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12

HELICOPTER NOISE MEASUREMENTS
DATA REPORT

Volume II Helicopter Models: Bell 212 (UH-1N),
Sikorsky S-61 (SH-3A), Sikorsky S-64 "Skycrane" (CH-54B),
Boeing Vertol "Chinook" (CH-47C)



April 1977
Data Report

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FEDERAL AVIATION ADMINISTRATION
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Technical Report Documentation Page

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|---|--|--|-----------|
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| 16. Abstract This data report contains the measured noise levels obtained from an FAA Helicopter Noise Test Program. The purpose of this test program was to provide a data base for a possible helicopter noise certification rule. The noise data presented in this two volume report is primarily intended as a means to disseminate the available information. Only the measured data is presented in this report. All FAA/DOT data analysis and comparisons will be presented in a later report which is scheduled for distribution in July, 1977. The eight helicopters tested during this Helicopter Noise Test Program constituted a wide range of gross weights and included participation from several helicopter manufacturers. The helicopter models used in this test program were the Hughes 300C, Hughes 500C, Bell 47-G, Bell 206-L, Bell 212 (UH-1N), Sikorsky S-61 (SH-3A), Sikorsky S-64 "Skycrane" (CH-54B), and Boeing Vertol "Chinook" CH-47C. Volume I contains the measured noise levels obtained from the first four helicopters while Volume II contains the data from the remaining four. The test procedure for each helicopter consisted of obtaining noise data during hover, level flyover, and approach conditions. The data presented in this report consists of time histories, 1/3-octave band spectra, EPNL, PNL, dBA, dBD and OASPL noise levels. | | 13. Type of Report and Period Covered Data Report | |
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DATA TABLE E

BELL 212 (UHIN)

TEST DATE: 10-6-76

TEST SITE: DULLES AIRPORT

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THE NOISE LEVELS PRESENTED IN SECTIONS IV, V AND VI HAVE BEEN TABULATED FOR THE SELECTED RUNS AND MICROPHONE LOCATIONS INDICATED ON THE FOLLOWING PAGE.

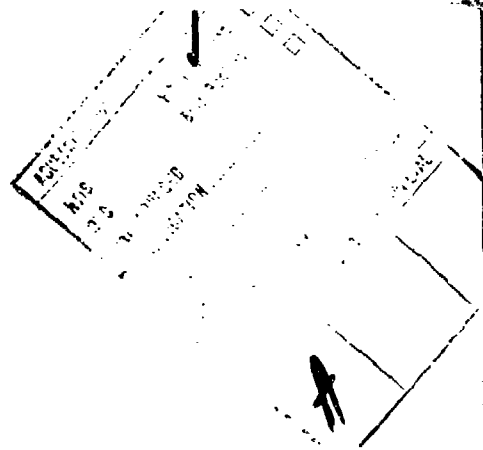


TABLE E-I
LIST OF RUNS SELECTED FOR ANALYSIS

| RUN# | TEST CONDITION | MICROPHONE LOCATION | | | | |
|------|---|---------------------|------------------------------|----------------|------------------------------|------------------------------|
| | | WEST | | EAST | | |
| | | 150 m SIDELINE | CENTER LINE | CENTER LINE | 150m SIDELINE | |
| 24 | 6° Approach | 60 Kts | X | X | X | |
| 27 | 9° Approach | 60 Kts | X | X | | |
| 29 | Level Flyover ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ | 60 Kts | | X | | |
| 30 | | | | X | | |
| 31 | | | | X | | |
| 32 | | 99 Kts | | X | | |
| 33 | | | | X | | |
| 34 | | | | X | | |
| 35 | | 110 Kts | | X | X | |
| 36 | | | | X | X | |
| 37 | | 114 Kts | | X | | |
| 38 | | | | X | | |
| 43 | 3° Approach | 60 Kts | X | X | | |
| 44 | Level Flyover ↓ ↓ ↓ | 110 Kts | X | X | X | |
| 45 | | | X | X | X | |
| 46 | | 114 Kts | | X | | |
| 47 | | | | X | | |
| | Microphone Locations | | Over Transpo Site Surface | Over Plywood | Over Transpo Site Surface | Over Transpo Site Surface |

GENERAL COMMENTS

- o There were no problems encountered while testing the Bell-212 (UHIN).
- o The weather conditions during the test consisted of moderate winds with gusts in the 8-12 mph range.

TABLE E-II Ground and Flight Log Data

Helicopter Model: Bell 202 (UH1H) Registration Number: U.S.F.F. Mussal 5 Test Date: 10/6/76

| Run | Time | Target Conditions | | Conditions | | Airspeed | | Altitude | | Ground Velocity (10 ft.) | | Comments | | | |
|-----|------|-------------------|----------|-------------------|-------|----------|-------|----------|----------|--------------------------|-----|----------|------|----|------------|
| | | Type | Velocity | Altitude over MSL | DBA * | Heading | R/S | R/D | Torque % | RPM | CAT | | Temp | RH | Wind Speed |
| 1 | 1:29 | | 0 | 59 ft | 94 | 0° N | 0 | 0 | 21 | | | | | | |
| 2 | 1:30 | Hover | 0 | | 96 | 45° E | | | 70 | | | | | | |
| 3 | 1:32 | | | | 96.5 | 135° S | | | 70 | | | | | | |
| 4 | 1:33 | | | | 98 | 180° W | | | 69 | | | | | | |
| 5 | 1:34 | | | | 94.5 | 225° W | | | 71 | | | | | | |
| 6 | 1:37 | | | | 95 | 270° W | | | 71 | | | | | | |
| 7 | 1:38 | | | | 96.5 | 315° W | | | 71 | | | | | | |
| 8 | 1:40 | | | | 96 | 0° N | | | 71 | | | | | | |
| 9 | 1:41 | | | | - | 0° N | | | 71 | | | | | | |
| 10 | 1:42 | | | | 99 | 45° E | | | 69 | | | | | | |
| 11 | 1:43 | | | | 98 | 90° E | | | 69 | | | | | | |
| 12 | 1:44 | | | | 97.5 | 135° E | | | 67 | | | | | | |
| 13 | 1:44 | | | | 97.5 | 180° S | | | 67 | | | | | | |
| 14 | 1:45 | | | | 97.5 | 225° W | | | 67 | | | | | | |
| 15 | 1:46 | | | | 93 | 270° W | | | 69 | | | | | | |
| 19 | 2:05 | Hover | 0 | 500 ft | 77 | 180° S | 0 | 0 | 67 | | | | | | Abort |
| 20 | 2:08 | | | | 86 | 135° S | | | 67 | | | | | | |
| 21 | 2:09 | | | | 85 | 90° E | | | 72 | | | | | | |
| 22 | 2:33 | 6° App | 60 kts. | 400 ft | 82 | S | 58 vs | 520 ft | 35 | | | | | | |
| 23 | 2:36 | | | | 84 | | 58 | 500 | 35 | | | | | | |
| 24 | 2:41 | | | | 82.5 | | 55 | - | 33 | | | | | | |
| 25 | 2:49 | 9° App | 60 kts | 400 ft | 84.5 | S | 60 vs | 700 ft | 20 | | | | | | |
| 26 | 2:53 | | | | 86.5 | | 55 | 700 | 25 | | | | | | |
| 27 | 2:57 | | | | 85.0 | | 58 | 700 | 20 | | | | | | |
| 28 | 3:00 | | | | 83.5 | | 58 | 600 | 30 | | | | | | |

* Synchron Level Meter Located 100 ft North of Hover position. Microphone at grazing incidence to the noise.

Below 900 ft of 500 ft - then good possible interference with off small

TABLE E-II Ground and Flight Log Data

| Run | Time | Target Conditions | | RF F | Heading | Actual Conditions | | RF/D | Mg in Torque | RF/100 | RF/200 | Temp. FH | Ground Vibrations (10 sec) | | Comments |
|--|------|-------------------|----------|--------|---------|-------------------|---------|------|--------------|--------|--------|----------|----------------------------|-------|--|
| | | Type | Velocity | | | Altitude | A/S | | | | | | Spas | Wires | |
| 29 | 3:02 | Level Flight | 60 kts | 500 ft | S | 60 | 0 | 41 | 500 | | | | | | |
| 30 | 3:05 | | | 90 ft | N | 51 | 0 | 41 | 500 | | | | | | |
| 31 | 3:08 | | | 79 | S | 61 | 0 | 50 | 500 | | | | | | |
| 32 | 3:12 | | 99 kts | | | 100 | 0 | 50 | 500 | | | | | | |
| 33 | 3:16 | | | | | 76 | 0 | 71 | 500 | | | | | | |
| 34 | 3:17 | | | | | 92 | 0 | 52 | 450 | | | | | | |
| Stopped to refuel the helicopter and re-set the microflame | | | | | | | | | | | | | | | |
| 35 | 3:56 | Level Flight | 110 kts | 500 ft | S | 108 | 0 | 55 | 500 | | | | | | Available 100% configuration Aircraft take-off (for away) from |
| 36 | 3:59 | | | | | 107 | 0 | 55 | 450 | | | | | | |
| 37 | 4:00 | | 114 kts | | | 115 | 0 | 60 | 500 | | | | | | |
| 38 | 4:02 | | | | | 100 | 0 | 61 | 450 | | | | | | |
| 39 | 4:05 | 3° App | 33 kts | 400 ft | | 60 | 350 kph | 75 | 400 | | | | | | |
| 40 | 4:07 | | | | | 60 | 380 | 35 | 400 | | | | | | |
| 41 | 4:10 | | | | | 60 | 380 | 34 | 400 | | | | | | |
| 42 | 4:13 | | | | | 58 | 350 | 34 | 300 | | | | | | |
| 43 | 4:16 | | | | | 60 | 300 | 35 | 410 | | | | | | |
| 44 | 4:21 | Level Flight | 110 kts | 500 ft | | 108 | 0 | 63 | 450 | | | | | | |
| 45 | 4:24 | | | | | 106 | 0 | 60 | 600 | | | | | | |
| 46 | 4:26 | | 114 kts | | | 115 | 0 | 50 | 500 | | | | | | |
| 47 | 4:28 | | | | | 116 | 0 | 60 | 510 | | | | | | |

Abort
Abort

TABLE E-III

Meteorological Data
Dulles International Airport
October 6, 1976

| Time | Temp. | Bar. Press. | Rel. Hum | Wind Speed | Wind Direction | Remarks |
|--------|-------|----------------|----------|---------------|-------------------|-------------|
| (Hours | (°F) | (mm Hg) | (%) | (mph) | (Degrees) | |
| 1315 | 67 | | 65 | 10-11 | 160 | Scat. Clds. |
| 1330 | 66 | | 66 | 9-10 | 185 | |
| 1345 | 68 | | 64 | 8-10 | 195 | |
| 1400 | 68 | | 64 | 10-11 | 200 | |
| 1415 | 69 | | 61 | 9-10 | 180 | |
| 1430 | 69 | | 60 | 9-10 | 180 | |
| 1445 | 70 | | 58 | 9-10 | 170 | |
| 1500 | 69 | 753 | 59 | 14-16 | 180 | |
| 1515 | 68 | | 60 | 12-14 | 170 | |
| 1530 | 68 | | 59 | 9-11 | 180 | |
| 1545 | 69 | | 58 | 8-9 | 170 | |
| 1600 | 70 | | 58 | 7-8 | 180 | |
| 1615 | 70 | | 58 | 10-12 | 160 | |
| 1630 | 70 | 753 | 56 | 10-11 | 190 | |

TABLE E-IV

HELICOPTER APPROACH AND FLYOVER NOISE DATA

BELL 212

OCTOBER 6, 1976

MICROPHONE OFFSET 150 METERS WEST
(LEVELS-DB RE 20 MICRO PA)

| EVENT | EPNL | DBA(M) | DBD(M) | OASPL | PNL(M) | PNLT(M) | LEQ | DUR(A) | DUR(P) | TC |
|-------|------|--------|--------|-------|--------|---------|------|--------|--------|-----|
| 24 | 95.6 | 80.2 | 86.0 | 91.7 | 93.1 | 94.0 | 75.7 | 41.0 | 41.0 | 1.0 |
| 27 | 97.0 | 80.7 | 86.8 | 92.5 | 94.5 | 95.2 | 76.1 | 52.5 | 43.0 | .7 |
| 36 | 96.9 | 81.9 | 88.4 | 95.0 | 95.3 | 95.3 | 78.9 | 27.0 | 27.5 | .0 |
| 43 | 94.0 | 76.9 | 82.4 | 91.5 | 89.2 | 90.3 | 72.8 | 56.0 | 57.0 | 2.1 |
| 44 | 96.3 | 81.3 | 87.9 | 94.8 | 94.3 | 95.9 | 78.3 | 23.5 | 23.5 | 1.9 |
| 45 | 96.2 | 80.6 | 86.5 | 94.5 | 94.2 | 95.3 | 77.2 | 25.0 | 30.0 | 1.3 |

MICROPHONE OFFSET 150 METERS EAST
(LEVELS-DB RE 20 MICRO PA)

| EVENT | EPNL | DBA(M) | DBD(M) | OASPL | PNL(M) | PNLT(M) | LEQ | DUR(A) | DUR(P) | TC |
|-------|------|--------|--------|-------|--------|---------|------|--------|--------|-----|
| 24 | 96.3 | 79.4 | 83.9 | 89.4 | 91.8 | 93.5 | 73.3 | 69.5 | 70.5 | 1.7 |
| 35 | 96.8 | 83.3 | 88.6 | 95.0 | 95.6 | 96.0 | 79.3 | 21.5 | 24.0 | 1.1 |
| 36 | 96.2 | 81.1 | 89.1 | 95.2 | 95.2 | 95.2 | 78.3 | 22.0 | 22.0 | .0 |
| 44 | 95.7 | 80.3 | 89.2 | 95.3 | 94.7 | 94.7 | 77.6 | 23.0 | 23.5 | .0 |
| 45 | 93.6 | 79.1 | 87.2 | 95.0 | 94.6 | 94.6 | 75.7 | 18.5 | 20.0 | .0 |

TABLE E-IV

HELICOPTER APPROACH AND FLYOVER NOISE DATA

BELL 212

OCTOBER 6, 1976

CENTERLINE MICROPHONE (SOFT SITE)
(LEVELS-DB RE 20 MICRO PA)

| EVENT | EPNL | DBA(M) | DBD(M) | OASPL | PNL(M) | PNLT(M) | LE | DUR(A) | DUR(P) | TC |
|-------|-------|--------|--------|-------|--------|---------|------|--------|--------|-----|
| 24 | 99.3 | 84.2 | 92.3 | 95.0 | 98.0 | 98.0 | 79.8 | 33.5 | 38.5 | .0 |
| 27 | 100.6 | 85.2 | 93.4 | 95.8 | 99.3 | 99.3 | 81.2 | 36.0 | 35.5 | .0 |
| 29 | 96.5 | 79.0 | 87.3 | 91.4 | 93.3 | 93.3 | 73.7 | 62.5 | 69.0 | .0 |
| 30 | 94.4 | 79.3 | 87.0 | 91.0 | 93.0 | 93.0 | 74.2 | 35.0 | 44.5 | .0 |
| 31 | 96.0 | 78.8 | 86.2 | 90.9 | 92.7 | 92.7 | 74.3 | 56.0 | 57.5 | .0 |
| 32 | 96.7 | 83.7 | 90.8 | 93.3 | 97.2 | 97.2 | 78.2 | 24.5 | 26.0 | .0 |
| 33 | 96.2 | 81.2 | 89.1 | 94.6 | 95.5 | 95.5 | 76.8 | 27.0 | 31.5 | .0 |
| 34 | 96.3 | 81.8 | 88.9 | 95.0 | 95.4 | 95.4 | 77.2 | 24.5 | 27.5 | .0 |
| 35 | 98.4 | 83.9 | 89.8 | 95.7 | 97.9 | 97.9 | 80.0 | 23.0 | 29.0 | .0 |
| 36 | 98.3 | 86.0 | 91.8 | 96.1 | 99.9 | 99.9 | 80.3 | 21.5 | 22.5 | .0 |
| 37 | 99.3 | 85.5 | 91.7 | 97.1 | 100.2 | 100.2 | 82.2 | 18.5 | 19.5 | .0 |
| 38 | 101.8 | 86.0 | 94.7 | 100.2 | 101.3 | 101.6 | 83.8 | 20.0 | 20.5 | 1.1 |
| 43 | 98.4 | 82.9 | 89.1 | 93.8 | 96.9 | 96.9 | 79.1 | 29.0 | 57.0 | .0 |
| 44 | 98.6 | 85.5 | 91.5 | 96.5 | 99.5 | 99.5 | 80.6 | 21.5 | 24.5 | .0 |
| 45 | 96.2 | 81.1 | 88.5 | 94.9 | 95.7 | 95.7 | 76.7 | 26.0 | 31.5 | .0 |
| 46 | 100.5 | 87.2 | 94.3 | 96.8 | 101.4 | 101.4 | 82.3 | 18.5 | 20.0 | .0 |
| 47 | 98.0 | 83.6 | 90.0 | 97.2 | 98.3 | 98.3 | 80.0 | 22.0 | 23.0 | .0 |

TABLE E-V

NOISE LEVEL TIME HISTORY DATA

BELL 212

OCTOBER 6, 1976

EVENT 24, 6 DEGREE APPROACH, MIC. 150 METERS WEST

1/2 SECOND INTEGRATION VS NOISE INDEXES
(DB RE 20 MICRO PA)

| INT | DBA | DBD | OASPL | PNL | PNLT | PNL-DBA | DBD-DBA |
|------------|------|------|-------|------|------|---------|---------|
| 1 | 69.2 | 75.9 | 83.9 | 83.3 | 83.3 | 14.1 | 6.7 |
| 4 | 66.9 | 74.3 | 82.7 | 81.2 | 82.2 | 14.3 | 7.4 |
| 7 | 65.9 | 73.2 | 82.4 | 79.5 | 80.9 | 13.9 | 7.3 |
| 10 | 69.4 | 76.1 | 83.5 | 82.7 | 82.7 | 13.3 | 6.7 |
| 13 | 73.4 | 78.6 | 85.7 | 85.8 | 85.8 | 12.4 | 5.2 |
| 16 | 68.5 | 76.8 | 85.6 | 83.6 | 83.6 | 15.1 | 8.3 |
| 19 | 71.7 | 79.7 | 87.2 | 86.1 | 87.1 | 14.4 | 8.0 |
| 22 | 75.4 | 80.8 | 87.4 | 88.0 | 89.1 | 12.6 | 5.4 |
| 25 | 76.3 | 81.3 | 87.4 | 88.3 | 89.8 | 12.0 | 5.0 |
| 28 | 72.4 | 79.5 | 87.3 | 86.9 | 86.9 | 14.5 | 7.1 |
| 31 | 76.6 | 82.1 | 87.6 | 89.3 | 90.6 | 12.7 | 5.5 |
| 34 | 76.1 | 80.5 | 86.3 | 88.1 | 88.1 | 12.0 | 4.4 |
| 37 | 73.8 | 79.2 | 86.4 | 86.9 | 88.4 | 13.1 | 5.4 |
| 40 | 73.6 | 79.4 | 86.6 | 86.8 | 86.8 | 13.2 | 5.8 |
| 43 | 72.8 | 78.1 | 85.0 | 85.6 | 86.7 | 12.8 | 5.3 |
| 46 | 73.2 | 79.0 | 85.1 | 86.2 | 87.7 | 13.0 | 5.8 |
| 49 | 72.8 | 78.4 | 83.8 | 85.3 | 85.3 | 12.5 | 5.6 |
| 52 | 73.5 | 78.9 | 83.2 | 86.4 | 87.8 | 12.9 | 5.4 |
| 55 | 77.0 | 81.8 | 85.7 | 89.2 | 90.5 | 12.2 | 4.8 |
| 58 | 77.2 | 82.4 | 86.4 | 89.2 | 89.2 | 12.0 | 5.2 |
| 61 | 76.1 | 82.0 | 88.1 | 89.4 | 89.4 | 13.3 | 5.9 |
| OH 64 → 65 | 78.7 | 84.5 | 90.3 | 91.6 | 91.6 | 12.9 | 5.8 |
| 67 | 78.2 | 84.5 | 91.4 | 91.9 | 91.9 | 13.7 | 6.3 |
| 70 | 79.3 | 85.3 | 91.3 | 92.4 | 92.9 | 13.1 | 6.0 |
| 71 | 80.2 | 86.0 | 91.1 | 93.0 | 94.0 | 12.8 | 5.8 |
| 74 | 78.2 | 84.0 | 89.2 | 91.7 | 92.9 | 13.5 | 5.8 |
| 77 | 78.8 | 84.2 | 88.0 | 92.4 | 93.5 | 13.6 | 5.4 |
| 80 | 77.1 | 82.4 | 85.8 | 89.7 | 89.7 | 12.6 | 5.3 |
| 83 | 74.9 | 80.2 | 84.2 | 88.0 | 90.0 | 13.1 | 5.3 |
| 86 | 71.2 | 77.5 | 82.7 | 84.8 | 86.4 | 13.6 | 6.3 |
| 89 | 70.5 | 77.0 | 82.0 | 84.3 | 85.6 | 13.8 | 6.5 |
| 92 | 69.5 | 75.5 | 81.1 | 82.6 | 82.6 | 13.1 | 6.0 |
| 95 | 68.3 | 74.4 | 79.8 | 81.5 | 81.5 | 13.2 | 6.1 |
| 98 | 64.6 | 72.1 | 79.0 | 78.7 | 79.8 | 14.1 | 7.5 |
| 101 | 67.5 | 74.2 | 78.8 | 81.3 | 83.0 | 13.8 | 6.7 |

TABLE E-V

NOISE LEVEL TIME HISTORY DATA

BELL 212

OCTOBER 6, 1976

EVENT 27, 9 DEGREE APPROACH, MIC. 150 METERS WEST

1/2 SECOND INTEGRATION VS NOISE INDEXES
(DB RE 20 MICRO PA)

| INT | DBA | DBD | OASPL | PNL | PNLT | PNL-DBA | DBD-DBA |
|-----------------|------|------|-------|------|------|---------|---------|
| 1 | 66.9 | 75.2 | 83.2 | 82.0 | 83.2 | 15.1 | 8.3 |
| 4 | 69.0 | 74.5 | 82.7 | 82.0 | 82.0 | 13.0 | 5.5 |
| 7 | 66.7 | 73.9 | 82.6 | 81.1 | 81.1 | 14.4 | 7.2 |
| 10 | 70.1 | 75.7 | 82.4 | 83.3 | 84.6 | 13.2 | 5.6 |
| 13 | 75.9 | 80.1 | 84.6 | 87.8 | 89.0 | 11.9 | 4.2 |
| 16 | 72.1 | 77.6 | 84.3 | 85.0 | 86.2 | 12.9 | 5.5 |
| 19 | 74.4 | 78.8 | 84.3 | 86.7 | 88.3 | 12.3 | 4.4 |
| 22 | 69.1 | 76.1 | 84.0 | 83.6 | 84.6 | 14.5 | 7.0 |
| 25 | 74.6 | 79.4 | 84.9 | 87.2 | 88.8 | 12.6 | 4.8 |
| 28 | 74.3 | 79.3 | 85.4 | 87.5 | 87.5 | 13.2 | 5.0 |
| 31 | 75.9 | 80.7 | 86.1 | 88.7 | 88.7 | 12.8 | 4.8 |
| 34 | 78.0 | 82.7 | 86.7 | 90.2 | 90.2 | 12.2 | 4.7 |
| 37 | 78.6 | 83.2 | 86.8 | 91.2 | 93.0 | 12.6 | 4.6 |
| 40 | 76.5 | 80.7 | 85.4 | 89.4 | 92.0 | 12.9 | 4.2 |
| 43 | 73.1 | 79.0 | 85.1 | 86.7 | 89.1 | 13.6 | 5.9 |
| 46 | 77.6 | 82.3 | 86.7 | 90.1 | 91.7 | 12.5 | 4.7 |
| 49 | 78.7 | 82.7 | 86.2 | 90.7 | 90.7 | 12.0 | 4.0 |
| 52 | 75.9 | 81.0 | 84.6 | 88.4 | 88.4 | 12.5 | 5.1 |
| 55 | 77.5 | 82.5 | 85.2 | 90.0 | 91.9 | 12.5 | 5.0 |
| 58 | 75.9 | 81.3 | 84.7 | 88.8 | 90.3 | 12.9 | 5.4 |
| 61 | 76.5 | 82.2 | 85.3 | 89.4 | 89.4 | 12.9 | 5.7 |
| 64 | 78.1 | 83.7 | 87.5 | 91.0 | 91.0 | 12.9 | 5.6 |
| 67 | 79.4 | 85.4 | 90.2 | 92.7 | 92.7 | 13.3 | 6.0 |
| OH -- 70 --> ?1 | 77.9 | 84.0 | 90.5 | 90.7 | 90.7 | 12.8 | 6.1 |
| 73 | 78.5 | 84.6 | 92.0 | 91.5 | 91.5 | 13.0 | 6.1 |
| 76 | 79.8 | 86.0 | 92.5 | 93.5 | 94.1 | 13.7 | 6.2 |
| 78 | 80.7 | 86.8 | 92.4 | 94.5 | 95.2 | 13.8 | 6.1 |
| 81 | 77.6 | 83.5 | 88.9 | 90.8 | 92.1 | 13.2 | 5.9 |
| 84 | 77.8 | 83.5 | 86.3 | 90.6 | 92.1 | 12.8 | 5.7 |
| 87 | 76.1 | 81.4 | 84.8 | 89.5 | 89.5 | 13.4 | 5.3 |
| 90 | 74.8 | 80.7 | 84.1 | 87.9 | 90.2 | 13.1 | 5.9 |
| 93 | 72.9 | 79.2 | 83.2 | 86.4 | 86.4 | 13.5 | 6.3 |
| 96 | 69.8 | 75.9 | 81.2 | 83.3 | 84.4 | 13.5 | 6.1 |
| 99 | 68.4 | 75.2 | 81.2 | 82.1 | 82.1 | 13.7 | 6.8 |
| 102 | 65.2 | 72.5 | 80.2 | 79.4 | 79.4 | 14.2 | 7.3 |
| 105 | 66.8 | 73.1 | 79.4 | 80.6 | 82.3 | 13.8 | 6.3 |

TABLE E-V

NOISE LEVEL TIME HISTORY DATA

BELL 212

OCTOBER 6, 1976

EVENT 36, 110 KT. FLY BY, MIC. 150 METERS WEST

1/2 SECOND INTEGRATION VS NOISE INDEXES
(DB RE 20 MICRO PA)

| INT | DBA | DBD | UASPL | PNL | PNLT | PNL-DBA | DBD-DBA |
|---------|------|------|-------|------|------|---------|---------|
| 3 | 62.5 | 74.5 | 84.4 | 80.2 | 80.2 | 17.7 | 12.0 |
| 5 | 65.3 | 77.5 | 86.7 | 83.0 | 83.0 | 17.7 | 12.2 |
| 7 | 69.3 | 80.7 | 88.8 | 85.7 | 85.7 | 16.4 | 11.4 |
| 9 | 72.9 | 83.4 | 90.7 | 88.3 | 88.3 | 15.4 | 10.5 |
| 11 | 75.5 | 85.1 | 91.9 | 90.2 | 90.2 | 14.7 | 9.6 |
| 13 | 76.4 | 85.9 | 92.2 | 90.3 | 90.3 | 13.9 | 9.5 |
| 15 | 77.1 | 86.1 | 92.2 | 90.8 | 90.8 | 13.7 | 9.0 |
| 17 | 76.2 | 85.3 | 92.0 | 90.4 | 90.4 | 14.2 | 9.1 |
| 19 | 76.4 | 85.1 | 92.4 | 91.3 | 91.3 | 14.9 | 8.7 |
| 21 | 78.5 | 86.7 | 93.5 | 92.6 | 92.6 | 14.1 | 8.2 |
| 23 | 80.6 | 88.4 | 94.4 | 94.8 | 94.8 | 14.2 | 7.8 |
| 25 | 78.8 | 87.1 | 93.8 | 93.1 | 93.1 | 14.3 | 8.3 |
| 27 | 76.7 | 86.1 | 93.2 | 92.0 | 92.0 | 15.3 | 9.4 |
| 29 | 79.1 | 87.0 | 93.6 | 93.3 | 93.3 | 14.2 | 7.9 |
| 31 | 80.5 | 87.4 | 94.1 | 94.3 | 94.3 | 13.8 | 6.9 |
| 32 | 81.9 | 88.1 | 94.5 | 95.3 | 95.3 | 13.4 | 6.2 |
| 34 | 80.9 | 87.7 | 94.9 | 95.0 | 95.0 | 14.1 | 6.8 |
| 36 | 79.8 | 86.3 | 94.3 | 93.6 | 94.6 | 13.8 | 6.5 |
| 38 | 79.8 | 85.9 | 94.3 | 93.5 | 93.5 | 13.7 | 6.1 |
| 40 | 80.5 | 86.2 | 94.0 | 93.8 | 93.8 | 13.3 | 5.7 |
| 42 | 81.5 | 86.5 | 93.1 | 94.0 | 94.0 | 12.5 | 5.0 |
| 44 | 81.7 | 86.3 | 91.6 | 93.3 | 94.8 | 11.6 | 4.6 |
| OH → 46 | 81.0 | 85.8 | 90.5 | 93.0 | 93.0 | 12.0 | 4.8 |
| 48 | 81.0 | 85.6 | 90.3 | 93.6 | 93.6 | 12.6 | 4.6 |
| 50 | 81.0 | 85.5 | 89.4 | 93.3 | 93.3 | 12.3 | 4.5 |
| 52 | 79.0 | 83.7 | 87.5 | 91.0 | 91.0 | 12.0 | 4.7 |
| 54 | 77.6 | 82.5 | 87.0 | 89.8 | 89.8 | 12.2 | 4.9 |
| 56 | 76.3 | 80.7 | 84.9 | 88.4 | 89.6 | 12.1 | 4.4 |
| 58 | 75.7 | 80.0 | 83.1 | 87.2 | 87.2 | 11.5 | 4.3 |
| 60 | 73.4 | 78.1 | 81.0 | 85.0 | 86.1 | 11.6 | 4.7 |
| 62 | 70.4 | 74.9 | 79.4 | 82.1 | 83.6 | 11.7 | 4.5 |
| 64 | 67.7 | 72.1 | 77.8 | 80.1 | 81.4 | 12.4 | 4.4 |
| 66 | 67.5 | 72.1 | 77.9 | 80.4 | 82.6 | 12.9 | 4.6 |
| 68 | 67.4 | 72.4 | 77.8 | 80.6 | 83.1 | 13.2 | 5.0 |

TABLE E-VI

NOISE LEVEL TIME HISTORY DATA

BELL 212

OCTOBER 6, 1976

EVENT 43, 3 DEGREE APPROACH, MIC. 150 METERS WEST

1/2 SECOND INTEGRATION VS NOISE INDEXES
(DB RE 20 MICRO PA)

| INT | DBA | DBD | OASPL | PNL | PNLI | PNL-DBA | DBD-DBA |
|------------|------|------|-------|------|------|---------|---------|
| 1 | 57.7 | 69.8 | 80.8 | 76.3 | 76.3 | 18.6 | 12.1 |
| 4 | 58.8 | 70.7 | 81.5 | 77.4 | 77.4 | 18.6 | 11.9 |
| 7 | 60.8 | 71.7 | 81.5 | 78.2 | 78.2 | 17.4 | 10.9 |
| 10 | 65.6 | 73.9 | 82.0 | 80.5 | 80.5 | 14.9 | 8.3 |
| 13 | 68.2 | 76.1 | 83.0 | 82.4 | 82.4 | 14.2 | 7.9 |
| 16 | 67.3 | 76.0 | 83.5 | 82.0 | 82.0 | 14.7 | 3.7 |
| 19 | 67.4 | 76.8 | 84.9 | 82.7 | 82.7 | 15.3 | 9.4 |
| 22 | 65.2 | 75.4 | 84.2 | 81.7 | 81.7 | 16.5 | 10.2 |
| 25 | 64.9 | 73.8 | 83.1 | 80.2 | 80.2 | 15.3 | 8.9 |
| 28 | 66.5 | 74.7 | 83.6 | 81.1 | 81.1 | 14.6 | 8.2 |
| 31 | 69.5 | 77.4 | 85.2 | 84.0 | 84.0 | 14.5 | 7.9 |
| 34 | 71.2 | 78.9 | 86.3 | 85.6 | 85.6 | 14.4 | 7.7 |
| 37 | 70.8 | 78.6 | 86.2 | 84.9 | 84.9 | 14.1 | 7.8 |
| 40 | 71.7 | 79.0 | 86.0 | 85.9 | 85.9 | 14.2 | 7.3 |
| 43 | 67.4 | 75.6 | 84.1 | 82.4 | 83.6 | 15.0 | 8.2 |
| 46 | 66.2 | 74.8 | 84.4 | 81.4 | 82.5 | 15.2 | 8.6 |
| 49 | 68.4 | 76.5 | 85.7 | 83.1 | 83.1 | 14.7 | 8.1 |
| 52 | 68.9 | 77.2 | 86.1 | 83.9 | 85.1 | 15.0 | 8.3 |
| 55 | 71.3 | 77.8 | 86.2 | 84.8 | 86.5 | 13.5 | 6.5 |
| 58 | 70.7 | 77.4 | 86.2 | 84.3 | 86.3 | 13.6 | 6.7 |
| 61 | 72.8 | 78.3 | 85.8 | 85.4 | 85.4 | 12.6 | 5.5 |
| 64 | 71.2 | 77.2 | 84.9 | 84.3 | 84.3 | 13.1 | 6.0 |
| 67 | 73.4 | 78.2 | 84.7 | 86.1 | 87.2 | 12.7 | 4.8 |
| 70 | 73.4 | 78.5 | 85.2 | 85.9 | 87.0 | 12.5 | 5.1 |
| 73 | 75.1 | 80.2 | 85.0 | 88.0 | 88.0 | 12.9 | 5.1 |
| 76 | 74.8 | 79.8 | 84.8 | 87.6 | 88.8 | 12.8 | 5.0 |
| 79 | 75.3 | 80.4 | 83.8 | 87.3 | 89.1 | 12.0 | 5.1 |
| 82 | 75.4 | 80.7 | 84.0 | 87.9 | 87.9 | 12.5 | 5.3 |
| 85 | 75.9 | 81.2 | 84.4 | 87.8 | 89.7 | 11.9 | 5.3 |
| 86 | 76.1 | 81.4 | 85.0 | 88.2 | 90.3 | 12.1 | 5.3 |
| 89 | 76.5 | 81.5 | 86.9 | 88.3 | 88.3 | 11.8 | 5.0 |
| 92 | 76.5 | 82.0 | 89.3 | 88.8 | 88.8 | 12.3 | 5.5 |
| OH 95 → 94 | 76.0 | 81.8 | 90.8 | 88.3 | 88.3 | 12.3 | 5.8 |
| 98 | 76.3 | 82.3 | 91.3 | 89.1 | 89.7 | 12.8 | 6.0 |
| 101 | 75.7 | 81.5 | 90.6 | 88.8 | 89.4 | 13.1 | 5.8 |
| 104 | 75.0 | 80.3 | 88.3 | 87.2 | 87.2 | 12.2 | 5.3 |
| 107 | 74.8 | 80.4 | 86.0 | 87.4 | 89.3 | 12.6 | 5.6 |
| 110 | 73.7 | 79.5 | 83.2 | 86.5 | 87.6 | 12.8 | 5.8 |
| 113 | 71.0 | 76.7 | 81.7 | 84.1 | 85.5 | 13.1 | 5.7 |
| 116 | 70.1 | 75.7 | 80.1 | 82.8 | 82.8 | 12.7 | 5.6 |
| 119 | 68.0 | 74.5 | 80.5 | 81.8 | 83.2 | 13.8 | 6.5 |
| 122 | 66.6 | 72.9 | 78.7 | 80.2 | 82.2 | 13.6 | 6.3 |
| 125 | 62.6 | 69.9 | 77.2 | 76.8 | 78.2 | 14.2 | 7.3 |
| 128 | 61.9 | 69.2 | 76.5 | 75.9 | 75.9 | 14.0 | 7.3 |
| 131 | 59.0 | 67.4 | 75.3 | 74.6 | 76.4 | 15.6 | 8.4 |

TABLE E-IV

NOISE LEVEL TIME HISTORY DATA

BELL 212

OCTOBER 6, 1976

EVENT 44, 110 KT. FLY BY, MIC. 150 METERS WEST

1/2 SECOND INTEGRATION VS NOISE INDEXES
(DB RE 20 MICRO PA)

| INT | DBA | DBD | OASPL | PNL | PNLT | PNL-DBA | DBD-DBA |
|---------|------|------|-------|------|------|---------|---------|
| 1 | 65.9 | 77.1 | 86.0 | 82.6 | 82.6 | 16.7 | 11.2 |
| 3 | 65.0 | 75.2 | 85.2 | 81.8 | 81.8 | 16.8 | 11.2 |
| 5 | 67.8 | 77.7 | 86.2 | 83.5 | 83.5 | 15.7 | 9.9 |
| 7 | 71.6 | 81.7 | 89.7 | 86.7 | 86.7 | 15.1 | 10.1 |
| 9 | 75.8 | 85.2 | 92.6 | 90.0 | 90.0 | 14.2 | 9.4 |
| 11 | 78.1 | 87.0 | 93.8 | 92.0 | 92.0 | 13.9 | 8.9 |
| 13 | 78.7 | 87.9 | 94.5 | 92.8 | 92.8 | 14.1 | 9.2 |
| 15 | 78.1 | 87.2 | 94.3 | 92.9 | 92.9 | 14.8 | 9.1 |
| 17 | 78.6 | 87.1 | 93.9 | 93.0 | 93.0 | 14.4 | 8.5 |
| 19 | 78.4 | 87.1 | 93.9 | 93.0 | 93.0 | 14.6 | 8.7 |
| 21 | 77.0 | 86.2 | 93.4 | 91.9 | 91.9 | 14.9 | 9.2 |
| 23 | 78.2 | 86.9 | 94.6 | 93.4 | 95.0 | 15.2 | 8.7 |
| 25 | 79.5 | 87.2 | 94.7 | 94.0 | 95.5 | 14.5 | 7.7 |
| 27 | 79.9 | 86.9 | 94.5 | 94.0 | 95.2 | 14.1 | 7.0 |
| 29 | 79.0 | 85.0 | 94.3 | 93.5 | 94.7 | 14.5 | 7.0 |
| 31 | 79.9 | 86.3 | 94.8 | 94.3 | 94.3 | 14.4 | 6.4 |
| 33 | 80.2 | 85.6 | 93.7 | 93.5 | 93.5 | 13.3 | 5.4 |
| 34 | 81.2 | 86.2 | 93.1 | 94.0 | 95.9 | 12.8 | 5.0 |
| 36 | 81.2 | 86.1 | 91.4 | 93.6 | 94.6 | 12.4 | 4.9 |
| 38 | 80.0 | 84.9 | 90.0 | 92.1 | 93.3 | 12.1 | 4.9 |
| OH → 40 | 79.4 | 84.2 | 89.4 | 91.4 | 91.4 | 12.0 | 4.8 |
| 42 | 78.7 | 83.7 | 89.2 | 91.0 | 91.0 | 12.3 | 5.0 |
| 44 | 77.1 | 82.2 | 88.3 | 89.4 | 89.4 | 12.3 | 5.1 |
| 46 | 76.1 | 81.2 | 86.6 | 87.8 | 89.1 | 11.7 | 5.1 |
| 48 | 74.7 | 79.5 | 84.6 | 86.5 | 87.8 | 11.9 | 4.8 |
| 50 | 73.4 | 78.5 | 83.3 | 86.2 | 87.2 | 12.8 | 5.1 |
| 52 | 72.4 | 77.2 | 81.9 | 84.9 | 86.6 | 12.5 | 4.8 |
| 54 | 69.7 | 74.9 | 80.5 | 82.6 | 83.7 | 12.9 | 5.2 |
| 56 | 69.1 | 74.4 | 79.0 | 81.6 | 83.3 | 12.5 | 5.3 |
| 58 | 67.3 | 72.5 | 78.2 | 80.4 | 82.9 | 13.1 | 5.2 |
| 60 | 64.4 | 70.3 | 77.1 | 77.2 | 78.7 | 12.8 | 5.9 |

TABLE E-V

NOISE LEVEL TIME HISTORY DATA

BELL 212

OCTOBER 6, 1976

EVENT 45, 110 KT. FLY BY, MIC. 150 METERS WEST

1/2 SECOND INTEGRATION VS NOISE INDEXES
(DB RE 20 MICRO PA)

| INT | DBA | DRD | OASPL | PNL | PNLT | PNL-DBA | DRD-DBA |
|---------|------|------|-------|------|------|---------|---------|
| 1 | 61.7 | 73.6 | 82.1 | 83.0 | 83.0 | 21.3 | 11.9 |
| 3 | 62.4 | 74.6 | 83.0 | 83.2 | 83.2 | 20.8 | 12.2 |
| 5 | 63.7 | 75.1 | 83.5 | 83.6 | 83.6 | 19.9 | 11.4 |
| 7 | 65.7 | 76.5 | 84.9 | 84.9 | 84.9 | 19.2 | 10.8 |
| 9 | 69.2 | 78.5 | 87.3 | 87.0 | 87.0 | 17.8 | 9.3 |
| 11 | 71.6 | 79.9 | 88.3 | 88.7 | 88.7 | 17.1 | 8.3 |
| 13 | 73.2 | 81.3 | 89.2 | 89.4 | 89.4 | 16.2 | 8.1 |
| 15 | 74.2 | 83.4 | 90.8 | 90.8 | 90.8 | 16.6 | 9.2 |
| 17 | 76.6 | 86.1 | 92.9 | 92.8 | 92.8 | 16.2 | 9.5 |
| 19 | 76.1 | 85.1 | 92.3 | 92.4 | 92.4 | 16.3 | 9.0 |
| 21 | 74.7 | 83.3 | 91.3 | 91.0 | 91.0 | 16.3 | 8.6 |
| 23 | 75.6 | 84.0 | 91.6 | 91.7 | 91.7 | 16.1 | 8.4 |
| 25 | 75.9 | 84.5 | 92.2 | 92.0 | 92.0 | 16.1 | 8.6 |
| 27 | 76.3 | 85.3 | 93.2 | 92.4 | 92.4 | 16.1 | 9.0 |
| 29 | 77.8 | 86.5 | 94.1 | 93.6 | 95.2 | 15.8 | 8.7 |
| 31 | 76.1 | 85.8 | 94.4 | 93.3 | 94.7 | 17.2 | 9.7 |
| 33 | 75.3 | 84.8 | 94.2 | 92.9 | 92.9 | 17.6 | 9.5 |
| 35 | 78.0 | 85.5 | 94.1 | 93.9 | 93.9 | 15.9 | 7.5 |
| 37 | 79.0 | 85.5 | 94.1 | 93.9 | 95.3 | 14.9 | 6.5 |
| 39 | 78.6 | 84.2 | 93.2 | 92.6 | 93.6 | 14.0 | 5.6 |
| 41 | 79.8 | 85.0 | 92.8 | 92.6 | 92.6 | 12.8 | 5.2 |
| 43 | 80.6 | 85.3 | 90.7 | 93.3 | 93.3 | 12.7 | 4.7 |
| OH → 45 | 80.0 | 84.4 | 87.8 | 92.4 | 92.4 | 12.4 | 4.4 |
| 47 | 80.0 | 84.7 | 87.9 | 91.8 | 91.8 | 11.8 | 4.7 |
| 49 | 79.2 | 83.7 | 87.7 | 91.1 | 91.1 | 11.9 | 4.5 |
| 51 | 77.9 | 82.3 | 86.7 | 90.1 | 90.1 | 12.2 | 4.4 |
| 53 | 77.2 | 81.8 | 86.5 | 89.9 | 89.9 | 12.7 | 4.6 |
| 55 | 74.5 | 79.6 | 85.1 | 87.5 | 87.5 | 13.0 | 5.1 |
| 57 | 71.8 | 77.8 | 83.7 | 85.8 | 86.8 | 14.0 | 6.0 |
| 59 | 70.2 | 76.3 | 82.7 | 84.6 | 85.9 | 14.4 | 6.1 |
| 61 | 67.7 | 74.4 | 81.5 | 83.4 | 83.4 | 15.7 | 6.7 |
| 63 | 67.7 | 74.2 | 80.7 | 83.1 | 84.7 | 15.4 | 6.5 |
| 65 | 68.8 | 75.1 | 79.7 | 84.2 | 86.5 | 15.4 | 6.3 |
| 67 | 66.4 | 73.6 | 79.5 | 82.6 | 82.6 | 16.2 | 7.2 |
| 69 | 65.6 | 73.2 | 78.3 | 82.5 | 82.5 | 16.9 | 7.6 |
| 71 | 63.9 | 72.1 | 77.1 | 81.9 | 81.9 | 18.0 | 8.2 |
| 73 | 63.4 | 72.4 | 76.6 | 82.0 | 82.0 | 18.6 | 9.0 |

TABLE E-V

NOISE LEVEL TIME HISTORY DATA

BELL 212

OCTOBER 6, 1976

EVENT 24, 6 DEGREE APPROACH, MIC. 150 METERS EAST

1/2 SECOND INTEGRATION VS NOISE INDEXES
(DB RE 20 MICRO PA)

| INT | DBA | DBD | OASPL | PNL | PNLT | PNL-DBA | DBD-DBA |
|----------------|------|------|-------|------|------|---------|---------|
| 1 | 62.6 | 71.8 | 81.1 | 79.6 | 79.6 | 17.0 | 9.2 |
| 5 | 65.2 | 72.7 | 81.4 | 80.4 | 80.4 | 15.2 | 7.5 |
| 9 | 63.8 | 73.1 | 81.8 | 80.4 | 80.4 | 16.6 | 9.3 |
| 13 | 67.2 | 76.4 | 84.9 | 83.5 | 83.5 | 16.3 | 9.2 |
| 17 | 71.3 | 79.2 | 86.0 | 86.1 | 86.1 | 14.8 | 7.9 |
| 21 | 74.0 | 80.1 | 85.6 | 87.4 | 87.4 | 13.4 | 6.1 |
| 25 | 69.8 | 76.7 | 83.7 | 84.0 | 84.0 | 14.2 | 6.9 |
| 29 | 66.3 | 73.9 | 82.3 | 81.7 | 81.7 | 15.4 | 7.6 |
| 33 | 64.3 | 72.0 | 80.9 | 79.8 | 79.8 | 15.5 | 7.7 |
| 37 | 64.0 | 72.2 | 81.1 | 79.5 | 79.5 | 15.5 | 8.2 |
| 41 | 65.9 | 74.4 | 82.4 | 81.5 | 81.5 | 15.6 | 8.5 |
| 45 | 69.5 | 76.9 | 84.1 | 84.1 | 84.1 | 14.6 | 7.4 |
| 49 | 67.2 | 75.6 | 83.9 | 82.6 | 82.6 | 15.4 | 8.4 |
| 53 | 64.1 | 74.1 | 83.8 | 80.8 | 80.8 | 16.7 | 10.0 |
| 57 | 70.3 | 79.4 | 87.1 | 86.4 | 86.4 | 16.1 | 9.1 |
| 61 | 70.6 | 80.2 | 88.1 | 87.1 | 87.1 | 16.5 | 9.6 |
| 65 | 69.0 | 77.6 | 86.4 | 85.0 | 85.0 | 16.0 | 8.6 |
| 69 | 65.8 | 74.4 | 84.1 | 82.3 | 82.3 | 16.5 | 8.6 |
| 73 | 63.9 | 71.9 | 82.5 | 80.2 | 80.2 | 16.3 | 8.0 |
| 77 | 66.0 | 73.8 | 83.8 | 82.0 | 82.0 | 16.0 | 7.8 |
| 81 | 65.7 | 74.8 | 85.1 | 82.5 | 82.5 | 16.8 | 9.1 |
| 85 | 67.6 | 76.1 | 86.5 | 83.8 | 83.8 | 16.2 | 8.5 |
| 89 | 71.3 | 78.3 | 87.3 | 85.7 | 87.2 | 14.4 | 7.0 |
| 93 | 72.0 | 79.1 | 88.1 | 86.4 | 86.4 | 14.4 | 7.1 |
| 97 | 73.7 | 79.2 | 87.8 | 87.6 | 89.1 | 13.9 | 5.5 |
| 101 | 77.3 | 81.3 | 88.3 | 89.3 | 90.6 | 12.0 | 4.0 |
| 105 | 76.5 | 81.2 | 89.1 | 89.3 | 90.7 | 12.8 | 4.7 |
| 109 | 78.0 | 82.5 | 88.9 | 90.1 | 92.4 | 12.1 | 4.5 |
| 111 | 79.4 | 83.9 | 89.4 | 91.8 | 93.5 | 12.4 | 4.5 |
| 115 | 78.1 | 82.8 | 88.3 | 90.7 | 92.6 | 12.6 | 4.7 |
| 119 | 76.9 | 81.9 | 85.9 | 90.0 | 90.0 | 13.1 | 5.0 |
| OH - 123 → 126 | 75.5 | 80.6 | 85.0 | 88.8 | 88.8 | 13.3 | 5.1 |
| 127 | 75.7 | 81.8 | 86.9 | 90.1 | 90.1 | 14.4 | 6.1 |
| 131 | 76.3 | 81.8 | 85.4 | 89.6 | 91.0 | 13.3 | 5.5 |
| 135 | 75.0 | 80.5 | 84.4 | 88.5 | 90.5 | 13.5 | 5.5 |
| 139 | 74.3 | 79.9 | 83.6 | 87.8 | 89.6 | 13.5 | 5.6 |
| 143 | 73.3 | 78.7 | 82.5 | 86.2 | 87.9 | 12.9 | 5.4 |
| 147 | 72.4 | 77.7 | 81.9 | 85.8 | 87.3 | 13.4 | 5.3 |
| 151 | 70.8 | 76.2 | 80.1 | 83.9 | 85.3 | 13.1 | 5.4 |
| 155 | 68.2 | 74.5 | 79.5 | 82.0 | 82.0 | 13.8 | 6.3 |
| 159 | 63.3 | 70.7 | 77.9 | 78.2 | 78.2 | 14.9 | 7.4 |
| 163 | 63.7 | 71.0 | 77.8 | 79.0 | 79.0 | 15.3 | 7.3 |
| 167 | 62.5 | 71.0 | 77.8 | 78.3 | 78.3 | 15.8 | 8.5 |

TABLE E-V

NOISE LEVEL TIME HISTORY DATA

BELL 212

OCTOBER 6, 1975

EVENT 35, 110 KT. FLT BY, MIC. 150 METERS EAST

1/2 SECOND INTEGRATION VS NOISE INDEXES
(DB RE 20 MICRO PA)

| INT | DRA | DBD | OASPL | PNL | PNLT | PNL-DBA | DBD-DRA |
|------------|------|------|-------|------|------|---------|---------|
| 5 | 67.7 | 77.3 | 85.3 | 83.7 | 83.7 | 16.0 | 9.6 |
| 7 | 70.8 | 80.1 | 87.7 | 86.2 | 86.2 | 15.4 | 9.3 |
| 9 | 71.5 | 81.0 | 88.8 | 87.4 | 87.4 | 15.9 | 9.5 |
| 11 | 73.9 | 82.7 | 89.8 | 89.3 | 89.3 | 15.4 | 8.8 |
| 13 | 80.2 | 86.4 | 91.8 | 93.0 | 93.0 | 12.8 | 6.2 |
| 15 | 83.3 | 88.6 | 93.5 | 95.4 | 95.4 | 12.1 | 5.3 |
| 17 | 79.3 | 87.2 | 93.9 | 93.8 | 93.8 | 14.5 | 7.9 |
| 19 | 78.8 | 87.4 | 94.4 | 94.2 | 95.3 | 15.4 | 8.6 |
| 21 | 78.1 | 86.6 | 94.5 | 93.7 | 94.8 | 15.6 | 8.5 |
| 23 | 75.7 | 84.7 | 93.9 | 91.3 | 91.3 | 15.6 | 9.0 |
| 25 | 77.7 | 85.6 | 94.0 | 92.7 | 92.7 | 15.0 | 7.9 |
| 27 | 79.3 | 86.5 | 94.5 | 94.3 | 94.3 | 15.0 | 7.2 |
| 28 | 80.5 | 86.9 | 95.0 | 94.9 | 96.0 | 14.4 | 6.4 |
| 30 | 82.0 | 87.3 | 94.6 | 95.6 | 95.6 | 13.6 | 5.3 |
| 32 | 80.6 | 86.5 | 92.9 | 95.0 | 95.0 | 14.4 | 5.9 |
| OH 34 → 35 | 80.8 | 86.2 | 90.9 | 94.2 | 95.6 | 13.4 | 5.4 |
| 36 | 81.2 | 86.0 | 90.3 | 94.0 | 94.0 | 12.8 | 4.8 |
| 38 | 80.2 | 85.6 | 90.3 | 94.1 | 94.1 | 13.9 | 5.4 |
| 40 | 79.7 | 84.9 | 89.9 | 93.3 | 93.3 | 13.6 | 5.2 |
| 42 | 79.2 | 84.0 | 89.1 | 92.4 | 92.4 | 13.2 | 4.8 |
| 44 | 78.0 | 82.9 | 87.7 | 90.7 | 90.7 | 12.7 | 4.9 |
| 46 | 77.4 | 82.3 | 86.7 | 90.2 | 91.3 | 12.8 | 4.9 |
| 48 | 75.3 | 80.3 | 85.8 | 88.0 | 89.5 | 12.7 | 5.0 |
| 50 | 73.8 | 78.6 | 84.5 | 86.8 | 88.4 | 13.0 | 4.8 |
| 52 | 73.2 | 78.4 | 85.1 | 86.7 | 88.5 | 13.5 | 5.2 |
| 54 | 70.7 | 76.0 | 84.1 | 84.3 | 85.7 | 13.6 | 5.3 |
| 56 | 68.8 | 74.4 | 82.7 | 82.8 | 84.7 | 14.0 | 5.6 |
| 58 | 67.4 | 73.9 | 81.4 | 81.9 | 84.2 | 14.5 | 6.5 |
| 60 | 69.9 | 76.7 | 83.1 | 84.1 | 85.6 | 14.2 | 6.8 |

TABLE E-V

NOISE LEVEL TIME HISTORY DATA

BELL 212

OCTOBER 6, 1976

EVENT 36, 110 KT. FLY BY, MIC. 150 METERS EAST

1/2 SECOND INTEGRATION VS NOISE INDEXES
(DB RE 20 MICRO PA)

| INT | DBA | DBD | OASPL | PNL | PNLT | PNL-DBA | DBD-DBA |
|--------------|------|------|-------|------|------|---------|---------|
| 1 | 60.6 | 69.9 | 78.7 | 76.7 | 76.7 | 16.1 | 9.3 |
| 3 | 62.2 | 72.0 | 80.8 | 78.4 | 78.4 | 16.2 | 9.8 |
| 5 | 64.0 | 74.2 | 83.6 | 81.3 | 81.3 | 17.3 | 10.2 |
| 7 | 67.9 | 78.4 | 87.2 | 84.4 | 84.4 | 16.5 | 10.5 |
| 9 | 73.3 | 83.1 | 90.7 | 88.8 | 88.8 | 15.5 | 9.8 |
| 11 | 78.8 | 86.8 | 93.1 | 92.9 | 92.9 | 14.1 | 8.0 |
| 13 | 81.1 | 88.6 | 94.7 | 94.9 | 94.9 | 13.8 | 7.5 |
| 15 | 81.1 | 89.1 | 95.2 | 95.2 | 95.2 | 14.1 | 8.0 |
| 17 | 79.6 | 88.1 | 94.8 | 94.7 | 94.7 | 15.1 | 8.5 |
| 19 | 78.1 | 87.2 | 94.5 | 93.7 | 93.7 | 15.6 | 9.1 |
| 21 | 77.4 | 86.6 | 94.3 | 93.5 | 94.6 | 16.1 | 9.2 |
| 23 | 78.3 | 86.6 | 94.4 | 93.7 | 94.8 | 15.4 | 8.3 |
| 25 | 78.9 | 85.6 | 93.8 | 93.2 | 94.5 | 14.3 | 6.7 |
| 27 | 76.9 | 83.8 | 92.9 | 91.7 | 93.7 | 14.8 | 6.9 |
| 29 | 78.7 | 84.8 | 93.1 | 92.5 | 93.6 | 13.8 | 6.1 |
| 31 | 78.9 | 84.1 | 91.4 | 92.5 | 92.5 | 13.6 | 5.2 |
| 33 | 78.0 | 83.0 | 88.7 | 91.6 | 93.1 | 13.6 | 5.0 |
| 35 | 78.5 | 82.8 | 86.5 | 90.8 | 92.3 | 12.3 | 4.3 |
| 37 | 78.8 | 83.2 | 86.7 | 91.7 | 91.7 | 12.9 | 4.4 |
| 39 | 79.7 | 84.1 | 88.1 | 92.3 | 92.3 | 12.6 | 4.4 |
| OH → 41 → 40 | 79.9 | 84.2 | 87.5 | 92.0 | 93.2 | 12.1 | 4.3 |
| 43 | 78.3 | 82.8 | 85.2 | 90.5 | 91.5 | 12.2 | 4.5 |
| 45 | 76.8 | 81.2 | 83.8 | 88.5 | 88.5 | 11.7 | 4.4 |
| 47 | 75.3 | 79.3 | 82.8 | 86.9 | 88.7 | 11.6 | 4.0 |
| 49 | 73.3 | 77.4 | 81.4 | 85.1 | 86.2 | 11.8 | 4.1 |
| 51 | 71.0 | 75.5 | 79.5 | 83.3 | 84.7 | 12.3 | 4.5 |
| 53 | 68.9 | 73.5 | 78.4 | 81.7 | 83.1 | 12.8 | 4.6 |
| 55 | 67.0 | 71.9 | 77.0 | 80.0 | 80.0 | 13.0 | 4.9 |
| 57 | 65.5 | 70.6 | 75.9 | 78.8 | 80.7 | 13.3 | 5.1 |

TABLE E-V

NOISE LEVEL TIME HISTORY DATA

BELL 212

OCTOBER 6, 1976

EVENT 44, 110 KT. FLY BY, MIC. 150 METERS EAST

1/2 SECOND INTEGRATION VS NOISE INDEXES
(DB RE 20 MICRO PA)

| INT | DBA | DBD | OASPL | PNL | PNLT | PNL-DBA | DBD-DBA |
|---------|------|------|-------|------|------|---------|---------|
| 1 | 61.7 | 70.5 | 79.2 | 77.0 | 77.0 | 15.3 | 8.8 |
| 3 | 61.7 | 71.2 | 80.6 | 77.8 | 77.8 | 16.1 | 9.5 |
| 5 | 64.7 | 74.4 | 83.0 | 80.9 | 80.9 | 16.2 | 9.7 |
| 7 | 68.7 | 78.4 | 87.0 | 85.3 | 85.3 | 16.6 | 9.7 |
| 9 | 72.9 | 82.5 | 90.2 | 88.9 | 88.9 | 16.0 | 9.6 |
| 11 | 75.9 | 85.1 | 92.2 | 91.4 | 91.4 | 15.5 | 9.2 |
| 13 | 78.6 | 87.4 | 93.9 | 93.0 | 93.0 | 14.4 | 8.8 |
| 15 | 79.9 | 88.7 | 95.0 | 94.4 | 94.4 | 14.5 | 8.8 |
| 16 | 80.3 | 89.2 | 95.3 | 94.7 | 94.7 | 14.4 | 8.9 |
| 18 | 79.4 | 88.3 | 94.8 | 94.1 | 94.1 | 14.7 | 8.9 |
| 20 | 78.2 | 87.3 | 94.3 | 93.5 | 93.5 | 15.3 | 9.1 |
| 22 | 77.4 | 86.9 | 94.3 | 93.2 | 93.2 | 15.8 | 9.5 |
| 24 | 76.5 | 86.2 | 94.3 | 92.3 | 93.3 | 15.8 | 9.7 |
| 26 | 75.4 | 84.7 | 93.2 | 91.7 | 92.9 | 16.3 | 9.3 |
| 28 | 76.1 | 84.5 | 93.2 | 91.8 | 91.8 | 15.7 | 8.4 |
| 30 | 78.3 | 85.4 | 93.6 | 92.9 | 92.9 | 14.6 | 7.1 |
| 32 | 77.8 | 84.0 | 92.4 | 91.8 | 91.8 | 14.0 | 6.2 |
| 34 | 78.1 | 83.5 | 91.3 | 91.8 | 93.3 | 13.7 | 5.4 |
| 36 | 79.3 | 84.1 | 89.2 | 92.1 | 92.1 | 12.8 | 4.8 |
| 38 | 79.9 | 84.0 | 86.4 | 91.9 | 91.9 | 12.0 | 4.1 |
| OH → 40 | 79.0 | 83.5 | 86.9 | 91.7 | 92.7 | 12.7 | 4.5 |
| 42 | 78.1 | 83.0 | 87.3 | 90.9 | 90.9 | 12.8 | 4.9 |
| 44 | 77.9 | 82.4 | 85.4 | 90.2 | 90.2 | 12.3 | 4.5 |
| 46 | 77.0 | 81.5 | 83.7 | 88.8 | 88.8 | 11.8 | 4.5 |
| 48 | 75.8 | 80.4 | 83.2 | 88.5 | 90.3 | 12.7 | 4.6 |
| 50 | 73.7 | 78.7 | 81.9 | 86.2 | 87.7 | 12.5 | 5.0 |
| 52 | 72.7 | 77.2 | 80.8 | 84.8 | 86.2 | 12.1 | 4.5 |
| 54 | 68.9 | 73.6 | 79.3 | 81.3 | 82.5 | 12.4 | 4.7 |
| 56 | 66.6 | 71.6 | 77.8 | 79.4 | 80.9 | 12.8 | 5.0 |
| 58 | 64.9 | 69.7 | 76.3 | 78.3 | 80.3 | 13.4 | 4.8 |
| 60 | 64.3 | 69.3 | 76.3 | 77.6 | 77.6 | 13.3 | 5.0 |

TABLE - E-V

NOISE LEVEL TIME HISTORY DATA

BELL 212

OCTOBER 6, 1976

EVENT 45, 110 KT. FLY BY, MIC. 150 METERS EAST

1/2 SECOND INTEGRATION VS NOISE INDEXES
(DB RE 20 MICRO PA)

| INT | DBA | DBD | OASPL | PNL | PNLT | PNL-DBA | DBD-DBA |
|---------|------|------|-------|------|------|---------|---------|
| 1 | 63.7 | 73.6 | 81.7 | 83.3 | 83.3 | 19.6 | 9.9 |
| 2 | 65.2 | 74.4 | 82.1 | 83.7 | 83.7 | 18.5 | 9.2 |
| 3 | 65.7 | 74.7 | 82.8 | 84.1 | 84.1 | 18.4 | 9.0 |
| 4 | 66.6 | 75.6 | 84.1 | 84.6 | 84.6 | 18.0 | 9.0 |
| 5 | 66.8 | 76.3 | 85.2 | 85.6 | 85.6 | 18.8 | 9.5 |
| 6 | 68.3 | 77.6 | 86.6 | 86.4 | 86.4 | 18.1 | 9.3 |
| 7 | 70.4 | 79.7 | 88.9 | 88.3 | 88.3 | 17.9 | 9.3 |
| 8 | 73.9 | 83.2 | 91.6 | 91.3 | 91.3 | 17.4 | 9.3 |
| 9 | 76.3 | 85.9 | 93.9 | 93.5 | 93.5 | 17.2 | 9.6 |
| 10 | 77.4 | 87.1 | 95.0 | 94.6 | 94.6 | 17.2 | 9.7 |
| 11 | 77.2 | 87.2 | 95.0 | 94.6 | 94.6 | 17.4 | 10.0 |
| 12 | 76.0 | 86.3 | 94.4 | 93.6 | 93.6 | 17.6 | 10.3 |
| 13 | 74.7 | 85.1 | 93.5 | 92.7 | 92.7 | 18.0 | 10.4 |
| 14 | 73.8 | 84.0 | 92.9 | 92.0 | 92.0 | 18.2 | 10.2 |
| 15 | 73.7 | 83.5 | 92.9 | 91.7 | 91.7 | 18.0 | 9.8 |
| 16 | 73.8 | 83.1 | 92.6 | 91.9 | 91.9 | 18.1 | 9.3 |
| 17 | 73.0 | 82.2 | 91.8 | 91.2 | 91.2 | 18.2 | 9.2 |
| 18 | 71.8 | 80.9 | 90.6 | 90.1 | 90.1 | 18.3 | 9.1 |
| 19 | 71.9 | 80.3 | 90.0 | 89.5 | 90.6 | 17.6 | 8.4 |
| 20 | 73.7 | 80.8 | 89.9 | 89.8 | 91.1 | 16.1 | 7.1 |
| 21 | 74.2 | 80.5 | 89.3 | 89.7 | 89.7 | 15.5 | 6.3 |
| 22 | 74.1 | 79.7 | 88.0 | 89.1 | 89.1 | 15.0 | 5.6 |
| 23 | 74.2 | 79.2 | 86.5 | 88.5 | 89.6 | 14.3 | 5.0 |
| 24 | 74.9 | 80.0 | 85.4 | 88.7 | 88.7 | 13.8 | 5.1 |
| 25 | 77.0 | 81.4 | 85.3 | 89.9 | 89.9 | 12.9 | 4.4 |
| 26 | 78.5 | 82.6 | 85.5 | 90.8 | 90.8 | 12.3 | 4.1 |
| 27 | 79.0 | 83.0 | 85.8 | 91.3 | 91.3 | 12.3 | 4.0 |
| OH → 28 | 78.9 | 83.4 | 86.2 | 91.8 | 91.8 | 12.9 | 4.5 |
| 29 | 78.9 | 83.6 | 87.0 | 92.0 | 92.0 | 13.1 | 4.7 |
| 30 | 79.0 | 83.4 | 87.1 | 91.7 | 91.7 | 12.7 | 4.4 |
| 31 | 79.1 | 83.2 | 86.8 | 91.3 | 91.3 | 12.2 | 4.1 |
| 32 | 78.1 | 82.3 | 85.5 | 90.2 | 90.2 | 12.1 | 4.2 |
| 33 | 77.0 | 81.6 | 84.2 | 89.5 | 89.5 | 12.5 | 4.6 |
| 34 | 75.2 | 80.1 | 82.8 | 88.2 | 88.2 | 13.0 | 4.9 |
| 35 | 75.4 | 80.0 | 82.1 | 88.4 | 88.4 | 13.0 | 4.6 |
| 36 | 75.8 | 80.5 | 82.1 | 88.6 | 88.6 | 12.8 | 4.7 |
| 37 | 75.3 | 80.2 | 82.0 | 88.1 | 89.3 | 12.8 | 4.9 |
| 38 | 73.9 | 79.3 | 81.5 | 87.3 | 88.9 | 13.4 | 5.4 |
| 39 | 72.9 | 78.0 | 80.5 | 86.6 | 88.3 | 13.7 | 5.1 |
| 40 | 72.3 | 77.3 | 79.5 | 86.1 | 87.7 | 13.8 | 5.0 |
| 41 | 71.3 | 76.4 | 79.1 | 85.1 | 86.4 | 13.8 | 5.1 |
| 42 | 69.3 | 74.8 | 78.8 | 83.8 | 85.2 | 14.5 | 5.5 |
| 43 | 67.9 | 73.6 | 78.6 | 83.1 | 84.3 | 15.2 | 5.7 |
| 44 | 67.4 | 73.3 | 78.3 | 82.9 | 84.2 | 15.5 | 5.9 |

TABLE E-V

NOISE LEVEL TIME HISTORY DATA

BELL 212

OCTOBER 6, 1976

EVENT 24, 6 DEGREE APPROACH, CENTERLINE MIC. (SOFT SITE)

1/2 SECOND INTEGRATION VS NOISE INDEXES
(DB RE 20 MICRO PA)

| INT | D9A | DBD | OAEPL | PNL | PNLT | PNL-DBA | DBD-DBA |
|------------|------|------|-------|------|------|---------|---------|
| 1 | 70.5 | 79.4 | 85.5 | 84.7 | 84.7 | 14.2 | 8.9 |
| 3 | 70.4 | 79.5 | 85.4 | 84.9 | 84.9 | 14.5 | 9.1 |
| 5 | 72.4 | 80.4 | 85.8 | 85.5 | 85.5 | 13.1 | 8.0 |
| 7 | 72.7 | 80.6 | 85.9 | 86.3 | 88.1 | 13.6 | 7.9 |
| 9 | 72.1 | 80.8 | 86.9 | 86.4 | 87.8 | 14.3 | 8.7 |
| 11 | 72.5 | 80.9 | 87.0 | 86.3 | 87.7 | 13.8 | 8.4 |
| 13 | 72.8 | 81.2 | 87.3 | 86.4 | 87.7 | 13.6 | 8.4 |
| 15 | 71.9 | 81.2 | 87.3 | 86.0 | 86.0 | 14.1 | 9.3 |
| 17 | 73.8 | 82.2 | 87.9 | 87.7 | 87.7 | 13.9 | 8.4 |
| 19 | 76.0 | 83.7 | 87.8 | 89.3 | 90.3 | 13.3 | 7.7 |
| 21 | 75.7 | 83.9 | 88.6 | 89.1 | 89.1 | 13.4 | 8.2 |
| 23 | 75.2 | 82.8 | 88.5 | 88.3 | 88.3 | 13.1 | 7.6 |
| 25 | 78.0 | 85.1 | 88.9 | 91.4 | 91.4 | 13.4 | 7.1 |
| 27 | 78.1 | 84.7 | 88.6 | 91.0 | 91.0 | 12.9 | 6.6 |
| 29 | 73.6 | 81.4 | 87.7 | 87.5 | 87.5 | 13.9 | 7.8 |
| 31 | 71.0 | 79.8 | 87.3 | 85.8 | 85.8 | 14.8 | 8.8 |
| 33 | 72.8 | 81.1 | 88.4 | 87.0 | 87.0 | 14.2 | 8.3 |
| 35 | 77.5 | 84.8 | 89.9 | 90.8 | 91.9 | 13.3 | 7.3 |
| 37 | 77.9 | 85.2 | 90.7 | 91.3 | 92.8 | 13.4 | 7.3 |
| 39 | 78.1 | 85.4 | 90.7 | 91.7 | 91.7 | 13.6 | 7.3 |
| 41 | 78.3 | 85.9 | 90.9 | 91.7 | 92.5 | 13.4 | 7.6 |
| 43 | 78.9 | 86.4 | 91.0 | 92.1 | 93.6 | 13.2 | 7.5 |
| 45 | 80.3 | 87.4 | 91.2 | 92.8 | 94.0 | 12.5 | 7.1 |
| 47 | 80.5 | 87.7 | 91.9 | 94.0 | 94.0 | 13.5 | 7.2 |
| 49 | 81.9 | 88.9 | 92.3 | 95.2 | 95.2 | 13.3 | 7.0 |
| 51 | 82.1 | 90.2 | 93.2 | 95.9 | 95.9 | 13.8 | 8.1 |
| 53 | 82.7 | 90.7 | 93.8 | 96.3 | 96.3 | 13.6 | 8.0 |
| 55 | 83.6 | 91.8 | 94.3 | 97.5 | 97.5 | 13.9 | 8.2 |
| 57 | 82.4 | 90.7 | 93.8 | 96.7 | 96.7 | 14.3 | 8.3 |
| 59 | 83.7 | 91.8 | 94.3 | 97.4 | 97.4 | 13.7 | 8.1 |
| 60 | 84.2 | 92.3 | 95.0 | 98.0 | 98.0 | 13.8 | 8.1 |
| OH 62 → 63 | 82.6 | 91.1 | 94.8 | 97.4 | 97.4 | 14.8 | 8.5 |
| 64 | 81.1 | 89.6 | 94.2 | 95.5 | 95.5 | 14.4 | 8.5 |
| 66 | 81.0 | 90.0 | 94.4 | 95.6 | 95.6 | 14.6 | 9.0 |
| 68 | 81.0 | 90.1 | 94.1 | 95.8 | 95.8 | 14.8 | 9.1 |
| 70 | 80.3 | 89.4 | 93.5 | 95.4 | 95.4 | 15.1 | 9.1 |
| 72 | 79.6 | 88.3 | 92.1 | 94.3 | 94.3 | 14.7 | 8.7 |
| 74 | 79.4 | 88.1 | 91.7 | 94.0 | 94.0 | 14.6 | 8.7 |
| 76 | 78.0 | 86.5 | 90.1 | 92.9 | 92.9 | 14.9 | 8.5 |
| 78 | 77.6 | 85.6 | 88.9 | 91.8 | 91.8 | 14.2 | 8.0 |
| 80 | 77.1 | 84.8 | 88.1 | 90.6 | 90.6 | 13.5 | 7.7 |
| 82 | 75.2 | 82.9 | 87.2 | 88.2 | 90.0 | 13.0 | 7.7 |
| 84 | 72.2 | 80.2 | 85.5 | 85.4 | 86.5 | 13.2 | 8.0 |
| 86 | 70.3 | 78.3 | 84.4 | 83.9 | 85.2 | 13.6 | 8.0 |

TABLE E-V

NOISE LEVEL TIME HISTORY DATA

BELL 212

OCTOBER 6, 1976

EVENT 27, 9 DEGREE APPROACH, CENTERLINE MIC. (SOFT SITE)

1/2 SECOND INTEGRATION VS NOISE INDEXES
(DB RE 20 MICRO PA)

| INT | DBA | DBD | OASPL | PNL | PNLT | PNL-DBA | DBD-DBA |
|----------|------|------|-------|------|------|---------|---------|
| 1 | 70.3 | 78.8 | 84.9 | 84.8 | 86.0 | 14.5 | 8.5 |
| 3 | 74.5 | 81.1 | 85.6 | 87.2 | 88.5 | 12.7 | 6.6 |
| 5 | 74.2 | 81.6 | 86.0 | 88.0 | 89.1 | 13.8 | 7.4 |
| 7 | 76.2 | 83.0 | 86.9 | 89.4 | 89.4 | 13.2 | 6.8 |
| 9 | 75.4 | 82.4 | 86.9 | 88.8 | 88.8 | 13.4 | 7.0 |
| 11 | 74.4 | 81.7 | 87.0 | 87.8 | 87.8 | 13.4 | 7.3 |
| 13 | 74.8 | 82.2 | 87.2 | 88.1 | 90.0 | 13.3 | 7.4 |
| 15 | 76.4 | 83.1 | 87.7 | 89.4 | 91.7 | 13.0 | 6.7 |
| 17 | 77.8 | 85.0 | 88.2 | 90.7 | 92.9 | 12.9 | 7.2 |
| 19 | 78.2 | 85.1 | 88.5 | 91.4 | 93.2 | 12.2 | 6.9 |
| 21 | 78.7 | 85.7 | 89.0 | 91.1 | 92.5 | 12.4 | 7.0 |
| 23 | 78.6 | 86.1 | 89.7 | 91.3 | 92.8 | 12.7 | 7.5 |
| 25 | 79.9 | 87.2 | 90.4 | 92.7 | 92.7 | 12.8 | 7.3 |
| 27 | 82.8 | 89.5 | 91.3 | 94.3 | 94.3 | 11.5 | 6.7 |
| 29 | 80.9 | 88.3 | 90.9 | 93.2 | 94.6 | 12.3 | 7.4 |
| 31 | 82.2 | 89.6 | 91.5 | 94.2 | 94.2 | 12.0 | 7.4 |
| 33 | 82.6 | 90.0 | 92.0 | 94.8 | 94.8 | 12.2 | 7.4 |
| 35 | 82.3 | 90.1 | 92.3 | 94.8 | 95.8 | 12.5 | 7.8 |
| 37 | 83.2 | 91.2 | 92.9 | 96.3 | 97.5 | 13.1 | 8.0 |
| 39 | 83.4 | 90.8 | 92.9 | 96.2 | 96.2 | 12.8 | 7.4 |
| 41 | 83.8 | 91.3 | 93.7 | 97.0 | 97.0 | 13.2 | 7.5 |
| 43 | 84.9 | 93.0 | 95.0 | 98.5 | 98.5 | 13.6 | 8.1 |
| 45 | 84.7 | 92.8 | 95.0 | 98.1 | 98.1 | 13.4 | 8.1 |
| 47 | 85.2 | 93.4 | 95.5 | 99.1 | 99.1 | 13.9 | 8.2 |
| 48 | 85.1 | 93.4 | 95.8 | 99.3 | 99.3 | 14.2 | 8.3 |
| 50 | 83.3 | 92.0 | 95.4 | 98.0 | 98.0 | 14.7 | 8.7 |
| OH-52-53 | 81.5 | 90.2 | 94.3 | 96.3 | 96.3 | 14.8 | 8.7 |
| 54 | 81.7 | 90.2 | 94.6 | 96.4 | 96.4 | 14.7 | 8.5 |
| 56 | 81.8 | 90.3 | 94.9 | 96.4 | 96.4 | 14.6 | 8.5 |
| 58 | 81.6 | 90.3 | 94.6 | 96.1 | 96.1 | 14.5 | 8.7 |
| 60 | 82.0 | 90.8 | 94.5 | 96.5 | 96.5 | 14.5 | 8.8 |
| 62 | 81.8 | 90.7 | 94.0 | 96.5 | 96.5 | 14.7 | 8.9 |
| 64 | 80.9 | 89.4 | 92.3 | 95.6 | 95.6 | 14.7 | 8.5 |
| 66 | 81.2 | 89.2 | 91.2 | 94.5 | 94.5 | 13.3 | 8.0 |
| 68 | 80.6 | 88.5 | 90.5 | 93.6 | 93.6 | 13.0 | 7.9 |
| 70 | 77.1 | 85.4 | 88.5 | 91.0 | 91.0 | 13.9 | 8.3 |
| 72 | 76.1 | 84.3 | 87.3 | 89.4 | 91.2 | 13.3 | 8.2 |
| 74 | 74.9 | 82.3 | 85.6 | 88.0 | 89.5 | 13.1 | 7.4 |
| 76 | 76.4 | 83.4 | 85.3 | 89.2 | 90.7 | 12.8 | 7.0 |
| 78 | 70.8 | 78.3 | 83.4 | 84.2 | 84.2 | 13.4 | 7.5 |
| 80 | 70.1 | 78.0 | 82.2 | 83.3 | 83.3 | 13.2 | 7.9 |
| 82 | 69.0 | 77.5 | 81.9 | 83.2 | 84.3 | 14.2 | 8.5 |
| 84 | 66.8 | 76.0 | 81.2 | 81.6 | 82.6 | 14.8 | 9.2 |

TABLE E-V

NOISE LEVEL TIME HISTORY DATA

BELL 212

OCTOBER 6, 1975

EVENT 29, 60 KT. FLY BY, CENTERLINE MIC. (SOFT SITE)

1/2 SECOND INTEGRATION VS NOISE INDEXES
(DB RE 20 MICRO PA)

| INT | DBA | DBD | OASPL | PNL | PNLI | PNL-DBA | DBD-DBA |
|--------------|------|------|-------|------|------|---------|---------|
| 1 | 63.0 | 72.7 | 78.7 | 79.3 | 79.3 | 16.3 | 9.7 |
| 5 | 65.3 | 75.3 | 80.5 | 80.8 | 80.8 | 15.5 | 10.0 |
| 9 | 67.7 | 77.1 | 82.5 | 82.5 | 82.5 | 14.8 | 9.4 |
| 13 | 68.9 | 78.2 | 83.5 | 83.4 | 83.4 | 14.5 | 9.3 |
| 17 | 69.2 | 79.2 | 84.0 | 84.8 | 84.8 | 15.6 | 10.0 |
| 21 | 67.1 | 77.4 | 82.7 | 82.9 | 82.9 | 15.8 | 10.3 |
| 25 | 65.9 | 76.0 | 82.2 | 81.7 | 81.7 | 15.8 | 10.1 |
| 29 | 68.6 | 76.5 | 81.7 | 82.5 | 82.5 | 13.9 | 7.9 |
| 33 | 68.5 | 77.1 | 81.8 | 82.6 | 82.6 | 14.1 | 8.6 |
| 37 | 67.2 | 76.3 | 82.2 | 82.1 | 82.1 | 14.9 | 9.1 |
| 41 | 67.1 | 77.5 | 83.4 | 82.8 | 82.8 | 15.7 | 10.4 |
| 45 | 69.1 | 79.4 | 84.8 | 84.5 | 84.5 | 15.4 | 10.3 |
| 49 | 68.4 | 79.2 | 85.2 | 84.2 | 84.2 | 15.8 | 10.8 |
| 53 | 67.7 | 79.0 | 85.3 | 83.6 | 83.6 | 15.9 | 11.3 |
| 57 | 68.8 | 79.5 | 86.0 | 84.3 | 85.5 | 15.5 | 10.7 |
| 61 | 71.3 | 82.7 | 88.3 | 87.1 | 87.1 | 15.8 | 11.4 |
| 65 | 68.8 | 79.6 | 85.9 | 84.8 | 84.8 | 16.0 | 10.8 |
| 69 | 70.3 | 80.8 | 86.9 | 86.3 | 86.3 | 16.0 | 10.5 |
| 73 | 68.3 | 79.6 | 86.5 | 84.6 | 84.6 | 16.3 | 11.3 |
| 77 | 69.3 | 78.9 | 86.0 | 84.6 | 85.7 | 15.3 | 9.6 |
| 81 | 71.4 | 80.7 | 87.8 | 86.1 | 87.7 | 14.7 | 9.3 |
| 85 | 76.8 | 84.5 | 90.0 | 90.7 | 90.7 | 13.9 | 7.7 |
| 89 | 76.7 | 84.2 | 90.0 | 90.7 | 92.1 | 14.0 | 7.5 |
| 93 | 76.3 | 83.9 | 89.8 | 90.1 | 90.1 | 13.8 | 7.6 |
| 97 | 76.8 | 84.6 | 90.4 | 90.7 | 92.0 | 13.9 | 7.8 |
| 101 | 77.3 | 85.5 | 90.6 | 92.1 | 92.1 | 14.8 | 8.2 |
| 104 | 78.9 | 87.0 | 91.4 | 93.3 | 93.3 | 14.4 | 8.1 |
| 108 | 78.7 | 87.0 | 91.3 | 92.8 | 92.8 | 14.1 | 8.3 |
| OH 112 → 114 | 78.2 | 86.1 | 90.5 | 92.1 | 92.1 | 13.9 | 7.9 |
| 116 | 77.2 | 84.4 | 89.5 | 90.9 | 90.9 | 13.7 | 7.2 |
| 120 | 75.7 | 83.4 | 87.7 | 89.5 | 89.5 | 13.8 | 7.7 |
| 124 | 74.0 | 82.0 | 85.8 | 88.1 | 88.1 | 14.1 | 8.0 |
| 128 | 73.9 | 81.5 | 84.5 | 87.3 | 88.7 | 13.4 | 7.6 |
| 132 | 72.5 | 80.5 | 83.8 | 86.2 | 87.8 | 13.7 | 8.0 |
| 136 | 69.7 | 77.6 | 82.5 | 83.8 | 83.8 | 14.1 | 7.9 |
| 140 | 68.3 | 76.4 | 81.3 | 82.2 | 83.8 | 13.9 | 8.1 |
| 144 | 67.4 | 75.9 | 80.1 | 82.1 | 82.1 | 14.7 | 8.5 |
| 148 | 66.4 | 74.4 | 79.0 | 80.2 | 81.9 | 13.8 | 8.0 |
| 152 | 66.7 | 74.6 | 78.7 | 80.9 | 83.0 | 14.2 | 7.9 |
| 156 | 64.0 | 72.6 | 77.9 | 78.5 | 80.2 | 14.5 | 8.6 |
| 160 | 60.8 | 70.2 | 76.3 | 76.5 | 78.0 | 15.7 | 9.4 |
| 164 | 58.0 | 69.3 | 76.1 | 76.0 | 76.0 | 18.0 | 11.3 |

TABLE E-V

NOISE LEVEL TIME HISTORY DATA

BELL 212

OCTOBER 6, 1976

EVENT 30, 60 KI. FLT BY, CENTERLINE MIC. (SOFT SITE)

1/2 SECOND INTEGRATION VS NOISE INDEXES
(DB RE 20 MICRO PA)

| INT | DBA | DBD | OASPL | PNL | PNLT | PNL-DBA | DBD-DBA |
|---------|------|------|-------|------|------|---------|---------|
| 1 | 61.5 | 72.5 | 80.0 | 78.4 | 78.4 | 16.9 | 11.0 |
| 4 | 63.0 | 74.0 | 81.1 | 79.5 | 79.5 | 16.5 | 11.0 |
| 7 | 63.2 | 74.9 | 81.9 | 80.3 | 80.3 | 17.1 | 11.7 |
| 10 | 66.7 | 78.4 | 84.8 | 83.2 | 83.2 | 16.5 | 11.7 |
| 13 | 66.3 | 78.8 | 85.3 | 83.2 | 83.2 | 16.9 | 12.5 |
| 16 | 65.5 | 77.4 | 84.6 | 82.3 | 82.3 | 16.8 | 11.9 |
| 19 | 67.2 | 78.2 | 84.9 | 83.1 | 83.1 | 15.9 | 11.0 |
| 22 | 72.3 | 80.1 | 85.8 | 85.7 | 85.7 | 13.4 | 7.8 |
| 25 | 74.1 | 81.4 | 86.6 | 87.0 | 88.0 | 12.9 | 7.3 |
| 28 | 72.7 | 81.5 | 87.4 | 86.7 | 86.7 | 14.0 | 8.8 |
| 31 | 71.1 | 80.0 | 86.9 | 85.7 | 85.7 | 14.6 | 8.9 |
| 34 | 73.6 | 81.1 | 87.0 | 87.3 | 87.3 | 13.7 | 7.5 |
| 37 | 76.1 | 83.1 | 88.0 | 89.3 | 91.1 | 13.2 | 7.0 |
| 40 | 76.5 | 83.8 | 88.5 | 90.6 | 90.6 | 14.1 | 7.3 |
| 43 | 74.7 | 83.0 | 89.2 | 88.9 | 90.5 | 14.2 | 8.3 |
| 46 | 76.5 | 84.4 | 89.9 | 90.4 | 90.4 | 13.9 | 7.9 |
| 49 | 78.7 | 86.5 | 91.0 | 92.9 | 92.9 | 14.2 | 7.8 |
| 50 | 79.3 | 87.0 | 91.0 | 93.0 | 93.0 | 13.7 | 7.7 |
| 53 | 77.9 | 85.3 | 89.9 | 91.4 | 91.4 | 13.5 | 7.4 |
| OH → 56 | 77.2 | 84.8 | 89.1 | 90.7 | 90.7 | 13.5 | 7.6 |
| 59 | 75.5 | 82.4 | 88.0 | 88.6 | 88.6 | 13.1 | 6.9 |
| 62 | 75.4 | 82.9 | 86.4 | 89.2 | 89.2 | 13.8 | 7.5 |
| 65 | 73.4 | 81.2 | 83.8 | 86.8 | 88.4 | 13.4 | 7.8 |
| 68 | 72.6 | 80.0 | 81.8 | 86.0 | 88.5 | 13.4 | 7.4 |
| 71 | 68.3 | 76.2 | 79.4 | 81.7 | 83.3 | 13.4 | 7.9 |
| 74 | 67.3 | 75.0 | 78.3 | 81.7 | 84.5 | 14.4 | 7.7 |
| 77 | 63.8 | 72.0 | 77.5 | 79.0 | 81.7 | 15.2 | 8.2 |
| 80 | 64.7 | 72.6 | 76.7 | 79.5 | 82.5 | 14.8 | 7.9 |
| 83 | 62.9 | 71.3 | 75.7 | 78.3 | 81.0 | 15.4 | 8.4 |
| 86 | 64.8 | 72.8 | 75.8 | 79.4 | 82.3 | 14.6 | 8.0 |
| 89 | 69.8 | 77.0 | 75.8 | 83.3 | 86.5 | 13.5 | 7.2 |
| 92 | 68.3 | 76.5 | 75.9 | 82.0 | 84.9 | 13.7 | 8.2 |
| 95 | 65.3 | 74.2 | 74.9 | 80.4 | 83.6 | 15.1 | 8.9 |
| 98 | 65.3 | 74.3 | 74.8 | 80.5 | 83.2 | 15.2 | 9.0 |
| 101 | 64.1 | 73.4 | 75.0 | 79.7 | 82.0 | 15.6 | 9.3 |

TABLE E-V

NOISE LEVEL TIME HISTORY DATA

BELL 212

OCTOBER 6, 1975

EVENT 31, 60 KT. FLY BY, CENTERLINE MIC. (SOFT SITE)

1/2 SECOND INTEGRATION VS NOISE INDEXES
(DB RE 20 MICRO PA)

| INT | DBA | DBD | OASPL | PNL | PNLI | PNL-DBA | DBD-DBA |
|------------|------|------|-------|------|------|---------|---------|
| 1 | 60.0 | 70.7 | 79.4 | 76.6 | 76.6 | 16.6 | 10.7 |
| 4 | 61.3 | 72.9 | 81.0 | 78.3 | 78.3 | 17.0 | 11.6 |
| 7 | 63.9 | 75.6 | 82.8 | 80.7 | 80.7 | 16.8 | 11.7 |
| 10 | 66.7 | 77.6 | 84.1 | 82.8 | 82.8 | 16.1 | 10.9 |
| 13 | 69.2 | 79.2 | 84.8 | 84.3 | 84.3 | 15.1 | 10.0 |
| 16 | 68.6 | 78.4 | 84.1 | 84.0 | 84.0 | 15.4 | 9.8 |
| 19 | 67.9 | 78.2 | 83.8 | 83.6 | 83.6 | 15.7 | 10.3 |
| 22 | 68.4 | 79.1 | 84.6 | 84.3 | 84.3 | 15.9 | 10.7 |
| 25 | 68.4 | 79.4 | 85.2 | 84.4 | 84.4 | 16.0 | 11.0 |
| 28 | 67.3 | 78.3 | 84.3 | 83.5 | 83.5 | 16.2 | 11.0 |
| 31 | 65.2 | 76.6 | 83.7 | 81.6 | 81.6 | 16.4 | 11.4 |
| 34 | 66.8 | 77.8 | 84.5 | 82.8 | 82.8 | 16.0 | 11.0 |
| 37 | 68.0 | 78.4 | 84.8 | 83.8 | 83.8 | 15.8 | 10.4 |
| 40 | 68.2 | 78.3 | 84.9 | 83.9 | 83.9 | 15.7 | 10.1 |
| 43 | 67.3 | 78.2 | 85.4 | 83.3 | 83.3 | 16.0 | 10.9 |
| 46 | 68.8 | 79.4 | 86.1 | 84.2 | 84.2 | 15.4 | 10.6 |
| 49 | 69.8 | 79.7 | 86.4 | 85.5 | 85.5 | 15.7 | 9.9 |
| 52 | 69.5 | 79.5 | 86.1 | 84.7 | 86.6 | 15.2 | 10.0 |
| 55 | 68.5 | 79.2 | 86.2 | 84.3 | 85.6 | 15.8 | 10.7 |
| 58 | 75.0 | 82.2 | 87.4 | 88.0 | 88.0 | 13.0 | 7.2 |
| 61 | 73.3 | 81.6 | 87.6 | 87.2 | 89.1 | 13.9 | 8.3 |
| 64 | 77.1 | 83.6 | 88.6 | 90.0 | 92.2 | 12.9 | 6.5 |
| 67 | 77.8 | 85.8 | 90.0 | 91.7 | 91.7 | 13.9 | 8.0 |
| 70 | 77.7 | 84.9 | 90.0 | 91.6 | 91.6 | 13.9 | 7.2 |
| 73 | 74.2 | 82.0 | 89.1 | 88.0 | 89.4 | 13.8 | 7.8 |
| 76 | 77.3 | 84.9 | 90.4 | 90.8 | 92.2 | 13.5 | 7.6 |
| 79 | 78.1 | 85.3 | 90.3 | 91.2 | 91.2 | 13.1 | 7.2 |
| 82 | 77.1 | 85.3 | 90.2 | 91.3 | 91.3 | 14.2 | 8.2 |
| 85 | 78.2 | 86.2 | 90.1 | 91.9 | 91.9 | 13.7 | 8.0 |
| 88 | 78.5 | 85.8 | 90.2 | 91.7 | 91.7 | 13.2 | 7.3 |
| 91 | 78.2 | 86.2 | 90.7 | 92.4 | 92.4 | 13.6 | 7.4 |
| OH 92 → 94 | 78.7 | 86.2 | 90.9 | 92.7 | 92.7 | 14.0 | 7.5 |
| 95 | 77.0 | 84.1 | 90.1 | 90.4 | 90.4 | 13.4 | 7.1 |
| 98 | 75.3 | 83.0 | 88.4 | 89.2 | 89.2 | 13.9 | 7.7 |
| 101 | 74.9 | 82.7 | 86.7 | 88.7 | 88.7 | 13.8 | 7.8 |
| 104 | 75.1 | 82.7 | 86.7 | 88.5 | 88.5 | 13.4 | 7.6 |
| 107 | 73.6 | 81.2 | 84.9 | 87.3 | 87.3 | 13.7 | 7.6 |
| 110 | 73.9 | 81.3 | 84.0 | 87.0 | 88.3 | 13.1 | 7.4 |
| 113 | 72.7 | 80.3 | 83.0 | 85.6 | 87.1 | 12.9 | 7.6 |
| 116 | 69.8 | 78.0 | 82.0 | 83.3 | 84.4 | 13.5 | 8.2 |
| 119 | 68.3 | 76.2 | 81.0 | 81.9 | 83.4 | 13.6 | 7.9 |
| 122 | 69.6 | 77.0 | 79.8 | 83.0 | 85.0 | 13.4 | 7.4 |
| 125 | 62.1 | 71.0 | 78.1 | 76.8 | 77.9 | 14.7 | 8.9 |

TABLE E-V

NOISE LEVEL TIME HISTORY DATA

BELL 212

OCTOBER 6, 1976

EVENT 32, 99 KT. FLY BY, CENTERLINE MIC. (SOFT SITE)

1/2 SECOND INTEGRATION VS NOISE INDEXES
(DB RE 20 MICRO PA)

| INT | DBA | DBD | OASPL | PNL | PNLT | PNL-DBA | DBD-DBA |
|-------|------|------|-------|------|------|---------|---------|
| 1 | 68.4 | 79.9 | 85.7 | 83.8 | 83.8 | 15.4 | 11.5 |
| 3 | 76.7 | 87.4 | 91.6 | 91.0 | 91.0 | 14.3 | 10.7 |
| 5 | 77.3 | 88.2 | 92.6 | 91.8 | 91.8 | 14.5 | 10.9 |
| 7 | 76.1 | 87.5 | 92.8 | 91.4 | 91.4 | 15.3 | 11.4 |
| 9 | 72.7 | 85.4 | 91.9 | 89.3 | 89.3 | 16.6 | 12.7 |
| 11 | 71.3 | 83.3 | 90.4 | 87.7 | 87.7 | 16.4 | 12.0 |
| 13 | 73.7 | 84.8 | 90.7 | 88.6 | 88.6 | 14.9 | 11.1 |
| 15 | 75.3 | 86.4 | 91.6 | 90.3 | 90.3 | 15.0 | 11.1 |
| 17 | 74.3 | 85.9 | 91.4 | 90.1 | 90.1 | 15.8 | 11.6 |
| 19 | 74.8 | 86.4 | 92.0 | 90.5 | 91.8 | 15.7 | 11.6 |
| 21 | 75.0 | 86.5 | 92.5 | 91.1 | 91.1 | 16.1 | 11.5 |
| 23 | 74.6 | 86.3 | 92.9 | 91.1 | 93.0 | 16.5 | 11.7 |
| 25 | 75.0 | 85.9 | 92.9 | 90.9 | 92.5 | 15.9 | 10.9 |
| 27 | 78.9 | 87.3 | 93.1 | 93.0 | 93.0 | 14.1 | 8.4 |
| 29 | 80.5 | 88.4 | 93.2 | 94.3 | 94.3 | 13.8 | 7.9 |
| 31 | 81.9 | 89.1 | 93.1 | 94.9 | 95.9 | 13.0 | 7.2 |
| 33 | 82.6 | 89.8 | 92.9 | 95.9 | 95.9 | 13.3 | 7.2 |
| 35 | 83.7 | 90.8 | 92.9 | 97.2 | 97.2 | 13.5 | 7.1 |
| 37 | 82.6 | 89.8 | 91.5 | 96.0 | 96.0 | 13.4 | 7.2 |
| OH→39 | 79.7 | 87.7 | 90.6 | 93.6 | 93.6 | 13.9 | 8.0 |
| 41 | 77.6 | 85.6 | 89.9 | 92.1 | 92.1 | 14.5 | 8.0 |
| 43 | 75.8 | 83.5 | 88.3 | 90.0 | 90.0 | 14.2 | 7.7 |
| 45 | 75.3 | 82.6 | 86.8 | 88.6 | 88.6 | 13.3 | 7.3 |
| 47 | 75.5 | 82.4 | 85.4 | 88.9 | 90.8 | 13.4 | 6.9 |
| 49 | 74.3 | 81.5 | 84.1 | 88.0 | 90.5 | 13.7 | 7.2 |
| 51 | 73.0 | 80.1 | 83.0 | 86.6 | 89.3 | 13.6 | 7.1 |
| 53 | 70.5 | 77.9 | 82.3 | 84.2 | 86.9 | 13.7 | 7.4 |
| 55 | 69.3 | 77.0 | 81.2 | 83.1 | 85.4 | 13.8 | 7.7 |
| 57 | 69.8 | 77.1 | 79.9 | 83.3 | 85.8 | 13.5 | 7.3 |
| 59 | 65.7 | 73.2 | 78.2 | 79.7 | 81.8 | 14.0 | 7.5 |

TABLE E-V

NOISE LEVEL TIME HISTORY DATA

BELL 212

OCTOBER 6, 1976

EVENT 33, 99 KI. FLY BY, CENTERLINE MIC. (SOFT SITE)

1/2 SECOND INTEGRATION VS NOISE INDEXES
(DB RE 20 MICRO PA)

| INT | DBA | DBD | OASPL | PNL | PNLI | PNL-DBA | DBD-DBA |
|------------|------|------|-------|------|------|---------|---------|
| 3 | 63.7 | 74.2 | 83.0 | 80.6 | 80.6 | 16.9 | 10.5 |
| 5 | 67.1 | 77.0 | 85.2 | 83.6 | 83.6 | 16.5 | 9.9 |
| 7 | 69.3 | 78.7 | 86.6 | 85.4 | 85.4 | 16.1 | 9.4 |
| 9 | 70.5 | 80.6 | 88.2 | 86.8 | 86.8 | 16.3 | 10.1 |
| 11 | 74.1 | 84.2 | 91.2 | 90.2 | 90.2 | 16.1 | 10.1 |
| 13 | 78.3 | 87.6 | 93.6 | 93.1 | 93.1 | 14.8 | 9.3 |
| 15 | 80.4 | 89.1 | 94.6 | 94.7 | 94.7 | 14.3 | 8.7 |
| 17 | 79.9 | 88.6 | 94.4 | 94.4 | 94.4 | 14.5 | 8.7 |
| 19 | 76.5 | 86.0 | 92.9 | 91.6 | 91.6 | 15.1 | 9.5 |
| 21 | 72.7 | 82.6 | 90.5 | 88.6 | 88.6 | 15.9 | 9.9 |
| 23 | 72.8 | 82.4 | 90.0 | 88.1 | 88.1 | 15.3 | 9.6 |
| 25 | 73.7 | 83.5 | 91.0 | 89.6 | 89.6 | 15.9 | 9.8 |
| 27 | 75.6 | 84.8 | 92.2 | 91.4 | 91.4 | 15.8 | 9.2 |
| 29 | 77.3 | 85.2 | 92.6 | 92.3 | 92.3 | 15.0 | 7.9 |
| 31 | 76.3 | 84.4 | 92.3 | 91.5 | 92.6 | 15.2 | 8.1 |
| 33 | 72.2 | 82.2 | 91.1 | 88.8 | 88.8 | 16.6 | 10.0 |
| 35 | 73.5 | 81.7 | 90.8 | 88.9 | 90.3 | 15.4 | 8.2 |
| 37 | 77.5 | 84.0 | 91.6 | 91.4 | 91.4 | 13.9 | 6.5 |
| 39 | 78.0 | 84.4 | 92.1 | 91.9 | 92.9 | 13.9 | 6.4 |
| 41 | 78.6 | 85.0 | 91.9 | 92.7 | 92.7 | 14.1 | 6.4 |
| 43 | 80.7 | 87.0 | 92.0 | 94.9 | 94.9 | 14.2 | 6.3 |
| 44 | 81.2 | 87.3 | 91.8 | 95.5 | 95.5 | 14.3 | 6.1 |
| OH 46 → 47 | 79.8 | 86.0 | 90.6 | 94.2 | 94.2 | 14.4 | 6.2 |
| 48 | 78.4 | 85.0 | 89.8 | 92.7 | 92.7 | 14.3 | 6.6 |
| 50 | 77.2 | 83.3 | 89.7 | 91.7 | 91.7 | 14.5 | 6.1 |
| 52 | 75.3 | 81.2 | 88.1 | 89.2 | 89.2 | 13.9 | 5.9 |
| 54 | 74.1 | 80.1 | 86.2 | 87.6 | 88.6 | 13.5 | 6.0 |
| 56 | 73.9 | 79.6 | 84.7 | 87.6 | 89.7 | 13.7 | 5.7 |
| 58 | 73.2 | 79.0 | 84.1 | 87.3 | 90.2 | 14.1 | 5.8 |
| 60 | 72.8 | 78.8 | 83.7 | 87.0 | 89.7 | 14.2 | 6.0 |
| 62 | 71.5 | 77.3 | 82.5 | 85.3 | 87.8 | 13.8 | 5.8 |
| 64 | 67.6 | 73.8 | 80.6 | 81.7 | 84.2 | 14.1 | 6.2 |
| 66 | 66.0 | 72.9 | 79.7 | 80.5 | 84.2 | 14.5 | 6.9 |
| 68 | 68.5 | 74.4 | 79.1 | 82.8 | 86.1 | 14.3 | 5.9 |
| 70 | 65.4 | 71.4 | 77.9 | 79.9 | 82.8 | 14.5 | 6.0 |
| 72 | 62.9 | 69.6 | 77.7 | 77.4 | 79.2 | 14.5 | 6.7 |
| 74 | 64.8 | 70.6 | 76.4 | 79.4 | 82.6 | 14.6 | 5.8 |
| 76 | 63.7 | 69.7 | 75.0 | 78.5 | 82.1 | 14.8 | 6.0 |

TABLE E-V

NOISE LEVEL TIME HISTORY DATA

BELL 212

OCTOBER 6, 1976

EVENT 34, 99 KT. FLY BY, CENTERLINE MIC. (SOFT SITE)

1/2 SECOND INTEGRATION VS NOISE INDEXES
(DB RE 20 MICRO PA)

| INT | DBA | DBD | OASPL | PNL | PNLT | PNL-DBA | DBD-DBA |
|---------|------|------|-------|------|------|---------|---------|
| 1 | 63.9 | 73.3 | 81.4 | 80.5 | 80.5 | 16.6 | 9.4 |
| 3 | 62.9 | 73.3 | 82.5 | 80.3 | 80.3 | 17.4 | 10.4 |
| 5 | 64.4 | 75.6 | 84.5 | 81.9 | 81.9 | 17.5 | 11.2 |
| 7 | 68.2 | 79.1 | 87.3 | 85.1 | 85.1 | 16.9 | 10.9 |
| 9 | 71.5 | 82.0 | 89.6 | 87.8 | 87.8 | 16.3 | 10.5 |
| 11 | 74.3 | 83.9 | 91.0 | 89.8 | 89.8 | 15.5 | 9.6 |
| 13 | 77.6 | 86.2 | 92.6 | 92.0 | 92.0 | 14.4 | 8.6 |
| 15 | 80.1 | 88.8 | 94.7 | 94.5 | 94.5 | 14.4 | 8.7 |
| 17 | 78.4 | 87.9 | 94.6 | 93.6 | 94.7 | 15.2 | 9.5 |
| 19 | 74.3 | 84.2 | 92.2 | 90.1 | 90.1 | 15.8 | 9.9 |
| 21 | 73.8 | 83.4 | 91.1 | 89.3 | 89.3 | 15.5 | 9.6 |
| 23 | 73.8 | 83.7 | 91.0 | 89.6 | 89.6 | 15.8 | 9.9 |
| 25 | 73.9 | 83.8 | 91.8 | 90.1 | 90.1 | 16.2 | 9.9 |
| 27 | 73.5 | 84.2 | 92.5 | 90.0 | 91.0 | 16.5 | 10.7 |
| 29 | 74.6 | 84.6 | 93.0 | 91.0 | 91.0 | 16.4 | 10.0 |
| 31 | 74.9 | 84.5 | 93.1 | 91.4 | 91.4 | 16.5 | 9.6 |
| 33 | 75.0 | 83.6 | 92.8 | 90.6 | 92.0 | 15.6 | 8.6 |
| 35 | 76.9 | 84.5 | 93.0 | 91.4 | 91.4 | 14.5 | 7.6 |
| 37 | 78.4 | 85.2 | 93.2 | 92.6 | 93.8 | 14.2 | 6.8 |
| 39 | 79.6 | 86.1 | 93.2 | 94.0 | 94.0 | 14.4 | 6.5 |
| 41 | 80.5 | 86.7 | 92.3 | 95.0 | 95.0 | 14.5 | 6.2 |
| 43 | 81.5 | 87.4 | 91.3 | 95.4 | 95.4 | 13.9 | 5.9 |
| OH → 45 | 80.9 | 86.6 | 90.7 | 94.3 | 94.3 | 13.4 | 5.7 |
| 47 | 77.8 | 83.9 | 89.6 | 92.1 | 92.1 | 14.3 | 6.1 |
| 49 | 76.8 | 82.5 | 88.2 | 90.4 | 90.4 | 13.6 | 5.7 |
| 51 | 76.3 | 82.0 | 86.9 | 89.6 | 90.8 | 13.3 | 5.7 |
| 53 | 75.6 | 81.3 | 86.1 | 89.3 | 91.7 | 13.7 | 5.7 |
| 55 | 74.6 | 80.4 | 84.5 | 88.6 | 91.8 | 14.0 | 5.8 |
| 57 | 71.7 | 77.7 | 81.9 | 85.9 | 88.8 | 14.2 | 6.0 |
| 59 | 69.6 | 75.7 | 81.8 | 83.9 | 86.1 | 14.3 | 6.1 |
| 61 | 68.8 | 74.6 | 80.9 | 82.8 | 85.3 | 14.0 | 5.8 |
| 63 | 66.0 | 71.9 | 80.0 | 80.4 | 82.9 | 14.4 | 5.9 |
| 65 | 64.6 | 70.6 | 78.8 | 78.4 | 80.2 | 13.8 | 6.0 |
| 67 | 60.3 | 68.0 | 77.2 | 75.7 | 78.1 | 15.4 | 7.7 |

TABLE E-IV

NOISE LEVEL TIME HISTORY DATA

BELL 212

OCTOBER 6, 1976

EVENT 35, 110 KT. FLY BY, CENTERLINE MIC. (SOFT SIDE)

1/2 SECOND INTEGRATION VS NOISE INDEXES
(DB RE 20 MICRO PA)

| INT | DBA | DBD | OASPL | PNL | PNLI | PNL-DBA | DBD-DBA |
|------------|------|------|-------|------|------|---------|---------|
| 1 | 66.5 | 76.0 | 83.7 | 82.4 | 82.4 | 15.9 | 9.5 |
| 3 | 66.5 | 76.0 | 84.1 | 82.6 | 82.6 | 16.1 | 9.5 |
| 5 | 67.4 | 77.0 | 85.2 | 83.4 | 83.4 | 16.0 | 9.6 |
| 7 | 72.2 | 81.7 | 88.8 | 87.6 | 87.6 | 15.4 | 9.5 |
| 9 | 77.0 | 85.9 | 92.1 | 91.4 | 91.4 | 14.4 | 8.9 |
| 11 | 80.4 | 89.0 | 94.5 | 94.2 | 94.2 | 13.8 | 8.6 |
| 13 | 81.4 | 89.8 | 95.6 | 95.8 | 95.8 | 14.4 | 8.4 |
| 15 | 79.9 | 89.0 | 95.5 | 95.0 | 95.0 | 15.1 | 9.1 |
| 17 | 78.4 | 87.8 | 95.1 | 93.9 | 93.9 | 15.5 | 9.4 |
| 19 | 79.5 | 88.4 | 95.2 | 94.4 | 94.4 | 14.9 | 8.9 |
| 21 | 79.4 | 88.3 | 94.6 | 94.2 | 94.2 | 14.8 | 8.9 |
| 23 | 77.9 | 86.8 | 93.8 | 93.0 | 93.0 | 15.1 | 8.9 |
| 25 | 78.2 | 87.0 | 94.0 | 93.2 | 93.2 | 15.0 | 8.8 |
| 27 | 76.3 | 86.0 | 94.0 | 92.2 | 92.2 | 15.9 | 9.7 |
| 29 | 76.2 | 85.9 | 94.2 | 92.2 | 92.2 | 16.0 | 9.7 |
| 31 | 78.2 | 86.7 | 94.7 | 93.3 | 94.6 | 15.1 | 8.5 |
| 33 | 80.2 | 87.2 | 94.9 | 94.2 | 95.4 | 14.0 | 7.0 |
| 35 | 82.3 | 88.9 | 95.7 | 96.0 | 96.0 | 13.7 | 6.6 |
| 37 | 83.3 | 89.6 | 95.4 | 97.4 | 97.4 | 14.1 | 6.3 |
| 39 | 83.5 | 89.3 | 94.0 | 97.6 | 97.6 | 14.1 | 5.8 |
| 40 | 83.9 | 89.5 | 93.3 | 97.9 | 97.9 | 14.0 | 5.6 |
| OH 42 → 43 | 83.2 | 88.9 | 92.2 | 97.0 | 97.0 | 13.8 | 5.7 |
| 44 | 80.2 | 86.4 | 91.2 | 94.4 | 94.4 | 14.2 | 6.2 |
| 46 | 77.8 | 83.8 | 90.0 | 91.8 | 91.8 | 14.0 | 6.0 |
| 48 | 78.4 | 84.2 | 90.0 | 92.1 | 93.4 | 13.7 | 5.8 |
| 50 | 77.4 | 83.2 | 88.4 | 91.4 | 93.3 | 14.0 | 5.6 |
| 52 | 74.7 | 80.4 | 85.9 | 88.5 | 90.5 | 13.8 | 5.7 |
| 54 | 73.3 | 79.2 | 85.2 | 87.1 | 89.2 | 13.8 | 5.9 |
| 56 | 73.0 | 79.1 | 85.7 | 87.3 | 89.5 | 14.3 | 6.1 |
| 58 | 70.6 | 76.9 | 83.8 | 85.2 | 87.9 | 14.6 | 6.3 |
| 60 | 69.9 | 77.7 | 85.7 | 85.1 | 87.6 | 15.2 | 7.8 |
| 62 | 69.5 | 78.6 | 87.0 | 86.5 | 88.7 | 17.0 | 9.1 |
| 64 | 69.1 | 77.8 | 85.8 | 85.3 | 87.9 | 16.2 | 8.7 |
| 66 | 66.2 | 73.7 | 81.2 | 80.8 | 83.3 | 14.6 | 7.5 |
| 68 | 67.0 | 73.6 | 80.6 | 81.3 | 83.2 | 14.3 | 6.6 |
| 70 | 65.7 | 73.4 | 81.4 | 80.8 | 82.0 | 15.1 | 7.7 |

TABLE - E-V

NOISE LEVEL TIME HISTORY DATA

BELL 212

OCTOBER 6, 1976

EVENT 36, 110 KT. FLY BY, CENTERLINE MIC. (SOFT SITE)

1/2 SECOND INTEGRATION VS NOISE INDEXES
(DB RE 20 MICRO PA)

| INT | DBA | DBD | OASPL | PNL | PNLT | PNL-DBA | DBD-DBA |
|---------|------|------|-------|------|------|---------|---------|
| 1 | 68.9 | 78.1 | 84.9 | 84.7 | 84.7 | 15.8 | 9.2 |
| 3 | 69.8 | 79.3 | 86.7 | 85.8 | 85.8 | 16.0 | 9.5 |
| 5 | 70.0 | 80.2 | 88.0 | 86.3 | 86.3 | 16.3 | 10.2 |
| 7 | 74.2 | 83.8 | 90.8 | 89.6 | 89.6 | 15.4 | 9.6 |
| 9 | 78.9 | 87.6 | 93.5 | 93.2 | 93.2 | 14.3 | 8.7 |
| 11 | 80.0 | 88.3 | 93.8 | 94.2 | 94.2 | 14.2 | 8.3 |
| 13 | 77.6 | 86.4 | 92.7 | 92.1 | 92.1 | 14.5 | 8.8 |
| 15 | 76.6 | 85.6 | 92.0 | 91.2 | 91.2 | 14.6 | 9.0 |
| 17 | 77.1 | 86.2 | 92.6 | 91.7 | 91.7 | 14.6 | 9.1 |
| 19 | 76.5 | 86.1 | 93.0 | 91.8 | 91.8 | 15.3 | 9.6 |
| 21 | 78.7 | 88.1 | 94.4 | 93.5 | 93.5 | 14.8 | 9.4 |
| 23 | 78.4 | 87.8 | 94.5 | 93.6 | 93.6 | 15.2 | 9.4 |
| 25 | 78.2 | 87.2 | 94.3 | 93.8 | 95.1 | 15.6 | 9.0 |
| 27 | 79.0 | 88.2 | 95.1 | 94.5 | 96.4 | 15.5 | 9.2 |
| 29 | 78.9 | 87.9 | 95.2 | 94.8 | 94.8 | 15.9 | 9.0 |
| 31 | 79.5 | 87.5 | 95.5 | 94.7 | 94.7 | 15.2 | 8.0 |
| 33 | 80.1 | 87.4 | 95.3 | 94.8 | 95.9 | 14.7 | 7.3 |
| 35 | 82.1 | 88.4 | 95.4 | 95.8 | 95.8 | 13.7 | 6.3 |
| 37 | 85.6 | 91.4 | 96.1 | 99.5 | 99.5 | 13.9 | 5.8 |
| 38 | 86.0 | 91.8 | 95.7 | 99.9 | 99.9 | 13.9 | 5.8 |
| 40 | 84.1 | 89.9 | 92.9 | 98.0 | 98.0 | 13.9 | 5.8 |
| OH → 42 | 81.9 | 88.0 | 90.9 | 95.4 | 95.4 | 13.5 | 6.1 |
| 44 | 79.2 | 85.2 | 88.8 | 93.4 | 93.4 | 14.2 | 6.0 |
| 46 | 77.9 | 83.3 | 86.3 | 91.0 | 91.0 | 13.1 | 5.4 |
| 48 | 77.1 | 82.2 | 86.1 | 90.4 | 92.3 | 13.3 | 5.1 |
| 50 | 75.9 | 81.2 | 85.9 | 89.1 | 90.7 | 13.2 | 5.3 |
| 52 | 74.5 | 79.7 | 84.5 | 87.7 | 89.0 | 13.2 | 5.2 |
| 54 | 71.6 | 77.0 | 81.5 | 85.3 | 87.4 | 13.7 | 5.4 |
| 56 | 73.3 | 78.4 | 80.5 | 86.2 | 88.3 | 12.9 | 5.1 |
| 58 | 70.1 | 75.0 | 79.0 | 83.1 | 84.8 | 13.0 | 4.9 |

TABLE E-V

NOISE LEVEL TIME HISTORY DATA

BELL 212

OCTOBER 6, 1976

EVENT 37, 114 KT. FLY BY, CENTERLINE MIC. (SOFT SITE)

1/2 SECOND INTEGRATION VS NOISE INDEXES
(DB RE 20 MICRO PA)

| INT | DBA | DED | OASPL | PNL | PNLT | PNL-DBA | DBD-DBA |
|---------|------|------|-------|-------|-------|---------|---------|
| 1 | 68.1 | 77.1 | 84.7 | 84.0 | 84.0 | 15.9 | 9.0 |
| 2 | 69.7 | 79.3 | 86.7 | 85.8 | 85.8 | 16.1 | 9.6 |
| 3 | 72.4 | 81.7 | 88.6 | 87.9 | 87.9 | 15.5 | 9.3 |
| 4 | 74.6 | 83.8 | 90.4 | 90.4 | 91.8 | 15.8 | 9.2 |
| 5 | 77.0 | 85.7 | 92.0 | 92.0 | 92.2 | 15.2 | 8.7 |
| 6 | 78.7 | 86.7 | 93.2 | 93.3 | 93.3 | 14.6 | 8.0 |
| 7 | 81.2 | 88.4 | 94.6 | 94.8 | 94.8 | 13.6 | 7.2 |
| 8 | 82.4 | 89.7 | 95.7 | 96.3 | 96.3 | 13.9 | 7.3 |
| 9 | 83.3 | 90.9 | 96.5 | 97.3 | 97.3 | 14.0 | 7.6 |
| 10 | 82.8 | 91.1 | 96.9 | 97.2 | 97.2 | 14.4 | 8.3 |
| 11 | 82.0 | 90.5 | 96.4 | 96.4 | 96.4 | 14.4 | 8.5 |
| 12 | 81.4 | 89.8 | 95.9 | 95.6 | 95.6 | 14.2 | 8.4 |
| 13 | 81.9 | 90.1 | 95.3 | 96.0 | 96.0 | 14.1 | 8.2 |
| 14 | 82.5 | 90.5 | 95.6 | 96.5 | 96.5 | 14.0 | 8.0 |
| 15 | 83.0 | 91.2 | 96.2 | 97.0 | 97.0 | 14.0 | 8.2 |
| 16 | 82.7 | 91.1 | 96.6 | 96.9 | 96.9 | 14.2 | 8.4 |
| 17 | 82.5 | 91.3 | 97.1 | 96.9 | 96.9 | 14.4 | 8.8 |
| 18 | 81.9 | 90.6 | 97.0 | 96.9 | 96.9 | 15.0 | 8.7 |
| 19 | 82.0 | 90.3 | 97.0 | 96.7 | 96.7 | 14.7 | 8.3 |
| 20 | 81.7 | 89.9 | 96.9 | 96.5 | 96.5 | 14.8 | 8.2 |
| 21 | 81.3 | 89.5 | 96.8 | 96.1 | 97.2 | 14.8 | 8.2 |
| 22 | 81.3 | 89.3 | 96.7 | 96.3 | 96.3 | 15.0 | 8.0 |
| 23 | 82.1 | 89.3 | 96.4 | 96.3 | 97.4 | 14.2 | 7.2 |
| 24 | 83.3 | 89.9 | 96.6 | 97.5 | 97.5 | 14.2 | 6.6 |
| 25 | 83.5 | 89.9 | 96.4 | 97.4 | 97.4 | 13.9 | 6.4 |
| 26 | 84.2 | 90.3 | 96.5 | 97.9 | 97.9 | 13.7 | 6.1 |
| 27 | 84.1 | 90.2 | 96.2 | 97.8 | 97.8 | 13.7 | 6.1 |
| 28 | 84.9 | 90.9 | 96.1 | 98.5 | 98.5 | 13.6 | 6.0 |
| 29 | 84.6 | 90.9 | 95.8 | 98.8 | 98.8 | 14.2 | 6.3 |
| 30 | 85.5 | 91.7 | 96.1 | 100.1 | 100.1 | 14.6 | 6.2 |
| 31 | 85.5 | 91.7 | 95.8 | 100.2 | 100.2 | 14.7 | 6.2 |
| 32 | 84.9 | 91.1 | 94.8 | 99.4 | 99.4 | 14.5 | 6.2 |
| OH → 33 | 82.9 | 89.3 | 92.9 | 96.7 | 96.7 | 13.8 | 6.4 |
| 34 | 80.6 | 87.1 | 91.2 | 94.8 | 94.8 | 14.2 | 6.5 |
| 35 | 78.8 | 85.1 | 89.9 | 93.1 | 93.1 | 14.3 | 6.3 |
| 36 | 77.7 | 83.8 | 88.9 | 91.8 | 91.8 | 14.1 | 6.1 |
| 37 | 77.1 | 83.2 | 88.6 | 90.9 | 90.9 | 13.8 | 6.1 |
| 38 | 76.6 | 82.6 | 88.2 | 90.3 | 91.4 | 13.7 | 6.0 |
| 39 | 76.1 | 81.9 | 87.3 | 89.8 | 91.2 | 13.7 | 5.8 |
| 40 | 75.4 | 81.3 | 86.4 | 89.5 | 91.6 | 14.1 | 5.9 |
| 41 | 74.9 | 80.8 | 85.7 | 89.1 | 91.6 | 14.2 | 5.9 |
| 42 | 73.7 | 79.7 | 84.8 | 88.0 | 90.5 | 14.3 | 6.0 |
| 43 | 73.0 | 78.8 | 83.7 | 86.9 | 89.4 | 13.9 | 5.8 |

TABLE E-VI

NOISE LEVEL TIME HISTORY DATA

BELL 212

OCTOBER 6, 1976

EVENT 38, 114 KT. FLY BY, CENTERLINE MIC. (SOFT SITE)

1/2 SECOND INTEGRATION VS NOISE INDEXES
(DB RE 20 MICRO PA)

| INT | DBA | DBD | OASPL | PNL | PNLT | PNL-DBA | DBD-DBA |
|---------|------|------|-------|-------|-------|---------|---------|
| 3 | 71.0 | 79.0 | 82.2 | 87.0 | 87.0 | 16.0 | 8.0 |
| 5 | 72.1 | 80.7 | 84.8 | 88.2 | 88.2 | 16.1 | 8.6 |
| 7 | 73.0 | 83.0 | 87.1 | 90.3 | 90.3 | 17.3 | 10.0 |
| 9 | 81.7 | 89.6 | 94.8 | 96.6 | 96.6 | 14.9 | 7.9 |
| 11 | 85.8 | 93.7 | 98.2 | 99.6 | 99.6 | 13.8 | 7.9 |
| 13 | 84.5 | 93.5 | 98.8 | 99.6 | 99.6 | 15.1 | 9.0 |
| 15 | 85.5 | 94.1 | 99.1 | 100.0 | 100.0 | 14.5 | 8.6 |
| 17 | 85.1 | 94.0 | 99.4 | 100.0 | 100.0 | 14.9 | 8.9 |
| 19 | 83.7 | 93.1 | 99.2 | 99.1 | 99.1 | 15.4 | 9.4 |
| 21 | 84.5 | 93.9 | 99.7 | 100.1 | 101.1 | 15.6 | 9.4 |
| 23 | 86.0 | 94.7 | 100.2 | 101.3 | 101.3 | 15.3 | 8.7 |
| 25 | 85.3 | 94.3 | 100.1 | 100.5 | 101.6 | 15.2 | 9.0 |
| 27 | 82.5 | 92.3 | 99.2 | 98.4 | 98.4 | 15.9 | 9.8 |
| 29 | 81.7 | 91.3 | 99.1 | 98.3 | 98.3 | 16.6 | 9.6 |
| 31 | 83.6 | 91.8 | 99.6 | 98.8 | 98.8 | 15.2 | 8.2 |
| 33 | 85.3 | 92.1 | 98.8 | 99.6 | 99.6 | 14.3 | 6.8 |
| 35 | 85.0 | 91.4 | 97.5 | 99.4 | 99.4 | 14.4 | 6.4 |
| 37 | 85.2 | 90.9 | 95.5 | 99.4 | 99.4 | 14.2 | 5.7 |
| OH → 39 | 83.5 | 88.4 | 92.2 | 96.6 | 96.6 | 13.1 | 4.9 |
| 41 | 81.2 | 86.5 | 89.5 | 94.6 | 94.6 | 13.4 | 5.3 |
| 43 | 79.0 | 84.7 | 87.5 | 92.4 | 92.4 | 13.4 | 5.7 |
| 45 | 78.1 | 83.4 | 85.1 | 91.8 | 93.4 | 13.7 | 5.3 |
| 47 | 76.2 | 81.9 | 83.7 | 90.3 | 92.0 | 14.1 | 5.7 |
| 49 | 73.7 | 79.1 | 82.9 | 87.9 | 89.9 | 14.2 | 5.4 |
| 51 | 72.5 | 77.9 | 80.8 | 86.7 | 88.9 | 14.2 | 5.4 |
| 53 | 69.7 | 75.6 | 78.2 | 84.4 | 86.6 | 14.7 | 5.9 |

TABLE E-V

NOISE LEVEL TIME HISTORY DATA

BELL 212

OCTOBER 6, 1976

EVENT 43, 3 DEGREE APPROACH, CENTERLINE MIC. (SOFT SITE)

1/2 SECOND INTEGRATION VS NOISE INDEXES
(DB RE 20 MICRO PA)

| INT | DBA | DBD | OASPL | PNL | PNLT | PNL-DBA | DBD-DBA |
|--------------|------|------|-------|------|------|---------|---------|
| 1 | 66.0 | 73.8 | 81.7 | 80.7 | 80.7 | 14.7 | 7.8 |
| 4 | 65.6 | 73.6 | 82.1 | 80.7 | 80.7 | 15.1 | 8.0 |
| 7 | 68.8 | 76.8 | 83.6 | 83.8 | 83.8 | 15.0 | 8.0 |
| 10 | 72.4 | 80.2 | 85.4 | 87.2 | 87.2 | 14.8 | 7.8 |
| 13 | 70.0 | 78.7 | 85.1 | 85.1 | 85.1 | 15.1 | 8.7 |
| 16 | 66.7 | 76.1 | 83.9 | 82.7 | 82.7 | 16.0 | 9.4 |
| 19 | 67.8 | 76.3 | 84.2 | 83.1 | 83.1 | 15.3 | 8.5 |
| 22 | 67.5 | 76.0 | 84.2 | 82.9 | 82.9 | 15.4 | 8.5 |
| 25 | 66.4 | 75.3 | 83.8 | 82.2 | 82.2 | 15.8 | 8.9 |
| 28 | 63.5 | 72.4 | 83.0 | 80.1 | 80.1 | 16.6 | 8.9 |
| 31 | 61.7 | 71.5 | 81.7 | 78.7 | 78.7 | 17.0 | 9.8 |
| 34 | 62.6 | 71.7 | 82.0 | 79.4 | 79.4 | 16.8 | 9.1 |
| 37 | 63.6 | 72.9 | 82.6 | 80.2 | 80.2 | 16.6 | 9.3 |
| 40 | 66.6 | 74.7 | 83.0 | 81.8 | 81.8 | 15.2 | 8.1 |
| 43 | 66.3 | 74.9 | 83.3 | 81.9 | 83.4 | 15.6 | 8.6 |
| 46 | 67.7 | 75.3 | 83.8 | 82.6 | 84.2 | 14.9 | 7.6 |
| 49 | 64.5 | 73.4 | 83.2 | 80.3 | 80.3 | 15.8 | 8.9 |
| 52 | 65.3 | 74.3 | 84.1 | 81.1 | 81.1 | 15.8 | 9.0 |
| 55 | 67.8 | 77.6 | 85.9 | 83.9 | 83.9 | 16.1 | 9.8 |
| 58 | 70.0 | 79.5 | 87.4 | 86.2 | 86.2 | 16.2 | 9.5 |
| 61 | 70.4 | 79.1 | 87.4 | 86.2 | 86.2 | 15.8 | 8.7 |
| 64 | 72.1 | 79.9 | 87.6 | 86.6 | 88.1 | 14.5 | 7.8 |
| 67 | 76.5 | 81.8 | 88.6 | 89.4 | 90.7 | 12.9 | 5.3 |
| 70 | 75.2 | 81.4 | 88.8 | 89.5 | 90.8 | 14.3 | 6.2 |
| 73 | 75.1 | 81.8 | 88.9 | 89.5 | 90.9 | 14.4 | 6.7 |
| 76 | 78.1 | 83.8 | 90.3 | 91.9 | 91.9 | 13.8 | 5.7 |
| 79 | 77.0 | 82.7 | 89.9 | 90.9 | 92.1 | 13.9 | 5.7 |
| 82 | 78.7 | 85.0 | 91.1 | 92.5 | 92.5 | 13.8 | 5.3 |
| 85 | 81.6 | 87.2 | 92.0 | 94.4 | 94.4 | 12.8 | 5.6 |
| 88 | 81.4 | 87.5 | 92.4 | 95.4 | 95.4 | 14.0 | 6.1 |
| 91 | 80.5 | 87.8 | 92.8 | 95.9 | 95.9 | 15.4 | 7.3 |
| 94 | 82.2 | 88.7 | 93.6 | 96.5 | 96.5 | 14.3 | 6.5 |
| 97 | 82.9 | 88.8 | 93.8 | 96.9 | 96.9 | 14.0 | 5.9 |
| OH 100 → 102 | 80.5 | 86.4 | 92.8 | 93.9 | 93.9 | 13.4 | 5.9 |
| 103 | 79.7 | 85.9 | 93.4 | 93.7 | 93.7 | 14.0 | 6.2 |
| 106 | 78.5 | 85.1 | 92.8 | 93.3 | 93.3 | 14.8 | 6.6 |
| 109 | 76.9 | 83.7 | 91.2 | 91.7 | 91.7 | 14.8 | 6.8 |
| 112 | 78.1 | 84.6 | 90.7 | 92.9 | 92.9 | 14.8 | 6.5 |
| 115 | 76.3 | 83.0 | 88.9 | 90.6 | 91.7 | 14.3 | 6.7 |
| 118 | 75.2 | 82.0 | 87.6 | 89.3 | 89.3 | 14.1 | 6.8 |
| 121 | 74.0 | 80.4 | 85.6 | 87.5 | 89.2 | 13.5 | 6.4 |
| 124 | 69.7 | 77.0 | 83.9 | 84.3 | 85.4 | 14.6 | 7.3 |
| 127 | 69.3 | 75.8 | 81.9 | 83.2 | 84.6 | 13.9 | 6.5 |
| 130 | 64.7 | 72.0 | 80.2 | 79.1 | 80.9 | 14.4 | 7.3 |

TABLE E-VI

NOISE LEVEL TIME HISTORY DATA

BELL 212

OCTOBER 6, 1976

EVENT 44, 110 KT. FLY BY, CENTERLINE MIC. (SOFT SITE)

1/2 SECOND INTEGRATION VS NOISE INDEXES
(DB RE 20 MICRO PA)

| INT | DBA | DBD | OASPL | PNL | PNLT | PNL-DBA | DBD-DBA |
|------------|------|------|-------|------|------|---------|---------|
| 1 | 67.1 | 74.7 | 80.9 | 81.8 | 81.8 | 14.7 | 7.6 |
| 3 | 67.4 | 74.9 | 81.6 | 82.2 | 82.2 | 14.8 | 7.5 |
| 5 | 68.0 | 76.0 | 83.3 | 82.8 | 82.8 | 14.8 | 8.0 |
| 7 | 75.3 | 83.2 | 88.8 | 89.6 | 89.6 | 14.3 | 7.9 |
| 9 | 80.4 | 88.2 | 93.4 | 94.0 | 94.0 | 13.6 | 7.8 |
| 11 | 80.8 | 88.6 | 94.2 | 94.8 | 94.8 | 14.0 | 7.8 |
| 13 | 80.6 | 89.0 | 94.3 | 94.9 | 94.9 | 14.3 | 8.4 |
| 15 | 80.1 | 88.9 | 94.5 | 94.2 | 94.2 | 14.1 | 8.8 |
| 17 | 80.4 | 89.3 | 95.2 | 94.7 | 94.7 | 14.3 | 8.9 |
| 19 | 79.3 | 88.6 | 95.1 | 94.5 | 94.5 | 15.2 | 9.3 |
| 21 | 79.0 | 87.9 | 94.2 | 93.8 | 93.8 | 14.8 | 8.9 |
| 23 | 78.1 | 87.3 | 93.8 | 92.9 | 92.9 | 14.8 | 9.2 |
| 25 | 76.9 | 86.6 | 93.7 | 92.5 | 92.5 | 15.6 | 9.7 |
| 27 | 77.6 | 87.0 | 94.7 | 93.1 | 95.1 | 15.5 | 9.4 |
| 29 | 78.3 | 87.4 | 95.3 | 94.0 | 94.0 | 15.7 | 9.1 |
| 31 | 78.5 | 87.8 | 95.9 | 94.1 | 94.1 | 15.6 | 9.3 |
| 33 | 79.5 | 87.8 | 95.8 | 94.6 | 94.6 | 15.1 | 8.3 |
| 35 | 82.8 | 89.6 | 96.4 | 97.0 | 98.2 | 14.2 | 6.8 |
| 37 | 85.5 | 91.5 | 96.3 | 99.5 | 99.5 | 14.0 | 6.0 |
| 39 | 84.9 | 90.6 | 94.5 | 98.9 | 98.9 | 14.0 | 5.7 |
| OH 41 → 42 | 83.0 | 88.2 | 91.2 | 96.4 | 96.4 | 13.4 | 5.2 |
| 43 | 81.1 | 86.7 | 89.3 | 94.5 | 94.5 | 13.4 | 5.6 |
| 45 | 79.1 | 84.5 | 88.4 | 92.2 | 92.2 | 13.1 | 5.4 |
| 47 | 77.8 | 82.9 | 87.3 | 90.7 | 90.7 | 12.9 | 5.1 |
| 49 | 75.9 | 81.3 | 86.3 | 89.5 | 91.1 | 13.6 | 5.4 |
| 51 | 73.8 | 79.7 | 84.9 | 88.2 | 90.3 | 14.4 | 5.9 |
| 53 | 73.7 | 79.5 | 83.4 | 87.7 | 90.6 | 14.0 | 5.8 |
| 55 | 73.0 | 78.7 | 82.1 | 87.0 | 90.3 | 14.0 | 5.7 |
| 57 | 70.3 | 75.9 | 80.4 | 84.4 | 87.5 | 14.1 | 5.6 |
| 59 | 66.1 | 72.0 | 78.8 | 80.0 | 81.8 | 13.9 | 5.9 |
| 61 | 67.9 | 73.4 | 78.3 | 81.9 | 85.3 | 14.0 | 5.5 |

TABLE E-V

NOISE LEVEL TIME HISTORY DATA

BELL 212

OCTOBER 6, 1976

EVENT 45, 110 KT. FLY BY, CENTERLINE MIC. (SOFT SITE)

1/2 SECOND INTEGRATION VS NOISE INDEXES
(DB RE 20 MICRO PA)

| INT | DBA | DBD | OASPL | PNL | PNLT | PNL-DBA | DBD-DBA |
|------------|------|------|-------|------|------|---------|---------|
| 3 | 63.4 | 73.1 | 80.8 | 81.5 | 81.5 | 18.1 | 9.7 |
| 5 | 66.1 | 76.1 | 83.4 | 83.6 | 83.6 | 17.5 | 10.0 |
| 7 | 67.5 | 77.9 | 85.1 | 85.4 | 85.4 | 17.9 | 10.4 |
| 9 | 68.7 | 78.9 | 86.0 | 86.3 | 86.3 | 17.6 | 10.2 |
| 11 | 70.2 | 80.3 | 87.3 | 87.4 | 87.4 | 17.2 | 10.1 |
| 13 | 72.1 | 81.7 | 88.2 | 88.7 | 88.7 | 16.6 | 9.6 |
| 15 | 75.3 | 83.9 | 89.5 | 90.5 | 90.5 | 15.2 | 8.6 |
| 17 | 76.5 | 84.7 | 89.8 | 91.5 | 91.5 | 15.0 | 8.2 |
| 19 | 77.2 | 85.3 | 90.3 | 91.9 | 91.9 | 14.7 | 8.1 |
| 21 | 77.2 | 85.5 | 90.8 | 92.4 | 92.4 | 15.2 | 8.3 |
| 23 | 76.9 | 85.4 | 91.1 | 92.1 | 92.1 | 15.2 | 8.5 |
| 25 | 74.8 | 83.6 | 90.1 | 90.8 | 90.8 | 16.0 | 8.8 |
| 27 | 73.9 | 83.4 | 90.7 | 89.8 | 89.8 | 15.9 | 9.5 |
| 29 | 75.3 | 84.8 | 92.0 | 91.0 | 91.0 | 15.7 | 9.5 |
| 31 | 77.7 | 87.1 | 93.5 | 93.3 | 93.3 | 15.6 | 9.4 |
| 33 | 79.5 | 88.5 | 94.9 | 94.6 | 94.6 | 15.1 | 9.0 |
| 35 | 76.6 | 86.5 | 94.0 | 93.0 | 93.0 | 16.4 | 9.9 |
| 37 | 72.9 | 84.0 | 93.3 | 91.1 | 91.1 | 18.2 | 11.1 |
| 39 | 72.7 | 83.8 | 93.2 | 90.9 | 90.9 | 18.2 | 11.1 |
| 41 | 72.6 | 82.9 | 92.5 | 90.2 | 90.2 | 17.6 | 10.3 |
| 43 | 73.8 | 83.0 | 93.0 | 90.6 | 90.6 | 16.8 | 9.2 |
| 45 | 77.4 | 84.3 | 92.7 | 92.5 | 92.5 | 15.1 | 6.9 |
| 47 | 79.3 | 86.0 | 91.8 | 94.2 | 94.2 | 14.9 | 6.7 |
| OH 49 → 50 | 81.1 | 87.2 | 91.2 | 95.7 | 95.7 | 14.6 | 6.1 |
| 51 | 79.7 | 85.7 | 89.0 | 93.4 | 93.4 | 13.7 | 6.0 |
| 53 | 78.4 | 84.3 | 87.6 | 92.5 | 92.5 | 14.1 | 5.9 |
| 55 | 76.6 | 82.6 | 85.5 | 91.3 | 90.3 | 13.7 | 6.0 |
| 57 | 75.3 | 80.4 | 84.1 | 87.6 | 87.6 | 12.3 | 5.1 |
| 59 | 75.4 | 80.5 | 84.5 | 88.5 | 90.2 | 13.1 | 5.1 |
| 61 | 75.1 | 80.1 | 83.8 | 88.6 | 90.8 | 13.5 | 5.0 |
| 63 | 70.8 | 76.1 | 81.5 | 85.0 | 87.2 | 14.2 | 5.3 |
| 65 | 68.3 | 74.3 | 81.2 | 82.5 | 84.0 | 14.2 | 6.0 |
| 67 | 69.2 | 75.0 | 79.9 | 83.6 | 85.9 | 14.4 | 5.8 |
| 69 | 68.3 | 73.8 | 79.0 | 82.9 | 85.4 | 14.6 | 5.5 |
| 71 | 66.7 | 72.0 | 77.7 | 81.0 | 83.5 | 14.3 | 5.3 |
| 73 | 67.5 | 72.6 | 77.7 | 81.6 | 83.3 | 14.1 | 5.1 |
| 75 | 65.9 | 71.4 | 77.3 | 80.5 | 81.9 | 14.6 | 5.5 |

TABLE E-V

NOISE LEVEL TIME HISTORY DATA

BELL 212

OCTOBER 6, 1976

EVENT 46, 114 KT. FLY BY, CENTERLINE MIC. (SOFT SITE)

1/2 SECOND INTEGRATION VS NOISE INDEXES
(DB RE 20 MICRO PA)

| INT | DBA | DBD | OASPL | PNL | PNLT | PNL-DBA | DBD-DBA |
|---------|------|------|-------|-------|-------|---------|---------|
| 1 | 67.7 | 77.5 | 85.6 | 88.3 | 88.3 | 20.6 | 9.8 |
| 2 | 67.9 | 78.2 | 86.6 | 88.6 | 88.6 | 20.7 | 10.3 |
| 3 | 69.5 | 79.7 | 88.1 | 89.6 | 89.6 | 20.1 | 10.2 |
| 4 | 72.1 | 81.6 | 89.9 | 91.4 | 91.4 | 19.3 | 9.5 |
| 5 | 76.5 | 84.6 | 92.2 | 94.0 | 94.0 | 17.5 | 8.1 |
| 6 | 82.7 | 90.7 | 95.9 | 98.3 | 98.3 | 15.6 | 8.0 |
| 7 | 86.4 | 93.5 | 97.9 | 100.7 | 100.7 | 14.3 | 7.1 |
| 8 | 87.2 | 94.3 | 98.8 | 101.4 | 101.4 | 14.2 | 7.1 |
| 9 | 86.8 | 94.0 | 98.7 | 101.2 | 101.2 | 14.4 | 7.2 |
| 10 | 85.1 | 93.2 | 98.4 | 100.3 | 100.3 | 15.2 | 8.1 |
| 11 | 83.8 | 92.7 | 98.2 | 99.6 | 99.6 | 15.8 | 8.9 |
| 12 | 82.7 | 91.6 | 97.5 | 98.7 | 98.7 | 16.0 | 8.9 |
| 13 | 81.9 | 90.5 | 96.9 | 98.1 | 98.1 | 16.2 | 8.6 |
| 14 | 81.7 | 89.8 | 96.5 | 97.6 | 97.6 | 15.9 | 8.1 |
| 15 | 81.0 | 89.4 | 96.4 | 97.5 | 97.5 | 16.5 | 8.4 |
| 16 | 81.1 | 89.8 | 96.7 | 97.7 | 98.7 | 16.6 | 8.7 |
| 17 | 81.8 | 90.6 | 97.4 | 98.3 | 99.5 | 16.5 | 8.8 |
| 18 | 81.9 | 90.8 | 97.7 | 98.6 | 98.6 | 16.7 | 8.9 |
| 19 | 81.6 | 90.5 | 97.9 | 98.5 | 98.5 | 16.9 | 8.9 |
| 20 | 81.1 | 90.2 | 97.9 | 98.3 | 98.3 | 17.2 | 9.1 |
| 21 | 81.3 | 90.2 | 98.2 | 98.4 | 98.4 | 17.1 | 8.9 |
| 22 | 81.1 | 90.0 | 98.2 | 98.3 | 98.3 | 17.2 | 8.9 |
| 23 | 80.4 | 89.3 | 97.8 | 97.9 | 97.9 | 17.5 | 8.9 |
| 24 | 80.2 | 89.0 | 97.6 | 97.3 | 98.4 | 17.1 | 8.8 |
| 25 | 80.7 | 89.0 | 97.3 | 97.2 | 97.2 | 16.5 | 8.3 |
| 26 | 81.9 | 89.2 | 97.0 | 97.2 | 97.2 | 15.3 | 7.3 |
| 27 | 82.2 | 88.8 | 96.5 | 97.3 | 97.3 | 15.1 | 6.6 |
| 28 | 82.9 | 88.9 | 96.2 | 97.8 | 97.8 | 14.9 | 6.0 |
| 29 | 83.2 | 88.9 | 95.5 | 97.7 | 97.7 | 14.5 | 5.7 |
| 30 | 83.8 | 89.4 | 94.8 | 98.1 | 98.1 | 14.3 | 5.6 |
| 31 | 83.3 | 89.0 | 93.8 | 97.8 | 97.8 | 14.5 | 5.7 |
| 32 | 82.6 | 88.5 | 92.7 | 97.0 | 97.0 | 14.4 | 5.9 |
| OH → 33 | 81.7 | 87.5 | 91.3 | 95.7 | 95.7 | 14.0 | 5.8 |
| 34 | 81.1 | 86.7 | 89.9 | 94.9 | 94.9 | 13.8 | 5.6 |
| 35 | 80.1 | 85.6 | 88.6 | 94.2 | 94.2 | 14.1 | 5.5 |
| 36 | 78.7 | 84.1 | 87.2 | 92.8 | 92.8 | 14.1 | 5.7 |
| 37 | 77.8 | 83.4 | 85.5 | 91.4 | 91.4 | 13.6 | 5.6 |
| 38 | 77.8 | 83.0 | 84.2 | 91.0 | 91.0 | 13.2 | 5.2 |
| 39 | 77.8 | 82.6 | 83.5 | 91.1 | 92.3 | 13.3 | 4.8 |
| 40 | 77.7 | 82.6 | 82.9 | 91.1 | 92.6 | 13.4 | 4.9 |
| 41 | 77.6 | 82.4 | 82.4 | 91.2 | 92.9 | 13.6 | 4.8 |
| 42 | 76.6 | 81.6 | 81.7 | 90.4 | 92.1 | 13.8 | 5.0 |
| 43 | 75.3 | 80.2 | 80.9 | 89.5 | 91.3 | 14.2 | 4.9 |
| 44 | 74.0 | 79.2 | 80.2 | 88.2 | 89.4 | 14.2 | 5.2 |

TABLE E-IV

NOISE LEVEL TIME HISTORY DATA

BELL 2'2

OCTOBER 6, 1976

EVENT 47, 114 KT. FLY BY, CENTERLINE MIC. (SOFT SITE)

1/2 SECOND INTEGRATION VS NOISE INDEXES
(DB RE 20 MICRO PA)

| INT | DBA | DBD | OASPL | PNL | PNLT | PNL-DRA | DBD-DBA |
|---------|------|------|-------|------|------|---------|---------|
| 1 | 70.3 | 80.0 | 87.8 | 86.5 | 86.5 | 16.2 | 9.7 |
| 3 | 70.6 | 81.3 | 89.4 | 87.2 | 87.2 | 16.6 | 10.7 |
| 5 | 71.4 | 82.0 | 89.6 | 88.0 | 88.0 | 16.6 | 10.6 |
| 7 | 72.2 | 82.6 | 89.9 | 88.3 | 88.3 | 16.1 | 10.4 |
| 9 | 74.6 | 84.4 | 91.0 | 89.8 | 89.8 | 15.2 | 9.8 |
| 11 | 78.0 | 86.9 | 92.6 | 92.6 | 92.6 | 14.6 | 8.9 |
| 13 | 81.1 | 89.1 | 94.3 | 95.0 | 95.0 | 13.9 | 8.0 |
| 15 | 81.5 | 89.6 | 94.7 | 95.4 | 95.4 | 13.9 | 8.1 |
| 17 | 80.6 | 89.2 | 94.9 | 94.8 | 94.8 | 14.2 | 8.6 |
| 19 | 79.1 | 88.4 | 94.7 | 93.8 | 93.8 | 14.7 | 9.3 |
| 21 | 78.2 | 87.6 | 94.4 | 93.3 | 93.3 | 15.1 | 9.4 |
| 23 | 77.6 | 86.9 | 93.8 | 92.8 | 92.8 | 15.2 | 9.3 |
| 25 | 76.8 | 86.5 | 93.7 | 92.0 | 92.0 | 15.2 | 9.7 |
| 27 | 78.9 | 88.1 | 94.8 | 94.0 | 94.0 | 15.1 | 9.2 |
| 29 | 80.6 | 89.4 | 96.6 | 95.6 | 95.6 | 15.0 | 8.8 |
| 31 | 80.2 | 89.2 | 96.7 | 95.5 | 95.5 | 15.3 | 9.0 |
| 33 | 81.0 | 89.3 | 97.0 | 95.8 | 95.8 | 14.8 | 8.3 |
| 35 | 82.2 | 89.5 | 97.1 | 96.7 | 96.7 | 14.5 | 7.3 |
| 37 | 83.3 | 89.9 | 96.8 | 98.0 | 98.0 | 14.7 | 6.6 |
| 38 | 83.6 | 90.0 | 96.3 | 98.3 | 98.3 | 14.7 | 6.4 |
| 40 | 83.0 | 89.0 | 93.8 | 97.4 | 97.4 | 14.4 | 6.0 |
| OH → 42 | 80.9 | 86.9 | 90.6 | 94.4 | 94.4 | 13.5 | 6.0 |
| 44 | 78.4 | 84.5 | 88.3 | 92.3 | 92.3 | 13.9 | 6.1 |
| 46 | 76.9 | 82.6 | 85.7 | 89.9 | 89.9 | 13.0 | 5.7 |
| 48 | 76.7 | 81.8 | 84.6 | 90.2 | 92.3 | 13.5 | 5.1 |
| 50 | 74.8 | 80.3 | 83.3 | 88.6 | 91.0 | 13.8 | 5.5 |
| 52 | 72.0 | 77.6 | 81.6 | 86.1 | 88.4 | 14.1 | 5.6 |
| 54 | 71.1 | 77.0 | 81.0 | 85.3 | 87.4 | 14.2 | 5.9 |
| 56 | 70.7 | 76.7 | 80.5 | 85.0 | 87.2 | 14.3 | 6.0 |
| 58 | 67.4 | 74.0 | 80.3 | 81.9 | 83.7 | 14.5 | 6.6 |

TABLE E-VI

NOISE LEVEL FREQUENCY SPECTRA TIME HISTORY

BELL 212

OCTOBER 6, 1976

EVENT 24, 6 DEGREE APPROACH, MIC. 150 METERS WEST

1/3 OCTAVE FREQUENCY BAND VS TIME (SECONDS)
(DB RE 20 MICRO PA)

| BAND | -27.5 | -22.0 | -16.5 | -11.0 | -5.5 | 0 | 3.0 | 5.5 | 11.0 | 13.0 |
|-------|-------|-------|-------|-------|------|------|------|------|------|------|
| 17 | 77.2 | 80.2 | 79.3 | 76.6 | 70.9 | 78.9 | 84.1 | 80.8 | 75.9 | 75.2 |
| 18 | 77.3 | 80.7 | 80.3 | 77.9 | 78.3 | 75.3 | 82.3 | 78.3 | 76.9 | 74.5 |
| 19 | 73.9 | 79.1 | 78.2 | 74.9 | 77.9 | 76.4 | 71.8 | 77.2 | 72.5 | 70.3 |
| 20 | 72.7 | 78.3 | 78.2 | 69.8 | 74.3 | 72.0 | 73.3 | 77.6 | 73.4 | 72.2 |
| 21 | 71.5 | 77.0 | 76.1 | 70.6 | 69.0 | 65.6 | 69.7 | 70.0 | 70.5 | 69.7 |
| 22 | 67.4 | 71.1 | 67.6 | 62.0 | 59.1 | 74.7 | 75.4 | 69.7 | 71.6 | 70.6 |
| 23 | 67.2 | 70.9 | 65.4 | 57.6 | 66.7 | 76.0 | 79.7 | 78.1 | 68.1 | 69.4 |
| 24 | 67.3 | 68.9 | 60.0 | 61.4 | 72.6 | 78.0 | 80.3 | 81.9 | 62.1 | 65.0 |
| 25 | 64.6 | 64.8 | 68.5 | 65.4 | 73.0 | 74.9 | 79.1 | 77.7 | 64.6 | 62.1 |
| 26 | 63.2 | 65.5 | 75.2 | 69.9 | 71.3 | 67.6 | 71.0 | 72.6 | 67.4 | 65.0 |
| 27 | 63.6 | 68.0 | 74.8 | 69.1 | 67.1 | 72.8 | 74.3 | 71.0 | 67.2 | 66.9 |
| 28 | 64.2 | 68.5 | 69.5 | 62.1 | 70.4 | 66.8 | 69.6 | 72.1 | 58.0 | 62.1 |
| 29 | 60.8 | 65.1 | 62.0 | 64.4 | 65.6 | 68.9 | 71.2 | 69.0 | 60.3 | 54.7 |
| 30 | 55.7 | 59.5 | 66.9 | 60.1 | 67.2 | 67.3 | 66.6 | 66.2 | 57.8 | 58.1 |
| 31 | 57.6 | 62.8 | 62.7 | 63.6 | 67.1 | 65.8 | 65.0 | 65.7 | 54.8 | 55.5 |
| 32 | 55.5 | 60.6 | 61.7 | 62.0 | 66.2 | 65.4 | 64.3 | 65.2 | 56.0 | 57.5 |
| 33 | 49.5 | 55.2 | 58.5 | 60.8 | 65.0 | 62.8 | 63.2 | 65.2 | 55.8 | 55.6 |
| 34 | 47.0 | 53.0 | 54.5 | 56.5 | 61.3 | 61.1 | 60.4 | 58.8 | 50.2 | 50.6 |
| 35 | 45.0 | 48.9 | 51.7 | 52.3 | 60.0 | 57.2 | 57.8 | 56.6 | 48.6 | 48.9 |
| 36 | 45.0 | 45.4 | 47.2 | 48.5 | 56.3 | 55.1 | 57.1 | 56.6 | 48.5 | 47.4 |
| 37 | 45.0 | 45.0 | 45.0 | 45.0 | 50.8 | 50.0 | 50.9 | 49.7 | 45.0 | 45.0 |
| 38 | 45.0 | 45.0 | 45.0 | 45.0 | 46.7 | 47.3 | 49.2 | 46.5 | 45.0 | 45.0 |
| 39 | 45.0 | 45.0 | 45.0 | 45.0 | 45.3 | 48.4 | 50.9 | 48.9 | 45.0 | 45.0 |
| 40 | 45.0 | 45.0 | 45.0 | 45.0 | 45.0 | 45.0 | 45.7 | 45.0 | 45.0 | 45.0 |
| A | 69.4 | 73.9 | 76.9 | 72.8 | 77.1 | 77.8 | 80.2 | 79.4 | 70.3 | 70.1 |
| D | 76.1 | 80.3 | 81.8 | 78.1 | 81.7 | 83.7 | 86.0 | 85.1 | 76.7 | 76.4 |
| OASPL | 83.5 | 87.0 | 87.2 | 85.0 | 85.4 | 90.8 | 91.1 | 89.0 | 82.6 | 81.5 |
| PNL | 82.7 | 87.3 | 89.2 | 85.6 | 89.3 | 90.9 | 93.0 | 93.1 | 83.9 | 83.4 |
| PNLT | 82.7 | 87.3 | 90.7 | 86.7 | 90.6 | 90.9 | 94.0 | 93.6 | 83.9 | 83.4 |

LOWER LIMIT OF ANALYSIS SYSTEM= 45.0

TABLE E-VI

NOISE LEVEL FREQUENCY SPECTRA TIME HISTORY

BELL 212

OCTOBER 6, 1976

EVENT 27, 9 DEGREE APPROACH, MIC. 150 METERS WEST

1/3 OCTAVE FREQUENCY BAND VS TIME (SECONDS)
(DB RE 20 MICRO PA)

| BAND | -30.5 | -24.5 | -18.5 | -12.5 | -6.5 | -.5 | 0 | 3.5 | 5.5 | 11.5 | 12.0 |
|-------|-------|-------|-------|-------|------|------|------|------|------|------|------|
| 17 | 76.2 | 77.5 | 79.1 | 78.4 | 75.5 | 79.1 | 78.9 | 82.5 | 80.5 | 76.1 | 76.0 |
| 18 | 76.4 | 78.1 | 79.6 | 79.1 | 76.7 | 73.7 | 74.3 | 77.5 | 77.9 | 75.5 | 74.7 |
| 19 | 73.8 | 76.4 | 77.3 | 77.3 | 76.9 | 75.5 | 74.9 | 76.6 | 73.4 | 71.0 | 70.9 |
| 20 | 71.8 | 73.0 | 75.4 | 76.0 | 71.2 | 72.4 | 73.5 | 78.0 | 75.4 | 72.9 | 72.2 |
| 21 | 71.9 | 71.2 | 75.0 | 74.4 | 67.6 | 66.6 | 67.4 | 70.0 | 69.3 | 72.3 | 71.6 |
| 22 | 64.9 | 63.4 | 67.5 | 69.4 | 62.1 | 73.6 | 73.6 | 75.5 | 64.9 | 71.3 | 71.1 |
| 23 | 64.4 | 60.9 | 64.8 | 60.5 | 72.5 | 78.3 | 77.2 | 81.8 | 73.9 | 68.4 | 67.7 |
| 24 | 61.3 | 56.8 | 65.8 | 70.2 | 75.0 | 77.3 | 76.8 | 83.5 | 75.2 | 62.2 | 62.5 |
| 25 | 58.3 | 62.8 | 73.0 | 74.4 | 72.4 | 76.6 | 75.3 | 78.0 | 75.6 | 64.2 | 62.6 |
| 26 | 68.1 | 70.1 | 78.1 | 76.1 | 69.3 | 67.2 | 67.7 | 70.1 | 71.6 | 68.4 | 66.5 |
| 27 | 69.7 | 68.4 | 74.6 | 72.0 | 67.1 | 71.1 | 71.8 | 73.9 | 68.5 | 69.5 | 66.8 |
| 28 | 64.7 | 59.7 | 67.3 | 66.8 | 70.5 | 66.6 | 66.6 | 70.2 | 70.8 | 61.4 | 61.0 |
| 29 | 56.4 | 51.2 | 66.6 | 69.8 | 65.0 | 69.2 | 69.4 | 71.5 | 66.0 | 57.9 | 54.4 |
| 30 | 50.5 | 54.3 | 61.9 | 63.2 | 65.3 | 66.3 | 66.8 | 67.5 | 64.7 | 60.7 | 59.1 |
| 31 | 52.9 | 51.1 | 61.9 | 65.2 | 64.9 | 64.9 | 65.2 | 66.2 | 63.7 | 55.8 | 54.9 |
| 32 | 48.0 | 52.0 | 59.1 | 64.1 | 63.5 | 64.5 | 63.5 | 63.9 | 63.5 | 60.0 | 60.2 |
| 33 | 46.1 | 48.2 | 57.6 | 62.0 | 62.3 | 63.3 | 62.8 | 63.7 | 63.4 | 57.7 | 57.7 |
| 34 | 45.0 | 45.2 | 55.4 | 58.0 | 60.1 | 61.3 | 60.9 | 61.7 | 58.1 | 53.6 | 52.4 |
| 35 | 45.0 | 45.0 | 51.6 | 54.9 | 58.2 | 58.8 | 58.1 | 59.2 | 56.6 | 52.5 | 51.1 |
| 36 | 45.0 | 45.0 | 47.5 | 50.2 | 54.9 | 56.5 | 55.6 | 59.1 | 58.6 | 51.0 | 49.7 |
| 37 | 45.0 | 45.0 | 45.0 | 45.8 | 49.1 | 50.9 | 50.7 | 51.6 | 50.5 | 45.0 | 45.0 |
| 38 | 45.0 | 45.0 | 45.0 | 45.0 | 45.0 | 47.4 | 47.7 | 49.0 | 47.6 | 45.0 | 45.0 |
| 39 | 45.0 | 45.0 | 45.0 | 45.0 | 45.0 | 48.2 | 48.6 | 51.8 | 50.2 | 45.0 | 45.0 |
| 40 | 45.0 | 45.0 | 45.0 | 45.0 | 45.0 | 45.0 | 45.2 | 46.0 | 45.3 | 45.0 | 45.0 |
| A | 70.1 | 69.1 | 73.0 | 77.6 | 75.9 | 77.9 | 77.8 | 80.7 | 77.0 | 71.4 | 70.3 |
| D | 75.7 | 76.1 | 82.7 | 82.3 | 81.3 | 84.0 | 83.6 | 86.8 | 82.9 | 77.7 | 76.7 |
| OASPL | 82.4 | 84.0 | 86.7 | 86.7 | 84.7 | 90.5 | 90.9 | 92.4 | 87.6 | 82.6 | 81.7 |
| PNL | 83.3 | 83.6 | 90.2 | 90.1 | 88.8 | 90.7 | 90.4 | 94.5 | 90.0 | 85.2 | 83.8 |
| PNLT | 84.6 | 84.6 | 90.2 | 91.7 | 90.3 | 90.7 | 90.4 | 95.2 | 91.6 | 86.5 | 85.3 |

LOWER LIMIT OF ANALYSIS SYSTEM= 45.0

TABLE E-VI

NOISE LEVEL FREQUENCY SPECTRA TIME HISTORY

BELL 212

OCTOBER 6, 1976

EVENT 36, 110 KT. FLY BY, MIC. 150 METERS WEST

1/3 OCTAVE FREQUENCY BAND VS TIME (SECONDS)
(DB RE 20 MICRO PA)

| BAND | -19.5 | -16.0 | -12.5 | -9.0 | -5.5 | -2.0 | 0 | 1.5 | 5.0 | 7.5 |
|-------|-------|-------|-------|------|------|------|------|------|------|------|
| 17 | 81.2 | 82.4 | 85.5 | 85.9 | 88.4 | 86.7 | 78.3 | 83.1 | 81.3 | 75.2 |
| 18 | 82.3 | 83.5 | 86.1 | 85.8 | 88.1 | 85.2 | 80.6 | 81.2 | 74.2 | 68.2 |
| 19 | 83.0 | 85.2 | 86.6 | 86.4 | 88.4 | 81.2 | 75.0 | 75.1 | 73.8 | 69.5 |
| 20 | 80.8 | 83.4 | 84.6 | 83.9 | 84.3 | 74.3 | 72.0 | 68.6 | 72.8 | 67.6 |
| 21 | 79.2 | 83.9 | 84.1 | 83.6 | 83.5 | 73.2 | 68.0 | 65.4 | 64.8 | 62.8 |
| 22 | 73.0 | 82.5 | 80.6 | 82.2 | 78.2 | 61.6 | 73.0 | 75.6 | 63.5 | 64.7 |
| 23 | 67.9 | 81.2 | 80.4 | 81.5 | 78.1 | 64.6 | 72.4 | 76.4 | 65.2 | 55.6 |
| 24 | 64.9 | 77.6 | 78.5 | 77.2 | 68.9 | 74.4 | 76.7 | 78.2 | 68.6 | 60.3 |
| 25 | 61.6 | 70.5 | 74.8 | 72.0 | 62.7 | 76.8 | 77.4 | 75.2 | 71.1 | 63.1 |
| 26 | 55.6 | 63.3 | 71.7 | 69.2 | 67.4 | 78.2 | 72.6 | 73.1 | 71.1 | 66.3 |
| 27 | 51.5 | 56.3 | 68.6 | 62.5 | 73.5 | 71.6 | 76.3 | 79.1 | 68.0 | 64.5 |
| 28 | 46.4 | 56.0 | 65.6 | 64.6 | 72.9 | 74.2 | 75.0 | 72.2 | 70.4 | 56.6 |
| 29 | 45.1 | 54.6 | 65.8 | 67.1 | 69.1 | 73.2 | 73.4 | 73.7 | 65.7 | 62.9 |
| 30 | 45.2 | 51.5 | 62.5 | 66.6 | 63.3 | 71.7 | 70.0 | 70.6 | 67.8 | 58.7 |
| 31 | 45.0 | 48.7 | 58.7 | 65.1 | 67.8 | 70.6 | 70.3 | 67.8 | 65.5 | 60.4 |
| 32 | 45.0 | 47.0 | 56.0 | 63.3 | 64.1 | 70.4 | 69.6 | 67.2 | 66.7 | 62.2 |
| 33 | 45.0 | 45.1 | 54.2 | 59.6 | 61.8 | 63.7 | 67.6 | 65.2 | 62.2 | 56.7 |
| 34 | 45.0 | 45.0 | 48.0 | 55.0 | 57.5 | 66.4 | 65.6 | 63.5 | 60.0 | 55.4 |
| 35 | 45.0 | 45.0 | 45.2 | 51.2 | 52.5 | 62.5 | 62.1 | 60.7 | 57.3 | 52.5 |
| 36 | 45.0 | 45.0 | 45.0 | 46.2 | 48.4 | 60.2 | 59.3 | 57.8 | 53.5 | 46.4 |
| 37 | 45.0 | 45.0 | 45.0 | 45.0 | 45.0 | 55.1 | 55.2 | 52.6 | 48.7 | 45.0 |
| 38 | 45.0 | 45.0 | 45.0 | 45.0 | 45.0 | 48.5 | 50.6 | 49.0 | 45.3 | 45.0 |
| 39 | 45.0 | 45.0 | 45.0 | 45.0 | 45.0 | 45.4 | 48.2 | 49.2 | 45.6 | 45.0 |
| 40 | 45.0 | 45.0 | 45.0 | 45.0 | 45.0 | 45.0 | 46.3 | 46.1 | 45.0 | 45.0 |
| A | 69.3 | 76.8 | 78.5 | 78.5 | 78.8 | 81.5 | 81.0 | 81.1 | 76.3 | 71.3 |
| D | 80.7 | 86.0 | 86.7 | 86.6 | 86.6 | 86.5 | 85.8 | 85.4 | 80.7 | 76.1 |
| OASPL | 38.8 | 92.2 | 93.5 | 93.4 | 94.7 | 93.1 | 90.5 | 89.8 | 84.9 | 79.9 |
| PNL | 85.7 | 90.7 | 92.6 | 93.1 | 93.7 | 94.0 | 93.0 | 93.6 | 88.4 | 83.2 |
| PNLT | 85.7 | 90.7 | 92.6 | 93.1 | 95.1 | 94.0 | 93.0 | 93.6 | 89.6 | 84.9 |

LOWER LIMIT OF ANALYSIS SYSTEM= 45.0

TABLE E-VI

NOISE LEVEL FREQUENCY SPECTRA TIME HISTORY

BELL 212

OCTOBER 6, 1976

EVENT 43, 3 DEGREE APPROACH, MIC. 150 METERS WEST

1/3 OCTAVE FREQUENCY BAND VS TIME (SECONDS)
(DB RE 20 MICRO PA)

| BAND | -42.0 | -34.0 | -26.0 | -18.0 | -10.0 | -2.0 | 0 | 6.0 | 14.0 | 14.5 |
|-------|-------|-------|-------|-------|-------|------|------|------|------|------|
| 17 | 74.2 | 76.1 | 76.6 | 80.0 | 77.4 | 78.2 | 77.2 | 80.2 | 73.0 | 73.0 |
| 18 | 75.7 | 76.6 | 78.1 | 79.9 | 77.2 | 76.2 | 72.5 | 77.6 | 71.5 | 71.1 |
| 19 | 73.5 | 73.4 | 74.5 | 76.5 | 74.9 | 70.8 | 68.3 | 74.6 | 71.0 | 70.0 |
| 20 | 72.8 | 73.5 | 73.3 | 76.1 | 74.8 | 66.6 | 64.3 | 72.0 | 70.3 | 69.2 |
| 21 | 70.9 | 72.3 | 74.3 | 75.1 | 75.8 | 65.1 | 63.1 | 68.0 | 64.2 | 63.8 |
| 22 | 67.8 | 66.0 | 69.0 | 68.3 | 66.4 | 63.2 | 69.6 | 60.9 | 61.5 | 61.1 |
| 23 | 65.5 | 64.9 | 68.7 | 67.7 | 62.9 | 69.7 | 70.7 | 68.6 | 59.3 | 59.1 |
| 24 | 67.7 | 65.1 | 70.6 | 64.3 | 60.2 | 73.1 | 73.7 | 71.9 | 53.5 | 54.2 |
| 25 | 63.7 | 61.4 | 65.9 | 57.6 | 66.8 | 73.1 | 71.0 | 72.9 | 56.4 | 53.2 |
| 26 | 58.6 | 58.3 | 60.9 | 61.5 | 73.5 | 67.9 | 64.1 | 69.7 | 60.2 | 58.1 |
| 27 | 54.2 | 54.2 | 52.3 | 65.9 | 73.1 | 68.6 | 70.0 | 64.8 | 63.1 | 60.3 |
| 28 | 51.7 | 52.3 | 55.3 | 65.9 | 65.6 | 70.1 | 67.7 | 69.5 | 59.2 | 58.2 |
| 29 | 46.6 | 48.4 | 56.8 | 60.9 | 64.5 | 68.0 | 68.7 | 63.6 | 50.5 | 49.8 |
| 30 | 45.0 | 45.9 | 53.5 | 54.0 | 63.2 | 66.1 | 65.6 | 64.5 | 55.8 | 54.1 |
| 31 | 45.2 | 45.2 | 50.1 | 59.4 | 64.8 | 66.5 | 64.5 | 62.8 | 52.1 | 51.6 |
| 32 | 45.0 | 45.0 | 49.8 | 52.7 | 62.3 | 65.4 | 62.9 | 61.9 | 58.6 | 58.0 |
| 33 | 45.0 | 45.0 | 48.4 | 51.4 | 60.4 | 63.6 | 62.0 | 60.2 | 53.4 | 52.8 |
| 34 | 45.0 | 45.0 | 46.0 | 48.2 | 57.3 | 60.9 | 60.3 | 56.7 | 48.0 | 46.6 |
| 35 | 45.0 | 45.0 | 45.1 | 45.6 | 53.1 | 58.4 | 57.6 | 54.2 | 48.2 | 47.0 |
| 36 | 45.0 | 45.0 | 45.0 | 45.1 | 50.5 | 55.6 | 54.8 | 53.7 | 46.2 | 45.7 |
| 37 | 45.0 | 45.0 | 45.0 | 45.0 | 46.8 | 50.4 | 49.7 | 47.5 | 45.0 | 45.0 |
| 38 | 45.0 | 45.0 | 45.0 | 45.0 | 45.0 | 47.2 | 46.4 | 45.0 | 45.0 | 45.0 |
| 39 | 45.0 | 45.0 | 45.0 | 45.0 | 45.0 | 47.8 | 46.5 | 46.0 | 45.0 | 45.0 |
| 40 | 45.0 | 45.0 | 45.0 | 45.0 | 45.0 | 45.2 | 45.2 | 45.0 | 45.0 | 45.0 |
| A | 65.6 | 65.3 | 68.6 | 70.7 | 75.0 | 76.5 | 75.7 | 75.0 | 66.6 | 65.6 |
| D | 73.9 | 74.0 | 76.1 | 77.4 | 80.2 | 81.8 | 81.4 | 80.4 | 72.9 | 71.8 |
| OASPL | 82.0 | 83.3 | 84.3 | 86.2 | 85.8 | 88.1 | 90.1 | 87.1 | 78.7 | 76.2 |
| PNL | 80.5 | 80.4 | 83.1 | 84.3 | 88.1 | 88.5 | 87.8 | 87.5 | 80.2 | 79.4 |
| PNLT | 80.5 | 80.4 | 83.1 | 86.3 | 88.1 | 88.5 | 87.8 | 89.2 | 82.2 | 81.3 |

LOWER LIMIT OF ANALYSIS SYSTEM= 45.0

TABLE E-VI

NOISE LEVEL FREQUENCY SPECTRA TIME HISTORY

BELL 212

OCTOBER 6, 1976

EVENT 44, 110 KI. FLY BY, MIC. 150 METERS WEST

1/3 OCTAVE FREQUENCY BAND VS TIME (SECONDS)
(DB RE 20 MICRO PA)

| BAND | -16.5 | -13.5 | -10.5 | -7.5 | -4.5 | -3.0 | -1.5 | 0 | 1.5 | 4.5 | 6.5 |
|-------|-------|-------|-------|------|------|------|------|------|------|------|------|
| 17 | 82.7 | 85.5 | 86.0 | 88.3 | 89.1 | 87.2 | 78.3 | 79.4 | 83.0 | 80.6 | 77.7 |
| 18 | 82.7 | 86.4 | 85.8 | 88.8 | 88.9 | 85.9 | 75.9 | 79.0 | 79.8 | 74.4 | 70.5 |
| 19 | 82.8 | 87.8 | 86.7 | 88.3 | 88.4 | 83.5 | 76.5 | 74.6 | 75.9 | 72.2 | 71.2 |
| 20 | 79.7 | 85.6 | 84.8 | 85.5 | 83.3 | 77.6 | 75.3 | 70.4 | 71.6 | 72.4 | 71.4 |
| 21 | 78.7 | 86.0 | 85.3 | 84.9 | 81.1 | 77.1 | 72.1 | 67.8 | 65.1 | 64.4 | 64.5 |
| 22 | 77.3 | 83.4 | 83.0 | 81.0 | 74.0 | 67.5 | 60.1 | 69.2 | 62.4 | 60.1 | 62.7 |
| 23 | 75.1 | 82.0 | 81.1 | 79.8 | 74.8 | 62.8 | 65.3 | 70.4 | 73.3 | 62.4 | 59.4 |
| 24 | 72.1 | 78.2 | 76.0 | 75.4 | 63.9 | 69.4 | 75.1 | 74.9 | 75.5 | 66.8 | 59.0 |
| 25 | 66.2 | 73.4 | 73.2 | 72.1 | 66.4 | 74.3 | 76.8 | 76.4 | 74.5 | 69.9 | 64.3 |
| 26 | 58.7 | 70.3 | 72.1 | 67.5 | 73.6 | 79.0 | 77.3 | 71.6 | 69.2 | 71.3 | 68.3 |
| 27 | 55.0 | 65.4 | 68.4 | 65.5 | 76.5 | 75.2 | 69.9 | 71.7 | 72.7 | 65.4 | 67.4 |
| 28 | 52.3 | 58.2 | 65.4 | 72.8 | 74.5 | 68.7 | 73.8 | 73.6 | 71.8 | 66.9 | 58.1 |
| 29 | 50.1 | 54.5 | 62.2 | 73.3 | 67.5 | 74.8 | 72.1 | 71.1 | 70.5 | 66.4 | 63.0 |
| 30 | 47.7 | 52.5 | 59.5 | 67.8 | 68.4 | 69.6 | 70.4 | 69.2 | 66.8 | 64.9 | 59.5 |
| 31 | 47.2 | 52.7 | 59.6 | 61.6 | 67.3 | 70.8 | 69.8 | 69.1 | 66.5 | 62.1 | 60.5 |
| 32 | 46.4 | 50.5 | 57.4 | 64.1 | 67.6 | 68.6 | 69.7 | 68.1 | 65.6 | 63.7 | 63.2 |
| 33 | 45.4 | 46.4 | 52.6 | 57.8 | 64.7 | 66.9 | 67.7 | 65.9 | 63.7 | 59.1 | 56.6 |
| 34 | 45.0 | 45.3 | 50.0 | 53.8 | 61.5 | 64.5 | 65.3 | 63.8 | 60.9 | 55.9 | 53.5 |
| 35 | 45.0 | 45.0 | 47.2 | 49.8 | 56.8 | 60.9 | 62.0 | 60.2 | 57.8 | 55.2 | 54.3 |
| 36 | 45.0 | 45.0 | 45.1 | 46.9 | 53.6 | 56.6 | 59.8 | 57.9 | 55.3 | 49.7 | 43.8 |
| 37 | 45.0 | 45.0 | 45.0 | 45.0 | 48.2 | 51.6 | 54.4 | 53.1 | 50.5 | 46.1 | 45.0 |
| 38 | 45.0 | 45.0 | 45.0 | 45.0 | 45.0 | 46.0 | 49.0 | 49.1 | 46.7 | 45.0 | 45.0 |
| 39 | 45.0 | 45.0 | 45.0 | 45.0 | 45.0 | 45.0 | 46.1 | 47.5 | 47.6 | 45.0 | 45.0 |
| 40 | 45.0 | 45.0 | 45.0 | 45.0 | 45.0 | 45.0 | 45.7 | 46.2 | 45.8 | 45.0 | 45.0 |
| A | 71.6 | 78.7 | 78.4 | 79.5 | 79.9 | 81.2 | 80.3 | 79.4 | 78.0 | 74.1 | 71.5 |
| D | 81.7 | 87.9 | 87.1 | 87.2 | 86.3 | 86.2 | 85.2 | 84.2 | 82.8 | 79.1 | 76.6 |
| OASPL | 89.7 | 94.5 | 93.9 | 94.7 | 94.8 | 93.1 | 90.5 | 89.4 | 88.8 | 84.0 | 81.4 |
| PNL | 86.7 | 92.8 | 93.0 | 94.0 | 94.3 | 94.0 | 92.7 | 91.4 | 90.3 | 86.6 | 84.2 |
| PNLF | 86.7 | 92.8 | 93.0 | 95.5 | 94.3 | 95.2 | 92.7 | 91.4 | 90.3 | 87.6 | 85.8 |

LOWER LIMIT OF ANALYSIS SYSTEM= 45.0

TABLE E-VI

NOISE LEVEL FREQUENCY SPECTRA TIME HISTORY

BELL 212

OCTOBER 6, 1976

EVENT 45, 110 KT. FLY BY, MIC. 150 METERS WEST

1/3 OCTAVE FREQUENCY BAND VS TIME (SECONDS)
(DB RE 20 MICRO PA)

| BAND | -19.0 | -15.0 | -11.0 | -7.0 | -4.0 | -3.0 | 0 | 1.0 | 5.0 | 9.0 | 10.5 |
|-------|-------|-------|-------|------|------|------|------|------|------|------|------|
| 17 | 79.0 | 83.6 | 84.9 | 88.3 | 88.8 | 88.2 | 77.6 | 79.1 | 80.6 | 74.3 | 71.9 |
| 18 | 79.2 | 83.7 | 85.9 | 88.1 | 88.1 | 87.5 | 77.6 | 78.3 | 74.3 | 70.4 | 69.0 |
| 19 | 78.8 | 84.0 | 85.6 | 88.1 | 87.1 | 83.8 | 72.9 | 72.5 | 72.1 | 68.7 | 68.2 |
| 20 | 74.1 | 81.9 | 82.3 | 85.4 | 82.5 | 77.4 | 63.3 | 61.7 | 67.8 | 68.8 | 69.0 |
| 21 | 74.0 | 82.7 | 80.5 | 83.6 | 79.1 | 73.5 | 65.8 | 66.1 | 65.0 | 64.8 | 66.8 |
| 22 | 70.8 | 80.7 | 79.5 | 80.6 | 71.2 | 63.6 | 70.4 | 75.6 | 63.1 | 60.1 | 63.8 |
| 23 | 62.7 | 77.3 | 78.1 | 78.1 | 70.6 | 68.3 | 73.6 | 74.2 | 68.4 | 58.0 | 58.2 |
| 24 | 61.6 | 71.4 | 74.5 | 71.4 | 67.7 | 72.5 | 79.7 | 75.5 | 70.4 | 61.4 | 58.8 |
| 25 | 60.4 | 66.4 | 70.9 | 63.6 | 70.4 | 72.0 | 69.9 | 69.7 | 67.1 | 61.2 | 57.5 |
| 26 | 55.0 | 60.1 | 70.8 | 64.6 | 74.4 | 73.1 | 74.8 | 74.9 | 64.5 | 63.1 | 63.0 |
| 27 | 55.0 | 57.3 | 65.4 | 65.4 | 72.8 | 68.9 | 77.2 | 75.2 | 70.8 | 60.1 | 60.1 |
| 28 | 55.0 | 55.2 | 60.1 | 62.8 | 68.4 | 72.7 | 72.0 | 72.9 | 64.7 | 57.4 | 55.9 |
| 29 | 55.0 | 55.0 | 57.9 | 64.2 | 72.2 | 70.4 | 70.4 | 70.9 | 65.0 | 58.4 | 57.8 |
| 30 | 55.0 | 55.0 | 55.5 | 59.7 | 68.0 | 69.5 | 68.9 | 69.8 | 64.0 | 56.1 | 55.7 |
| 31 | 55.0 | 55.0 | 56.6 | 57.5 | 69.3 | 67.7 | 68.1 | 68.9 | 63.2 | 55.5 | 56.5 |
| 32 | 55.0 | 55.0 | 57.2 | 60.7 | 67.2 | 65.9 | 67.1 | 68.2 | 64.3 | 60.1 | 61.5 |
| 33 | 55.0 | 55.0 | 55.4 | 55.5 | 64.8 | 62.7 | 65.0 | 65.3 | 60.3 | 55.0 | 55.4 |
| 34 | 55.0 | 55.0 | 55.0 | 55.2 | 61.1 | 60.2 | 62.9 | 63.0 | 57.6 | 55.0 | 55.0 |
| 35 | 55.0 | 55.0 | 55.0 | 55.0 | 56.7 | 57.3 | 58.3 | 59.0 | 55.8 | 55.0 | 55.0 |
| 36 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 | 55.5 | 56.2 | 55.8 | 55.0 | 55.0 | 55.0 |
| 37 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 |
| 38 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 |
| 39 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 |
| 40 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 |
| A | 65.7 | 74.2 | 75.6 | 76.1 | 79.0 | 78.6 | 80.0 | 80.0 | 74.5 | 67.7 | 67.8 |
| D | 76.5 | 83.4 | 84.0 | 85.8 | 85.5 | 84.2 | 84.4 | 84.7 | 79.6 | 74.2 | 74.5 |
| OASPL | 84.9 | 90.8 | 91.6 | 94.4 | 94.1 | 93.2 | 87.8 | 87.9 | 85.1 | 80.7 | 79.5 |
| PNL | 84.9 | 90.8 | 91.7 | 93.3 | 93.9 | 92.6 | 92.4 | 91.8 | 87.5 | 83.1 | 83.4 |
| PNLT | 84.9 | 90.8 | 91.7 | 94.7 | 95.3 | 93.6 | 92.4 | 91.8 | 87.5 | 84.7 | 85.3 |

LOWER LIMIT OF ANALYSIS SYSTEM= 55.0

TABLE E-VI

NOISE LEVEL FREQUENCY SPECTRA TIME HISTORY

BELL 212

OCTOBER 6, 1976

EVENT 24, 6 DEGREE APPROACH, MIC. 150 METERS EAST

1/3 OCTAVE FREQUENCY BAND VS TIME (SECONDS)
(DB RE 20 MICRO PA)

| BAND | -56.5 | -46.5 | -36.5 | -26.5 | -16.5 | -6.5 | 0 | 3.5 | 13.5 |
|-------|-------|-------|-------|-------|-------|------|------|------|------|
| 17 | 78.7 | 73.8 | 79.0 | 77.8 | 84.5 | 81.3 | 80.4 | 77.2 | 70.3 |
| 18 | 79.2 | 75.9 | 78.4 | 78.5 | 82.4 | 81.1 | 81.6 | 73.1 | 66.6 |
| 19 | 78.3 | 71.5 | 74.1 | 72.9 | 76.9 | 71.3 | 72.6 | 78.1 | 66.6 |
| 20 | 77.5 | 72.9 | 74.3 | 71.8 | 74.8 | 73.6 | 71.1 | 74.8 | 70.1 |
| 21 | 75.5 | 70.5 | 71.8 | 70.6 | 73.6 | 74.7 | 68.6 | 64.4 | 70.3 |
| 22 | 70.0 | 65.7 | 68.3 | 62.3 | 73.0 | 63.3 | 74.1 | 71.0 | 68.7 |
| 23 | 64.7 | 62.9 | 65.4 | 59.2 | 70.5 | 68.8 | 76.9 | 73.6 | 63.2 |
| 24 | 60.4 | 64.4 | 62.4 | 59.9 | 64.7 | 77.1 | 76.4 | 74.1 | 56.7 |
| 25 | 65.2 | 63.8 | 57.6 | 60.7 | 65.6 | 76.0 | 70.3 | 72.3 | 54.4 |
| 26 | 64.1 | 58.0 | 59.1 | 55.9 | 70.2 | 73.3 | 65.0 | 65.5 | 61.0 |
| 27 | 59.1 | 56.7 | 52.4 | 59.5 | 70.2 | 67.1 | 70.6 | 70.3 | 64.0 |
| 28 | 54.3 | 48.4 | 48.4 | 58.6 | 66.2 | 72.9 | 65.5 | 65.4 | 59.4 |
| 29 | 49.1 | 48.7 | 47.8 | 53.5 | 59.9 | 69.4 | 67.5 | 67.2 | 51.2 |
| 30 | 46.0 | 47.2 | 46.1 | 46.8 | 57.2 | 67.2 | 65.3 | 63.7 | 54.6 |
| 31 | 45.0 | 45.0 | 45.1 | 45.1 | 58.3 | 64.8 | 62.8 | 61.5 | 54.3 |
| 32 | 45.0 | 45.0 | 45.0 | 45.5 | 54.6 | 64.1 | 63.3 | 62.0 | 60.1 |
| 33 | 45.0 | 45.0 | 45.0 | 45.0 | 53.2 | 61.8 | 62.4 | 66.0 | 58.4 |
| 34 | 45.0 | 45.0 | 45.0 | 45.0 | 49.6 | 60.6 | 59.8 | 57.1 | 50.1 |
| 35 | 45.0 | 45.0 | 45.0 | 45.0 | 46.4 | 56.3 | 57.3 | 54.5 | 51.7 |
| 36 | 45.0 | 45.0 | 45.0 | 45.0 | 45.0 | 54.0 | 55.9 | 55.2 | 50.9 |
| 37 | 45.0 | 45.0 | 45.0 | 45.0 | 45.0 | 48.8 | 51.6 | 49.6 | 45.0 |
| 38 | 45.0 | 45.0 | 45.0 | 45.0 | 45.0 | 45.8 | 48.7 | 46.9 | 45.0 |
| 39 | 45.0 | 45.0 | 45.0 | 45.0 | 45.0 | 45.0 | 49.3 | 48.9 | 45.0 |
| 40 | 45.0 | 45.0 | 45.0 | 45.0 | 45.0 | 45.0 | 46.8 | 45.6 | 45.0 |
| A | 67.2 | 64.3 | 64.1 | 63.9 | 72.0 | 78.1 | 75.9 | 75.4 | 67.9 |
| D | 76.4 | 72.0 | 74.1 | 71.9 | 79.1 | 82.8 | 81.8 | 80.9 | 74.3 |
| OASPL | 84.9 | 80.9 | 83.6 | 82.5 | 88.1 | 88.2 | 86.7 | 84.8 | 79.8 |
| PNL | 83.5 | 79.8 | 80.8 | 80.2 | 86.4 | 90.4 | 89.9 | 89.0 | 81.8 |
| PNLT | 83.5 | 79.8 | 80.8 | 80.2 | 86.4 | 92.0 | 89.9 | 91.2 | 83.1 |

LOWER LIMIT OF ANALYSIS SYSTEM= 45.0

TABLE E-VI

NOISE LEVEL FREQUENCY SPECTRA TIME HISTORY

BELL 212

OCTOBER 6, 1976

EVENT 35, 110 KT. FLY BY, MIC. 150 METERS EAST

1/3 OCTAVE FREQUENCY BAND VS TIME (SECONDS)
(DB RE 20 MICRO PA)

| BAND | -15.0 | -12.0 | -9.0 | -6.0 | -3.0 | 0 | 3.0 | 6.0 | 8.5 |
|-------|-------|-------|------|------|------|------|------|------|------|
| 17 | 79.5 | 83.1 | 87.9 | 89.1 | 88.4 | 81.7 | 84.3 | 81.6 | 81.0 |
| 18 | 80.0 | 82.4 | 86.3 | 86.5 | 86.7 | 84.3 | 83.5 | 77.6 | 77.7 |
| 19 | 81.2 | 82.8 | 87.7 | 86.9 | 83.9 | 75.8 | 72.1 | 72.1 | 69.9 |
| 20 | 79.4 | 82.2 | 86.7 | 84.3 | 78.4 | 75.2 | 72.0 | 70.3 | 65.6 |
| 21 | 78.8 | 83.2 | 86.7 | 83.1 | 80.5 | 78.7 | 74.0 | 66.2 | 68.8 |
| 22 | 75.2 | 83.2 | 84.1 | 79.5 | 76.2 | 76.1 | 73.5 | 65.1 | 67.1 |
| 23 | 75.4 | 81.3 | 82.3 | 79.7 | 79.6 | 79.0 | 77.9 | 69.3 | 66.3 |
| 24 | 72.9 | 77.4 | 76.4 | 74.7 | 79.0 | 79.5 | 76.9 | 69.1 | 64.1 |
| 25 | 66.9 | 77.1 | 73.2 | 70.5 | 78.4 | 74.9 | 72.4 | 69.8 | 64.3 |
| 26 | 60.6 | 75.4 | 70.6 | 70.4 | 80.3 | 70.9 | 70.0 | 70.5 | 66.3 |
| 27 | 58.0 | 75.8 | 66.2 | 72.0 | 76.7 | 75.0 | 75.9 | 64.6 | 66.3 |
| 28 | 52.9 | 73.2 | 66.9 | 69.9 | 72.1 | 75.1 | 70.0 | 67.2 | 59.8 |
| 29 | 51.7 | 69.7 | 69.2 | 63.9 | 72.2 | 74.1 | 71.4 | 65.3 | 60.9 |
| 30 | 49.3 | 64.5 | 64.4 | 64.1 | 68.8 | 70.3 | 67.7 | 63.5 | 61.2 |
| 31 | 47.5 | 59.8 | 60.7 | 62.9 | 67.2 | 68.7 | 64.5 | 62.1 | 59.2 |
| 32 | 45.0 | 56.8 | 58.0 | 57.7 | 66.4 | 66.9 | 65.0 | 64.6 | 61.9 |
| 33 | 45.0 | 52.1 | 51.1 | 54.2 | 63.6 | 66.1 | 64.1 | 59.1 | 56.0 |
| 34 | 45.0 | 49.2 | 50.9 | 52.5 | 61.3 | 62.8 | 58.3 | 55.5 | 52.8 |
| 35 | 45.0 | 45.9 | 47.8 | 48.8 | 57.6 | 61.1 | 56.2 | 56.8 | 54.0 |
| 36 | 45.0 | 45.2 | 46.1 | 46.5 | 54.9 | 58.8 | 54.9 | 52.1 | 48.4 |
| 37 | 45.0 | 45.0 | 45.0 | 45.0 | 49.8 | 54.8 | 49.7 | 49.3 | 45.1 |
| 38 | 45.0 | 45.0 | 45.0 | 45.0 | 45.7 | 51.1 | 47.4 | 45.7 | 45.0 |
| 39 | 45.0 | 45.0 | 45.0 | 45.0 | 45.0 | 47.5 | 47.4 | 45.0 | 45.0 |
| 40 | 45.0 | 45.0 | 45.0 | 45.0 | 45.0 | 46.8 | 45.5 | 45.0 | 45.0 |
| A | 70.8 | 80.2 | 78.8 | 77.7 | 81.4 | 80.8 | 78.6 | 74.3 | 70.7 |
| D | 80.1 | 86.4 | 87.4 | 85.6 | 86.8 | 85.8 | 83.5 | 79.1 | 76.0 |
| OASFL | 87.7 | 91.8 | 94.4 | 94.0 | 93.8 | 90.0 | 88.5 | 85.0 | 84.1 |
| PNL | 86.2 | 93.0 | 94.2 | 92.7 | 95.4 | 93.9 | 91.6 | 87.0 | 84.3 |
| PNLT | 86.2 | 93.0 | 95.3 | 92.7 | 95.4 | 93.9 | 91.6 | 88.3 | 85.7 |

LOWER LIMIT OF ANALYSIS SYSTEM= 45.0

TABLE E-VI

NOISE LEVEL FREQUENCY SPECTRA TIME HISTORY

BELL 212

OCTOBER 6, 1976

EVENT 36, 110 KT. FLY BY, MIC. 150 METERS EAST

1/3 OCTAVE FREQUENCY BAND VS TIME (SECONDS)
(DB RE 20 MICRO PA)

| BAND | -15.5 | -12.5 | -9.5 | -6.5 | -3.5 | -.5 | 0 | 2.5 | 5.5 | 6.0 |
|-------|-------|-------|------|------|------|------|------|------|------|------|
| 17 | 82.1 | 85.3 | 86.7 | 87.8 | 86.4 | 77.6 | 79.5 | 83.2 | 75.5 | 73.6 |
| 18 | 80.3 | 86.2 | 87.4 | 87.4 | 85.8 | 83.8 | 83.7 | 73.1 | 71.2 | 70.6 |
| 19 | 78.9 | 87.1 | 87.7 | 87.4 | 82.9 | 71.1 | 68.6 | 64.4 | 66.3 | 66.2 |
| 20 | 76.6 | 86.6 | 87.0 | 85.6 | 77.6 | 69.5 | 68.4 | 64.2 | 64.3 | 63.2 |
| 21 | 77.3 | 87.4 | 87.0 | 84.2 | 79.3 | 74.1 | 72.2 | 62.2 | 61.5 | 61.8 |
| 22 | 75.2 | 86.1 | 83.6 | 78.0 | 72.2 | 67.7 | 69.7 | 70.3 | 61.3 | 60.7 |
| 23 | 70.0 | 84.6 | 80.5 | 75.5 | 69.9 | 72.1 | 73.4 | 75.3 | 62.1 | 60.0 |
| 24 | 66.4 | 80.5 | 75.3 | 72.3 | 66.5 | 77.6 | 78.3 | 76.0 | 65.0 | 62.2 |
| 25 | 59.9 | 77.4 | 71.3 | 63.5 | 73.6 | 71.5 | 72.0 | 71.4 | 68.2 | 66.6 |
| 26 | 57.6 | 75.9 | 69.6 | 66.6 | 77.9 | 68.5 | 67.6 | 67.5 | 69.9 | 69.3 |
| 27 | 56.4 | 74.9 | 65.7 | 72.4 | 76.3 | 72.4 | 73.9 | 76.0 | 64.6 | 64.5 |
| 28 | 53.5 | 69.5 | 66.2 | 73.2 | 69.7 | 73.5 | 72.5 | 71.2 | 67.5 | 64.3 |
| 29 | 49.2 | 64.6 | 66.0 | 73.3 | 70.1 | 72.0 | 73.0 | 72.6 | 65.9 | 65.0 |
| 30 | 46.4 | 57.5 | 62.3 | 65.3 | 67.5 | 69.5 | 69.7 | 67.7 | 64.4 | 62.1 |
| 31 | 45.0 | 53.2 | 58.4 | 66.8 | 64.3 | 68.4 | 68.0 | 65.3 | 61.9 | 60.7 |
| 32 | 45.0 | 51.6 | 54.3 | 61.2 | 63.6 | 67.9 | 67.8 | 65.0 | 63.1 | 62.4 |
| 33 | 45.0 | 48.3 | 49.4 | 57.8 | 60.5 | 65.9 | 66.2 | 62.4 | 58.0 | 57.0 |
| 34 | 45.0 | 46.2 | 47.9 | 54.8 | 57.7 | 62.9 | 63.4 | 59.1 | 54.5 | 53.6 |
| 35 | 45.0 | 45.0 | 45.0 | 49.7 | 55.3 | 60.4 | 60.9 | 57.1 | 54.1 | 53.7 |
| 36 | 45.0 | 45.0 | 45.0 | 46.7 | 51.4 | 58.3 | 58.8 | 55.2 | 50.4 | 49.1 |
| 37 | 45.0 | 45.0 | 45.0 | 45.0 | 47.5 | 55.1 | 55.4 | 50.2 | 47.8 | 46.4 |
| 38 | 45.0 | 45.0 | 45.0 | 45.0 | 45.0 | 51.1 | 51.2 | 48.1 | 45.0 | 45.0 |
| 39 | 45.0 | 45.0 | 45.0 | 45.0 | 45.0 | 47.8 | 48.2 | 47.4 | 45.0 | 45.0 |
| 40 | 45.0 | 45.0 | 45.0 | 45.0 | 45.0 | 48.1 | 47.9 | 45.5 | 45.0 | 45.0 |
| A | 67.9 | 81.1 | 78.1 | 78.9 | 78.9 | 78.8 | 79.2 | 78.3 | 73.3 | 71.9 |
| D | 78.4 | 88.6 | 87.2 | 85.6 | 84.1 | 83.2 | 83.5 | 82.8 | 77.4 | 76.3 |
| OASPL | 87.2 | 94.7 | 94.5 | 93.8 | 91.4 | 86.7 | 87.5 | 85.2 | 81.4 | 80.2 |
| PNL | 84.4 | 94.9 | 93.7 | 93.2 | 92.5 | 91.7 | 92.1 | 90.5 | 85.1 | 84.1 |
| PNLT | 84.4 | 94.9 | 93.7 | 94.5 | 92.5 | 91.7 | 92.1 | 91.5 | 86.2 | 85.3 |

LOWER LIMIT OF ANALYSIS SYSTEM= 45.0

TABLE E-VI

NOISE LEVEL FREQUENCY SPECTRA TIME HISTORY

BELL 212

OCTOBER 6, 1976

EVENT 44, 110 KI. FLY BY, MIC. 150 METERS EAST

1/3 OCTAVE FREQUENCY BAND VS TIME (SECONDS)
(DB RE 20 MICRO PA)

| BAND | -16.5 | -13.5 | -12.0 | -10.5 | -7.5 | -4.5 | -1.5 | 0 | 1.5 | 4.5 | 6.5 |
|-------|-------|-------|-------|-------|------|------|------|------|------|------|------|
| 17 | 82.1 | 85.4 | 87.0 | 86.2 | 87.0 | 87.1 | 80.1 | 78.6 | 83.0 | 77.0 | 69.1 |
| 18 | 80.1 | 85.3 | 87.1 | 85.7 | 86.2 | 86.3 | 83.3 | 83.2 | 78.2 | 71.6 | 71.8 |
| 19 | 78.7 | 86.8 | 87.2 | 88.0 | 87.2 | 86.7 | 74.5 | 70.6 | 68.2 | 66.3 | 67.0 |
| 20 | 77.9 | 86.1 | 87.0 | 87.3 | 86.3 | 83.7 | 74.2 | 68.2 | 63.5 | 67.6 | 62.9 |
| 21 | 78.2 | 86.6 | 88.2 | 87.3 | 85.8 | 82.2 | 74.0 | 69.4 | 59.9 | 61.1 | 62.1 |
| 22 | 73.7 | 84.6 | 87.3 | 84.9 | 81.6 | 73.2 | 63.9 | 70.6 | 74.7 | 56.0 | 60.9 |
| 23 | 67.5 | 82.8 | 85.5 | 82.5 | 76.8 | 72.6 | 70.2 | 74.0 | 75.4 | 66.2 | 56.8 |
| 24 | 65.8 | 79.1 | 79.1 | 77.5 | 69.5 | 64.3 | 75.6 | 77.3 | 75.7 | 68.8 | 59.9 |
| 25 | 63.4 | 73.1 | 73.4 | 71.9 | 62.8 | 71.7 | 75.4 | 70.2 | 69.6 | 69.7 | 63.3 |
| 26 | 63.4 | 69.3 | 71.1 | 70.0 | 59.7 | 76.9 | 72.8 | 66.6 | 69.6 | 67.9 | 67.9 |
| 27 | 62.7 | 67.5 | 71.6 | 67.5 | 64.4 | 74.8 | 69.3 | 73.5 | 75.1 | 65.6 | 66.1 |
| 28 | 53.7 | 62.4 | 65.5 | 60.0 | 67.8 | 70.2 | 74.3 | 71.4 | 68.6 | 67.9 | 58.8 |
| 29 | 51.8 | 56.1 | 59.7 | 61.2 | 65.9 | 66.5 | 71.2 | 73.3 | 70.1 | 65.0 | 64.0 |
| 30 | 52.3 | 47.9 | 52.5 | 59.5 | 56.1 | 66.2 | 70.4 | 69.2 | 68.8 | 65.4 | 59.3 |
| 31 | 48.2 | 47.4 | 49.4 | 55.1 | 54.5 | 61.0 | 68.4 | 67.6 | 66.1 | 63.2 | 60.5 |
| 32 | 45.2 | 46.7 | 47.5 | 50.0 | 53.3 | 61.3 | 68.6 | 67.4 | 65.6 | 68.3 | 63.6 |
| 33 | 45.0 | 45.0 | 45.5 | 48.9 | 47.7 | 57.9 | 65.5 | 66.0 | 63.6 | 62.4 | 57.2 |
| 34 | 45.0 | 45.0 | 45.0 | 45.7 | 46.1 | 54.9 | 64.1 | 63.7 | 61.3 | 57.5 | 55.2 |
| 35 | 45.0 | 45.0 | 45.0 | 45.0 | 45.0 | 52.1 | 61.3 | 61.1 | 58.9 | 57.0 | 54.6 |
| 36 | 45.0 | 45.0 | 45.0 | 45.0 | 45.0 | 48.9 | 59.2 | 60.1 | 57.3 | 53.7 | 50.0 |
| 37 | 45.0 | 45.0 | 45.0 | 45.0 | 45.0 | 45.2 | 54.7 | 54.8 | 53.3 | 51.6 | 47.0 |
| 38 | 45.0 | 45.0 | 45.0 | 45.0 | 45.0 | 45.0 | 51.7 | 52.2 | 50.8 | 48.1 | 45.4 |
| 39 | 45.0 | 45.0 | 45.0 | 45.0 | 45.0 | 45.0 | 46.7 | 49.5 | 51.0 | 48.3 | 45.0 |
| 40 | 45.0 | 45.0 | 45.0 | 45.0 | 45.0 | 45.0 | 46.7 | 49.2 | 49.3 | 45.2 | 45.0 |
| A | 68.7 | 78.6 | 80.3 | 78.6 | 76.1 | 78.0 | 79.6 | 79.0 | 78.3 | 75.1 | 71.6 |
| D | 78.4 | 87.4 | 89.2 | 87.5 | 85.6 | 84.8 | 84.0 | 83.5 | 82.9 | 79.9 | 75.9 |
| OASPL | 87.0 | 93.9 | 95.3 | 94.4 | 93.7 | 93.0 | 87.5 | 86.9 | 86.6 | 82.6 | 80.0 |
| PNL | 85.3 | 93.0 | 94.7 | 93.7 | 92.0 | 92.4 | 91.8 | 91.7 | 90.8 | 87.8 | 83.8 |
| PNLT | 85.3 | 93.0 | 94.7 | 93.7 | 93.2 | 92.4 | 93.1 | 92.7 | 90.8 | 89.6 | 85.4 |

LOWER LIMIT OF ANALYSIS SYSTEM= 45.0

TABLE E-VI

NOISE LEVEL FREQUENCY SPECTRA TIME HISTORY

BELL 212

OCTOBER 6, 1976

EVENT 45, 110 KT. FLY BY, MIC. 150 METERS EAST

1/3 OCTAVE FREQUENCY BAND VS TIME (SECONDS)
(DB RE 20 MICRO PA)

| BAND | -12.0 | -9.5 | -7.0 | -4.5 | -2.0 | 0 | .5 | 3.0 | 5.5 | 7.5 |
|-------|-------|------|------|------|------|------|------|------|------|------|
| 17 | 78.5 | 86.7 | 87.6 | 85.7 | 77.4 | 75.8 | 78.3 | 80.6 | 74.3 | 69.7 |
| 18 | 76.8 | 87.3 | 87.3 | 84.7 | 83.7 | 82.1 | 81.6 | 70.3 | 69.5 | 70.2 |
| 19 | 75.1 | 88.3 | 87.0 | 83.6 | 70.3 | 66.7 | 66.6 | 65.3 | 64.8 | 67.7 |
| 20 | 72.7 | 86.2 | 84.8 | 79.4 | 67.0 | 60.8 | 61.3 | 59.9 | 64.0 | 63.2 |
| 21 | 73.2 | 85.7 | 83.7 | 78.9 | 69.9 | 62.3 | 64.3 | 61.9 | 61.6 | 61.7 |
| 22 | 71.7 | 83.0 | 79.4 | 68.7 | 64.5 | 72.2 | 72.2 | 72.5 | 61.5 | 58.3 |
| 23 | 66.1 | 79.2 | 75.3 | 66.1 | 71.7 | 75.5 | 76.7 | 72.2 | 67.8 | 60.0 |
| 24 | 65.8 | 73.5 | 69.8 | 61.3 | 70.1 | 78.4 | 79.3 | 71.6 | 69.2 | 62.7 |
| 25 | 63.5 | 67.8 | 64.1 | 66.0 | 70.7 | 70.0 | 67.9 | 63.9 | 67.1 | 63.3 |
| 26 | 58.6 | 67.5 | 58.6 | 68.2 | 67.9 | 70.0 | 71.8 | 68.7 | 62.0 | 62.9 |
| 27 | 59.2 | 65.2 | 61.0 | 66.0 | 67.3 | 75.3 | 74.4 | 71.0 | 67.7 | 58.1 |
| 28 | 56.3 | 60.6 | 60.9 | 61.5 | 69.0 | 70.2 | 70.9 | 69.0 | 65.2 | 62.3 |
| 29 | 55.0 | 59.0 | 60.4 | 64.0 | 65.9 | 70.7 | 69.9 | 67.3 | 64.3 | 59.1 |
| 30 | 55.0 | 56.2 | 57.1 | 59.9 | 65.0 | 69.2 | 68.4 | 65.6 | 61.0 | 59.6 |
| 31 | 55.0 | 55.0 | 55.2 | 59.8 | 62.9 | 67.9 | 67.3 | 64.7 | 62.0 | 57.1 |
| 32 | 55.0 | 55.0 | 56.3 | 58.1 | 62.1 | 66.8 | 65.9 | 64.1 | 65.8 | 59.5 |
| 33 | 55.0 | 55.0 | 55.0 | 56.8 | 61.3 | 65.5 | 64.5 | 62.4 | 59.3 | 55.5 |
| 34 | 55.0 | 55.0 | 55.0 | 55.0 | 58.4 | 62.8 | 62.1 | 58.5 | 55.9 | 55.0 |
| 35 | 55.0 | 55.0 | 55.0 | 55.0 | 57.4 | 60.1 | 59.3 | 56.5 | 55.2 | 55.0 |
| 36 | 55.0 | 55.0 | 55.0 | 55.0 | 56.1 | 58.5 | 58.3 | 55.4 | 55.0 | 55.0 |
| 37 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 | 55.3 | 55.0 | 55.0 | 55.0 | 55.0 |
| 38 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 |
| 39 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 |
| 40 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 |
| A | 66.6 | 76.3 | 73.8 | 71.9 | 74.9 | 78.9 | 78.9 | 75.2 | 72.9 | 67.9 |
| D | 75.6 | 85.9 | 84.0 | 80.3 | 80.0 | 83.4 | 83.6 | 80.1 | 78.0 | 73.6 |
| OASPL | 84.1 | 93.9 | 92.9 | 90.0 | 85.4 | 86.2 | 87.0 | 82.8 | 80.5 | 78.6 |
| PNL | 84.6 | 93.5 | 92.0 | 89.5 | 88.7 | 91.8 | 92.0 | 88.2 | 86.6 | 83.1 |
| PNLT | 84.6 | 93.5 | 92.0 | 90.6 | 88.7 | 91.8 | 92.0 | 88.2 | 88.3 | 84.3 |

LOWER LIMIT OF ANALYSIS SYSTEM= 55.0

TABLE E-VI

NOISE LEVEL FREQUENCY SPECTRA TIME HISTORY

BELL 212

OCTOBER 6, 1976

EVENT 24, 6 DEGREE APPROACH, CENTERLINE MIC. (SOFT SITE)

1/3 OCTAVE FREQUENCY BAND VS TIME (SECONDS)
(DB RE 20 MICRO PA)

| BAND | -28.0 | -23.0 | -18.0 | -13.0 | -8.0 | -3.0 | -1.5 | 0 | 2.0 | 7.0 | 10.0 |
|-------|-------|-------|-------|-------|------|------|------|------|------|------|------|
| 17 | 79.4 | 81.1 | 81.9 | 85.4 | 85.9 | 84.1 | 83.6 | 82.6 | 80.6 | 78.0 | 75.7 |
| 18 | 80.3 | 82.5 | 83.3 | 84.6 | 83.4 | 83.1 | 81.6 | 79.9 | 75.7 | 76.0 | 76.0 |
| 19 | 77.8 | 79.9 | 80.4 | 79.6 | 77.6 | 68.7 | 66.5 | 70.2 | 71.0 | 72.3 | 71.6 |
| 20 | 78.3 | 77.3 | 75.9 | 77.0 | 72.8 | 68.7 | 78.1 | 82.6 | 85.1 | 68.9 | 72.2 |
| 21 | 76.1 | 76.3 | 75.1 | 77.5 | 73.1 | 79.9 | 85.8 | 86.0 | 86.9 | 71.5 | 69.6 |
| 22 | 72.5 | 72.1 | 70.3 | 72.9 | 72.8 | 85.7 | 88.5 | 86.5 | 87.0 | 79.6 | 64.7 |
| 23 | 71.9 | 70.4 | 66.5 | 67.8 | 78.1 | 86.8 | 87.2 | 80.4 | 81.8 | 81.1 | 72.5 |
| 24 | 65.6 | 60.8 | 66.3 | 72.6 | 82.7 | 82.8 | 79.0 | 76.4 | 76.8 | 78.0 | 73.6 |
| 25 | 59.0 | 66.6 | 76.7 | 76.9 | 80.8 | 76.9 | 83.1 | 79.9 | 79.7 | 71.2 | 73.2 |
| 26 | 69.7 | 73.5 | 80.0 | 77.0 | 73.4 | 79.1 | 79.5 | 74.3 | 74.4 | 70.9 | 68.5 |
| 27 | 70.0 | 73.1 | 74.6 | 72.7 | 70.6 | 73.2 | 76.6 | 76.0 | 74.3 | 71.7 | 61.4 |
| 28 | 68.2 | 67.6 | 63.1 | 62.3 | 70.6 | 72.6 | 72.5 | 72.3 | 70.1 | 66.2 | 65.2 |
| 29 | 62.5 | 60.1 | 61.8 | 68.3 | 70.8 | 70.7 | 71.0 | 69.5 | 68.1 | 65.3 | 61.0 |
| 30 | 53.7 | 58.3 | 60.2 | 64.8 | 67.1 | 67.3 | 68.5 | 69.3 | 66.6 | 64.0 | 59.6 |
| 31 | 58.2 | 58.4 | 58.2 | 65.9 | 66.0 | 66.8 | 68.3 | 68.7 | 65.5 | 62.3 | 57.4 |
| 32 | 52.0 | 52.9 | 55.9 | 60.8 | 63.0 | 64.9 | 67.5 | 67.3 | 64.5 | 65.4 | 63.6 |
| 33 | 49.2 | 48.3 | 52.2 | 58.4 | 61.1 | 65.4 | 67.1 | 65.5 | 63.7 | 64.5 | 63.7 |
| 34 | 47.4 | 45.9 | 48.5 | 56.3 | 62.4 | 63.4 | 64.7 | 63.0 | 61.5 | 59.1 | 54.7 |
| 35 | 45.0 | 45.0 | 45.1 | 51.3 | 58.2 | 61.1 | 61.4 | 60.6 | 59.8 | 57.7 | 53.6 |
| 36 | 45.0 | 45.0 | 45.0 | 47.8 | 55.6 | 57.5 | 59.3 | 57.9 | 57.0 | 57.1 | 51.6 |
| 37 | 45.0 | 45.0 | 45.0 | 45.0 | 52.4 | 54.8 | 57.1 | 55.9 | 54.3 | 53.9 | 48.1 |
| 38 | 45.0 | 45.0 | 45.0 | 45.0 | 48.3 | 52.9 | 55.7 | 55.3 | 54.7 | 52.5 | 45.9 |
| 39 | 45.0 | 45.0 | 45.0 | 45.0 | 45.1 | 53.6 | 56.8 | 57.7 | 59.2 | 55.5 | 45.7 |
| 40 | 45.0 | 45.0 | 45.0 | 45.0 | 45.7 | 52.2 | 57.8 | 60.6 | 62.3 | 52.7 | 45.0 |
| A | 72.7 | 73.8 | 78.1 | 77.9 | 80.5 | 82.4 | 84.2 | 81.6 | 81.2 | 77.1 | 74.3 |
| D | 80.6 | 82.2 | 84.7 | 85.2 | 87.7 | 90.7 | 92.3 | 90.0 | 90.2 | 85.4 | 82.0 |
| OASPL | 85.9 | 87.9 | 88.6 | 90.7 | 91.9 | 93.8 | 95.0 | 94.4 | 94.3 | 89.2 | 86.3 |
| PNL | 86.3 | 87.7 | 91.0 | 91.3 | 94.0 | 96.7 | 98.0 | 96.2 | 96.0 | 92.0 | 87.1 |
| PNLT | 88.1 | 87.7 | 91.0 | 92.8 | 94.0 | 96.7 | 98.0 | 96.2 | 96.0 | 92.0 | 88.5 |

LOWER LIMIT OF ANALYSIS SYSTEM= 45.0

TABLE E-VI

NOISE LEVEL FREQUENCY SPECTRA TIME HISTORY

BELL 212

OCTOBER 6, 1976

EVENT 27, 9 DEGREE APPROACH, CENTERLINE MIC. (SOFT SITE)

1/3 OCTAVE FREQUENCY BAND VS TIME (SECONDS)
(DB RE 20 MICRO PA)

| BAND | -23.0 | -18.0 | -13.0 | -8.0 | -3.0 | 0 | 2.0 | 7.0 | 12.0 |
|-------|-------|-------|-------|------|------|------|------|------|------|
| 17 | 80.0 | 81.7 | 83.3 | 83.1 | 83.3 | 82.6 | 80.9 | 78.9 | 74.9 |
| 18 | 81.3 | 82.9 | 84.8 | 83.8 | 84.6 | 80.1 | 78.5 | 75.3 | 72.4 |
| 19 | 78.4 | 77.6 | 79.3 | 76.5 | 70.4 | 73.9 | 78.1 | 72.4 | 70.7 |
| 20 | 74.8 | 73.7 | 72.8 | 73.0 | 71.1 | 82.6 | 85.7 | 72.0 | 73.4 |
| 21 | 72.8 | 72.7 | 71.7 | 68.2 | 82.7 | 85.4 | 86.4 | 70.0 | 71.9 |
| 22 | 66.1 | 65.7 | 61.7 | 75.7 | 87.5 | 86.3 | 86.0 | 80.2 | 72.4 |
| 23 | 63.3 | 62.5 | 71.6 | 81.3 | 89.8 | 79.3 | 80.3 | 84.1 | 68.0 |
| 24 | 64.6 | 71.0 | 81.7 | 86.7 | 84.7 | 75.8 | 77.1 | 83.5 | 64.9 |
| 25 | 74.1 | 77.4 | 84.5 | 84.6 | 83.0 | 79.6 | 79.8 | 78.4 | 70.2 |
| 26 | 78.4 | 79.4 | 82.4 | 76.2 | 82.9 | 73.5 | 74.9 | 76.0 | 72.5 |
| 27 | 74.5 | 73.1 | 69.8 | 77.4 | 72.7 | 74.5 | 74.4 | 75.3 | 70.4 |
| 28 | 65.8 | 64.2 | 71.4 | 69.5 | 72.8 | 73.1 | 72.1 | 67.9 | 62.6 |
| 29 | 61.8 | 68.0 | 67.7 | 71.1 | 70.6 | 69.3 | 69.8 | 67.9 | 65.0 |
| 30 | 59.1 | 58.7 | 65.7 | 65.6 | 68.6 | 67.9 | 67.7 | 64.9 | 62.1 |
| 31 | 55.7 | 60.2 | 61.6 | 64.2 | 68.3 | 67.6 | 66.5 | 62.8 | 60.0 |
| 32 | 55.6 | 57.7 | 60.3 | 62.7 | 67.4 | 66.4 | 65.9 | 64.2 | 66.2 |
| 33 | 51.5 | 56.1 | 57.5 | 62.3 | 65.9 | 64.8 | 65.0 | 63.7 | 65.2 |
| 34 | 46.9 | 51.6 | 56.3 | 60.3 | 65.5 | 64.1 | 62.9 | 58.8 | 55.9 |
| 35 | 45.0 | 47.5 | 52.7 | 58.8 | 63.1 | 61.4 | 60.8 | 57.2 | 55.9 |
| 36 | 45.0 | 45.4 | 50.2 | 58.3 | 59.1 | 58.4 | 58.4 | 56.0 | 52.6 |
| 37 | 45.0 | 45.0 | 45.7 | 52.6 | 56.3 | 55.7 | 55.7 | 52.7 | 48.8 |
| 38 | 45.0 | 45.0 | 45.0 | 48.1 | 52.2 | 55.1 | 55.3 | 51.7 | 46.3 |
| 39 | 45.0 | 45.0 | 45.0 | 45.6 | 52.8 | 58.3 | 59.3 | 54.8 | 45.7 |
| 40 | 45.0 | 45.0 | 45.0 | 45.7 | 51.9 | 61.6 | 62.0 | 52.8 | 45.0 |
| A | 76.2 | 77.8 | 82.8 | 83.2 | 85.2 | 81.2 | 81.6 | 81.3 | 75.0 |
| D | 83.0 | 85.0 | 89.5 | 91.2 | 93.4 | 89.7 | 90.1 | 89.2 | 82.3 |
| OASPL | 86.9 | 88.2 | 91.3 | 92.9 | 95.5 | 94.2 | 94.7 | 91.0 | 84.7 |
| PNL | 89.4 | 90.7 | 94.3 | 96.3 | 99.1 | 96.0 | 96.1 | 94.3 | 88.1 |
| PNLT | 89.4 | 92.9 | 94.3 | 97.5 | 99.1 | 96.0 | 96.1 | 94.3 | 89.4 |

LOWER LIMIT OF ANALYSIS SYSTEM= 45.0

TABLE E-VI

NOISE LEVEL FREQUENCY SPECTRA TIME HISTORY

BELL 212

OCTOBER 6, 1976

EVENT 29, 60 KT. FLY BY, CENTERLINE MIC. (SOFT SITE)

1/3 OCTAVE FREQUENCY BAND VS TIME (SECONDS)
(DB RE 20 MICRO PA)

| BAND | -50.5 | -41.0 | -31.5 | -22.0 | -12.5 | -3.0 | 0 | 6.5 | 16.0 | 18.0 |
|-------|-------|-------|-------|-------|-------|------|------|------|------|------|
| 17 | 77.5 | 75.3 | 78.0 | 79.9 | 84.3 | 81.0 | 75.8 | 74.9 | 73.8 | 72.4 |
| 18 | 77.8 | 76.1 | 79.3 | 81.3 | 84.7 | 77.7 | 73.4 | 69.5 | 68.8 | 68.7 |
| 19 | 74.4 | 73.2 | 77.3 | 78.8 | 79.4 | 64.2 | 66.2 | 67.5 | 65.8 | 63.5 |
| 20 | 74.7 | 70.5 | 76.1 | 77.1 | 77.8 | 71.1 | 76.3 | 67.8 | 69.8 | 71.2 |
| 21 | 75.2 | 69.0 | 76.6 | 78.4 | 77.7 | 77.5 | 77.1 | 68.1 | 63.6 | 63.6 |
| 22 | 71.8 | 70.2 | 74.3 | 74.9 | 70.3 | 81.9 | 81.5 | 74.9 | 65.4 | 64.5 |
| 23 | 70.9 | 71.4 | 72.2 | 71.8 | 65.6 | 79.4 | 72.8 | 74.9 | 61.2 | 58.3 |
| 24 | 66.0 | 66.5 | 66.7 | 67.9 | 68.6 | 78.0 | 71.4 | 67.8 | 60.8 | 57.6 |
| 25 | 65.2 | 66.5 | 59.2 | 58.0 | 74.7 | 75.1 | 72.9 | 60.9 | 61.8 | 59.9 |
| 26 | 67.8 | 68.4 | 55.8 | 57.1 | 77.4 | 75.7 | 67.1 | 67.1 | 62.4 | 61.4 |
| 27 | 64.6 | 65.8 | 52.8 | 58.7 | 72.7 | 71.4 | 69.3 | 63.5 | 58.8 | 60.0 |
| 28 | 55.5 | 56.7 | 52.5 | 60.6 | 63.3 | 69.8 | 68.7 | 64.4 | 57.2 | 51.1 |
| 29 | 48.9 | 45.9 | 50.2 | 57.0 | 66.3 | 67.8 | 67.4 | 65.3 | 59.3 | 58.1 |
| 30 | 45.3 | 45.7 | 47.9 | 51.3 | 60.5 | 66.9 | 67.3 | 61.8 | 56.2 | 53.1 |
| 31 | 45.0 | 47.2 | 46.8 | 50.1 | 62.1 | 65.6 | 67.5 | 59.8 | 54.8 | 54.1 |
| 32 | 45.0 | 47.8 | 45.1 | 48.5 | 58.6 | 66.7 | 65.3 | 62.9 | 58.7 | 61.7 |
| 33 | 45.0 | 45.0 | 45.0 | 45.8 | 57.3 | 65.8 | 63.3 | 60.4 | 58.3 | 57.4 |
| 34 | 45.0 | 45.0 | 45.0 | 46.5 | 55.3 | 62.3 | 61.5 | 55.1 | 52.7 | 48.8 |
| 35 | 45.0 | 45.0 | 45.0 | 45.0 | 50.4 | 60.9 | 58.9 | 55.4 | 52.6 | 48.2 |
| 36 | 45.0 | 45.0 | 45.0 | 45.0 | 47.0 | 57.1 | 56.1 | 53.8 | 49.6 | 45.5 |
| 37 | 45.0 | 45.0 | 45.0 | 45.0 | 45.0 | 54.1 | 53.7 | 50.1 | 45.8 | 45.0 |
| 38 | 45.0 | 45.0 | 45.0 | 45.0 | 45.0 | 51.0 | 52.7 | 49.0 | 45.0 | 45.0 |
| 39 | 45.0 | 45.0 | 45.0 | 45.0 | 45.0 | 51.9 | 55.6 | 50.9 | 45.0 | 45.0 |
| 40 | 45.0 | 45.0 | 45.0 | 45.0 | 45.0 | 50.8 | 57.3 | 48.2 | 45.0 | 45.0 |
| A | 68.9 | 69.5 | 67.4 | 69.5 | 76.7 | 78.7 | 77.6 | 73.2 | 67.4 | 67.7 |
| D | 78.2 | 77.4 | 78.6 | 80.3 | 84.2 | 87.0 | 85.1 | 80.8 | 75.4 | 75.3 |
| OASPL | 83.5 | 81.9 | 84.7 | 86.8 | 90.0 | 91.3 | 90.2 | 84.6 | 79.5 | 78.9 |
| PNL | 83.4 | 82.8 | 83.6 | 85.5 | 90.7 | 92.8 | 91.4 | 86.9 | 81.8 | 81.4 |
| PNLT | 83.4 | 82.8 | 83.6 | 85.5 | 92.1 | 92.8 | 91.4 | 86.9 | 81.8 | 83.4 |

LOWER LIMIT OF ANALYSIS SYSTEM= 45.0

TABLE E-VI.

NOISE LEVEL FREQUENCY SPECTRA TIME HISTORY

BELL 212

OCTOBER 6, 1976

EVENT 30, 60 KT. FLY BY, CENTERLINE MIC. (SOFT SITE)

1/3 OCTAVE FREQUENCY BAND VS TIME (SECONDS)
(DB RE 20 MICRO PA)

| BAND | -23.0 | -17.0 | -11.0 | -5.0 | 0 | 1.0 | 7.0 | 13.0 | 19.0 | 21.0 |
|-------|-------|-------|-------|------|------|------|------|------|------|------|
| 17 | 78.5 | 80.6 | 82.3 | 85.0 | 74.1 | 72.2 | 74.8 | 71.3 | 68.8 | 69.4 |
| 18 | 78.5 | 79.9 | 81.3 | 82.6 | 72.9 | 69.0 | 69.1 | 65.9 | 66.3 | 65.0 |
| 19 | 78.5 | 78.8 | 78.6 | 77.1 | 60.1 | 58.7 | 65.1 | 64.3 | 61.7 | 61.6 |
| 20 | 77.4 | 76.4 | 74.1 | 71.6 | 72.3 | 75.5 | 62.5 | 66.3 | 65.9 | 64.2 |
| 21 | 75.9 | 73.6 | 73.5 | 69.8 | 76.0 | 73.8 | 58.2 | 61.7 | 63.4 | 62.4 |
| 22 | 72.4 | 72.4 | 69.8 | 70.3 | 79.4 | 77.3 | 66.8 | 59.9 | 63.1 | 63.6 |
| 23 | 71.1 | 71.9 | 65.1 | 75.1 | 74.1 | 68.4 | 70.6 | 55.7 | 59.7 | 58.5 |
| 24 | 65.2 | 63.4 | 64.0 | 78.5 | 68.8 | 65.9 | 66.6 | 50.7 | 53.4 | 55.1 |
| 25 | 55.1 | 57.9 | 67.9 | 77.0 | 72.7 | 68.5 | 61.5 | 52.7 | 50.9 | 51.1 |
| 26 | 51.8 | 70.1 | 73.7 | 72.0 | 68.5 | 66.0 | 58.3 | 54.5 | 50.4 | 49.4 |
| 27 | 51.1 | 70.9 | 71.3 | 71.1 | 69.6 | 68.3 | 63.5 | 55.4 | 52.9 | 50.8 |
| 28 | 49.3 | 67.2 | 62.1 | 67.8 | 67.4 | 67.5 | 58.3 | 51.0 | 50.5 | 50.1 |
| 29 | 49.3 | 58.2 | 61.7 | 62.5 | 66.5 | 67.6 | 59.6 | 48.0 | 48.3 | 48.8 |
| 30 | 46.3 | 52.1 | 58.2 | 60.8 | 67.9 | 68.0 | 57.2 | 49.7 | 48.0 | 48.3 |
| 31 | 46.9 | 51.2 | 56.6 | 60.5 | 67.4 | 67.7 | 55.1 | 49.8 | 51.5 | 52.6 |
| 32 | 45.4 | 48.5 | 54.7 | 58.5 | 66.1 | 65.3 | 62.2 | 59.6 | 60.8 | 60.5 |
| 33 | 45.0 | 47.7 | 55.1 | 56.4 | 65.3 | 63.7 | 56.1 | 52.7 | 54.4 | 55.0 |
| 34 | 45.0 | 47.0 | 50.8 | 55.8 | 62.7 | 62.5 | 53.4 | 47.2 | 49.9 | 52.6 |
| 35 | 45.0 | 45.0 | 47.1 | 53.9 | 61.6 | 61.2 | 55.7 | 49.5 | 57.6 | 57.9 |
| 36 | 45.0 | 45.0 | 45.0 | 53.1 | 58.6 | 58.4 | 50.9 | 45.0 | 46.3 | 46.7 |
| 37 | 45.0 | 45.0 | 45.0 | 48.8 | 55.3 | 55.8 | 47.8 | 45.0 | 45.0 | 45.0 |
| 38 | 45.0 | 45.0 | 45.0 | 46.1 | 52.6 | 54.0 | 45.0 | 45.0 | 45.0 | 45.0 |
| 39 | 45.0 | 45.0 | 45.0 | 45.0 | 53.2 | 55.0 | 45.0 | 45.0 | 45.0 | 45.0 |
| 40 | 45.0 | 45.0 | 45.0 | 45.0 | 54.2 | 56.5 | 45.0 | 45.0 | 45.0 | 45.0 |
| A | 66.7 | 72.3 | 73.6 | 76.5 | 77.2 | 76.0 | 69.3 | 63.4 | 65.5 | 65.3 |
| D | 78.4 | 80.1 | 81.1 | 84.4 | 84.8 | 83.3 | 77.2 | 71.7 | 74.4 | 74.3 |
| OASPL | 84.8 | 85.8 | 87.0 | 89.9 | 89.1 | 88.3 | 80.2 | 76.2 | 74.8 | 74.8 |
| PNL | 83.2 | 85.7 | 87.3 | 90.4 | 90.7 | 89.4 | 83.1 | 78.6 | 80.3 | 80.5 |
| PNLT | 83.2 | 85.7 | 87.3 | 90.4 | 90.7 | 89.4 | 85.3 | 81.4 | 83.5 | 83.2 |

LOWER LIMIT OF ANALYSIS SYSTEM= 45.0

TABLE E-VI

NOISE LEVEL FREQUENCY SPECTRA TIME HISTORY

BELL 212

OCTOBER 6, 1976

EVENT 31, 60 KT. FLY BY, CENTERLINE MIC. (SOFT SITE)

1/3 OCTAVE FREQUENCY BAND VS TIME (SECONDS)
(DB RE 20 MICRO PA)

| BAND | -42.0 | -34.0 | -26.0 | -18.0 | -10.0 | -2.0 | -1.0 | 0 | 6.0 | 14.0 | 15.0 |
|-------|-------|-------|-------|-------|-------|------|------|------|------|------|------|
| 17 | 78.3 | 78.6 | 79.5 | 80.9 | 83.6 | 76.2 | 75.6 | 73.7 | 76.6 | 73.7 | 72.9 |
| 18 | 78.6 | 79.4 | 80.3 | 82.0 | 83.4 | 75.0 | 73.9 | 72.1 | 72.2 | 68.3 | 67.4 |
| 19 | 75.7 | 77.0 | 77.3 | 77.3 | 77.0 | 60.9 | 63.7 | 63.8 | 64.1 | 65.3 | 63.6 |
| 20 | 75.8 | 76.3 | 74.2 | 76.4 | 73.8 | 73.1 | 75.0 | 75.7 | 63.6 | 66.8 | 65.8 |
| 21 | 74.9 | 76.0 | 73.3 | 77.0 | 73.2 | 77.6 | 78.7 | 76.7 | 66.4 | 60.9 | 59.3 |
| 22 | 72.2 | 74.2 | 71.5 | 74.6 | 63.4 | 81.1 | 81.9 | 80.9 | 75.5 | 55.8 | 55.8 |
| 23 | 71.0 | 73.0 | 71.8 | 72.6 | 67.6 | 75.5 | 74.8 | 72.4 | 76.5 | 61.3 | 58.4 |
| 24 | 66.4 | 67.8 | 67.4 | 63.6 | 73.8 | 72.9 | 72.1 | 71.3 | 69.3 | 62.2 | 57.1 |
| 25 | 62.8 | 62.2 | 60.5 | 63.6 | 75.0 | 76.2 | 76.5 | 73.9 | 66.1 | 62.1 | 59.5 |
| 26 | 62.3 | 61.3 | 59.2 | 72.2 | 73.2 | 71.9 | 71.1 | 68.7 | 69.6 | 60.9 | 58.7 |
| 27 | 56.6 | 59.8 | 59.6 | 73.5 | 66.0 | 72.6 | 73.5 | 71.1 | 66.9 | 55.0 | 52.9 |
| 28 | 50.9 | 53.1 | 55.5 | 69.0 | 67.3 | 67.9 | 69.7 | 68.9 | 66.5 | 59.4 | 55.2 |
| 29 | 46.4 | 47.0 | 52.9 | 59.6 | 59.1 | 67.0 | 68.2 | 68.4 | 66.9 | 56.1 | 54.0 |
| 30 | 45.0 | 46.5 | 51.2 | 59.2 | 58.5 | 67.8 | 69.8 | 68.4 | 64.0 | 56.7 | 54.7 |
| 31 | 45.1 | 47.1 | 51.5 | 59.0 | 57.5 | 67.2 | 68.6 | 68.1 | 62.1 | 55.1 | 53.4 |
| 32 | 45.0 | 45.1 | 47.7 | 55.2 | 58.9 | 66.2 | 67.4 | 64.8 | 62.3 | 64.1 | 62.3 |
| 33 | 45.0 | 45.0 | 47.4 | 51.6 | 55.4 | 65.4 | 65.1 | 63.4 | 61.3 | 61.1 | 59.4 |
| 34 | 45.0 | 45.0 | 45.9 | 49.9 | 54.9 | 63.1 | 63.0 | 61.6 | 58.2 | 53.4 | 51.1 |
| 35 | 45.0 | 45.0 | 45.0 | 48.2 | 52.9 | 59.8 | 60.4 | 59.5 | 56.8 | 52.6 | 49.6 |
| 36 | 45.0 | 45.0 | 45.0 | 45.6 | 49.1 | 57.7 | 58.4 | 56.3 | 54.8 | 49.8 | 47.6 |
| 37 | 45.0 | 45.0 | 45.0 | 45.0 | 45.7 | 54.5 | 55.6 | 54.5 | 51.7 | 46.0 | 45.4 |
| 38 | 45.0 | 45.0 | 45.0 | 45.0 | 45.0 | 53.3 | 54.0 | 53.0 | 49.8 | 45.0 | 45.0 |
| 39 | 45.0 | 45.0 | 45.0 | 45.0 | 45.0 | 54.6 | 55.8 | 55.3 | 52.4 | 45.0 | 45.0 |
| 40 | 45.0 | 45.0 | 45.0 | 45.0 | 45.0 | 54.4 | 56.6 | 57.4 | 50.4 | 45.0 | 45.0 |
| A | 66.7 | 68.1 | 67.6 | 75.0 | 74.6 | 78.3 | 78.7 | 77.7 | 74.5 | 69.6 | 67.5 |
| D | 77.6 | 79.2 | 78.1 | 82.2 | 82.7 | 85.6 | 86.2 | 84.8 | 82.1 | 77.0 | 75.0 |
| OASPL | 84.1 | 84.9 | 85.2 | 87.4 | 89.4 | 90.4 | 90.9 | 90.4 | 85.8 | 79.8 | 78.6 |
| PNL | 82.8 | 84.0 | 83.5 | 88.0 | 88.3 | 92.0 | 92.7 | 91.3 | 88.4 | 83.0 | 81.0 |
| PNLT | 82.6 | 84.0 | 83.5 | 88.0 | 89.9 | 92.0 | 92.7 | 91.3 | 88.4 | 85.0 | 83.0 |

LOWER LIMIT OF ANALYSIS SYSTEM= 45.0

TABLE E-VI

NOISE LEVEL FREQUENCY SPECTRA TIME HISTORY

BELL 212

OCTOBER 6, 1976

EVENT 32, 99 KT. FLY BY, CENTERLINE MIC. (SOFT SITE)

1/3 OCTAVE FREQUENCY BAND VS TIME (SECONDS)
(DB RE 20 MICRO PA)

| BAND | -18.5 | -15.0 | -11.5 | -8.0 | -4.5 | -2.0 | -1.0 | 0 | 2.5 | 6.0 | 7.0 |
|-------|-------|-------|-------|------|------|------|------|------|------|------|------|
| 17 | 80.8 | 86.5 | 84.8 | 86.7 | 88.2 | 82.5 | 76.6 | 78.0 | 78.0 | 74.5 | 75.1 |
| 18 | 81.6 | 86.0 | 84.9 | 86.2 | 86.1 | 83.1 | 80.9 | 78.4 | 69.0 | 72.3 | 72.8 |
| 19 | 81.7 | 86.2 | 84.8 | 86.8 | 84.7 | 77.0 | 69.8 | 63.1 | 62.2 | 65.3 | 67.4 |
| 20 | 82.1 | 84.0 | 83.0 | 84.6 | 80.9 | 70.2 | 69.0 | 74.3 | 75.6 | 63.4 | 64.3 |
| 21 | 82.2 | 83.2 | 83.4 | 84.2 | 78.7 | 73.7 | 79.1 | 81.0 | 69.8 | 57.3 | 58.2 |
| 22 | 81.2 | 78.3 | 81.7 | 80.1 | 69.3 | 77.1 | 79.9 | 81.8 | 77.4 | 64.5 | 58.2 |
| 23 | 79.5 | 74.8 | 79.7 | 76.5 | 75.4 | 84.3 | 83.3 | 79.1 | 71.9 | 69.6 | 66.4 |
| 24 | 75.1 | 68.0 | 75.2 | 65.6 | 80.4 | 84.9 | 79.7 | 73.2 | 66.2 | 67.1 | 64.8 |
| 25 | 68.9 | 63.0 | 65.6 | 66.1 | 82.2 | 77.9 | 77.9 | 77.2 | 70.0 | 63.4 | 63.8 |
| 26 | 61.7 | 61.7 | 59.9 | 66.1 | 79.5 | 81.2 | 81.2 | 74.4 | 66.2 | 62.1 | 58.1 |
| 27 | 55.9 | 54.2 | 56.0 | 67.5 | 71.4 | 79.1 | 76.6 | 74.9 | 70.2 | 67.3 | 62.9 |
| 28 | 52.3 | 51.0 | 58.7 | 64.5 | 74.0 | 74.4 | 73.8 | 70.9 | 68.2 | 61.1 | 60.6 |
| 29 | 47.4 | 50.3 | 58.6 | 56.5 | 68.8 | 73.4 | 73.1 | 69.5 | 66.1 | 63.8 | 61.2 |
| 30 | 46.5 | 49.3 | 54.9 | 61.6 | 69.1 | 70.3 | 69.8 | 68.0 | 63.6 | 61.7 | 58.4 |
| 31 | 44.2 | 47.6 | 50.7 | 55.4 | 64.3 | 70.3 | 69.4 | 68.1 | 62.2 | 60.2 | 57.6 |
| 32 | 44.5 | 45.4 | 48.8 | 51.6 | 62.0 | 69.5 | 68.8 | 67.3 | 63.3 | 67.8 | 65.0 |
| 33 | 43.6 | 45.0 | 47.6 | 50.1 | 59.7 | 67.8 | 66.7 | 66.7 | 62.2 | 59.5 | 56.7 |
| 34 | 43.5 | 45.0 | 45.5 | 47.2 | 58.4 | 68.0 | 66.6 | 64.7 | 60.5 | 56.4 | 54.0 |
| 35 | 43.5 | 45.0 | 45.0 | 45.0 | 55.4 | 65.0 | 64.3 | 63.0 | 59.6 | 57.5 | 55.8 |
| 36 | 43.5 | 45.0 | 45.0 | 45.0 | 51.5 | 61.3 | 60.9 | 59.8 | 58.2 | 53.0 | 51.2 |
| 37 | 43.5 | 45.0 | 45.0 | 45.0 | 48.0 | 57.4 | 57.5 | 57.1 | 55.7 | 50.7 | 47.7 |
| 38 | 43.5 | 45.0 | 45.0 | 45.0 | 45.7 | 53.4 | 54.6 | 54.7 | 55.0 | 48.4 | 45.7 |
| 39 | 43.5 | 45.0 | 45.0 | 45.0 | 45.0 | 50.2 | 54.1 | 57.4 | 57.7 | 47.9 | 45.4 |
| 40 | 43.5 | 45.0 | 45.0 | 45.0 | 45.0 | 47.8 | 51.6 | 56.7 | 58.7 | 45.8 | 45.0 |
| A | 74.5 | 72.7 | 74.9 | 74.6 | 81.2 | 83.7 | 82.6 | 79.7 | 75.5 | 73.0 | 70.5 |
| D | 85.4 | 85.4 | 86.3 | 86.3 | 88.8 | 90.8 | 89.8 | 87.7 | 83.0 | 80.1 | 77.9 |
| OASPL | 89.8 | 91.9 | 91.5 | 92.9 | 93.3 | 92.9 | 91.5 | 90.6 | 87.5 | 83.0 | 82.3 |
| PNL | 88.7 | 89.3 | 90.2 | 91.1 | 94.8 | 97.2 | 96.0 | 93.6 | 89.2 | 86.6 | 84.2 |
| PNLT | 88.7 | 89.3 | 90.2 | 93.0 | 96.1 | 97.2 | 96.0 | 93.6 | 89.2 | 89.3 | 86.9 |

LOWER LIMIT OF ANALYSIS SYSTEM= 45.0

TABLE E-VI

NOISE LEVEL FREQUENCY SPECTRA TIME HISTORY

BELL 212

OCTOBER 6, 1976

EVENT 33. 99 KT. FLY BY. CENTERLINE MIC. (SOFT SITE)

1/3 OCTAVE FREQUENCY BAND VS TIME (SECONDS)
(DB RE 20 MICRO PA)

| BAND | -20.0 | -16.0 | -12.0 | -8.0 | -4.0 | -1.5 | 0 | 4.0 | 8.0 | 11.0 |
|-------|-------|-------|-------|------|------|------|------|------|------|------|
| 17 | 80.5 | 84.0 | 84.6 | 87.0 | 87.2 | 80.1 | 78.1 | 76.6 | 74.9 | 71.6 |
| 18 | 81.0 | 85.3 | 84.4 | 85.7 | 85.0 | 81.8 | 78.2 | 73.7 | 73.8 | 71.4 |
| 19 | 80.8 | 87.0 | 83.7 | 86.0 | 82.1 | 71.5 | 63.6 | 65.2 | 69.6 | 67.5 |
| 20 | 76.0 | 86.9 | 79.9 | 83.7 | 78.5 | 68.1 | 74.2 | 65.6 | 67.3 | 66.7 |
| 21 | 76.6 | 87.8 | 78.1 | 82.9 | 74.9 | 77.7 | 81.6 | 66.4 | 61.4 | 63.1 |
| 22 | 72.3 | 85.6 | 79.9 | 72.7 | 69.7 | 79.7 | 81.3 | 74.2 | 54.9 | 61.2 |
| 23 | 71.1 | 85.3 | 77.9 | 75.0 | 76.5 | 84.8 | 79.6 | 73.2 | 61.2 | 55.5 |
| 24 | 69.3 | 81.1 | 71.3 | 66.6 | 78.7 | 82.6 | 72.5 | 66.6 | 62.1 | 53.3 |
| 25 | 68.4 | 76.6 | 64.0 | 69.1 | 78.4 | 73.1 | 76.9 | 66.0 | 63.6 | 57.5 |
| 26 | 64.4 | 73.2 | 59.9 | 72.5 | 75.3 | 77.8 | 72.6 | 68.7 | 60.7 | 62.6 |
| 27 | 60.9 | 70.2 | 55.5 | 72.3 | 70.0 | 72.9 | 72.1 | 68.7 | 57.5 | 62.0 |
| 28 | 60.2 | 65.7 | 55.6 | 66.4 | 71.1 | 74.0 | 69.7 | 66.3 | 61.1 | 53.2 |
| 29 | 55.1 | 59.2 | 55.7 | 62.5 | 65.9 | 72.1 | 67.2 | 65.9 | 57.2 | 57.7 |
| 30 | 51.3 | 56.5 | 53.3 | 65.9 | 61.3 | 69.4 | 66.9 | 62.7 | 58.4 | 54.0 |
| 31 | 47.5 | 54.0 | 48.5 | 62.8 | 59.3 | 58.2 | 66.6 | 61.4 | 56.6 | 53.4 |
| 32 | 45.7 | 50.7 | 46.2 | 56.6 | 57.2 | 66.8 | 66.0 | 64.0 | 62.7 | 64.3 |
| 33 | 45.2 | 47.8 | 45.3 | 52.5 | 57.1 | 65.6 | 65.9 | 60.0 | 55.4 | 54.6 |
| 34 | 45.0 | 45.4 | 45.7 | 50.9 | 56.2 | 64.9 | 64.3 | 56.6 | 54.1 | 50.2 |
| 35 | 45.0 | 45.0 | 45.0 | 47.7 | 54.7 | 62.9 | 62.1 | 57.3 | 55.2 | 54.3 |
| 36 | 45.0 | 45.0 | 45.0 | 45.8 | 50.8 | 59.7 | 59.1 | 54.6 | 49.2 | 47.0 |
| 37 | 45.0 | 45.0 | 45.0 | 45.0 | 48.2 | 55.6 | 55.9 | 52.4 | 46.7 | 45.1 |
| 38 | 45.0 | 45.0 | 45.0 | 45.0 | 45.3 | 52.6 | 54.1 | 50.9 | 45.0 | 45.0 |
| 39 | 45.0 | 45.0 | 45.0 | 45.0 | 45.0 | 50.2 | 55.4 | 53.9 | 45.0 | 45.0 |
| 40 | 45.0 | 45.0 | 45.0 | 45.0 | 45.0 | 47.7 | 54.8 | 53.2 | 45.0 | 45.0 |
| A | 69.3 | 80.4 | 72.8 | 76.3 | 78.0 | 81.2 | 78.8 | 74.0 | 69.2 | 68.1 |
| D | 78.7 | 89.1 | 82.4 | 84.4 | 84.4 | 87.3 | 85.3 | 79.6 | 75.1 | 73.9 |
| OASPL | 86.6 | 94.6 | 90.0 | 92.3 | 92.1 | 91.8 | 90.2 | 85.5 | 81.5 | 78.4 |
| PNL | 85.4 | 94.7 | 88.1 | 91.5 | 91.9 | 95.5 | 93.0 | 87.2 | 82.9 | 82.4 |
| PNLT | 85.4 | 94.7 | 86.1 | 92.6 | 92.9 | 95.5 | 93.0 | 88.3 | 85.1 | 85.8 |

LOWER LIMIT OF ANALYSIS SYSTEM= 45.0

TABLE E-VI

NOISE LEVEL FREQUENCY SPECTRA TIME HISTORY

BELL 212

OCTOBER 6, 1976

EVENT 34, 99 KT. FLY BY, CENTERLINE MIC. (SOFT SITE)

1/3 OCTAVE FREQUENCY BAND VS TIME (SECONDS)
(DB RE 20 MICRO PA)

| BAND | -19.0 | -15.5 | -12.0 | -8.5 | -5.0 | -1.5 | +1.0 | 0 | +2.0 | +5.5 | +8.0 |
|-------|-------|-------|-------|------|------|------|------|------|------|------|------|
| 17 | 80.9 | 84.8 | 85.0 | 86.9 | 88.0 | 81.2 | 77.3 | 76.1 | 78.8 | 74.2 | 73.2 |
| 18 | 80.0 | 84.5 | 84.9 | 85.5 | 86.3 | 81.9 | 80.9 | 78.2 | 73.1 | 75.1 | 73.0 |
| 19 | 81.5 | 85.8 | 83.9 | 86.5 | 85.1 | 72.2 | 67.3 | 63.3 | 61.5 | 68.7 | 70.3 |
| 20 | 79.5 | 86.2 | 81.9 | 84.7 | 82.5 | 68.3 | 71.6 | 75.3 | 76.1 | 67.0 | 68.9 |
| 21 | 76.3 | 86.5 | 81.7 | 83.9 | 80.3 | 77.9 | 80.5 | 81.6 | 71.1 | 61.8 | 65.0 |
| 22 | 73.9 | 84.9 | 79.1 | 80.3 | 71.7 | 79.2 | 80.7 | 82.6 | 78.4 | 61.4 | 60.7 |
| 23 | 71.8 | 83.6 | 72.8 | 76.4 | 71.3 | 84.1 | 83.4 | 79.6 | 73.4 | 65.8 | 56.1 |
| 24 | 69.8 | 79.6 | 75.1 | 65.9 | 76.1 | 81.1 | 78.7 | 73.2 | 67.1 | 64.7 | 57.5 |
| 25 | 61.1 | 74.7 | 67.6 | 65.3 | 76.2 | 72.5 | 76.1 | 78.3 | 70.0 | 64.1 | 61.4 |
| 26 | 52.2 | 71.6 | 60.2 | 65.5 | 75.4 | 76.5 | 77.2 | 74.3 | 67.3 | 59.1 | 64.3 |
| 27 | 49.2 | 68.3 | 56.7 | 62.9 | 63.9 | 72.9 | 74.8 | 74.9 | 71.4 | 66.1 | 60.9 |
| 28 | 48.2 | 65.4 | 58.3 | 60.8 | 66.3 | 72.4 | 72.4 | 71.6 | 70.1 | 61.1 | 57.6 |
| 29 | 47.3 | 59.6 | 59.7 | 53.6 | 66.2 | 70.9 | 71.4 | 70.4 | 66.9 | 63.2 | 60.7 |
| 30 | 46.9 | 57.0 | 57.2 | 52.8 | 61.2 | 63.3 | 68.4 | 69.6 | 65.9 | 60.3 | 56.1 |
| 31 | 45.2 | 55.5 | 48.6 | 51.9 | 59.2 | 68.1 | 68.4 | 68.3 | 63.8 | 59.9 | 55.7 |
| 32 | 45.0 | 52.1 | 46.4 | 43.7 | 56.9 | 68.4 | 69.1 | 68.3 | 64.5 | 68.9 | 63.1 |
| 33 | 45.0 | 49.0 | 46.8 | 45.6 | 55.2 | 66.6 | 67.1 | 67.0 | 62.9 | 59.8 | 55.9 |
| 34 | 45.0 | 46.7 | 45.3 | 45.3 | 54.8 | 65.8 | 66.2 | 65.6 | 62.0 | 57.7 | 52.6 |
| 35 | 45.0 | 45.0 | 45.0 | 45.0 | 51.8 | 62.8 | 63.0 | 62.7 | 61.0 | 59.6 | 53.0 |
| 36 | 45.0 | 45.0 | 45.0 | 45.0 | 49.6 | 60.7 | 61.3 | 60.6 | 58.5 | 54.9 | 48.3 |
| 37 | 45.0 | 45.0 | 45.0 | 45.0 | 45.9 | 57.5 | 58.7 | 58.6 | 56.6 | 51.6 | 45.6 |
| 38 | 45.0 | 45.0 | 45.0 | 45.0 | 45.0 | 54.6 | 55.8 | 56.7 | 56.0 | 48.8 | 45.0 |
| 39 | 45.0 | 45.0 | 45.0 | 45.0 | 45.0 | 53.0 | 56.4 | 58.7 | 59.5 | 48.2 | 45.0 |
| 40 | 45.0 | 45.0 | 45.0 | 45.0 | 45.0 | 50.9 | 54.6 | 59.3 | 59.9 | 45.8 | 45.0 |
| A | 68.2 | 79.2 | 73.8 | 74.1 | 76.9 | 81.1 | 81.5 | 80.9 | 76.8 | 73.0 | 68.8 |
| D | 79.1 | 87.7 | 83.4 | 84.5 | 84.5 | 87.2 | 87.4 | 86.6 | 82.5 | 79.0 | 74.6 |
| OASPL | 87.3 | 93.7 | 91.1 | 92.8 | 93.0 | 91.8 | 91.3 | 90.7 | 88.2 | 82.8 | 80.9 |
| PNL | 85.1 | 93.5 | 89.3 | 90.4 | 91.4 | 95.3 | 95.4 | 94.3 | 90.4 | 87.2 | 82.8 |
| PNLT | 85.1 | 93.5 | 89.3 | 90.4 | 91.4 | 95.3 | 95.4 | 94.3 | 90.4 | 90.2 | 85.3 |

LOWER LIMIT OF ANALYSIS SYSTEM= 45.0

TABLE E-VI

NOISE LEVEL FREQUENCY SPECTRA TIME HISTORY

BELL 212

OCTOBER 6, 1976

EVENT 35, 110 KT. FLY BY, CENTERLINE MIC. (SOFT SITE)

1/3 OCTAVE FREQUENCY BAND VS TIME (SECONDS)
(DB RE 20 MICRO PA)

| BAND | -18.0 | -14.0 | -10.0 | -6.0 | -2.0 | 0 | 2.0 | 6.0 | 10.0 | 10.5 |
|-------|-------|-------|-------|------|------|------|------|------|------|------|
| 17 | 82.4 | 88.1 | 88.2 | 88.7 | 85.3 | 80.1 | 79.9 | 76.9 | 79.6 | 77.7 |
| 18 | 80.6 | 87.1 | 85.5 | 88.4 | 85.8 | 79.1 | 79.2 | 79.0 | 81.8 | 80.7 |
| 19 | 81.5 | 87.9 | 85.8 | 87.8 | 79.5 | 68.9 | 70.3 | 75.4 | 82.2 | 81.5 |
| 20 | 79.9 | 87.4 | 84.3 | 85.3 | 72.9 | 76.2 | 74.4 | 72.5 | 76.8 | 76.3 |
| 21 | 80.6 | 88.1 | 85.2 | 84.6 | 77.7 | 82.0 | 74.3 | 68.2 | 68.2 | 67.6 |
| 22 | 78.0 | 85.4 | 83.5 | 80.0 | 79.6 | 83.2 | 78.8 | 66.5 | 70.9 | 70.1 |
| 23 | 76.6 | 83.9 | 83.1 | 78.2 | 85.8 | 80.0 | 76.1 | 66.5 | 67.4 | 63.2 |
| 24 | 72.9 | 80.0 | 78.7 | 75.8 | 84.5 | 73.5 | 69.5 | 69.1 | 64.3 | 65.3 |
| 25 | 69.3 | 73.7 | 70.0 | 75.4 | 77.4 | 78.2 | 72.0 | 67.9 | 62.4 | 62.3 |
| 26 | 62.7 | 73.8 | 68.0 | 75.3 | 80.2 | 74.0 | 70.8 | 65.0 | 61.3 | 61.0 |
| 27 | 57.0 | 71.0 | 64.2 | 72.0 | 77.7 | 74.9 | 71.9 | 62.0 | 63.5 | 62.5 |
| 28 | 54.3 | 66.6 | 63.9 | 63.9 | 75.1 | 72.8 | 69.7 | 65.9 | 60.0 | 60.1 |
| 29 | 50.8 | 63.4 | 61.9 | 66.0 | 74.3 | 73.8 | 69.3 | 62.4 | 56.1 | 55.0 |
| 30 | 48.1 | 61.0 | 58.8 | 60.2 | 72.3 | 71.5 | 67.0 | 63.5 | 57.8 | 57.4 |
| 31 | 46.4 | 58.0 | 58.4 | 58.8 | 70.2 | 70.6 | 65.2 | 61.6 | 54.3 | 54.0 |
| 32 | 45.0 | 54.2 | 54.3 | 56.8 | 68.9 | 69.6 | 66.5 | 67.5 | 60.8 | 61.0 |
| 33 | 45.0 | 51.3 | 49.5 | 53.1 | 66.7 | 69.2 | 64.5 | 60.1 | 53.6 | 52.4 |
| 34 | 45.0 | 47.1 | 48.4 | 51.9 | 67.4 | 68.4 | 62.4 | 58.2 | 52.1 | 51.0 |
| 35 | 45.0 | 45.0 | 45.3 | 48.0 | 64.8 | 66.3 | 61.1 | 57.9 | 51.6 | 50.3 |
| 36 | 45.0 | 45.0 | 45.0 | 45.7 | 61.7 | 63.0 | 58.5 | 52.1 | 46.0 | 45.8 |
| 37 | 45.0 | 45.0 | 45.0 | 45.0 | 57.3 | 60.5 | 56.8 | 49.7 | 45.0 | 45.0 |
| 38 | 45.0 | 45.0 | 45.0 | 45.0 | 55.1 | 58.0 | 55.4 | 46.1 | 45.0 | 45.0 |
| 39 | 45.0 | 45.0 | 45.0 | 45.0 | 52.2 | 59.9 | 58.8 | 45.9 | 45.0 | 45.0 |
| 40 | 45.0 | 45.0 | 45.0 | 45.0 | 49.6 | 61.3 | 59.4 | 45.0 | 45.0 | 45.0 |
| A | 72.2 | 79.9 | 77.9 | 78.2 | 83.5 | 81.8 | 77.6 | 73.8 | 69.5 | 69.1 |
| D | 81.7 | 89.0 | 86.8 | 86.7 | 89.3 | 87.7 | 83.6 | 79.6 | 78.4 | 77.8 |
| OASPL | 88.8 | 95.5 | 93.8 | 94.7 | 94.0 | 91.8 | 89.8 | 85.8 | 86.6 | 85.8 |
| PNL | 87.6 | 95.0 | 93.0 | 93.3 | 97.6 | 95.6 | 91.5 | 87.7 | 86.0 | 85.3 |
| PNLT | 87.6 | 95.0 | 93.0 | 94.6 | 97.6 | 95.6 | 91.5 | 90.0 | 88.3 | 87.9 |

LOWER LIMIT OF ANALYSIS SYSTEM= 45.0

TABLE E-VI

NOISE LEVEL FREQUENCY SPECTRA TIME HISTORY

BELL 212

OCTOBER 6, 1976

EVENT 36, 110 KT. FLY BY, CENTERLINE MIC. (SOFT SITE)

1/3 OCTAVE FREQUENCY BAND VS TIME (SECONDS)
(DB RE 20 MICRO PA)

| BAND | -17.5 | -14.5 | -11.5 | -8.5 | -5.5 | -2.5 | 0 | .5 | 3.5 | 4.5 |
|-------|-------|-------|-------|------|------|------|------|------|------|------|
| 17 | 83.0 | 84.4 | 85.4 | 87.3 | 89.6 | 89.7 | 75.2 | 75.5 | 72.7 | 73.7 |
| 18 | 83.9 | 85.2 | 84.7 | 86.4 | 88.5 | 88.8 | 78.4 | 75.7 | 77.2 | 76.8 |
| 19 | 83.6 | 84.9 | 86.2 | 87.2 | 89.0 | 86.1 | 63.6 | 61.6 | 68.4 | 71.0 |
| 20 | 83.8 | 84.2 | 85.7 | 86.8 | 86.5 | 79.7 | 76.4 | 78.1 | 62.6 | 66.0 |
| 21 | 82.9 | 85.1 | 85.5 | 86.9 | 85.4 | 76.3 | 82.6 | 80.8 | 63.7 | 61.4 |
| 22 | 80.9 | 83.0 | 83.5 | 83.5 | 79.7 | 79.3 | 83.6 | 83.9 | 71.4 | 67.3 |
| 23 | 77.6 | 82.0 | 81.3 | 82.9 | 75.2 | 85.6 | 79.8 | 76.9 | 72.8 | 70.4 |
| 24 | 72.2 | 78.5 | 76.3 | 75.2 | 75.4 | 86.8 | 74.2 | 73.4 | 70.0 | 69.1 |
| 25 | 68.6 | 73.8 | 68.8 | 70.5 | 74.8 | 84.2 | 78.5 | 76.8 | 64.3 | 66.1 |
| 26 | 66.4 | 70.5 | 66.2 | 69.3 | 77.2 | 80.4 | 74.6 | 72.1 | 69.1 | 64.0 |
| 27 | 60.9 | 66.2 | 61.4 | 67.6 | 75.7 | 79.4 | 75.2 | 72.1 | 69.6 | 70.0 |
| 28 | 54.8 | 63.4 | 56.1 | 66.8 | 68.6 | 76.8 | 72.7 | 71.6 | 68.1 | 65.5 |
| 29 | 53.5 | 55.6 | 55.5 | 65.2 | 67.7 | 75.5 | 72.2 | 71.4 | 67.3 | 67.6 |
| 30 | 50.9 | 52.7 | 54.8 | 58.1 | 68.2 | 72.0 | 70.6 | 69.4 | 64.7 | 65.5 |
| 31 | 50.4 | 51.5 | 52.6 | 60.5 | 65.6 | 70.5 | 70.0 | 69.0 | 64.0 | 64.5 |
| 32 | 47.2 | 49.7 | 47.7 | 55.1 | 61.8 | 69.1 | 69.6 | 68.8 | 69.7 | 68.2 |
| 33 | 46.2 | 46.4 | 46.4 | 52.0 | 58.2 | 67.5 | 69.5 | 68.5 | 63.1 | 62.5 |
| 34 | 45.0 | 46.3 | 45.6 | 50.8 | 55.5 | 67.4 | 67.6 | 66.2 | 59.5 | 60.5 |
| 35 | 45.0 | 45.0 | 45.0 | 46.3 | 51.0 | 65.9 | 65.1 | 64.2 | 60.7 | 61.1 |
| 36 | 45.0 | 45.0 | 45.0 | 45.0 | 48.5 | 63.1 | 62.2 | 61.5 | 55.8 | 56.1 |
| 37 | 45.0 | 45.0 | 45.0 | 45.0 | 45.0 | 59.2 | 60.4 | 59.6 | 53.2 | 53.4 |
| 38 | 45.0 | 45.0 | 45.0 | 45.0 | 45.0 | 55.2 | 58.8 | 58.3 | 51.2 | 50.3 |
| 39 | 45.0 | 45.0 | 45.0 | 45.0 | 45.0 | 51.5 | 59.5 | 60.1 | 53.5 | 50.2 |
| 40 | 45.0 | 45.0 | 45.0 | 45.0 | 45.0 | 50.2 | 61.0 | 62.3 | 52.2 | 47.2 |
| A | 74.2 | 77.6 | 76.5 | 78.2 | 79.5 | 85.6 | 81.9 | 80.5 | 76.4 | 75.4 |
| D | 83.8 | 86.4 | 86.1 | 87.2 | 87.5 | 91.4 | 88.0 | 86.8 | 81.5 | 80.5 |
| OASPL | 90.8 | 92.7 | 93.0 | 94.3 | 95.5 | 96.1 | 90.9 | 90.1 | 86.2 | 85.3 |
| PNL | 89.6 | 92.1 | 91.8 | 93.8 | 94.7 | 99.5 | 95.4 | 94.7 | 89.7 | 88.7 |
| PNLT | 89.6 | 92.1 | 91.8 | 95.1 | 94.7 | 99.5 | 95.4 | 94.7 | 91.7 | 90.2 |

LOWER LIMIT OF ANALYSIS SYSTEM= 45.0

TABLE E-VI

NOISE LEVEL FREQUENCY SPECTRA TIME HISTORY

BELL 212

OCTOBER 6, 1976

EVENT 37, 114 KT. FLY BY, CENTERLINE MIC. (SOFT SITE)

1/3 OCTAVE FREQUENCY BAND VS TIME (SECONDS)
(DB RE 20 MICRO PA)

| BAND | -14.5 | -12.0 | -9.5 | -7.0 | -4.5 | -2.0 | -1.0 | 0 | .5 | 3.0 | 4.5 |
|-------|-------|-------|------|------|------|------|-------|------|------|------|------|
| 17 | 84.0 | 87.9 | 86.0 | 89.1 | 91.3 | 90.3 | 87.7 | 81.8 | 79.7 | 75.5 | 73.8 |
| 18 | 81.7 | 87.4 | 86.0 | 89.2 | 90.1 | 86.9 | 86.2 | 83.3 | 79.8 | 80.0 | 78.0 |
| 19 | 79.2 | 88.7 | 86.6 | 89.7 | 88.8 | 81.6 | 73.1 | 66.5 | 66.2 | 70.8 | 73.3 |
| 20 | 83.4 | 89.2 | 87.7 | 89.8 | 86.8 | 75.2 | 74.1 | 77.6 | 78.7 | 67.2 | 70.7 |
| 21 | 84.0 | 89.3 | 88.6 | 89.3 | 85.4 | 79.2 | 84.4 | 83.5 | 81.0 | 70.3 | 66.1 |
| 22 | 80.7 | 87.7 | 88.0 | 86.5 | 78.3 | 84.0 | 86.6 | 84.3 | 82.8 | 76.1 | 66.3 |
| 23 | 76.1 | 85.4 | 86.7 | 83.0 | 78.7 | 87.3 | 89.4 | 82.8 | 77.4 | 76.6 | 70.9 |
| 24 | 72.2 | 81.4 | 80.5 | 77.1 | 81.7 | 85.8 | 83.6 | 75.7 | 73.8 | 71.3 | 70.7 |
| 25 | 71.9 | 76.2 | 75.0 | 79.2 | 80.1 | 78.6 | 82.6 | 80.9 | 77.4 | 65.4 | 68.2 |
| 26 | 69.5 | 78.6 | 77.3 | 77.1 | 81.9 | 79.2 | 82.5 | 77.1 | 72.5 | 70.2 | 63.5 |
| 27 | 67.8 | 77.9 | 75.5 | 74.3 | 78.0 | 78.2 | 78.2 | 76.5 | 73.7 | 68.6 | 66.3 |
| 28 | 58.7 | 73.9 | 69.9 | 72.9 | 72.1 | 75.8 | 76.3 | 73.7 | 71.6 | 66.9 | 64.9 |
| 29 | 60.5 | 71.3 | 67.7 | 67.0 | 73.7 | 73.5 | 74.4 | 73.9 | 72.0 | 66.9 | 63.3 |
| 30 | 53.9 | 68.1 | 64.8 | 62.1 | 69.5 | 71.5 | 72.0 | 71.3 | 70.2 | 65.1 | 62.5 |
| 31 | 51.8 | 65.4 | 62.7 | 61.2 | 70.4 | 70.9 | 70.9 | 70.1 | 69.1 | 63.7 | 61.1 |
| 32 | 51.3 | 59.8 | 56.7 | 60.9 | 68.2 | 69.1 | 70.2 | 70.7 | 69.8 | 67.2 | 67.9 |
| 33 | 47.6 | 56.1 | 55.8 | 56.4 | 64.7 | 67.7 | 69.9 | 69.4 | 68.1 | 62.1 | 59.7 |
| 34 | 45.6 | 51.4 | 50.0 | 50.6 | 61.9 | 67.8 | 69.3 | 68.6 | 66.9 | 59.9 | 58.0 |
| 35 | 45.0 | 48.4 | 46.8 | 47.3 | 58.6 | 65.0 | 66.3 | 66.1 | 65.0 | 59.2 | 58.7 |
| 36 | 45.0 | 46.8 | 45.0 | 45.2 | 54.1 | 59.9 | 63.0 | 62.5 | 61.1 | 56.5 | 53.8 |
| 37 | 45.0 | 45.4 | 45.0 | 45.0 | 50.2 | 57.1 | 60.3 | 59.9 | 58.9 | 53.5 | 51.9 |
| 38 | 45.0 | 45.0 | 45.0 | 45.0 | 46.3 | 54.1 | 57.5 | 57.7 | 57.7 | 52.8 | 48.7 |
| 39 | 45.0 | 45.0 | 45.0 | 45.0 | 45.0 | 50.9 | 56.6 | 59.5 | 59.9 | 56.0 | 49.1 |
| 40 | 45.0 | 45.0 | 45.0 | 45.0 | 45.0 | 47.8 | 54.3 | 59.9 | 61.2 | 54.5 | 46.5 |
| A | 74.6 | 83.3 | 82.5 | 82.0 | 83.3 | 84.6 | 85.5 | 82.9 | 80.6 | 76.1 | 73.7 |
| D | 83.8 | 90.9 | 90.5 | 90.3 | 89.9 | 90.9 | 91.7 | 89.3 | 87.1 | 81.9 | 79.7 |
| OASPL | 90.4 | 96.5 | 95.6 | 97.0 | 96.6 | 95.8 | 95.8 | 92.9 | 91.2 | 87.3 | 84.8 |
| PNL | 90.4 | 97.3 | 96.5 | 96.7 | 97.5 | 98.8 | 100.2 | 96.7 | 94.8 | 89.8 | 88.0 |
| PNLT | 91.8 | 97.3 | 96.5 | 96.7 | 97.5 | 98.8 | 100.2 | 96.7 | 94.8 | 91.2 | 90.5 |

LOWER LIMIT OF ANALYSIS SYSTEM= 45.0

TABLE E-VI

NOISE LEVEL FREQUENCY SPECTRA TIME HISTORY

BELL 212

OCTOBER 6, 1976

EVENT 38, 114 KT. FLY BY, CENTERLINE MIC. (SOFT SITE)

1/3 OCTAVE FREQUENCY BAND VS TIME (SECONDS)
(DB RE 20 MICRO PA)

| BAND | -16.0 | -13.5 | -11.0 | -8.5 | -6.0 | -3.5 | -1.0 | 0 | 1.5 | 4.0 |
|-------|-------|-------|-------|-------|------|------|------|------|------|------|
| 17 | 82.4 | 89.0 | 89.6 | 90.5 | 91.8 | 94.3 | 88.9 | 80.1 | 75.6 | 73.0 |
| 18 | 81.3 | 90.4 | 90.6 | 91.0 | 91.5 | 93.1 | 86.1 | 80.1 | 73.1 | 73.6 |
| 19 | 81.1 | 90.6 | 91.5 | 92.1 | 92.0 | 92.6 | 78.7 | 65.0 | 63.3 | 67.3 |
| 20 | 80.2 | 90.8 | 91.5 | 92.1 | 90.8 | 89.2 | 72.0 | 75.5 | 75.7 | 64.9 |
| 21 | 78.7 | 92.2 | 92.3 | 92.6 | 91.2 | 87.8 | 81.3 | 83.4 | 72.2 | 59.6 |
| 22 | 79.5 | 90.2 | 91.8 | 91.8 | 89.5 | 80.6 | 82.0 | 84.0 | 79.6 | 64.5 |
| 23 | 77.9 | 89.0 | 90.4 | 91.1 | 88.3 | 80.8 | 87.2 | 82.5 | 74.6 | 69.5 |
| 24 | 76.0 | 86.9 | 86.6 | 87.4 | 81.8 | 85.0 | 83.8 | 75.1 | 70.0 | 69.2 |
| 25 | 70.8 | 83.4 | 80.6 | 80.3 | 70.4 | 85.2 | 77.9 | 78.9 | 73.7 | 67.2 |
| 26 | 66.5 | 80.3 | 75.3 | 73.1 | 66.7 | 83.3 | 80.3 | 76.6 | 71.7 | 64.9 |
| 27 | 64.0 | 76.0 | 71.8 | 69.1 | 70.2 | 76.9 | 77.8 | 76.3 | 74.1 | 69.7 |
| 28 | 59.8 | 73.0 | 67.4 | 69.1 | 70.2 | 73.0 | 75.6 | 74.0 | 70.8 | 66.6 |
| 29 | 56.1 | 64.7 | 64.1 | 69.1 | 67.9 | 70.0 | 75.0 | 73.6 | 71.3 | 66.6 |
| 30 | 55.0 | 60.1 | 60.0 | 69.5 | 61.7 | 65.8 | 73.7 | 71.2 | 69.7 | 65.0 |
| 31 | 55.0 | 57.3 | 58.4 | 64.4 | 58.7 | 63.2 | 73.5 | 71.9 | 68.5 | 65.2 |
| 32 | 55.0 | 56.7 | 55.6 | 61.0 | 56.1 | 61.7 | 72.3 | 71.7 | 68.8 | 70.4 |
| 33 | 55.0 | 55.0 | 55.0 | 58.1 | 55.0 | 60.4 | 70.2 | 70.1 | 67.9 | 65.5 |
| 34 | 55.0 | 55.0 | 55.0 | 55.5 | 55.0 | 60.9 | 70.1 | 68.3 | 66.5 | 64.0 |
| 35 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 | 58.7 | 67.7 | 65.5 | 65.3 | 63.4 |
| 36 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 | 57.1 | 64.8 | 63.6 | 63.1 | 59.8 |
| 37 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 | 61.8 | 60.8 | 61.1 | 56.6 |
| 38 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 | 59.8 | 59.9 | 60.1 | 55.5 |
| 39 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 | 58.9 | 61.7 | 62.6 | 56.0 |
| 40 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 | 58.0 | 62.9 | 64.5 | 55.2 |
| A | 73.0 | 85.5 | 85.1 | 85.2 | 82.5 | 84.7 | 85.2 | 83.5 | 79.9 | 76.2 |
| D | 83.0 | 93.9 | 94.0 | 94.3 | 92.3 | 92.0 | 90.9 | 88.4 | 85.4 | 81.9 |
| OASPL | 89.1 | 98.8 | 99.4 | 99.9 | 99.2 | 99.3 | 95.5 | 92.2 | 88.3 | 83.7 |
| PNL | 90.3 | 99.8 | 100.0 | 100.7 | 98.4 | 99.1 | 99.4 | 96.6 | 93.5 | 90.3 |
| PNLT | 90.3 | 99.8 | 100.0 | 100.7 | 98.4 | 99.1 | 99.4 | 96.6 | 93.5 | 92.0 |

LOWER LIMIT OF ANALYSIS SYSTEM= 55.0

TABLE E-VI

NOISE LEVEL FREQUENCY SPECTRA TIME HISTORY

BELL 212

OCTOBER 6, 1976

EVENT 43, 3 DEGREE APPROACH, CENTERLINE MIC. (SOFT SITE)

1/3 OCTAVE FREQUENCY BAND VS TIME (SECONDS)
(DB RE 20 MICRO PA)

| BAND | -46.0 | -38.0 | -30.0 | -22.0 | -14.0 | -6.0 | -2.5 | 0 | 2.0 | 10.0 | 10.5 |
|-------|-------|-------|-------|-------|-------|------|------|------|------|------|------|
| 17 | 76.9 | 78.8 | 78.0 | 80.8 | 83.7 | 84.3 | 82.8 | 79.1 | 81.8 | 77.1 | 76.8 |
| 18 | 78.9 | 79.4 | 77.3 | 81.4 | 84.2 | 84.7 | 82.6 | 75.9 | 75.9 | 73.9 | 74.1 |
| 19 | 76.9 | 74.6 | 73.8 | 78.4 | 80.0 | 75.9 | 68.2 | 64.6 | 67.7 | 69.4 | 69.7 |
| 20 | 76.5 | 72.3 | 71.6 | 78.4 | 77.7 | 70.7 | 70.3 | 76.5 | 79.6 | 70.5 | 70.9 |
| 21 | 75.5 | 72.5 | 71.1 | 79.1 | 77.4 | 69.0 | 79.2 | 79.9 | 78.2 | 67.4 | 67.1 |
| 22 | 75.0 | 67.2 | 71.7 | 76.4 | 75.1 | 77.8 | 83.6 | 81.6 | 82.1 | 63.9 | 64.5 |
| 23 | 77.3 | 67.6 | 71.0 | 75.0 | 71.3 | 82.5 | 84.9 | 75.2 | 74.9 | 71.7 | 69.1 |
| 24 | 74.0 | 66.5 | 68.1 | 69.2 | 67.0 | 84.2 | 79.1 | 73.1 | 73.1 | 75.0 | 73.0 |
| 25 | 72.0 | 64.6 | 66.4 | 63.4 | 72.8 | 78.5 | 78.9 | 76.7 | 74.9 | 74.5 | 72.9 |
| 26 | 67.8 | 60.6 | 62.1 | 60.9 | 76.6 | 71.5 | 77.6 | 72.5 | 70.8 | 68.5 | 66.8 |
| 27 | 64.9 | 61.3 | 52.0 | 56.9 | 74.8 | 75.3 | 74.8 | 73.4 | 71.9 | 59.3 | 59.0 |
| 28 | 57.3 | 53.2 | 51.2 | 54.7 | 65.0 | 70.0 | 73.7 | 71.5 | 70.2 | 64.6 | 61.3 |
| 29 | 52.2 | 50.2 | 51.6 | 54.5 | 65.3 | 71.5 | 71.8 | 69.7 | 68.5 | 60.6 | 60.1 |
| 30 | 52.0 | 52.7 | 52.7 | 53.9 | 66.9 | 68.8 | 71.1 | 69.4 | 67.2 | 60.4 | 58.9 |
| 31 | 53.4 | 48.4 | 48.6 | 47.0 | 64.4 | 68.2 | 72.0 | 69.0 | 66.0 | 58.3 | 57.2 |
| 32 | 50.4 | 45.4 | 45.2 | 46.9 | 62.1 | 68.2 | 71.5 | 67.9 | 66.5 | 61.0 | 60.4 |
| 33 | 46.4 | 45.0 | 45.3 | 45.9 | 60.2 | 67.1 | 70.3 | 65.9 | 66.1 | 59.5 | 59.2 |
| 34 | 45.0 | 45.0 | 45.0 | 45.2 | 55.6 | 65.4 | 67.7 | 64.3 | 64.2 | 55.7 | 54.5 |
| 35 | 45.0 | 45.0 | 45.0 | 45.0 | 51.9 | 61.9 | 64.2 | 62.6 | 61.9 | 54.2 | 53.0 |
| 36 | 45.0 | 45.0 | 45.0 | 45.0 | 47.9 | 57.9 | 62.2 | 61.3 | 60.0 | 51.8 | 51.0 |
| 37 | 45.0 | 45.0 | 45.0 | 45.0 | 45.0 | 55.0 | 59.7 | 58.2 | 57.4 | 48.8 | 47.9 |
| 38 | 45.0 | 45.0 | 45.0 | 45.0 | 45.0 | 50.5 | 56.2 | 56.5 | 56.7 | 45.8 | 45.6 |
| 39 | 45.0 | 45.0 | 45.0 | 45.0 | 45.0 | 48.1 | 56.4 | 59.5 | 59.9 | 45.0 | 45.0 |
| 40 | 45.0 | 45.0 | 45.0 | 45.0 | 45.0 | 49.4 | 55.8 | 62.6 | 63.4 | 45.0 | 45.0 |
| A | 72.4 | 65.9 | 67.3 | 70.0 | 76.4 | 81.0 | 82.9 | 80.1 | 78.5 | 73.5 | 71.8 |
| D | 80.2 | 74.7 | 75.6 | 79.5 | 82.7 | 87.4 | 88.8 | 86.0 | 85.1 | 79.9 | 78.6 |
| OASPL | 85.4 | 83.8 | 83.6 | 87.4 | 89.5 | 92.5 | 93.8 | 93.1 | 92.8 | 85.3 | 84.6 |
| PNL | 87.2 | 81.9 | 82.4 | 86.2 | 91.0 | 95.6 | 96.9 | 93.5 | 93.3 | 87.2 | 85.9 |
| PNLT | 87.2 | 83.0 | 82.4 | 86.2 | 91.0 | 95.6 | 96.9 | 93.5 | 93.3 | 88.7 | 85.9 |

LOWER LIMIT OF ANALYSIS SYSTEM= 45.0

TABLE E-VI

NOISE LEVEL FREQUENCY SPECTRA TIME HISTORY

BELL 212

OCTOBER 6, 1976

EVENT 44, 110 KT. FLY BY, CENTERLINE MIC. (SOFT SITE)

1/3 OCTAVE FREQUENCY BAND VS TIME (SECONDS)
(DB RE 20 MICRO PA)

| BAND | -17.5 | -14.5 | -11.5 | -8.5 | -5.5 | -2.5 | 0 | .5 | 3.5 | 6.5 |
|-------|-------|-------|-------|------|------|------|------|------|------|------|
| 17 | 81.7 | 85.0 | 86.2 | 86.9 | 90.3 | 91.3 | 78.7 | 76.6 | 75.7 | 74.3 |
| 18 | 80.7 | 85.6 | 86.9 | 86.2 | 89.4 | 87.9 | 78.0 | 75.1 | 78.2 | 73.8 |
| 19 | 79.9 | 85.0 | 88.1 | 86.5 | 89.4 | 86.5 | 64.3 | 61.3 | 69.1 | 70.9 |
| 20 | 79.6 | 85.4 | 87.9 | 85.8 | 87.0 | 81.3 | 74.3 | 77.0 | 63.6 | 70.0 |
| 21 | 79.8 | 86.9 | 88.2 | 86.0 | 86.4 | 76.3 | 79.9 | 78.7 | 64.9 | 63.7 |
| 22 | 77.8 | 87.7 | 85.8 | 84.2 | 81.3 | 77.6 | 80.8 | 80.9 | 72.0 | 58.5 |
| 23 | 79.8 | 86.1 | 82.9 | 81.6 | 76.8 | 85.3 | 78.8 | 75.6 | 73.3 | 57.5 |
| 24 | 77.4 | 80.5 | 78.2 | 73.2 | 76.0 | 87.2 | 72.5 | 69.6 | 71.1 | 61.8 |
| 25 | 74.0 | 73.3 | 71.8 | 67.8 | 76.5 | 84.4 | 75.4 | 73.8 | 65.8 | 65.2 |
| 26 | 70.3 | 72.7 | 71.4 | 67.7 | 73.4 | 79.5 | 74.2 | 70.9 | 69.3 | 65.6 |
| 27 | 66.5 | 70.4 | 68.2 | 64.4 | 71.9 | 78.3 | 75.4 | 73.3 | 69.2 | 61.7 |
| 28 | 60.0 | 66.4 | 63.1 | 62.5 | 65.1 | 77.4 | 74.2 | 73.5 | 68.4 | 62.2 |
| 29 | 54.0 | 62.0 | 58.0 | 59.0 | 60.2 | 75.1 | 73.4 | 72.9 | 66.0 | 62.5 |
| 30 | 51.5 | 56.2 | 56.1 | 53.1 | 60.2 | 72.0 | 71.4 | 71.2 | 65.5 | 59.9 |
| 31 | 49.9 | 55.8 | 54.9 | 54.3 | 56.3 | 71.2 | 71.6 | 71.2 | 64.1 | 59.5 |
| 32 | 47.5 | 49.9 | 54.0 | 50.4 | 55.1 | 70.2 | 71.0 | 70.7 | 68.2 | 69.6 |
| 33 | 45.0 | 48.4 | 51.1 | 50.1 | 52.3 | 68.5 | 69.0 | 68.4 | 62.6 | 60.3 |
| 34 | 45.0 | 45.2 | 50.7 | 47.4 | 51.4 | 67.2 | 67.9 | 67.5 | 60.8 | 57.3 |
| 35 | 45.0 | 45.0 | 46.4 | 45.1 | 48.1 | 63.8 | 67.0 | 66.6 | 59.6 | 57.0 |
| 36 | 45.0 | 45.0 | 45.0 | 45.0 | 47.4 | 60.8 | 64.7 | 64.2 | 56.1 | 51.9 |
| 37 | 45.0 | 45.0 | 45.0 | 45.0 | 45.5 | 57.6 | 62.7 | 62.4 | 54.6 | 50.0 |
| 38 | 45.0 | 45.0 | 45.0 | 45.0 | 45.0 | 55.3 | 59.5 | 59.9 | 52.6 | 46.0 |
| 39 | 45.0 | 45.0 | 45.0 | 45.0 | 45.0 | 49.4 | 60.6 | 61.4 | 55.4 | 45.3 |
| 40 | 45.0 | 45.0 | 45.0 | 45.0 | 45.0 | 48.9 | 61.4 | 63.5 | 54.1 | 45.0 |
| A | 75.3 | 80.6 | 79.3 | 76.9 | 78.5 | 85.5 | 81.8 | 81.1 | 75.9 | 73.0 |
| D | 83.2 | 89.0 | 88.6 | 86.6 | 87.8 | 91.5 | 87.1 | 86.7 | 81.3 | 78.7 |
| OASPL | 88.8 | 94.3 | 95.1 | 93.7 | 95.9 | 96.3 | 89.9 | 89.3 | 86.3 | 82.1 |
| PNL | 89.6 | 94.9 | 94.5 | 92.5 | 94.1 | 99.5 | 95.2 | 94.5 | 89.5 | 87.0 |
| PNLT | 89.6 | 94.9 | 94.5 | 92.5 | 94.1 | 99.5 | 95.2 | 94.5 | 91.1 | 90.3 |

LOWER LIMIT OF ANALYSIS SYSTEM= 45.0

TABLE E-VI

NOISE LEVEL FREQUENCY SPECTRA TIME HISTORY

BELL 212

OCTOBER 6, 1976

EVENT 45, 110 KT. FLY BY, CENTERLINE MIC. (SOFT SITE)

1/3 OCTAVE FREQUENCY BAND VS TIME (SECONDS)
(DB RE 20 MICRO PA)

| BAND | -21.5 | -17.5 | -13.5 | -9.5 | -5.5 | -1.5 | 0 | 2.5 | 6.5 | 9.5 |
|-------|-------|-------|-------|------|------|------|------|------|------|------|
| 17 | 79.7 | 78.6 | 82.3 | 85.2 | 88.1 | 86.3 | 78.8 | 73.1 | 68.3 | 68.4 |
| 18 | 78.9 | 80.3 | 81.5 | 85.5 | 87.2 | 83.5 | 80.1 | 67.8 | 73.2 | 71.0 |
| 19 | 79.2 | 81.7 | 82.1 | 87.1 | 87.0 | 78.4 | 66.1 | 63.5 | 67.9 | 68.4 |
| 20 | 75.7 | 81.2 | 83.1 | 86.0 | 84.6 | 68.8 | 70.4 | 75.8 | 64.4 | 67.5 |
| 21 | 74.2 | 82.8 | 84.0 | 85.9 | 82.6 | 73.3 | 80.9 | 71.3 | 64.0 | 63.1 |
| 22 | 74.3 | 81.6 | 82.1 | 84.4 | 77.5 | 75.8 | 80.5 | 79.1 | 64.2 | 61.3 |
| 23 | 73.8 | 80.2 | 82.4 | 82.9 | 72.5 | 83.8 | 83.6 | 70.0 | 67.9 | 59.9 |
| 24 | 71.0 | 76.4 | 79.0 | 78.1 | 67.6 | 81.6 | 77.1 | 68.3 | 67.1 | 63.1 |
| 25 | 64.7 | 71.1 | 72.4 | 72.7 | 68.1 | 70.8 | 76.7 | 71.2 | 62.2 | 62.1 |
| 26 | 59.8 | 68.0 | 70.2 | 68.0 | 65.5 | 72.5 | 76.3 | 68.7 | 62.9 | 64.0 |
| 27 | 52.6 | 63.9 | 66.8 | 66.6 | 61.0 | 70.6 | 72.4 | 70.0 | 65.6 | 58.8 |
| 28 | 51.2 | 60.0 | 59.8 | 59.2 | 55.9 | 69.0 | 70.7 | 68.4 | 62.1 | 60.2 |
| 29 | 50.0 | 56.1 | 57.6 | 57.8 | 53.6 | 68.5 | 69.6 | 68.2 | 61.7 | 59.2 |
| 30 | 50.0 | 52.9 | 53.4 | 56.8 | 54.8 | 65.9 | 67.9 | 66.5 | 60.4 | 57.7 |
| 31 | 50.0 | 50.2 | 51.9 | 53.4 | 52.9 | 66.2 | 68.0 | 65.6 | 58.8 | 55.3 |
| 32 | 50.0 | 50.0 | 50.0 | 52.4 | 52.1 | 65.7 | 66.3 | 65.3 | 64.6 | 62.2 |
| 33 | 50.0 | 50.0 | 50.0 | 50.7 | 50.6 | 65.6 | 65.6 | 64.2 | 57.4 | 54.5 |
| 34 | 50.0 | 50.0 | 50.0 | 50.3 | 50.0 | 63.6 | 65.9 | 62.6 | 54.6 | 53.4 |
| 35 | 50.0 | 50.0 | 50.0 | 50.0 | 50.0 | 60.0 | 63.2 | 61.1 | 54.8 | 53.5 |
| 36 | 50.0 | 50.0 | 50.0 | 50.0 | 50.0 | 57.9 | 60.0 | 59.0 | 50.9 | 50.0 |
| 37 | 50.0 | 50.0 | 50.0 | 50.0 | 50.0 | 54.6 | 56.1 | 55.9 | 50.0 | 50.0 |
| 38 | 50.0 | 50.0 | 50.0 | 50.0 | 50.0 | 52.3 | 53.3 | 54.1 | 50.0 | 50.0 |
| 39 | 50.0 | 50.0 | 50.0 | 50.0 | 50.0 | 50.0 | 52.3 | 55.7 | 50.0 | 50.0 |
| 40 | 50.0 | 50.0 | 50.0 | 50.0 | 50.0 | 50.0 | 50.6 | 55.4 | 50.0 | 50.0 |
| A | 67.5 | 75.3 | 76.9 | 77.7 | 72.7 | 79.3 | 80.7 | 76.6 | 70.8 | 68.3 |
| D | 77.9 | 83.9 | 85.4 | 87.1 | 83.8 | 86.0 | 86.5 | 82.6 | 76.1 | 73.8 |
| OASPL | 85.1 | 89.5 | 91.1 | 93.5 | 93.2 | 91.8 | 90.1 | 85.5 | 81.5 | 79.0 |
| PNL | 85.4 | 90.5 | 92.1 | 93.3 | 90.9 | 94.2 | 94.8 | 90.3 | 85.0 | 82.9 |
| PNLT | 85.4 | 90.5 | 92.1 | 93.3 | 90.9 | 94.2 | 94.8 | 90.3 | 87.2 | 85.4 |

LOWER LIMIT OF ANALYSIS SYSTEM= 50.0

TABLE E-VI

NOISE LEVEL FREQUENCY SPECTRA TIME HISTORY

BELL 212

OCTOBER 6, 1976

EVENT 46, 114 KT. FLY BY, CENTERLINE MIC. (SOFT SITE)

1/3 OCTAVE FREQUENCY BAND VS TIME (SECONDS)
(DB RE 20 MICRO PA)

| BAND | -14.5 | -12.5 | -12.0 | -9.5 | -7.0 | -4.5 | -2.0 | 0 | .5 | 3.0 | 5.0 |
|-------|-------|-------|-------|------|------|------|------|------|------|------|------|
| 17 | 82.6 | 88.7 | 88.4 | 89.6 | 91.2 | 92.6 | 90.9 | 77.6 | 76.0 | 72.5 | 68.8 |
| 18 | 83.5 | 88.8 | 88.8 | 89.2 | 90.8 | 91.5 | 88.1 | 79.3 | 76.8 | 65.7 | 67.9 |
| 19 | 83.1 | 89.1 | 89.2 | 89.1 | 91.4 | 91.2 | 84.8 | 64.2 | 63.1 | 62.7 | 64.2 |
| 20 | 81.4 | 90.5 | 90.9 | 88.6 | 90.4 | 89.1 | 77.3 | 75.9 | 77.5 | 68.1 | 63.8 |
| 21 | 80.8 | 91.6 | 92.2 | 89.1 | 90.1 | 87.5 | 74.8 | 82.2 | 81.3 | 67.1 | 61.3 |
| 22 | 79.0 | 90.8 | 91.3 | 87.5 | 87.9 | 81.4 | 79.7 | 82.7 | 83.3 | 72.4 | 63.6 |
| 23 | 73.5 | 89.9 | 89.8 | 86.1 | 85.8 | 75.0 | 85.3 | 82.1 | 77.6 | 72.8 | 68.0 |
| 24 | 71.0 | 87.7 | 87.7 | 83.0 | 78.4 | 78.2 | 84.5 | 75.6 | 73.9 | 67.9 | 68.0 |
| 25 | 68.1 | 84.3 | 83.9 | 76.6 | 70.4 | 78.4 | 79.2 | 78.2 | 77.8 | 70.1 | 65.2 |
| 26 | 65.5 | 82.2 | 81.5 | 70.6 | 72.7 | 77.9 | 76.6 | 75.1 | 73.0 | 70.9 | 64.0 |
| 27 | 61.3 | 80.3 | 78.5 | 64.6 | 74.3 | 73.9 | 76.6 | 75.2 | 74.5 | 69.9 | 68.7 |
| 28 | 60.0 | 77.3 | 75.4 | 65.0 | 72.8 | 65.3 | 73.4 | 71.8 | 71.1 | 68.9 | 65.6 |
| 29 | 60.0 | 73.1 | 71.3 | 63.7 | 66.4 | 66.4 | 72.1 | 71.2 | 71.1 | 71.2 | 66.2 |
| 30 | 60.0 | 70.9 | 69.2 | 61.6 | 61.9 | 60.8 | 69.8 | 70.1 | 69.8 | 68.6 | 66.2 |
| 31 | 60.0 | 67.7 | 66.5 | 60.0 | 61.7 | 60.2 | 67.4 | 69.5 | 68.6 | 67.3 | 65.3 |
| 32 | 60.0 | 63.2 | 62.7 | 60.0 | 60.0 | 60.5 | 66.6 | 69.4 | 68.4 | 69.5 | 69.2 |
| 33 | 60.0 | 60.4 | 60.3 | 60.0 | 60.0 | 60.0 | 64.7 | 67.9 | 67.3 | 64.6 | 62.7 |
| 34 | 60.0 | 60.0 | 60.0 | 60.0 | 60.0 | 60.0 | 64.5 | 68.1 | 67.4 | 62.0 | 62.0 |
| 35 | 60.0 | 60.0 | 60.0 | 60.0 | 60.0 | 60.0 | 62.7 | 65.4 | 65.1 | 61.4 | 60.9 |
| 36 | 60.0 | 60.0 | 60.0 | 60.0 | 60.0 | 60.0 | 60.9 | 63.8 | 63.8 | 60.1 | 60.0 |
| 37 | 60.0 | 60.0 | 60.0 | 60.0 | 60.0 | 60.0 | 60.0 | 60.6 | 60.5 | 60.0 | 60.0 |
| 38 | 60.0 | 60.0 | 60.0 | 60.0 | 60.0 | 60.0 | 60.0 | 60.0 | 60.0 | 60.0 | 60.0 |
| 39 | 60.0 | 60.0 | 60.0 | 60.0 | 60.0 | 60.0 | 60.0 | 60.0 | 60.0 | 60.0 | 60.0 |
| 40 | 60.0 | 60.0 | 60.0 | 60.0 | 60.0 | 60.0 | 60.0 | 60.1 | 60.8 | 60.0 | 60.0 |
| A | 72.1 | 87.2 | 86.8 | 81.7 | 81.6 | 80.2 | 83.2 | 81.7 | 81.1 | 77.8 | 75.3 |
| D | 81.6 | 94.3 | 94.0 | 89.8 | 90.5 | 89.0 | 88.9 | 87.5 | 86.7 | 82.6 | 80.2 |
| OASPL | 89.9 | 98.8 | 98.7 | 96.5 | 97.9 | 97.6 | 95.5 | 91.3 | 89.9 | 83.5 | 80.9 |
| PNL | 91.4 | 101.4 | 101.2 | 97.6 | 98.5 | 97.3 | 97.7 | 95.7 | 94.9 | 91.1 | 89.5 |
| PNLT | 91.4 | 101.4 | 101.2 | 97.6 | 98.5 | 98.4 | 97.7 | 95.7 | 94.9 | 92.3 | 91.3 |

LOWER LIMIT OF ANALYSIS SYSTEM= 60.0

TABLE E-VI

NOISE LEVEL FREQUENCY SPECTRA TIME HISTORY

BELL 212

OCTOBER 6, 1976

EVENT 47, 114 KT. FLY BY, CENTERLINE MIC. (SOFT SIT)

1/3 OCTAVE FREQUENCY BAND VS TIME (SECONDS)
(DB RE 20 MICRO PA)

| BAND | -17.5 | -14.5 | -11.5 | -8.5 | -5.5 | -2.5 | 0 | .5 | 3.5 | 5.0 |
|-------|-------|-------|-------|------|------|------|------|------|------|------|
| 17 | 84.2 | 83.5 | 85.9 | 86.9 | 90.4 | 91.8 | 78.2 | 77.3 | 74.2 | 71.9 |
| 18 | 82.8 | 84.9 | 87.1 | 86.7 | 90.4 | 88.7 | 79.3 | 76.5 | 74.9 | 72.7 |
| 19 | 82.2 | 85.7 | 87.3 | 86.5 | 89.6 | 86.2 | 65.8 | 64.7 | 67.6 | 68.5 |
| 20 | 82.3 | 86.3 | 87.6 | 85.0 | 88.4 | 81.6 | 75.3 | 77.3 | 65.3 | 67.9 |
| 21 | 82.1 | 86.2 | 87.5 | 85.2 | 88.0 | 78.7 | 81.6 | 79.8 | 64.4 | 65.1 |
| 22 | 79.6 | 86.4 | 85.7 | 84.1 | 84.2 | 80.4 | 81.9 | 81.8 | 71.8 | 64.7 |
| 23 | 76.5 | 85.9 | 83.3 | 82.1 | 79.5 | 84.7 | 79.3 | 75.5 | 72.6 | 67.5 |
| 24 | 69.5 | 82.9 | 78.2 | 75.4 | 77.7 | 85.2 | 72.4 | 71.6 | 70.5 | 67.0 |
| 25 | 62.7 | 77.5 | 72.5 | 66.7 | 78.6 | 81.6 | 76.3 | 75.3 | 64.6 | 64.7 |
| 26 | 59.5 | 73.7 | 70.5 | 67.7 | 75.9 | 77.0 | 73.6 | 69.9 | 69.6 | 60.9 |
| 27 | 58.2 | 72.4 | 67.8 | 64.0 | 73.0 | 78.0 | 73.2 | 70.5 | 68.0 | 66.1 |
| 28 | 54.0 | 67.9 | 61.8 | 60.5 | 68.7 | 75.4 | 71.5 | 70.8 | 66.7 | 63.7 |
| 29 | 47.7 | 63.4 | 54.9 | 57.2 | 61.9 | 73.1 | 70.9 | 69.8 | 66.8 | 62.6 |
| 30 | 47.0 | 57.6 | 53.8 | 52.8 | 58.4 | 69.1 | 69.9 | 68.9 | 65.1 | 60.9 |
| 31 | 45.3 | 53.4 | 50.1 | 48.5 | 56.4 | 69.0 | 70.1 | 69.2 | 63.7 | 60.6 |
| 32 | 45.0 | 47.6 | 46.3 | 49.6 | 54.9 | 67.0 | 70.3 | 69.2 | 70.1 | 66.3 |
| 33 | 45.0 | 45.9 | 45.2 | 47.1 | 52.4 | 64.4 | 68.6 | 67.7 | 62.5 | 58.4 |
| 34 | 45.0 | 45.0 | 45.0 | 46.8 | 51.2 | 63.8 | 66.6 | 65.7 | 60.7 | 56.3 |
| 35 | 45.0 | 45.0 | 45.0 | 45.0 | 48.0 | 60.4 | 64.5 | 63.7 | 59.9 | 58.2 |
| 36 | 45.0 | 45.0 | 45.0 | 45.0 | 45.5 | 58.2 | 63.2 | 62.0 | 56.2 | 53.3 |
| 37 | 45.0 | 45.0 | 45.0 | 45.0 | 45.0 | 54.7 | 60.6 | 59.7 | 53.7 | 50.2 |
| 38 | 45.0 | 45.0 | 45.0 | 45.0 | 45.0 | 51.4 | 57.6 | 57.2 | 51.6 | 47.0 |
| 39 | 45.0 | 45.0 | 45.0 | 45.0 | 45.0 | 48.1 | 58.4 | 58.8 | 53.7 | 46.9 |
| 40 | 45.0 | 45.0 | 45.0 | 45.0 | 45.0 | 46.7 | 58.6 | 60.2 | 50.5 | 45.1 |
| A | 72.2 | 81.1 | 79.1 | 76.8 | 80.2 | 83.3 | 80.9 | 79.7 | 76.1 | 72.0 |
| D | 82.6 | 89.1 | 88.4 | 86.5 | 89.2 | 89.9 | 86.9 | 85.9 | 81.4 | 77.6 |
| OASPL | 89.9 | 94.3 | 94.7 | 93.7 | 96.7 | 96.8 | 90.6 | 89.4 | 84.0 | 81.6 |
| PNL | 88.3 | 95.0 | 93.8 | 92.0 | 95.5 | 98.0 | 94.4 | 93.6 | 89.8 | 86.1 |
| PNLT | 88.3 | 95.0 | 93.8 | 92.0 | 95.5 | 98.0 | 94.4 | 93.6 | 92.1 | 88.4 |

LOWER LIMIT OF ANALYSIS SYSTEM= 45.0

TABLE E-VII
5 FOOT HOVER TEST

1/3 OCTAVE NOISE LEVEL FREQUENCY SPECTRA

BELL 212

OCTOBER 6, 1976

EVENT 1, 0 DEGREES, MICROPHONE 150 METERS WEST

1/3 OCTAVE BAND VS LEVEL (AVE OVER 19 SECONDS)
(DB RE 20 MICRO PA)

| BAND | ENERGY AVERAGE | MAX | MIN | ARITH. AVERAGE | STD DEV |
|-------|-------------------|------|------|-------------------|------------|
| 14 | 72.4 | 74.5 | 68.6 | 72.1 | 1.8 |
| 15 | 81.9 | 84.0 | 77.6 | 81.5 | 1.9 |
| 16 | 78.6 | 80.7 | 74.4 | 78.3 | 1.9 |
| 17 | 79.0 | 81.6 | 74.1 | 78.5 | 2.2 |
| 18 | 77.2 | 79.9 | 72.4 | 76.8 | 2.2 |
| 19 | 75.3 | 78.2 | 70.9 | 74.9 | 1.9 |
| 20 | 75.3 | 78.4 | 67.6 | 74.5 | 2.8 |
| 21 | 73.9 | 77.6 | 66.4 | 73.2 | 2.7 |
| 22 | 76.6 | 78.4 | 73.0 | 76.3 | 1.5 |
| 23 | 75.5 | 77.8 | 72.4 | 75.3 | 1.6 |
| 24 | 75.9 | 78.8 | 73.5 | 75.7 | 1.3 |
| 25 | 76.0 | 80.5 | 72.7 | 75.5 | 1.9 |
| 26 | 74.7 | 78.9 | 70.7 | 74.2 | 2.1 |
| 27 | 72.7 | 77.2 | 69.0 | 72.1 | 2.2 |
| 28 | 68.3 | 72.2 | 64.6 | 67.8 | 2.1 |
| 29 | 62.2 | 64.9 | 58.9 | 61.9 | 1.7 |
| 30 | 58.0 | 61.0 | 53.9 | 57.6 | 2.1 |
| 31 | 58.4 | 60.9 | 53.1 | 57.9 | 2.3 |
| 32 | 58.4 | 61.2 | 53.0 | 57.8 | 2.4 |
| 33 | 57.4 | 60.7 | 52.3 | 56.8 | 2.3 |
| 34 | 55.2 | 58.6 | 49.7 | 54.6 | 2.4 |
| 35 | 52.7 | 54.8 | 48.1 | 52.3 | 1.9 |
| 36 | 51.7 | 54.0 | 47.5 | 51.4 | 1.6 |
| 37 | 47.5 | 49.7 | 45.1 | 47.3 | 1.1 |
| 38 | 45.5 | 47.0 | 45.0 | 45.5 | .5 |
| 39 | 45.4 | 46.4 | 45.0 | 45.4 | .4 |
| 40 | 46.0 | 47.9 | 45.1 | 45.9 | .8 |
| DBA | 76.9 | 80.4 | 74.1 | 76.6 | 1.7 |
| DBD | 83.1 | 86.0 | 80.8 | 82.9 | 1.3 |
| OASPL | 88.4 | 89.4 | 87.3 | 88.4 | .6 |
| PNL | 90.0 | 92.9 | 87.1 | 89.8 | 1.4 |
| PNLT | 90.2 | 92.9 | 87.1 | 89.9 | 1.5 |

270°
(Microphone Location
Relative to Helicopter)

TABLE E-VII
5 FOOT HOVER TEST

1/3 OCTAVE NOISE LEVEL FREQUENCY SPECTRA

BELL 212

OCTOBER 6, 1976

EVENT 2, 45 DEGREES, MICROPHONE 150 METERS WEST

1/3 OCTAVE BAND VS LEVEL (AVE OVER 19 SECONDS)
(DB RE 20 MICRO PA)

| BAND | ENERGY AVERAGE | MAX | MIN | ARITH. AVERAGE | STD DEV |
|-------|-------------------|------|------|-------------------|------------|
| 14 | 75.4 | 76.8 | 71.0 | 75.2 | 1.5 |
| 15 | 84.7 | 86.1 | 79.2 | 84.4 | 1.8 |
| 16 | 81.5 | 83.1 | 75.2 | 81.1 | 2.1 |
| 17 | 86.0 | 88.4 | 78.7 | 85.6 | 2.1 |
| 18 | 83.2 | 85.2 | 74.2 | 82.8 | 2.4 |
| 19 | 79.3 | 81.4 | 69.5 | 78.5 | 3.2 |
| 20 | 80.4 | 84.4 | 75.2 | 79.9 | 2.0 |
| 21 | 78.1 | 80.3 | 72.0 | 77.8 | 2.0 |
| 22 | 79.4 | 81.3 | 76.2 | 79.3 | 1.1 |
| 23 | 78.0 | 80.9 | 76.0 | 77.8 | 1.3 |
| 24 | 79.1 | 82.2 | 76.9 | 78.8 | 1.6 |
| 25 | 79.3 | 81.8 | 75.8 | 79.0 | 1.7 |
| 26 | 79.2 | 82.8 | 74.0 | 78.7 | 2.1 |
| 27 | 78.0 | 82.9 | 72.3 | 77.3 | 2.5 |
| 28 | 74.7 | 80.1 | 66.8 | 73.7 | 3.0 |
| 29 | 69.5 | 72.5 | 59.1 | 68.4 | 3.5 |
| 30 | 65.0 | 67.7 | 56.5 | 64.4 | 2.5 |
| 31 | 65.8 | 68.1 | 57.2 | 65.3 | 2.4 |
| 32 | 65.8 | 68.5 | 56.9 | 65.2 | 2.8 |
| 33 | 65.0 | 67.7 | 57.8 | 64.5 | 2.4 |
| 34 | 61.3 | 64.6 | 54.3 | 60.8 | 2.4 |
| 35 | 58.3 | 60.4 | 52.8 | 58.0 | 1.9 |
| 36 | 56.0 | 58.0 | 51.6 | 55.7 | 1.6 |
| 37 | 51.9 | 54.0 | 48.0 | 51.7 | 1.5 |
| 38 | 48.7 | 51.1 | 46.8 | 48.6 | 1.1 |
| 39 | 47.0 | 48.7 | 45.5 | 46.9 | .7 |
| 40 | 46.4 | 47.8 | 45.1 | 46.4 | .7 |
| DBA | 81.7 | 85.3 | 77.2 | 81.3 | 1.9 |
| DBD | 87.3 | 89.9 | 84.5 | 87.1 | 1.4 |
| OASPL | 91.8 | 93.1 | 90.6 | 91.8 | .7 |
| PNL | 94.7 | 97.3 | 91.3 | 94.5 | 1.4 |
| PNLT | 94.7 | 97.3 | 91.3 | 94.5 | 1.4 |

225°
(Microphone Location
Relative to Helicopter)

TABLE E-VII

5 FOOT HOVER TEST

1/3 OCTAVE NOISE LEVEL FREQUENCY SPECTRA

BELL 212

OCTOBER 6, 1976

EVENT 3, 90 DEGREES, MICROPHONE 150 METERS WEST

1/3 OCTAVE BAND VS LEVEL (AVE OVER 19 SECONDS)
(DB RE 20 MICRO PA)

| BAND | ENERGY AVERAGE | MAX | MIN | ARITH. AVERAGE | STD DEV |
|-------|-------------------|------|------|-------------------|------------|
| 14 | 75.2 | 76.4 | 74.2 | 75.2 | .5 |
| 15 | 84.1 | 85.4 | 82.9 | 84.0 | .6 |
| 16 | 81.3 | 82.8 | 80.3 | 81.2 | .7 |
| 17 | 85.7 | 87.0 | 84.7 | 85.7 | .6 |
| 18 | 83.0 | 85.0 | 81.5 | 82.9 | .8 |
| 19 | 79.0 | 82.1 | 74.9 | 78.7 | 1.7 |
| 20 | 81.9 | 83.3 | 80.1 | 81.8 | .9 |
| 21 | 78.6 | 79.8 | 76.7 | 78.5 | .9 |
| 22 | 78.9 | 80.8 | 73.8 | 78.6 | 1.6 |
| 23 | 75.9 | 79.8 | 71.4 | 75.6 | 1.7 |
| 24 | 76.6 | 80.6 | 70.8 | 76.1 | 2.1 |
| 25 | 76.0 | 80.2 | 69.7 | 75.4 | 2.5 |
| 26 | 74.2 | 78.2 | 67.9 | 73.5 | 2.5 |
| 27 | 68.9 | 72.6 | 63.0 | 68.4 | 2.3 |
| 28 | 65.9 | 71.3 | 60.7 | 65.1 | 2.4 |
| 29 | 64.2 | 68.8 | 60.3 | 63.5 | 2.4 |
| 30 | 58.2 | 64.8 | 52.9 | 56.6 | 3.3 |
| 31 | 56.0 | 62.0 | 50.5 | 54.7 | 3.1 |
| 32 | 55.4 | 61.8 | 50.6 | 54.0 | 3.2 |
| 33 | 54.4 | 60.2 | 49.9 | 53.3 | 2.9 |
| 34 | 52.4 | 57.0 | 47.9 | 51.5 | 2.7 |
| 35 | 50.5 | 54.9 | 46.0 | 49.9 | 2.3 |
| 36 | 48.5 | 52.5 | 45.0 | 48.1 | 1.8 |
| 37 | 46.3 | 50.3 | 45.0 | 46.1 | 1.4 |
| 38 | 45.2 | 46.3 | 45.0 | 45.2 | .3 |
| 39 | 45.2 | 46.0 | 45.0 | 45.2 | .3 |
| 40 | 45.0 | 45.0 | 45.0 | 45.0 | .0 |
| DBA | 76.9 | 80.0 | 73.2 | 76.6 | 1.6 |
| DBD | 84.0 | 86.9 | 81.7 | 83.8 | 1.2 |
| OASPL | 90.7 | 92.3 | 89.8 | 90.7 | .6 |
| PNL | 90.7 | 93.8 | 88.4 | 90.4 | 1.3 |
| PNLT | 90.9 | 93.8 | 88.4 | 90.7 | 1.4 |

180°

(Microphone Location
Relative to Helicopter)

TABLE E-III

5 FOOT HOVER TEST

1/3 OCTAVE NOISE LEVEL FREQUENCY SPECTRA

BELL 212

OCTOBER 6, 1976

EVENT 4, 135 DEGREES, MICROPHONE 150 METERS WEST

1/3 OCTAVE BAND VS LEVEL (AVE OVER 19 SECONDS)
(DB RE 20 MICRO PA)

| BAND | ENERGY AVERAGE | MAX | MIN | ARITH. AVERAGE | STD DEV |
|-------|-------------------|------|------|-------------------|------------|
| 14 | 75.2 | 76.6 | 73.9 | 75.2 | .7 |
| 15 | 84.5 | 85.5 | 83.5 | 84.4 | .5 |
| 16 | 81.6 | 82.8 | 80.6 | 81.6 | .5 |
| 17 | 84.1 | 84.8 | 83.3 | 84.1 | .4 |
| 18 | 81.5 | 82.5 | 79.9 | 81.5 | .7 |
| 19 | 77.4 | 80.1 | 70.2 | 76.9 | 2.2 |
| 20 | 76.3 | 77.7 | 72.7 | 76.1 | 1.2 |
| 21 | 73.9 | 76.0 | 71.7 | 73.8 | 1.1 |
| 22 | 74.6 | 75.7 | 72.6 | 74.5 | .8 |
| 23 | 73.9 | 75.8 | 70.9 | 73.7 | 1.3 |
| 24 | 74.0 | 76.7 | 71.5 | 73.8 | 1.4 |
| 25 | 74.3 | 77.1 | 71.7 | 74.1 | 1.4 |
| 26 | 73.5 | 76.2 | 70.6 | 73.3 | 1.5 |
| 27 | 71.7 | 74.1 | 68.3 | 71.3 | 1.7 |
| 28 | 68.6 | 71.6 | 63.8 | 68.1 | 2.1 |
| 29 | 64.9 | 67.7 | 59.8 | 64.5 | 2.1 |
| 30 | 59.6 | 63.1 | 55.1 | 59.2 | 1.9 |
| 31 | 58.0 | 61.6 | 50.1 | 57.6 | 2.0 |
| 32 | 58.0 | 61.3 | 52.9 | 57.5 | 2.1 |
| 33 | 58.0 | 60.7 | 54.8 | 57.7 | 1.4 |
| 34 | 54.6 | 57.6 | 51.3 | 54.3 | 1.7 |
| 35 | 52.0 | 54.7 | 48.9 | 51.7 | 1.8 |
| 36 | 50.2 | 53.0 | 47.4 | 49.9 | 1.7 |
| 37 | 47.7 | 50.1 | 45.9 | 47.5 | 1.4 |
| 38 | 46.3 | 48.2 | 45.2 | 46.2 | .8 |
| 39 | 46.7 | 48.1 | 45.6 | 46.7 | .6 |
| 40 | 46.2 | 48.0 | 45.4 | 46.2 | .7 |
| DBA | 76.1 | 78.3 | 73.4 | 75.9 | 1.3 |
| DBD | 82.4 | 83.9 | 80.9 | 82.3 | .8 |
| OASPL | 89.3 | 90.0 | 88.6 | 89.2 | .3 |
| PNL | 89.4 | 91.1 | 87.5 | 89.3 | 1.0 |
| PNLT | 89.5 | 91.1 | 87.5 | 89.4 | .9 |

135°
(Microphone Location
Relative to Helicopter)

TABLE E-III

5 FOOT HOVER TEST

1/3 OCTAVE NOISE LEVEL FREQUENCY SPECTRA

BELL 212

OCTOBER 6, 1976

EVENT 5, 180 DEGREES, MICROPHONE 150 METERS WEST

1/3 OCTAVE BAND VS LEVEL (AVE OVER 19 SECONDS)
(DB RE 20 MICRO PA)

| BAND | ENERGY AVERAGE | MAX | MIN | ARITH. AVERAGE | STD DEV |
|-------|-------------------|------|------|-------------------|------------|
| 14 | 75.8 | 76.5 | 75.1 | 75.8 | .2 |
| 15 | 84.4 | 85.4 | 82.4 | 84.3 | .7 |
| 16 | 81.5 | 82.8 | 78.8 | 81.3 | 1.0 |
| 17 | 81.4 | 83.1 | 78.9 | 81.3 | 1.0 |
| 18 | 79.6 | 81.7 | 77.7 | 79.5 | 1.0 |
| 19 | 78.0 | 81.3 | 75.7 | 77.8 | 1.4 |
| 20 | 73.9 | 77.2 | 70.2 | 73.5 | 1.8 |
| 21 | 71.6 | 75.3 | 68.4 | 71.2 | 1.8 |
| 22 | 73.1 | 74.7 | 70.4 | 73.0 | 1.0 |
| 23 | 72.4 | 74.8 | 69.4 | 72.2 | 1.3 |
| 24 | 73.6 | 75.9 | 70.5 | 73.4 | 1.2 |
| 25 | 72.1 | 74.3 | 70.0 | 71.9 | 1.2 |
| 26 | 70.7 | 72.4 | 68.1 | 70.6 | 1.1 |
| 27 | 68.9 | 71.0 | 66.9 | 68.7 | 1.2 |
| 28 | 66.4 | 68.7 | 63.9 | 66.3 | 1.0 |
| 29 | 64.1 | 66.0 | 61.7 | 64.0 | 1.2 |
| 30 | 58.8 | 61.5 | 56.6 | 58.6 | 1.3 |
| 31 | 55.7 | 58.6 | 53.0 | 55.4 | 1.4 |
| 32 | 55.5 | 57.9 | 53.2 | 55.3 | 1.4 |
| 33 | 55.7 | 57.4 | 52.8 | 55.5 | 1.2 |
| 34 | 54.2 | 56.7 | 50.8 | 54.0 | 1.4 |
| 35 | 51.3 | 52.9 | 49.0 | 51.1 | 1.2 |
| 36 | 49.4 | 51.0 | 47.2 | 49.3 | 1.0 |
| 37 | 46.4 | 47.9 | 45.0 | 46.3 | .7 |
| 38 | 45.4 | 46.4 | 45.0 | 45.3 | .4 |
| 39 | 45.8 | 46.6 | 45.0 | 45.7 | .5 |
| 40 | 46.5 | 47.8 | 45.2 | 46.4 | .7 |
| DBA | 74.0 | 75.6 | 72.8 | 74.0 | .8 |
| DBD | 80.6 | 81.8 | 79.2 | 80.5 | .7 |
| OASPL | 88.4 | 89.5 | 87.1 | 88.3 | .6 |
| PNL | 87.6 | 89.0 | 86.2 | 87.5 | .7 |
| PNLT | 87.6 | 89.0 | 86.2 | 87.5 | .7 |

90°
(Microphone Location
Relative to Helicopt)

TABLE E-VII

5 FOOT HOVER TEST

1/3 OCTAVE NOISE LEVEL FREQUENCY SPECTRA

BELL 212

OCTOBER 6, 1976

EVENT 6, 225 DEGREES, MICROPHONE 150 METERS WEST

1/3 OCTAVE BAND VS LEVEL (AVE OVER 19 SECONDS)
(DB RE 20 MICRO PA)

| BAND | ENERGY AVERAGE | MAX | MIN | ARITH. AVERAGE | STD DEV |
|-------|-------------------|------|------|-------------------|------------|
| 14 | 76.9 | 77.8 | 76.3 | 76.9 | .4 |
| 15 | 84.9 | 86.1 | 83.6 | 84.9 | .7 |
| 16 | 81.6 | 83.0 | 79.5 | 81.5 | .9 |
| 17 | 82.4 | 83.6 | 80.7 | 82.3 | .9 |
| 18 | 80.9 | 82.6 | 78.8 | 80.8 | .9 |
| 19 | 78.9 | 80.5 | 76.4 | 78.8 | 1.1 |
| 20 | 77.0 | 78.5 | 74.5 | 76.8 | 1.0 |
| 21 | 74.7 | 76.5 | 71.7 | 74.6 | 1.3 |
| 22 | 73.7 | 76.1 | 69.5 | 73.5 | 1.5 |
| 23 | 73.3 | 75.8 | 69.0 | 73.1 | 1.6 |
| 24 | 72.8 | 75.6 | 69.3 | 72.5 | 1.6 |
| 25 | 71.9 | 74.5 | 66.8 | 71.6 | 1.8 |
| 26 | 71.6 | 74.9 | 66.9 | 71.2 | 1.9 |
| 27 | 70.1 | 73.8 | 65.4 | 69.7 | 1.9 |
| 28 | 67.6 | 71.1 | 63.8 | 67.3 | 1.5 |
| 29 | 64.2 | 67.9 | 61.2 | 63.9 | 1.7 |
| 30 | 60.2 | 64.0 | 56.7 | 59.9 | 1.6 |
| 31 | 60.2 | 63.2 | 56.0 | 59.8 | 1.9 |
| 32 | 61.0 | 64.2 | 56.2 | 60.5 | 2.2 |
| 33 | 60.0 | 63.1 | 55.7 | 59.5 | 2.0 |
| 34 | 57.5 | 60.0 | 53.7 | 57.1 | 1.8 |
| 35 | 55.6 | 58.2 | 50.8 | 55.2 | 2.1 |
| 36 | 55.5 | 58.8 | 49.5 | 54.9 | 2.4 |
| 37 | 52.0 | 54.7 | 47.9 | 51.6 | 2.0 |
| 38 | 50.8 | 53.8 | 47.2 | 50.5 | 1.8 |
| 39 | 55.3 | 58.4 | 51.4 | 55.0 | 1.6 |
| 40 | 61.3 | 64.7 | 57.2 | 60.9 | 1.7 |
| DBA | 75.2 | 77.4 | 72.0 | 75.0 | 1.3 |
| DBD | 81.9 | 83.6 | 79.5 | 81.8 | 1.1 |
| OASPL | 89.3 | 90.5 | 88.2 | 89.2 | .7 |
| PNL | 89.6 | 91.9 | 86.9 | 89.4 | 1.3 |
| PNLT | 89.6 | 91.9 | 86.9 | 89.4 | 1.3 |

45°
(Microphone Location
Relative to Helicopter)

TABLE E-VII

5 FOOT HOVER TEST

1/3 OCTAVE NOISE LEVEL FREQUENCY SPECTRA

BELL 212

OCTOBER 6, 1976

EVENT 1, 0 DEGREES, MICROPHONE 150 METERS EAST

1/3 OCTAVE BAND VS LEVEL (AVE OVER 19 SECONDS)
(DB RE 20 MICRO PA)

| BAND | ENERGY AVERAGE | MAX | MIN | ARITH. AVERAGE | STD DEV |
|-------|-------------------|-------|------|-------------------|------------|
| 14 | 76.8 | 78.1 | 74.6 | 76.7 | 1.0 |
| 15 | 84.6 | 86.2 | 82.9 | 84.5 | .9 |
| 16 | 81.7 | 84.1 | 79.2 | 81.5 | 1.4 |
| 17 | 80.8 | 84.3 | 76.6 | 80.3 | 2.1 |
| 18 | 77.7 | 81.5 | 72.3 | 77.0 | 2.6 |
| 19 | 77.2 | 82.4 | 73.5 | 75.6 | 2.3 |
| 20 | 79.4 | 83.2 | 74.5 | 78.9 | 2.0 |
| 21 | 81.2 | 84.9 | 77.2 | 80.8 | 2.1 |
| 22 | 82.6 | 86.4 | 77.8 | 81.8 | 2.5 |
| 23 | 84.4 | 85.4 | 78.3 | 83.6 | 2.6 |
| 24 | 84.5 | 86.2 | 78.7 | 83.9 | 2.5 |
| 25 | 83.3 | 85.1 | 76.2 | 82.9 | 2.1 |
| 26 | 82.5 | 85.4 | 74.5 | 81.9 | 2.6 |
| 27 | 79.9 | 83.1 | 72.9 | 79.3 | 2.5 |
| 28 | 77.3 | 80.5 | 71.5 | 76.7 | 2.3 |
| 29 | 74.1 | 76.2 | 69.5 | 73.8 | 1.6 |
| 30 | 71.1 | 72.9 | 68.0 | 70.8 | 1.6 |
| 31 | 69.3 | 71.2 | 66.3 | 69.0 | 1.5 |
| 32 | 66.7 | 67.7 | 65.0 | 66.6 | .9 |
| 33 | 65.7 | 65.5 | 65.0 | 65.5 | 1.3 |
| 34 | 66.3 | 65.0 | 65.0 | 65.6 | 1.9 |
| 35 | 65.2 | 65.0 | 65.0 | 65.2 | .5 |
| 36 | 65.0 | 65.0 | 65.0 | 65.0 | .2 |
| 37 | 65.0 | 65.0 | 65.0 | 65.0 | .0 |
| 38 | 65.0 | 65.0 | 65.0 | 65.0 | .0 |
| 39 | 65.0 | 65.0 | 65.0 | 65.0 | .0 |
| 40 | 65.0 | 65.0 | 65.0 | 65.0 | .0 |
| DBA | 85.0 | 86.6 | 79.7 | 84.7 | 1.8 |
| DBD | 90.3 | 92.3 | 85.0 | 89.9 | 1.9 |
| OASPL | 93.2 | 94.9 | 90.7 | 93.1 | 1.1 |
| PNL | 98.7 | 102.1 | 94.6 | 98.5 | 1.5 |
| PNLT | 98.9 | 103.5 | 94.6 | 98.5 | 1.7 |

90°
(Microphone Location
Relative to Helicopter)

TABLE E-VII

5 FOOT HOVER TEST

1/3 OCTAVE NOISE LEVEL FREQUENCY SPECTRA

BELL 212

OCTOBER 6, 1976

EVENT 2, 45 DEGREES, MICROPHONE 150 METERS EAST

1/3 OCTAVE BAND VS LEVEL (AVE OVER 19 SECONDS)
(DB RE 20 MICRO PA)

| BAND | ENERGY AVERAGE | MAX | MIN | ARITH. AVERAGE | STD DEV |
|-------|-------------------|------|------|-------------------|------------|
| 14 | 77.1 | 78.7 | 75.9 | 77.0 | .8 |
| 15 | 84.4 | 85.4 | 83.2 | 84.3 | .6 |
| 16 | 82.1 | 83.4 | 80.4 | 82.1 | .6 |
| 17 | 82.1 | 83.3 | 80.3 | 82.0 | .7 |
| 18 | 78.5 | 80.3 | 76.3 | 78.4 | 1.0 |
| 19 | 75.6 | 78.4 | 70.2 | 75.2 | 2.1 |
| 20 | 76.9 | 79.9 | 73.5 | 76.6 | 1.6 |
| 21 | 75.6 | 79.7 | 72.8 | 75.3 | 1.6 |
| 22 | 74.7 | 79.3 | 70.3 | 74.3 | 1.9 |
| 23 | 74.7 | 77.9 | 71.5 | 74.4 | 1.6 |
| 24 | 75.1 | 79.3 | 71.7 | 74.6 | 2.1 |
| 25 | 75.2 | 78.4 | 70.8 | 74.6 | 2.2 |
| 26 | 75.0 | 78.5 | 70.2 | 74.3 | 2.5 |
| 27 | 73.3 | 77.9 | 67.8 | 72.4 | 2.8 |
| 28 | 71.4 | 76.0 | 65.7 | 70.6 | 2.7 |
| 29 | 68.6 | 72.4 | 65.0 | 67.9 | 2.4 |
| 30 | 66.8 | 70.2 | 65.0 | 66.4 | 1.7 |
| 31 | 66.1 | 70.4 | 65.0 | 65.8 | 1.5 |
| 32 | 65.6 | 69.6 | 65.0 | 65.4 | 1.2 |
| 33 | 65.2 | 66.8 | 65.0 | 65.1 | .5 |
| 34 | 65.0 | 65.5 | 65.0 | 65.0 | .1 |
| 35 | 65.0 | 65.0 | 65.0 | 65.0 | .0 |
| 36 | 65.0 | 65.0 | 65.0 | 65.0 | .0 |
| 37 | 65.0 | 65.0 | 65.0 | 65.0 | .0 |
| 38 | 65.0 | 65.0 | 65.0 | 65.0 | .0 |
| 39 | 65.0 | 65.0 | 65.0 | 65.0 | .0 |
| 40 | 65.0 | 65.0 | 65.0 | 65.0 | .0 |
| DBA | 78.5 | 83.2 | 74.4 | 77.8 | 2.4 |
| DED | 84.1 | 87.4 | 81.5 | 83.8 | 1.6 |
| OASPL | 90.0 | 92.0 | 88.9 | 90.0 | .7 |
| PNL | 94.0 | 96.3 | 92.8 | 93.9 | .9 |
| PNLT | 94.0 | 96.3 | 92.8 | 93.9 | .9 |

45°
(Microphone Location
Relative to Helicopter)

TABLE E-VII

5 FOOT HOVER TEST

1/3 OCTAVE NOISE LEVEL FREQUENCY SPECTRA

BELL 212

OCTOBER 6, 1976

EVENT 3, 90 DEGREES, MICROPHONE 150 METERS EAST

1/3 OCTAVE BAND US LEVEL (AVE OVER 19 SECONDS)
(DB RE 20 MICRO PA)

| BAND | ENERGY AVERAGE | MAX | MIN | ARITH. AVERAGE | STD DEV |
|-------|-------------------|------|------|-------------------|------------|
| 14 | 76.1 | 77.2 | 74.9 | 76.1 | .6 |
| 15 | 83.7 | 84.6 | 82.7 | 83.7 | .5 |
| 16 | 82.1 | 83.5 | 80.5 | 82.0 | .8 |
| 17 | 83.0 | 84.0 | 81.8 | 82.9 | .6 |
| 18 | 80.1 | 81.7 | 78.1 | 80.0 | 1.0 |
| 19 | 78.1 | 80.4 | 75.0 | 77.9 | 1.4 |
| 20 | 77.8 | 80.0 | 75.4 | 77.7 | 1.2 |
| 21 | 76.5 | 78.4 | 74.1 | 76.4 | 1.1 |
| 22 | 76.7 | 79.6 | 73.4 | 76.5 | 1.5 |
| 23 | 78.4 | 82.5 | 73.9 | 77.9 | 2.2 |
| 24 | 79.4 | 83.1 | 72.9 | 78.7 | 2.6 |
| 25 | 79.1 | 83.2 | 74.0 | 78.5 | 2.4 |
| 26 | 78.1 | 81.6 | 73.7 | 77.6 | 2.1 |
| 27 | 75.7 | 79.0 | 71.7 | 75.3 | 1.9 |
| 28 | 73.8 | 77.3 | 70.9 | 73.5 | 1.7 |
| 29 | 70.9 | 73.7 | 67.3 | 70.3 | 2.2 |
| 30 | 67.6 | 71.5 | 63.1 | 66.9 | 2.4 |
| 31 | 65.0 | 69.4 | 60.2 | 64.2 | 2.8 |
| 32 | 61.6 | 65.7 | 56.3 | 60.6 | 3.0 |
| 33 | 59.1 | 62.6 | 55.1 | 58.5 | 2.4 |
| 34 | 58.6 | 62.2 | 55.0 | 58.0 | 2.2 |
| 35 | 56.6 | 59.0 | 55.0 | 56.4 | 1.3 |
| 36 | 55.8 | 58.4 | 55.0 | 55.8 | .9 |
| 37 | 55.1 | 55.9 | 55.0 | 55.1 | .2 |
| 38 | 55.0 | 55.0 | 55.0 | 55.0 | .0 |
| 39 | 55.6 | 57.0 | 55.0 | 55.6 | .7 |
| 40 | 60.9 | 63.4 | 56.7 | 60.5 | 1.9 |
| DBA | 80.7 | 84.2 | 76.6 | 80.3 | 1.7 |
| DBD | 86.0 | 89.6 | 82.6 | 85.6 | 1.6 |
| OASPL | 90.2 | 92.3 | 88.9 | 90.1 | .9 |
| PNL | 93.8 | 96.8 | 90.6 | 93.6 | 1.5 |
| PNLT | 94.1 | 96.8 | 90.6 | 93.9 | 1.5 |

0°
(Microphone location
relative to Helicopter)

TABLE E-VII
5 FOOT HOVER TEST

1/3 OCTAVE NOISE LEVEL FREQUENCY SPECTRA

BELL 212

OCTOBER 6, 1976

EVENT 4, 135 DEGREES, MICROPHONE 150 METERS EAST

1/3 OCTAVE BAND VS LEVEL (AVE OVER 19 SECONDS)
(DB RE 20 MICRO PA)

| BAND | ENERGY AVERAGE | MAX | MIN | ARITH. AVERAGE | STD DEV |
|-------|-------------------|------|------|-------------------|------------|
| 14 | 75.5 | 76.7 | 74.4 | 75.4 | .6 |
| 15 | 83.9 | 84.7 | 83.4 | 83.9 | .3 |
| 16 | 82.0 | 83.2 | 80.8 | 82.0 | .7 |
| 17 | 82.4 | 83.0 | 81.3 | 82.4 | .4 |
| 18 | 79.8 | 81.0 | 77.8 | 79.7 | .8 |
| 19 | 77.7 | 79.4 | 75.2 | 77.5 | 1.2 |
| 20 | 75.6 | 78.4 | 71.1 | 75.3 | 1.6 |
| 21 | 74.5 | 78.1 | 68.3 | 73.8 | 2.6 |
| 22 | 75.0 | 79.4 | 70.4 | 74.3 | 2.6 |
| 23 | 75.7 | 78.9 | 69.9 | 74.9 | 2.8 |
| 24 | 75.5 | 79.9 | 69.5 | 74.6 | 2.8 |
| 25 | 74.8 | 77.9 | 70.2 | 74.4 | 2.0 |
| 26 | 73.7 | 78.4 | 68.7 | 73.1 | 2.4 |
| 27 | 72.4 | 76.8 | 65.7 | 71.3 | 3.1 |
| 28 | 71.1 | 75.4 | 64.2 | 70.1 | 3.2 |
| 29 | 68.9 | 73.9 | 62.9 | 67.8 | 3.2 |
| 30 | 65.5 | 71.8 | 58.8 | 64.0 | 3.5 |
| 31 | 62.7 | 69.2 | 56.0 | 61.2 | 3.5 |
| 32 | 60.6 | 66.8 | 53.8 | 59.0 | 3.8 |
| 33 | 59.1 | 64.9 | 51.6 | 57.4 | 3.8 |
| 34 | 57.8 | 65.3 | 50.1 | 55.6 | 4.2 |
| 35 | 55.5 | 62.7 | 48.0 | 53.3 | 4.2 |
| 36 | 53.6 | 59.0 | 47.2 | 52.0 | 3.7 |
| 37 | 50.4 | 54.5 | 45.3 | 49.4 | 3.0 |
| 38 | 49.9 | 57.4 | 45.0 | 48.3 | 3.2 |
| 39 | 51.1 | 54.1 | 46.9 | 50.6 | 2.1 |
| 40 | 56.6 | 58.8 | 52.5 | 56.2 | 1.8 |
| DBA | 77.3 | 80.0 | 72.3 | 76.7 | 2.3 |
| DBD | 82.6 | 84.7 | 78.6 | 82.2 | 1.9 |
| OASPL | 88.7 | 89.7 | 87.1 | 88.6 | .8 |
| PNL | 90.7 | 93.6 | 86.4 | 90.2 | 2.2 |
| PNLT | 90.9 | 94.1 | 86.4 | 90.3 | 2.3 |

315°
(Microphone Location
Relative to Heliopt)

TABLE E-VII

5 FOOT HOVER TEST

1/3 OCTAVE NOISE LEVEL FREQUENCY SPECTRA

BELL 212

OCTOBER 6, 1976

EVENT 5, 180 DEGREES, MICROPHONE 150 METERS EAST

1/3 OCTAVE BAND VS LEVEL (AVE OVER 19 SECONDS)
(DB RE 20 MICRO PA)

| BAND | ENERGY AVERAGE | MAX | MIN | ARITH. AVERAGE | STD DEV |
|-------|-------------------|------|------|-------------------|------------|
| 14 | 75.7 | 76.3 | 75.1 | 75.7 | .3 |
| 15 | 83.2 | 83.8 | 82.4 | 83.2 | .4 |
| 16 | 81.7 | 82.9 | 80.6 | 81.7 | .5 |
| 17 | 81.2 | 81.9 | 79.8 | 81.2 | .5 |
| 18 | 78.7 | 80.2 | 76.9 | 78.7 | .7 |
| 19 | 77.2 | 78.6 | 74.0 | 77.1 | 1.2 |
| 20 | 76.2 | 78.2 | 73.1 | 76.0 | 1.2 |
| 21 | 74.4 | 78.9 | 71.3 | 74.0 | 1.8 |
| 22 | 75.0 | 77.4 | 71.2 | 74.7 | 1.5 |
| 23 | 74.8 | 77.1 | 71.1 | 74.4 | 1.8 |
| 24 | 76.1 | 79.0 | 70.4 | 75.4 | 2.5 |
| 25 | 75.8 | 79.8 | 70.6 | 75.0 | 2.7 |
| 26 | 75.0 | 78.9 | 68.4 | 73.9 | 3.1 |
| 27 | 72.6 | 77.6 | 65.1 | 71.4 | 3.4 |
| 28 | 70.8 | 76.1 | 63.3 | 69.6 | 3.3 |
| 29 | 68.6 | 74.9 | 61.1 | 67.1 | 3.6 |
| 30 | 65.9 | 72.7 | 57.9 | 64.4 | 3.5 |
| 31 | 62.9 | 68.6 | 56.4 | 61.0 | 3.1 |
| 32 | 60.6 | 66.6 | 53.9 | 59.3 | 3.3 |
| 33 | 59.0 | 65.2 | 52.8 | 57.6 | 3.3 |
| 34 | 56.5 | 62.0 | 50.7 | 55.3 | 3.3 |
| 35 | 53.5 | 57.5 | 48.9 | 52.7 | 2.6 |
| 36 | 52.8 | 58.1 | 48.0 | 51.8 | 2.8 |
| 37 | 49.5 | 53.8 | 45.8 | 48.9 | 2.3 |
| 38 | 48.0 | 52.1 | 45.0 | 47.5 | 2.0 |
| 39 | 47.6 | 49.8 | 45.0 | 47.3 | 1.5 |
| 40 | 51.2 | 54.9 | 47.6 | 50.7 | 2.0 |
| DBA | 77.9 | 82.9 | 72.6 | 77.0 | 2.8 |
| DBD | 83.0 | 86.7 | 78.7 | 82.5 | 2.1 |
| OASPL | 88.5 | 90.0 | 87.0 | 88.4 | .7 |
| PNL | 90.8 | 94.5 | 86.4 | 90.2 | 2.2 |
| PNLT | 91.0 | 95.4 | 86.4 | 90.3 | 2.4 |

270°
(Microphone Location
Relative to Helicopter)

TABLE E-VII

5 FOOT HOVER TEST

1/3 OCTAVE NOISE LEVEL FREQUENCY SPECTRA

BELL 212

OCTOBER 6, 1976

EVENT 6, 225 DEGREES, MICROPHONE 150 METERS EAST

1/3 OCTAVE BAND VS LEVEL (AVE OVER 19 SECONDS)
(DB RE 20 MICRO PA)

| BAND | ENERGY AVERAGE | MAX | MIN | ARITH. AVERAGE | STD DEV |
|-------|-------------------|-------|------|-------------------|------------|
| 14 | 75.8 | 76.8 | 74.0 | 75.7 | .7 |
| 15 | 82.4 | 83.5 | 80.7 | 82.4 | .7 |
| 16 | 81.2 | 82.5 | 80.2 | 81.2 | .6 |
| 17 | 83.0 | 84.4 | 81.9 | 82.9 | .7 |
| 18 | 79.9 | 81.4 | 78.6 | 79.9 | .7 |
| 19 | 77.5 | 79.9 | 74.6 | 77.4 | 1.2 |
| 20 | 79.4 | 81.6 | 77.2 | 79.1 | 1.4 |
| 21 | 78.1 | 81.5 | 74.6 | 77.7 | 1.9 |
| 22 | 79.1 | 83.7 | 75.3 | 78.6 | 2.1 |
| 23 | 79.5 | 84.8 | 74.5 | 78.4 | 2.9 |
| 24 | 80.1 | 86.1 | 74.9 | 78.3 | 3.1 |
| 25 | 79.3 | 85.5 | 73.0 | 77.6 | 3.6 |
| 26 | 78.4 | 85.2 | 72.7 | 76.5 | 3.7 |
| 27 | 76.5 | 83.4 | 71.6 | 74.7 | 3.6 |
| 28 | 74.8 | 81.7 | 67.6 | 72.8 | 3.8 |
| 29 | 72.1 | 78.8 | 65.2 | 70.4 | 3.6 |
| 30 | 69.0 | 74.9 | 61.5 | 67.9 | 3.1 |
| 31 | 67.3 | 73.5 | 59.8 | 66.0 | 3.2 |
| 32 | 65.6 | 72.6 | 58.4 | 63.7 | 3.7 |
| 33 | 65.1 | 72.5 | 56.7 | 62.4 | 4.3 |
| 34 | 62.8 | 70.4 | 53.5 | 59.9 | 4.6 |
| 35 | 58.9 | 66.4 | 51.6 | 56.7 | 3.9 |
| 36 | 57.2 | 64.3 | 50.6 | 55.2 | 3.8 |
| 37 | 53.7 | 60.7 | 47.8 | 51.9 | 3.6 |
| 38 | 50.8 | 56.5 | 46.2 | 49.6 | 2.9 |
| 39 | 48.3 | 52.4 | 45.0 | 47.7 | 2.1 |
| 40 | 48.2 | 51.5 | 46.1 | 47.9 | 1.5 |
| DBA | 82.0 | 88.6 | 76.7 | 80.3 | 3.4 |
| DBD | 86.9 | 92.8 | 82.5 | 85.7 | 2.9 |
| OASPL | 90.4 | 94.0 | 88.4 | 90.1 | 1.6 |
| PNL | 94.4 | 100.4 | 89.9 | 93.3 | 2.9 |
| PNLT | 94.4 | 100.4 | 89.9 | 93.3 | 2.9 |

225°

(Microphone Location
Relative to Helicopter)

TABLE E-VII
5 FOOT HOVER TEST

1/3 OCTAVE NOISE LEVEL FREQUENCY SPECTRA

BELL 212

OCTOBER 6, 1976

EVENT 8, 315 DEGREES, MICROPHONE 150 METERS EAST

1/3 OCTAVE BAND VS LEVEL (AVE OVER 19 SECONDS)
(DB RE 20 MICRO PA)

| BAND | ENERGY AVERAGE | MAX | MIN | ARITH. AVERAGE | STD DEV |
|-------|-------------------|-------|------|-------------------|------------|
| 14 | 77.4 | 79.9 | 74.1 | 77.2 | 1.4 |
| 15 | 86.3 | 88.6 | 83.9 | 86.2 | 1.0 |
| 16 | 85.1 | 86.9 | 82.7 | 85.0 | 1.0 |
| 17 | 87.1 | 89.1 | 85.3 | 87.0 | 1.0 |
| 18 | 84.3 | 88.1 | 81.4 | 84.0 | 1.6 |
| 19 | 83.6 | 88.0 | 79.1 | 83.2 | 2.0 |
| 20 | 85.5 | 88.5 | 79.7 | 85.0 | 2.2 |
| 21 | 87.3 | 90.3 | 81.6 | 86.8 | 2.3 |
| 22 | 87.8 | 90.6 | 81.9 | 87.4 | 2.1 |
| 23 | 88.2 | 91.0 | 83.0 | 87.8 | 2.0 |
| 24 | 88.7 | 91.9 | 83.1 | 88.3 | 2.1 |
| 25 | 88.1 | 91.2 | 82.0 | 87.6 | 2.1 |
| 26 | 88.2 | 92.2 | 81.7 | 87.8 | 2.0 |
| 27 | 85.9 | 90.0 | 80.5 | 85.3 | 2.2 |
| 28 | 84.6 | 88.1 | 80.0 | 84.3 | 1.8 |
| 29 | 82.4 | 85.6 | 79.0 | 82.0 | 1.8 |
| 30 | 79.0 | 81.6 | 75.3 | 78.7 | 1.7 |
| 31 | 76.4 | 78.5 | 74.2 | 76.2 | 1.2 |
| 32 | 72.7 | 74.8 | 67.8 | 72.6 | 1.3 |
| 33 | 70.9 | 73.3 | 67.7 | 70.7 | 1.3 |
| 34 | 70.6 | 74.4 | 67.2 | 70.3 | 1.7 |
| 35 | 67.6 | 70.4 | 64.3 | 67.4 | 1.6 |
| 36 | 65.0 | 66.5 | 61.9 | 64.8 | 1.4 |
| 37 | 61.2 | 63.9 | 58.5 | 61.0 | 1.3 |
| 38 | 58.7 | 60.7 | 56.4 | 58.6 | 1.2 |
| 39 | 55.9 | 57.5 | 55.0 | 55.8 | .7 |
| 40 | 55.2 | 55.9 | 55.0 | 55.2 | .2 |
| DBA | 91.1 | 94.0 | 87.4 | 90.9 | 1.4 |
| DBD | 95.6 | 98.3 | 92.7 | 95.4 | 1.4 |
| OASPL | 97.8 | 100.5 | 95.1 | 97.6 | 1.3 |
| PNL | 103.4 | 106.3 | 99.8 | 103.1 | 1.4 |
| PNLT | 103.5 | 106.6 | 99.8 | 103.2 | 1.4 |

135°
*(Microphone Location
Relative to Helicopter)*

TABLE E-VII
5 FOOT HOVER TEST

1/3 OCTAVE NOISE LEVEL FREQUENCY SPECTRA

BELL 212

OCTOBER 6, 1976

EVENT 15, 270 DEGREES, MICROPHONE 150 METERS EAST

1/3 OCTAVE BAND VS LEVEL (AVE OVER 19 SECONDS)
(DB RE 20 MICRO PA)

| BAND | ENERGY AVERAGE | MAX | MIN | ARITH. AVERAGE | STD DEV |
|-------|-------------------|-------|------|-------------------|------------|
| 14 | 76.7 | 78.5 | 75.1 | 76.6 | .8 |
| 15 | 84.6 | 85.8 | 82.8 | 84.5 | .9 |
| 16 | 83.4 | 84.9 | 81.4 | 83.3 | .9 |
| 17 | 87.7 | 89.1 | 86.5 | 87.6 | .7 |
| 18 | 83.6 | 86.2 | 81.3 | 83.4 | 1.2 |
| 19 | 80.6 | 84.1 | 76.6 | 80.0 | 2.1 |
| 20 | 86.5 | 88.0 | 83.8 | 86.4 | 1.1 |
| 21 | 84.2 | 87.4 | 82.3 | 84.0 | 1.2 |
| 22 | 86.7 | 89.0 | 83.3 | 86.5 | 1.2 |
| 23 | 86.5 | 89.4 | 81.9 | 86.2 | 1.6 |
| 24 | 87.0 | 90.5 | 83.0 | 86.7 | 1.8 |
| 25 | 86.2 | 90.8 | 81.4 | 85.8 | 1.9 |
| 26 | 85.2 | 89.8 | 81.5 | 84.7 | 2.0 |
| 27 | 82.4 | 84.9 | 77.5 | 82.1 | 1.9 |
| 28 | 80.5 | 83.0 | 75.4 | 80.2 | 1.8 |
| 29 | 78.8 | 81.7 | 74.1 | 78.4 | 2.2 |
| 30 | 75.6 | 79.2 | 71.0 | 75.2 | 2.0 |
| 31 | 72.1 | 74.7 | 68.5 | 71.8 | 1.5 |
| 32 | 68.2 | 71.3 | 64.1 | 67.9 | 1.7 |
| 33 | 66.8 | 69.8 | 62.0 | 66.6 | 1.6 |
| 34 | 66.6 | 69.5 | 61.0 | 66.2 | 1.9 |
| 35 | 64.1 | 66.4 | 59.6 | 63.9 | 1.5 |
| 36 | 62.1 | 64.9 | 58.4 | 61.9 | 1.4 |
| 37 | 58.9 | 61.5 | 55.7 | 58.7 | 1.4 |
| 38 | 56.9 | 59.0 | 55.0 | 56.7 | 1.1 |
| 39 | 55.1 | 55.5 | 55.0 | 55.1 | .2 |
| 40 | 55.0 | 55.0 | 55.0 | 55.0 | .0 |
| DBA | 88.1 | 91.1 | 84.6 | 87.2 | 1.6 |
| DBD | 93.1 | 96.0 | 89.6 | 92.8 | 1.5 |
| OASPL | 96.0 | 97.9 | 94.1 | 95.9 | 1.0 |
| PNL | 100.7 | 103.1 | 97.8 | 100.5 | 1.3 |
| PNLT | 100.7 | 103.1 | 97.8 | 100.5 | 1.3 |

180°
(Microphone Location)
(Relative to Helicopter)

TABLE E-VII

500 FOOT HOVER TEST

1/3 OCTAVE NOISE LEVEL FREQUENCY SPECTRA

BELL 212

OCTOBER 6, 1976

EVENT 20, 180 DEGREES, MICROPHONE 150 METERS WEST

1/3 OCTAVE BAND VS LEVEL (AVE OVER 19 SECONDS)
(DB RE 20 MICRO PA)

| BAND | ENERGY AVERAGE | MAX | MIN | ARITH. AVERAGE | STD DEV |
|-------|-------------------|------|------|-------------------|------------|
| 14 | 71.2 | 73.1 | 67.4 | 71.0 | 1.3 |
| 15 | 75.7 | 78.5 | 71.5 | 75.4 | 1.7 |
| 16 | 69.8 | 73.3 | 64.6 | 69.0 | 2.8 |
| 17 | 73.6 | 76.4 | 67.9 | 73.1 | 2.2 |
| 18 | 75.2 | 77.4 | 70.0 | 74.9 | 1.8 |
| 19 | 73.7 | 76.2 | 68.4 | 73.4 | 1.9 |
| 20 | 68.8 | 71.7 | 65.1 | 68.5 | 1.9 |
| 21 | 59.6 | 62.5 | 56.8 | 59.4 | 1.5 |
| 22 | 66.3 | 68.1 | 63.4 | 66.1 | 1.4 |
| 23 | 73.5 | 75.3 | 70.2 | 73.2 | 1.5 |
| 24 | 75.6 | 77.7 | 71.9 | 75.3 | 1.7 |
| 25 | 73.3 | 75.6 | 69.3 | 73.0 | 1.7 |
| 26 | 68.5 | 70.4 | 63.6 | 68.3 | 1.4 |
| 27 | 74.2 | 76.2 | 69.2 | 74.1 | 1.4 |
| 28 | 68.7 | 70.8 | 63.1 | 68.5 | 1.5 |
| 29 | 70.2 | 72.6 | 65.7 | 70.0 | 1.3 |
| 30 | 67.1 | 69.7 | 63.1 | 67.0 | 1.3 |
| 31 | 64.3 | 66.4 | 60.6 | 64.2 | 1.2 |
| 32 | 62.1 | 64.4 | 59.9 | 62.0 | 1.1 |
| 33 | 61.0 | 63.8 | 58.8 | 60.8 | 1.2 |
| 34 | 57.3 | 59.5 | 54.0 | 57.1 | 1.4 |
| 35 | 54.2 | 56.8 | 51.2 | 54.0 | 1.3 |
| 36 | 51.5 | 53.8 | 48.2 | 51.3 | 1.2 |
| 37 | 46.6 | 48.3 | 45.1 | 46.6 | .7 |
| 38 | 45.1 | 46.0 | 45.0 | 45.1 | .2 |
| 39 | 45.1 | 46.1 | 45.0 | 45.1 | .3 |
| 40 | 45.0 | 45.2 | 45.0 | 45.0 | .1 |
| DBA | 77.2 | 79.1 | 73.2 | 77.0 | 1.2 |
| DED | 81.7 | 83.5 | 78.3 | 81.6 | 1.1 |
| OASPL | 84.3 | 85.8 | 82.7 | 84.2 | .8 |
| PNL | 88.9 | 90.5 | 85.5 | 88.8 | 1.1 |
| PNLT | 89.0 | 90.5 | 85.5 | 88.8 | 1.0 |

90°
(Microphone Location
Relative to Helicopter)

TABLE E-VII

500 FOOT HOVER TEST

1/3 OCTAVE NOISE LEVEL FREQUENCY SPECTRA

BELL 212

OCTOBER 5, 1976

EVENT 20, 190 DEGREES, MICROPHONE 150 METERS EAST

1/3 OCTAVE BAND VS LEVEL (AVE OVER 19 SECONDS)
(DB RE 20 MICRO PA)

| BAND | ENERGY AVERAGE | MAX | MIN | ARITH. AVERAGE | STD DEV |
|-------|-------------------|------|------|-------------------|------------|
| 14 | 75.8 | 78.0 | 71.1 | 75.5 | 2.0 |
| 15 | 80.4 | 82.4 | 75.3 | 80.0 | 1.9 |
| 16 | 72.0 | 76.5 | 67.1 | 71.5 | 2.2 |
| 17 | 79.5 | 80.7 | 77.9 | 79.4 | .7 |
| 18 | 74.9 | 76.0 | 73.4 | 74.8 | .8 |
| 19 | 64.4 | 66.1 | 61.2 | 64.3 | 1.1 |
| 20 | 64.5 | 66.1 | 58.2 | 64.2 | 1.8 |
| 21 | 64.1 | 65.5 | 61.5 | 64.0 | 1.0 |
| 22 | 74.9 | 77.0 | 72.4 | 74.7 | 1.2 |
| 23 | 77.2 | 78.8 | 74.9 | 77.1 | 1.0 |
| 24 | 75.8 | 77.5 | 73.4 | 75.7 | 1.1 |
| 25 | 68.0 | 70.2 | 64.2 | 67.8 | 1.5 |
| 26 | 76.4 | 78.5 | 73.2 | 76.2 | 1.3 |
| 27 | 72.5 | 74.6 | 68.6 | 72.3 | 1.6 |
| 28 | 74.5 | 76.5 | 69.8 | 74.2 | 1.8 |
| 29 | 74.4 | 76.6 | 68.0 | 73.9 | 2.4 |
| 30 | 70.8 | 72.8 | 64.1 | 70.3 | 2.3 |
| 31 | 69.1 | 71.1 | 62.5 | 68.7 | 2.3 |
| 32 | 68.4 | 70.6 | 62.7 | 68.0 | 2.2 |
| 33 | 67.0 | 69.1 | 62.5 | 66.7 | 1.8 |
| 34 | 63.2 | 66.5 | 57.8 | 62.8 | 2.2 |
| 35 | 60.3 | 62.8 | 55.9 | 60.0 | 1.7 |
| 36 | 57.4 | 59.5 | 53.3 | 57.1 | 1.5 |
| 37 | 52.5 | 54.8 | 49.2 | 52.3 | 1.4 |
| 38 | 49.1 | 50.4 | 47.2 | 49.1 | .8 |
| 39 | 49.1 | 50.5 | 47.9 | 49.0 | .6 |
| 40 | 48.9 | 50.2 | 47.2 | 48.9 | .7 |
| DBA | 80.5 | 82.5 | 76.0 | 80.2 | 1.7 |
| DBD | 84.4 | 85.9 | 80.6 | 84.2 | 1.4 |
| GASPL | 87.0 | 88.4 | 83.9 | 86.8 | 1.2 |
| PNL | 92.0 | 93.5 | 88.6 | 91.9 | 1.3 |
| PNLT | 92.2 | 93.5 | 88.6 | 92.0 | 1.2 |

270°
(Microphone location
Relative to Helicopter)

TABLE E-VII

500 FOOT HOVER TEST

1/3 OCTAVE NOISE LEVEL FREQUENCY SPECTRA

BELL 212

OCTOBER 6, 1976

EVENT 20, 180 DEGREES, CENTERLINE MICROPHONE (SOFT SITE)

1/3 OCTAVE BAND VS LEVEL (AVE OVER 19 SECONDS)
(DB RE 20 MICRO PA)

| BAND | ENERGY AVERAGE | MAX | MIN | ARITH. AVERAGE | SID DEV |
|-------|-------------------|------|------|-------------------|------------|
| 14 | 72.7 | 75.2 | 68.4 | 72.4 | 1.8 |
| 15 | 73.3 | 76.7 | 68.2 | 72.7 | 2.3 |
| 16 | 77.1 | 79.9 | 72.3 | 76.5 | 2.4 |
| 17 | 77.5 | 79.3 | 75.2 | 77.3 | 1.2 |
| 18 | 72.6 | 75.2 | 69.8 | 72.3 | 1.5 |
| 19 | 64.7 | 67.5 | 59.7 | 64.3 | 1.9 |
| 20 | 77.6 | 80.1 | 74.7 | 77.4 | 1.3 |
| 21 | 79.6 | 82.0 | 74.1 | 79.2 | 2.1 |
| 22 | 83.9 | 86.0 | 80.3 | 83.6 | 1.6 |
| 23 | 79.6 | 81.3 | 74.3 | 79.4 | 1.4 |
| 24 | 78.2 | 79.9 | 72.8 | 77.9 | 1.6 |
| 25 | 83.3 | 85.7 | 77.8 | 83.0 | 1.7 |
| 26 | 77.9 | 81.6 | 73.1 | 79.4 | 2.3 |
| 27 | 82.1 | 84.0 | 75.7 | 81.7 | 2.2 |
| 28 | 80.5 | 82.5 | 72.3 | 79.9 | 2.6 |
| 29 | 77.6 | 79.8 | 69.9 | 77.0 | 2.6 |
| 30 | 76.5 | 78.5 | 69.4 | 76.0 | 2.5 |
| 31 | 74.0 | 76.7 | 66.5 | 73.4 | 2.7 |
| 32 | 71.5 | 73.6 | 66.6 | 71.1 | 1.8 |
| 33 | 69.5 | 71.6 | 66.4 | 69.3 | 1.4 |
| 34 | 66.6 | 68.2 | 62.8 | 66.3 | 1.6 |
| 35 | 62.6 | 64.6 | 59.8 | 62.4 | 1.3 |
| 36 | 60.0 | 61.6 | 58.5 | 59.9 | .9 |
| 37 | 55.4 | 57.1 | 53.8 | 55.4 | .8 |
| 38 | 54.6 | 55.7 | 53.3 | 54.6 | .6 |
| 39 | 56.0 | 56.9 | 54.4 | 55.9 | .5 |
| 40 | 57.0 | 57.9 | 55.7 | 57.0 | .5 |
| DBA | 86.0 | 87.9 | 79.8 | 85.6 | 2.1 |
| DD | 90.2 | 91.8 | 85.0 | 90.0 | 1.8 |
| OASPL | 91.3 | 92.7 | 86.3 | 91.1 | 1.6 |
| PNL | 97.6 | 98.9 | 92.5 | 97.4 | 1.7 |
| PNLI | 97.6 | 98.9 | 92.5 | 97.4 | 1.7 |

(Helicopter Located
Directly Overhead)

TABLE E-VIII
Helicopter Noise Level Data
Bell 212

October, 1976

max RMS Noise Level - dBA re 20 μ Pa

| HELICOPTER OPERATION | RUN NUMBER | MICROPHONE OFFSET TO THE WEST | | MICROPHONE OFFSET TO THE EAST | |
|--------------------------|------------|-------------------------------|--------|-------------------------------|--------|
| | | 150 M | 75 M | 75 M | 150 M |
| 5 FE. HOVER 0° | 1 | 80.3 | 85.8 | — | — |
| | 10 | — | (270°) | 94.8 | 86.5 |
| 5 FE. HOVER 45° | 2 | 84.5 | 91.8 | — | — |
| | 11 | — | (225°) | 89.8 | 83.0 |
| 5 FE. HOVER 90° | 3 | 79.0 | 88.8 | — | — |
| | 12 | — | (180°) | 88.8 | 84.0 |
| 5 FE. HOVER 135° | 4 | 76.5 | 86.5 | 89.3 | 84.3 |
| | 13 | — | (135°) | 92.0 | 83.8 |
| 5 FE. HOVER 180° | 5 | 75.3 | 87.3 | 88.5 | 82.3 |
| | 14 | — | (90°) | — | 85.5 |
| 5 FE. HOVER 225° | 6 | 77.3 | 84.3 | 94.3 | 82.5 |
| | | — | (45°) | — | — |
| 5 FE. HOVER 270° | 7 | 78.5 | 82.8 | 94.8 | 85.0 |
| | | — | (0°) | — | — |
| 5 FE. HOVER 315° | | — | — | — | — |
| | | — | (315°) | — | — |
| 500 FE. HOVER 180° | 20 | 78.8 | 86.3* | 87.3* | 82.3 |
| | | (90°) | — | — | (270°) |
| 500 FE. HOVER 90° | 21 | 84.3 | 85.8* | 86.5* | 82.0 |
| | | (180°) | — | — | (0°) |

* Microphone at cantailine

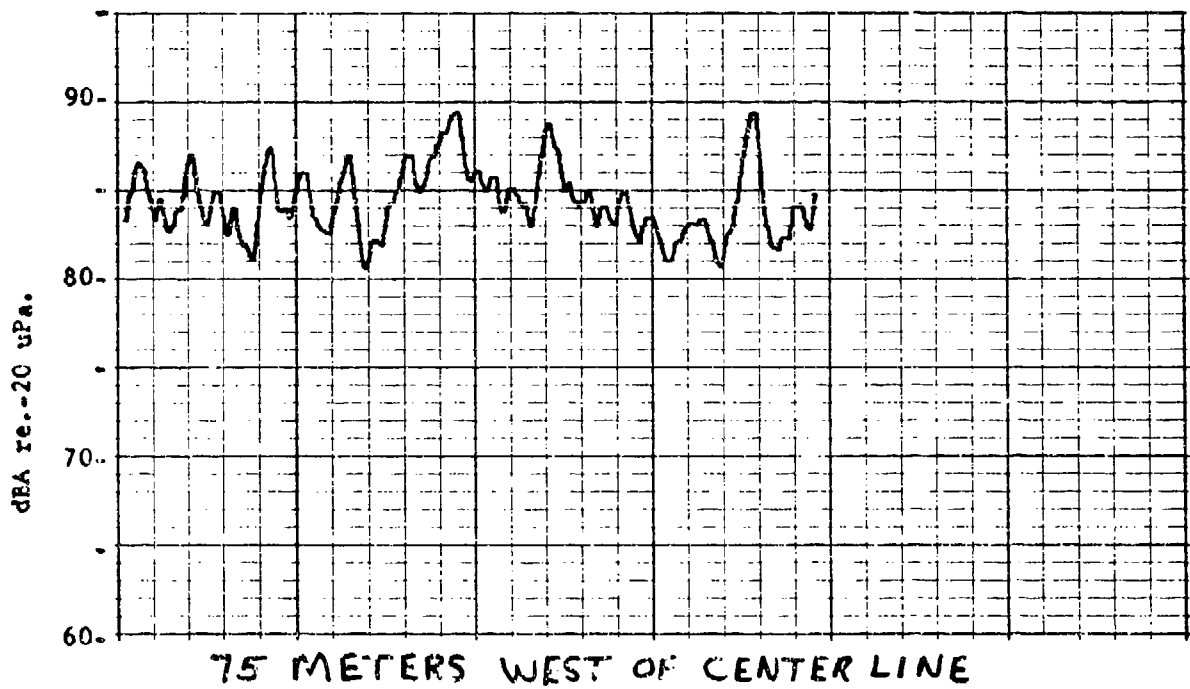
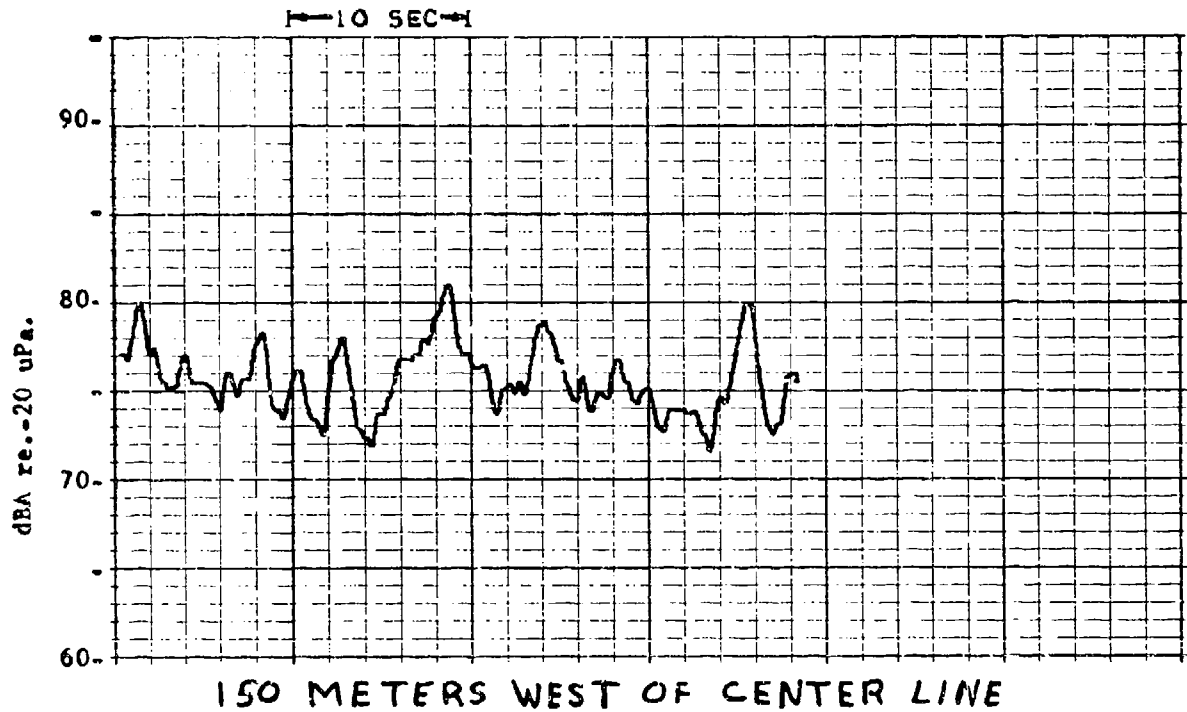
TABLE E-VIII
Helicopter Noise Level Data
BELL 212

OCTOBER 6, 1976

MAX RMS Noise Level - dBA @ 20 μPa

| HELICOPTER OPERATION | RUN NUMBER | MICROPHONE OFFSET TO THE WEST | | MICROPHONE OFFSET TO THE EAST | |
|----------------------------|------------|-------------------------------|-------------|-------------------------------|------|
| | | 150M | CENTER LINE | CENTER LINE | 150M |
| 3° GLIDE SLOPE | 41 | 81.3 | 86.5 | 84.9 | 78.0 |
| | 42 | 77.8 | 81.8 | 82.3 | 81.3 |
| | 43 | 77.8 | 83.0 | 83.9 | 81.0 |
| 6° GLIDE SLOPE | 22 | 79.8 | 84.3 | 84.0 | — |
| | 23 | 78.5 | 85.0 | 84.0 | 82.0 |
| | 24 | 81.0 | 84.8 | 84.5 | 80.0 |
| 9° GLIDE SLOPE | 25 | 83.3 | 88.0 | 86.5 | 79.0 |
| | 26 | 84.5 | 86.0 | 86.5 | 78.8 |
| | 27 | 81.0 | 87.0 | 86.0 | 78.5 |
| | 28 | 79.5 | 85.0 | 84.8 | 78.0 |
| 60 KT LEVEL FLYOVER | 29 | 76.0 | 79.8 | 79.5 | 77.0 |
| | 30 | 80.5 | 80.8 | 79.3 | 75.0 |
| | 31 | 77.8 | 78.8 | 79.3 | 79.5 |
| 99 KT LEVEL FLYOVER | 32 | 81.0 | 84.5 | — | 79.8 |
| | 33 | 80.0 | 82.5 | 82.5 | 80.0 |
| | 34 | 81.0 | 83.3 | 81.0 | 78.8 |
| 110 KT LEVEL FLYOVER | 35 | 82.0 | 85.3 | 84.5 | 83.8 |
| | 36 | 83.0 | 85.5 | 87.3 | 81.8 |
| | 44 | 82.8 | 87.0 | 86.0 | 80.5 |
| | 45 | 81.8 | 81.3 | 81.5 | 79.5 |

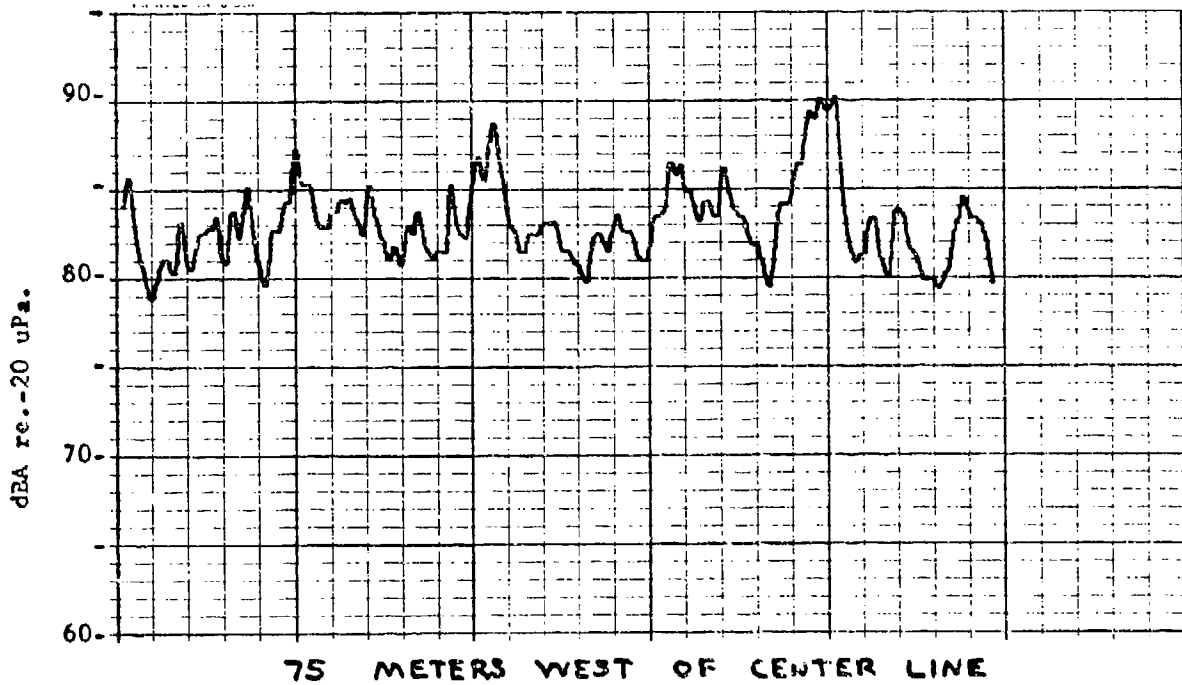
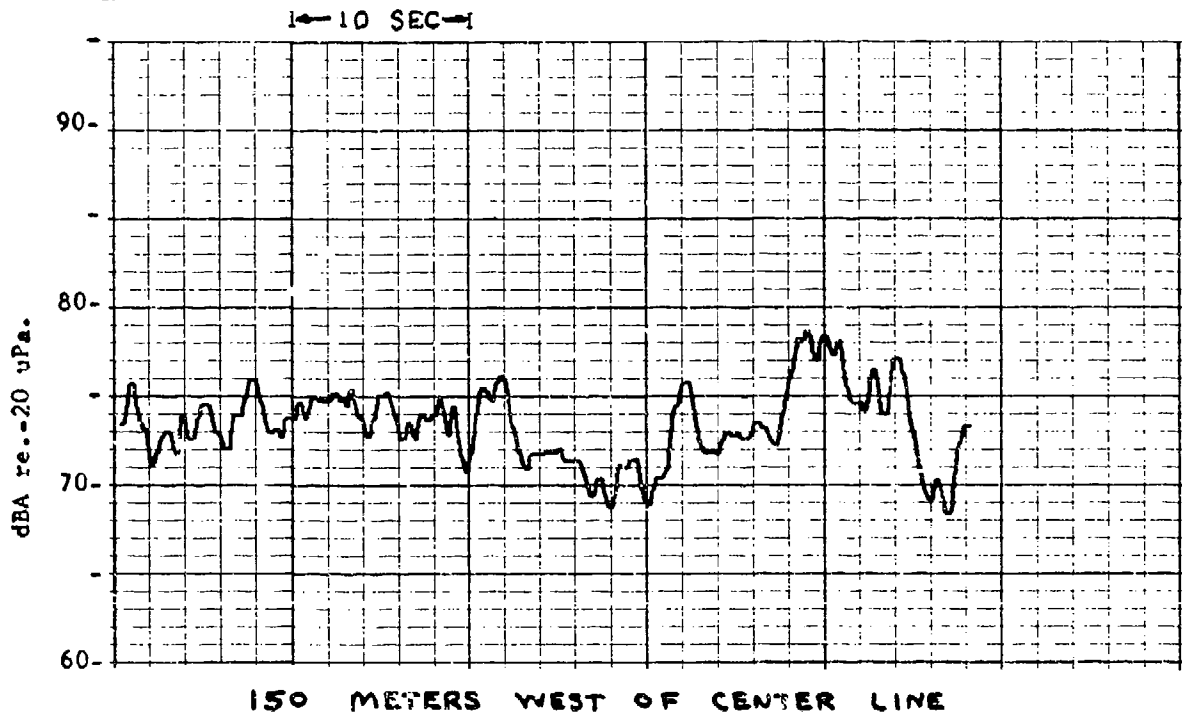
TABLE E-IX



NOISE LEVEL TIME HISTORIES
BELL 212 HELICOPTER
90° HOVER - 5FT

RUN 3

TABLE E-IX

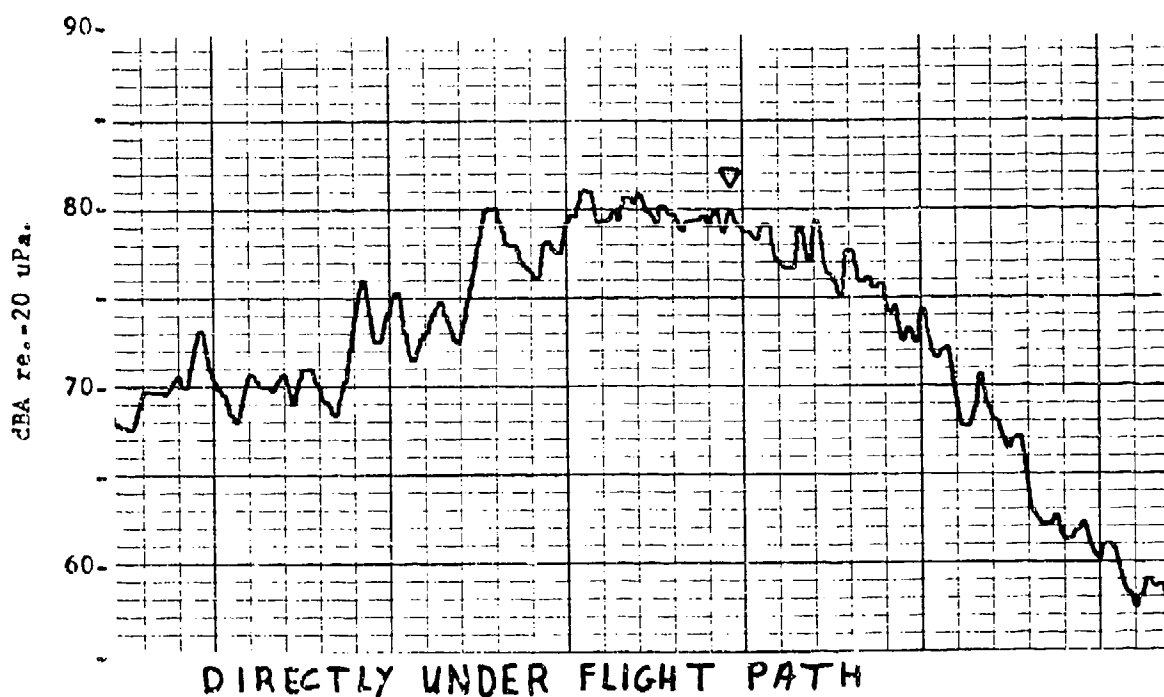
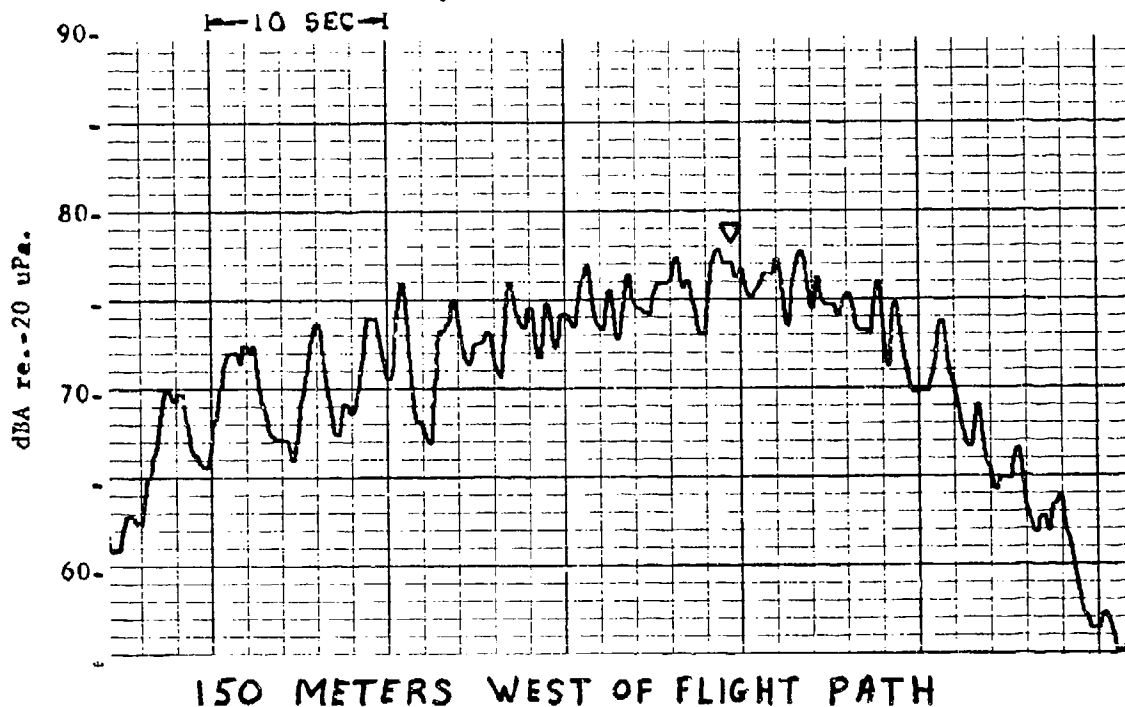


NOISE LEVEL TIME HISTORIES
BELL 212 HELICOPTER
180° HOVER - 5 FT.

RUN 5

TABLE E-IX

▽ = CENTER CROSSING



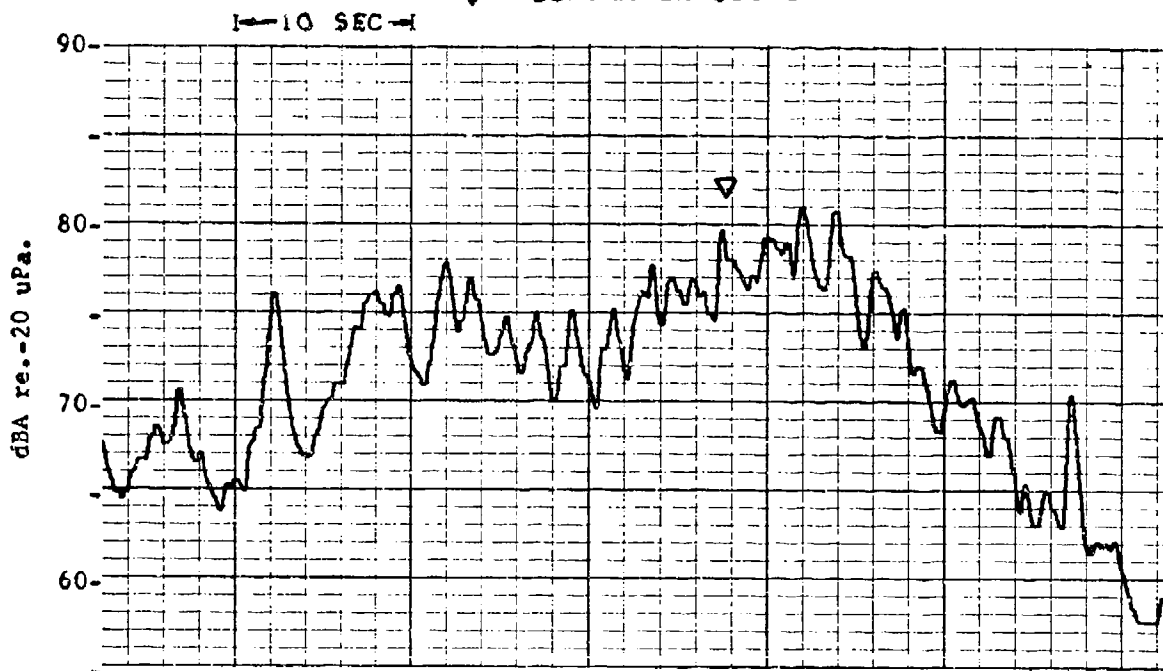
DIRECTLY UNDER FLIGHT PATH

NOISE LEVEL TIME HISTORIES
BELL 212 HELICOPTER
3° APPROACH

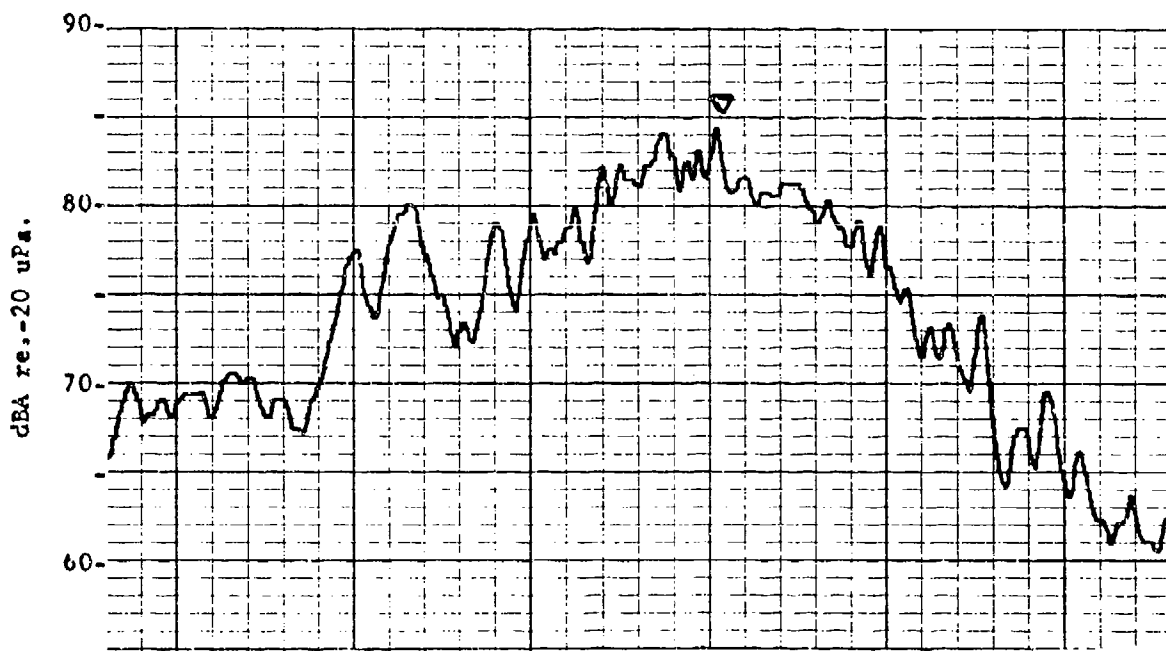
RUN 42

TABLE E-IV

▽ = CENTER CROSSING



150 METERS WEST OF FLIGHT PATH



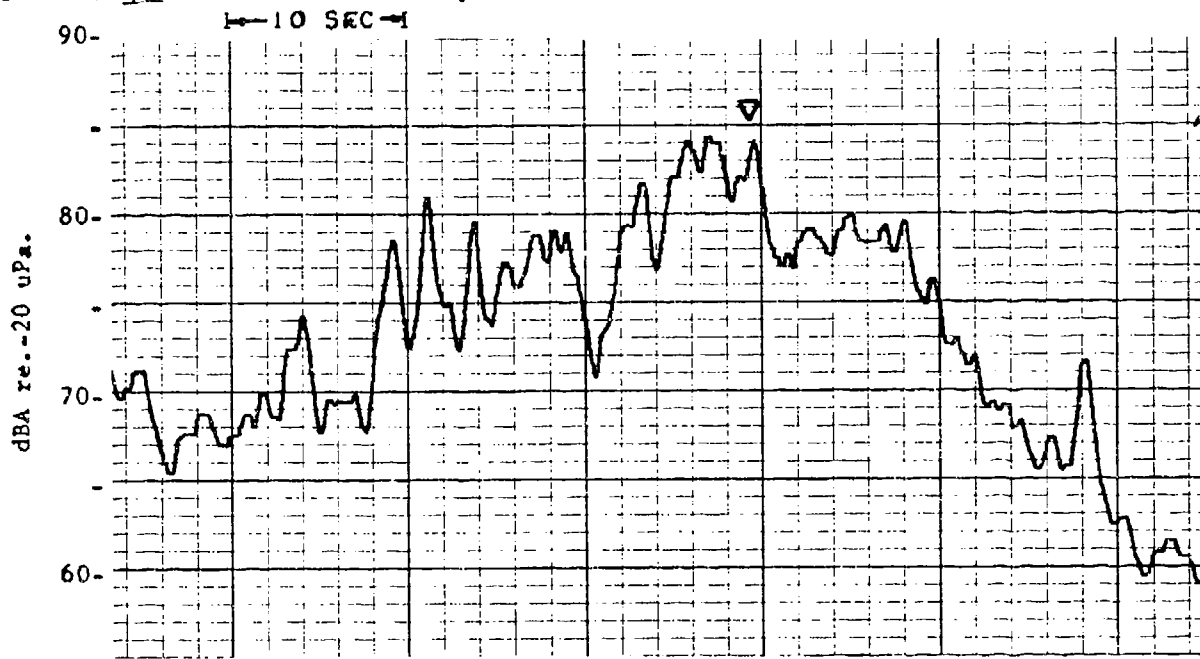
DIRECTLY UNDER FLIGHT PATH

NOISE LEVEL TIME HISTORIES
BELL 212 HELICOPTER
6° APPROACH

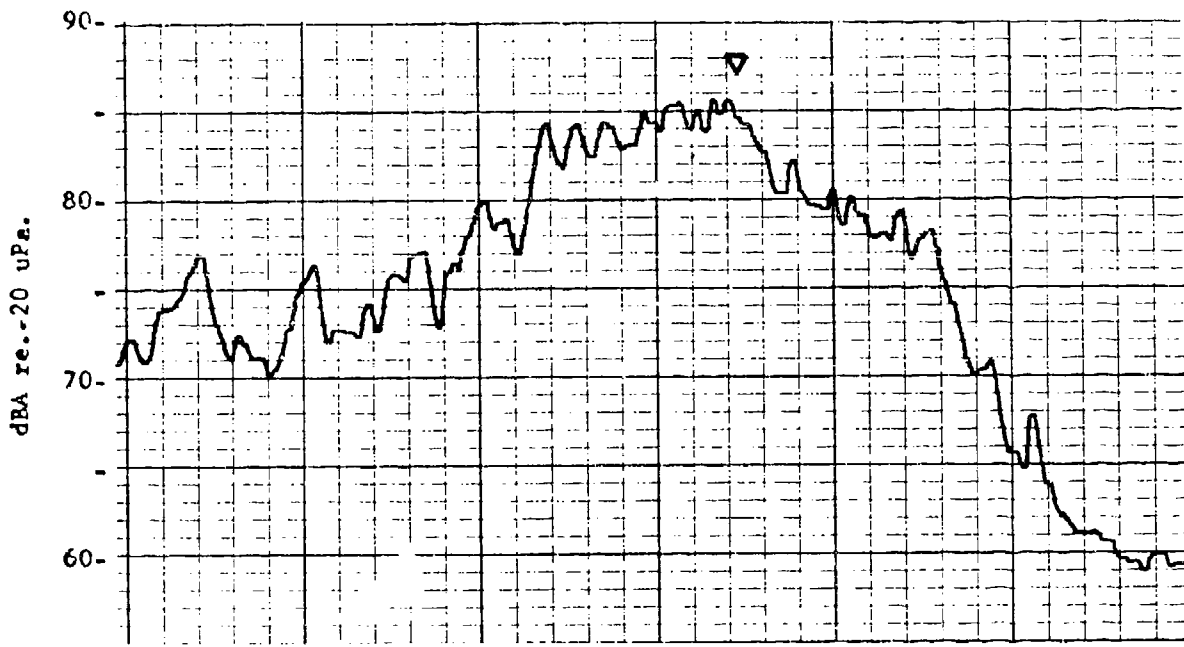
RUN 24

TABLE E-IX

▽ = CENTER CROSSING



150 METERS WEST OF FLIGHT PATH



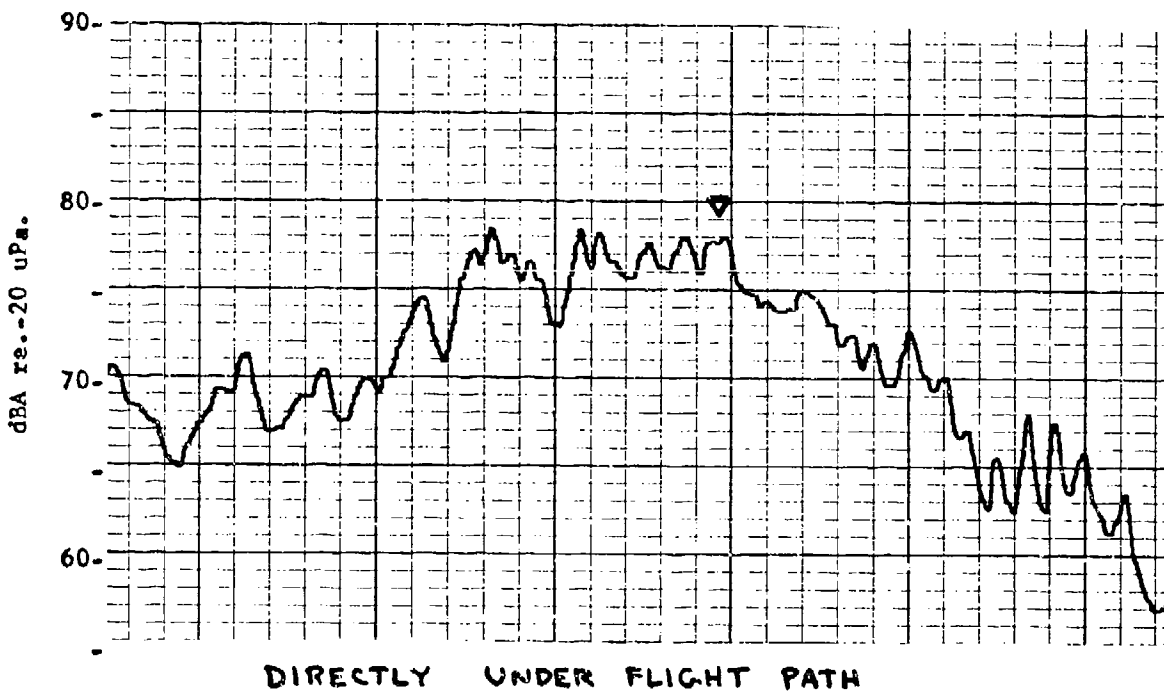
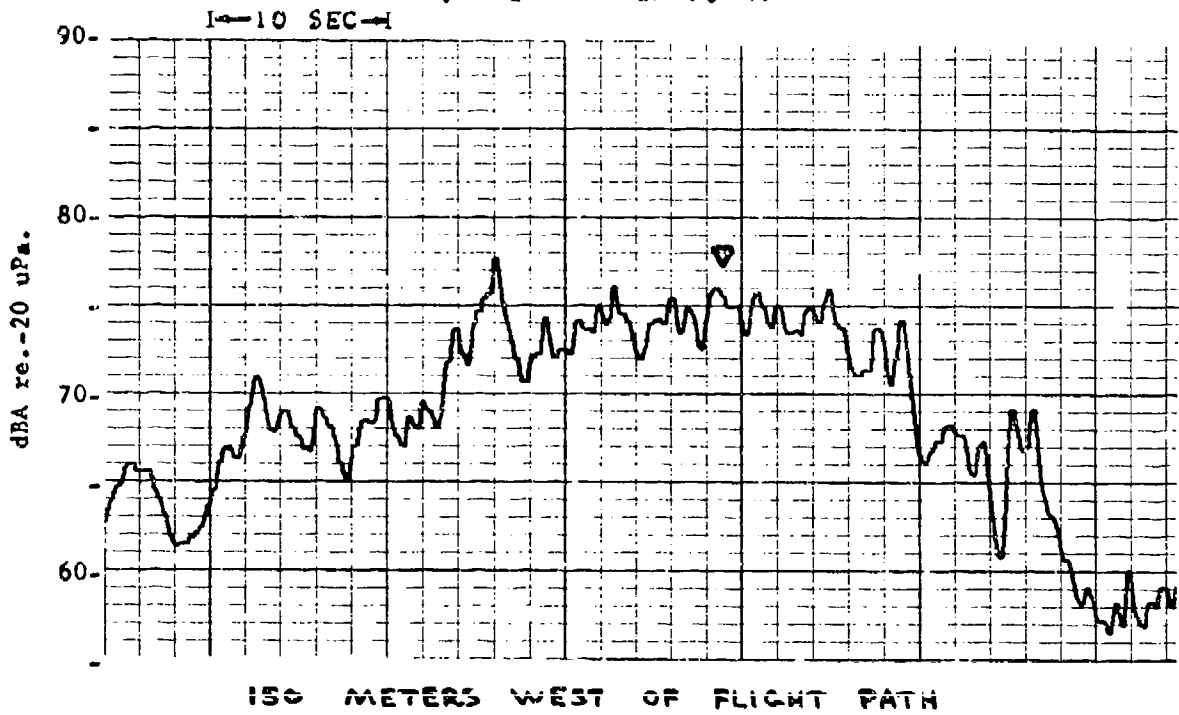
DIRECTLY UNDER FLIGHT PATH

NOISE LEVEL TIME HISTORIES
BELL 212 HELICOPTER
9° APPROACH

RUN 26

TABLE E-IX

▽ = CENTER CROSSING

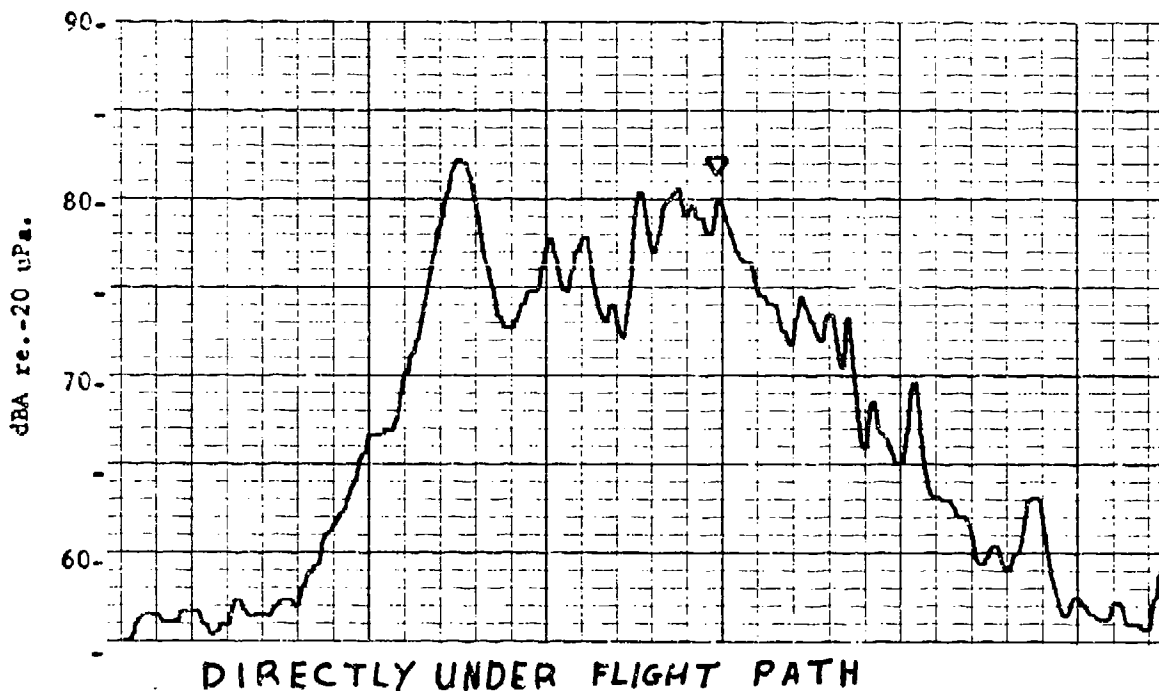
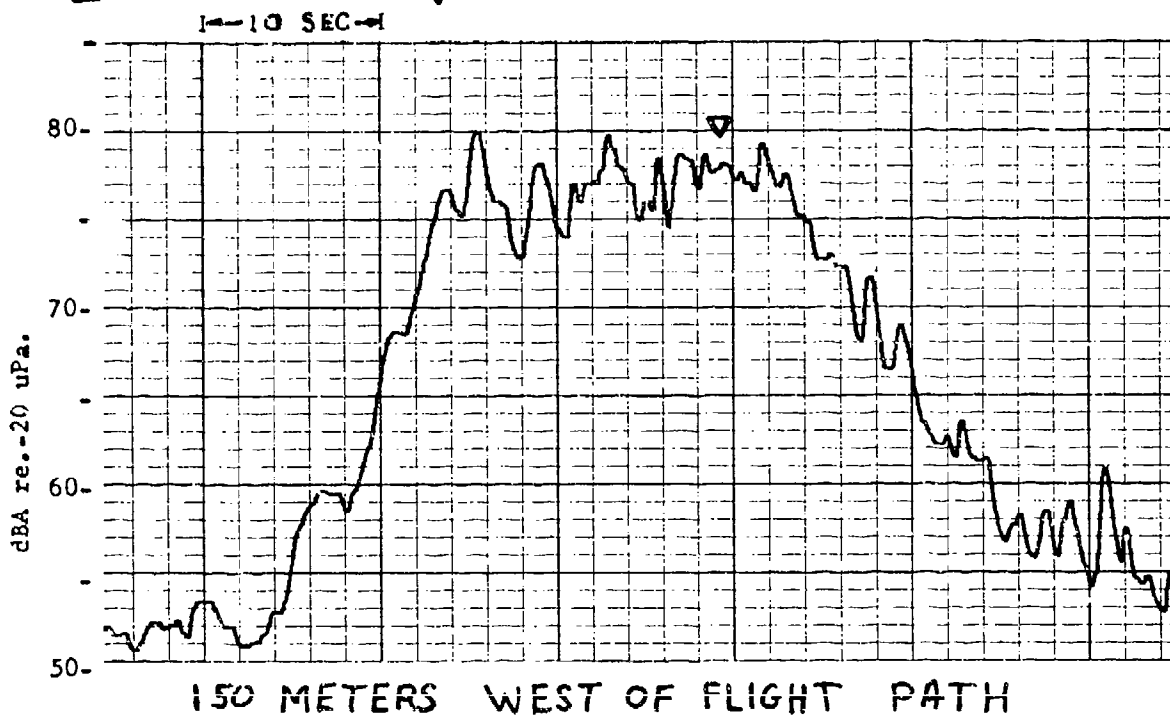


NOISE LEVEL TIME HISTORIES
BELL 212 HELICOPTER
LEVEL FLYOVER - 60 KTS

RUN 31

TABLE E-IX

▽ = CENTER CROSSING



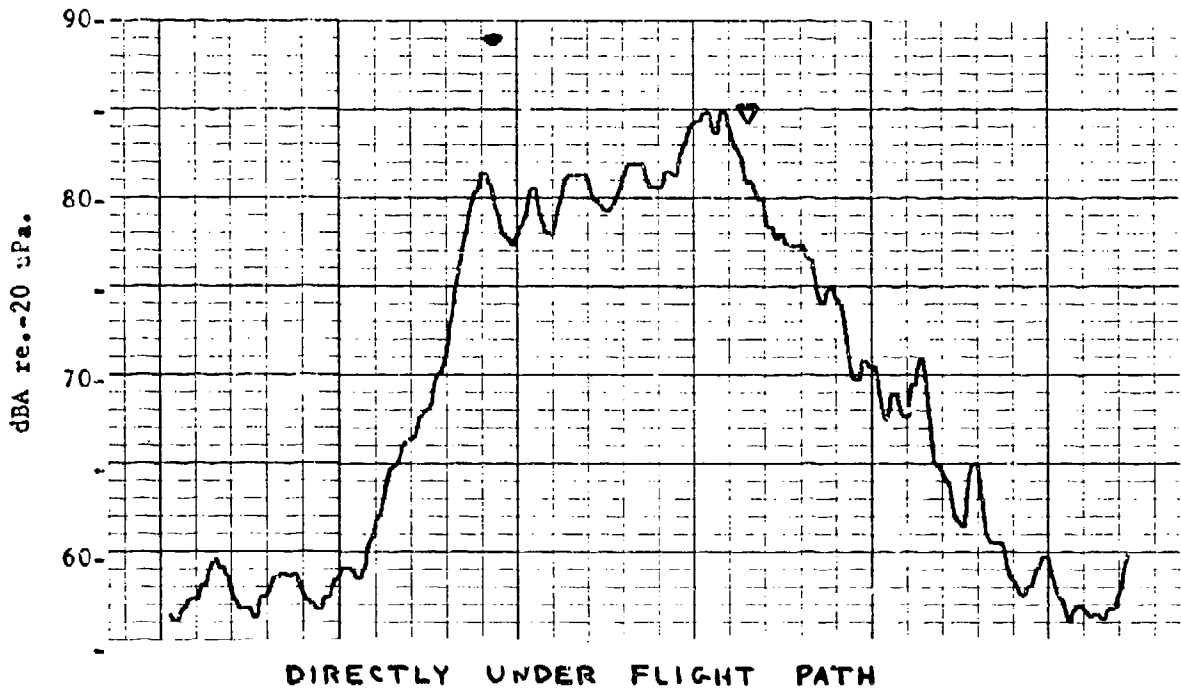
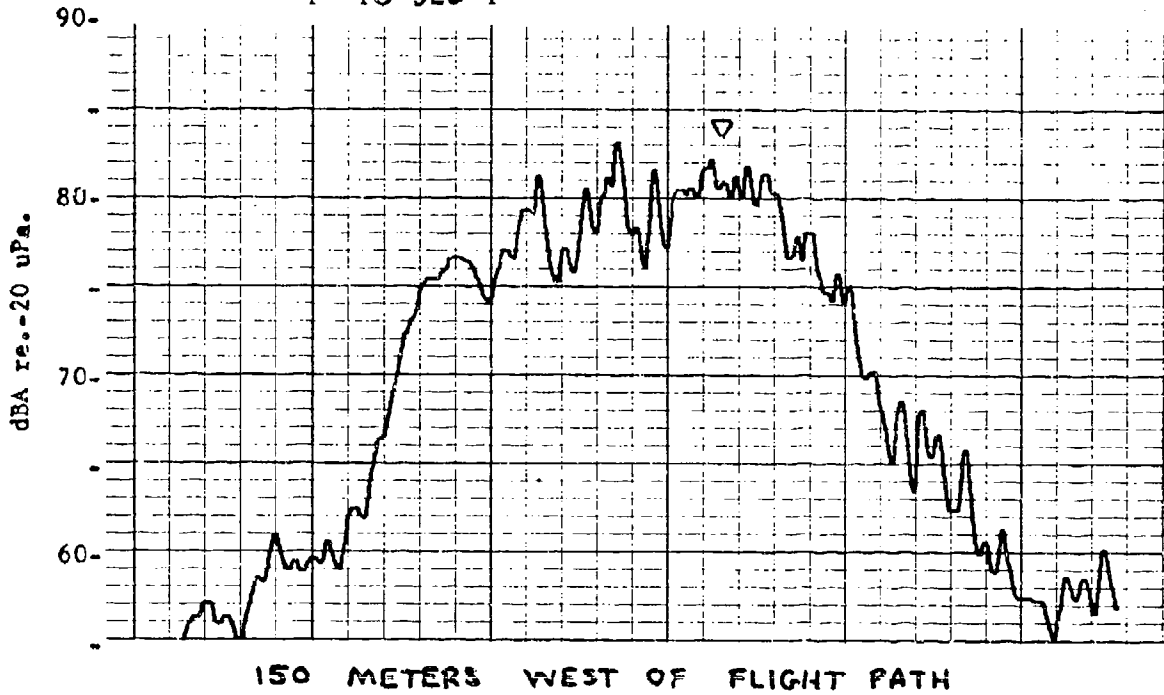
NOISE LEVEL TIME HISTORIES
BELL 212 HELICOPTER
LEVEL FLYOVER - 99 KTS.

RUN 33

TABLE E-IX

▽ = CENTER CROSSING

← 10 SEC →

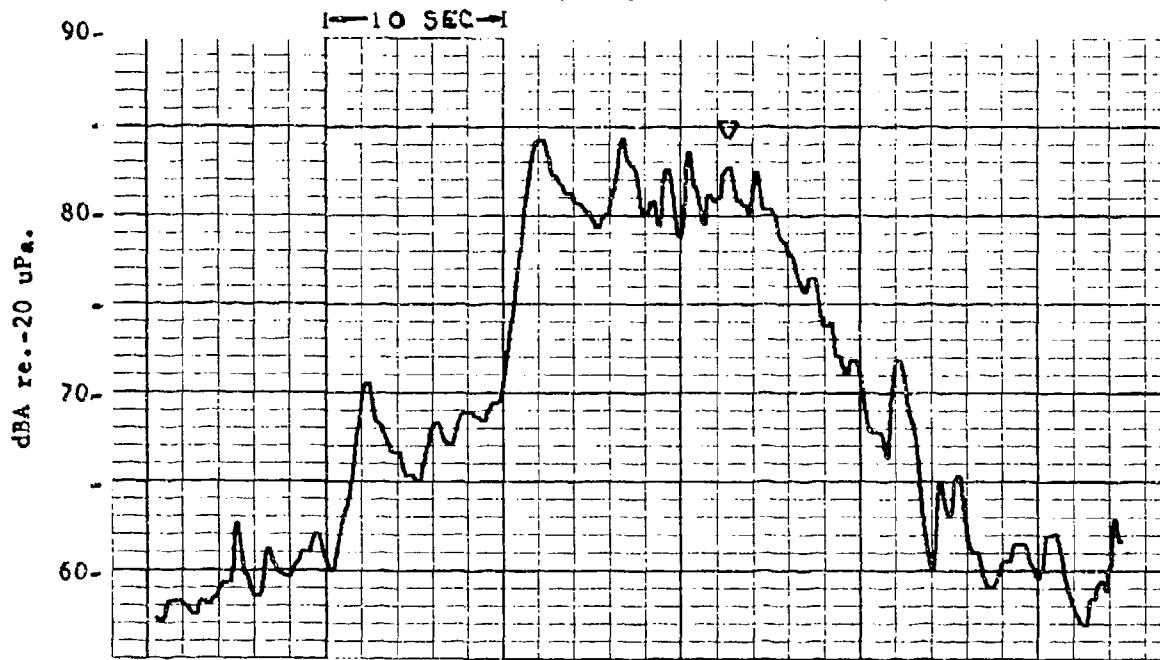


NOISE LEVEL TIME HISTORIES
BELL 212 HELICOPTER
LEVEL FLYOVER - 110 KTS

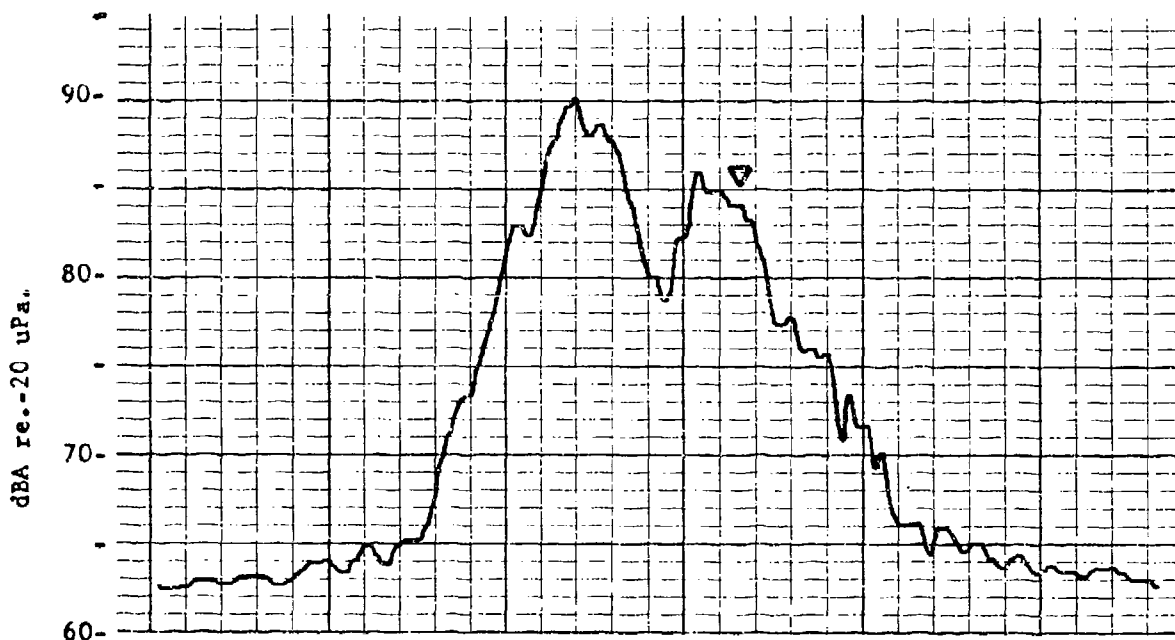
RUN 36

TABLE E-IX

▽ = CENTER CROSSING



150 METERS WEST OF FLIGHT PATH



DIRECTLY UNDER FLIGHT PATH

NOISE LEVEL TIME HISTORIES
BELL 212 HELICOPTER
LEVEL FLYOVER - 114 KTS

RUN 38

DATA TABLE F

Sikorsky S-61 (SH-3A)

TEST DATE: 10-28-76

TEST SITE: NASA LANGLEY

| SECTION - F | CONTENT | PAGE # |
|-------------|---|--------|
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THE NOISE LEVELS PRESENTED IN SECTIONS IV, V AND VI HAVE BEEN TABULATED FOR THE SELECTED RUNS AND MICROPHONE LOCATIONS INDICATED ON THE FOLLOWING PAGE.

TABLE F-I

LIST OF RUNS SELECTED FOR ANALYSIS

| RUN# | TEST CONDITION | MICROPHONE LOCATION | | | | |
|------|----------------------|---------------------|------------------|------------------|------------------|------------------|
| | | WEST | | EAST | | |
| | | 150 m SIDELINE | CENTER LINE | CENTER LINE | 150m SIDELINE | |
| 16 | 9° Approach | 60 Kts | | X | | |
| 18 | Level Flyover | 60 Kts | | X | | |
| 19 | ↓ | ↓ | | X | | |
| 20 | 6° Approach | 60 Kts | | X | | |
| 26 | Level Flyover | 100 Kts | | X | | |
| 27 | ↓ | ↓ | | X | | |
| 28 | ↓ | ↓ | | X | | |
| 31 | 3° Approach | 60 Kts | | X | | |
| 32 | Level Flyover | 115 Kts | X | X | X | X |
| 33 | ↓ | ↓ | X | X | X | X |
| 34 | ↓ | ↓ | X | X | X | X |
| | Microphone Locations | | Over Concrete | Over Concrete | Over Grass | Over Concrete |

GENERAL COMMENTS

- o There were no problems encountered while testing the Sikorsky S-61 (SH-3A).
- o The weather conditions during the test were very windy with gusts in the 10-20 mph range.
- o Because the S-61's gross weight was effected by its rate of fuel consumption, a table has been inserted which provides a log of the gross weight as a function of time.

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TABLE F-II Ground and Flight Log Data

| Run | Time | Target | | Velocity | | Altitude ft. | DBA | Heading | Air | | Rate of | | Conductivity | | Ground | | Wave | Comments | |
|-----|--------|--------|-------|----------|------|-----------------|------|---------|--------|------|---------|--------|--------------|------|--------|---------|---------|----------|---|
| | | Type | Cond. | Vel. | Dir. | | | | Spd. | Turn | Alt. | Temp. | RH | Wind | Dir. | Temp. | | | Dir. |
| 1 | 8:18 | | | | | 5 ft | 94.0 | 0° N | 0 | 60% | 0 | 60% | 5 ft | 100% | 39.5°F | — | 1000kts | N | About good run ; or slide slope good run ; on slide slope slightly high over trees Ground Speed 83 knts ↓ Slide Slope Good; 90 knts Ground Speed 90 knts ↓ About Altitude Too Low Heading 200° only get 200° because of air loss |
| 2 | 8:19 | | | | | | 94.0 | 45° | | | | | | | | | | | |
| 3 | 8:20 | | | | | | 97.0 | 45° | | | | | | | | | | | |
| 4 | 8:21 | | | | | | 96.5 | 90° E | | | | | | | | | | | |
| 5 | 8:22 | | | | | | 97.0 | 125° | | | | | | | | | | | |
| 6 | 8:22.5 | | | | | | 96.0 | 180° E | | | | | | | | | | | |
| 7 | 8:23 | | | | | | 97.0 | 255° | | | | | | | | | | | |
| 8 | 8:25 | | | | | | 92.0 | 280° | | | | | | | | | | | |
| 9 | 8:26 | | | | | | 92.0 | 315° | | | | | | | | | | | |
| 10 | 8:27 | | | | | | 92.0 | 0° | | | | | | | | | | | |
| 11 | 8:28 | | | | | | 94.0 | 45° | | | | | | | | | | | |
| 12 | 8:29 | | | | | | 94.5 | 90° E | | | | | | | | | | | |
| 13 | 8:30 | | | | | | 98.0 | 125° | | | | | | | | | | | |
| 14 | 8:31 | | | | | | 95.0 | 180° E | | | | | | | | | | | |
| 15 | 8:45 | | | | | 400 ft | — | S | 60 kts | 100% | 14 | 400 ft | 100% | 45°F | 54% | 1000kts | N | | |
| 16 | 8:47 | | | | | | 88.0 | | | 110% | 15 | | | | | | | | |
| 17 | 8:50 | | | | | | 84.0 | | | 120% | 17 | | | | | | | | |
| 18 | 9:05 | | | | | 600 ft | 81.0 | S | 60 kts | 0 | 36 | 500 ft | 100% | 40°F | | | | | |
| 19 | 9:09 | | | | | | 82.0 | | | | 40 | | | | | | | | |
| 20 | 9:14 | | | | | 400 ft | 85.0 | S | 60 kts | 200% | 20 | 400 ft | 105 | 30°C | | | | | |
| 21 | 9:19 | | | | | | 85.5 | | | | 31 | | | | | | | | |
| 22 | 9:25 | | | | | 500 ft | 74.0 | 0° N | 0 | 0 | 60 | 500 ft | 100% | 30°C | | | | | |
| 23 | 9:28 | | | | | | 95.0 | 0° N | | | 65 | | | | | | | | |
| 24 | 9:25 | | | | | | 96.0 | 90° E | | | 65 | | | | | | | | |
| 25 | 9:27 | | | | | | 98.0 | 275° | | | 75 | | | | | | | | |

Sikorsky S-61

Helicopter, Model: Military Designation SH-30

Registration Number: 508 N454

Test Date: Oct 28, 1976

TABLE F-II Ground and Flight Log Data

Helicopter Model: Sikorsky S-61 Military Designation SH-3A Registration Number: Test Date: Oct. 28, 1976

| Run | Time | Type | Velocity: ft./min. | Altitude over M.S. | dB A | Heading | Air Speed | Rate of Descent | Mp or Torque | Altitude over M.S. | RPM | OAT | Temp | RH | Wind Speed | Wind Dir./Turb. | Comments |
|-----|-------|------------------|-----------------------|--------------------------|------|---------|--------------|--------------------|-----------------|--------------------------|------|-----|-------|-----|---------------|--------------------|--|
| 26 | 9:21 | Level Flyover | 100 kt | 500 ft | 85.0 | S | 100 Kts | 0 | 68% | 500 ft | 103% | 42° | | | | | Needs to extend flight path Flight Path Estimated; Good |
| 27 | 9:34 | ↓ | ↓ | ↓ | 82.5 | ↓ | ↓ | 70 | ↓ | ↓ | ↓ | ↓ | | | | | |
| 28 | 9:37 | ↓ | ↓ | ↓ | 82.0 | ↓ | ↓ | 65 | ↓ | ↓ | ↓ | ↓ | | | | | |
| 29 | 9:44 | 3° App. | 60 kt | 400 ft | 85.5 | S | 60 Kts | 600 ft/min | 32 | 375 ft | 105% | 20° | | | | | Slightly below glide slope Slightly above glide slope Glide Slope loads good |
| 30 | 9:47 | ↓ | ↓ | ↓ | 87.0 | ↓ | 500 | 500 | 33 | 400 ft | 104 | ↓ | 32° | | | | |
| 31 | 9:53 | ↓ | ↓ | ↓ | 87.0 | ↓ | 500 | 500 | 30 | ↓ | ↓ | ↓ | | | | | |
| 32 | 10:06 | Level Flyover | 115 kt | 500 ft | 86.5 | S | 115 Kts | 0 | 72 | 500 ft | 107% | 40° | 41° F | 52% | 10-20 Kts | N | 130 Kts Ground Speed 125 Kts 130 Kts ↓ |
| 33 | 10:10 | ↓ | ↓ | ↓ | 82.5 | ↓ | ↓ | ↓ | 70 | ↓ | ↓ | ↓ | | | | | |
| 34 | 10:15 | ↓ | ↓ | ↓ | 84.5 | ↓ | ↓ | ↓ | 78 | ↓ | ↓ | ↓ | | | | | |

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TABLE F-II

SIKORSKY S-61 (SH-3A)

LOG OF GROSS WEIGHT vs. TIME

| <u>Time</u> | <u>Run #</u> | <u>Fuel (lbs.)</u> | <u>Total Gross Weight</u> |
|-------------|--------------|--------------------|---------------------------|
| 8:15 | 1 | 3000 | 18,724 |
| 8:56 | 17 | 2700 | 18,424 |
| 9:11 | 19 | 2500 | 18,224 |
| 9:20 | 22 | 2350 | 18,074 |
| 9:30 | 25 | 2200 | 17,924 |
| 10:00 | 31 | 1700 | 17,424 |
| 10:14 | 34 | 1500 | 17,224 |

TABLE F-III

Meteorological Data
Langley Air Force Base

October 28, 1976

| TIME (hours) | TEMP. (of) | BAR. PRESS. (mmhs) | REL. HUM. (%) | WIND SPEED (mph) | WIND DIRECTION (degrees) | REMARKS |
|-----------------|---------------|--------------------------|---------------------|------------------------|--------------------------------|------------------------|
| 0800 | 53 | 778 | 62 | 5-19 | 0 | Sky - Partly Cloudy |
| 0815 | 53 | | 66 | 10-19 | 20 | |
| 0830 | 53 | | 67 | 16-23 | 25 | |
| 0845 | 53 | | 68 | 14-22 | 20 | |
| 0900 | 54 | | 69 | 9-19 | 30 | |
| 0915 | 54 | | 70 | 11-19 | 30 | |
| 0930 | 54 | | 69 | 13-22 | 25 | |
| 0945 | 54 | | 69 | 8-20 | 20 | |
| 1000 | 54 | | 69 | 7-16 | 30 | |
| 1015 | 54 | | 68 | 12-18 | 30 | |
| 1030 | 55 | | 67 | 18-23 | 40 | |
| 1130 | 54 | | 65 | 14-18 | 10 | |
| 1145 | 56 | | 64 | 10-16 | 30 | |
| 1200 | 56 | | 64 | 8-12 | 35 | Sky - Clear |
| 1215 | 55 | | 63 | 8-14 | 20 | |
| 1230 | 56 | | 60 | 8-12 | 20 | |
| 1245 | 56 | | 58 | 13-18 | 25 | |
| 1300 | 57 | 774 | 56 | 8-15 | 40 | |
| 1315 | 58 | | 53 | 8-16 | 40 | |
| 1330 | 57 | | 52 | 5-12 | 50 | |
| 1345 | 57 | | 50 | 8-15 | 40 | Sky - Clear |
| 1400 | 57 | | 48 | 8-12 | 45 | |
| 1415 | 57 | | 48 | 5-12 | 15 | |
| 1430 | 57 | | 47 | 5-12 | 50 | |
| 1445 | 58 | | 48 | 5-9 | 30 | |
| 1500 | 57 | 772 | 47 | 5-8 | 20 | |
| 1515 | 57 | | 47 | 6-12 | 25 | |
| 1530 | 57 | | 47 | 5-15 | 60 | |
| 1545 | 58 | | 48 | 8-11 | 30 | |
| 1600 | 58 | | 47 | 8-10 | 50 | |
| 1615 | 57 | | 46 | 9-11 | 60 | |
| 1630 | 56 | | 46 | 5-8 | 40 | |
| 1645 | 57 | | 46 | 2-9 | 40 | |
| 1700 | 57 | | 47 | 1-6 | 25 | |
| 1715 | 56 | | 48 | 2-7 | 40 | |

TABLE F-IV

HELICOPTER APPROACH AND FLYOVER NOISE DATA

SIKORSKY S-61

OCTOBER 28 1976

MICROPHONE OFFSET 150 METERS WEST
(LEVELS-DB RE 20 MICRO PA)

| EVENT | EPNL | DBA(M) | DBD(M) | OASPL | PNL(M) | PNLT(M) | LEQ | DUR(A) | DUR(P) | TP |
|-------|------|--------|--------|-------|--------|---------|------|--------|--------|-----|
| 32 | 90.3 | 83.9 | 87.7 | 89.3 | 94.6 | 94.6 | 80.0 | 8.5 | 8.5 | .0 |
| 33 | 89.5 | 80.9 | 85.0 | 86.6 | 92.3 | 93.3 | 77.1 | 11.0 | 10.0 | 1.2 |
| 34 | 89.6 | 81.8 | 85.6 | 87.1 | 92.9 | 92.9 | 78.8 | 8.5 | 8.5 | .0 |

MICROPHONE OFFSET 150 METERS EAST
(LEVELS-DB RE 20 MICRO PA)

| EVENT | EPNL | DBA(M) | DBD(M) | OASPL | PNL(M) | PNLT(M) | LEQ | DUR(A) | DUR(P) | TP |
|-------|------|--------|--------|-------|--------|---------|------|--------|--------|----|
| 32 | 89.3 | 81.6 | 85.6 | 85.0 | 92.2 | 92.2 | 78.5 | 9.5 | 10.5 | .0 |
| 33 | 89.2 | 81.7 | 85.4 | 85.1 | 91.7 | 91.7 | 77.1 | 13.0 | 14.5 | .0 |
| 34 | 90.5 | 83.1 | 86.7 | 86.5 | 93.2 | 93.2 | 79.3 | 11.5 | 12.0 | .0 |

TABLE F-III

HELICOPTER APPROACH AND FLYOVER NOISE DATA

SIKORSKY S-61

OCTOBER 28 1976

CENTERLINE MICROPHONE - HARD SITE
(LEVELS-DB RE 20 MICRO PA)

| EVENT | EPNL | DBA(M) | DBD(M) | OASPL | PNL(M) | PNLT(M) | LEQ | DUR(A) | DUR(P) | TP |
|-------|------|--------|--------|-------|--------|---------|------|--------|--------|-----|
| 16 | 91.7 | 80.4 | 85.5 | 93.0 | 92.7 | 92.7 | 75.4 | 23.0 | 22.5 | .0 |
| 18 | 92.4 | 80.2 | 84.8 | 90.1 | 91.3 | 91.3 | 76.7 | 24.0 | 25.0 | .0 |
| 19 | 92.1 | 81.3 | 86.1 | 90.8 | 93.2 | 93.2 | 76.9 | 21.0 | 21.0 | .0 |
| 20 | 95.1 | 84.6 | 90.4 | 94.0 | 97.0 | 97.0 | 80.2 | 16.5 | 17.5 | .0 |
| 26 | 92.5 | 84.1 | 88.2 | 88.3 | 95.2 | 95.2 | 80.6 | 10.5 | 14.0 | .0 |
| 27 | 91.3 | 82.8 | 87.1 | 87.6 | 94.3 | 94.9 | 79.3 | 10.0 | 12.0 | 1.0 |
| 28 | 89.6 | 81.0 | 85.9 | 87.1 | 91.5 | 92.5 | 77.1 | 12.0 | 12.0 | .0 |
| 31 | 95.6 | 86.6 | 91.2 | 93.1 | 97.9 | 97.9 | 83.1 | 11.5 | 13.0 | .0 |
| 32 | 92.0 | 84.8 | 89.2 | 88.7 | 96.2 | 96.2 | 82.1 | 7.5 | 8.5 | .0 |
| 33 | 90.4 | 80.9 | 85.7 | 87.3 | 92.5 | 92.5 | 77.2 | 14.5 | 14.5 | .0 |
| 34 | 91.4 | 83.5 | 87.8 | 87.8 | 94.9 | 94.9 | 79.4 | 11.5 | 11.5 | .0 |

CENTERLINE MICROPHONE - SOFT SITE
(LEVELS-DB RE 20 MICRO PA)

| EVENT | EPNL | DBA(M) | DBD(M) | OASPL | PNL(M) | PNLT(M) | LEQ | DUR(A) | DUR(P) | TP |
|-------|------|--------|--------|-------|--------|---------|------|--------|--------|----|
| 32 | 89.2 | 81.0 | 85.7 | 86.4 | 92.3 | 92.3 | 77.6 | 10.5 | 10.5 | .0 |
| 33 | 88.1 | 78.8 | 83.4 | 85.8 | 90.6 | 90.6 | 75.6 | 11.0 | 12.5 | .0 |
| 34 | 88.9 | 80.5 | 85.5 | 86.6 | 92.0 | 92.0 | 78.2 | 8.5 | 8.5 | .0 |

TABLE F-V

NOISE LEVEL TIME HISTORY DATA

SIKORSKY S-61

OCTOBER 28 1976

EVENT 32, 115 KI. FLY BY, MIC. 150 METERS WEST

1/2 SECOND INTEGRATION VS NOISE INDEXES
(DB RE 20 MICRO PA)

| INT | DBA | DBD | OASPL | PNL | PNLT | PNL-DBA | DBD-DBA |
|---------|------|------|-------|------|------|---------|---------|
| 1 | 65.7 | 71.3 | 79.7 | 78.3 | 78.3 | 12.6 | 5.6 |
| 2 | 67.4 | 72.8 | 80.6 | 79.6 | 79.6 | 12.2 | 5.4 |
| 3 | 71.7 | 75.9 | 81.6 | 82.7 | 84.0 | 11.0 | 4.2 |
| 4 | 73.2 | 77.1 | 82.2 | 84.1 | 84.1 | 10.9 | 3.9 |
| 5 | 74.9 | 78.5 | 83.0 | 85.4 | 86.9 | 10.5 | 3.6 |
| 6 | 75.5 | 79.0 | 83.6 | 86.2 | 87.9 | 10.7 | 3.5 |
| 7 | 77.6 | 81.6 | 84.9 | 88.5 | 88.5 | 10.9 | 4.0 |
| 8 | 79.8 | 83.9 | 86.2 | 90.4 | 90.4 | 10.6 | 4.1 |
| 9 | 80.9 | 85.1 | 87.2 | 91.0 | 91.9 | 11.0 | 4.2 |
| 10 | 82.5 | 86.4 | 88.4 | 93.3 | 93.3 | 10.8 | 3.9 |
| OH → 11 | 83.5 | 87.4 | 89.2 | 94.1 | 94.1 | 10.6 | 3.9 |
| 12 | 83.9 | 87.7 | 89.3 | 94.6 | 94.6 | 10.7 | 3.8 |
| 13 | 83.2 | 86.9 | 88.2 | 93.9 | 93.9 | 10.7 | 3.7 |
| 14 | 81.6 | 85.4 | 86.4 | 92.6 | 92.6 | 11.0 | 3.8 |
| 15 | 80.0 | 83.9 | 84.7 | 91.5 | 91.5 | 11.5 | 3.9 |
| 16 | 78.6 | 82.5 | 83.3 | 90.0 | 90.0 | 11.4 | 3.9 |
| 17 | 77.8 | 81.4 | 82.6 | 89.0 | 89.0 | 11.2 | 3.6 |
| 18 | 77.0 | 80.5 | 81.8 | 88.0 | 88.0 | 11.0 | 3.5 |
| 19 | 76.0 | 79.7 | 81.1 | 87.3 | 87.3 | 11.3 | 3.7 |
| 20 | 74.4 | 78.1 | 79.8 | 85.5 | 85.5 | 11.1 | 3.7 |
| 21 | 72.3 | 76.5 | 78.5 | 83.4 | 83.4 | 11.1 | 4.2 |
| 22 | 69.8 | 74.6 | 77.7 | 81.5 | 81.5 | 11.7 | 4.8 |
| 23 | 67.6 | 73.0 | 77.1 | 80.0 | 80.0 | 12.4 | 5.4 |

● TABLE F-V

NOISE LEVEL TIME HISTORY DATA

SIKORSKY S-61

OCTOBER 28 1976

EVENT 33, 115 KT. FLY BY, MIC. 150 METERS WEST

1/2 SECOND INTEGRATION VS NOISE INDEXES
(DB RE 20 MICRO PA)

| INT | DBA | DBD | OASPL | PNL | PNLT | PNL-DBA | DBD-DBA |
|---------|------|------|-------|------|------|---------|---------|
| 1 | 65.9 | 72.0 | 80.7 | 79.4 | 79.4 | 13.5 | 6.1 |
| 2 | 67.7 | 72.7 | 80.8 | 79.9 | 81.1 | 12.2 | 5.0 |
| 3 | 69.4 | 73.9 | 80.7 | 80.7 | 82.1 | 11.3 | 4.5 |
| 4 | 71.4 | 75.6 | 80.2 | 82.3 | 83.3 | 10.9 | 4.2 |
| 5 | 72.3 | 76.3 | 80.7 | 83.2 | 83.2 | 10.9 | 4.0 |
| 6 | 73.0 | 76.9 | 81.1 | 83.7 | 85.4 | 10.7 | 3.9 |
| 7 | 74.6 | 78.3 | 82.0 | 85.5 | 87.2 | 10.9 | 3.7 |
| 8 | 75.9 | 79.8 | 82.5 | 86.6 | 87.8 | 10.7 | 3.9 |
| 9 | 76.6 | 80.7 | 82.8 | 87.6 | 87.6 | 11.0 | 4.1 |
| 10 | 78.0 | 82.0 | 84.2 | 89.2 | 90.4 | 11.2 | 4.0 |
| 11 | 79.6 | 83.6 | 85.0 | 90.9 | 92.5 | 11.3 | 4.0 |
| 12 | 80.9 | 84.6 | 85.9 | 92.1 | 93.3 | 11.2 | 3.7 |
| OH → 13 | 80.9 | 85.0 | 86.3 | 92.3 | 92.3 | 11.4 | 4.1 |
| 14 | 80.4 | 84.7 | 86.6 | 92.3 | 92.3 | 11.9 | 4.3 |
| 15 | 79.7 | 84.2 | 86.3 | 92.0 | 92.0 | 12.3 | 4.5 |
| 16 | 79.3 | 83.6 | 85.7 | 91.2 | 91.2 | 11.9 | 4.3 |
| 17 | 78.7 | 82.8 | 84.6 | 90.3 | 90.3 | 11.6 | 4.1 |
| 18 | 77.5 | 81.6 | 83.7 | 88.9 | 88.9 | 11.4 | 4.1 |
| 19 | 76.1 | 80.0 | 82.5 | 87.6 | 87.6 | 11.5 | 3.9 |
| 20 | 74.3 | 78.3 | 81.5 | 86.0 | 86.0 | 11.7 | 4.0 |
| 21 | 73.2 | 77.3 | 80.3 | 84.6 | 84.6 | 11.4 | 4.1 |
| 22 | 72.8 | 76.8 | 80.8 | 84.1 | 84.1 | 11.3 | 4.0 |
| 23 | 72.1 | 76.0 | 80.7 | 83.6 | 83.6 | 11.5 | 3.9 |
| 24 | 71.6 | 75.6 | 80.3 | 82.8 | 82.8 | 11.2 | 4.0 |
| 25 | 70.3 | 74.6 | 78.6 | 81.5 | 81.5 | 11.2 | 4.3 |
| 26 | 69.4 | 73.8 | 77.8 | 80.8 | 80.8 | 11.4 | 4.4 |
| 27 | 67.5 | 72.1 | 77.2 | 79.8 | 79.8 | 12.3 | 4.6 |
| 28 | 65.9 | 70.8 | 76.3 | 79.0 | 79.0 | 13.1 | 4.9 |

TABLE F-V

NOISE LEVEL TIME HISTORY DATA

SIKORSKY S-61

OCTOBER 28 1976

EVENT 34, 115 KT. FLY BY, MIC. 150 METERS WEST

1/2 SECOND INTEGRATION VS NOISE INDEXES
(DB RE 20 MICRO PA)

| INT | DBA | DBL | OASPL | PNL | PNLT | PNL-DBA | DBD-DBA |
|---------|------|------|-------|------|------|---------|---------|
| 1 | 65.8 | 72.2 | 80.1 | 79.2 | 79.2 | 13.4 | 6.4 |
| 2 | 67.8 | 73.7 | 81.2 | 80.9 | 80.9 | 13.1 | 5.9 |
| 3 | 69.3 | 74.8 | 81.7 | 81.7 | 81.7 | 12.4 | 5.5 |
| 4 | 71.7 | 76.3 | 82.5 | 83.0 | 83.0 | 11.3 | 4.6 |
| 5 | 74.4 | 78.8 | 83.4 | 85.3 | 86.7 | 10.9 | 4.4 |
| 6 | 77.3 | 81.8 | 84.9 | 88.3 | 90.5 | 11.0 | 4.5 |
| 7 | 77.7 | 82.2 | 85.5 | 88.8 | 90.5 | 11.1 | 4.5 |
| 8 | 78.8 | 83.2 | 86.1 | 89.9 | 89.9 | 11.1 | 4.4 |
| 9 | 79.8 | 83.8 | 86.5 | 90.7 | 90.7 | 10.9 | 4.0 |
| 10 | 81.1 | 84.8 | 86.9 | 91.9 | 91.9 | 10.8 | 3.7 |
| OH → 11 | 81.5 | 85.4 | 87.1 | 92.4 | 92.4 | 10.9 | 3.9 |
| 12 | 81.8 | 85.6 | 86.9 | 92.8 | 92.8 | 11.0 | 3.8 |
| 13 | 81.4 | 85.6 | 86.5 | 92.9 | 92.9 | 11.5 | 4.2 |
| 14 | 80.8 | 84.9 | 85.7 | 92.3 | 92.3 | 11.5 | 4.1 |
| 15 | 79.7 | 84.1 | 84.9 | 91.3 | 91.3 | 11.6 | 4.4 |
| 16 | 78.9 | 83.1 | 84.1 | 90.6 | 90.6 | 11.7 | 4.2 |
| 17 | 77.3 | 81.5 | 82.8 | 89.0 | 89.0 | 11.7 | 4.2 |
| 18 | 75.4 | 79.4 | 81.0 | 86.8 | 86.8 | 11.4 | 4.0 |
| 19 | 72.7 | 76.7 | 79.0 | 83.9 | 83.9 | 11.2 | 4.0 |
| 20 | 71.3 | 75.1 | 78.8 | 82.6 | 82.6 | 11.3 | 3.8 |
| 21 | 70.1 | 74.2 | 78.6 | 81.4 | 81.4 | 11.3 | 4.1 |
| 22 | 69.1 | 73.4 | 78.7 | 80.5 | 80.5 | 11.4 | 4.3 |
| 23 | 68.8 | 73.1 | 77.8 | 80.4 | 81.5 | 11.6 | 4.3 |

TABLE F-V

NOISE LEVEL TIME HISTORY DATA

SIKORSKY S-61

OCTOBER 28 1976

EVENT 32, 115 KT. FLY BY, MIC. 150 METERS EAST

1/2 SECOND INTEGRATION VS NOISE INDEXES
(DB RE 20 MICRO PA)

| INT | DBA | DBD | OASPL | PNL | PNLT | PNL-DBA | DBD-DBA |
|---------|------|------|-------|------|------|---------|---------|
| 1 | 67.9 | 73.5 | 78.4 | 79.7 | 79.7 | 11.8 | 5.6 |
| 2 | 68.9 | 74.2 | 78.5 | 80.5 | 80.5 | 11.6 | 5.3 |
| 3 | 69.7 | 75.1 | 79.2 | 82.0 | 83.2 | 12.3 | 5.4 |
| 4 | 71.8 | 76.9 | 79.8 | 83.4 | 83.4 | 11.6 | 5.1 |
| 5 | 75.4 | 79.8 | 80.7 | 86.4 | 87.6 | 11.0 | 4.4 |
| 6 | 76.5 | 80.9 | 81.0 | 87.5 | 89.0 | 11.0 | 4.4 |
| 7 | 76.8 | 81.3 | 81.3 | 87.9 | 89.3 | 11.1 | 4.5 |
| 8 | 77.8 | 82.2 | 82.6 | 88.9 | 88.9 | 11.1 | 4.4 |
| 9 | 79.0 | 83.4 | 83.8 | 90.1 | 90.1 | 11.1 | 4.4 |
| 10 | 80.5 | 84.7 | 84.9 | 91.4 | 91.4 | 10.9 | 4.2 |
| 11 | 81.5 | 85.5 | 85.0 | 92.2 | 92.2 | 10.7 | 4.0 |
| OH → 12 | 81.6 | 85.6 | 84.7 | 92.2 | 92.2 | 10.6 | 4.0 |
| 13 | 81.4 | 85.6 | 84.6 | 92.1 | 92.1 | 10.7 | 4.2 |
| 14 | 80.9 | 85.1 | 84.6 | 91.4 | 91.4 | 10.5 | 4.2 |
| 15 | 80.2 | 84.3 | 84.4 | 90.8 | 90.8 | 10.6 | 4.1 |
| 16 | 79.2 | 83.1 | 83.5 | 89.7 | 89.7 | 10.5 | 3.9 |
| 17 | 78.1 | 82.3 | 82.7 | 88.7 | 88.7 | 10.6 | 4.2 |
| 18 | 77.6 | 81.7 | 81.7 | 88.1 | 88.1 | 10.5 | 4.1 |
| 19 | 76.0 | 80.2 | 80.5 | 86.7 | 86.7 | 10.7 | 4.2 |
| 20 | 74.3 | 78.4 | 79.0 | 85.2 | 85.2 | 10.9 | 4.1 |
| 21 | 72.4 | 76.6 | 77.7 | 83.5 | 83.5 | 11.1 | 4.2 |
| 22 | 71.3 | 75.7 | 76.7 | 82.3 | 82.3 | 11.0 | 4.4 |
| 23 | 69.3 | 74.2 | 75.7 | 81.0 | 82.2 | 11.7 | 4.9 |
| 24 | 67.6 | 73.0 | 74.6 | 79.6 | 79.6 | 12.0 | 5.4 |
| 25 | 66.2 | 72.1 | 75.0 | 78.7 | 78.7 | 12.5 | 5.9 |

TABLE F-V

NOISE LEVEL TIME HISTORY DATA

SIKORSKY S-61

OCTOBER 28 1976

EVENT 33, 115 KT. FLY BY, MIC. 150 METERS EAST

1/2 SECOND INTEGRATION VS NOISE INDEXES
(DB RE 20 MICRO PA)

| INT | DBA | DBD | OASPL | PNL | PNLT | PNL-DBA | DBD-DBA |
|---------|------|------|-------|------|------|---------|---------|
| 1 | 63.8 | 71.6 | 78.7 | 77.8 | 77.3 | 14.0 | 7.8 |
| 2 | 68.6 | 74.0 | 80.0 | 80.8 | 82.4 | 12.2 | 5.4 |
| 3 | 70.9 | 75.6 | 81.2 | 82.3 | 83.7 | 11.4 | 4.7 |
| 4 | 71.7 | 75.4 | 82.2 | 82.9 | 83.8 | 11.1 | 4.7 |
| 5 | 73.3 | 77.8 | 82.7 | 84.3 | 84.3 | 11.0 | 4.5 |
| 6 | 75.9 | 80.1 | 83.2 | 86.7 | 86.7 | 10.8 | 4.2 |
| 7 | 76.4 | 80.7 | 83.2 | 87.3 | 87.3 | 10.9 | 4.3 |
| 8 | 75.2 | 79.8 | 82.6 | 86.5 | 86.5 | 11.3 | 4.6 |
| 9 | 71.6 | 77.2 | 81.4 | 83.7 | 83.7 | 12.1 | 5.6 |
| 10 | 70.8 | 75.8 | 80.6 | 82.1 | 83.5 | 11.3 | 5.0 |
| 11 | 72.6 | 76.7 | 80.4 | 83.5 | 86.1 | 10.9 | 4.1 |
| 12 | 73.8 | 77.6 | 80.7 | 84.6 | 86.6 | 10.8 | 3.8 |
| 13 | 75.1 | 79.1 | 80.9 | 85.9 | 87.0 | 10.8 | 4.0 |
| 14 | 78.0 | 82.3 | 82.4 | 89.1 | 89.1 | 11.1 | 4.3 |
| 15 | 79.9 | 83.8 | 83.4 | 90.5 | 90.5 | 10.6 | 3.9 |
| 16 | 81.0 | 84.9 | 84.4 | 91.5 | 91.5 | 10.5 | 3.9 |
| 17 | 81.4 | 85.1 | 84.9 | 91.5 | 91.5 | 10.1 | 3.7 |
| OH → 18 | 81.7 | 85.4 | 85.1 | 91.7 | 91.7 | 10.0 | 3.7 |
| 19 | 80.9 | 84.6 | 84.8 | 90.8 | 90.8 | 9.9 | 3.7 |
| 20 | 79.8 | 83.5 | 84.3 | 89.8 | 89.8 | 10.0 | 3.7 |
| 21 | 78.2 | 82.2 | 83.7 | 88.6 | 88.6 | 10.4 | 4.0 |
| 22 | 77.6 | 81.9 | 83.3 | 88.3 | 88.3 | 10.7 | 4.3 |
| 23 | 76.7 | 81.3 | 82.6 | 87.5 | 87.5 | 10.8 | 4.6 |
| 24 | 75.2 | 80.1 | 81.8 | 86.5 | 86.5 | 11.3 | 4.9 |
| 25 | 74.4 | 79.0 | 81.3 | 85.9 | 85.9 | 11.5 | 4.6 |
| 26 | 73.5 | 78.0 | 80.7 | 85.1 | 85.1 | 11.6 | 4.5 |
| 27 | 73.7 | 77.9 | 80.2 | 84.8 | 84.8 | 11.1 | 4.2 |
| 28 | 73.1 | 77.7 | 79.6 | 84.3 | 84.3 | 11.2 | 4.6 |
| 29 | 71.6 | 76.7 | 78.6 | 83.1 | 83.1 | 11.5 | 5.1 |
| 30 | 69.1 | 75.0 | 77.4 | 81.5 | 81.5 | 12.4 | 5.9 |
| 31 | 65.9 | 73.2 | 74.4 | 80.2 | 80.2 | 14.3 | 7.3 |
| 32 | 65.5 | 72.9 | 76.3 | 80.1 | 80.1 | 14.6 | 7.4 |

TABLE F-V

NOISE LEVEL TIME HISTORY DATA

SIKORSKY S-61

OCTOBER 28 1976

EVENT 34, 115 KT. FLY BY, MIC. 150 METERS EAST

1/2 SECOND INTEGRATION VS NOISE INDEXES
(DB RE 20 MICRO PA)

| INT | DBA | DBD | OASPL | PNL | PNL.T | PNL-DBA | DBD-DBA |
|---------|------|------|-------|------|-------|---------|---------|
| 1 | 63.6 | 71.1 | 79.2 | 77.0 | 78.4 | 13.4 | 7.5 |
| 2 | 66.4 | 73.0 | 79.7 | 79.1 | 80.5 | 12.7 | 6.6 |
| 3 | 70.9 | 75.6 | 80.5 | 82.2 | 83.4 | 11.3 | 4.7 |
| 4 | 73.1 | 77.2 | 80.6 | 83.6 | 83.6 | 10.5 | 4.1 |
| 5 | 73.6 | 77.8 | 80.4 | 84.0 | 84.0 | 10.4 | 4.2 |
| 6 | 72.6 | 77.1 | 79.9 | 83.7 | 83.7 | 11.1 | 4.5 |
| 7 | 72.5 | 77.3 | 79.6 | 83.8 | 84.9 | 11.3 | 4.8 |
| 8 | 74.4 | 78.5 | 80.1 | 85.1 | 86.6 | 10.7 | 4.1 |
| 9 | 76.3 | 81.0 | 80.8 | 87.1 | 88.1 | 10.8 | 4.7 |
| 10 | 78.5 | 83.1 | 82.7 | 89.2 | 90.2 | 10.7 | 4.6 |
| 11 | 79.9 | 84.8 | 83.9 | 90.7 | 91.8 | 10.8 | 4.9 |
| 12 | 81.5 | 85.7 | 85.1 | 91.9 | 91.9 | 10.4 | 4.2 |
| 13 | 81.2 | 85.3 | 85.1 | 91.6 | 91.6 | 10.4 | 4.1 |
| 14 | 80.7 | 84.6 | 84.7 | 91.0 | 91.0 | 10.3 | 3.9 |
| 15 | 80.2 | 84.5 | 84.4 | 90.8 | 90.8 | 10.6 | 4.3 |
| 16 | 81.1 | 85.0 | 84.7 | 91.2 | 91.2 | 10.1 | 3.9 |
| 17 | 81.0 | 85.2 | 84.9 | 91.2 | 91.2 | 10.2 | 4.2 |
| 18 | 82.8 | 86.6 | 86.4 | 92.8 | 92.8 | 10.0 | 3.8 |
| OH → 19 | 83.0 | 86.7 | 86.5 | 93.2 | 93.2 | 10.2 | 3.7 |
| 20 | 83.1 | 86.6 | 86.2 | 93.1 | 93.1 | 10.0 | 3.5 |
| 21 | 80.8 | 84.2 | 83.7 | 90.7 | 90.7 | 9.9 | 3.4 |
| 22 | 78.6 | 82.1 | 81.6 | 88.4 | 88.4 | 9.8 | 3.5 |
| 23 | 76.3 | 79.6 | 79.8 | 86.0 | 86.0 | 9.7 | 3.3 |
| 24 | 75.8 | 79.2 | 79.3 | 85.6 | 85.6 | 9.8 | 3.4 |
| 25 | 74.6 | 78.0 | 78.3 | 84.6 | 85.9 | 10.0 | 3.4 |
| 26 | 73.2 | 77.1 | 77.4 | 83.3 | 84.5 | 10.1 | 3.9 |
| 27 | 70.7 | 75.2 | 76.5 | 81.8 | 81.8 | 11.1 | 4.5 |
| 28 | 70.2 | 75.0 | 76.7 | 81.6 | 81.6 | 11.4 | 4.8 |
| 29 | 68.7 | 73.6 | 76.4 | 80.1 | 80.1 | 11.4 | 4.9 |

TABLE F-V

NOISE LEVEL TIME HISTORY DATA

SIKORSKY S-61

OCTOBER 28 1976

EVENT 16, 9 DEGREE APPROACH, CENTERLINE MIC. (HARD SITE)

1/2 SECOND INTEGRATION VS NOISE INDEXES
(DB RE 20 MICRO PA)

| INT | DBA | DBD | OASPL | PNL | PNLT | PNL-DBA | DBD-DBA |
|--------------|------|------|-------|------|------|---------|---------|
| 1 | 62.3 | 69.3 | 78.1 | 77.0 | 77.0 | 14.7 | 7.0 |
| 3 | 64.0 | 69.9 | 79.0 | 77.5 | 78.5 | 13.5 | 5.9 |
| 5 | 65.6 | 70.9 | 79.6 | 78.5 | 80.2 | 12.9 | 5.3 |
| 7 | 69.6 | 74.4 | 79.7 | 82.2 | 82.2 | 12.6 | 4.8 |
| 9 | 74.0 | 78.8 | 82.1 | 86.1 | 86.1 | 12.1 | 4.8 |
| 11 | 69.5 | 74.8 | 81.6 | 82.5 | 82.5 | 13.0 | 5.3 |
| 13 | 68.1 | 73.9 | 82.7 | 80.9 | 82.2 | 12.8 | 5.8 |
| 15 | 68.1 | 73.9 | 82.7 | 81.1 | 81.1 | 13.0 | 5.8 |
| 17 | 67.6 | 73.5 | 83.2 | 81.3 | 82.3 | 13.7 | 5.9 |
| 19 | 68.3 | 74.5 | 84.1 | 82.1 | 83.1 | 13.8 | 6.2 |
| 21 | 69.3 | 75.3 | 84.4 | 82.9 | 82.9 | 13.6 | 6.0 |
| 23 | 70.7 | 76.5 | 85.7 | 83.5 | 84.7 | 12.8 | 5.8 |
| 25 | 73.2 | 78.6 | 85.9 | 85.9 | 87.8 | 12.7 | 5.4 |
| 27 | 73.3 | 78.8 | 86.6 | 86.3 | 87.7 | 13.0 | 5.5 |
| 29 | 73.0 | 79.0 | 87.4 | 86.3 | 86.3 | 13.3 | 6.0 |
| 31 | 72.4 | 78.8 | 88.3 | 86.2 | 86.2 | 13.8 | 6.4 |
| 33 | 73.4 | 80.0 | 90.5 | 86.9 | 86.9 | 13.5 | 6.6 |
| 35 | 76.0 | 82.3 | 92.2 | 88.6 | 88.6 | 12.6 | 6.3 |
| 37 | 77.7 | 83.5 | 93.0 | 90.4 | 90.4 | 12.7 | 5.8 |
| OH → 39 → 40 | 79.5 | 85.0 | 91.0 | 92.3 | 92.3 | 12.8 | 5.5 |
| 41 | 79.9 | 85.4 | 88.3 | 92.7 | 92.7 | 12.8 | 5.5 |
| 43 | 80.4 | 85.3 | 88.3 | 92.4 | 92.4 | 12.0 | 4.9 |
| 45 | 80.4 | 85.3 | 89.3 | 92.4 | 92.4 | 12.0 | 4.9 |
| 47 | 78.0 | 83.2 | 87.3 | 90.4 | 90.4 | 12.4 | 5.2 |
| 49 | 74.4 | 79.6 | 83.5 | 86.3 | 86.3 | 11.9 | 5.2 |
| 51 | 71.9 | 77.0 | 81.0 | 83.5 | 83.5 | 11.6 | 5.1 |
| 53 | 70.4 | 75.1 | 79.2 | 82.0 | 82.0 | 11.6 | 4.7 |
| 55 | 69.1 | 74.3 | 77.6 | 81.2 | 82.2 | 12.1 | 5.2 |
| 57 | 67.0 | 72.2 | 77.4 | 79.1 | 79.1 | 12.1 | 5.2 |
| 59 | 66.7 | 71.8 | 77.4 | 78.8 | 78.8 | 12.1 | 5.1 |

TABLE F-V

NOISE LEVEL TIME HISTORY DATA

SIKORSKY S-61

OCTOBER 28 1976

EVENT 18, 60 KT. FLY BY, CENTERLINE MIC. (HARD SITE)

1/2 SECOND INTEGRATION VS NOISE INDEXES
(DB RE 20 MICRO PA)

| INT | DBA | DBD | OASPL | PNL | PNLT | PNL-DBA | DBD-DBA |
|---------|------|------|-------|------|------|---------|---------|
| 1 | 62.3 | 69.3 | 77.2 | 76.3 | 76.3 | 14.0 | 7.0 |
| 3 | 63.5 | 69.9 | 78.0 | 77.3 | 77.3 | 13.8 | 6.4 |
| 5 | 67.1 | 72.6 | 79.0 | 79.8 | 79.8 | 12.7 | 5.5 |
| 7 | 70.8 | 75.2 | 79.8 | 83.1 | 83.1 | 12.3 | 4.4 |
| 9 | 76.5 | 80.5 | 82.7 | 87.9 | 89.5 | 11.4 | 4.0 |
| 11 | 77.8 | 81.6 | 82.9 | 88.2 | 89.7 | 10.4 | 3.8 |
| 13 | 76.1 | 80.1 | 81.7 | 87.1 | 89.2 | 11.0 | 4.0 |
| 15 | 73.1 | 77.3 | 81.0 | 85.0 | 86.0 | 11.9 | 4.2 |
| 17 | 71.0 | 75.8 | 80.8 | 83.2 | 84.2 | 12.2 | 4.8 |
| 19 | 69.7 | 74.6 | 80.8 | 81.6 | 81.6 | 11.9 | 4.9 |
| 21 | 74.3 | 78.4 | 81.3 | 85.8 | 87.8 | 11.5 | 4.1 |
| 23 | 75.2 | 79.4 | 83.0 | 86.5 | 88.2 | 11.3 | 4.2 |
| 25 | 74.7 | 79.4 | 84.3 | 86.9 | 86.9 | 12.2 | 4.7 |
| 27 | 76.0 | 80.5 | 83.5 | 87.7 | 89.2 | 11.7 | 4.5 |
| 29 | 76.8 | 81.4 | 84.0 | 88.1 | 89.1 | 11.3 | 4.6 |
| 31 | 78.1 | 82.8 | 85.0 | 89.6 | 89.6 | 11.5 | 4.7 |
| 33 | 78.9 | 83.7 | 86.2 | 90.7 | 90.7 | 11.8 | 4.8 |
| 35 | 79.7 | 84.4 | 87.3 | 91.2 | 91.2 | 11.5 | 4.7 |
| 37 | 80.0 | 84.8 | 87.7 | 91.3 | 91.3 | 11.3 | 4.8 |
| OH → 39 | 80.2 | 84.4 | 88.7 | 91.2 | 91.2 | 11.0 | 4.2 |
| 41 | 79.1 | 83.5 | 89.7 | 90.3 | 90.3 | 11.2 | 4.4 |
| 43 | 78.0 | 82.3 | 90.1 | 89.0 | 89.0 | 11.0 | 4.3 |
| 45 | 77.3 | 81.3 | 89.3 | 87.9 | 87.9 | 10.6 | 4.0 |
| 47 | 76.5 | 80.4 | 87.5 | 87.1 | 87.1 | 10.6 | 3.9 |
| 49 | 75.1 | 79.2 | 85.9 | 86.0 | 86.0 | 10.9 | 4.1 |
| 51 | 74.2 | 78.4 | 84.1 | 85.1 | 85.1 | 10.9 | 4.2 |
| 53 | 72.6 | 77.1 | 82.5 | 83.9 | 83.9 | 11.3 | 4.5 |
| 55 | 69.1 | 73.6 | 80.7 | 80.9 | 80.9 | 11.8 | 4.5 |
| 57 | 66.0 | 71.6 | 80.3 | 78.7 | 78.7 | 12.7 | 5.6 |
| 59 | 66.0 | 71.1 | 78.8 | 78.1 | 78.1 | 12.1 | 5.1 |
| 61 | 64.9 | 69.7 | 77.1 | 76.9 | 78.5 | 12.0 | 4.8 |

TABLE F-IV

NOISE LEVEL TIME HISTORY DATA

SIKORSKY S-61

OCTOBER 28 1976

EVENT 19, 60 KT. FLY BY, CENTERLINE MIC. (HARD SITE)

1/2 SECOND INTEGRATION VS NOISE INDEXES
(DB RE 20 MICRO PA)

| INT | DBA | DBD | OASPL | PNL | PNLT | PNL-DBA | DBD-DBA |
|------------|------|------|-------|------|------|---------|---------|
| 1 | 63.6 | 71.2 | 76.9 | 78.2 | 78.2 | 14.6 | 7.6 |
| 3 | 62.8 | 70.7 | 77.2 | 78.6 | 78.6 | 15.8 | 7.9 |
| 5 | 64.8 | 72.2 | 78.0 | 80.0 | 80.0 | 15.2 | 7.4 |
| 7 | 70.8 | 75.5 | 80.1 | 83.0 | 84.1 | 12.2 | 4.7 |
| 9 | 74.3 | 77.9 | 81.4 | 86.2 | 86.2 | 11.9 | 3.6 |
| 11 | 70.2 | 75.2 | 79.8 | 82.7 | 82.7 | 12.5 | 5.0 |
| 13 | 66.9 | 73.0 | 78.7 | 80.7 | 82.1 | 13.8 | 6.1 |
| 15 | 66.7 | 73.0 | 78.6 | 80.5 | 82.2 | 13.8 | 6.3 |
| 17 | 68.1 | 74.1 | 79.6 | 81.1 | 81.1 | 13.0 | 6.0 |
| 19 | 67.7 | 73.9 | 80.5 | 81.4 | 82.7 | 13.7 | 6.2 |
| 21 | 71.6 | 76.3 | 81.3 | 84.0 | 85.6 | 12.4 | 4.7 |
| 23 | 73.2 | 77.8 | 82.2 | 85.2 | 85.2 | 12.0 | 4.6 |
| 25 | 75.0 | 79.9 | 84.2 | 87.5 | 87.5 | 12.5 | 4.9 |
| 27 | 76.3 | 81.1 | 85.5 | 88.8 | 88.8 | 12.5 | 4.8 |
| 29 | 77.4 | 82.5 | 85.6 | 89.7 | 89.7 | 12.3 | 5.1 |
| 31 | 77.2 | 82.1 | 85.8 | 89.0 | 89.0 | 11.8 | 4.9 |
| 33 | 80.4 | 85.5 | 87.2 | 92.3 | 92.3 | 11.9 | 5.1 |
| 35 | 80.6 | 85.4 | 88.1 | 92.7 | 92.7 | 12.1 | 4.8 |
| OH 37 → 38 | 81.3 | 86.1 | 90.0 | 93.2 | 93.2 | 11.9 | 4.8 |
| 39 | 80.9 | 85.8 | 90.8 | 92.5 | 92.5 | 11.6 | 4.9 |
| 41 | 81.2 | 84.7 | 90.8 | 91.3 | 91.3 | 11.1 | 4.5 |
| 43 | 76.7 | 81.0 | 89.8 | 87.8 | 87.8 | 11.1 | 4.3 |
| 45 | 76.1 | 80.2 | 88.2 | 86.8 | 86.8 | 10.7 | 4.1 |
| 47 | 75.7 | 79.9 | 87.0 | 86.7 | 86.7 | 11.0 | 4.2 |

TABLE F-V

NOISE LEVEL TIME HISTORY DATA

SIKORSKY S-61

OCTOBER 28 1976

EVENT 20, 6 DEGREE APPROACH, CENTERLINE MIC. (HARD SITE)

1/2 SECOND INTEGRATION VS NOISE INDEXES
(DB RE 20 MICRU PA)

| INT | DBA | DBD | OASPL | PNL | PNLT | PNL-DBA | DBD-DBA |
|---------|------|------|-------|------|------|---------|---------|
| 1 | 70.5 | 77.0 | 84.6 | 84.3 | 85.3 | 13.8 | 6.5 |
| 2 | 71.1 | 77.5 | 84.8 | 84.7 | 85.8 | 13.6 | 6.4 |
| 3 | 72.3 | 78.0 | 84.9 | 85.4 | 86.5 | 13.1 | 5.7 |
| 4 | 74.2 | 79.2 | 85.2 | 86.5 | 87.7 | 12.3 | 5.0 |
| 5 | 75.2 | 79.9 | 85.6 | 87.3 | 87.3 | 12.1 | 4.7 |
| 6 | 75.8 | 80.5 | 86.0 | 88.0 | 88.0 | 12.2 | 4.7 |
| 7 | 76.0 | 80.9 | 86.6 | 88.2 | 89.9 | 12.2 | 4.9 |
| 8 | 75.9 | 81.2 | 87.9 | 88.3 | 90.2 | 12.4 | 5.3 |
| 9 | 75.4 | 81.2 | 88.4 | 88.6 | 90.1 | 13.2 | 5.8 |
| 10 | 75.3 | 81.0 | 88.6 | 88.7 | 88.7 | 13.4 | 5.7 |
| 11 | 75.1 | 81.0 | 88.9 | 88.6 | 88.6 | 13.5 | 5.9 |
| 12 | 75.4 | 81.5 | 89.0 | 88.9 | 88.9 | 13.5 | 6.1 |
| 13 | 76.1 | 82.5 | 89.2 | 89.7 | 89.7 | 13.6 | 6.4 |
| 14 | 78.7 | 84.3 | 89.2 | 91.3 | 91.3 | 12.6 | 5.6 |
| 15 | 79.2 | 84.9 | 89.4 | 92.0 | 92.0 | 12.8 | 5.7 |
| 16 | 79.8 | 85.4 | 89.6 | 92.6 | 92.6 | 12.8 | 5.6 |
| 17 | 80.3 | 86.0 | 89.9 | 92.9 | 92.9 | 12.6 | 5.7 |
| 18 | 80.9 | 86.7 | 90.1 | 93.5 | 93.5 | 12.6 | 5.8 |
| 19 | 81.4 | 87.2 | 90.1 | 94.0 | 94.0 | 12.6 | 5.8 |
| 20 | 81.3 | 87.0 | 89.8 | 94.2 | 94.2 | 12.9 | 5.7 |
| OH → 21 | 81.9 | 87.6 | 90.0 | 94.6 | 94.6 | 12.7 | 5.7 |
| 22 | 82.5 | 88.1 | 90.9 | 95.3 | 95.3 | 12.8 | 5.6 |
| 23 | 83.5 | 89.1 | 92.3 | 96.0 | 96.0 | 12.5 | 5.6 |
| 24 | 84.1 | 89.8 | 93.4 | 96.4 | 96.4 | 12.3 | 5.7 |
| 25 | 84.2 | 90.1 | 93.9 | 96.7 | 96.7 | 12.5 | 5.9 |
| 26 | 84.6 | 90.4 | 94.0 | 97.0 | 97.0 | 12.4 | 5.8 |
| 27 | 84.1 | 89.7 | 93.2 | 96.3 | 96.3 | 12.2 | 5.6 |
| 28 | 83.4 | 89.0 | 92.2 | 95.8 | 95.8 | 12.4 | 5.6 |
| 29 | 81.4 | 87.2 | 90.4 | 94.3 | 94.3 | 12.9 | 5.8 |
| 30 | 80.1 | 85.9 | 89.2 | 93.0 | 93.0 | 12.9 | 5.8 |
| 31 | 78.7 | 84.4 | 87.5 | 91.4 | 91.4 | 12.7 | 5.7 |
| 32 | 77.9 | 83.4 | 86.3 | 90.6 | 90.6 | 12.7 | 5.5 |
| 33 | 76.6 | 82.4 | 85.0 | 89.4 | 89.4 | 12.8 | 5.8 |
| 34 | 75.3 | 80.9 | 83.6 | 88.0 | 88.0 | 12.7 | 5.6 |
| 35 | 75.1 | 80.2 | 82.6 | 87.5 | 87.5 | 12.4 | 5.1 |
| 36 | 74.8 | 79.6 | 81.9 | 87.2 | 88.5 | 12.4 | 4.8 |
| 37 | 73.9 | 78.6 | 81.0 | 86.3 | 86.3 | 12.4 | 4.7 |
| 38 | 71.8 | 76.8 | 80.0 | 84.3 | 84.3 | 12.5 | 5.0 |
| 39 | 70.3 | 75.8 | 79.2 | 83.0 | 83.0 | 12.7 | 5.5 |

TABLE F-V

NOISE LEVEL TIME HISTORY DATA

SIKORSKY S-61

OCTOBER 28 1976

EVENT 26, 100 KT. FLY BY, CENTERLINE MIC. (HARD SITE)

1/2 SECOND INTEGRATION VS NOISE INDEXES
(DB RE 20 MICRO PA)

| INT | DBA | DBD | OASPL | PNL | PNLT | PNL-DBA | DBD-DBA |
|---------|------|------|-------|------|------|---------|---------|
| 1 | 70.5 | 78.0 | 84.5 | 85.0 | 85.0 | 14.5 | 7.5 |
| 2 | 71.4 | 78.4 | 84.1 | 85.5 | 85.5 | 14.1 | 7.0 |
| 3 | 72.0 | 79.1 | 84.4 | 86.4 | 87.6 | 14.4 | 7.1 |
| 4 | 73.6 | 79.7 | 85.3 | 87.5 | 87.5 | 13.9 | 6.1 |
| 5 | 75.3 | 80.8 | 85.6 | 88.7 | 90.2 | 13.4 | 5.5 |
| 6 | 76.7 | 81.5 | 86.0 | 89.2 | 91.0 | 12.5 | 4.8 |
| 7 | 78.0 | 82.5 | 85.9 | 89.9 | 89.9 | 11.9 | 4.5 |
| 8 | 79.4 | 83.5 | 86.0 | 90.6 | 90.6 | 11.2 | 4.1 |
| 9 | 80.7 | 85.1 | 86.0 | 91.5 | 91.5 | 10.8 | 4.4 |
| 10 | 81.5 | 85.8 | 85.5 | 91.9 | 91.9 | 10.4 | 4.3 |
| 11 | 82.2 | 86.8 | 86.4 | 93.4 | 93.4 | 11.2 | 4.6 |
| 12 | 83.4 | 87.6 | 87.4 | 94.5 | 94.5 | 11.1 | 4.2 |
| 13 | 84.0 | 88.2 | 88.2 | 95.2 | 95.2 | 11.2 | 4.2 |
| OH → 14 | 84.1 | 88.2 | 88.3 | 94.9 | 94.9 | 10.8 | 4.1 |
| 15 | 83.6 | 87.8 | 88.2 | 94.5 | 94.5 | 10.9 | 4.2 |
| 16 | 82.8 | 87.1 | 87.8 | 93.9 | 93.9 | 11.1 | 4.3 |
| 17 | 82.0 | 86.1 | 87.2 | 93.0 | 93.0 | 11.0 | 4.1 |
| 18 | 80.5 | 85.0 | 86.1 | 91.7 | 91.7 | 11.2 | 4.5 |
| 19 | 79.3 | 83.8 | 85.5 | 90.7 | 90.7 | 11.4 | 4.5 |
| 20 | 77.9 | 82.7 | 84.9 | 89.6 | 89.6 | 11.7 | 4.8 |
| 21 | 77.2 | 82.0 | 84.4 | 89.0 | 89.0 | 11.8 | 4.8 |
| 22 | 76.6 | 81.2 | 83.2 | 88.4 | 88.4 | 11.8 | 4.6 |
| 23 | 75.3 | 80.3 | 82.4 | 87.5 | 87.5 | 12.2 | 5.0 |
| 24 | 73.3 | 78.7 | 81.8 | 86.1 | 86.1 | 12.8 | 5.4 |
| 25 | 70.9 | 77.6 | 81.2 | 84.5 | 84.5 | 13.6 | 6.7 |
| 26 | 69.4 | 76.9 | 81.8 | 83.9 | 83.9 | 14.5 | 7.5 |
| 27 | 69.6 | 77.3 | 82.4 | 84.0 | 85.2 | 14.4 | 7.7 |

TABLE F-II

NOISE LEVEL TIME HISTORY DATA

SIKORSKY S-61

OCTOBER 28 1976

EVENT 27, 100 KT. FLY BY, CENTERLINE MIC. (HARD SITE)

1/2 SECOND INTEGRATION VS NOISE INDEXES
(DB · RE 20 MICRO PA)

| INT | DBA | DBD | JASPL | PNL | PNLT | PNL-DBA | DBD-DBA |
|---------|------|------|-------|------|------|---------|---------|
| 1 | 72.0 | 77.6 | 84.5 | 84.2 | 85.3 | 12.2 | 5.6 |
| 2 | 72.2 | 78.0 | 84.3 | 84.7 | 84.7 | 12.5 | 5.8 |
| 3 | 72.5 | 78.5 | 84.5 | 85.6 | 85.6 | 13.1 | 6.0 |
| 4 | 73.1 | 78.9 | 84.6 | 86.0 | 86.0 | 12.9 | 5.8 |
| 5 | 72.8 | 78.9 | 84.6 | 85.8 | 85.8 | 13.0 | 6.1 |
| 6 | 73.9 | 80.4 | 84.3 | 86.7 | 88.2 | 12.8 | 6.5 |
| 7 | 74.8 | 80.9 | 84.7 | 87.1 | 89.2 | 12.3 | 6.1 |
| 8 | 76.2 | 81.6 | 85.2 | 88.2 | 89.3 | 12.0 | 5.4 |
| 9 | 77.4 | 82.2 | 85.5 | 89.3 | 89.3 | 11.9 | 4.8 |
| 10 | 78.6 | 83.6 | 86.2 | 90.5 | 90.5 | 11.9 | 5.0 |
| 11 | 80.6 | 85.3 | 86.8 | 92.3 | 93.5 | 11.7 | 4.7 |
| 12 | 82.4 | 86.9 | 87.6 | 93.9 | 94.9 | 11.5 | 4.5 |
| 13 | 82.8 | 87.1 | 87.6 | 94.3 | 94.3 | 11.5 | 4.3 |
| OH → 14 | 82.5 | 86.7 | 86.8 | 93.9 | 93.9 | 11.4 | 4.2 |
| 15 | 81.7 | 85.9 | 86.0 | 93.2 | 93.2 | 11.5 | 4.2 |
| 16 | 81.5 | 85.7 | 85.9 | 92.8 | 92.8 | 11.3 | 4.2 |
| 17 | 81.2 | 85.1 | 85.9 | 92.1 | 92.1 | 10.9 | 3.9 |
| 18 | 80.4 | 84.2 | 85.3 | 90.9 | 90.9 | 10.5 | 3.8 |
| 19 | 79.3 | 83.0 | 84.4 | 89.5 | 89.5 | 10.2 | 3.7 |
| 20 | 78.1 | 81.8 | 83.3 | 88.3 | 88.3 | 10.2 | 3.7 |
| 21 | 76.7 | 80.2 | 82.5 | 87.0 | 87.0 | 10.3 | 3.5 |
| 22 | 75.4 | 78.8 | 81.8 | 85.9 | 85.9 | 10.5 | 3.4 |
| 23 | 73.5 | 77.3 | 80.9 | 84.3 | 84.3 | 10.8 | 3.8 |
| 24 | 71.1 | 75.5 | 79.7 | 82.3 | 82.3 | 11.2 | 4.4 |
| 25 | 69.6 | 74.3 | 78.9 | 80.9 | 80.9 | 11.3 | 4.7 |
| 26 | 70.0 | 74.2 | 78.6 | 80.9 | 80.9 | 10.9 | 4.2 |

TABLE F-V

NOISE LEVEL TIME HISTORY DATA

SIKORSKY S-61

OCTOBER 28 1976

EVENT 28, 100 KT. FLY BY, CENTERLINE MIC. (HARD SITE)

1/2 SECOND INTEGRATION VS NOISE INDEXES
(DB, RE 20 MICRO PA)

| INT | DBA | DBD | OASPL | PNL | PNLT | PNL-DBA | DBD-DBA |
|---------|------|------|-------|------|------|---------|---------|
| 1 | 66.6 | 73.1 | 83.7 | 79.0 | 80.8 | 12.4 | 6.5 |
| 2 | 67.5 | 73.4 | 82.5 | 79.7 | 81.6 | 12.2 | 5.9 |
| 3 | 69.0 | 74.5 | 82.4 | 81.0 | 81.0 | 12.0 | 5.5 |
| 4 | 71.0 | 75.9 | 83.8 | 82.4 | 82.4 | 11.4 | 4.9 |
| 5 | 71.2 | 76.2 | 84.2 | 82.7 | 82.7 | 11.5 | 5.0 |
| 6 | 72.4 | 77.0 | 84.6 | 83.9 | 83.9 | 11.5 | 4.6 |
| 7 | 72.6 | 77.2 | 84.2 | 84.5 | 84.5 | 11.9 | 4.6 |
| 8 | 73.2 | 77.7 | 84.5 | 85.1 | 86.8 | 11.9 | 4.5 |
| 9 | 74.1 | 78.7 | 84.7 | 85.9 | 88.1 | 11.8 | 4.6 |
| 10 | 74.8 | 79.7 | 85.0 | 87.1 | 88.2 | 12.3 | 4.9 |
| 11 | 75.3 | 80.3 | 85.1 | 87.9 | 87.9 | 12.6 | 5.0 |
| 12 | 75.7 | 80.6 | 84.8 | 88.0 | 88.0 | 12.3 | 4.9 |
| 13 | 76.5 | 81.5 | 85.9 | 88.7 | 88.7 | 12.2 | 5.0 |
| 14 | 77.8 | 82.8 | 86.4 | 89.5 | 89.5 | 11.7 | 5.0 |
| 15 | 80.0 | 85.1 | 87.1 | 91.8 | 91.8 | 11.8 | 5.1 |
| 16 | 80.6 | 85.7 | 86.6 | 92.4 | 92.4 | 11.8 | 5.1 |
| 17 | 81.0 | 85.9 | 86.5 | 92.5 | 92.5 | 11.5 | 4.9 |
| OH → 18 | 80.5 | 85.3 | 86.3 | 91.9 | 91.9 | 11.4 | 4.8 |
| 19 | 80.5 | 84.8 | 86.3 | 91.8 | 91.8 | 11.3 | 4.3 |
| 20 | 79.6 | 83.9 | 86.1 | 91.0 | 91.0 | 11.4 | 4.3 |
| 21 | 78.6 | 82.6 | 85.5 | 89.5 | 89.5 | 10.9 | 4.0 |
| 22 | 77.5 | 81.6 | 85.3 | 88.2 | 88.2 | 10.7 | 4.1 |
| 23 | 76.6 | 80.3 | 84.5 | 86.9 | 86.9 | 10.3 | 3.7 |
| 24 | 75.3 | 79.3 | 83.7 | 85.9 | 85.9 | 10.6 | 4.0 |
| 25 | 73.8 | 77.7 | 82.0 | 84.8 | 84.8 | 11.0 | 3.9 |
| 26 | 72.3 | 76.4 | 80.8 | 83.6 | 83.6 | 11.3 | 4.1 |
| 27 | 70.8 | 74.9 | 79.8 | 81.7 | 81.7 | 10.9 | 4.1 |
| 28 | 68.9 | 73.2 | 78.9 | 80.3 | 80.3 | 11.4 | 4.3 |
| 29 | 68.5 | 72.9 | 79.2 | 79.7 | 79.7 | 11.2 | 4.4 |
| 30 | 69.2 | 73.6 | 79.6 | 80.5 | 81.5 | 11.3 | 4.4 |

TABLE F-V

NOISE LEVEL TIME HISTORY DATA

SIKORSKY S-61

OCTOBER 28 1976

EVENT 31, 3 DEGREE APPROACH, CENTERLINE MIC. (HARD SITE)

1/2 SECOND INTEGRATION VS NOISE INDEXES
(DB RE 20 MICRO PA)

| INT | DBA | DBD | OASPL | PNL | PNLT | PNL-DBA | DBD-DBA |
|---------|------|------|-------|------|------|---------|---------|
| 1 | 69.6 | 76.9 | 84.7 | 84.9 | 84.9 | 15.3 | 7.3 |
| 2 | 70.8 | 77.7 | 84.7 | 85.7 | 85.7 | 14.9 | 6.9 |
| 3 | 73.5 | 78.8 | 83.9 | 87.0 | 87.0 | 13.5 | 5.3 |
| 4 | 76.8 | 81.6 | 84.5 | 89.6 | 89.6 | 12.8 | 4.8 |
| 5 | 77.9 | 82.6 | 85.3 | 90.5 | 90.5 | 12.6 | 4.7 |
| 6 | 77.8 | 82.9 | 85.4 | 90.5 | 90.5 | 12.7 | 5.1 |
| 7 | 77.0 | 82.3 | 84.9 | 89.6 | 89.6 | 12.6 | 5.3 |
| 8 | 80.7 | 85.0 | 86.9 | 91.6 | 91.6 | 10.9 | 4.3 |
| 9 | 82.9 | 87.4 | 89.1 | 94.0 | 95.4 | 11.1 | 4.5 |
| 10 | 84.6 | 89.1 | 90.4 | 95.5 | 95.5 | 10.9 | 4.5 |
| 11 | 84.6 | 89.4 | 90.8 | 96.3 | 96.3 | 11.7 | 4.8 |
| 12 | 85.0 | 90.0 | 91.0 | 96.7 | 96.7 | 11.7 | 5.0 |
| 13 | 86.6 | 91.2 | 91.7 | 97.8 | 97.8 | 11.2 | 4.6 |
| 14 | 86.2 | 91.0 | 91.3 | 97.9 | 97.9 | 11.7 | 4.8 |
| 15 | 85.9 | 90.8 | 91.2 | 97.7 | 97.7 | 11.8 | 4.9 |
| 16 | 83.9 | 89.2 | 90.6 | 96.1 | 96.1 | 12.2 | 5.3 |
| 17 | 84.3 | 89.4 | 91.2 | 96.2 | 96.2 | 11.9 | 5.1 |
| 21 → 18 | 84.1 | 88.9 | 91.9 | 96.0 | 96.0 | 11.9 | 4.8 |
| 19 | 84.6 | 89.4 | 92.7 | 96.4 | 96.4 | 11.8 | 4.8 |
| 20 | 84.8 | 89.4 | 93.1 | 96.3 | 96.3 | 11.5 | 4.6 |
| 21 | 83.9 | 88.5 | 92.9 | 95.4 | 95.4 | 11.5 | 4.6 |
| 22 | 82.3 | 86.8 | 92.1 | 93.7 | 93.7 | 11.4 | 4.5 |
| 23 | 79.8 | 84.6 | 90.8 | 91.4 | 91.4 | 11.6 | 4.8 |
| 24 | 78.4 | 83.5 | 89.3 | 90.5 | 90.5 | 12.1 | 5.1 |
| 25 | 77.3 | 82.7 | 88.6 | 89.7 | 89.7 | 12.4 | 5.4 |
| 26 | 76.9 | 82.6 | 88.0 | 89.7 | 89.7 | 12.8 | 5.7 |
| 27 | 76.0 | 82.1 | 87.0 | 89.3 | 89.3 | 13.3 | 6.1 |
| 28 | 74.7 | 81.3 | 85.3 | 88.4 | 88.4 | 13.7 | 6.6 |
| 29 | 72.7 | 79.4 | 83.7 | 86.1 | 86.1 | 13.4 | 6.7 |

TABLE F-V

NOISE LEVEL TIME HISTORY DATA

SIKORSKY S-61

OCTOBER 28 1976

EVENT 32, 115 KT. FLY BY, CENTERLINE MIC. (HARD SITE)

1/2 SECOND INTEGRATION VS NOISE INDEXES
(DB RE 20 MICRO PA)

| INT | DBA | DBD | OASPL | PNL | PNLT | PNL-DBA | DBD-DBA |
|---------|------|------|-------|------|------|---------|---------|
| 1 | 70.4 | 76.0 | 81.9 | 82.4 | 83.9 | 12.0 | 5.6 |
| 2 | 71.8 | 76.7 | 82.0 | 83.5 | 84.5 | 11.7 | 4.9 |
| 3 | 73.6 | 78.0 | 82.3 | 84.8 | 86.5 | 11.2 | 4.4 |
| 4 | 76.0 | 80.1 | 82.9 | 87.0 | 87.0 | 11.0 | 4.1 |
| 5 | 80.5 | 83.7 | 85.4 | 90.6 | 90.6 | 10.1 | 3.2 |
| 6 | 82.1 | 85.6 | 86.5 | 92.2 | 92.2 | 10.1 | 3.5 |
| 7 | 84.1 | 87.7 | 87.9 | 94.4 | 94.4 | 10.3 | 3.6 |
| 8 | 84.2 | 88.4 | 87.9 | 95.0 | 95.0 | 10.8 | 4.2 |
| 9 | 84.8 | 89.2 | 88.5 | 96.0 | 96.0 | 11.2 | 4.4 |
| OH → 10 | 84.7 | 89.0 | 88.4 | 96.2 | 96.2 | 11.5 | 4.3 |
| 11 | 84.7 | 88.8 | 88.7 | 96.1 | 96.1 | 11.4 | 4.1 |
| 12 | 83.3 | 87.1 | 87.6 | 94.5 | 94.5 | 11.2 | 3.8 |
| 13 | 81.5 | 85.7 | 86.2 | 92.8 | 92.8 | 11.3 | 4.2 |
| 14 | 80.1 | 84.2 | 84.9 | 91.4 | 91.4 | 11.3 | 4.1 |
| 15 | 80.1 | 83.9 | 84.3 | 91.0 | 91.0 | 10.9 | 3.8 |
| 16 | 79.2 | 82.8 | 83.6 | 89.7 | 89.7 | 10.5 | 3.6 |
| 17 | 77.2 | 80.9 | 81.7 | 87.8 | 87.8 | 10.6 | 3.7 |
| 18 | 74.9 | 78.8 | 80.6 | 85.7 | 85.7 | 10.8 | 3.9 |
| 19 | 73.4 | 77.4 | 80.2 | 84.2 | 84.2 | 10.8 | 4.0 |
| 20 | 72.2 | 76.4 | 79.6 | 83.0 | 83.0 | 10.8 | 4.2 |
| 21 | 71.5 | 75.7 | 78.6 | 82.1 | 82.1 | 10.6 | 4.2 |

TABLE F-V

NOISE LEVEL TIME HISTORY DATA

SIKORSKY S-61

OCTOBER 28 1976

EVENT 33, 115 KT. FLY BY, CENTERLINE MIC. (HARD SITE)

1/2 SECOND INTEGRATION VS NOISE INDEXES
(DB RE 20 MICRO PA)

| INT | DBA | DBD | OASPL | PNL | PNLT | PNL-DBA | DBD-DBA |
|---------|------|------|-------|------|------|---------|---------|
| 1 | 67.1 | 72.5 | 81.3 | 79.3 | 80.5 | 12.2 | 5.4 |
| 2 | 66.1 | 72.2 | 81.5 | 79.0 | 79.0 | 12.9 | 6.1 |
| 3 | 69.1 | 74.5 | 82.0 | 81.4 | 81.4 | 12.3 | 5.4 |
| 4 | 71.8 | 76.6 | 83.4 | 83.5 | 83.5 | 11.7 | 4.8 |
| 5 | 72.9 | 77.6 | 84.4 | 84.3 | 84.3 | 11.4 | 4.7 |
| 6 | 73.2 | 77.8 | 84.5 | 85.1 | 85.1 | 11.9 | 4.6 |
| 7 | 72.7 | 77.5 | 84.3 | 85.0 | 85.0 | 12.3 | 4.8 |
| 8 | 72.0 | 76.9 | 83.9 | 84.4 | 85.6 | 12.4 | 4.9 |
| 9 | 72.1 | 77.1 | 84.1 | 83.9 | 83.9 | 11.8 | 5.0 |
| 10 | 72.5 | 77.9 | 84.4 | 84.5 | 85.7 | 12.0 | 5.4 |
| 11 | 73.8 | 79.3 | 84.7 | 85.6 | 87.5 | 11.8 | 5.5 |
| 12 | 75.9 | 80.9 | 84.8 | 87.4 | 87.4 | 11.5 | 5.0 |
| 13 | 77.1 | 81.8 | 84.7 | 88.4 | 88.4 | 11.3 | 4.7 |
| 14 | 78.3 | 82.8 | 85.3 | 89.5 | 89.5 | 11.2 | 4.5 |
| 15 | 78.9 | 83.5 | 86.0 | 90.2 | 90.2 | 11.3 | 4.6 |
| 16 | 80.3 | 84.9 | 87.2 | 91.6 | 91.6 | 11.3 | 4.6 |
| 17 | 80.7 | 85.4 | 87.3 | 92.1 | 92.1 | 11.4 | 4.7 |
| 18 | 80.9 | 85.7 | 87.0 | 92.5 | 92.5 | 11.6 | 4.8 |
| OH → 19 | 80.5 | 85.4 | 86.1 | 92.3 | 92.3 | 11.8 | 4.9 |
| 20 | 80.5 | 85.3 | 86.3 | 92.2 | 92.2 | 11.7 | 4.8 |
| 21 | 80.5 | 85.2 | 86.5 | 92.0 | 92.0 | 11.5 | 4.7 |
| 22 | 79.9 | 84.3 | 86.4 | 91.2 | 91.2 | 11.3 | 4.4 |
| 23 | 78.7 | 83.0 | 85.2 | 89.9 | 89.9 | 11.2 | 4.3 |
| 24 | 77.7 | 81.6 | 84.2 | 88.7 | 88.7 | 11.0 | 3.9 |
| 25 | 77.0 | 80.4 | 83.4 | 87.6 | 87.6 | 10.6 | 3.4 |
| 26 | 76.3 | 79.8 | 82.9 | 87.0 | 87.0 | 10.7 | 3.5 |
| 27 | 75.2 | 79.0 | 82.2 | 86.2 | 86.2 | 11.0 | 3.8 |
| 28 | 74.7 | 78.7 | 81.8 | 85.9 | 85.9 | 11.2 | 4.0 |
| 29 | 74.5 | 78.4 | 81.3 | 85.8 | 85.8 | 11.3 | 3.9 |
| 30 | 73.9 | 77.8 | 81.1 | 85.0 | 85.0 | 11.1 | 3.9 |
| 31 | 72.8 | 76.6 | 80.6 | 83.8 | 83.8 | 11.0 | 3.8 |
| 32 | 70.8 | 74.8 | 80.4 | 82.1 | 82.1 | 11.3 | 4.0 |
| 33 | 68.4 | 73.0 | 80.0 | 80.2 | 81.4 | 11.8 | 4.6 |
| 34 | 66.7 | 72.3 | 81.2 | 79.4 | 79.4 | 12.7 | 5.6 |
| 35 | 66.0 | 72.7 | 83.0 | 79.8 | 81.3 | 13.8 | 6.7 |

TABLE F-V

NOISE LEVEL TIME HISTORY DATA

SIKORSKY S-61

OCTOBER 28 1976

EVENT 34, 115 KT. FLY BY, CENTERLINE MIC. (HARD SITE)

1/2 SECOND INTEGRATION VS NOISE INDEXES
(DB RE 20 MICRO PA)

| INT | DBA | DBD | OASPL | PWL | PWLT | PWL-DBA | DBD-DBA |
|---------|------|------|-------|------|------|---------|---------|
| 1 | 70.5 | 75.7 | 81.7 | 83.5 | 86.4 | 13.0 | 5.2 |
| 2 | 72.7 | 77.7 | 81.8 | 85.3 | 88.0 | 12.6 | 5.0 |
| 3 | 73.4 | 78.3 | 81.3 | 85.9 | 88.4 | 12.5 | 4.9 |
| 4 | 73.2 | 78.0 | 81.1 | 85.8 | 88.4 | 12.6 | 4.8 |
| 5 | 75.2 | 79.5 | 81.3 | 86.7 | 88.9 | 11.5 | 4.3 |
| 6 | 76.8 | 80.7 | 82.3 | 87.4 | 88.6 | 10.6 | 3.9 |
| 7 | 77.1 | 81.2 | 82.5 | 87.5 | 89.0 | 10.4 | 4.1 |
| 8 | 78.2 | 82.1 | 82.9 | 88.4 | 88.4 | 10.2 | 3.9 |
| 9 | 79.9 | 83.8 | 83.5 | 89.8 | 89.8 | 9.9 | 3.9 |
| 10 | 81.2 | 84.9 | 85.3 | 91.1 | 91.1 | 9.9 | 3.7 |
| 11 | 82.5 | 86.4 | 86.7 | 92.7 | 92.7 | 10.2 | 3.9 |
| 12 | 83.3 | 87.6 | 87.8 | 94.3 | 94.3 | 11.0 | 4.3 |
| OH → 13 | 83.5 | 87.8 | 87.7 | 94.9 | 94.9 | 11.4 | 4.3 |
| 14 | 83.0 | 87.5 | 87.6 | 94.7 | 94.7 | 11.7 | 4.5 |
| 15 | 82.3 | 86.8 | 87.3 | 94.0 | 94.0 | 11.7 | 4.5 |
| 16 | 81.5 | 86.0 | 86.8 | 93.1 | 93.1 | 11.6 | 4.5 |
| 17 | 80.4 | 84.8 | 85.9 | 91.9 | 91.9 | 11.5 | 4.4 |
| 18 | 79.0 | 83.0 | 84.7 | 90.2 | 90.2 | 11.2 | 4.0 |
| 19 | 78.0 | 82.0 | 83.9 | 88.9 | 88.9 | 10.9 | 4.0 |
| 20 | 76.2 | 80.3 | 82.7 | 86.9 | 86.9 | 10.7 | 4.1 |
| 21 | 74.7 | 78.9 | 81.8 | 85.8 | 85.8 | 11.1 | 4.2 |
| 22 | 73.6 | 78.1 | 80.8 | 85.0 | 85.0 | 11.4 | 4.5 |
| 23 | 73.0 | 77.4 | 79.7 | 83.9 | 83.9 | 10.9 | 4.4 |
| 24 | 72.5 | 76.6 | 78.4 | 83.2 | 83.2 | 10.7 | 4.1 |
| 25 | 73.0 | 76.5 | 78.7 | 83.2 | 84.3 | 10.2 | 3.5 |
| 26 | 73.5 | 76.7 | 78.9 | 83.2 | 84.3 | 9.7 | 3.2 |
| 27 | 72.7 | 76.0 | 79.3 | 82.2 | 82.2 | 9.5 | 3.3 |
| 28 | 70.3 | 74.1 | 80.6 | 80.6 | 81.7 | 10.3 | 3.8 |
| 29 | 66.3 | 71.3 | 81.4 | 78.1 | 79.2 | 11.8 | 5.0 |

TABLE F-V

NOISE LEVEL TIME HISTORY DATA

SIKORSKY S-61

OCTOBER 28 1976

EVENT 32, 115 KT. FLY BY, CENTERLINE MIC. (SOFT SITE)

1/2 SECOND INTEGRATION VS NOISE INDEXES
(DB RE 20 MICRO PA)

| INT | DBA | DBD | OASPL | PNL | PNLT | PNL-DBA | DBD-DBA |
|---------|------|------|-------|------|------|---------|---------|
| 1 | 61.4 | 68.2 | 79.3 | 75.0 | 75.0 | 13.6 | 6.8 |
| 2 | 65.4 | 70.8 | 78.7 | 77.8 | 77.8 | 12.4 | 5.4 |
| 3 | 68.4 | 73.0 | 78.9 | 79.7 | 80.7 | 11.3 | 4.6 |
| 4 | 71.4 | 76.2 | 79.3 | 82.7 | 84.6 | 11.3 | 4.8 |
| 5 | 71.6 | 76.4 | 80.0 | 83.0 | 84.9 | 11.4 | 4.8 |
| 6 | 72.6 | 77.5 | 80.3 | 84.2 | 85.9 | 11.6 | 4.9 |
| 7 | 73.6 | 78.3 | 80.7 | 85.2 | 85.2 | 11.6 | 4.7 |
| 8 | 75.7 | 80.8 | 81.1 | 87.5 | 87.5 | 11.8 | 5.1 |
| 9 | 77.2 | 82.1 | 81.9 | 88.8 | 88.8 | 11.6 | 4.9 |
| 10 | 78.7 | 83.7 | 83.0 | 90.0 | 91.0 | 11.3 | 5.0 |
| 11 | 80.3 | 85.1 | 84.9 | 91.6 | 91.6 | 11.3 | 4.8 |
| 12 | 81.0 | 85.7 | 85.7 | 92.3 | 92.3 | 11.3 | 4.7 |
| OH → 13 | 80.9 | 85.4 | 86.2 | 92.2 | 92.2 | 11.3 | 4.5 |
| 14 | 80.7 | 85.3 | 86.4 | 92.0 | 92.0 | 11.3 | 4.6 |
| 15 | 80.5 | 85.1 | 86.4 | 91.8 | 91.8 | 11.3 | 4.6 |
| 16 | 80.1 | 84.6 | 85.8 | 91.4 | 91.4 | 11.3 | 4.5 |
| 17 | 79.1 | 83.2 | 84.5 | 90.0 | 90.0 | 10.9 | 4.1 |
| 18 | 77.9 | 81.9 | 83.2 | 88.7 | 88.7 | 10.8 | 4.0 |
| 19 | 76.9 | 80.9 | 82.0 | 87.5 | 87.5 | 10.6 | 4.0 |
| 20 | 75.4 | 79.7 | 80.7 | 85.8 | 85.8 | 10.4 | 4.3 |
| 21 | 74.2 | 78.4 | 79.9 | 84.8 | 84.8 | 10.6 | 4.2 |
| 22 | 72.9 | 76.9 | 78.7 | 83.4 | 83.4 | 10.5 | 4.0 |
| 23 | 71.7 | 75.4 | 77.7 | 82.1 | 82.1 | 10.4 | 3.7 |
| 24 | 70.5 | 74.2 | 76.5 | 81.1 | 81.1 | 10.6 | 3.7 |
| 25 | 68.7 | 72.3 | 75.5 | 79.6 | 79.6 | 10.9 | 3.6 |
| 26 | 66.8 | 70.6 | 74.2 | 77.9 | 77.9 | 11.1 | 3.8 |
| 27 | 64.5 | 68.6 | 73.2 | 76.5 | 76.5 | 12.0 | 4.1 |

TABLE F-V

NOISE LEVEL TIME HISTORY DATA

SIKORSKY S-61

OCTOBER 28 1976

EVENT 33, 115 KT. FLY BY, CENTERLINE MIC. (SOFT SITE)

1/2 SECOND INTEGRATION VS NOISE INDEXES
(DB RE 20 MICRO PA)

| INT | DBA | DBD | OASPL | PNL | PNLT | PNL-DBA | DBD-DBA |
|---------|------|------|-------|------|------|---------|---------|
| 1 | 64.9 | 71.6 | 81.8 | 78.3 | 79.6 | 13.4 | 6.7 |
| 2 | 67.2 | 73.1 | 82.8 | 79.8 | 80.9 | 12.6 | 5.9 |
| 3 | 68.3 | 73.8 | 82.7 | 80.5 | 80.5 | 12.2 | 5.5 |
| 4 | 69.0 | 74.3 | 82.7 | 81.3 | 82.6 | 12.3 | 5.3 |
| 5 | 69.1 | 74.5 | 81.8 | 81.6 | 83.7 | 12.5 | 5.4 |
| 6 | 70.5 | 75.4 | 82.2 | 82.8 | 85.0 | 12.3 | 4.9 |
| 7 | 73.3 | 78.2 | 83.0 | 85.1 | 86.2 | 11.8 | 4.9 |
| 8 | 75.3 | 79.9 | 83.7 | 87.0 | 87.0 | 11.7 | 4.6 |
| 9 | 75.9 | 80.2 | 83.4 | 87.5 | 87.5 | 11.6 | 4.3 |
| 10 | 75.7 | 79.8 | 82.9 | 87.3 | 87.3 | 11.6 | 4.1 |
| 11 | 75.4 | 79.9 | 82.7 | 87.0 | 87.0 | 11.6 | 4.5 |
| 12 | 76.1 | 81.0 | 83.8 | 87.5 | 88.8 | 11.4 | 4.9 |
| OH → 13 | 77.3 | 82.1 | 84.8 | 89.0 | 89.0 | 11.7 | 4.8 |
| 14 | 78.2 | 82.9 | 85.4 | 90.1 | 90.1 | 11.9 | 4.7 |
| 15 | 78.8 | 83.4 | 85.5 | 90.6 | 90.6 | 11.8 | 4.6 |
| 16 | 78.7 | 83.4 | 85.8 | 90.6 | 90.6 | 11.9 | 4.7 |
| 17 | 78.4 | 83.0 | 85.8 | 90.3 | 90.3 | 11.9 | 4.6 |
| 18 | 77.5 | 82.1 | 85.2 | 89.7 | 89.7 | 12.2 | 4.6 |
| 19 | 76.8 | 81.1 | 84.3 | 88.2 | 88.2 | 11.4 | 4.3 |
| 20 | 75.6 | 79.9 | 83.2 | 87.0 | 87.0 | 11.4 | 4.3 |
| 21 | 74.6 | 78.5 | 82.9 | 85.7 | 85.7 | 11.1 | 3.9 |
| 22 | 72.9 | 77.1 | 82.2 | 84.2 | 84.2 | 11.3 | 4.2 |
| 23 | 71.6 | 76.2 | 81.5 | 83.1 | 83.1 | 11.5 | 4.6 |
| 24 | 70.8 | 75.4 | 80.4 | 82.8 | 82.8 | 12.0 | 4.6 |
| 25 | 69.6 | 74.1 | 79.5 | 81.7 | 81.7 | 12.1 | 4.5 |
| 26 | 67.8 | 72.5 | 78.5 | 80.3 | 80.3 | 12.5 | 4.7 |
| 27 | 67.0 | 71.5 | 77.4 | 79.3 | 79.3 | 12.3 | 4.5 |
| 28 | 66.5 | 71.2 | 77.2 | 78.9 | 78.9 | 12.4 | 4.7 |

TABLE F-V

NOISE LEVEL TIME HISTORY DATA

SIKORSKY S-61

OCTOBER 28 1976

EVENT 34, 115 KT. FLY BY, CENTERLINE MIC. (SOFT SITE)

1/2 SECOND INTEGRATION VS NOISE INDEXES
(DB RE 20 MICRO PA)

| INT | DBA | DBD | OASPL | PNL | PNLT | PNL-DBA | DBD-DBA |
|--------|------|------|-------|------|------|---------|---------|
| 1 | 69.4 | 73.9 | 79.9 | 80.4 | 81.8 | 11.0 | 4.5 |
| 2 | 69.0 | 73.8 | 79.6 | 80.2 | 81.3 | 11.2 | 4.8 |
| 3 | 68.6 | 73.8 | 79.4 | 80.6 | 82.0 | 12.0 | 5.2 |
| 4 | 70.1 | 74.8 | 78.9 | 82.0 | 83.5 | 11.9 | 4.7 |
| 5 | 74.4 | 78.7 | 79.7 | 85.1 | 85.1 | 10.7 | 4.3 |
| 6 | 77.9 | 82.0 | 81.6 | 88.1 | 88.1 | 10.2 | 4.1 |
| 7 | 79.9 | 84.2 | 83.8 | 90.5 | 90.5 | 10.6 | 4.3 |
| OH → 8 | 80.5 | 85.2 | 84.8 | 91.6 | 91.6 | 11.1 | 4.7 |
| 9 | 80.4 | 85.5 | 85.3 | 91.9 | 91.9 | 11.5 | 5.1 |
| 10 | 80.0 | 85.3 | 85.4 | 91.9 | 91.9 | 11.9 | 5.3 |
| 11 | 80.3 | 85.5 | 85.9 | 92.0 | 92.0 | 11.7 | 5.2 |
| 12 | 80.5 | 85.3 | 86.4 | 91.9 | 91.9 | 11.4 | 4.8 |
| 13 | 80.0 | 84.6 | 86.6 | 91.6 | 91.6 | 11.6 | 4.6 |
| 14 | 78.9 | 83.3 | 86.1 | 90.8 | 90.8 | 11.9 | 4.4 |
| 15 | 77.8 | 82.3 | 85.0 | 89.3 | 89.3 | 11.5 | 4.5 |
| 16 | 77.1 | 81.3 | 83.4 | 88.3 | 88.3 | 11.2 | 4.2 |
| 17 | 76.1 | 80.0 | 82.0 | 87.0 | 87.0 | 10.9 | 3.9 |
| 18 | 73.9 | 77.7 | 81.3 | 84.4 | 84.4 | 10.5 | 3.8 |
| 19 | 71.9 | 75.9 | 80.9 | 82.9 | 82.9 | 11.0 | 4.0 |
| 20 | 69.4 | 73.5 | 79.8 | 80.8 | 80.8 | 11.4 | 4.1 |
| 21 | 68.1 | 72.4 | 78.3 | 79.7 | 79.7 | 11.6 | 4.3 |
| 22 | 67.2 | 71.5 | 77.6 | 79.0 | 79.0 | 11.8 | 4.3 |
| 23 | 65.7 | 70.4 | 77.4 | 77.6 | 77.6 | 11.9 | 4.7 |

TABLE F-VI

NOISE LEVEL FREQUENCY SPECTRA TIME HISTORY

SIKORSKY S-61

OCTOBER 28 1976

EVENT 32, 115 KT. FLY BY, MIC. 150 METERS WEST

1/3 OCTAVE FREQUENCY BAND VS TIME (SECONDS)
(DB RE 20 MICRO PA)

| BAND | -3.5 | -2.5 | -1.5 | -.5 | 0 | .5 | 1.5 | 2.5 | 3.5 | 5.0 |
|-------|------|------|------|------|------|------|------|------|------|------|
| 17 | 65.8 | 66.1 | 66.8 | 69.4 | 70.5 | 71.9 | 69.8 | 66.4 | 64.1 | 61.9 |
| 18 | 68.8 | 71.7 | 70.0 | 72.5 | 72.2 | 70.1 | 66.1 | 65.4 | 65.7 | 64.8 |
| 19 | 65.0 | 63.1 | 63.6 | 64.7 | 65.3 | 64.8 | 61.0 | 61.9 | 64.0 | 66.5 |
| 20 | 64.3 | 63.2 | 61.6 | 63.0 | 68.1 | 71.5 | 71.8 | 63.1 | 65.5 | 69.4 |
| 21 | 69.8 | 68.7 | 67.5 | 68.8 | 72.2 | 73.0 | 70.6 | 66.8 | 62.3 | 60.3 |
| 22 | 59.2 | 57.7 | 65.6 | 71.9 | 74.4 | 75.8 | 74.5 | 70.7 | 67.8 | 60.2 |
| 23 | 54.9 | 61.2 | 70.7 | 75.2 | 76.8 | 78.6 | 78.4 | 74.9 | 72.8 | 65.1 |
| 24 | 65.6 | 68.7 | 77.1 | 80.5 | 79.9 | 78.9 | 74.1 | 70.4 | 71.8 | 69.1 |
| 25 | 65.5 | 66.4 | 70.3 | 69.1 | 69.6 | 72.0 | 72.4 | 67.7 | 67.4 | 67.5 |
| 26 | 68.8 | 68.3 | 69.5 | 73.8 | 76.5 | 77.7 | 77.8 | 76.2 | 73.0 | 63.0 |
| 27 | 65.2 | 65.2 | 74.4 | 75.8 | 75.9 | 75.8 | 74.7 | 73.2 | 74.0 | 67.4 |
| 28 | 67.0 | 71.1 | 74.2 | 77.0 | 78.3 | 78.7 | 75.4 | 72.8 | 69.5 | 65.0 |
| 29 | 67.0 | 66.6 | 73.4 | 74.5 | 75.8 | 76.6 | 73.8 | 71.3 | 68.7 | 64.8 |
| 30 | 62.1 | 67.3 | 71.9 | 74.0 | 74.8 | 75.4 | 72.6 | 68.9 | 67.0 | 62.8 |
| 31 | 62.2 | 65.4 | 69.7 | 71.7 | 72.7 | 73.3 | 70.5 | 67.0 | 65.4 | 62.3 |
| 32 | 60.7 | 64.3 | 68.3 | 71.2 | 72.2 | 72.3 | 69.1 | 65.7 | 63.0 | 60.8 |
| 33 | 58.3 | 62.1 | 65.9 | 69.0 | 70.1 | 70.1 | 66.4 | 63.3 | 59.7 | 56.7 |
| 34 | 56.5 | 58.6 | 62.9 | 65.5 | 66.7 | 66.6 | 63.9 | 60.5 | 56.9 | 52.7 |
| 35 | 52.1 | 55.5 | 60.1 | 63.2 | 64.3 | 64.0 | 60.6 | 57.2 | 53.5 | 49.0 |
| 36 | 46.1 | 49.6 | 55.2 | 58.9 | 59.9 | 59.5 | 56.6 | 52.9 | 49.3 | 45.4 |
| 37 | 45.0 | 45.0 | 48.5 | 52.7 | 54.4 | 54.3 | 51.4 | 48.0 | 45.1 | 45.0 |
| 38 | 45.0 | 45.0 | 45.0 | 46.8 | 47.6 | 47.7 | 45.8 | 45.0 | 45.0 | 45.0 |
| 39 | 45.0 | 45.0 | 45.0 | 45.0 | 45.0 | 45.0 | 45.0 | 45.0 | 45.0 | 45.0 |
| 40 | 45.0 | 45.0 | 45.0 | 45.0 | 45.0 | 45.0 | 45.0 | 45.0 | 45.0 | 45.0 |
| A | 73.2 | 75.5 | 79.8 | 82.5 | 83.5 | 83.9 | 81.6 | 78.6 | 77.0 | 72.3 |
| D | 77.1 | 79.0 | 83.9 | 86.4 | 87.4 | 87.7 | 85.4 | 82.5 | 80.5 | 76.5 |
| OASPL | 82.2 | 83.6 | 86.2 | 88.4 | 89.2 | 89.3 | 86.4 | 83.3 | 81.8 | 78.5 |
| PNL | 84.1 | 86.2 | 90.4 | 93.3 | 94.1 | 94.6 | 92.6 | 90.0 | 88.0 | 83.4 |
| PNLT | 84.1 | 87.9 | 90.4 | 93.3 | 94.1 | 94.6 | 92.6 | 90.0 | 88.0 | 83.4 |

LOWER LIMIT OF ANALYSIS SYSTEM= 45.0

TABLE F-VI

NOISE LEVEL FREQUENCY SPECTRA TIME HISTORY

SIKORSKY S-61

OCTOBER 28 1976

EVENT 33, 115 KT. FLY BY, MIC. 150 METERS WEST

1/3 OCTAVE FREQUENCY BAND VS TIME (SECONDS)
(DB RE 20 MICRO PA)

| BAND | -5.0 | -3.5 | -2.0 | -.5 | 0 | 1.0 | 2.5 | 4.0 | 5.5 |
|-------|------|------|------|------|------|------|------|------|------|
| 17 | 64.0 | 65.0 | 69.3 | 68.7 | 69.7 | 69.2 | 66.0 | 65.4 | 67.4 |
| 18 | 68.3 | 66.9 | 68.4 | 70.9 | 70.3 | 68.0 | 65.5 | 67.1 | 68.5 |
| 19 | 61.7 | 63.5 | 66.3 | 63.0 | 63.2 | 63.0 | 63.2 | 64.9 | 66.3 |
| 20 | 59.2 | 60.2 | 62.7 | 66.5 | 70.1 | 75.6 | 67.6 | 64.3 | 66.1 |
| 21 | 70.9 | 69.6 | 69.2 | 74.4 | 75.6 | 74.2 | 69.2 | 66.4 | 64.6 |
| 22 | 58.1 | 56.8 | 63.3 | 69.0 | 71.1 | 73.7 | 71.3 | 64.7 | 58.7 |
| 23 | 50.8 | 56.6 | 68.7 | 72.1 | 72.9 | 74.7 | 75.1 | 70.5 | 63.0 |
| 24 | 60.2 | 67.4 | 73.6 | 76.7 | 75.7 | 69.9 | 67.6 | 67.1 | 66.3 |
| 25 | 59.7 | 64.4 | 67.4 | 67.6 | 69.1 | 72.3 | 71.5 | 63.6 | 66.2 |
| 26 | 64.9 | 66.7 | 65.8 | 74.1 | 74.2 | 71.8 | 74.1 | 69.3 | 64.4 |
| 27 | 60.3 | 61.4 | 70.4 | 75.0 | 77.0 | 77.7 | 73.2 | 67.7 | 66.8 |
| 28 | 59.4 | 68.6 | 70.9 | 77.3 | 76.4 | 71.8 | 69.4 | 66.1 | 65.1 |
| 29 | 63.0 | 65.8 | 67.2 | 72.5 | 73.0 | 72.2 | 69.6 | 65.1 | 64.7 |
| 30 | 58.7 | 64.5 | 67.6 | 71.9 | 71.9 | 71.3 | 68.0 | 63.7 | 62.2 |
| 31 | 60.9 | 61.7 | 65.8 | 69.9 | 70.0 | 69.2 | 66.0 | 62.2 | 61.0 |
| 32 | 57.2 | 60.9 | 65.4 | 69.4 | 69.5 | 68.7 | 64.4 | 60.3 | 58.8 |
| 33 | 56.1 | 58.6 | 63.3 | 66.2 | 66.6 | 65.8 | 61.7 | 57.0 | 54.8 |
| 34 | 52.5 | 55.7 | 61.3 | 64.3 | 64.6 | 62.5 | 59.1 | 54.4 | 52.3 |
| 35 | 48.2 | 51.8 | 57.6 | 62.0 | 62.0 | 60.0 | 56.2 | 51.6 | 48.9 |
| 36 | 45.0 | 46.0 | 54.1 | 57.8 | 57.9 | 56.2 | 52.3 | 47.9 | 45.2 |
| 37 | 45.0 | 45.0 | 48.0 | 52.2 | 52.7 | 50.8 | 47.8 | 45.0 | 45.0 |
| 38 | 45.0 | 45.0 | 45.0 | 45.5 | 46.0 | 45.4 | 45.0 | 45.0 | 45.0 |
| 39 | 45.0 | 45.0 | 45.0 | 45.0 | 45.0 | 45.0 | 45.0 | 45.0 | 45.0 |
| 40 | 45.0 | 45.0 | 45.0 | 45.0 | 45.0 | 45.0 | 45.0 | 45.0 | 45.0 |
| A | 69.4 | 73.0 | 76.6 | 80.9 | 80.9 | 79.7 | 77.5 | 73.2 | 71.6 |
| D | 73.9 | 76.9 | 80.7 | 84.6 | 85.0 | 84.2 | 81.6 | 77.3 | 75.6 |
| OASPL | 80.7 | 81.1 | 82.8 | 85.9 | 86.3 | 86.3 | 83.7 | 80.3 | 80.3 |
| PNL | 80.7 | 83.7 | 87.6 | 92.1 | 92.3 | 92.0 | 88.9 | 84.6 | 82.8 |
| PNLT | 82.1 | 85.4 | 87.6 | 93.3 | 92.3 | 92.0 | 88.9 | 84.6 | 82.8 |

LOWER LIMIT OF ANALYSIS SYSTEM= 45.0

TABLE F-VI

NOISE LEVEL FREQUENCY SPECTRA TIME HISTORY

SIKORSKY S-61

OCTOBER 28 1976

EVENT 34, 115 KT. FLY BY, MIC. 150 METERS WEST

1/3 OCTAVE FREQUENCY BAND VS TIME (SECONDS)
(DB RE 20 MICRO PA)

| BAND | -4.0 | -3.0 | -2.0 | -1.0 | 0 | 1.0 | 2.0 | 3.0 | 4.5 |
|-------|------|------|------|------|------|------|------|------|------|
| 17 | 65.8 | 65.4 | 66.0 | 65.4 | 67.3 | 69.5 | 68.2 | 66.7 | 64.5 |
| 18 | 69.3 | 67.4 | 68.3 | 67.2 | 66.8 | 63.8 | 64.3 | 62.4 | 60.4 |
| 19 | 65.4 | 66.5 | 65.5 | 65.3 | 64.4 | 61.5 | 61.9 | 61.1 | 62.7 |
| 20 | 64.6 | 66.6 | 66.6 | 62.3 | 69.2 | 75.9 | 72.4 | 60.9 | 66.7 |
| 21 | 72.6 | 71.8 | 71.1 | 64.4 | 73.4 | 73.7 | 70.2 | 65.4 | 54.6 |
| 22 | 52.1 | 58.3 | 60.8 | 66.7 | 72.5 | 74.2 | 73.2 | 69.8 | 61.0 |
| 23 | 57.6 | 59.1 | 67.6 | 72.5 | 74.9 | 76.4 | 76.2 | 75.0 | 67.3 |
| 24 | 63.1 | 68.3 | 73.6 | 77.6 | 78.3 | 73.8 | 69.6 | 70.2 | 66.6 |
| 25 | 61.6 | 67.0 | 70.4 | 68.4 | 68.9 | 73.6 | 72.9 | 67.8 | 64.6 |
| 26 | 63.4 | 67.2 | 69.0 | 70.8 | 75.3 | 75.7 | 76.7 | 75.8 | 64.1 |
| 27 | 62.7 | 63.3 | 69.0 | 74.0 | 75.3 | 77.5 | 75.9 | 71.7 | 67.6 |
| 28 | 60.3 | 69.5 | 73.4 | 73.8 | 75.9 | 74.1 | 72.1 | 71.6 | 64.4 |
| 29 | 62.2 | 67.2 | 67.7 | 71.8 | 74.2 | 73.5 | 71.1 | 69.5 | 63.9 |
| 30 | 60.1 | 64.9 | 69.0 | 71.9 | 73.8 | 72.4 | 69.7 | 66.8 | 60.7 |
| 31 | 57.9 | 62.7 | 67.3 | 70.0 | 71.6 | 70.3 | 67.8 | 65.2 | 59.6 |
| 32 | 57.8 | 63.1 | 67.2 | 68.1 | 69.8 | 69.8 | 67.1 | 63.4 | 58.4 |
| 33 | 56.7 | 60.3 | 65.3 | 66.1 | 67.2 | 67.4 | 64.7 | 60.6 | 55.1 |
| 34 | 53.0 | 58.1 | 62.7 | 63.6 | 65.1 | 65.2 | 63.0 | 58.6 | 51.0 |
| 35 | 49.6 | 54.3 | 59.0 | 61.2 | 62.1 | 61.8 | 59.6 | 55.8 | 48.1 |
| 36 | 45.0 | 50.2 | 54.4 | 56.8 | 57.9 | 58.0 | 55.4 | 51.5 | 45.5 |
| 37 | 45.0 | 45.5 | 49.3 | 50.3 | 52.8 | 52.6 | 49.9 | 47.0 | 45.0 |
| 38 | 45.0 | 45.0 | 45.0 | 45.1 | 46.5 | 47.3 | 45.6 | 45.0 | 45.0 |
| 39 | 45.0 | 45.0 | 45.0 | 45.0 | 45.0 | 45.0 | 45.0 | 45.0 | 45.0 |
| 40 | 45.0 | 45.0 | 45.0 | 45.0 | 45.0 | 45.0 | 45.0 | 45.0 | 45.0 |
| A | 69.3 | 74.4 | 77.7 | 79.8 | 81.5 | 81.4 | 79.7 | 77.3 | 71.3 |
| D | 74.8 | 78.8 | 82.2 | 83.8 | 85.4 | 85.6 | 84.1 | 81.5 | 75.1 |
| OASPL | 81.7 | 83.4 | 85.5 | 86.5 | 87.1 | 86.5 | 84.9 | 82.8 | 78.8 |
| PNL | 81.7 | 85.3 | 88.8 | 90.7 | 92.4 | 92.9 | 91.3 | 89.0 | 82.6 |
| PNLT | 81.7 | 86.7 | 90.5 | 90.7 | 92.4 | 92.9 | 91.3 | 89.0 | 82.6 |

LOWER LIMIT OF ANALYSIS SYSTEM= 45.0

TABLE F-VI

NOISE LEVEL FREQUENCY SPECTRA TIME HISTORY

SIKORSKY S-61

OCTOBER 28 1976

EVENT 32, 115 KT. FLY BY, MIC. 150 METERS EAST

1/3 OCTAVE FREQUENCY BAND VS TIME (SECONDS)
(DB RE 20 MICRO PA)

| BAND | -5.0 | -3.5 | -2.0 | -0.5 | 0 | 1.0 | 2.5 | 4.0 | 5.5 |
|-------|------|------|------|------|------|------|------|------|------|
| 17 | 64.8 | 64.7 | 64.9 | 68.2 | 69.6 | 68.6 | 67.4 | 66.5 | 61.8 |
| 18 | 70.0 | 68.8 | 67.1 | 68.2 | 68.6 | 67.3 | 66.9 | 65.7 | 64.8 |
| 19 | 66.8 | 63.9 | 64.2 | 65.2 | 64.4 | 60.9 | 62.8 | 62.0 | 64.2 |
| 20 | 64.5 | 64.2 | 67.1 | 63.5 | 66.3 | 66.3 | 63.8 | 64.5 | 65.9 |
| 21 | 71.2 | 74.5 | 73.7 | 69.2 | 68.7 | 68.7 | 65.7 | 63.8 | 60.8 |
| 22 | 58.7 | 57.4 | 59.6 | 67.6 | 69.4 | 70.9 | 66.5 | 60.5 | 54.7 |
| 23 | 52.7 | 55.2 | 63.9 | 71.1 | 72.6 | 76.7 | 74.6 | 68.6 | 59.0 |
| 24 | 55.9 | 66.2 | 71.6 | 74.4 | 74.2 | 73.2 | 72.3 | 68.3 | 64.2 |
| 25 | 59.5 | 64.8 | 67.4 | 68.4 | 66.9 | 67.2 | 66.3 | 66.3 | 66.1 |
| 26 | 63.0 | 68.6 | 65.9 | 72.3 | 73.5 | 74.9 | 72.1 | 65.6 | 65.5 |
| 27 | 62.4 | 60.2 | 70.5 | 75.6 | 74.6 | 71.3 | 71.5 | 69.4 | 60.4 |
| 28 | 58.4 | 67.6 | 70.2 | 72.9 | 73.8 | 74.5 | 72.2 | 67.2 | 63.5 |
| 29 | 61.2 | 67.5 | 69.9 | 74.2 | 74.3 | 74.4 | 70.4 | 68.0 | 59.1 |
| 30 | 59.2 | 67.4 | 69.9 | 73.9 | 73.8 | 72.4 | 70.3 | 65.7 | 61.1 |
| 31 | 59.4 | 66.0 | 69.1 | 72.3 | 71.9 | 71.1 | 68.8 | 65.1 | 59.1 |
| 32 | 58.2 | 66.3 | 68.7 | 71.9 | 71.6 | 70.0 | 67.0 | 64.2 | 57.9 |
| 33 | 55.3 | 63.5 | 65.0 | 68.9 | 68.7 | 67.6 | 63.5 | 59.8 | 53.3 |
| 34 | 51.0 | 59.7 | 62.5 | 66.2 | 66.1 | 64.7 | 60.3 | 56.0 | 49.1 |
| 35 | 47.9 | 56.2 | 58.0 | 62.5 | 62.6 | 61.2 | 56.8 | 51.5 | 46.3 |
| 36 | 45.0 | 47.2 | 52.9 | 58.3 | 58.3 | 56.8 | 52.1 | 46.6 | 45.0 |
| 37 | 45.0 | 45.0 | 46.8 | 51.8 | 51.8 | 51.1 | 47.0 | 45.0 | 45.0 |
| 38 | 45.0 | 45.0 | 45.0 | 45.0 | 45.2 | 45.7 | 45.0 | 45.0 | 45.0 |
| 39 | 45.0 | 45.0 | 45.0 | 45.0 | 45.0 | 45.0 | 45.0 | 45.0 | 45.0 |
| 40 | 45.0 | 45.0 | 45.0 | 45.0 | 45.0 | 45.0 | 45.0 | 45.0 | 45.0 |
| A | 68.9 | 75.4 | 77.8 | 81.5 | 81.6 | 80.9 | 78.1 | 74.3 | 69.3 |
| D | 74.2 | 79.2 | 82.2 | 85.5 | 85.6 | 85.1 | 82.3 | 78.4 | 74.2 |
| CMSPL | 78.5 | 80.7 | 82.6 | 85.0 | 84.7 | 84.6 | 82.7 | 79.0 | 75.7 |
| PNL | 80.5 | 86.4 | 88.9 | 92.2 | 92.2 | 91.4 | 88.7 | 85.2 | 81.0 |
| PNLT | 80.5 | 87.6 | 88.9 | 92.2 | 92.2 | 91.4 | 88.7 | 85.2 | 82.2 |

LOWER LIMIT OF ANALYSIS SYSTEM= 45.0

TABLE F-VI

NOISE LEVEL FREQUENCY SPECTRA TIME HISTORY

SIKORSKY S-61

OCTOBER 28 1976

EVENT 33, 115 KT. FLY BY, MIC. 150 METERS EAST

1/3 OCTAVE FREQUENCY BAND VS TIME (SECONDS)
(DB RE 20 MICRO PA)

| BAND | -8.5 | -6.5 | -4.5 | -2.5 | -.5 | 0 | 1.5 | 3.5 | 5.5 | 6.0 |
|-------|------|------|------|------|------|------|------|------|------|------|
| 17 | 64.1 | 67.7 | 66.2 | 66.3 | 67.0 | 67.6 | 66.8 | 64.6 | 61.1 | 61.3 |
| 18 | 71.7 | 74.3 | 71.7 | 68.6 | 68.3 | 67.4 | 67.6 | 70.6 | 68.4 | 66.0 |
| 19 | 65.1 | 68.3 | 67.3 | 65.2 | 63.1 | 63.3 | 63.0 | 62.5 | 63.2 | 61.9 |
| 20 | 61.5 | 65.4 | 64.3 | 61.9 | 60.2 | 61.3 | 62.1 | 65.4 | 67.3 | 66.7 |
| 21 | 68.1 | 74.2 | 74.7 | 68.3 | 68.0 | 68.8 | 72.0 | 75.9 | 74.6 | 73.7 |
| 22 | 59.6 | 61.2 | 60.2 | 58.6 | 66.0 | 68.4 | 67.6 | 65.1 | 65.1 | 64.5 |
| 23 | 58.6 | 59.5 | 57.4 | 63.5 | 71.8 | 72.6 | 75.1 | 70.9 | 61.3 | 59.7 |
| 24 | 56.0 | 56.4 | 63.1 | 70.3 | 75.6 | 75.1 | 71.4 | 70.0 | 64.0 | 61.2 |
| 25 | 51.6 | 58.5 | 59.8 | 66.3 | 67.2 | 66.3 | 63.2 | 66.1 | 67.3 | 65.4 |
| 26 | 55.0 | 65.4 | 66.3 | 62.4 | 70.8 | 73.4 | 72.4 | 66.9 | 66.5 | 65.5 |
| 27 | 56.9 | 66.9 | 61.7 | 67.2 | 74.7 | 74.6 | 69.3 | 70.5 | 61.8 | 59.7 |
| 28 | 57.8 | 65.2 | 61.1 | 69.6 | 72.9 | 74.2 | 71.8 | 66.8 | 64.7 | 61.4 |
| 29 | 53.3 | 64.1 | 61.5 | 65.9 | 73.6 | 74.4 | 71.4 | 67.1 | 62.2 | 60.3 |
| 30 | 56.5 | 66.0 | 62.0 | 65.5 | 74.1 | 74.5 | 69.3 | 65.0 | 62.2 | 59.1 |
| 31 | 54.8 | 63.4 | 63.8 | 65.6 | 72.8 | 73.3 | 68.0 | 63.2 | 61.6 | 58.3 |
| 32 | 55.4 | 63.1 | 62.8 | 64.9 | 71.0 | 70.9 | 66.9 | 60.8 | 58.3 | 55.1 |
| 33 | 51.3 | 60.0 | 59.9 | 61.6 | 67.4 | 67.8 | 63.5 | 57.6 | 54.3 | 51.3 |
| 34 | 46.3 | 56.0 | 55.4 | 59.3 | 64.2 | 64.1 | 60.1 | 53.8 | 50.2 | 47.8 |
| 35 | 45.0 | 49.4 | 51.8 | 54.7 | 61.4 | 60.9 | 57.0 | 51.1 | 46.8 | 45.2 |
| 36 | 45.0 | 45.0 | 45.3 | 49.8 | 57.1 | 56.1 | 52.2 | 46.9 | 45.0 | 45.0 |
| 37 | 45.0 | 45.0 | 45.0 | 45.0 | 50.4 | 49.9 | 47.4 | 45.0 | 45.0 | 45.0 |
| 38 | 45.0 | 45.0 | 45.0 | 45.0 | 45.0 | 45.0 | 45.0 | 45.0 | 45.0 | 45.0 |
| 39 | 45.0 | 45.0 | 45.0 | 45.0 | 45.0 | 45.0 | 45.0 | 45.0 | 45.0 | 45.0 |
| 40 | 45.0 | 45.0 | 45.0 | 45.0 | 45.0 | 45.0 | 45.0 | 45.0 | 45.0 | 45.0 |
| A | 63.8 | 73.3 | 71.6 | 75.1 | 81.4 | 81.7 | 78.2 | 74.4 | 71.6 | 69.1 |
| D | 71.6 | 77.8 | 77.2 | 79.1 | 85.1 | 85.4 | 82.2 | 79.0 | 76.7 | 75.0 |
| OASPL | 78.7 | 82.7 | 81.4 | 80.9 | 84.9 | 85.1 | 83.7 | 81.3 | 78.6 | 77.4 |
| PNL | 77.8 | 84.3 | 83.7 | 85.9 | 91.5 | 91.7 | 88.6 | 85.9 | 83.1 | 81.5 |
| PNLT | 77.8 | 84.3 | 83.7 | 87.0 | 91.5 | 91.7 | 88.6 | 85.9 | 83.1 | 81.5 |

LOWER LIMIT OF ANALYSIS SYSTEM= 45.0

TABLE F-VI

NOISE LEVEL FREQUENCY SPECTRA TIME HISTORY

SIKORSKY S-61

OCTOBER 28 1976

EVENT 34, 115 KT. FLY BY, MIC. 150 METERS EAST

1/3 OCTAVE FREQUENCY BAND VS TIME (SECONDS)
(DB RE 20 MICRO PA)

| BAND | -8.5 | -7.0 | -5.5 | -4.0 | -2.5 | -1.0 | 0 | .5 | 2.0 | 4.0 |
|-------|------|------|------|------|------|------|------|------|------|------|
| 17 | 65.8 | 63.4 | 62.1 | 63.7 | 65.6 | 66.9 | 67.9 | 67.7 | 62.2 | 61.6 |
| 18 | 70.1 | 70.3 | 66.3 | 65.7 | 66.7 | 63.7 | 63.5 | 63.1 | 60.7 | 60.7 |
| 19 | 66.0 | 67.0 | 64.3 | 66.1 | 65.7 | 62.7 | 63.0 | 63.4 | 63.1 | 63.7 |
| 20 | 61.6 | 64.6 | 65.3 | 65.7 | 64.4 | 63.1 | 63.8 | 65.3 | 67.1 | 69.1 |
| 21 | 67.4 | 74.7 | 74.0 | 75.0 | 70.9 | 63.7 | 63.5 | 62.6 | 55.7 | 62.5 |
| 22 | 58.6 | 61.0 | 59.2 | 56.7 | 64.9 | 68.5 | 69.6 | 68.6 | 60.2 | 58.1 |
| 23 | 51.2 | 56.4 | 52.6 | 64.5 | 70.5 | 75.7 | 77.2 | 76.7 | 69.4 | 55.7 |
| 24 | 49.3 | 54.1 | 63.0 | 71.8 | 75.2 | 76.0 | 76.7 | 76.7 | 71.4 | 61.9 |
| 25 | 52.9 | 60.6 | 62.9 | 71.2 | 71.0 | 68.3 | 68.3 | 70.6 | 69.6 | 66.4 |
| 26 | 56.4 | 66.9 | 68.5 | 70.6 | 68.2 | 74.7 | 77.0 | 76.4 | 65.4 | 66.7 |
| 27 | 60.5 | 67.1 | 62.6 | 68.7 | 75.2 | 73.7 | 75.6 | 76.5 | 70.0 | 62.7 |
| 28 | 60.7 | 65.9 | 64.4 | 73.0 | 72.3 | 73.9 | 76.8 | 76.7 | 69.4 | 63.3 |
| 29 | 55.8 | 66.8 | 69.3 | 70.7 | 74.0 | 73.1 | 75.4 | 75.7 | 69.5 | 64.3 |
| 30 | 60.1 | 66.9 | 64.5 | 71.3 | 73.0 | 72.8 | 75.0 | 75.3 | 66.9 | 60.9 |
| 31 | 55.8 | 64.5 | 65.9 | 71.0 | 71.3 | 71.8 | 74.0 | 74.0 | 66.3 | 59.8 |
| 32 | 57.6 | 61.9 | 64.4 | 70.2 | 69.6 | 69.7 | 72.7 | 72.5 | 64.5 | 58.0 |
| 33 | 54.8 | 59.7 | 61.8 | 68.3 | 67.4 | 67.1 | 69.3 | 68.9 | 60.3 | 53.6 |
| 34 | 50.5 | 56.2 | 58.0 | 66.3 | 65.0 | 64.8 | 65.8 | 65.3 | 56.7 | 50.3 |
| 35 | 46.7 | 51.9 | 53.4 | 62.8 | 62.1 | 60.9 | 61.2 | 60.5 | 52.3 | 46.4 |
| 36 | 45.0 | 45.0 | 46.5 | 56.8 | 57.5 | 56.0 | 56.2 | 55.4 | 48.1 | 45.0 |
| 37 | 45.0 | 45.0 | 45.0 | 49.5 | 50.7 | 50.5 | 51.1 | 50.2 | 45.0 | 45.0 |
| 38 | 45.0 | 45.0 | 45.0 | 45.0 | 45.0 | 45.2 | 45.6 | 45.5 | 45.0 | 45.0 |
| 39 | 45.0 | 45.0 | 45.0 | 45.0 | 45.0 | 45.0 | 45.0 | 45.0 | 45.0 | 45.0 |
| 40 | 45.0 | 45.0 | 45.0 | 45.0 | 45.0 | 45.0 | 45.0 | 45.0 | 45.0 | 45.0 |
| A | 66.4 | 73.6 | 74.4 | 79.9 | 80.7 | 81.0 | 83.0 | 83.1 | 76.3 | 70.7 |
| D | 73.0 | 77.8 | 78.5 | 84.8 | 84.6 | 85.2 | 86.7 | 86.6 | 79.6 | 75.2 |
| GASPL | 79.7 | 80.4 | 80.1 | 83.9 | 84.7 | 84.9 | 86.5 | 86.2 | 79.8 | 76.5 |
| PNL | 79.1 | 84.0 | 85.1 | 90.7 | 91.0 | 91.2 | 93.2 | 93.1 | 86.0 | 81.8 |
| PNLT | 80.5 | 84.0 | 86.6 | 91.8 | 91.0 | 91.2 | 93.2 | 93.1 | 86.0 | 81.8 |

LOWER LIMIT OF ANALYSIS SYSTEM= 45.0

TABLE F-VI

NOISE LEVEL FREQUENCY SPECTRA TIME HISTORY

SIKORSKY S-61

OCTOBER 28 1976

EVENT 16, 9 DEGREE APPROACH, CENTERLINE MIC. (HARD SITE)

1/3 OCTAVE FREQUENCY BAND VS TIME (SECONDS)
(DB RE 20 MICRO PA)

| BAND | -16.5 | -13.5 | -10.5 | -7.5 | -4.5 | -1.5 | 0 | .5 | 1.5 | 4.5 | 6.0 |
|-------|-------|-------|-------|------|------|------|------|------|------|------|------|
| 17 | 63.5 | 65.4 | 66.6 | 65.6 | 67.4 | 68.0 | 71.4 | 71.6 | 70.4 | 68.9 | 66.2 |
| 18 | 65.2 | 69.0 | 69.1 | 69.7 | 69.5 | 70.8 | 68.9 | 68.3 | 64.0 | 66.1 | 65.0 |
| 19 | 61.1 | 62.4 | 63.1 | 62.8 | 65.9 | 62.8 | 63.4 | 64.5 | 65.4 | 65.4 | 63.6 |
| 20 | 59.7 | 60.1 | 61.3 | 60.5 | 59.7 | 65.3 | 74.1 | 76.7 | 78.4 | 63.2 | 66.6 |
| 21 | 69.1 | 70.3 | 70.2 | 69.9 | 59.0 | 77.5 | 80.4 | 80.9 | 80.2 | 63.8 | 60.6 |
| 22 | 54.1 | 56.0 | 53.8 | 53.0 | 59.4 | 71.1 | 74.1 | 75.2 | 78.4 | 70.4 | 55.6 |
| 23 | 51.8 | 51.2 | 54.5 | 60.8 | 64.8 | 70.4 | 72.3 | 71.9 | 72.4 | 73.0 | 62.1 |
| 24 | 63.4 | 62.7 | 65.9 | 74.7 | 76.3 | 73.9 | 71.3 | 74.3 | 76.1 | 71.6 | 65.6 |
| 25 | 64.2 | 61.8 | 63.3 | 67.4 | 62.8 | 68.4 | 75.2 | 75.3 | 74.6 | 66.0 | 66.2 |
| 26 | 70.2 | 66.7 | 70.0 | 68.7 | 62.9 | 74.6 | 73.4 | 74.0 | 74.5 | 67.1 | 63.5 |
| 27 | 67.6 | 61.2 | 60.4 | 61.7 | 66.2 | 69.6 | 73.5 | 72.9 | 73.6 | 67.3 | 61.3 |
| 28 | 58.2 | 54.1 | 56.8 | 66.6 | 58.1 | 67.8 | 72.9 | 73.2 | 74.1 | 66.3 | 62.9 |
| 29 | 60.2 | 59.6 | 58.9 | 60.6 | 61.5 | 68.7 | 72.0 | 72.1 | 72.5 | 66.7 | 62.0 |
| 30 | 56.5 | 57.3 | 54.8 | 63.3 | 61.0 | 68.7 | 70.4 | 70.3 | 70.4 | 64.3 | 61.0 |
| 31 | 57.1 | 58.8 | 54.9 | 62.4 | 59.9 | 67.2 | 69.3 | 68.9 | 69.0 | 63.7 | 60.0 |
| 32 | 55.9 | 56.6 | 54.6 | 62.3 | 60.4 | 66.6 | 68.4 | 68.4 | 68.0 | 62.9 | 59.7 |
| 33 | 49.8 | 54.4 | 52.6 | 60.7 | 60.2 | 64.2 | 67.4 | 67.4 | 65.8 | 59.8 | 57.1 |
| 34 | 45.4 | 50.6 | 49.1 | 58.1 | 58.5 | 63.9 | 66.6 | 65.8 | 63.5 | 58.8 | 55.4 |
| 35 | 45.0 | 45.3 | 45.1 | 54.2 | 55.9 | 63.7 | 63.9 | 63.6 | 62.3 | 56.9 | 53.1 |
| 36 | 45.0 | 45.0 | 45.0 | 49.7 | 52.9 | 60.3 | 61.3 | 61.5 | 60.0 | 53.5 | 49.3 |
| 37 | 45.0 | 45.0 | 45.0 | 45.0 | 47.0 | 55.2 | 57.6 | 57.9 | 57.4 | 49.8 | 45.2 |
| 38 | 45.0 | 45.0 | 45.0 | 45.0 | 45.0 | 50.0 | 53.7 | 54.5 | 54.6 | 46.0 | 45.0 |
| 39 | 45.0 | 45.0 | 45.0 | 45.0 | 45.0 | 45.3 | 48.9 | 49.7 | 50.3 | 45.0 | 45.0 |
| 40 | 45.0 | 45.0 | 45.0 | 45.0 | 45.0 | 45.0 | 46.0 | 46.4 | 46.2 | 45.0 | 45.0 |
| A | 69.6 | 68.1 | 68.3 | 73.2 | 72.4 | 77.7 | 80.0 | 79.9 | 80.4 | 74.4 | 70.5 |
| D | 74.4 | 73.9 | 74.5 | 78.6 | 78.8 | 83.5 | 85.5 | 85.4 | 85.3 | 79.6 | 75.4 |
| OASPL | 79.7 | 82.7 | 84.1 | 85.9 | 88.5 | 93.0 | 89.2 | 88.3 | 88.3 | 83.5 | 79.8 |
| PNL | 82.2 | 80.9 | 82.1 | 85.9 | 86.2 | 90.4 | 92.6 | 92.7 | 92.4 | 86.3 | 82.1 |
| PNLT | 82.2 | 82.2 | 83.1 | 87.8 | 86.2 | 90.4 | 92.6 | 92.7 | 92.4 | 86.3 | 82.1 |

LOWER LIMIT OF ANALYSIS SYSTEM= 45.0

TABLE F-VI

NOISE LEVEL FREQUENCY SPECTRA TIME HISTORY

SIKORSKY S-61

OCTOBER 28 1976

EVENT 18, 60 KT. FLY BY, CENTERLINE MIC. (HARD SITE)

1/3 OCTAVE FREQUENCY BAND VS TIME (SECONDS)
(DB RE 20 MICRO PA)

| BAND | -17.0 | -13.5 | -10.0 | -6.5 | -3.0 | -1.0 | 0 | .5 | 4.0 | 7.5 | 8.0 |
|-------|-------|-------|-------|------|------|------|------|------|------|------|------|
| 17 | 62.1 | 61.4 | 65.3 | 64.9 | 70.2 | 69.7 | 68.6 | 68.7 | 68.0 | 72.2 | 71.3 |
| 18 | 63.0 | 61.0 | 62.1 | 71.0 | 76.8 | 70.3 | 64.4 | 62.7 | 59.8 | 64.3 | 64.2 |
| 19 | 62.4 | 63.8 | 64.6 | 69.5 | 71.1 | 63.9 | 59.9 | 62.4 | 56.1 | 61.9 | 62.2 |
| 20 | 63.5 | 61.9 | 63.0 | 65.6 | 63.0 | 68.2 | 74.9 | 77.7 | 65.0 | 60.7 | 61.6 |
| 21 | 66.6 | 69.2 | 69.6 | 71.1 | 67.0 | 75.3 | 76.5 | 76.7 | 67.8 | 56.4 | 59.6 |
| 22 | 60.4 | 61.7 | 59.1 | 58.7 | 69.4 | 71.1 | 70.4 | 70.2 | 69.7 | 60.3 | 59.7 |
| 23 | 61.7 | 62.3 | 56.9 | 61.3 | 72.0 | 71.3 | 68.4 | 67.6 | 69.6 | 62.9 | 61.7 |
| 24 | 64.6 | 63.1 | 57.8 | 70.3 | 76.0 | 72.8 | 67.5 | 67.8 | 64.3 | 63.3 | 63.3 |
| 25 | 64.7 | 68.7 | 61.5 | 69.5 | 65.1 | 71.3 | 71.4 | 71.0 | 71.3 | 63.6 | 64.4 |
| 26 | 65.1 | 77.3 | 66.9 | 73.0 | 69.9 | 71.0 | 69.4 | 69.6 | 68.4 | 61.2 | 60.1 |
| 27 | 64.9 | 76.2 | 66.1 | 64.9 | 71.4 | 71.3 | 72.7 | 72.1 | 70.9 | 65.8 | 63.6 |
| 28 | 60.1 | 70.4 | 57.8 | 68.0 | 69.6 | 71.9 | 73.0 | 72.9 | 69.8 | 62.1 | 60.9 |
| 29 | 55.6 | 61.6 | 61.3 | 66.1 | 71.5 | 72.0 | 72.8 | 72.7 | 69.0 | 63.8 | 61.5 |
| 30 | 53.8 | 66.4 | 61.0 | 65.6 | 70.8 | 73.1 | 72.4 | 71.8 | 67.3 | 61.3 | 59.0 |
| 31 | 51.9 | 60.7 | 59.8 | 64.5 | 69.3 | 71.2 | 71.3 | 70.3 | 66.8 | 63.1 | 60.3 |
| 32 | 48.9 | 58.7 | 57.3 | 64.8 | 68.8 | 69.7 | 69.8 | 69.2 | 65.2 | 62.4 | 59.1 |
| 33 | 45.1 | 55.8 | 54.8 | 61.8 | 66.6 | 67.1 | 67.3 | 66.8 | 61.4 | 57.6 | 54.5 |
| 34 | 45.0 | 49.6 | 51.5 | 58.3 | 65.1 | 65.6 | 65.4 | 64.4 | 59.1 | 53.4 | 50.9 |
| 35 | 45.0 | 45.0 | 46.0 | 54.7 | 63.9 | 62.7 | 61.9 | 61.0 | 56.9 | 50.5 | 47.6 |
| 36 | 45.0 | 45.0 | 45.0 | 49.4 | 59.5 | 57.8 | 57.6 | 57.2 | 53.1 | 46.5 | 45.3 |
| 37 | 45.0 | 45.0 | 45.0 | 45.0 | 51.6 | 52.6 | 53.0 | 53.0 | 49.0 | 45.0 | 45.0 |
| 38 | 45.0 | 45.0 | 45.0 | 45.0 | 45.2 | 47.0 | 46.3 | 48.7 | 45.5 | 45.0 | 45.0 |
| 39 | 45.0 | 45.0 | 45.0 | 45.0 | 45.0 | 45.0 | 45.0 | 45.0 | 45.0 | 45.0 | 45.0 |
| 40 | 45.0 | 45.0 | 45.0 | 45.0 | 45.0 | 45.0 | 45.0 | 45.0 | 45.0 | 45.0 | 45.0 |
| A | 67.1 | 77.1 | 69.7 | 74.9 | 78.9 | 80.0 | 80.2 | 79.9 | 76.5 | 71.1 | 69.1 |
| D | 72.6 | 81.0 | 74.6 | 79.7 | 83.7 | 84.8 | 84.4 | 84.0 | 80.4 | 75.6 | 73.6 |
| GASPL | 79.0 | 82.1 | 80.8 | 84.0 | 86.2 | 87.7 | 88.7 | 89.2 | 87.5 | 81.3 | 80.7 |
| PNL | 79.8 | 87.8 | 81.6 | 87.1 | 90.7 | 91.3 | 91.2 | 90.9 | 87.1 | 82.9 | 80.9 |
| PNLT | 79.8 | 89.5 | 81.6 | 87.1 | 90.7 | 91.3 | 91.2 | 90.9 | 87.1 | 82.9 | 80.9 |

LOWER LIMIT OF ANALYSIS SYSTEM= 45.0

TABLE F-VI

NOISE LEVEL FREQUENCY SPECTRA TIME HISTORY

SIKORSKY S-61

OCTOBER 28 1976

EVENT 19, 60 KT. FLY BY, CENTERLINE MIC. (HARD SITE)

1/3 OCTAVE FREQUENCY BAND VS TIME (SECONDS)
(DB RE 20 MICRO PA)

| BAND | -16.0 | -13.0 | -10.0 | -7.0 | -4.0 | -1.0 | 0 | 2.0 | 5.0 |
|-------|-------|-------|-------|------|------|------|------|------|------|
| 17 | 59.3 | 61.2 | 62.8 | 67.5 | 70.1 | 72.8 | 73.6 | 71.6 | 73.1 |
| 18 | 72.6 | 72.9 | 74.0 | 75.6 | 76.7 | 73.4 | 72.4 | 68.0 | 69.0 |
| 19 | 62.3 | 68.4 | 70.4 | 72.5 | 71.7 | 65.4 | 66.0 | 64.6 | 60.5 |
| 20 | 64.7 | 65.8 | 67.5 | 68.6 | 66.7 | 72.0 | 78.1 | 76.1 | 61.7 |
| 21 | 73.8 | 73.8 | 72.8 | 73.3 | 69.4 | 78.4 | 79.7 | 73.6 | 68.4 |
| 22 | 65.1 | 64.0 | 60.3 | 59.4 | 66.6 | 77.5 | 78.0 | 71.8 | 68.6 |
| 23 | 67.3 | 63.1 | 57.3 | 63.8 | 71.4 | 74.3 | 74.1 | 67.3 | 69.3 |
| 24 | 58.2 | 58.1 | 54.7 | 72.7 | 75.6 | 72.8 | 74.8 | 70.7 | 63.0 |
| 25 | 55.3 | 56.8 | 59.9 | 69.9 | 67.9 | 76.8 | 77.3 | 70.7 | 63.2 |
| 26 | 63.4 | 60.7 | 63.6 | 69.2 | 69.1 | 74.7 | 75.1 | 71.6 | 69.2 |
| 27 | 66.9 | 60.4 | 61.6 | 65.1 | 72.4 | 75.2 | 74.9 | 71.4 | 66.9 |
| 28 | 59.3 | 58.5 | 55.4 | 67.4 | 67.6 | 73.5 | 74.0 | 71.9 | 67.9 |
| 29 | 55.3 | 56.0 | 58.8 | 64.4 | 69.4 | 72.9 | 72.4 | 71.8 | 68.5 |
| 30 | 55.5 | 59.2 | 58.7 | 64.9 | 68.3 | 72.6 | 71.2 | 69.5 | 67.1 |
| 31 | 53.9 | 57.4 | 60.2 | 64.6 | 66.5 | 71.4 | 70.7 | 68.6 | 66.9 |
| 32 | 53.7 | 56.2 | 58.0 | 64.3 | 66.6 | 70.3 | 69.2 | 67.0 | 65.1 |
| 33 | 49.9 | 51.6 | 53.0 | 60.6 | 63.5 | 68.4 | 67.4 | 63.7 | 61.3 |
| 34 | 47.3 | 48.3 | 50.8 | 57.7 | 62.4 | 66.4 | 65.0 | 61.7 | 59.4 |
| 35 | 45.0 | 45.0 | 46.6 | 54.3 | 60.3 | 63.1 | 62.0 | 59.4 | 57.0 |
| 36 | 45.0 | 45.0 | 45.0 | 49.7 | 56.4 | 59.0 | 58.5 | 56.0 | 53.0 |
| 37 | 45.0 | 45.0 | 45.0 | 45.1 | 47.8 | 53.9 | 54.3 | 52.4 | 48.5 |
| 38 | 45.0 | 45.0 | 45.0 | 45.0 | 45.0 | 48.8 | 49.5 | 48.4 | 45.2 |
| 39 | 45.0 | 45.0 | 45.0 | 45.0 | 45.0 | 45.0 | 45.4 | 45.1 | 45.0 |
| 40 | 45.0 | 45.0 | 45.0 | 45.0 | 45.0 | 45.0 | 45.0 | 45.0 | 45.0 |
| A | 68.2 | 67.2 | 68.3 | 74.3 | 77.2 | 81.2 | 81.0 | 78.5 | 75.5 |
| D | 74.3 | 73.2 | 74.2 | 79.3 | 82.2 | 85.7 | 85.9 | 63.0 | 79.6 |
| OASPL | 79.0 | 79.1 | 80.0 | 82.9 | 85.5 | 89.1 | 90.5 | 90.5 | 86.3 |
| PNL | 81.3 | 81.2 | 81.2 | 86.6 | 89.3 | 93.0 | 93.0 | 89.7 | 86.7 |
| PNLT | 81.3 | 81.2 | 81.2 | 86.6 | 89.3 | 93.0 | 93.0 | 89.7 | 86.7 |

LOWER LIMIT OF ANALYSIS SYSTEM= 45.0

TABLE F-VI

NOISE LEVEL FREQUENCY SPECTRA TIME HISTORY

SIKORSKY S-61

OCTOBER 28 1976

EVENT 20, 6 DEGREE APPROACH, CENTERLINE MIC. (HARD SITE)

1/3 OCTAVE FREQUENCY BAND VS TIME (SECONDS)
(DB RE 20 MICRO PA)

| BAND | -9.0 | -7.0 | -5.0 | -3.0 | -1.0 | 0 | 1.0 | 3.0 | 5.0 | 8.0 |
|-------|------|------|------|------|------|------|------|------|------|------|
| 17 | 66.2 | 66.1 | 67.8 | 69.0 | 68.7 | 69.7 | 70.9 | 72.4 | 72.1 | 67.6 |
| 18 | 72.6 | 73.6 | 72.0 | 72.1 | 70.3 | 68.9 | 68.8 | 70.6 | 72.7 | 69.9 |
| 19 | 65.7 | 66.5 | 65.1 | 67.6 | 66.7 | 66.2 | 68.0 | 62.7 | 67.6 | 65.0 |
| 20 | 66.7 | 66.3 | 64.0 | 63.5 | 74.1 | 79.5 | 83.0 | 75.7 | 67.8 | 68.6 |
| 21 | 75.7 | 75.3 | 74.6 | 77.1 | 80.8 | 84.2 | 86.6 | 83.9 | 76.7 | 69.9 |
| 22 | 66.3 | 61.9 | 61.9 | 73.2 | 80.0 | 80.6 | 84.4 | 87.0 | 75.5 | 66.5 |
| 23 | 68.8 | 66.2 | 67.1 | 76.9 | 75.8 | 77.3 | 77.2 | 85.8 | 80.8 | 67.9 |
| 24 | 67.7 | 75.1 | 78.6 | 79.9 | 75.3 | 78.4 | 82.3 | 77.4 | 80.6 | 68.1 |
| 25 | 66.4 | 71.4 | 68.6 | 69.7 | 78.7 | 79.5 | 79.8 | 83.5 | 74.8 | 70.7 |
| 26 | 70.7 | 74.4 | 68.1 | 75.5 | 75.9 | 76.2 | 79.5 | 81.5 | 72.9 | 73.4 |
| 27 | 65.7 | 64.9 | 69.7 | 73.6 | 74.7 | 76.1 | 77.0 | 78.0 | 73.7 | 69.1 |
| 28 | 61.0 | 70.0 | 64.5 | 71.3 | 72.2 | 73.8 | 75.3 | 74.0 | 67.6 | 62.5 |
| 29 | 63.7 | 64.5 | 64.2 | 68.1 | 71.9 | 72.0 | 73.3 | 71.4 | 66.7 | 63.4 |
| 30 | 59.4 | 64.9 | 62.3 | 66.3 | 71.2 | 71.0 | 70.7 | 69.3 | 64.0 | 60.1 |
| 31 | 60.4 | 62.5 | 61.2 | 65.6 | 69.7 | 69.5 | 69.4 | 68.6 | 62.8 | 59.9 |
| 32 | 61.8 | 61.1 | 61.2 | 65.9 | 68.8 | 68.4 | 68.4 | 66.2 | 61.9 | 58.3 |
| 33 | 58.3 | 60.8 | 60.1 | 63.1 | 67.5 | 67.2 | 66.4 | 63.1 | 58.7 | 55.6 |
| 34 | 54.4 | 59.0 | 58.7 | 62.9 | 67.6 | 65.7 | 63.6 | 61.8 | 57.2 | 53.2 |
| 35 | 50.1 | 55.5 | 55.6 | 63.5 | 65.4 | 63.2 | 62.4 | 59.6 | 55.0 | 50.8 |
| 36 | 46.5 | 50.7 | 53.5 | 59.5 | 61.3 | 60.5 | 59.8 | 57.3 | 51.5 | 46.9 |
| 37 | 45.0 | 45.5 | 47.7 | 52.3 | 56.8 | 57.1 | 56.6 | 53.6 | 46.9 | 45.0 |
| 38 | 45.0 | 45.0 | 45.0 | 46.6 | 52.5 | 53.5 | 54.1 | 50.0 | 45.0 | 45.0 |
| 39 | 45.0 | 45.0 | 45.0 | 45.0 | 47.1 | 49.1 | 49.8 | 46.1 | 45.0 | 45.0 |
| 40 | 45.0 | 45.0 | 45.0 | 45.0 | 45.0 | 45.5 | 46.0 | 45.1 | 45.0 | 45.0 |
| A | 72.3 | 76.0 | 75.1 | 79.2 | 81.4 | 81.9 | 83.5 | 84.1 | 78.7 | 73.9 |
| D | 78.0 | 80.9 | 81.0 | 84.9 | 87.2 | 87.6 | 89.1 | 89.7 | 84.4 | 78.6 |
| OASPL | 84.9 | 86.8 | 88.9 | 89.4 | 90.1 | 90.0 | 92.3 | 93.2 | 87.5 | 81.0 |
| PNL | 85.4 | 88.2 | 88.6 | 92.0 | 94.0 | 94.6 | 96.0 | 96.3 | 91.4 | 86.3 |
| PNLT | 86.5 | 89.9 | 88.6 | 92.0 | 94.0 | 94.6 | 96.0 | 96.3 | 91.4 | 86.3 |

LOWER LIMIT OF ANALYSIS SYSTEM= 45.0

TABLE F-VI

NOISE LEVEL FREQUENCY SPECTRA TIME HISTORY

SIKORSKY S-61

OCTOBER 28 1976

EVENT 26, 100 KT. FLY BY, CENTERLINE MIC. (HARD SITE)

1/3 OCTAVE FREQUENCY BAND VS TIME (SECONDS)
(DB RE 20 MICRO PA)

| BAND | -6.5 | -4.5 | -2.5 | -.5 | 0 | 1.5 | 3.5 | 5.5 | 7.5 |
|-------|------|------|------|------|------|------|------|------|------|
| 17 | 69.8 | 70.7 | 68.0 | 68.5 | 68.9 | 68.3 | 68.0 | 66.2 | 68.0 |
| 18 | 73.2 | 75.0 | 71.5 | 71.8 | 71.0 | 70.0 | 71.7 | 69.8 | 70.7 |
| 19 | 67.0 | 69.3 | 66.6 | 69.3 | 70.3 | 66.8 | 66.3 | 64.6 | 67.9 |
| 20 | 65.9 | 67.6 | 65.5 | 71.4 | 76.5 | 82.3 | 64.6 | 64.2 | 64.1 |
| 21 | 73.7 | 78.9 | 74.7 | 80.8 | 81.6 | 75.4 | 71.8 | 70.0 | 69.2 |
| 22 | 66.3 | 67.0 | 63.9 | 70.9 | 71.4 | 70.7 | 70.0 | 64.6 | 62.3 |
| 23 | 67.3 | 70.6 | 70.2 | 72.2 | 71.0 | 69.1 | 72.9 | 68.1 | 66.5 |
| 24 | 61.6 | 70.8 | 77.3 | 75.5 | 72.2 | 69.0 | 66.8 | 64.6 | 60.6 |
| 25 | 58.7 | 64.3 | 65.5 | 73.1 | 73.4 | 72.1 | 66.9 | 63.2 | 62.7 |
| 26 | 64.2 | 71.5 | 67.8 | 75.9 | 74.9 | 74.8 | 71.5 | 61.7 | 65.6 |
| 27 | 63.2 | 63.5 | 73.7 | 77.0 | 77.6 | 73.9 | 69.7 | 65.3 | 59.7 |
| 28 | 61.0 | 70.1 | 72.2 | 76.1 | 75.8 | 73.2 | 70.6 | 63.2 | 63.6 |
| 29 | 61.5 | 67.5 | 74.1 | 76.6 | 76.4 | 75.0 | 69.9 | 64.4 | 63.0 |
| 30 | 61.5 | 68.4 | 72.4 | 76.0 | 76.1 | 72.9 | 68.3 | 63.1 | 62.0 |
| 31 | 60.2 | 64.0 | 70.8 | 73.9 | 73.8 | 72.0 | 67.4 | 61.5 | 61.5 |
| 32 | 60.5 | 61.7 | 69.1 | 71.9 | 72.2 | 70.4 | 66.3 | 60.2 | 59.4 |
| 33 | 59.7 | 60.3 | 66.3 | 70.1 | 69.9 | 67.8 | 62.5 | 57.4 | 55.7 |
| 34 | 57.2 | 57.3 | 64.9 | 69.4 | 58.7 | 66.0 | 60.1 | 55.5 | 55.0 |
| 35 | 55.0 | 55.5 | 63.2 | 66.7 | 66.4 | 63.6 | 57.6 | 55.0 | 55.0 |
| 36 | 55.0 | 55.0 | 58.7 | 63.5 | 63.0 | 60.2 | 55.2 | 55.0 | 55.0 |
| 37 | 55.0 | 55.0 | 55.4 | 58.1 | 58.2 | 56.6 | 55.0 | 55.0 | 55.0 |
| 38 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 |
| 39 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 |
| 40 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 |
| A | 70.5 | 75.3 | 80.7 | 84.0 | 84.1 | 82.0 | 77.2 | 70.9 | 70.2 |
| D | 78.0 | 80.8 | 85.1 | 88.2 | 88.2 | 86.1 | 82.0 | 77.6 | 77.2 |
| OASPL | 84.5 | 85.6 | 86.0 | 88.2 | 88.3 | 87.2 | 84.4 | 81.2 | 81.2 |
| PNL | 85.0 | 88.7 | 91.5 | 95.2 | 94.9 | 93.0 | 89.0 | 84.5 | 84.0 |
| PNLT | 85.0 | 90.2 | 91.5 | 95.2 | 94.9 | 93.0 | 89.0 | 84.5 | 84.0 |

LOWER LIMIT OF ANALYSIS SYSTEM= 55.0

TABLE F-VI

NOISE LEVEL FREQUENCY SPECTRA TIME HISTORY

SIKORSKY 5-61

OCTOBER 28 1976

EVENT 27, 100 KT. FLY BY, CENTERLINE MIC. (HARD SITE)

1/3 OCTAVE FREQUENCY BAND VS TIME (SECONDS)
(DB + RE 20 MICRO PA)

| BAND | -7.5 | -6.0 | -4.5 | -3.0 | -1.5 | -1.0 | 0 | 1.5 | 3.0 | 4.5 |
|-------|------|------|------|------|------|------|------|------|------|------|
| 17 | 70.1 | 71.0 | 68.8 | 69.3 | 71.9 | 71.9 | 69.6 | 69.0 | 68.0 | 66.2 |
| 18 | 73.6 | 73.7 | 72.4 | 72.9 | 69.9 | 70.6 | 69.1 | 63.1 | 62.6 | 64.8 |
| 19 | 68.9 | 69.4 | 68.5 | 66.5 | 66.6 | 66.1 | 63.2 | 62.8 | 57.2 | 61.3 |
| 20 | 70.7 | 72.4 | 74.7 | 75.3 | 72.0 | 71.6 | 71.9 | 79.2 | 66.6 | 62.8 |
| 21 | 70.5 | 74.2 | 73.6 | 70.2 | 69.9 | 76.0 | 78.2 | 74.6 | 65.8 | 59.1 |
| 22 | 59.5 | 61.5 | 58.4 | 57.5 | 65.9 | 67.3 | 68.5 | 69.9 | 67.4 | 63.5 |
| 23 | 57.5 | 57.0 | 55.0 | 62.6 | 69.3 | 69.7 | 67.5 | 63.7 | 66.3 | 68.1 |
| 24 | 55.8 | 58.4 | 65.8 | 74.0 | 78.3 | 78.2 | 73.5 | 66.7 | 63.2 | 62.7 |
| 25 | 53.6 | 62.2 | 63.5 | 65.4 | 64.9 | 68.1 | 71.4 | 68.7 | 70.9 | 60.5 |
| 26 | 61.9 | 66.7 | 67.4 | 68.7 | 72.0 | 75.5 | 74.7 | 74.9 | 72.1 | 69.0 |
| 27 | 64.3 | 66.5 | 61.5 | 67.9 | 72.1 | 74.4 | 76.6 | 73.9 | 72.7 | 64.9 |
| 28 | 64.9 | 65.4 | 61.9 | 70.6 | 75.7 | 77.3 | 75.6 | 74.0 | 71.1 | 66.7 |
| 29 | 58.6 | 60.6 | 63.5 | 66.5 | 72.0 | 74.0 | 74.8 | 74.9 | 71.2 | 65.8 |
| 30 | 61.5 | 64.0 | 62.3 | 67.3 | 72.1 | 74.1 | 74.7 | 73.6 | 69.6 | 65.7 |
| 31 | 60.2 | 62.1 | 62.6 | 65.4 | 70.1 | 72.2 | 73.0 | 71.8 | 68.2 | 64.2 |
| 32 | 59.7 | 63.1 | 63.9 | 66.4 | 69.7 | 71.3 | 72.3 | 70.3 | 66.4 | 61.9 |
| 33 | 56.6 | 60.6 | 63.0 | 64.1 | 68.0 | 69.3 | 70.2 | 68.0 | 63.2 | 58.7 |
| 34 | 53.4 | 57.4 | 59.6 | 62.9 | 67.6 | 68.7 | 68.5 | 65.6 | 60.4 | 56.1 |
| 35 | 47.6 | 52.0 | 57.2 | 59.0 | 64.2 | 66.3 | 66.5 | 63.3 | 58.5 | 53.1 |
| 36 | 45.0 | 45.7 | 51.2 | 53.7 | 61.0 | 62.9 | 62.5 | 59.6 | 55.3 | 49.3 |
| 37 | 45.0 | 45.0 | 45.0 | 47.2 | 54.8 | 55.8 | 57.0 | 55.7 | 50.7 | 45.5 |
| 38 | 45.0 | 45.0 | 45.0 | 45.0 | 47.9 | 49.8 | 51.2 | 51.0 | 46.5 | 45.0 |
| 39 | 45.0 | 45.0 | 45.0 | 45.0 | 45.0 | 45.0 | 45.8 | 45.8 | 45.0 | 45.0 |
| 40 | 45.0 | 45.0 | 45.0 | 45.0 | 45.0 | 45.0 | 45.0 | 45.0 | 45.0 | 45.0 |
| A | 69.9 | 72.2 | 72.8 | 76.2 | 80.6 | 82.4 | 82.5 | 81.2 | 78.1 | 73.5 |
| D | 75.7 | 78.0 | 76.9 | 81.6 | 85.3 | 86.9 | 86.7 | 85.1 | 81.8 | 77.3 |
| OASPL | 83.8 | 84.3 | 84.6 | 85.2 | 86.8 | 87.6 | 86.8 | 85.9 | 83.3 | 80.9 |
| FNL | 81.9 | 84.7 | 85.8 | 88.2 | 92.3 | 93.9 | 93.9 | 92.1 | 88.3 | 84.3 |
| PNLT | 83.0 | 84.7 | 85.8 | 89.3 | 93.5 | 94.9 | 93.9 | 92.1 | 88.3 | 84.3 |

LOWER LIMIT OF ANALYSIS SYSTEM= 45.0

TABLE F-VI

NOISE LEVEL FREQUENCY SPECTRA TIME HISTORY

SIKORSKY S-61

OCTOBER 28 1976

EVENT 28, 100 KT. FLY BY, CENTERLINE MIC. (HARD SITE)

1/3 OCTAVE FREQUENCY BAND VS TIME (SECONDS)
(DB RE 20 MICRO PA)

| BAND | -7.0 | -5.5 | -4.0 | -2.5 | -1.0 | 0 | .5 | 2.0 | 3.5 | 4.5 |
|-------|------|------|------|------|------|------|------|------|------|------|
| 17 | 68.3 | 71.7 | 69.6 | 69.8 | 69.4 | 68.9 | 69.1 | 69.7 | 70.2 | 67.5 |
| 18 | 73.6 | 72.9 | 74.1 | 72.9 | 68.5 | 67.8 | 68.3 | 67.9 | 68.1 | 67.1 |
| 19 | 68.0 | 67.5 | 66.5 | 64.8 | 58.9 | 61.2 | 64.6 | 62.3 | 61.1 | 61.3 |
| 20 | 61.8 | 62.4 | 62.9 | 61.7 | 68.4 | 78.7 | 80.3 | 73.1 | 60.3 | 60.3 |
| 21 | 69.9 | 71.7 | 70.2 | 68.2 | 79.0 | 79.9 | 78.5 | 67.9 | 62.4 | 59.6 |
| 22 | 57.7 | 57.6 | 57.4 | 65.5 | 62.5 | 69.9 | 70.0 | 67.6 | 65.3 | 62.3 |
| 23 | 55.2 | 55.6 | 62.3 | 56.5 | 68.6 | 65.4 | 64.6 | 65.6 | 68.6 | 66.5 |
| 24 | 54.5 | 67.0 | 75.2 | 76.3 | 71.9 | 67.5 | 69.0 | 63.8 | 62.6 | 64.0 |
| 25 | 59.0 | 62.5 | 64.8 | 62.3 | 59.8 | 69.9 | 69.5 | 71.4 | 64.1 | 60.3 |
| 26 | 66.0 | 70.3 | 70.5 | 68.3 | 72.9 | 72.2 | 72.6 | 70.5 | 69.7 | 65.1 |
| 27 | 64.8 | 52.7 | 66.3 | 68.9 | 73.6 | 73.2 | 72.7 | 70.7 | 66.5 | 63.8 |
| 28 | 62.9 | 66.0 | 69.0 | 69.6 | 71.8 | 72.8 | 73.2 | 70.9 | 66.9 | 64.2 |
| 29 | 60.5 | 63.7 | 64.7 | 67.4 | 72.1 | 73.0 | 73.4 | 71.0 | 65.6 | 62.5 |
| 30 | 60.2 | 61.9 | 63.5 | 67.2 | 72.6 | 73.2 | 72.5 | 69.3 | 64.5 | 61.5 |
| 31 | 61.0 | 61.4 | 63.1 | 66.1 | 70.9 | 71.5 | 71.1 | 67.9 | 63.9 | 60.5 |
| 32 | 61.0 | 61.5 | 62.7 | 65.8 | 70.6 | 70.1 | 69.8 | 66.0 | 62.4 | 59.1 |
| 33 | 59.1 | 57.5 | 61.3 | 63.7 | 68.3 | 67.9 | 67.4 | 63.3 | 58.2 | 55.0 |
| 34 | 54.4 | 54.8 | 59.5 | 61.7 | 67.3 | 66.1 | 65.2 | 60.3 | 56.2 | 52.5 |
| 35 | 50.1 | 50.9 | 55.8 | 59.7 | 65.9 | 63.0 | 62.3 | 58.1 | 53.1 | 49.5 |
| 36 | 45.0 | 45.1 | 50.8 | 56.3 | 61.9 | 59.3 | 58.9 | 54.3 | 48.9 | 46.1 |
| 37 | 45.0 | 45.0 | 45.5 | 50.9 | 55.8 | 54.9 | 54.6 | 50.5 | 45.5 | 45.0 |
| 38 | 45.0 | 45.0 | 45.0 | 45.0 | 49.7 | 50.0 | 49.9 | 46.3 | 45.0 | 45.0 |
| 39 | 45.0 | 45.0 | 45.0 | 45.0 | 45.2 | 45.2 | 45.1 | 45.0 | 45.0 | 45.0 |
| 40 | 45.0 | 45.0 | 45.0 | 45.0 | 45.0 | 45.0 | 45.0 | 45.0 | 45.0 | 45.0 |
| A | 71.0 | 72.6 | 74.8 | 76.5 | 80.6 | 80.5 | 80.5 | 77.5 | 73.8 | 70.8 |
| D | 75.9 | 77.2 | 79.7 | 81.5 | 85.7 | 85.3 | 84.8 | 81.6 | 77.7 | 74.9 |
| OASPL | 83.8 | 84.2 | 85.0 | 85.9 | 86.6 | 86.3 | 86.3 | 85.3 | 82.0 | 79.8 |
| PNL | 82.4 | 84.5 | 87.1 | 88.7 | 92.4 | 91.9 | 91.8 | 88.2 | 84.8 | 81.7 |
| PNLT | 82.4 | 84.5 | 88.2 | 88.7 | 92.4 | 91.9 | 91.8 | 88.2 | 84.8 | 81.7 |

LOWER LIMIT OF ANALYSIS SYSTEM= 45.0

TABLE F-VI

NOISE LEVEL FREQUENCY SPECTRA TIME HISTORY

SIKORSKY S-61

OCTOBER 28 1976

EVENT 31, 3 DEGREE APPROACH, CENTERLINE MIC. (HARD SITE)

1/3 OCTAVE FREQUENCY BAND VS TIME (SECONDS)
(DB RE 20 MICRO PA)

| BAND | -7.5 | -6.0 | -4.5 | -3.0 | -1.5 | 0 | 1.5 | 3.0 | 5.5 |
|-------|------|------|------|------|------|------|------|------|------|
| 17 | 66.8 | 66.1 | 68.8 | 67.2 | 70.4 | 73.0 | 72.4 | 71.4 | 71.3 |
| 18 | 70.4 | 70.7 | 73.3 | 70.8 | 74.4 | 71.8 | 67.8 | 69.1 | 71.8 |
| 19 | 65.1 | 66.7 | 68.1 | 67.3 | 69.9 | 65.0 | 69.6 | 66.8 | 68.5 |
| 20 | 61.9 | 62.3 | 65.8 | 64.4 | 64.7 | 79.5 | 83.8 | 69.7 | 69.2 |
| 21 | 66.2 | 67.6 | 69.5 | 67.0 | 76.0 | 81.9 | 80.6 | 71.5 | 63.8 |
| 22 | 58.1 | 57.8 | 62.1 | 71.4 | 78.5 | 77.7 | 77.2 | 73.7 | 62.9 |
| 23 | 55.6 | 60.9 | 71.6 | 79.2 | 79.4 | 75.9 | 73.2 | 75.2 | 66.5 |
| 24 | 63.0 | 70.9 | 79.4 | 83.4 | 80.6 | 75.0 | 76.4 | 68.1 | 70.8 |
| 25 | 68.9 | 76.9 | 81.7 | 83.3 | 77.7 | 78.8 | 76.9 | 71.3 | 70.4 |
| 26 | 74.4 | 78.3 | 79.4 | 79.9 | 82.7 | 77.5 | 77.4 | 70.8 | 64.1 |
| 27 | 69.6 | 69.6 | 77.6 | 82.1 | 78.3 | 78.0 | 76.6 | 70.9 | 65.2 |
| 28 | 60.5 | 69.7 | 77.9 | 77.0 | 78.4 | 75.3 | 76.7 | 71.1 | 65.2 |
| 29 | 62.5 | 66.4 | 69.3 | 75.6 | 74.5 | 75.3 | 75.9 | 70.5 | 63.7 |
| 30 | 58.7 | 65.3 | 70.0 | 71.8 | 74.7 | 74.7 | 74.5 | 70.1 | 63.0 |
| 31 | 59.2 | 64.7 | 68.1 | 71.7 | 74.8 | 74.3 | 72.6 | 68.5 | 63.0 |
| 32 | 59.7 | 63.5 | 66.9 | 71.5 | 73.3 | 73.1 | 72.0 | 67.6 | 61.8 |
| 33 | 57.0 | 60.8 | 64.7 | 69.3 | 71.9 | 70.8 | 69.4 | 64.8 | 58.6 |
| 34 | 55.5 | 59.4 | 63.6 | 67.7 | 70.4 | 68.9 | 66.9 | 62.5 | 56.6 |
| 35 | 55.0 | 57.3 | 60.6 | 67.0 | 69.6 | 66.7 | 65.3 | 61.1 | 55.1 |
| 36 | 55.0 | 55.1 | 57.0 | 64.7 | 66.0 | 63.6 | 62.9 | 58.9 | 55.0 |
| 37 | 55.0 | 55.0 | 55.0 | 59.5 | 61.0 | 60.6 | 59.9 | 56.1 | 55.0 |
| 38 | 55.0 | 55.0 | 55.0 | 55.0 | 56.4 | 57.5 | 57.9 | 55.0 | 55.0 |
| 39 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 | 55.3 | 55.0 | 55.0 |
| 40 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 |
| A | 73.5 | 77.8 | 82.9 | 85.0 | 85.9 | 84.1 | 83.9 | 78.4 | 72.7 |
| D | 78.8 | 82.9 | 87.4 | 90.0 | 90.8 | 88.9 | 88.5 | 83.5 | 79.4 |
| OASPL | 83.9 | 85.4 | 89.1 | 91.0 | 91.2 | 91.9 | 92.9 | 89.3 | 83.7 |
| PNL | 87.0 | 90.5 | 94.0 | 96.7 | 97.7 | 96.0 | 95.4 | 90.5 | 86.1 |
| PNLT | 87.0 | 90.5 | 95.4 | 96.7 | 97.7 | 96.0 | 95.4 | 90.5 | 86.1 |

LOWER LIMIT OF ANALYSIS SYSTEM= 55.0

TABLE F-VI

NOISE LEVEL FREQUENCY SPECTRA TIME HISTORY

SIKORSKY S-61

OCTOBER 28 1976

EVENT 32, 115 KT. FLY BY, CENTERLINE MIC. (HARD SITE)

1/3 OCTAVE FREQUENCY BAND VS TIME (SECONDS)
(DB RE 20 MICRO PA)

| BAND | -4.0 | -3.0 | -2.0 | -1.0 | 0 | 1.0 | 2.0 | 3.0 | 4.0 |
|-------|------|------|------|------|------|------|------|------|------|
| 17 | 67.6 | 69.1 | 69.1 | 69.5 | 70.4 | 69.3 | 69.2 | 69.3 | 65.6 |
| 18 | 72.6 | 72.1 | 71.1 | 72.6 | 70.6 | 68.0 | 68.8 | 69.1 | 67.1 |
| 19 | 66.3 | 64.1 | 65.1 | 67.1 | 62.8 | 63.7 | 63.3 | 62.8 | 63.3 |
| 20 | 63.3 | 64.0 | 66.3 | 67.3 | 73.7 | 79.3 | 74.6 | 66.3 | 61.7 |
| 21 | 70.9 | 71.2 | 70.9 | 76.5 | 77.4 | 75.3 | 70.6 | 67.3 | 62.2 |
| 22 | 57.5 | 57.7 | 64.7 | 69.5 | 72.4 | 71.7 | 70.4 | 70.2 | 67.4 |
| 23 | 54.9 | 63.3 | 69.0 | 70.7 | 69.7 | 66.2 | 67.4 | 71.2 | 69.4 |
| 24 | 66.1 | 73.4 | 79.0 | 79.2 | 73.4 | 69.9 | 67.6 | 66.4 | 66.8 |
| 25 | 63.6 | 66.1 | 66.3 | 70.9 | 74.6 | 72.4 | 73.3 | 70.8 | 63.5 |
| 26 | 67.8 | 69.5 | 69.1 | 77.3 | 76.3 | 74.4 | 73.6 | 73.0 | 69.9 |
| 27 | 60.4 | 67.6 | 74.2 | 74.7 | 77.2 | 75.9 | 74.9 | 73.5 | 68.3 |
| 28 | 65.9 | 70.7 | 75.1 | 78.2 | 78.0 | 75.7 | 73.5 | 72.3 | 68.9 |
| 29 | 65.2 | 69.1 | 76.7 | 76.6 | 77.1 | 75.6 | 72.5 | 71.4 | 67.5 |
| 30 | 59.7 | 65.8 | 75.2 | 76.1 | 76.6 | 75.1 | 71.4 | 70.5 | 66.8 |
| 31 | 59.8 | 64.8 | 72.8 | 74.9 | 76.1 | 74.4 | 71.1 | 70.3 | 65.8 |
| 32 | 59.0 | 63.8 | 70.7 | 73.8 | 74.9 | 73.2 | 69.8 | 68.2 | 63.5 |
| 33 | 58.2 | 62.9 | 68.2 | 70.8 | 73.2 | 71.5 | 67.4 | 64.7 | 59.5 |
| 34 | 56.4 | 60.5 | 65.9 | 68.5 | 70.9 | 69.1 | 64.7 | 61.8 | 56.9 |
| 35 | 54.1 | 57.4 | 62.4 | 66.6 | 68.4 | 66.3 | 61.8 | 59.2 | 53.4 |
| 36 | 47.8 | 51.3 | 58.0 | 63.1 | 64.9 | 62.7 | 58.1 | 54.8 | 49.4 |
| 37 | 45.0 | 45.9 | 52.6 | 57.5 | 60.3 | 58.0 | 53.0 | 49.9 | 45.5 |
| 38 | 45.0 | 45.0 | 46.3 | 50.4 | 55.1 | 53.0 | 48.4 | 45.5 | 45.0 |
| 39 | 45.0 | 45.0 | 45.0 | 45.1 | 48.7 | 47.7 | 45.0 | 45.0 | 45.0 |
| 40 | 45.0 | 45.0 | 45.0 | 45.1 | 45.3 | 45.0 | 45.0 | 45.4 | 45.3 |
| A | 71.8 | 76.0 | 82.1 | 84.2 | 84.7 | 83.3 | 80.1 | 79.2 | 74.9 |
| D | 76.7 | 80.1 | 85.6 | 88.4 | 89.0 | 87.1 | 84.2 | 82.8 | 78.8 |
| OASPL | 82.0 | 82.9 | 86.5 | 87.9 | 88.4 | 87.6 | 84.9 | 83.6 | 80.6 |
| PNL | 83.5 | 87.0 | 92.2 | 95.0 | 96.2 | 94.5 | 91.4 | 89.7 | 85.7 |
| PNLT | 84.5 | 87.0 | 92.2 | 95.0 | 96.2 | 94.5 | 91.4 | 89.7 | 85.7 |

LOWER LIMIT OF ANALYSIS SYSTEM= 45.0

TABLE F-VI

NOISE LEVEL FREQUENCY SPECTRA TIME HISTORY

SIKORSKY S-61

OCTOBER 28 1976

EVENT 33, 115 KT. FLY BY, CENTERLINE MIC. (HARD SITE)

1/3 OCTAVE FREQUENCY BAND VS TIME (SECONDS)
(DB RE 20 MICRO PA)

| BAND | -8.0 | -6.0 | -4.0 | -2.0 | 0 | 2.0 | 4.0 | 6.0 | 6.5 |
|-------|------|------|------|------|------|------|------|------|------|
| 17 | 68.3 | 69.5 | 70.8 | 70.5 | 66.2 | 66.8 | 66.9 | 67.3 | 67.8 |
| 18 | 74.9 | 74.0 | 73.7 | 73.3 | 72.0 | 70.6 | 72.1 | 70.1 | 68.9 |
| 19 | 69.9 | 69.5 | 67.7 | 64.6 | 63.8 | 64.4 | 64.2 | 63.8 | 63.4 |
| 20 | 64.8 | 63.8 | 62.3 | 62.0 | 73.6 | 77.6 | 63.7 | 62.4 | 62.3 |
| 21 | 70.4 | 74.1 | 72.1 | 75.5 | 80.9 | 73.6 | 74.3 | 71.5 | 70.4 |
| 22 | 60.0 | 61.9 | 59.6 | 66.1 | 69.7 | 68.6 | 67.5 | 62.3 | 60.8 |
| 23 | 57.2 | 55.7 | 60.2 | 69.3 | 66.4 | 65.6 | 70.4 | 63.8 | 61.9 |
| 24 | 54.4 | 62.5 | 71.0 | 76.8 | 69.8 | 66.8 | 63.8 | 64.3 | 61.9 |
| 25 | 56.0 | 64.7 | 64.5 | 65.6 | 70.7 | 72.1 | 63.2 | 64.8 | 63.5 |
| 26 | 60.4 | 70.4 | 67.7 | 69.2 | 73.1 | 73.0 | 70.0 | 61.7 | 62.6 |
| 27 | 60.9 | 66.8 | 61.0 | 72.4 | 73.6 | 73.3 | 67.8 | 66.1 | 62.6 |
| 28 | 59.8 | 63.4 | 68.0 | 73.7 | 72.2 | 71.5 | 68.9 | 66.9 | 66.3 |
| 29 | 57.1 | 65.2 | 63.3 | 71.2 | 72.6 | 71.3 | 68.2 | 66.8 | 64.4 |
| 30 | 60.7 | 61.3 | 63.8 | 70.7 | 72.7 | 70.3 | 66.3 | 64.6 | 62.0 |
| 31 | 60.1 | 63.2 | 64.2 | 68.5 | 71.8 | 68.4 | 65.5 | 62.9 | 60.4 |
| 32 | 60.1 | 61.5 | 63.3 | 67.4 | 69.9 | 67.5 | 63.7 | 62.0 | 59.0 |
| 33 | 56.8 | 60.3 | 61.9 | 65.6 | 68.1 | 64.8 | 59.3 | 57.3 | 54.1 |
| 34 | 52.4 | 54.9 | 59.4 | 63.5 | 66.6 | 62.6 | 57.0 | 53.6 | 50.5 |
| 35 | 46.5 | 50.8 | 56.1 | 60.0 | 64.8 | 60.1 | 54.1 | 49.7 | 48.0 |
| 36 | 45.0 | 46.1 | 50.0 | 55.8 | 60.4 | 56.0 | 50.5 | 46.0 | 45.3 |
| 37 | 45.0 | 45.0 | 45.2 | 50.3 | 55.5 | 51.5 | 45.4 | 45.0 | 45.0 |
| 38 | 45.0 | 45.0 | 45.0 | 45.0 | 49.5 | 47.1 | 45.0 | 45.0 | 45.0 |
| 39 | 45.0 | 45.0 | 45.0 | 45.0 | 45.2 | 45.0 | 45.0 | 45.0 | 45.0 |
| 40 | 45.0 | 45.0 | 45.0 | 45.0 | 45.0 | 45.0 | 45.0 | 45.0 | 45.0 |
| A | 69.1 | 72.7 | 73.8 | 78.9 | 80.5 | 78.7 | 75.2 | 72.8 | 70.8 |
| D | 74.5 | 77.5 | 79.3 | 83.5 | 85.4 | 83.0 | 79.0 | 76.6 | 74.8 |
| OASPL | 82.0 | 84.3 | 84.7 | 86.0 | 86.1 | 85.2 | 82.2 | 80.6 | 80.4 |
| PNL | 81.4 | 85.0 | 85.6 | 90.2 | 92.3 | 89.9 | 86.2 | 83.8 | 82.1 |
| PNLT | 81.4 | 85.0 | 87.5 | 90.2 | 92.3 | 89.9 | 86.2 | 83.8 | 82.1 |

LOWER LIMIT OF ANALYSIS SYSTEM= 45.0

TABLE F-VI

NOISE LEVEL FREQUENCY SPECTRA TIME HISTORY

SIKORSKY S-61

OCTOBER 28 1976

EVENT 34, 115 KT. FLY BY, CENTERLINE MIC. (HARD SITE)

1/3 OCTAVE FREQUENCY BAND VS TIME (SECONDS)
(DB RE 20 MICRO PA)

| BAND | -6.5 | -5.0 | -3.5 | -2.0 | -0.5 | 0 | 1.0 | 2.5 | 4.0 | 5.0 |
|-------|------|------|------|------|------|------|------|------|------|------|
| 17 | 69.2 | 67.1 | 67.8 | 66.0 | 69.3 | 70.1 | 70.6 | 69.8 | 65.7 | 64.7 |
| 18 | 68.0 | 69.0 | 70.2 | 67.6 | 69.0 | 68.4 | 68.1 | 63.7 | 64.9 | 63.1 |
| 19 | 64.3 | 64.2 | 65.1 | 65.5 | 65.3 | 65.0 | 66.8 | 64.1 | 60.5 | 62.2 |
| 20 | 62.2 | 62.0 | 61.6 | 61.3 | 65.3 | 69.5 | 80.8 | 77.7 | 60.0 | 59.2 |
| 21 | 67.5 | 71.0 | 71.1 | 68.1 | 75.8 | 78.7 | 79.4 | 70.2 | 63.0 | 57.5 |
| 22 | 58.8 | 58.2 | 57.8 | 60.5 | 68.9 | 69.8 | 70.7 | 70.5 | 66.5 | 64.0 |
| 23 | 56.4 | 54.6 | 56.2 | 65.8 | 69.7 | 69.3 | 65.8 | 67.7 | 70.5 | 68.9 |
| 24 | 54.8 | 55.8 | 68.1 | 76.3 | 79.0 | 77.5 | 70.0 | 67.0 | 64.1 | 66.7 |
| 25 | 52.0 | 58.0 | 64.1 | 65.7 | 70.4 | 73.3 | 74.1 | 72.1 | 66.7 | 63.2 |
| 26 | 55.5 | 63.9 | 69.8 | 68.2 | 76.1 | 76.6 | 74.1 | 73.6 | 70.6 | 68.3 |
| 27 | 56.4 | 64.2 | 63.1 | 74.2 | 74.7 | 75.4 | 75.8 | 73.7 | 67.9 | 66.8 |
| 28 | 57.4 | 64.9 | 70.6 | 73.3 | 77.0 | 76.5 | 74.5 | 72.0 | 67.3 | 66.2 |
| 29 | 52.2 | 61.3 | 70.6 | 74.0 | 76.4 | 76.2 | 74.8 | 71.1 | 66.8 | 64.8 |
| 30 | 51.1 | 64.2 | 68.5 | 71.0 | 75.5 | 75.7 | 74.1 | 70.5 | 65.8 | 64.2 |
| 31 | 51.8 | 62.0 | 65.2 | 68.5 | 73.6 | 73.9 | 72.4 | 69.1 | 65.5 | 64.4 |
| 32 | 62.9 | 69.0 | 67.9 | 67.9 | 71.8 | 72.1 | 70.9 | 67.9 | 63.3 | 62.0 |
| 33 | 50.9 | 60.9 | 63.1 | 66.6 | 70.1 | 70.6 | 70.3 | 64.9 | 59.7 | 57.6 |
| 34 | 45.7 | 56.5 | 59.0 | 64.3 | 69.1 | 69.5 | 68.2 | 62.7 | 57.3 | 54.6 |
| 35 | 46.3 | 53.0 | 56.6 | 60.4 | 66.8 | 67.7 | 66.1 | 60.5 | 54.5 | 50.8 |
| 36 | 45.0 | 45.5 | 49.5 | 54.9 | 64.1 | 64.9 | 62.5 | 57.2 | 50.6 | 46.9 |
| 37 | 45.0 | 45.0 | 45.0 | 49.0 | 57.2 | 58.4 | 57.5 | 52.7 | 46.1 | 45.0 |
| 38 | 45.0 | 45.0 | 45.0 | 45.2 | 50.1 | 51.8 | 52.4 | 48.8 | 45.0 | 45.0 |
| 39 | 45.0 | 45.0 | 45.0 | 45.0 | 45.2 | 45.5 | 46.6 | 45.0 | 45.0 | 45.0 |
| 40 | 45.0 | 45.1 | 45.0 | 45.0 | 45.0 | 45.0 | 45.0 | 45.0 | 45.0 | 45.0 |
| A | 56.1 | 73.4 | 76.8 | 79.9 | 83.3 | 83.5 | 82.3 | 79.0 | 74.7 | 73.0 |
| D | 72.6 | 78.3 | 80.7 | 83.8 | 87.6 | 87.8 | 86.8 | 83.0 | 78.9 | 77.4 |
| OASPL | 82.3 | 81.3 | 82.3 | 83.5 | 87.8 | 87.7 | 87.3 | 84.7 | 81.8 | 79.7 |
| PNL | 80.3 | 85.9 | 87.4 | 89.8 | 94.3 | 94.9 | 94.0 | 90.2 | 85.8 | 83.9 |
| PNLT | 84.1 | 88.4 | 88.6 | 89.8 | 94.3 | 94.9 | 94.0 | 90.2 | 85.8 | 83.9 |

LOWER LIMIT OF ANALYSIS SYSTEM= 45.0

TABLE F-VI

NOISE LEVEL FREQUENCY SPECTRA TIME HISTORY

SIKORSKY S-61

OCTOBER 28 1976

EVENT 32, 115 KT. FLY BY, CENTERLINE MIC. (SOFT SITE)

1/3 OCTAVE FREQUENCY BAND VS TIME (SECONDS)
(DB RE 20 MICRO PA)

| BAND | -5.0 | -4.0 | -3.0 | -2.0 | -1.0 | 0 | 1.0 | 2.0 | 5.0 |
|-------|------|------|------|------|------|------|------|------|------|
| 17 | 65.4 | 65.8 | 65.0 | 64.8 | 65.1 | 67.4 | 67.1 | 66.1 | 62.9 |
| 18 | 70.4 | 70.6 | 70.4 | 69.9 | 66.3 | 63.2 | 64.2 | 66.0 | 64.5 |
| 19 | 63.4 | 63.7 | 61.9 | 60.5 | 59.8 | 60.2 | 52.1 | 61.9 | 60.3 |
| 20 | 59.0 | 59.6 | 58.0 | 60.3 | 64.7 | 74.2 | 82.1 | 79.1 | 57.4 |
| 21 | 63.5 | 63.3 | 63.2 | 69.0 | 77.7 | 80.7 | 77.4 | 70.2 | 57.7 |
| 22 | 49.3 | 52.5 | 57.2 | 62.8 | 68.5 | 70.8 | 70.9 | 69.4 | 63.5 |
| 23 | 53.9 | 57.6 | 63.5 | 66.4 | 68.8 | 67.6 | 63.9 | 55.4 | 66.9 |
| 24 | 60.8 | 65.0 | 72.6 | 76.3 | 76.4 | 72.6 | 70.1 | 69.8 | 65.3 |
| 25 | 60.0 | 61.4 | 62.8 | 63.0 | 69.2 | 72.6 | 71.1 | 73.6 | 60.3 |
| 26 | 60.7 | 62.1 | 61.6 | 64.8 | 75.2 | 74.4 | 71.1 | 71.1 | 64.2 |
| 27 | 56.6 | 58.7 | 65.8 | 68.5 | 70.9 | 74.8 | 73.0 | 73.0 | 65.9 |
| 28 | 62.3 | 67.0 | 66.6 | 70.8 | 73.6 | 73.6 | 72.6 | 71.9 | 65.1 |
| 29 | 62.0 | 63.5 | 64.9 | 68.8 | 72.1 | 73.2 | 73.9 | 71.9 | 64.3 |
| 30 | 57.9 | 61.8 | 63.4 | 68.2 | 71.8 | 72.6 | 72.7 | 70.7 | 62.8 |
| 31 | 58.3 | 60.2 | 63.0 | 67.2 | 70.2 | 70.4 | 71.2 | 69.2 | 61.6 |
| 32 | 56.9 | 60.7 | 62.5 | 66.6 | 69.1 | 69.4 | 69.8 | 67.8 | 60.0 |
| 33 | 55.4 | 60.5 | 61.4 | 64.9 | 66.9 | 67.4 | 67.5 | 65.4 | 56.4 |
| 34 | 53.1 | 57.4 | 59.9 | 63.8 | 65.9 | 65.9 | 65.1 | 62.1 | 52.9 |
| 35 | 49.3 | 53.4 | 57.7 | 62.0 | 64.1 | 64.1 | 62.7 | 59.6 | 49.0 |
| 36 | 45.0 | 46.5 | 51.7 | 57.1 | 60.8 | 60.9 | 59.6 | 56.2 | 45.2 |
| 37 | 45.0 | 45.0 | 46.8 | 51.4 | 55.2 | 55.7 | 54.8 | 52.1 | 45.0 |
| 38 | 45.0 | 45.0 | 45.0 | 45.1 | 47.9 | 49.6 | 49.8 | 47.7 | 45.0 |
| 39 | 45.0 | 45.0 | 45.0 | 45.0 | 45.0 | 45.0 | 45.0 | 45.0 | 45.0 |
| 40 | 45.0 | 45.0 | 45.0 | 45.0 | 45.0 | 45.0 | 45.0 | 45.0 | 45.0 |
| A | 68.4 | 71.6 | 73.6 | 77.2 | 80.3 | 80.9 | 80.5 | 79.1 | 71.7 |
| D | 73.0 | 76.4 | 78.3 | 82.1 | 85.1 | 85.4 | 85.1 | 83.2 | 75.4 |
| CASPL | 78.9 | 80.0 | 80.7 | 81.9 | 84.9 | 86.2 | 86.4 | 84.5 | 77.7 |
| PNL | 79.7 | 83.0 | 85.2 | 88.8 | 91.6 | 92.2 | 91.8 | 90.0 | 82.1 |
| PNLT | 80.7 | 84.9 | 85.2 | 88.8 | 91.6 | 92.2 | 91.8 | 90.0 | 82.1 |

LOWER LIMIT OF ANALYSIS SYSTEM= 45.0

TABLE F-VI

NOISE LEVEL FREQUENCY SPECTRA TIME HISTORY

SIKORSKY S-61

OCTOBER 28 1976

EVENT 33, 115 KT. FLY BY, CENTERLINE MIC. (SOFT SITE)

1/3 OCTAVE FREQUENCY BAND VS TIME (SECONDS)
(DB RE 20 MICRO PA)

| BAND | -6.0 | -4.5 | -3.0 | -1.5 | 0 | 1.5 | 3.0 | 4.5 | 6.5 |
|-------|------|------|------|------|------|------|------|------|------|
| 17 | 68.6 | 67.5 | 69.0 | 67.8 | 68.9 | 67.2 | 66.3 | 69.3 | 64.7 |
| 18 | 71.9 | 72.5 | 73.0 | 71.5 | 71.1 | 71.8 | 69.8 | 69.6 | 70.3 |
| 19 | 68.5 | 64.9 | 63.4 | 62.8 | 61.8 | 64.1 | 62.6 | 63.2 | 62.4 |
| 20 | 62.7 | 60.7 | 60.1 | 58.7 | 65.2 | 79.4 | 78.9 | 65.1 | 58.6 |
| 21 | 69.2 | 70.0 | 68.6 | 72.2 | 79.5 | 81.3 | 74.6 | 72.6 | 71.9 |
| 22 | 55.7 | 57.6 | 59.6 | 63.2 | 68.5 | 68.9 | 69.0 | 66.8 | 62.7 |
| 23 | 51.4 | 57.5 | 63.1 | 65.0 | 67.6 | 63.7 | 66.6 | 68.3 | 64.3 |
| 24 | 59.2 | 68.0 | 72.6 | 75.7 | 72.7 | 67.2 | 67.0 | 61.6 | 61.3 |
| 25 | 58.0 | 62.0 | 64.9 | 63.5 | 66.5 | 70.5 | 71.7 | 66.9 | 59.0 |
| 26 | 59.8 | 64.1 | 63.2 | 64.1 | 70.8 | 69.4 | 69.8 | 66.3 | 59.0 |
| 27 | 55.9 | 56.1 | 66.2 | 69.6 | 68.1 | 71.2 | 70.4 | 67.3 | 63.1 |
| 28 | 55.7 | 62.1 | 68.2 | 69.2 | 69.6 | 70.8 | 69.9 | 64.9 | 60.7 |
| 29 | 58.6 | 60.0 | 63.5 | 68.5 | 68.6 | 71.3 | 68.8 | 65.2 | 59.2 |
| 30 | 53.8 | 57.3 | 62.4 | 67.5 | 68.4 | 70.1 | 68.1 | 63.7 | 58.7 |
| 31 | 55.3 | 57.7 | 62.5 | 64.5 | 66.6 | 68.9 | 66.9 | 63.1 | 57.1 |
| 32 | 54.8 | 58.1 | 62.0 | 62.1 | 66.0 | 67.8 | 65.0 | 61.3 | 54.5 |
| 33 | 51.2 | 56.0 | 59.2 | 60.8 | 63.4 | 65.4 | 61.8 | 57.6 | 51.4 |
| 34 | 46.7 | 52.0 | 57.8 | 58.8 | 61.5 | 63.1 | 59.3 | 54.3 | 48.3 |
| 35 | 45.0 | 46.4 | 53.5 | 55.0 | 59.6 | 60.4 | 56.3 | 51.7 | 46.0 |
| 36 | 45.0 | 45.0 | 47.9 | 49.5 | 55.7 | 56.7 | 52.5 | 47.8 | 45.0 |
| 37 | 45.0 | 45.0 | 45.0 | 45.2 | 49.5 | 51.6 | 48.8 | 45.2 | 45.0 |
| 38 | 45.0 | 45.0 | 45.0 | 45.0 | 45.0 | 46.4 | 45.2 | 45.0 | 45.0 |
| 39 | 45.0 | 45.0 | 45.0 | 45.0 | 45.0 | 45.0 | 45.0 | 45.0 | 45.0 |
| 40 | 45.0 | 45.0 | 45.0 | 45.0 | 45.0 | 45.0 | 45.0 | 45.0 | 45.0 |
| A | 64.9 | 69.0 | 73.3 | 75.7 | 77.3 | 78.7 | 76.8 | 72.9 | 67.8 |
| D | 71.6 | 74.3 | 78.2 | 79.8 | 82.1 | 83.4 | 81.1 | 77.1 | 72.5 |
| OASPL | 81.8 | 82.7 | 83.0 | 82.9 | 84.8 | 85.8 | 84.3 | 82.2 | 78.5 |
| PNL | 78.3 | 81.3 | 85.1 | 87.3 | 89.0 | 90.6 | 88.2 | 84.2 | 80.3 |
| PNLT | 79.6 | 82.6 | 86.2 | 87.3 | 89.0 | 90.6 | 88.2 | 84.2 | 80.3 |

LOWER LIMIT OF ANALYSIS SYSTEM= 45.0

TABLE F-VII

NOISE LEVEL FREQUENCY SPECTRA TIME HISTORY

SIKORSKY S-61

OCTOBER 28 1976

EVENT 34, 115 KT. FLY BY, CENTERLINE MIC. (SOFT SITE)

1/3 OCTAVE FREQUENCY BAND VS TIME (SECONDS)
(DB RE 20 MICRO PA)

| BAND | -3.0 | -2.0 | -1.0 | 0 | 1.0 | 2.0 | 3.0 | 4.0 | 6.0 |
|-------|------|------|------|------|------|------|------|------|------|
| 17 | 64.1 | 63.5 | 63.7 | 64.3 | 65.8 | 65.4 | 66.1 | 68.3 | 69.7 |
| 18 | 69.3 | 68.2 | 68.1 | 56.8 | 63.6 | 59.9 | 61.1 | 61.9 | 64.4 |
| 19 | 64.2 | 63.6 | 63.9 | 62.9 | 60.1 | 60.1 | 62.0 | 59.9 | 62.9 |
| 20 | 59.2 | 59.4 | 57.8 | 60.5 | 69.5 | 81.4 | 82.5 | 73.4 | 57.5 |
| 21 | 64.3 | 63.2 | 62.9 | 74.5 | 79.9 | 80.6 | 74.9 | 67.8 | 57.1 |
| 22 | 50.9 | 53.6 | 62.6 | 68.8 | 69.6 | 68.7 | 69.7 | 68.7 | 63.1 |
| 23 | 56.3 | 60.9 | 66.8 | 70.5 | 68.9 | 64.6 | 65.8 | 69.4 | 67.5 |
| 24 | 66.2 | 69.9 | 75.5 | 78.3 | 75.4 | 68.6 | 68.4 | 66.3 | 63.9 |
| 25 | 61.9 | 61.6 | 63.9 | 65.8 | 71.0 | 73.3 | 72.5 | 72.6 | 59.5 |
| 26 | 64.3 | 63.8 | 64.2 | 72.2 | 73.6 | 71.2 | 71.5 | 69.4 | 64.5 |
| 27 | 58.3 | 60.4 | 70.1 | 72.4 | 71.4 | 72.8 | 72.4 | 72.6 | 63.8 |
| 28 | 64.0 | 64.7 | 69.4 | 73.0 | 72.4 | 71.3 | 71.0 | 70.7 | 62.9 |
| 29 | 63.2 | 60.5 | 70.3 | 72.5 | 71.7 | 73.2 | 72.1 | 69.0 | 61.4 |
| 30 | 56.9 | 61.4 | 68.5 | 71.8 | 71.2 | 72.6 | 70.7 | 58.0 | 59.2 |
| 31 | 55.5 | 58.2 | 67.6 | 71.0 | 70.7 | 71.4 | 69.5 | 67.4 | 58.5 |
| 32 | 56.2 | 57.7 | 66.0 | 69.6 | 69.8 | 70.0 | 68.0 | 66.0 | 56.6 |
| 33 | 53.4 | 56.1 | 64.4 | 68.0 | 67.6 | 68.1 | 65.5 | 62.0 | 53.0 |
| 34 | 50.5 | 52.6 | 62.6 | 66.2 | 66.2 | 66.1 | 62.4 | 60.2 | 50.3 |
| 35 | 47.2 | 49.1 | 59.6 | 63.6 | 64.1 | 62.7 | 59.9 | 57.7 | 47.4 |
| 36 | 45.0 | 45.4 | 54.7 | 60.5 | 61.5 | 59.7 | 56.6 | 54.1 | 45.3 |
| 37 | 45.0 | 45.0 | 48.4 | 53.9 | 54.7 | 54.3 | 52.1 | 49.4 | 45.0 |
| 38 | 45.0 | 45.0 | 45.0 | 46.7 | 48.1 | 48.8 | 47.3 | 45.9 | 45.0 |
| 39 | 45.0 | 45.0 | 45.0 | 45.0 | 45.0 | 45.0 | 45.0 | 45.0 | 45.0 |
| 40 | 45.0 | 45.0 | 45.0 | 45.0 | 45.0 | 45.0 | 45.0 | 45.0 | 45.0 |
| A | 69.0 | 70.1 | 77.9 | 80.5 | 80.0 | 80.5 | 78.9 | 77.1 | 69.4 |
| D | 73.8 | 74.8 | 82.0 | 85.2 | 85.3 | 85.3 | 83.3 | 81.3 | 73.5 |
| OASPL | 79.6 | 78.9 | 81.6 | 84.8 | 85.4 | 86.4 | 86.1 | 83.4 | 79.8 |
| PNL | 80.2 | 82.0 | 88.1 | 91.6 | 91.9 | 91.9 | 90.8 | 88.3 | 80.8 |
| PNLT | 81.3 | 83.5 | 88.1 | 91.6 | 91.9 | 91.9 | 90.8 | 88.3 | 80.8 |

LOWER LIMIT OF ANALYSIS SYSTEM= 45.0

TABLE F-VII

5 FOOT HOVER TEST

1/3 OCTAVE NOISE LEVEL FREQUENCY SPECTRA

SIKORSKY S-61

OCTOBER 28 1976

EVENT 1, 0 DEGREES, MICROPHONE 150 METERS WEST

1/3 OCTAVE BAND VS LEVEL (AVE OVER 19 SECONDS)
(DB RE 20 MICRO PA)

| BAND | ENERGY AVERAGE | MAX | MIN | ARITH. AVERAGE | STD DEV |
|-------|-------------------|-------|------|-------------------|------------|
| 14 | 76.5 | 81.5 | 66.2 | 74.4 | 4.8 |
| 15 | 76.5 | 81.4 | 69.8 | 75.5 | 3.0 |
| 16 | 73.4 | 80.0 | 66.8 | 71.8 | 3.5 |
| 17 | 74.3 | 78.3 | 70.0 | 73.8 | 2.2 |
| 18 | 74.0 | 76.8 | 69.4 | 73.6 | 1.9 |
| 19 | 74.9 | 77.9 | 72.1 | 74.6 | 1.5 |
| 20 | 85.2 | 88.6 | 81.2 | 84.9 | 1.6 |
| 21 | 78.9 | 82.0 | 76.7 | 78.7 | 1.3 |
| 22 | 79.4 | 82.0 | 76.4 | 79.2 | 1.4 |
| 23 | 81.7 | 83.6 | 79.1 | 81.6 | 1.1 |
| 24 | 80.8 | 83.0 | 79.3 | 80.7 | 1.0 |
| 25 | 81.0 | 83.5 | 79.5 | 80.9 | 1.0 |
| 26 | 80.0 | 82.3 | 77.7 | 79.9 | 1.2 |
| 27 | 79.8 | 81.8 | 78.0 | 79.7 | .9 |
| 28 | 79.9 | 81.9 | 77.3 | 79.8 | 1.1 |
| 29 | 80.2 | 82.8 | 76.9 | 80.0 | 1.4 |
| 30 | 79.9 | 82.7 | 76.5 | 79.6 | 1.5 |
| 31 | 79.6 | 82.7 | 75.9 | 79.3 | 1.6 |
| 32 | 78.8 | 82.4 | 74.5 | 78.4 | 1.8 |
| 33 | 73.3 | 76.4 | 69.6 | 73.0 | 1.6 |
| 34 | 68.2 | 70.9 | 65.1 | 68.0 | 1.4 |
| 35 | 66.1 | 68.1 | 63.1 | 65.9 | 1.3 |
| 36 | 64.4 | 65.9 | 62.3 | 64.3 | .9 |
| 37 | 58.9 | 60.6 | 57.0 | 58.9 | .8 |
| 38 | 55.0 | 55.0 | 55.0 | 55.0 | .0 |
| 39 | 55.0 | 55.0 | 55.0 | 55.0 | .0 |
| 40 | 55.0 | 55.0 | 55.0 | 55.0 | .0 |
| DBA | 87.9 | 90.1 | 85.9 | 87.8 | 1.0 |
| DBD | 91.8 | 93.7 | 90.2 | 91.7 | .9 |
| OASPL | 92.5 | 94.0 | 91.4 | 92.5 | .7 |
| PNL | 99.6 | 101.9 | 97.5 | 99.4 | 1.1 |
| PNLT | 99.6 | 101.9 | 97.5 | 99.4 | 1.1 |

270°
(Microphone Location
Relative to Helicopter)

TABLE F-VII
5 FOOT HOVER TEST

1/3 OCTAVE NOISE LEVEL FREQUENCY SPECTRA

SIKORSKY S-61

OCTOBER 28 1976

EVENT 3, 45 DEGREES, MICROPHONE 150 METERS WEST

1/3 OCTAVE BAND VS LEVEL (AVE OVER 19 SECONDS)
(DB RE 20 MICRO PA)

| BAND | ENERGY AVERAGE | MAX | MIN | ARITH. AVERAGE | STD DEV |
|-------|-------------------|-------|------|-------------------|------------|
| 14 | 70.8 | 74.6 | 62.5 | 69.8 | 3.3 |
| 15 | 71.2 | 75.1 | 65.5 | 70.6 | 2.2 |
| 16 | 66.8 | 70.5 | 63.0 | 66.4 | 1.9 |
| 17 | 71.0 | 74.5 | 67.4 | 70.7 | 1.6 |
| 18 | 70.9 | 74.4 | 68.5 | 70.7 | 1.5 |
| 19 | 74.5 | 77.8 | 70.6 | 74.0 | 2.0 |
| 20 | 85.0 | 87.8 | 80.3 | 84.5 | 2.0 |
| 21 | 78.8 | 81.2 | 76.2 | 78.6 | 1.3 |
| 22 | 78.0 | 80.4 | 75.0 | 77.7 | 1.6 |
| 23 | 82.4 | 84.1 | 80.3 | 82.3 | 1.1 |
| 24 | 81.9 | 84.1 | 79.4 | 81.7 | 1.2 |
| 25 | 83.0 | 85.8 | 79.3 | 82.7 | 1.6 |
| 26 | 81.4 | 84.3 | 78.1 | 81.0 | 1.7 |
| 27 | 80.7 | 82.7 | 73.3 | 80.6 | 1.2 |
| 28 | 80.5 | 82.7 | 77.9 | 80.4 | 1.2 |
| 29 | 81.1 | 83.8 | 78.2 | 80.9 | 1.4 |
| 30 | 79.8 | 83.5 | 76.4 | 79.5 | 1.5 |
| 31 | 78.2 | 82.0 | 74.5 | 78.0 | 1.5 |
| 32 | 76.6 | 80.0 | 71.9 | 76.2 | 2.0 |
| 33 | 74.1 | 78.8 | 68.9 | 73.4 | 2.4 |
| 34 | 72.8 | 77.8 | 67.8 | 72.1 | 2.4 |
| 35 | 69.3 | 73.0 | 65.6 | 68.9 | 2.0 |
| 36 | 65.5 | 68.2 | 62.3 | 65.2 | 1.6 |
| 37 | 59.5 | 61.9 | 57.3 | 59.3 | 1.2 |
| 38 | 55.3 | 56.4 | 55.0 | 55.3 | .4 |
| 39 | 55.0 | 55.0 | 55.0 | 55.0 | .0 |
| 40 | 55.0 | 55.0 | 55.0 | 55.0 | .0 |
| DBA | 88.2 | 91.4 | 85.7 | 88.1 | 1.1 |
| DBD | 92.6 | 95.5 | 90.2 | 92.4 | 1.1 |
| OASPL | 92.6 | 93.8 | 90.5 | 92.5 | .8 |
| PNL | 99.6 | 102.3 | 97.5 | 99.5 | 1.1 |
| PNLT | 99.6 | 102.3 | 97.5 | 99.5 | 1.1 |

225°
(Microphone Location)
(Relative to Helicopter)

TABLE F-VII
5 FOOT HOVER TEST

1/3 OCTAVE NOISE LEVEL FREQUENCY SPECTRA

SIKORSKY S-61

OCTOBER 28 1976

EVENT 4, 90 DEGREES, MICROPHONE 150 METERS WEST

1/3 OCTAVE BAND VS LEVEL (AVE OVER 19 SECONDS)
 (DB: RE 20 MICRO PA)

| BAND | ENERGY AVERAGE | MAX | MIN | ARITH. AVERAGE | STD DEV |
|-------|-------------------|-------|------|-------------------|------------|
| 14 | 68.8 | 72.1 | 59.9 | 67.9 | 3.0 |
| 15 | 73.9 | 77.1 | 67.4 | 73.4 | 2.4 |
| 16 | 68.0 | 70.5 | 64.0 | 67.7 | 1.6 |
| 17 | 77.9 | 83.8 | 71.1 | 76.5 | 3.5 |
| 18 | 77.8 | 83.2 | 71.8 | 76.6 | 3.1 |
| 19 | 79.2 | 85.2 | 73.6 | 77.9 | 3.0 |
| 20 | 84.7 | 88.2 | 80.7 | 84.0 | 2.3 |
| 21 | 83.0 | 88.8 | 78.6 | 82.1 | 2.6 |
| 22 | 83.0 | 85.8 | 78.7 | 82.4 | 2.3 |
| 23 | 84.8 | 88.2 | 80.5 | 84.4 | 2.0 |
| 24 | 84.7 | 87.5 | 81.5 | 84.4 | 1.6 |
| 25 | 84.4 | 87.0 | 80.1 | 84.1 | 1.7 |
| 26 | 84.0 | 87.2 | 79.6 | 83.6 | 1.8 |
| 27 | 82.0 | 85.3 | 78.4 | 81.6 | 2.0 |
| 28 | 79.8 | 83.1 | 75.8 | 79.4 | 1.9 |
| 29 | 79.5 | 82.8 | 75.1 | 79.0 | 2.0 |
| 30 | 76.9 | 80.1 | 72.2 | 76.4 | 2.1 |
| 31 | 75.0 | 78.4 | 71.2 | 74.5 | 2.1 |
| 32 | 74.9 | 78.6 | 70.3 | 74.2 | 2.6 |
| 33 | 72.1 | 76.2 | 66.1 | 71.3 | 2.7 |
| 34 | 70.2 | 73.4 | 64.3 | 69.6 | 2.3 |
| 35 | 68.1 | 71.1 | 63.5 | 67.6 | 2.1 |
| 36 | 64.7 | 67.7 | 60.9 | 64.3 | 1.9 |
| 37 | 59.4 | 62.3 | 56.0 | 59.1 | 1.7 |
| 38 | 55.6 | 57.2 | 55.0 | 55.5 | .7 |
| 39 | 55.0 | 55.0 | 55.0 | 55.0 | .0 |
| 40 | 55.0 | 55.0 | 55.0 | 55.0 | .0 |
| DBA | 88.0 | 90.4 | 85.6 | 87.7 | 1.4 |
| DBD | 92.9 | 95.4 | 90.2 | 92.7 | 1.4 |
| OASPL | 94.1 | 97.3 | 91.2 | 93.8 | 1.7 |
| PNL | 100.1 | 102.9 | 97.2 | 99.8 | 1.5 |
| PNLT | 100.1 | 102.9 | 97.2 | 99.8 | 1.5 |

180°
 (Microphone Location
 Relative to Microphone)

TABLE F-VII
5 FOOT HOVER TEST

1/3 OCTAVE NOISE LEVEL FREQUENCY SPECTRA

SIKORSKY S-61

OCTOBER 28 1976

EVENT 5, 135 DEGREES, MICROPHONE 150 METERS WEST

1/3 OCTAVE BAND VS LEVEL (AVE OVER 19 SECONDS)
(DB RE 20 MICRO PA)

| BAND | ENERGY AVERAGE | MAX | MIN | ARITH. AVERAGE | STD DEV |
|-------|-------------------|-------|-------|-------------------|------------|
| 14 | 67.1 | 72.6 | 62.0 | 66.2 | 2.6 |
| 15 | 81.0 | 84.0 | 78.3 | 80.8 | 1.5 |
| 16 | 72.7 | 74.4 | 71.2 | 72.6 | .9 |
| 17 | 81.7 | 85.1 | 77.8 | 81.3 | 1.7 |
| 18 | 81.3 | 83.6 | 78.1 | 81.0 | 1.6 |
| 19 | 84.0 | 86.2 | 79.8 | 83.7 | 1.7 |
| 20 | 88.6 | 90.5 | 86.1 | 88.4 | 1.2 |
| 21 | 86.9 | 88.9 | 81.8 | 86.6 | 1.8 |
| 22 | 87.5 | 89.8 | 83.8 | 87.2 | 1.6 |
| 23 | 88.9 | 91.4 | 85.5 | 88.6 | 1.5 |
| 24 | 88.6 | 90.5 | 82.4 | 88.3 | 1.8 |
| 25 | 87.6 | 89.3 | 82.1 | 87.3 | 1.7 |
| 26 | 87.2 | 89.6 | 81.8 | 86.9 | 1.7 |
| 27 | 85.8 | 89.4 | 79.9 | 85.3 | 2.0 |
| 28 | 83.6 | 86.0 | 78.7 | 83.4 | 1.7 |
| 29 | 82.3 | 84.9 | 77.1 | 81.9 | 1.9 |
| 30 | 78.4 | 81.1 | 73.7 | 78.1 | 1.7 |
| 31 | 76.7 | 78.4 | 73.4 | 76.5 | 1.4 |
| 32 | 76.7 | 78.6 | 73.5 | 76.6 | 1.3 |
| 33 | 74.8 | 76.9 | 71.0 | 74.6 | 1.4 |
| 34 | 72.2 | 74.3 | 70.1 | 72.1 | 1.1 |
| 35 | 68.4 | 69.9 | 66.4 | 68.3 | 1.0 |
| 36 | 65.0 | 66.4 | 63.2 | 65.0 | .8 |
| 37 | 59.5 | 60.7 | 57.9 | 59.4 | .8 |
| 38 | 55.1 | 55.6 | 55.0 | 55.1 | .2 |
| 39 | 55.0 | 55.0 | 55.0 | 55.0 | .0 |
| 40 | 55.0 | 55.0 | 55.0 | 55.0 | .0 |
| DBA | 91.1 | 93.2 | 87.2 | 91.0 | 1.3 |
| DBD | 96.0 | 97.7 | 92.8 | 95.9 | 1.1 |
| OASPL | 97.7 | 99.6 | 94.7 | 97.5 | 1.2 |
| PNL | 103.2 | 104.7 | 100.2 | 103.0 | 1.0 |
| PNLT | 103.2 | 104.7 | 100.2 | 103.0 | 1.0 |

135°
(Microphone Location
Relative to Helicopter)

TABLE F-VII

5 FOOT HOVER TEST

1/3 OCTAVE NOISE LEVEL FREQUENCY SPECTRA

SIKORSKY S-61

OCTOBER 28 1976

EVENT 6, 180 DEGREES, MICROPHONE 150 METERS WEST

1/3 OCTAVE BAND VS LEVEL (AVE OVER 19 SECONDS)
(DB RE 20 MICRO PA)

| BAND | ENERGY AVERAGE | MAX | MIN | ARITH. AVERAGE | STD DEV |
|-------|-------------------|-------|------|-------------------|------------|
| 14 | 66.0 | 71.2 | 60.1 | 64.5 | 3.5 |
| 15 | 80.2 | 84.0 | 73.3 | 79.4 | 2.8 |
| 16 | 71.9 | 74.9 | 68.5 | 71.5 | 1.9 |
| 17 | 77.0 | 79.0 | 72.6 | 76.8 | 1.6 |
| 18 | 76.6 | 79.9 | 72.9 | 76.2 | 1.8 |
| 19 | 76.7 | 78.8 | 73.1 | 76.5 | 1.6 |
| 20 | 87.3 | 90.7 | 84.5 | 87.0 | 1.7 |
| 21 | 81.6 | 84.2 | 79.0 | 81.4 | 1.3 |
| 22 | 81.8 | 84.3 | 79.3 | 81.6 | 1.2 |
| 23 | 84.3 | 86.1 | 81.2 | 84.1 | 1.2 |
| 24 | 83.1 | 85.0 | 79.7 | 82.0 | 1.3 |
| 25 | 84.0 | 86.3 | 81.8 | 83.9 | 1.1 |
| 26 | 83.1 | 85.0 | 79.9 | 82.9 | 1.4 |
| 27 | 82.8 | 84.3 | 78.9 | 82.5 | 1.6 |
| 28 | 82.0 | 83.7 | 76.8 | 81.7 | 1.7 |
| 29 | 80.2 | 81.1 | 76.3 | 79.9 | 1.6 |
| 30 | 77.4 | 78.6 | 72.6 | 77.1 | 1.8 |
| 31 | 75.0 | 77.2 | 70.9 | 74.6 | 1.8 |
| 32 | 73.4 | 75.5 | 69.9 | 73.1 | 1.7 |
| 33 | 70.0 | 72.3 | 66.8 | 69.8 | 1.6 |
| 34 | 68.0 | 70.4 | 65.7 | 67.8 | 1.4 |
| 35 | 65.7 | 67.6 | 63.7 | 65.6 | 1.2 |
| 36 | 63.2 | 64.8 | 61.4 | 63.1 | .9 |
| 37 | 58.7 | 60.6 | 56.8 | 58.6 | 1.0 |
| 38 | 55.3 | 56.4 | 55.0 | 55.3 | .4 |
| 39 | 55.0 | 55.0 | 55.0 | 55.0 | .0 |
| 40 | 55.0 | 55.0 | 55.0 | 55.0 | .0 |
| DBA | 87.9 | 89.1 | 84.7 | 87.8 | 1.2 |
| DBD | 92.4 | 93.6 | 89.7 | 92.3 | 1.0 |
| OASPL | 94.1 | 95.7 | 92.3 | 94.1 | .8 |
| PNL | 99.5 | 101.2 | 97.1 | 99.4 | 1.0 |
| PNLT | 99.5 | 101.2 | 97.1 | 99.4 | 1.0 |

90°

(Microphone location
Relative to Helicopter)

TABLE F-VI
5 FOOT HOVER TEST

1/3 OCTAVE NOISE LEVEL FREQUENCY SPECTRA

SIKORSKY S-61

OCTOBER 28 1976

EVENT 7, 225 DEGREES, MICROPHONE 150 METERS WEST

1/3 OCTAVE BAND VS LEVEL (AVE OVER 19 SECONDS)
(DB RE 20 MICRO PA)

| BAND | ENERGY AVERAGE | MAX | MIN | ARITH. AVERAGE | STD DEV |
|-------|-------------------|------|------|-------------------|------------|
| 14 | 62.1 | 68.0 | 57.1 | 60.9 | 3.0 |
| 15 | 69.5 | 74.1 | 65.4 | 69.0 | 2.0 |
| 16 | 65.0 | 66.7 | 62.0 | 64.9 | 1.1 |
| 17 | 71.8 | 74.3 | 66.6 | 71.5 | 1.8 |
| 18 | 72.0 | 74.9 | 67.3 | 71.3 | 1.6 |
| 19 | 73.4 | 75.0 | 71.2 | 73.3 | 1.2 |
| 20 | 77.3 | 80.3 | 73.8 | 76.7 | 2.1 |
| 21 | 75.2 | 77.1 | 72.2 | 74.9 | 1.5 |
| 22 | 75.1 | 77.6 | 72.6 | 74.9 | 1.5 |
| 23 | 78.7 | 81.4 | 75.4 | 78.5 | 1.4 |
| 24 | 78.0 | 81.8 | 74.2 | 77.5 | 2.0 |
| 25 | 80.2 | 85.2 | 75.5 | 79.5 | 2.4 |
| 26 | 80.0 | 84.7 | 75.7 | 79.4 | 2.3 |
| 27 | 80.1 | 84.9 | 75.6 | 79.5 | 2.3 |
| 28 | 78.6 | 83.2 | 74.5 | 78.0 | 2.1 |
| 29 | 77.6 | 81.2 | 75.1 | 77.3 | 1.6 |
| 30 | 74.8 | 77.2 | 72.6 | 74.6 | 1.2 |
| 31 | 73.4 | 77.1 | 71.0 | 73.1 | 1.5 |
| 32 | 71.8 | 75.8 | 68.9 | 71.4 | 1.6 |
| 33 | 68.0 | 70.2 | 65.4 | 67.9 | 1.1 |
| 34 | 66.3 | 68.5 | 64.7 | 66.2 | 1.0 |
| 35 | 64.2 | 66.1 | 62.6 | 64.1 | 1.0 |
| 36 | 61.4 | 62.7 | 60.1 | 61.4 | .7 |
| 37 | 57.5 | 59.1 | 56.0 | 57.4 | .7 |
| 38 | 55.0 | 55.7 | 55.0 | 55.1 | .2 |
| 39 | 55.0 | 55.0 | 55.0 | 55.0 | .0 |
| 40 | 55.0 | 55.0 | 55.0 | 55.0 | .0 |
| DBA | 85.0 | 89.1 | 81.9 | 84.6 | 1.7 |
| DEB | 89.1 | 92.8 | 86.3 | 88.8 | 1.6 |
| OASPL | 89.4 | 93.0 | 86.5 | 89.2 | 1.5 |
| PNL | 96.1 | 99.5 | 93.2 | 95.9 | 1.5 |
| PNLT | 96.1 | 99.5 | 93.2 | 95.9 | 1.5 |

45°
(Microphone Location
relative to Helicopter)

TABLE F-VII
S HOI HOVER TEST

1/3 OCTAVE NOISE LEVEL FREQUENCY SPECTRA

SIKORSKY S-61

OCTOBER 28 1976

EVENT 8, 270 DEGREES, MICROPHONE 150 METERS WEST

1/3 OCTAVE BAND VS LEVEL (AVE OVER 19 SECONDS)
(DB RE 20 MICRO PA)

| BAND | ENERGY AVERAGE | MAX | MIN | ARITH. AVERAGE | STD DEV |
|-------|-------------------|------|------|-------------------|------------|
| 14 | 70.4 | 76.5 | 60.6 | 69.0 | 3.6 |
| 15 | 72.3 | 75.8 | 65.4 | 71.7 | 2.4 |
| 16 | 67.1 | 70.6 | 63.8 | 66.8 | 1.7 |
| 17 | 71.6 | 74.7 | 66.8 | 71.2 | 1.7 |
| 18 | 72.0 | 74.9 | 69.4 | 71.8 | 1.4 |
| 19 | 72.7 | 74.9 | 68.9 | 72.4 | 1.6 |
| 20 | 75.1 | 77.2 | 71.4 | 74.7 | 1.7 |
| 21 | 76.5 | 80.7 | 73.0 | 76.0 | 2.0 |
| 22 | 76.7 | 79.5 | 72.0 | 76.3 | 1.8 |
| 23 | 79.0 | 81.1 | 74.1 | 78.7 | 1.7 |
| 24 | 80.8 | 83.6 | 77.2 | 80.5 | 1.7 |
| 25 | 82.2 | 85.2 | 77.8 | 81.7 | 2.2 |
| 26 | 81.6 | 85.9 | 76.5 | 80.9 | 2.5 |
| 27 | 80.0 | 84.6 | 76.2 | 79.5 | 2.1 |
| 28 | 77.4 | 79.8 | 73.5 | 77.0 | 1.9 |
| 29 | 77.5 | 80.5 | 73.7 | 77.1 | 1.9 |
| 30 | 75.3 | 78.1 | 71.6 | 75.0 | 1.8 |
| 31 | 73.7 | 75.9 | 69.5 | 73.4 | 1.7 |
| 32 | 72.1 | 74.4 | 68.5 | 71.8 | 1.6 |
| 33 | 68.5 | 71.5 | 65.2 | 68.3 | 1.6 |
| 34 | 67.4 | 70.0 | 64.0 | 67.1 | 1.5 |
| 35 | 64.6 | 66.4 | 61.8 | 64.4 | 1.3 |
| 36 | 62.1 | 63.7 | 59.8 | 62.0 | 1.1 |
| 37 | 57.5 | 59.3 | 55.8 | 57.5 | .8 |
| 38 | 55.0 | 55.2 | 55.0 | 55.0 | .1 |
| 39 | 55.0 | 55.0 | 55.0 | 55.0 | .0 |
| 40 | 55.0 | 55.0 | 55.0 | 55.0 | .0 |
| DBA | 85.4 | 87.5 | 81.9 | 85.1 | 1.7 |
| DBD | 89.8 | 92.0 | 86.3 | 89.5 | 1.6 |
| OASPL | 90.3 | 93.3 | 86.8 | 90.0 | 1.6 |
| PNL | 96.9 | 99.5 | 93.5 | 96.6 | 1.6 |
| PNLT | 96.9 | 99.5 | 93.5 | 96.6 | 1.6 |

0°
(Microphone Location
Relative to Helicopter)

TABLE F-VII
5 FOOT HOVER TEST

1/3 OCTAVE NOISE LEVEL FREQUENCY SPECTRA

SIKORSKY S-61

OCTOBER 28 1976

EVENT 9, 315 DEGREES, MICROPHONE 150 METERS WEST

1/3 OCTAVE BAND VS LEVEL (AVE OVER 19 SECONDS)
(DB RE 20 MICRO PA)

| BAND | ENERGY AVERAGE | MAX | MIN | ARITH. AVERAGE | STD DEV |
|-------|-------------------|------|------|-------------------|------------|
| 14 | 69.7 | 76.3 | 61.8 | 68.0 | 3.8 |
| 15 | 70.3 | 74.6 | 64.2 | 69.7 | 2.4 |
| 16 | 66.5 | 71.5 | 62.8 | 65.9 | 2.0 |
| 17 | 72.6 | 74.3 | 69.4 | 72.5 | 1.3 |
| 18 | 71.3 | 73.2 | 68.8 | 71.1 | 1.3 |
| 19 | 72.9 | 75.2 | 70.2 | 72.7 | 1.1 |
| 20 | 78.2 | 79.6 | 75.3 | 78.0 | 1.4 |
| 21 | 75.4 | 76.5 | 73.2 | 75.3 | 1.0 |
| 22 | 75.9 | 77.1 | 73.9 | 75.8 | .9 |
| 23 | 78.2 | 79.7 | 76.0 | 78.1 | 1.0 |
| 24 | 78.3 | 79.7 | 74.7 | 78.2 | 1.1 |
| 25 | 79.4 | 82.7 | 76.6 | 79.2 | 1.5 |
| 26 | 79.3 | 83.2 | 76.5 | 79.0 | 1.6 |
| 27 | 78.9 | 81.9 | 75.7 | 78.6 | 1.4 |
| 28 | 78.1 | 81.2 | 74.8 | 77.9 | 1.4 |
| 29 | 77.2 | 79.7 | 72.6 | 76.9 | 1.6 |
| 30 | 74.0 | 78.0 | 70.2 | 73.7 | 1.7 |
| 31 | 71.8 | 73.9 | 69.4 | 71.6 | 1.2 |
| 32 | 71.3 | 73.2 | 69.2 | 71.2 | 1.1 |
| 33 | 68.9 | 71.0 | 66.1 | 68.7 | 1.2 |
| 34 | 67.7 | 69.3 | 65.5 | 67.7 | .9 |
| 35 | 65.2 | 66.2 | 63.5 | 65.2 | .7 |
| 36 | 63.4 | 64.5 | 61.4 | 63.3 | .7 |
| 37 | 59.3 | 60.4 | 57.5 | 59.3 | .7 |
| 38 | 55.9 | 57.3 | 55.0 | 55.9 | .7 |
| 39 | 55.0 | 55.0 | 55.0 | 55.0 | .0 |
| 40 | 55.0 | 55.0 | 55.0 | 55.0 | .0 |
| DBA | 84.4 | 87.1 | 81.9 | 84.3 | 1.0 |
| DBD | 88.8 | 91.1 | 87.2 | 88.7 | .9 |
| OASPL | 89.3 | 91.3 | 87.1 | 89.3 | .8 |
| PNL | 96.0 | 98.2 | 93.9 | 95.9 | .9 |
| PNLI | 96.0 | 98.2 | 93.9 | 95.9 | 1.0 |

315°
(Microphone Location)
(Relative to Helicopter)

TABLE F-VII

5 FOOT HOVER TEST

1/3 OCTAVE NOISE LEVEL FREQUENCY SPECTRA

SIKORSKY S-61

OCTOBER 28 1976

EVENT 1, 0 DEGREES, MICROPHONE 150 METERS EAST

1/3 OCTAVE BAND VS LEVEL (AVE OVER 19 SECONDS)
(DB RE 20 MICRO PA)

| BAND | ENERGY AVERAGE | MAX | MIN | ARITH. AVERAGE | STD DEV |
|-------|-------------------|------|------|-------------------|------------|
| 14 | 67.7 | 75.5 | 63.3 | 67.0 | 2.1 |
| 15 | 76.4 | 79.2 | 73.7 | 76.2 | 1.2 |
| 16 | 72.0 | 75.2 | 69.8 | 71.8 | 1.3 |
| 17 | 73.2 | 75.6 | 70.1 | 73.0 | 1.6 |
| 18 | 74.7 | 76.8 | 73.0 | 74.6 | .9 |
| 19 | 73.1 | 74.8 | 71.7 | 73.1 | .7 |
| 20 | 82.6 | 86.0 | 77.8 | 81.9 | 2.5 |
| 21 | 76.1 | 77.3 | 73.0 | 76.0 | 1.2 |
| 22 | 74.5 | 76.3 | 72.8 | 74.4 | 1.0 |
| 23 | 73.5 | 75.8 | 71.4 | 73.4 | 1.1 |
| 24 | 70.0 | 73.4 | 66.7 | 69.6 | 1.9 |
| 25 | 70.7 | 72.9 | 66.1 | 70.4 | 1.8 |
| 26 | 71.2 | 72.9 | 67.9 | 71.0 | 1.5 |
| 27 | 72.5 | 74.4 | 69.9 | 72.4 | 1.1 |
| 28 | 73.2 | 75.0 | 70.3 | 73.1 | 1.1 |
| 29 | 73.8 | 76.6 | 71.0 | 73.5 | 1.4 |
| 30 | 73.2 | 75.9 | 69.8 | 72.9 | 1.6 |
| 31 | 72.5 | 75.4 | 69.9 | 72.4 | 1.2 |
| 32 | 71.7 | 73.5 | 68.6 | 71.5 | 1.3 |
| 33 | 68.8 | 71.2 | 65.4 | 68.5 | 1.5 |
| 34 | 67.9 | 69.5 | 64.7 | 67.7 | 1.3 |
| 35 | 66.6 | 68.2 | 64.2 | 66.5 | .9 |
| 36 | 64.2 | 66.4 | 62.0 | 64.1 | 1.0 |
| 37 | 61.0 | 62.7 | 59.2 | 60.9 | .8 |
| 38 | 57.6 | 59.3 | 56.2 | 57.5 | .8 |
| 39 | 55.0 | 55.0 | 55.0 | 55.0 | .0 |
| 40 | 55.0 | 55.0 | 55.0 | 55.0 | .0 |
| DBA | 81.8 | 83.3 | 79.3 | 81.7 | 1.0 |
| DBD | 86.8 | 87.9 | 84.6 | 86.7 | .9 |
| OASPL | 88.0 | 89.0 | 86.6 | 88.0 | .6 |
| PNL | 94.3 | 95.4 | 92.2 | 94.2 | .8 |
| PNLT | 94.3 | 95.4 | 92.2 | 94.2 | .8 |

90°
(Microphone Location
Relative to Helicopter)

TABLE F-VII
5 FOOT HOVER TEST

1/3 OCTAVE NOISE LEVEL FREQUENCY SPECTRA

SIKORSKY S-61

OCTOBER 28 1976

EVENT 3, 45 DEGREES, MICROPHONE 150 METERS EAST

1/3 OCTAVE BAND VS LEVEL (AVE OVER 19 SECONDS)
(DB RE 20 MICRO PA)

| BAND | ENERGY AVERAGE | MAX | MIN | ARITH. AVERAGE | STD DEV |
|-------|-------------------|------|------|-------------------|------------|
| 14 | 74.3 | 80.1 | 67.7 | 73.2 | 3.1 |
| 15 | 74.8 | 78.2 | 70.5 | 74.4 | 1.8 |
| 16 | 75.5 | 79.1 | 69.6 | 74.8 | 2.6 |
| 17 | 74.6 | 76.4 | 71.4 | 74.4 | 1.2 |
| 18 | 73.5 | 76.8 | 69.8 | 73.2 | 1.6 |
| 19 | 73.5 | 79.0 | 70.6 | 72.9 | 2.1 |
| 20 | 76.9 | 79.2 | 73.3 | 76.6 | 1.7 |
| 21 | 74.6 | 76.1 | 72.4 | 74.4 | 1.1 |
| 22 | 73.9 | 75.9 | 71.7 | 73.8 | 1.2 |
| 23 | 73.1 | 75.4 | 70.1 | 72.9 | 1.3 |
| 24 | 69.6 | 71.3 | 67.1 | 69.4 | 1.2 |
| 25 | 70.2 | 73.4 | 67.0 | 70.0 | 1.5 |
| 26 | 71.8 | 75.0 | 67.8 | 71.4 | 1.8 |
| 27 | 73.5 | 76.5 | 69.1 | 73.1 | 1.8 |
| 28 | 72.4 | 74.9 | 68.9 | 72.1 | 1.6 |
| 29 | 72.1 | 74.4 | 68.6 | 71.9 | 1.5 |
| 30 | 70.1 | 72.2 | 66.0 | 69.9 | 1.5 |
| 31 | 71.6 | 73.2 | 67.4 | 71.4 | 1.4 |
| 32 | 71.0 | 72.5 | 67.5 | 70.8 | 1.4 |
| 33 | 68.8 | 70.5 | 65.5 | 68.7 | 1.2 |
| 34 | 68.5 | 70.2 | 65.6 | 68.4 | 1.1 |
| 35 | 67.6 | 68.9 | 64.9 | 67.6 | .9 |
| 36 | 65.2 | 66.3 | 62.8 | 65.2 | .8 |
| 37 | 62.0 | 63.2 | 59.8 | 62.0 | .8 |
| 38 | 58.6 | 59.6 | 56.4 | 58.6 | .7 |
| 39 | 55.1 | 55.7 | 55.0 | 55.1 | .2 |
| 40 | 55.0 | 55.0 | 55.0 | 55.0 | .0 |
| DEA | 81.1 | 82.6 | 78.2 | 81.0 | 1.2 |
| DBD | 86.6 | 87.9 | 84.3 | 86.5 | 1.1 |
| OASPL | 87.0 | 88.7 | 85.2 | 86.9 | .8 |
| PNL | 94.2 | 95.4 | 92.2 | 94.1 | .9 |
| PNLT | 94.2 | 95.4 | 92.2 | 94.1 | .9 |

45°
(Microphone Location
Relative to Helicopter)

TABLE F-VII
5 FOOT HOVER TEST

1/3 OCTAVE NOISE LEVEL FREQUENCY SPECTRA

SIKORSKY S-61

OCTOBER 28 1976

EVENT 4, 90 DEGREES, MICROPHONE 150 METERS EAST

1/3 OCTAVE BAND VS LEVEL (AVE OVER 19 SECONDS)
(DB RE 20 MICRO PA)

| BAND | ENERGY AVERAGE | MAX | MIN | ARITH. AVERAGE | STD DEV |
|-------|-------------------|------|------|-------------------|------------|
| 14 | 67.2 | 72.8 | 60.7 | 65.9 | 3.3 |
| 15 | 72.8 | 76.9 | 69.3 | 72.3 | 2.1 |
| 16 | 69.0 | 72.8 | 66.0 | 68.7 | 1.7 |
| 17 | 71.7 | 74.5 | 67.5 | 71.3 | 1.9 |
| 18 | 73.7 | 76.2 | 71.6 | 73.5 | 1.1 |
| 19 | 72.0 | 73.8 | 70.1 | 71.9 | .9 |
| 20 | 74.1 | 77.4 | 71.0 | 73.8 | 1.7 |
| 21 | 74.4 | 75.9 | 72.4 | 74.3 | 1.0 |
| 22 | 72.4 | 73.7 | 70.5 | 72.3 | .7 |
| 23 | 71.7 | 75.9 | 69.5 | 71.4 | 1.5 |
| 24 | 69.1 | 71.7 | 66.7 | 68.9 | 1.2 |
| 25 | 70.2 | 72.8 | 66.5 | 69.9 | 1.5 |
| 26 | 71.1 | 74.9 | 67.9 | 70.8 | 1.8 |
| 27 | 72.6 | 76.2 | 69.2 | 72.2 | 1.9 |
| 28 | 72.6 | 75.7 | 68.7 | 72.2 | 2.0 |
| 29 | 73.3 | 77.7 | 68.4 | 72.6 | 2.6 |
| 30 | 72.4 | 77.1 | 67.3 | 71.4 | 2.9 |
| 31 | 71.5 | 74.9 | 66.4 | 70.8 | 2.5 |
| 32 | 70.4 | 74.0 | 66.4 | 70.0 | 2.0 |
| 33 | 67.9 | 69.8 | 65.1 | 67.7 | 1.3 |
| 34 | 67.7 | 70.1 | 65.8 | 67.6 | 1.0 |
| 35 | 65.5 | 68.0 | 64.5 | 65.5 | .8 |
| 36 | 63.8 | 65.9 | 62.5 | 63.8 | .7 |
| 37 | 59.8 | 61.3 | 58.4 | 59.7 | .6 |
| 38 | 56.5 | 57.6 | 55.2 | 56.4 | .5 |
| 39 | 55.0 | 55.0 | 55.0 | 55.0 | .0 |
| 40 | 55.0 | 55.0 | 55.0 | 55.0 | .0 |
| DBA | 80.9 | 83.5 | 77.8 | 80.6 | 1.8 |
| DBD | 85.7 | 88.2 | 83.1 | 85.5 | 1.3 |
| OASPL | 85.5 | 87.3 | 83.9 | 85.5 | .9 |
| PNL | 93.3 | 95.4 | 91.3 | 93.2 | 1.1 |
| PNLT | 93.3 | 95.4 | 91.3 | 93.2 | 1.1 |

0°
(Microphone Location
Relative to Helicopter)

TABLE F-VII

5 FOOT HOVER TEST

1/3 OCTAVE NOISE LEVEL FREQUENCY SPECTRA

SIKORSKY S-61

OCTOBER 28 1976

EVENT 5, 135 DEGREES, MICROPHONE 150 METERS EAST

1/3 OCTAVE BAND US LEVEL (AVE OVER 19 SECONDS)
(DB RE 20 MICRO PA)

| BAND | ENERGY AVERAGE | MAX | MIN | ARITH. AVERAGE | STD DEV |
|-------|-------------------|------|------|-------------------|------------|
| 14 | 68.0 | 71.6 | 63.1 | 67.6 | 2.0 |
| 15 | 76.6 | 78.3 | 74.1 | 76.5 | 1.2 |
| 16 | 71.6 | 73.2 | 68.8 | 71.5 | 1.0 |
| 17 | 74.1 | 77.4 | 69.8 | 73.6 | 2.2 |
| 18 | 73.5 | 74.8 | 71.5 | 73.4 | .8 |
| 19 | 72.8 | 74.0 | 70.3 | 72.7 | .8 |
| 20 | 79.2 | 83.5 | 75.0 | 78.6 | 2.2 |
| 21 | 74.6 | 75.7 | 72.6 | 74.6 | .7 |
| 22 | 73.2 | 75.3 | 69.9 | 73.0 | 1.3 |
| 23 | 74.6 | 77.1 | 72.7 | 74.5 | 1.1 |
| 24 | 73.7 | 76.9 | 70.3 | 73.3 | 1.8 |
| 25 | 77.2 | 80.1 | 73.9 | 76.8 | 1.9 |
| 26 | 77.2 | 80.3 | 73.3 | 76.8 | 1.9 |
| 27 | 78.7 | 81.1 | 74.3 | 78.4 | 1.7 |
| 28 | 78.8 | 81.5 | 75.4 | 78.5 | 1.8 |
| 29 | 78.7 | 82.2 | 74.1 | 78.3 | 2.0 |
| 30 | 76.4 | 80.4 | 72.2 | 75.6 | 2.3 |
| 31 | 75.8 | 78.9 | 71.2 | 75.4 | 2.0 |
| 32 | 74.5 | 76.3 | 71.2 | 74.4 | 1.0 |
| 33 | 72.5 | 74.8 | 69.5 | 72.3 | 1.3 |
| 34 | 71.4 | 73.7 | 68.9 | 71.2 | 1.3 |
| 35 | 68.7 | 70.9 | 66.1 | 68.5 | 1.1 |
| 36 | 67.3 | 68.8 | 64.5 | 67.2 | 1.1 |
| 37 | 63.8 | 65.4 | 61.6 | 63.7 | .9 |
| 38 | 60.7 | 62.8 | 58.2 | 60.6 | 1.0 |
| 39 | 56.5 | 58.4 | 55.0 | 56.4 | .8 |
| 40 | 55.0 | 55.0 | 55.0 | 55.0 | .0 |
| DBA | 85.8 | 87.8 | 83.3 | 85.5 | 1.4 |
| DBD | 90.1 | 92.0 | 87.9 | 90.0 | 1.2 |
| OASPL | 89.2 | 90.9 | 87.7 | 89.1 | .9 |
| PNL | 97.3 | 99.1 | 95.3 | 97.1 | 1.0 |
| PNLT | 97.3 | 99.1 | 95.3 | 97.1 | 1.0 |

315°

(Microphone Location
Relative to Helicopter)

TABLE F-VII

5 FOOT HOVER TEST

1/3 OCTAVE NOISE LEVEL FREQUENCY SPECTRA

SIKORSKY S-61

OCTOBER 28 1976

EVENT 6, 180 DEGREES, MICROPHONE 150 METERS EAST

1/3 OCTAVE BAND VS LEVEL (AVE OVER 19 SECONDS)
(DB RE 20 MICRO PA)

| BAND | ENERGY AVERAGE | MAX | MIN | ARITH. AVERAGE | STD DEV |
|-------|-------------------|-------|------|-------------------|------------|
| 14 | 65.5 | 69.3 | 60.0 | 64.7 | 2.7 |
| 15 | 72.0 | 75.1 | 67.4 | 71.5 | 2.2 |
| 16 | 72.1 | 74.4 | 68.9 | 71.9 | 1.3 |
| 17 | 75.4 | 77.9 | 71.6 | 75.1 | 1.7 |
| 18 | 75.3 | 79.3 | 72.7 | 75.0 | 1.6 |
| 19 | 75.7 | 79.3 | 73.8 | 75.5 | 1.2 |
| 20 | 82.0 | 85.2 | 78.1 | 81.6 | 2.0 |
| 21 | 75.7 | 77.5 | 73.9 | 75.6 | .9 |
| 22 | 72.6 | 74.0 | 70.6 | 72.5 | 1.1 |
| 23 | 77.6 | 79.6 | 70.9 | 77.0 | 2.4 |
| 24 | 74.4 | 76.6 | 70.5 | 74.1 | 1.6 |
| 25 | 76.7 | 79.6 | 72.4 | 76.3 | 1.8 |
| 26 | 76.9 | 80.1 | 72.2 | 76.6 | 1.9 |
| 27 | 78.6 | 81.1 | 73.7 | 78.2 | 1.9 |
| 28 | 78.9 | 81.7 | 73.2 | 78.4 | 2.1 |
| 29 | 79.0 | 83.0 | 74.1 | 78.4 | 2.4 |
| 30 | 77.6 | 82.3 | 72.7 | 76.9 | 2.4 |
| 31 | 75.9 | 80.3 | 70.9 | 75.1 | 2.5 |
| 32 | 74.7 | 80.1 | 69.3 | 73.5 | 3.0 |
| 33 | 72.2 | 77.5 | 65.6 | 70.6 | 3.5 |
| 34 | 70.2 | 75.9 | 64.3 | 68.9 | 3.2 |
| 35 | 67.0 | 71.0 | 62.9 | 66.4 | 2.3 |
| 36 | 64.1 | 66.9 | 61.5 | 63.9 | 1.6 |
| 37 | 59.9 | 62.1 | 57.8 | 59.8 | 1.2 |
| 38 | 56.0 | 56.8 | 55.0 | 55.9 | .5 |
| 39 | 55.0 | 55.0 | 55.0 | 55.0 | .0 |
| 40 | 55.0 | 55.0 | 55.0 | 55.0 | .0 |
| DBA | 85.7 | 89.1 | 81.4 | 85.2 | 2.1 |
| DBD | 89.7 | 93.5 | 85.8 | 89.2 | 2.1 |
| OASPL | 89.8 | 91.6 | 87.3 | 89.6 | 1.2 |
| PNL | 97.0 | 100.3 | 93.9 | 96.5 | 2.0 |
| PNLT | 97.0 | 100.3 | 93.9 | 96.5 | 2.0 |

270°
(Microphone Location
Relative to Helicopter)

TABLE F-VII
5 FOOT HOVER TEST

1/3 OCTAVE NOISE LEVEL FREQUENCY SPECTRA

SIKORSKY S-61

OCTOBER 28 1976

EVENT 7, 225 DEGREES, MICROPHONE 150 METERS EAST

1/3 OCTAVE BAND VS LEVEL (AVE OVER 19 SECONDS)
(DE RE 20 MICRO PA)

| BAND | ENERGY AVERAGE | MAX | MIN | ARITH. AVERAGE | STD DEV |
|-------|-------------------|------|------|-------------------|------------|
| 14 | 71.3 | 76.1 | 62.9 | 69.8 | 3.9 |
| 15 | 74.7 | 77.9 | 67.5 | 74.2 | 2.2 |
| 16 | 74.8 | 82.5 | 66.4 | 72.4 | 4.0 |
| 17 | 73.4 | 77.1 | 68.8 | 72.9 | 2.1 |
| 18 | 73.2 | 75.4 | 71.5 | 73.1 | 1.1 |
| 19 | 74.0 | 79.1 | 70.3 | 73.4 | 2.0 |
| 20 | 82.2 | 85.4 | 77.1 | 81.8 | 1.9 |
| 21 | 75.7 | 77.5 | 73.5 | 75.6 | .9 |
| 22 | 71.7 | 73.7 | 69.1 | 71.5 | 1.3 |
| 23 | 73.5 | 77.0 | 70.8 | 73.2 | 1.5 |
| 24 | 70.2 | 72.8 | 66.3 | 69.8 | 1.9 |
| 25 | 74.4 | 78.7 | 69.4 | 73.6 | 2.7 |
| 26 | 73.0 | 76.4 | 68.4 | 72.4 | 2.4 |
| 27 | 74.3 | 77.3 | 68.6 | 73.5 | 2.6 |
| 28 | 74.0 | 76.6 | 68.8 | 73.5 | 2.2 |
| 29 | 75.0 | 78.5 | 71.2 | 74.5 | 2.1 |
| 30 | 73.7 | 77.7 | 69.0 | 73.2 | 2.1 |
| 31 | 72.6 | 77.1 | 68.1 | 72.1 | 2.2 |
| 32 | 70.1 | 74.1 | 65.2 | 69.6 | 2.1 |
| 33 | 66.6 | 69.6 | 61.3 | 65.2 | 2.0 |
| 34 | 55.8 | 68.6 | 60.4 | 65.4 | 2.1 |
| 35 | 63.8 | 66.6 | 58.0 | 63.4 | 1.9 |
| 36 | 61.7 | 64.1 | 56.7 | 61.4 | 1.6 |
| 37 | 58.3 | 60.4 | 55.0 | 58.1 | 1.3 |
| 38 | 55.4 | 56.5 | 55.0 | 55.3 | .4 |
| 39 | 55.0 | 55.0 | 55.0 | 55.0 | .0 |
| 40 | 55.0 | 55.0 | 55.0 | 55.0 | .0 |
| DBA | 81.8 | 85.2 | 77.6 | 81.4 | 2.0 |
| DBD | 86.0 | 88.7 | 82.1 | 85.7 | 1.7 |
| OASPL | 87.7 | 89.8 | 85.3 | 87.5 | 1.2 |
| PNL | 93.5 | 96.3 | 90.3 | 93.3 | 1.4 |
| PNLT | 93.5 | 96.3 | 90.3 | 93.3 | 1.4 |

225°
(Microphone Location
Relative to Helicopter)

TABLE F-VII

5 FOOT HOVER TEST

1/3 OCTAVE NOISE LEVEL FREQUENCY SPECTRA

SIKORSKY S-61

OCTOBER 28 1976

EVENT 8, 270 DEGREES, MICROPHONE 150 METERS EAST

1/3 OCTAVE BAND VS LEVEL (AVE OVER 19 SECONDS)
(DB RE 20 MICRO PA)

| BAND | ENERGY AVERAGE | MAX | MIN | ARITH. AVERAGE | STD DEV |
|-------|-------------------|------|------|-------------------|------------|
| 14 | 66.4 | 70.4 | 58.8 | 65.3 | 3.5 |
| 15 | 73.3 | 74.9 | 68.8 | 73.1 | 1.5 |
| 16 | 70.2 | 73.1 | 64.5 | 69.8 | 2.1 |
| 17 | 72.0 | 74.1 | 69.5 | 71.8 | 1.2 |
| 18 | 74.5 | 76.6 | 72.3 | 74.4 | 1.0 |
| 19 | 73.6 | 75.0 | 72.6 | 73.6 | .7 |
| 20 | 83.4 | 84.5 | 81.0 | 83.3 | .9 |
| 21 | 77.4 | 80.2 | 75.3 | 77.2 | 1.4 |
| 22 | 71.9 | 73.5 | 70.4 | 71.8 | .8 |
| 23 | 72.6 | 74.3 | 70.2 | 72.5 | 1.0 |
| 24 | 65.6 | 68.4 | 61.8 | 65.4 | 1.5 |
| 25 | 67.7 | 70.2 | 65.3 | 67.5 | 1.2 |
| 26 | 67.7 | 71.8 | 64.2 | 67.3 | 1.8 |
| 27 | 69.9 | 74.4 | 65.7 | 69.4 | 2.2 |
| 28 | 69.0 | 72.3 | 66.7 | 68.7 | 1.7 |
| 29 | 68.8 | 72.3 | 66.0 | 68.4 | 1.8 |
| 30 | 67.3 | 70.3 | 65.2 | 67.1 | 1.3 |
| 31 | 67.3 | 69.2 | 64.8 | 67.2 | 1.2 |
| 32 | 67.2 | 70.3 | 64.3 | 67.0 | 1.4 |
| 33 | 65.1 | 68.1 | 62.2 | 64.9 | 1.5 |
| 34 | 64.0 | 68.1 | 61.3 | 63.7 | 1.7 |
| 35 | 62.5 | 64.5 | 60.2 | 62.3 | 1.1 |
| 36 | 60.6 | 62.3 | 58.8 | 60.5 | .8 |
| 37 | 57.6 | 59.1 | 55.8 | 57.6 | .8 |
| 38 | 55.3 | 56.1 | 55.0 | 55.2 | .3 |
| 39 | 55.0 | 55.0 | 55.0 | 55.0 | .0 |
| 40 | 55.0 | 55.0 | 55.0 | 55.0 | .0 |
| DBA | 77.5 | 80.3 | 75.5 | 77.3 | 1.3 |
| DBD | 83.4 | 85.5 | 81.6 | 83.2 | 1.0 |
| OASPL | 86.6 | 87.8 | 85.5 | 86.6 | .7 |
| PNL | 91.8 | 93.6 | 90.5 | 91.7 | .8 |
| PNLT | 91.8 | 93.6 | 90.5 | 91.7 | .8 |

180°
(Microphone Location
Relative to Helicopter)

TABLE F-VII

5 FOOT HOVER TEST

1/3 OCTAVE NOISE LEVEL FREQUENCY SPECTRA

SIKORSKY S-61

OCTOBER 28 1976

EVENT 9, 315 DEGREES, MICROPHONE 150 METERS EAST

1/3 OCTAVE BAND VS LEVEL (AVE OVER 19 SECONDS)
(DB RE 20 MICRO PA)

| BAND | ENERGY AVERAGE | MAX | MIN | ARITH. AVERAGE | STD DEV |
|-------|-------------------|------|------|-------------------|------------|
| 14 | 66.5 | 68.9 | 62.0 | 66.1 | 1.9 |
| 15 | 76.3 | 78.2 | 74.2 | 76.1 | 1.2 |
| 16 | 71.6 | 73.0 | 70.0 | 71.5 | .8 |
| 17 | 72.8 | 75.1 | 70.3 | 72.6 | 1.2 |
| 18 | 74.5 | 76.0 | 72.8 | 74.4 | .9 |
| 19 | 73.4 | 76.3 | 70.9 | 73.2 | 1.2 |
| 20 | 83.8 | 86.1 | 80.6 | 83.6 | 1.5 |
| 21 | 77.7 | 79.6 | 75.2 | 77.5 | 1.1 |
| 22 | 71.8 | 73.0 | 70.1 | 71.7 | .8 |
| 23 | 70.9 | 73.3 | 68.2 | 70.7 | 1.2 |
| 24 | 67.5 | 70.7 | 64.4 | 67.1 | 1.9 |
| 25 | 59.0 | 72.7 | 65.6 | 68.4 | 2.1 |
| 26 | 68.0 | 70.4 | 64.8 | 67.6 | 1.7 |
| 27 | 69.4 | 71.4 | 66.4 | 69.1 | 1.5 |
| 28 | 69.4 | 71.6 | 66.0 | 69.1 | 1.5 |
| 29 | 69.9 | 72.1 | 67.0 | 69.7 | 1.4 |
| 30 | 69.1 | 70.6 | 65.1 | 68.9 | 1.4 |
| 31 | 68.5 | 69.7 | 65.7 | 68.3 | 1.1 |
| 32 | 66.8 | 69.2 | 64.3 | 66.6 | 1.1 |
| 33 | 63.1 | 64.8 | 60.9 | 63.0 | 1.0 |
| 34 | 61.9 | 63.3 | 60.4 | 61.8 | .9 |
| 35 | 60.8 | 62.2 | 59.6 | 60.8 | .8 |
| 36 | 59.3 | 60.6 | 57.8 | 59.2 | .8 |
| 37 | 56.2 | 57.4 | 55.0 | 56.1 | .7 |
| 38 | 55.0 | 55.0 | 55.0 | 55.0 | .0 |
| 39 | 55.0 | 55.0 | 55.0 | 55.0 | .0 |
| 40 | 55.0 | 55.0 | 55.0 | 55.0 | .0 |
| DBA | 77.8 | 79.6 | 75.1 | 77.6 | 1.1 |
| DBD | 82.9 | 84.7 | 80.7 | 82.8 | 1.0 |
| OASPL | 86.9 | 88.1 | 85.6 | 86.8 | .8 |
| PNL | 91.7 | 93.2 | 90.0 | 91.6 | 1.0 |
| PNLT | 91.7 | 93.2 | 90.0 | 91.6 | 1.0 |

135°

(Microphone Location
Relative to Helicopter)

TABLE F-VII

5 FOOT HOVER TEST

1/3 OCTAVE NOISE LEVEL FREQUENCY SPECTRA

SIKORSKY S-61

OCTOBER 28 1976

EVENT 1, 0 DEGREES, MICROPHONE 75 METERS WEST

1/3 OCTAVE BAND VS LEVEL (AVE OVER 19 SECONDS)
(DB RE 20 MICRO PA)

| BAND | ENERGY AVERAGE | MAX | MIN | ARITH. AVERAGE | STD DEV |
|-------|-------------------|-------|-------|-------------------|------------|
| 14 | 70.2 | 75.1 | 66.0 | 69.4 | 2.6 |
| 15 | 77.6 | 81.6 | 73.9 | 77.4 | 1.5 |
| 16 | 71.9 | 73.3 | 69.3 | 71.9 | .8 |
| 17 | 77.1 | 80.9 | 72.8 | 76.6 | 2.1 |
| 18 | 77.1 | 80.5 | 73.9 | 76.7 | 1.8 |
| 19 | 78.9 | 82.1 | 76.2 | 78.6 | 1.5 |
| 20 | 89.4 | 92.9 | 85.8 | 89.1 | 1.4 |
| 21 | 83.4 | 87.2 | 81.0 | 83.1 | 1.5 |
| 22 | 83.9 | 87.3 | 80.6 | 83.7 | 1.4 |
| 23 | 86.1 | 88.5 | 83.9 | 86.0 | 1.1 |
| 24 | 85.3 | 87.4 | 83.7 | 85.2 | 1.0 |
| 25 | 85.4 | 87.0 | 83.2 | 85.3 | .9 |
| 26 | 84.7 | 86.0 | 82.7 | 84.6 | .8 |
| 27 | 85.0 | 86.7 | 82.4 | 84.9 | .9 |
| 28 | 84.7 | 86.6 | 81.8 | 84.6 | 1.1 |
| 29 | 84.6 | 86.5 | 82.2 | 84.5 | 1.0 |
| 30 | 84.4 | 87.3 | 82.1 | 84.3 | 1.2 |
| 31 | 84.0 | 87.3 | 81.8 | 83.7 | 1.4 |
| 32 | 83.1 | 86.2 | 80.1 | 82.8 | 1.6 |
| 33 | 80.0 | 83.2 | 77.0 | 79.7 | 1.7 |
| 34 | 75.6 | 79.4 | 73.7 | 76.3 | 1.4 |
| 35 | 74.0 | 76.2 | 71.8 | 73.9 | 1.0 |
| 36 | 71.0 | 72.7 | 69.6 | 70.9 | .7 |
| 37 | 66.9 | 68.0 | 65.8 | 66.8 | .6 |
| 38 | 62.3 | 63.5 | 61.4 | 62.3 | .6 |
| 39 | 58.7 | 59.6 | 57.8 | 58.7 | .5 |
| 40 | 56.3 | 56.8 | 55.5 | 56.3 | .4 |
| DBA | 92.7 | 95.2 | 91.0 | 92.6 | 1.0 |
| DBD | 97.0 | 99.3 | 94.9 | 96.9 | 1.0 |
| OASPL | 96.9 | 98.2 | 95.6 | 96.8 | .7 |
| PNL | 104.5 | 106.6 | 102.6 | 104.4 | 1.0 |
| PNLT | 104.5 | 106.6 | 102.6 | 104.4 | 1.0 |

270°
(Microphone Location
Relative to Helicopter)

TABLE F-VII
5 FOOT HOVER TEST

1/3 OCTAVE NOISE LEVEL FREQUENCY SPECTRA

SIKORSKY S-61

OCTOBER 28 1976

EVENT 3, 45 DEGREES, MICROPHONE 75 METERS WEST

1/3 OCTAVE BAND VS LEVEL (AVE OVER 19 SECONDS)
(DB RE 20 MICRO PA)

| BAND | ENERGY AVERAGE | MAX | MIN | ARITH. AVERAGE | STD DEV |
|-------|-------------------|-------|-------|-------------------|------------|
| 14 | 68.2 | 73.1 | 63.4 | 67.6 | 2.3 |
| 15 | 74.3 | 77.2 | 68.9 | 73.7 | 2.3 |
| 16 | 68.8 | 70.5 | 66.7 | 68.7 | 1.2 |
| 17 | 73.4 | 76.8 | 69.7 | 73.0 | 1.8 |
| 18 | 74.2 | 78.1 | 71.0 | 73.9 | 1.7 |
| 19 | 77.3 | 80.9 | 73.0 | 76.9 | 1.8 |
| 20 | 88.8 | 91.2 | 85.0 | 88.4 | 1.8 |
| 21 | 82.2 | 85.0 | 80.0 | 82.1 | 1.2 |
| 22 | 80.3 | 83.0 | 77.8 | 80.3 | 1.3 |
| 23 | 85.1 | 86.9 | 82.4 | 84.9 | 1.2 |
| 24 | 84.2 | 86.1 | 81.5 | 84.1 | 1.0 |
| 25 | 85.1 | 86.7 | 82.4 | 85.0 | 1.0 |
| 26 | 83.5 | 85.5 | 80.2 | 83.3 | 1.2 |
| 27 | 83.6 | 86.2 | 80.4 | 83.4 | 1.5 |
| 28 | 81.9 | 84.4 | 79.2 | 81.7 | 1.4 |
| 29 | 82.8 | 85.5 | 79.4 | 82.4 | 1.7 |
| 30 | 81.4 | 84.4 | 78.4 | 81.2 | 1.6 |
| 31 | 80.1 | 82.6 | 77.1 | 79.9 | 1.5 |
| 32 | 79.4 | 82.2 | 75.5 | 79.1 | 1.7 |
| 33 | 78.6 | 81.3 | 73.0 | 78.2 | 2.1 |
| 34 | 78.1 | 81.3 | 71.2 | 77.5 | 2.5 |
| 35 | 75.5 | 78.2 | 69.8 | 75.1 | 2.1 |
| 36 | 72.6 | 74.8 | 68.3 | 72.3 | 1.8 |
| 37 | 68.1 | 69.9 | 64.7 | 67.9 | 1.5 |
| 38 | 63.8 | 65.6 | 60.9 | 63.6 | 1.3 |
| 39 | 59.1 | 60.3 | 57.3 | 59.0 | .9 |
| 40 | 55.5 | 56.3 | 55.0 | 55.5 | .4 |
| DBA | 90.8 | 92.9 | 88.3 | 90.7 | 1.2 |
| DBD | 96.1 | 98.1 | 93.3 | 95.9 | 1.3 |
| OASPL | 95.2 | 97.1 | 93.6 | 95.1 | .8 |
| PNL | 103.4 | 105.6 | 100.5 | 103.3 | 1.3 |
| PNLT | 103.4 | 105.6 | 100.5 | 103.3 | 1.3 |

225°
(Microphone Location
Relative to Helicopter)

TABLE F-VII
5 FOOT HOVER TEST

1/3 OCTAVE NOISE LEVEL FREQUENCY SPECTRA

SIKORSKY S-61

OCTOBER 28 1976

EVENT 1, 0 DEGREES, MICROPHONE 75 METERS EAST

1/3 OCTAVE BAND VS LEVEL (AVE OVER 19 SECONDS)
 (DB RE 20 MICRO PA)

| BAND | ENERGY AVERAGE | MAX | MIN | ARITH. AVERAGE | STD DEV |
|-------|-------------------|-------|-------|-------------------|------------|
| 14 | 72.6 | 76.5 | 65.7 | 71.4 | 3.5 |
| 15 | 82.4 | 84.4 | 80.2 | 82.3 | 1.0 |
| 16 | 76.2 | 77.4 | 73.6 | 76.1 | .9 |
| 17 | 78.6 | 81.9 | 75.2 | 78.3 | 1.6 |
| 18 | 78.3 | 80.1 | 76.6 | 78.3 | .9 |
| 19 | 78.8 | 80.5 | 76.7 | 78.7 | .8 |
| 20 | 87.6 | 90.8 | 82.9 | 87.1 | 2.1 |
| 21 | 81.0 | 82.6 | 79.1 | 80.9 | .9 |
| 22 | 79.8 | 81.4 | 77.9 | 79.7 | .8 |
| 23 | 78.3 | 80.6 | 76.2 | 78.1 | 1.1 |
| 24 | 69.4 | 72.9 | 66.3 | 69.1 | 1.7 |
| 25 | 70.4 | 72.9 | 66.9 | 70.1 | 1.5 |
| 26 | 74.8 | 76.9 | 71.9 | 74.6 | 1.3 |
| 27 | 79.1 | 81.0 | 75.8 | 78.9 | 1.3 |
| 28 | 81.0 | 83.2 | 77.0 | 80.7 | 1.7 |
| 29 | 83.0 | 86.0 | 79.3 | 82.6 | 2.0 |
| 30 | 83.2 | 86.6 | 78.9 | 82.7 | 2.1 |
| 31 | 82.4 | 85.2 | 79.7 | 82.1 | 1.7 |
| 32 | 79.7 | 82.3 | 77.3 | 79.5 | 1.4 |
| 33 | 76.3 | 78.4 | 73.6 | 76.1 | 1.1 |
| 34 | 74.7 | 76.3 | 72.8 | 74.6 | 1.0 |
| 35 | 74.2 | 75.7 | 72.3 | 74.1 | .9 |
| 36 | 73.0 | 74.7 | 71.5 | 72.9 | .8 |
| 37 | 71.1 | 72.6 | 69.2 | 71.1 | .8 |
| 38 | 69.3 | 70.5 | 67.2 | 69.2 | .8 |
| 39 | 67.0 | 68.4 | 65.3 | 67.0 | .8 |
| 40 | 63.7 | 64.8 | 62.1 | 63.7 | .7 |
| DBA | 89.8 | 92.0 | 87.8 | 89.6 | 1.3 |
| DBD | 94.4 | 96.1 | 92.9 | 94.3 | 1.0 |
| OASPL | 94.1 | 95.9 | 92.8 | 94.0 | .8 |
| PNL | 101.7 | 103.3 | 100.5 | 101.6 | .9 |
| PNLT | 101.7 | 103.3 | 100.5 | 101.6 | .9 |

90°
 (Microphone Location
 Relative to Helicopter)

TABLE F-VII

5 FOOT HOVER TEST

1/3 OCTAVE NOISE LEVEL FREQUENCY SPECTRA

SIKORSKY S-61

OCTOBER 28 1976

EVENT 3, 45 DEGREES, MICROPHONE 75 METERS EAST

**1/3 OCTAVE BAND VS LEVEL (AVE OVER 19 SECONDS)
(DB RE 20 MICRO PA)**

| BAND | ENERGY AVERAGE | MAX | MIN | ARITH. AVERAGE | STD DEV |
|-------|-------------------|-------|------|-------------------|------------|
| 14 | 67.0 | 70.0 | 62.9 | 66.5 | 2.0 |
| 15 | 75.9 | 78.9 | 71.5 | 75.5 | 2.0 |
| 16 | 71.2 | 72.8 | 69.4 | 71.1 | .8 |
| 17 | 76.7 | 80.2 | 74.0 | 76.4 | 1.5 |
| 18 | 76.1 | 78.3 | 72.2 | 75.9 | 1.3 |
| 19 | 76.4 | 78.7 | 74.3 | 76.3 | .9 |
| 20 | 81.1 | 83.5 | 77.6 | 80.9 | 1.5 |
| 21 | 78.9 | 80.7 | 77.4 | 78.8 | .8 |
| 22 | 78.0 | 80.1 | 75.8 | 77.9 | 1.0 |
| 23 | 75.9 | 78.5 | 73.6 | 75.8 | 1.2 |
| 24 | 66.5 | 68.3 | 64.5 | 66.3 | 1.2 |
| 25 | 67.8 | 70.6 | 63.9 | 67.5 | 1.6 |
| 26 | 71.6 | 73.6 | 67.8 | 71.4 | 1.4 |
| 27 | 75.8 | 78.3 | 72.5 | 75.5 | 1.6 |
| 28 | 77.7 | 79.7 | 75.0 | 77.5 | 1.2 |
| 29 | 79.1 | 81.3 | 76.3 | 78.9 | 1.3 |
| 30 | 78.0 | 80.3 | 75.6 | 77.8 | 1.1 |
| 31 | 78.1 | 80.1 | 75.8 | 78.0 | 1.0 |
| 32 | 76.2 | 78.8 | 73.8 | 76.1 | 1.2 |
| 33 | 74.7 | 77.1 | 72.6 | 74.5 | 1.3 |
| 34 | 73.5 | 75.2 | 71.3 | 73.4 | 1.0 |
| 35 | 73.8 | 75.8 | 71.3 | 73.7 | 1.1 |
| 36 | 72.9 | 74.4 | 71.0 | 72.8 | 1.0 |
| 37 | 71.3 | 72.9 | 69.4 | 71.2 | 1.0 |
| 38 | 70.1 | 72.0 | 68.0 | 70.0 | 1.1 |
| 39 | 68.3 | 70.0 | 65.7 | 68.1 | 1.2 |
| 40 | 65.9 | 67.5 | 63.6 | 65.8 | 1.1 |
| DEA | 86.9 | 88.8 | 85.4 | 86.8 | .9 |
| DBD | 92.7 | 94.4 | 91.1 | 92.6 | .9 |
| OASPL | 91.0 | 92.1 | 90.2 | 91.0 | .5 |
| PNL | 99.9 | 101.4 | 98.2 | 99.8 | 1.0 |
| PNLT | 99.9 | 101.4 | 98.2 | 99.8 | 1.0 |

*45°
Microphone Location
Relative to Helicopter*

TABLE F-VII

500 FT HOVER TEST

1/3 OCTAVE NOISE LEVEL FREQUENCY SPECTRA

SIKORSKY S-61

OCTOBER 28 1976

EVENT 23, 0 DEGREES, MICROPHONE 150 METERS WEST

1/3 OCTAVE BAND VS LEVEL (AVE OVER 19 SECONDS)
(DB RE 20 MICRO PA)

| BAND | ENERGY AVERAGE | MAX | MIN | ARITH. AVERAGE | STD DEV |
|-------|-------------------|------|------|-------------------|------------|
| 14 | 71.9 | 76.2 | 65.7 | 71.1 | 2.7 |
| 15 | 71.3 | 74.6 | 67.2 | 70.8 | 2.1 |
| 16 | 67.1 | 70.4 | 63.1 | 66.5 | 2.3 |
| 17 | 67.1 | 69.8 | 64.7 | 66.9 | 1.4 |
| 18 | 65.0 | 66.6 | 62.9 | 64.9 | .9 |
| 19 | 62.4 | 64.3 | 59.9 | 62.3 | 1.1 |
| 20 | 61.9 | 64.6 | 58.8 | 61.7 | 1.4 |
| 21 | 71.8 | 76.2 | 62.4 | 70.5 | 3.8 |
| 22 | 77.8 | 80.6 | 68.6 | 76.8 | 3.4 |
| 23 | 82.1 | 84.3 | 74.0 | 81.3 | 3.0 |
| 24 | 80.0 | 82.5 | 74.4 | 79.6 | 2.1 |
| 25 | 78.6 | 82.1 | 65.9 | 77.3 | 4.1 |
| 26 | 81.9 | 83.6 | 75.3 | 81.5 | 1.9 |
| 27 | 77.7 | 79.2 | 74.2 | 77.5 | 1.0 |
| 28 | 78.2 | 79.4 | 75.8 | 78.1 | .9 |
| 29 | 77.2 | 78.3 | 74.3 | 77.1 | 1.0 |
| 30 | 75.5 | 77.2 | 72.5 | 75.4 | 1.1 |
| 31 | 73.3 | 74.5 | 70.6 | 73.2 | 1.1 |
| 32 | 71.1 | 72.2 | 67.9 | 71.0 | 1.0 |
| 33 | 66.7 | 67.9 | 64.3 | 66.6 | .9 |
| 34 | 62.9 | 64.3 | 60.2 | 62.8 | 1.1 |
| 35 | 59.1 | 60.3 | 55.9 | 59.0 | 1.1 |
| 36 | 54.4 | 56.4 | 52.2 | 54.3 | .9 |
| 37 | 49.4 | 51.6 | 46.0 | 49.2 | 1.1 |
| 38 | 45.6 | 47.0 | 45.0 | 45.6 | .5 |
| 39 | 45.0 | 45.0 | 45.0 | 45.0 | .0 |
| 40 | 45.0 | 45.0 | 45.0 | 45.0 | .0 |
| DBA | 84.7 | 86.0 | 80.8 | 84.6 | 1.2 |
| DBD | 88.7 | 90.2 | 84.0 | 88.4 | 1.5 |
| OASPL | 89.8 | 91.3 | 85.5 | 89.6 | 1.5 |
| PNL | 95.3 | 96.7 | 90.6 | 95.1 | 1.5 |
| PNLT | 95.3 | 96.7 | 90.6 | 95.1 | 1.5 |

270°
(Microphone Location
Relative to Helicopter)

TABLE F-VII

500 FT HOVER TEST

1/3 OCTAVE NOISE LEVEL FREQUENCY SPECTRA

SIKORSKY S-61

OCTOBER 28 1976

EVENT 23, 0 DEGREES, MICROPHONE 150 METERS EAST

1/3 OCTAVE BAND VS LEVEL (AVE OVER 19 SECONDS)
(DB RE 20 MICRO PA)

| BAND | ENERGY AVERAGE | MAX | MIN | ARITH. AVERAGE | STD DEV |
|-------|-------------------|------|------|-------------------|------------|
| 14 | 68.7 | 74.4 | 63.4 | 67.5 | 2.9 |
| 15 | 74.2 | 77.7 | 68.7 | 73.8 | 2.1 |
| 16 | 68.2 | 72.3 | 63.5 | 67.7 | 2.1 |
| 17 | 70.0 | 73.9 | 66.1 | 69.5 | 2.2 |
| 18 | 68.8 | 71.4 | 64.4 | 68.5 | 1.5 |
| 19 | 64.6 | 67.1 | 58.6 | 64.1 | 2.0 |
| 20 | 62.4 | 66.2 | 57.8 | 61.8 | 2.2 |
| 21 | 72.3 | 75.2 | 68.6 | 71.9 | 2.0 |
| 22 | 77.7 | 81.1 | 73.5 | 77.3 | 2.0 |
| 23 | 81.8 | 84.4 | 78.1 | 81.5 | 1.5 |
| 24 | 78.6 | 80.0 | 74.6 | 78.5 | 1.2 |
| 25 | 76.5 | 80.6 | 70.6 | 75.4 | 3.1 |
| 26 | 80.5 | 82.4 | 77.9 | 80.4 | 1.1 |
| 27 | 77.8 | 80.9 | 75.1 | 77.4 | 1.8 |
| 28 | 78.6 | 80.1 | 77.3 | 78.5 | .8 |
| 29 | 77.0 | 79.7 | 75.0 | 76.8 | 1.3 |
| 30 | 74.3 | 77.1 | 72.4 | 74.1 | 1.4 |
| 31 | 71.7 | 74.4 | 69.6 | 71.5 | 1.5 |
| 32 | 69.7 | 71.9 | 67.3 | 69.5 | 1.3 |
| 33 | 65.9 | 68.2 | 63.0 | 65.7 | 1.4 |
| 34 | 62.4 | 64.3 | 60.1 | 62.2 | 1.2 |
| 35 | 59.5 | 60.8 | 57.3 | 59.4 | 1.1 |
| 36 | 54.3 | 55.9 | 52.0 | 54.2 | 1.1 |
| 37 | 49.6 | 52.0 | 47.5 | 49.5 | 1.1 |
| 38 | 45.4 | 46.9 | 45.0 | 45.4 | .5 |
| 39 | 45.0 | 45.0 | 45.0 | 45.0 | .0 |
| 40 | 45.0 | 45.0 | 45.0 | 45.0 | .0 |
| DBA | 83.9 | 86.1 | 81.8 | 83.8 | 1.1 |
| DBD | 87.7 | 90.0 | 85.4 | 87.5 | 1.1 |
| OASPL | 88.9 | 91.2 | 86.4 | 88.7 | 1.2 |
| PWL | 94.6 | 96.6 | 92.4 | 94.4 | 1.0 |
| PNLT | 94.6 | 96.6 | 92.4 | 94.4 | 1.0 |

90°
(Microphone Location
Relative to Helicopter)

TABLE F-VIII
500 FT HOVER TEST

1/3 OCTAVE NOISE LEVEL FREQUENCY SPECTRA

SIKORSKY S-61

OCTOBER 28 1976

EVENT 23 , 0 DEGREES, CENTERLINE MIC. (HARD SITE)

1/3 OCTAVE BAND VS LEVEL (AVE OVER 19 SECONDS)
(DB RE 20 MICRO PA)

| BAND | ENERGY AVERAGE | MAX | MIN | ARITH. AVERAGE | STD DEV |
|-------|-------------------|-------|------|-------------------|------------|
| 14 | 70.7 | 74.4 | 63.3 | 69.9 | 2.9 |
| 15 | 72.1 | 74.7 | 67.6 | 71.8 | 1.7 |
| 16 | 67.7 | 70.8 | 63.8 | 67.2 | 2.1 |
| 17 | 68.5 | 71.1 | 64.8 | 68.2 | 1.7 |
| 18 | 64.8 | 67.6 | 61.9 | 64.6 | 1.3 |
| 19 | 66.6 | 70.3 | 61.3 | 66.0 | 2.4 |
| 20 | 81.6 | 84.7 | 78.7 | 81.3 | 1.6 |
| 21 | 82.9 | 85.0 | 75.8 | 82.3 | 2.4 |
| 22 | 84.3 | 86.8 | 75.2 | 83.7 | 2.6 |
| 23 | 79.5 | 81.2 | 73.4 | 79.2 | 1.8 |
| 24 | 86.8 | 88.4 | 78.8 | 86.5 | 2.0 |
| 25 | 85.7 | 87.9 | 81.0 | 85.5 | 1.4 |
| 26 | 85.8 | 87.4 | 81.5 | 85.7 | 1.1 |
| 27 | 84.2 | 85.6 | 80.9 | 84.1 | 1.1 |
| 28 | 83.0 | 84.8 | 80.6 | 82.9 | .9 |
| 29 | 80.7 | 82.2 | 78.7 | 80.6 | .9 |
| 30 | 77.3 | 79.2 | 75.6 | 77.1 | 1.0 |
| 31 | 75.5 | 77.1 | 74.0 | 75.4 | 1.0 |
| 32 | 73.1 | 75.1 | 71.8 | 73.0 | .9 |
| 33 | 69.1 | 70.4 | 67.6 | 69.1 | .8 |
| 34 | 65.8 | 67.0 | 64.4 | 65.8 | .7 |
| 35 | 62.3 | 63.4 | 61.0 | 62.3 | .5 |
| 36 | 57.7 | 58.6 | 56.7 | 57.7 | .5 |
| 37 | 53.0 | 53.7 | 51.8 | 53.0 | .5 |
| 38 | 48.5 | 49.1 | 48.1 | 48.5 | .3 |
| 39 | 45.0 | 45.0 | 45.0 | 45.0 | .0 |
| 40 | 45.0 | 45.0 | 45.0 | 45.0 | .0 |
| DBA | 89.2 | 90.3 | 86.0 | 89.1 | .9 |
| DBD | 93.3 | 94.3 | 89.6 | 93.2 | .9 |
| OASPL | 94.6 | 95.6 | 90.0 | 94.4 | 1.2 |
| PNL | 99.7 | 100.7 | 96.2 | 99.6 | .8 |
| PNLT | 99.7 | 100.7 | 96.2 | 99.6 | .8 |

(Helicopter Landing
Directly Overhead)

TABLE F-VIII
Helicopter Noise Level Data
SIKORSKY S61 OCTOBER 28, 1976

MAX RMS Noise Level - dBA re 20 μPa

| HELICOPTER OPERATION | RUN NUMBER | MICROPHONE OFFSET TO THE WEST | | MICROPHONE OFFSET TO THE EAST | |
|-------------------------|---------------|----------------------------------|--------------|----------------------------------|--------------|
| | | 150M | 75M | 75M | 150M |
| 5 FT. HOVER 0° | 1 10 | 90.5 87.5 | 95.0 92.3 | 92.8 90.3 | 86.3 83.0 |
| | | (270°) | | (90°) | |
| 5 FT. HOVER 45° | 3 11 | 91.3 89.3 | 93.5 94.5 | 89.0 89.0 | 85.0 81.8 |
| | | (225°) | | (45°) | |
| 5 FT. HOVER 90° | 4 12 | 94.3 92.3 | 96.8 96.3 | 88.5 90.8 | 86.0 83.0 |
| | | (180°) | | (0°) | |
| 5 FT. HOVER 135° | 5 13 | 93.8 96.3 | 98.5 98.3 | 93.3 94.5 | 87.8 86.8 |
| | | (135°) | | (315°) | |
| 5 FT. HOVER 180° | 6 14 | 91.3 93.0 | 94.0 95.0 | 95.0 95.5 | 89.5 89.0 |
| | | (90°) | | (270°) | |
| 5 FT. HOVER 225° | 7 | 89.0 | 92.0 | 94.8 | 85.5 |
| | | (45°) | | (225°) | |
| 5 FT. HOVER 270° | 8 | 88.0 | 91.0 | 88.0 | 80.5 |
| | | (0°) | | (180°) | |
| 5 FT. HOVER 315° | 9 | 87.5 | 90.5 | 88.8 | 79.0 |
| | | (315°) | | (135°) | |
| 500 FT. HOVER 0° | 23 | 85.8 | 89.5* | 88.8* | 85.5 |
| | | (270°) | | (90°) | |
| 500 FT. HOVER 90° | 24 | 86.0 | 90.5* | 89.5* | 84.0 |
| | | (180°) | | (0°) | |

* microphone at centerline

TABLE F-VIII
Helicopter Noise Level Data
SIKORSKY S-61

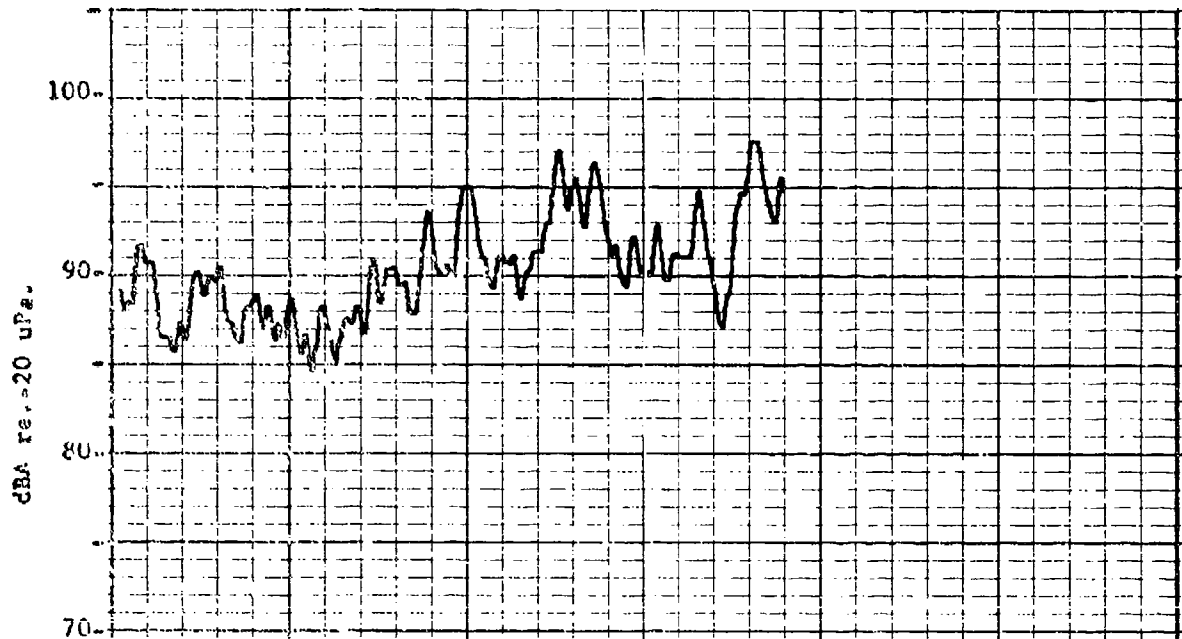
OCTOBER 28, 1976

MAX RMS Noise Level - dB(A) @ 20 μPa

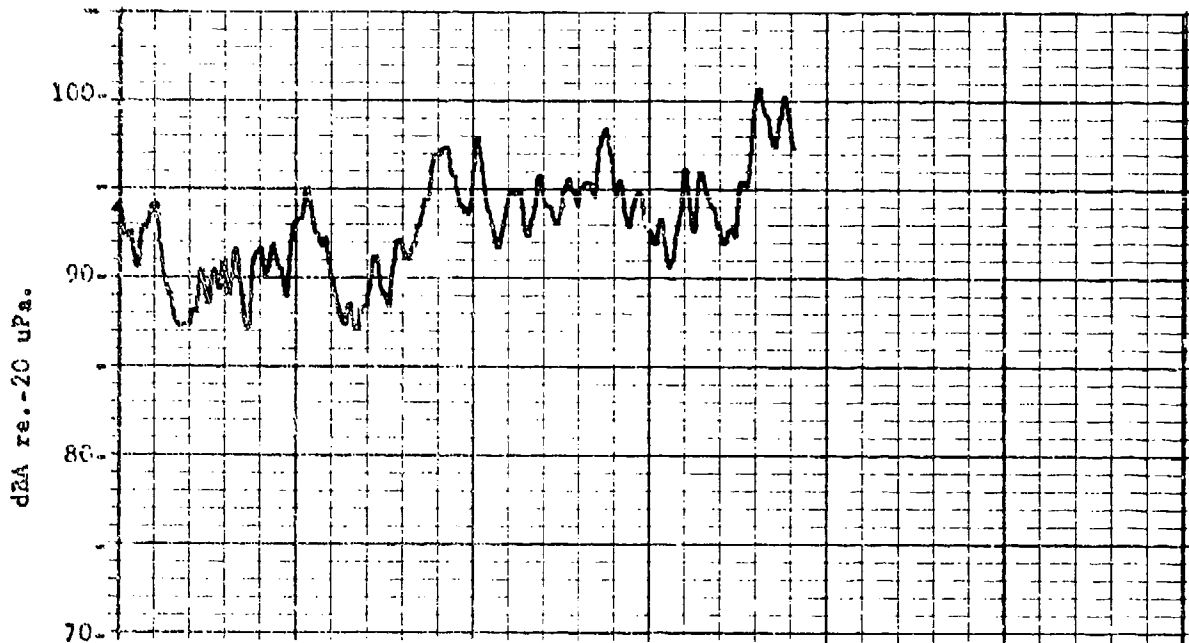
| HELICOPTER OPERATION | RUN NUMBER | MICROPHONE OFFSET TO THE WEST | | MICROPHONE OFFSET TO THE EAST | |
|----------------------------|---------------|----------------------------------|-------------|----------------------------------|------|
| | | 150M | CENTER LINE | CENTER LINE | 150M |
| 3° GLIDE SLOPE | 29 | 82.3 | 86.8 | 86.3 | 80.3 |
| | 30 | 81.8 | 85.5 | 83.0 | 82.3 |
| | 31 | 82.5 | 87.0 | 84.0 | 80.5 |
| 6° GLIDE SLOPE | 20 | 82.8 | 85.0 | 83.5 | 79.5 |
| | 21 | 85.0 | 86.3 | 84.0 | 79.5 |
| 9° GLIDE SLOPE | 15 | 84.0 | 80.5 | 79.8 | 78.8 |
| | 16 | 84.5 | 80.3 | 80.0 | 80.3 |
| | 17 | 83.5 | 82.8 | 81.0 | 81.8 |
| 60 KT LEVEL FLYOVER | 18 | 81.0 | 80.0 | 79.5 | 78.5 |
| | 19 | 83.0 | 82.5 | 82.0 | 80.0 |
| 100KT LEVEL FLYOVER | 26 | 82.8 | 84.0 | 81.5 | 82.5 |
| | 27 | 82.3 | 83.5 | 80.5 | 81.3 |
| | 28 | 81.8 | 81.8 | 79.5 | 80.5 |
| 115 KT LEVEL FLYOVER | 32 | 84.0 | 85.3 | 82.0 | 82.3 |
| | 33 | 81.5 | 82.0 | 78.8 | 81.8 |
| | 34 | 81.8 | 84.0 | 81.8 | 85.3 |

TABLE F-IX

← 10 SEC →



150 METERS WEST OF CENTER LINE



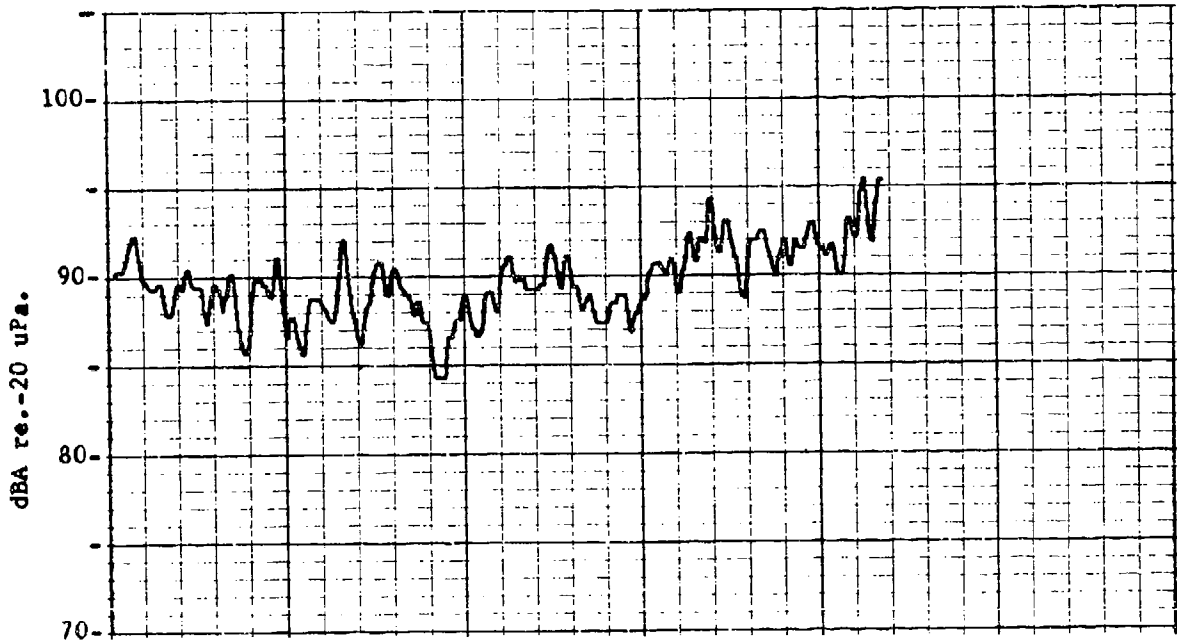
75 METERS WEST OF CENTER LINE

NOISE LEVEL TIME HISTORIES
SIKORSKY S-61 HELICOPTER
90° HOVER - 5 FT.

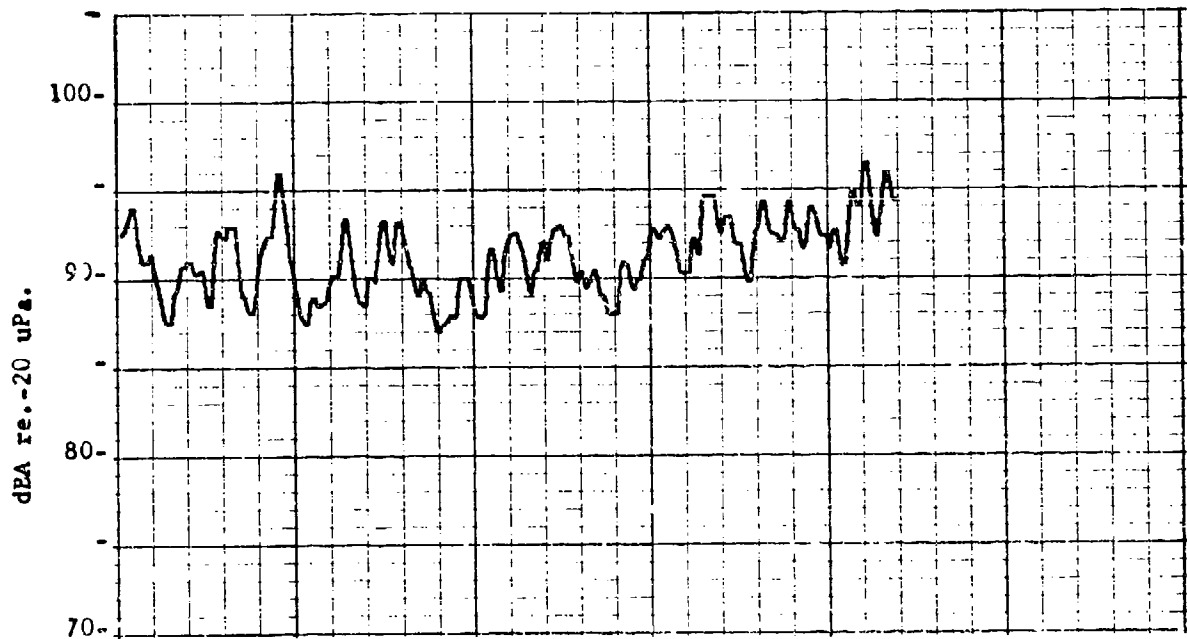
RUN 4

TABLE F-IV

← 10 SEC →



150 METERS WEST OF CENTER LINE



75 METERS WEST OF CENTER LINE

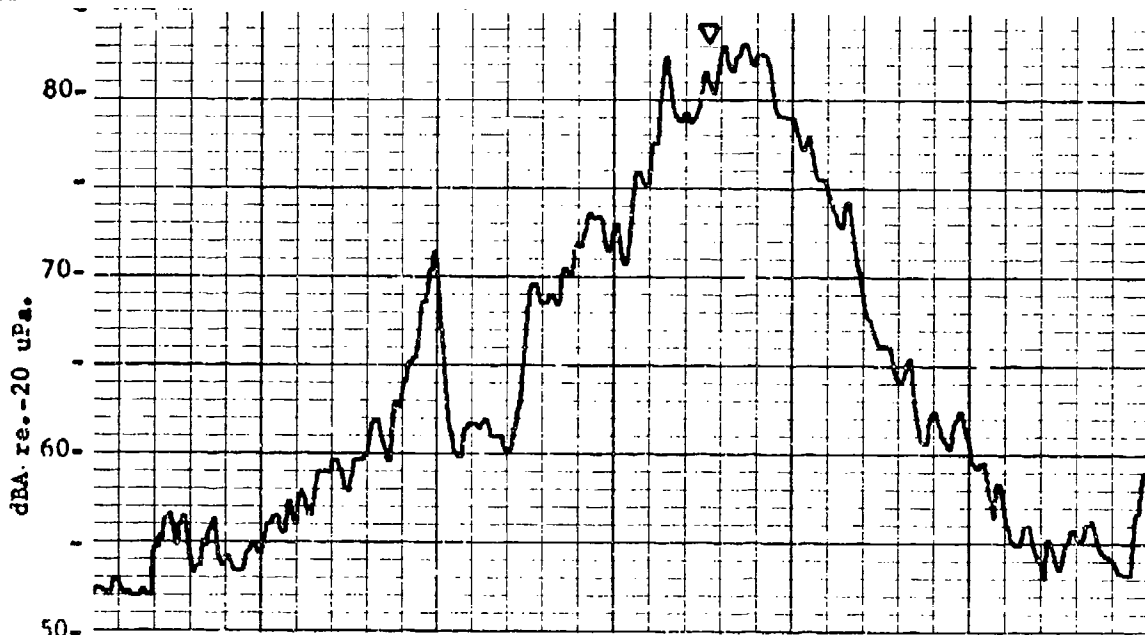
NOISE LEVEL TIME HISTORIES
SIKORSKY S-61 HELICOPTER
180° HOVER 5 FT

RUN 6

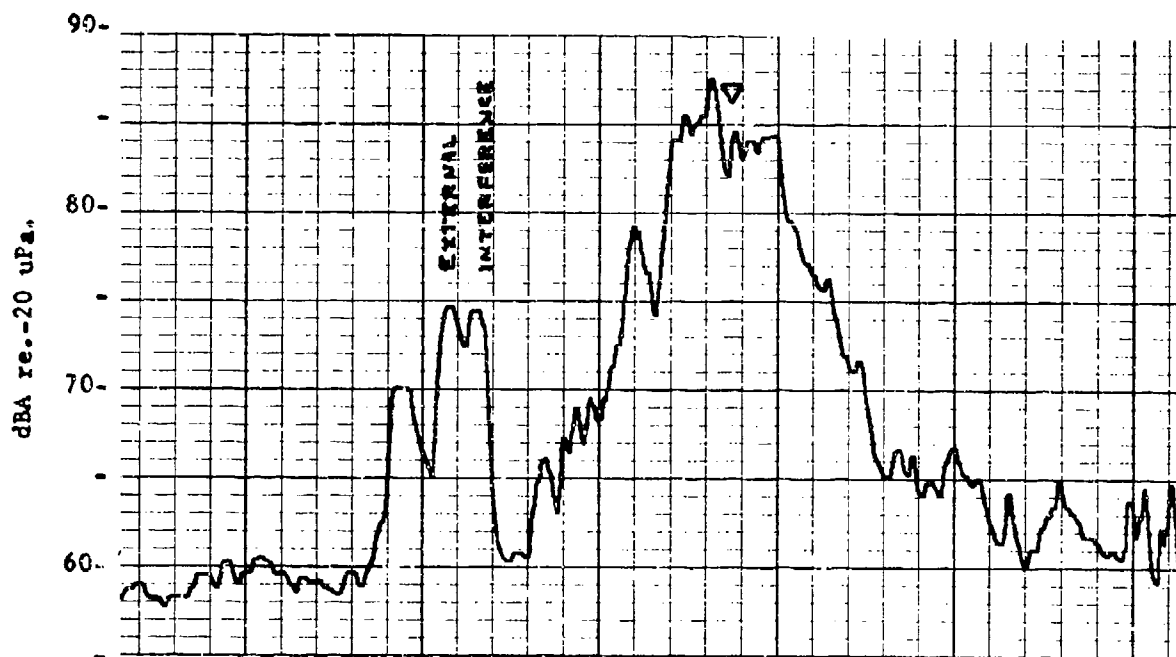
TABLE F-IX

← 10 SEC →

▽ = CENTER CROSSING



150 METERS WEST OF FLIGHT PATH



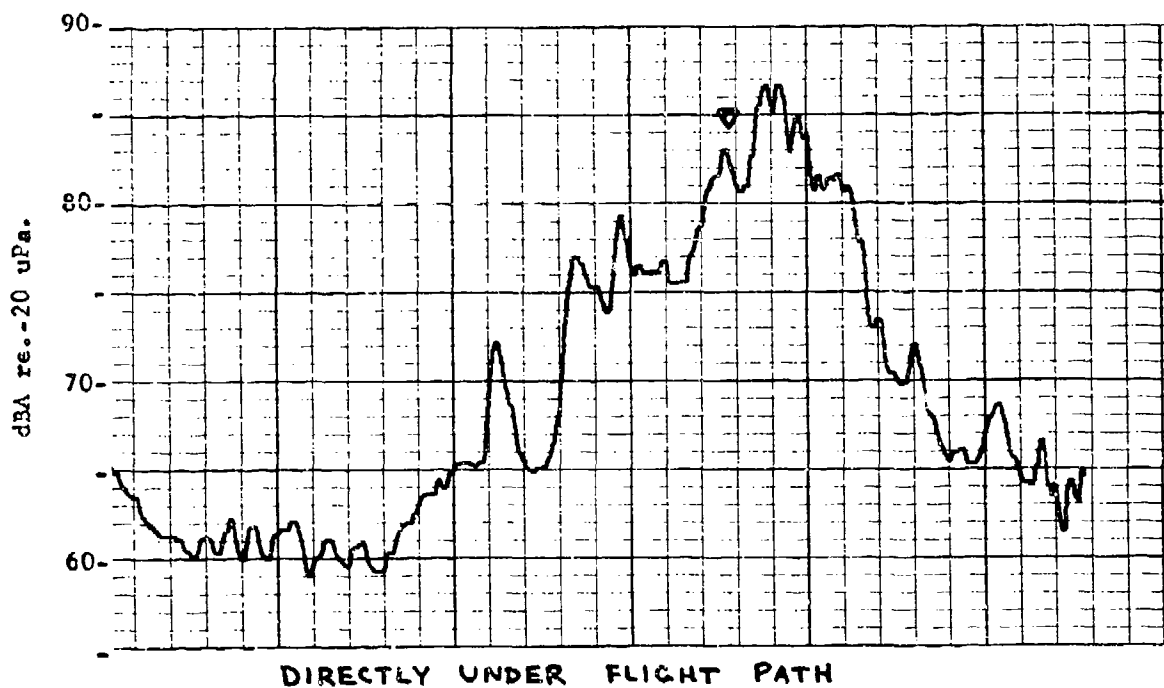
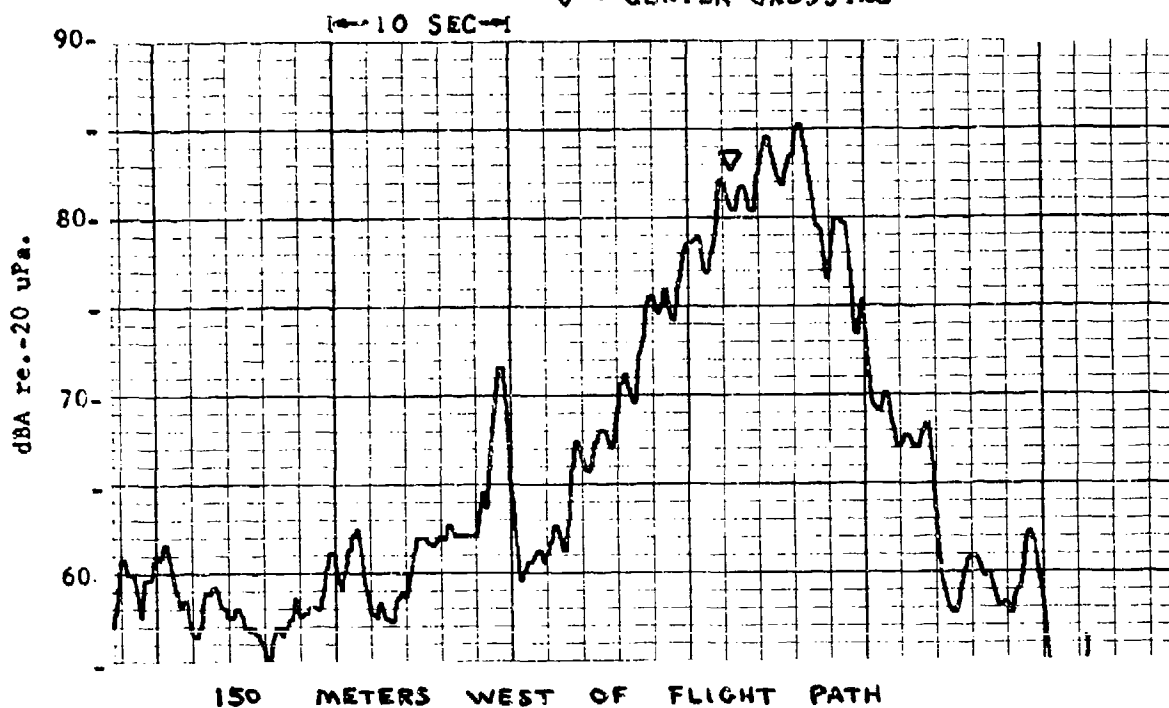
DIRECTLY UNDER FLIGHT PATH

NOISE LEVEL TIME HISTORIES
SIKORSKY S-61 HELICOPTER
3° APPROACH

RUN 31

TABLE F-IX

▽ = CENTER CROSSING

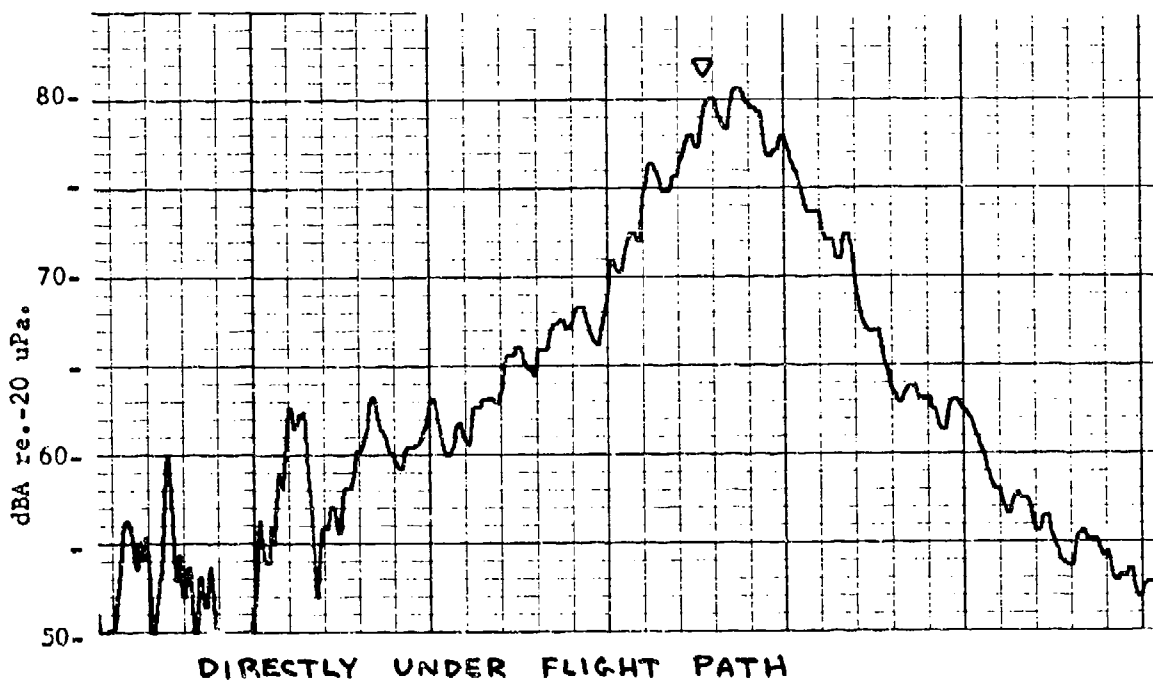
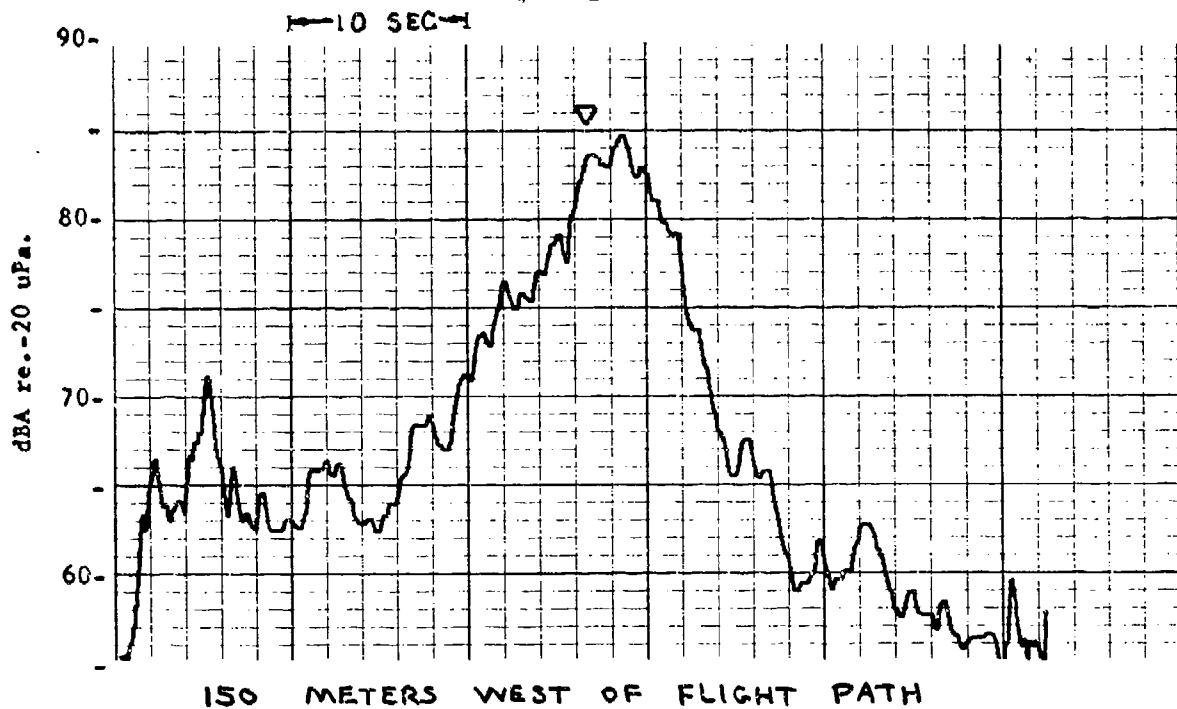


NOISE LEVEL TIME HISTORIES
SIKORSKY S-61 HELICOPTER
6° APPROACH

RUN 21

TABLE F-IX

▽ = CENTER CROSSING

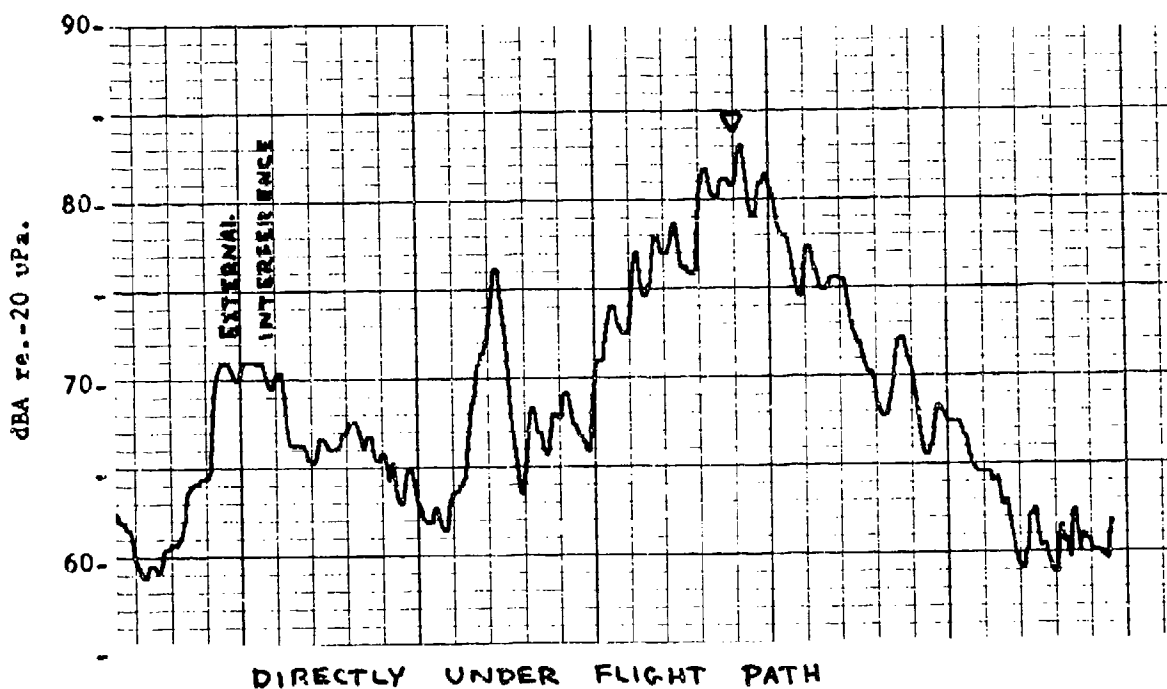
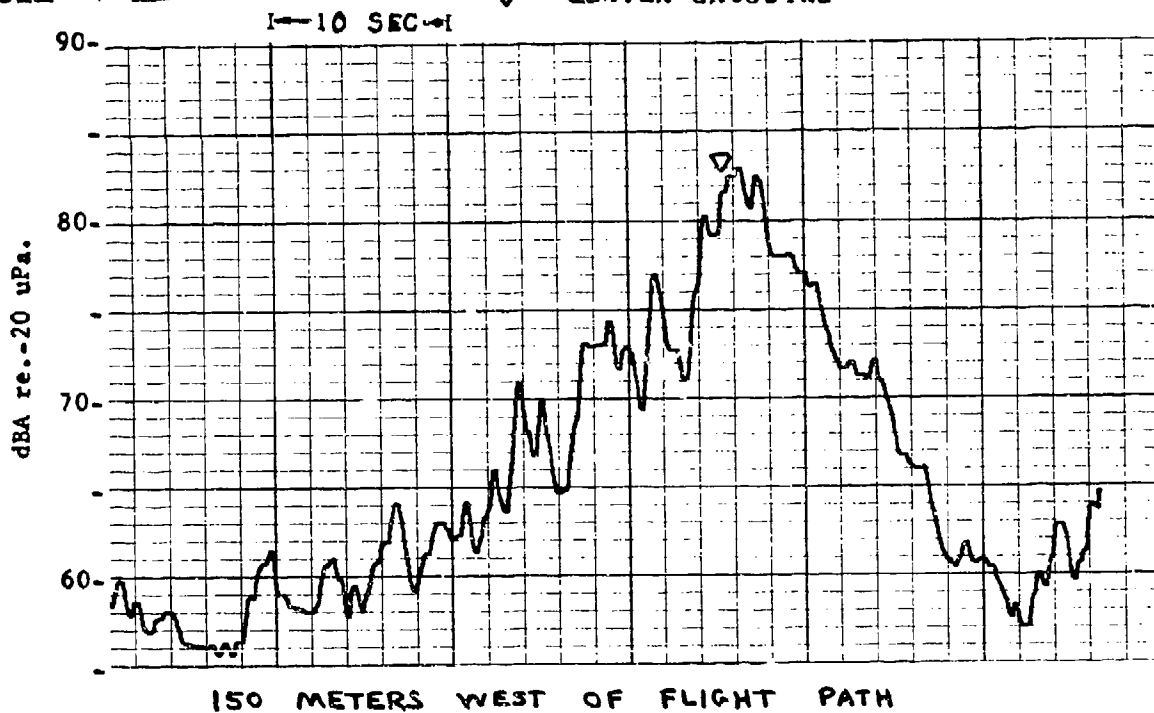


NOISE LEVEL TIME HISTORIES
SIKORSKY S-61 HELICOPTER
9° APPROACH

RUN 15

TABLE F-IX

▽ = CENTER CROSSING



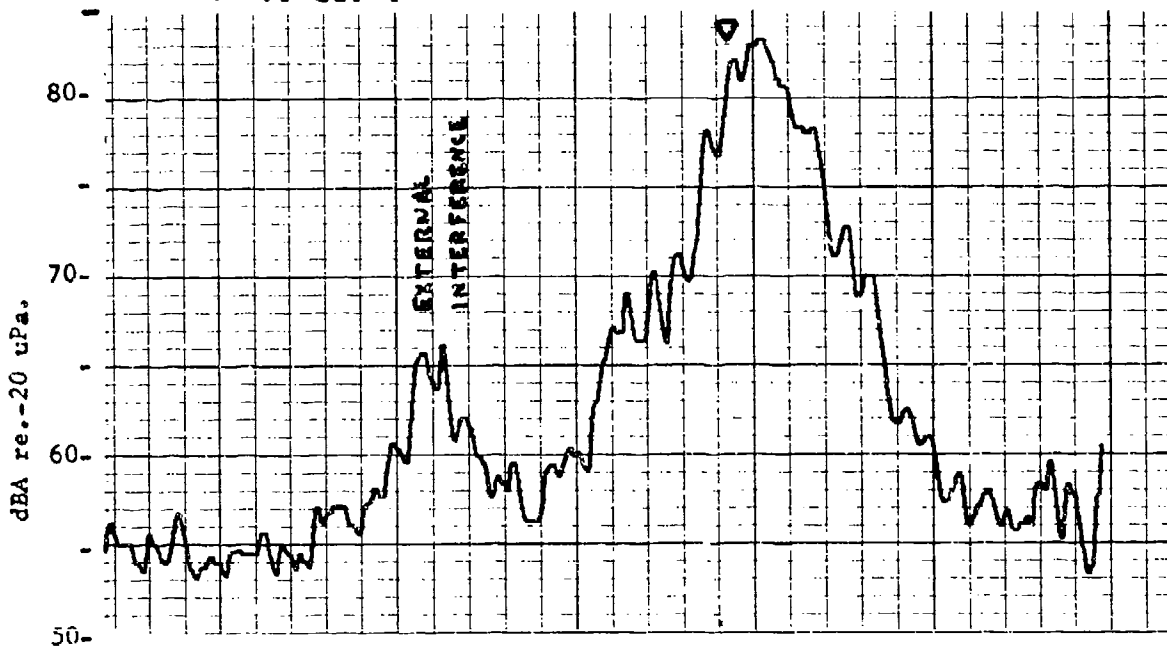
NOISE LEVEL TIME HISTORIES
SIKORSKY S-61 HELICOPTER
LEVEL FLYOVER - 60 KTS

RUN 19

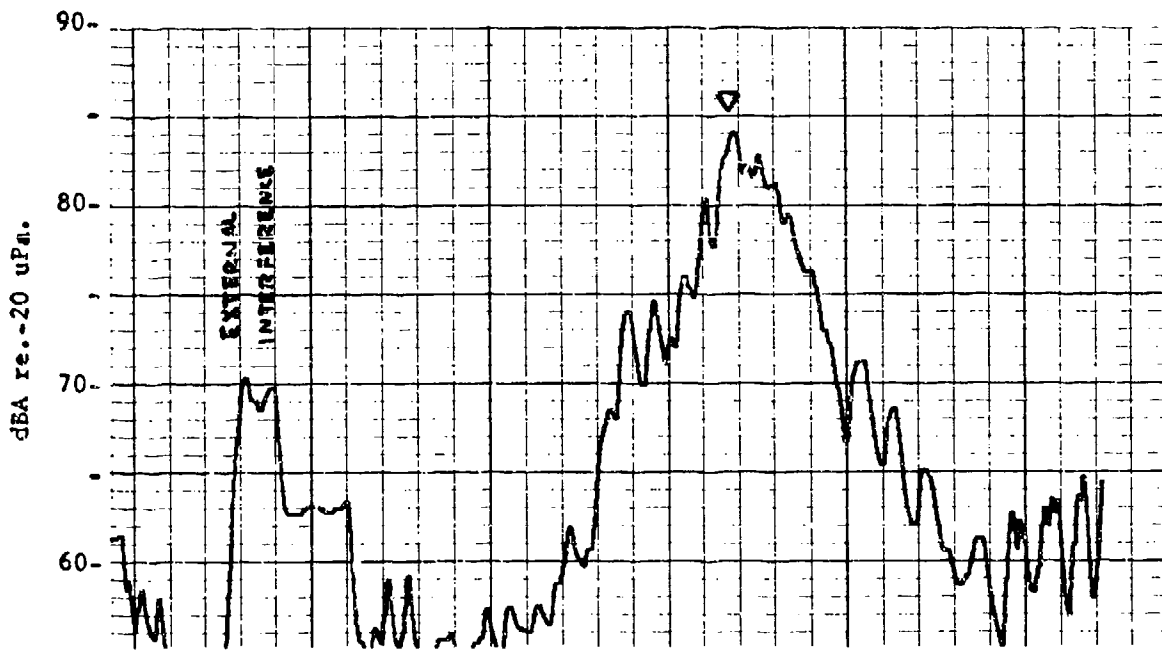
TABLE F-IX

← 10 SEC →

▽ = CENTER CROSSING



150 METERS WEST OF FLIGHT PATH



DIRECTLY UNDER FLIGHT PATH

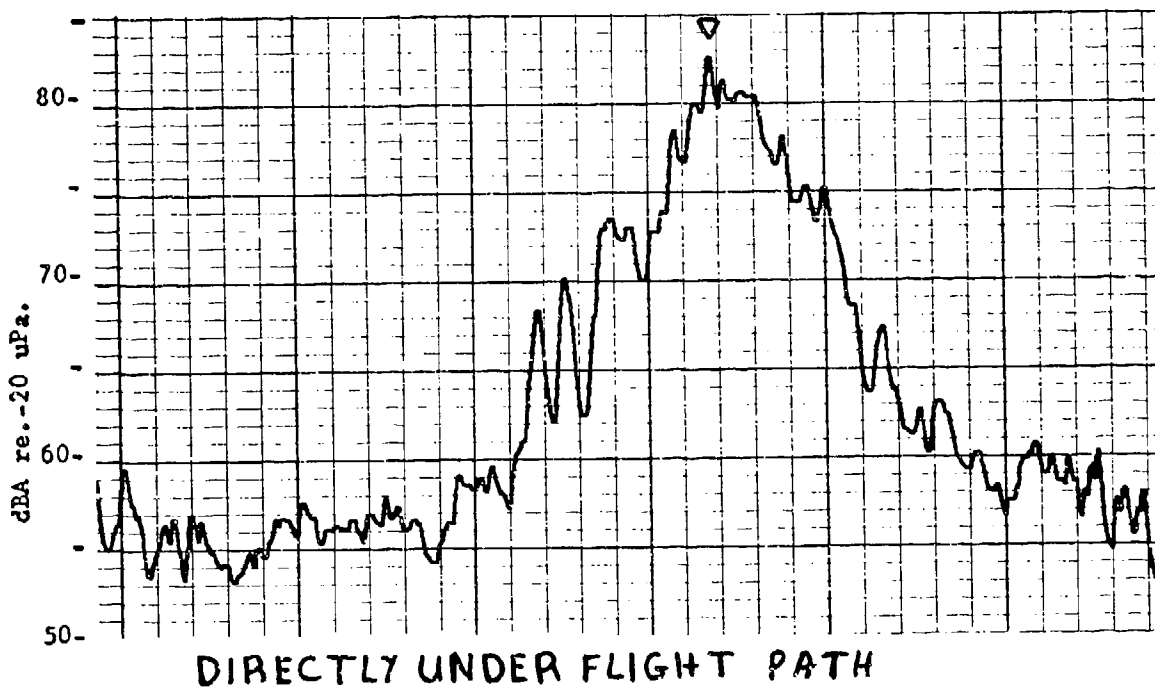
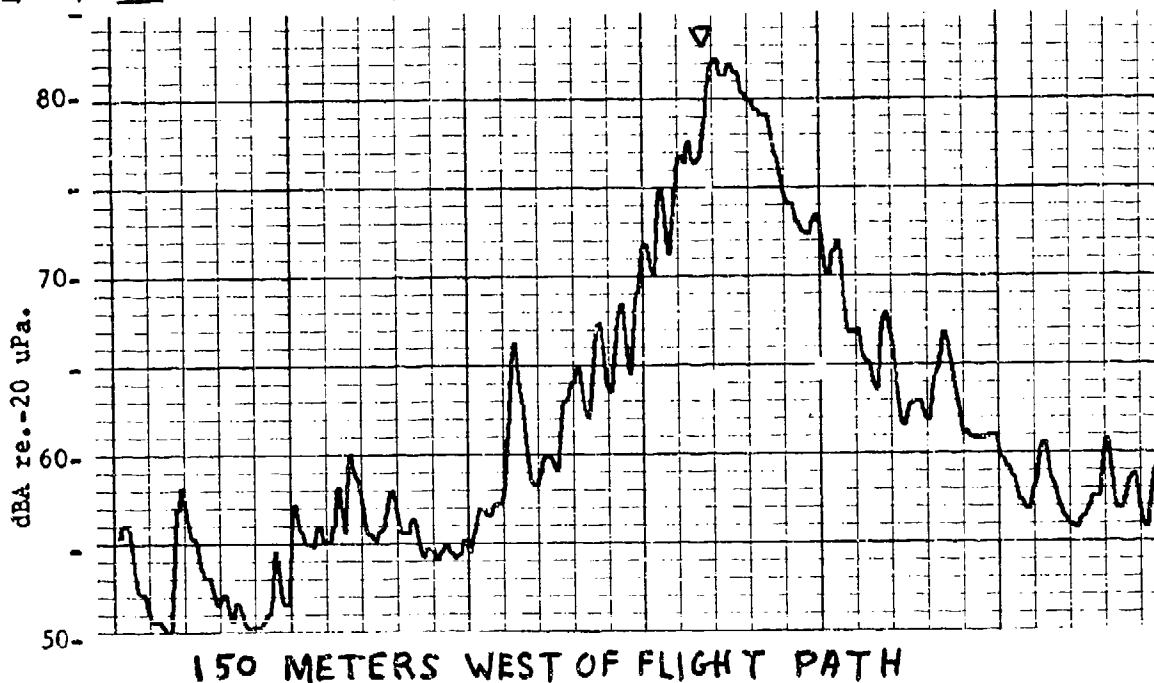
NOISE LEVEL TIME HISTORIES
SIKORSKY S-61 HELICOPTER
LEVEL FLYOVER - 100 KTS.

RUN 27

TABLE F-IX

← 10 SEC →

▽ = CENTER CROSSING



NOISE LEVEL TIME HISTORIES
SIKORSKY S-61 HELICOPTER
LEVEL FLYOVER - 115 KTS

RUN 33

DATA TABLE G

Sikorsky S-64 "Skycrane" (CH-54B)

TEST DATE: 10-28-76

TEST SITE: NASA LANGLEY

| SECTION - G | CONTENT | PAGE # |
|-------------|---|--------|
| I | RUN LIST | 555 |
| II | GROUND AND FLIGHT LOG DATA | 558 |
| III | METEOROLOGICAL DATA | 561 |
| IV | LEVEL FLYOVER AND APPROACH NOISE DATA | 562 |
| V | TIME HISTORIES | 564 |
| VI | 1/3-OCTAVE BAND SPECTRA--FLYOVER AND APPROACH | 598 |
| VII | 1/3-OCTAVE BAND SPECTRA--5 FOOT HOVER | 632 |
| VIII | MAXIMUM dBA NOISE LEVEL (ALL RUNS) | 668 |
| IX | SELECTED dBA TIME HISTORIES--GRAPHIC PLOTS | 672 |

THE NOISE LEVELS PRESENTED IN SECTIONS IV, V AND VI HAVE BEEN TABULATED FOR THE SELECTED RUNS AND MICROPHONE LOCATIONS INDICATED ON THE FOLLOWING PAGE.

TABLE G-1

LIST OF RUNS SELECTED FOR ANALYSIS

| RUN# | TEST CONDITION | MICROPHONE LOCATION | | | |
|------|------------------------------|---------------------|------------------|----------------|------------------|
| | | WEST | | EAST | |
| | | 150 m SIDELINE | CENTER LINE | CENTER LINE | 150m SIDELINE |
| | <u>Heavy (with Truck)</u> | | | | |
| 43 | 9° Approach 60 Kts | X | X | | X |
| 49 | Level Flyover 60 Kts | | X | | |
| 50 | ↓ | | X | | |
| 51 | 6° Approach 60 Kts | X | X | | X |
| 55 | Level Flyover 85 Kts | | X | | |
| 66 | ↓ | | X | | |
| 67 | 95 Kts | X | X | X | X |
| 68 | ↓ | X | X | X | X |
| 69 | ↓ | X | X | X | X |
| 70 | 3° Approach 60 Kts | | X | | |
| | <u>Light (without Truck)</u> | | | | |
| 74 | 6° Approach 60 Kts | | X | | |
| 76 | Level Flyover 85 Kts | | X | | |
| 77 | ↓ | | X | | |
| 78 | 95 Kts | | X | | |
| 79 | ↓ | | X | | |
| 80 | 105 Kts | X | X | | X |
| 81 | ↓ | X | X | | X |
| | Microphone Locations | Over Concrete | Over Concrete | Over Grass | Over Concrete |
| | | 556 | | | |

GENERAL COMMENTS

- o There were no problems encountered while testing the Sikorsky S-64 "Skycrane" (CH-54B).
- o The weather conditions during the test were very windy with gusts in the 10-15 mph range.
- o The S-64 "Skycrane" used a 13,500 lb. army truck for ballast. Because the truck could easily be detached from the helicopter, noise data was taken both with and without the truck.
- o Because the S-64 "Skycrane's" gross weight during testing was greatly effected by its rate of fuel consumption, a table has been inserted which provides a log of the gross weight as a function of time.

TABLE G-II Ground and Flight Log Data

Propagator Model: Sikorsky S-64 "Skyrane" Military Designation CM-54 B Requestor's Number: 18710 Test Date: Oct. 28, 1976

| Run | Time | Target Conditions | | Atts/Conditions | | Ground Weather | | Comments | | | | | | | |
|-------|----------------------|-------------------|----------|--------------------|---------|----------------|-----------------|----------|---------------------|-----|------|------|---------|------------|---|
| | | Type | Velocity | Altitude over seas | Heading | AR Speed | % of Max Torque | | M/Ratio over M.E.S. | RPM | DAT | Temp | RH | Wind Speed | Wind Direction |
| 35-38 | Sikorsky S-64 (SH-3) | | | | | | | | | | | | | | |
| 35 | 11:23 | Hover | 0 | 58' | 0° N | 0 | 50% | 50% | 50% | 500 | 40°F | 50% | 0-20kts | N | off mic. inc. plane |
| 36 | 11:25 | Level Flyover | 0 | 100' | 45° E | 0 | 50% | 50% | 100% | ↓ | | | | | |
| 37 | 11:26 | Level Flyover | 0 | 100' | 90° E | 0 | 50% | 50% | 100% | ↓ | | | | | |
| 38 | 11:28 | Level Flyover | 0 | 104.5' | 15° | 0 | 50% | 50% | 100% | ↓ | | | | | |
| 39 | 11:40 | Level Flyover | 0 | 104.0' | 180° S | 0 | 50% | 50% | 100% | ↓ | | | | | |
| 40 | 11:42 | Level Flyover | 0 | 104.5' | 325° | 0 | 50% | 50% | 100% | ↓ | | | | | |
| 41 | 11:43 | Level Flyover | 0 | 94.0' | 300° W | 0 | 50% | 50% | 100% | ↓ | | | | | |
| 42 | 11:45 | Level Flyover | 0 | 90.5' | 350° | 0 | 50% | 50% | 100% | ↓ | | | | | |
| 43 | | | | | | | | | | | | | | | |
| 44 | 11:59 | 90° App. | 60 kts | 400' | 0° | 0 | 50% | 50% | 100% | ↓ | | | | | good run |
| 45 | 12:04 | 90° App. | 60 kts | 38.0' | 0° | 0 | 50% | 50% | 100% | ↓ | | | | | good run |
| 46 | 12:07 | Hover | 0 | 500' | 0° N | 0 | 50% | 50% | 100% | ↓ | | | | | off mic. 100' off plane. 100' off plane. 100' off plane |
| 47 | 12:09 | Hover | 0 | 400' | 30° E | 0 | 50% | 50% | 100% | ↓ | | | | | Abort |
| 48 | 12:10 | Hover | 0 | 300' | 40° E | 0 | 50% | 50% | 100% | ↓ | | | | | Abort |
| 49 | | | | | | | | | | | | | | | |
| 50 | 12:14 | Level Flyover | 60 kts | 500' | 0° | 0 | 50% | 50% | 100% | ↓ | | | | | need to lengthen approach |
| 51 | 12:15 | Level Flyover | 60 kts | 85.0' | 0° | 0 | 50% | 50% | 100% | ↓ | | | | | TUN length looks good |
| 52 | 12:21 | 6° App. | 60 kts | 85.3' | 0° | 0 | 50% | 50% | 100% | ↓ | | | | | good run |
| 53 | 12:25 | Level Flyover | 95 kts | 400' | 0° | 0 | 50% | 50% | 100% | ↓ | | | | | good run |
| 54 | 12:30 | Level Flyover | 95 kts | 500' | 0° | 0 | 50% | 50% | 100% | ↓ | | | | | Abort |
| 55 | 12:34 | Level Flyover | 95 kts | 85.5' | 0° | 0 | 50% | 50% | 100% | ↓ | | | | | Abort |
| 56 | 12:38 | Level Flyover | 95 kts | 88.5' | 0° | 0 | 50% | 50% | 100% | ↓ | | | | | Abort |
| 65 | | Hughes 500 C | Tested | | | | | | | | | | | | |

COPY

TABLE G-II Ground and Flight Log Data

Helicopter Model: Sikorsky S-64 "Skycrane" Military Designation OH-54 B

Registration Number:

Test Date: Oct. 28, 1976

| Run | Time | Target Conditions | | | Actual Conditions | | | Ground Weather | | | Comments | | | | | | | | | |
|---|------|-------------------|--------------|--------------------|-------------------|---------|-----------|-----------------|--------------|-------------------|----------|------|------|------|--------------------------------|------------|----------------|----------|--|--|
| | | Type | Veloc. (kts) | Altitude over Miss | dB A | Heading | Air Speed | Rate of Descent | Mp or Torque | AH time over Miss | | PPM | OAT | Temp | RH | Wind Speed | Wind Direction | | | |
| 67 | 2:23 | Level Flyover | 95 kts | 500 ft | 87.0 | S | 95 kt | 0 | 40% | 500 ft | 100% | 40°C | 47°F | 48% | 7-15 kts Avg. Gusts to 40 kts | N | good run | | | |
| 68 | 2:35 | | | | 87.0 | | | | | | | | | | | | | good run | | |
| 69 | 2:40 | | | | 87.5 | | | | | | | | | | | | | good run | | |
| 70 | 2:45 | 3° App. | 60 kts | 400 ft | 88.7 | S | 60 kt | 30 ft/min | 23% | 400 ft | 100% | 40°C | | | | | | good run | | |
| 71 | 2:48 | | | | 89.3 | | | | | | | | | | | | | good run | | |
| Sikorsky S-64 "Skycrane" without Army truck | | | | | | | | | | | | | | | | | | | | |
| 72 | 3:00 | Hover | 0 | 500 ft | 87.0 | 0° N | 0 | 0 | 26% | 500 ft | 100% | 50°C | 48°F | 38% | 10-12 kts Avg. Gusts to 18 kts | N | good run | | | |
| 73 | 3:01 | | | | 88.5 | 90° E | | | 30 | | | | | | | | | good run | | |
| 74 | 3:04 | 6° App. | 60 kts | 400 ft | 86.7 | S | 60 kts | 40 ft/min | 15% | 400 ft | 100% | 40°C | | | | | | good run | | |
| 75 | 3:07 | | | | 86.5 | | | | | | | | | | | | | good run | | |
| 76 | 3:10 | Level Flyover | 95 kts | 500 ft | 87.5 | S | 95 kt | 0 | 24 | 500 ft | 100% | 60°C | | | | | | good run | | |
| 77 | 3:14 | | | | 87.5 | | | | | | | | | | | | | good run | | |
| 78 | 3:16 | Level Flyover | 95 kts | 500 ft | 88.5 | S | 95 kt | 0 | 30 | | | | | | | | | good run | | |
| 79 | 3:17 | | | | 89.5 | | | | 29 | | | | | | | | | good run | | |
| 80 | 3:23 | Level Flyover | 105 kts | 500 ft | 89.0 | S | 105 kt | 0 | 35 | | | | | | | | | good run | | |
| 81 | 3:25 | | | | 89.6 | | | | 34 | | | | | | | | | good run | | |
| Hughes 500 C | | | | | | | | | | | | | | | | | | | | |
| 82-85 | | Hover | 0 | 5 ft | | 0° N | 0 | 0 | 27 | 5 ft | 100% | 80°C | | | | | | Abort | | |
| 86 | 4:03 | | | | | 45° | | | 27 | | | | | | | | | | | |
| 87 | 4:04 | | | | | 90° F | | | 28 | | | | | | | | | | | |
| 88 | 4:05 | | | | | 135° | | | 29 | | | | | | | | | | | |
| 89 | 4:06 | | | | | 180° S | | | 30 | | | | | | | | | | | |
| 90 | 4:07 | | | | | 225° | | | 31 | | | | | | | | | | | |
| 91 | 4:08 | | | | | 270° | | | 31 | | | | | | | | | | | |
| 92 | 4:09 | | | | | 315° | | | 31 | | | | | | | | | | | |
| 93 | 4:10 | | | | | 360° | | | 31 | | | | | | | | | | | |

NO COPY



Abort

TABLE G-II

SIKORSKY S-64 "SKYCRANE" (CH-54B)

LOG OF GROSS WEIGHT vs. TIME

| <u>Time</u> | <u>Run#</u> | <u>Army Truck</u> | <u>Fuel (lbs.)</u> | <u>Total Gross Weight</u> |
|--------------------------------|-------------|-------------------|--------------------|---------------------------|
| 11:33 | 35 | 13,500 | 6600 | 42,895 |
| 12:00 | 44 | 13,500 | 5000 | 41,295 |
| 12:20 | 51 | 13,500 | 3500 | 39,795 |
| 12:36 | 52 | 13,500 | 2600 | 38,895 |
| ----- REFUEL ----- | | | | |
| 2:30 | 66 | 13,500 | 4900 | 41,195 |
| 2:50 | 71 | 13,500 | 3400 | 39,695 |
| ----- REMOVED ARMY TRUCK ----- | | | | |
| 3:06 | 75 | - | 2800 | 25,595 |
| 3:20 | 80 | - | 2100 | 24,895 |
| 4:05 | 88 | - | 1400 | 24,295 |
| 4:13 | 93 | - | 1000 | 23,795 |

TABLE G-III

Meteorological Data
Langley Air Force Base

October 28, 1976

| TIME (hours) | TEMP. (of) | BAR. PRESS. (inches) | REL. HUM. (%) | WIND SPEED (mph) | WIND DIRECTION (degrees) | REMARKS |
|-----------------|---------------|----------------------------|---------------------|------------------------|--------------------------------|------------------------|
| 0800 | 53 | 778 | 62 | 5-19 | 0 | Sky - Partly Cloudy |
| 0815 | 53 | | 66 | 10-19 | 20 | |
| 0930 | 53 | | 67 | 16-23 | 25 | |
| 0845 | 53 | | 68 | 14-22 | 20 | |
| 0900 | 54 | | 69 | 9-19 | 30 | |
| 0915 | 54 | | 70 | 11-19 | 30 | |
| 0930 | 54 | | 69 | 13-22 | 25 | |
| 0945 | 54 | | 69 | 8-20 | 20 | |
| 1000 | 54 | | 69 | 7-16 | 30 | |
| 1015 | 54 | | 68 | 12-18 | 30 | |
| 1030 | 55 | | 67 | 18-23 | 40 | |
| 1130 | 54 | | 65 | 14-18 | 10 | |
| 1145 | 56 | | 64 | 17-16 | 30 | |
| 1200 | 56 | | 64 | 8-12 | 35 | Sky - Clear |
| 1215 | 55 | | 63 | 8-14 | 20 | |
| 1230 | 56 | | 60 | 8-12 | 20 | |
| 1245 | 56 | | 58 | 13-18 | 25 | |
| 1300 | 57 | 774 | 56 | 8-15 | 40 | |
| 1315 | 58 | | 53 | 8-16 | 40 | |
| 1330 | 57 | | 52 | 5-12 | 50 | |
| 1345 | 57 | | 50 | 8-15 | 40 | Sky - Clear |
| 1400 | 57 | | 40 | 5-12 | 45 | |
| 1415 | 57 | | 48 | 5-12 | 35 | |
| 1430 | 57 | | 47 | 5-12 | 50 | |
| 1445 | 58 | | 48 | 5-9 | 30 | |
| 1500 | 57 | 772 | 47 | 5-8 | 20 | |
| 1515 | 57 | | 47 | 6-10 | 25 | |
| 1530 | 57 | | 47 | 5-15 | 60 | |
| 1545 | 58 | | 48 | 8-11 | 20 | |
| 1600 | 58 | | 47 | 8-10 | 50 | |
| 1615 | 57 | | 46 | 9-11 | 60 | |
| 1630 | 56 | | 46 | 5-0 | 40 | |
| 1645 | 57 | | 46 | 5-0 | 40 | |
| 1700 | 57 | | 47 | 1-5 | 25 | |
| 1715 | 56 | | 48 | 2-7 | 40 | |

TABLE G-IV

HELICOPTER APPROACH AND FLYOVER NOISE DATA

SIKORSKY S-64

OCTOBER 28 1976

MICROPHONE OFFSET 150 METERS WEST
(10 RE 20 MICRO PA)

| EVENT | EPNL | DBA(M) | DBD(M) | OASPL | PNL(M) | PNLT(M) | LEQ | DUR(A) | DUR(P) | TC |
|-------|-------|--------|--------|-------|--------|---------|------|--------|--------|-----|
| 43 | 100.0 | 86.5 | 91.9 | 95.4 | 99.8 | 102.3 | 83.1 | 16.0 | 15.0 | 2.5 |
| 51 | 98.0 | 85.7 | 91.1 | 94.7 | 98.8 | 100.6 | 82.9 | 13.5 | 13.5 | 1.8 |
| 67 | 96.0 | 87.8 | 92.0 | 94.8 | 99.2 | 99.2 | 84.8 | 10.5 | 11.5 | .0 |
| 68 | 90.0 | 85.7 | 89.7 | 94.8 | 97.2 | 97.3 | 82.9 | 12.5 | 14.5 | 1.1 |
| 69 | 95.7 | 87.0 | 91.4 | 93.9 | 98.4 | 98.4 | 84.0 | 9.5 | 12.0 | .0 |
| 80 | 95.3 | 86.8 | 90.6 | 93.3 | 98.2 | 98.2 | 83.7 | 9.0 | 11.5 | .0 |
| 81 | 95.9 | 87.7 | 91.4 | 93.2 | 98.6 | 93.6 | 83.9 | 9.5 | 13.0 | .0 |

MICROPHONE OFFSET 150 METERS EAST

| EVENT | EPNL | DBA(M) | DBD(M) | OASPL | PNL(M) | PNLT(M) | LEQ | DUR(A) | DUR(P) | TC |
|-------|------|--------|--------|-------|--------|---------|------|--------|--------|-----|
| 43 | 97.0 | 83.6 | 87.7 | 92.2 | 95.3 | 97.5 | 78.7 | 26.5 | 27.0 | 2.4 |
| 51 | 90.6 | 82.7 | 86.9 | 91.7 | 94.5 | 94.7 | 77.9 | 31.0 | 33.5 | 1.1 |
| 67 | 96.2 | 86.7 | 90.6 | 94.6 | 98.0 | 98.0 | 83.2 | 12.5 | 14.0 | .0 |
| 68 | 95.5 | 84.6 | 88.9 | 95.4 | 96.3 | 97.5 | 82.3 | 12.5 | 13.0 | 1.4 |
| 69 | 95.8 | 86.6 | 90.2 | 94.3 | 97.9 | 90.4 | 83.3 | 11.5 | 13.0 | .5 |
| 80 | 94.0 | 83.9 | 88.4 | 95.5 | 90.6 | 95.6 | 81.0 | 11.0 | 14.0 | .0 |
| 81 | 93.2 | 82.8 | 87.2 | 94.1 | 94.6 | 94.6 | 79.7 | 12.0 | 15.0 | .0 |

TABLE G-IV

HELICOPTER APPROACH AND FLYOVER NOISE DATA

SIKORSKY S-64

OCTOBER 28 1976

CENTERLINE MICROPHONE - HARD SITE
(DB RE 20 MICRO PA)

| EVENT | EPNL | DBA(M) | DBD(M) | OASPL | PNL(M) | PNLT(M) | LEQ | DUR(A) | DUR(P) | TC |
|-------|-------|--------|--------|-------|--------|---------|------|--------|--------|-----|
| 43 | 101.4 | 88.3 | 95.3 | 100.4 | 102.5 | 102.6 | 84.9 | 15.0 | 14.0 | 1.7 |
| 49 | 95.8 | 84.5 | 89.4 | 94.3 | 96.7 | 96.7 | 80.9 | 16.0 | 21.0 | .0 |
| 50 | 96.8 | 84.2 | 90.3 | 95.1 | 97.9 | 97.9 | 81.1 | 17.5 | 22.0 | .0 |
| 51 | 99.4 | 87.0 | 93.5 | 98.5 | 101.1 | 102.3 | 83.5 | 15.5 | 13.5 | 1.4 |
| 55 | 94.9 | 84.4 | 89.3 | 96.2 | 96.7 | 96.7 | 80.8 | 13.0 | 18.0 | .0 |
| 66 | 95.6 | 85.3 | 90.2 | 97.5 | 98.1 | 98.1 | 81.8 | 11.0 | 16.0 | .0 |
| 67 | 96.7 | 86.8 | 91.7 | 98.4 | 99.2 | 99.2 | 83.2 | 11.0 | 16.5 | .0 |
| 68 | 96.1 | 86.7 | 90.8 | 99.1 | 98.4 | 98.4 | 82.9 | 11.0 | 15.5 | .0 |
| 69 | 95.3 | 86.6 | 91.8 | 97.5 | 98.9 | 98.9 | 83.6 | 8.5 | 10.0 | .0 |
| 70 | 99.5 | 88.2 | 93.9 | 99.5 | 101.4 | 101.4 | 84.0 | 16.0 | 16.5 | .0 |
| 74 | 100.0 | 86.0 | 92.5 | 99.0 | 100.1 | 101.3 | 82.8 | 18.5 | 18.0 | 2.3 |
| 76 | 98.2 | 87.3 | 92.3 | 99.4 | 100.2 | 100.8 | 84.9 | 10.0 | 10.0 | 1.0 |
| 77 | 97.1 | 87.3 | 92.3 | 97.5 | 100.1 | 100.5 | 84.2 | 10.5 | 11.0 | .6 |
| 78 | 98.1 | 88.2 | 93.9 | 100.0 | 101.7 | 102.9 | 85.3 | 9.0 | 7.5 | 1.2 |
| 79 | 98.1 | 89.3 | 94.4 | 99.4 | 102.3 | 103.2 | 85.3 | 8.0 | 8.0 | 1.0 |
| 80 | 97.7 | 88.5 | 94.2 | 100.2 | 102.3 | 103.1 | 84.8 | 8.0 | 8.0 | .8 |
| 81 | 98.0 | 89.6 | 94.7 | 100.6 | 102.7 | 103.4 | 85.8 | 8.0 | 7.0 | .7 |

CENTERLINE MICROPHONE - SOFT SITE

| EVENT | EPNL | DBA(M) | DBD(M) | OASPL | PNL(M) | PNLT(M) | LEQ | DUR(A) | DUR(P) | TC |
|-------|------|--------|--------|-------|--------|---------|------|--------|--------|----|
| 67 | 95.5 | 86.3 | 90.9 | 97.3 | 98.9 | 98.9 | 82.5 | 10.5 | 12.0 | .0 |
| 68 | 95.2 | 85.3 | 89.8 | 97.7 | 97.6 | 97.6 | 81.7 | 11.0 | 14.0 | .0 |
| 69 | 95.0 | 86.2 | 90.7 | 96.7 | 98.5 | 98.5 | 83.0 | 7.5 | 13.5 | .0 |

TABLE G-VI

NOISE LEVEL TIME HISTORY DATA

SIKORSKY S-64

With truck

OCTOBER 28 1976

EVENT 43 9 DEGREE APPROACH MIC. 150 METERS WEST

1/2 SECOND INTEGRATION VS NOISE INDEXES
(DB RE 20 MICRO PA)

| INT | DBA | DBD | OASPL | PNL | PNLT | PNL-DBA | DBD-DBA |
|-------|------|------|-------|------|-------|---------|---------|
| 1 | 69.7 | 77.6 | 86.6 | 86.1 | 87.4 | 16.4 | 7.9 |
| 2 | 73.1 | 79.6 | 87.3 | 88.1 | 89.9 | 15.0 | 6.5 |
| 3 | 75.6 | 81.6 | 88.3 | 89.5 | 91.1 | 13.9 | 6.0 |
| 4 | 76.7 | 82.4 | 89.2 | 90.3 | 91.8 | 13.6 | 5.7 |
| 5 | 77.5 | 83.2 | 89.9 | 91.0 | 92.3 | 13.5 | 5.7 |
| 6 | 77.9 | 83.6 | 90.1 | 91.4 | 92.6 | 13.5 | 5.7 |
| 7 | 78.0 | 83.8 | 90.3 | 91.4 | 91.4 | 13.4 | 5.8 |
| 8 | 78.7 | 84.2 | 90.6 | 92.1 | 92.1 | 13.4 | 5.5 |
| 9 | 79.7 | 85.1 | 91.1 | 92.8 | 92.8 | 13.1 | 5.4 |
| 10 | 79.9 | 85.3 | 91.3 | 93.1 | 94.2 | 13.2 | 5.4 |
| 11 | 79.4 | 84.8 | 91.2 | 92.7 | 94.1 | 13.3 | 5.4 |
| 12 | 79.6 | 85.2 | 91.4 | 93.0 | 94.5 | 13.4 | 5.6 |
| 13 | 80.8 | 86.3 | 91.7 | 93.9 | 95.2 | 13.1 | 5.5 |
| 14 | 81.8 | 87.4 | 92.2 | 95.0 | 95.0 | 13.2 | 5.6 |
| 15 | 82.1 | 87.9 | 92.5 | 95.6 | 95.6 | 13.5 | 5.8 |
| 16 | 82.7 | 88.8 | 93.0 | 96.2 | 96.2 | 13.5 | 6.1 |
| 17 | 83.2 | 89.3 | 93.5 | 96.9 | 98.2 | 13.7 | 6.1 |
| 18 | 84.3 | 90.2 | 93.9 | 97.6 | 100.1 | 13.5 | 5.9 |
| 19 | 84.8 | 90.3 | 93.8 | 98.1 | 100.8 | 13.3 | 5.5 |
| 20 | 85.7 | 90.9 | 93.8 | 98.8 | 101.5 | 13.1 | 5.2 |
| 21 | 86.3 | 91.6 | 94.5 | 99.5 | 102.1 | 13.2 | 5.3 |
| 22 | 86.6 | 91.9 | 95.0 | 99.8 | 102.3 | 13.2 | 5.3 |
| 23 | 86.2 | 91.5 | 95.1 | 99.5 | 101.7 | 13.3 | 5.3 |
| OH→24 | 85.7 | 91.1 | 95.3 | 99.2 | 101.4 | 13.5 | 5.4 |
| 25 | 85.5 | 90.8 | 95.2 | 98.8 | 100.8 | 13.3 | 5.3 |
| 26 | 85.6 | 91.0 | 95.4 | 99.0 | 100.7 | 13.4 | 5.4 |
| 27 | 85.7 | 91.0 | 95.4 | 98.9 | 100.2 | 13.2 | 5.3 |
| 28 | 85.4 | 90.6 | 95.3 | 98.7 | 98.7 | 13.3 | 5.2 |
| 29 | 84.5 | 89.5 | 94.5 | 97.6 | 97.6 | 13.1 | 5.0 |
| 30 | 83.1 | 88.0 | 93.4 | 96.0 | 96.0 | 12.9 | 4.9 |
| 31 | 81.6 | 86.6 | 92.5 | 94.5 | 94.5 | 12.9 | 5.0 |
| 32 | 80.5 | 85.5 | 91.4 | 93.6 | 93.6 | 13.1 | 5.0 |
| 33 | 79.7 | 84.3 | 90.6 | 93.2 | 93.2 | 13.5 | 5.1 |
| 34 | 78.7 | 83.7 | 89.4 | 91.9 | 93.1 | 13.2 | 5.0 |
| 35 | 77.1 | 82.4 | 88.2 | 90.3 | 90.3 | 13.2 | 5.3 |
| 36 | 74.2 | 80.0 | 87.1 | 88.0 | 89.2 | 13.8 | 5.8 |
| 37 | 71.9 | 78.3 | 86.1 | 86.3 | 87.9 | 14.4 | 6.4 |
| 38 | 70.4 | 77.5 | 86.7 | 85.4 | 86.5 | 15.0 | 7.1 |

TABLE G-V

NOISE LEVEL TIME HISTORY DATA

SIKORSKY S-64

With truck

OCTOBER 28 1976

EVENT 51 6 DEGREE APPROACH MIC.150 METERS WEST

1/2 SECOND INTEGRATION VS NOISE INDEXES
(DB RE 20 MICRO PA)

| INT | DBA | DBD | OASPL | PNL | PNLT | PNL-DBA | DED-DBA |
|---------|------|------|-------|------|-------|---------|---------|
| 1 | 72.3 | 78.7 | 86.2 | 87.4 | 87.4 | 15.1 | 6.4 |
| 2 | 72.7 | 79.1 | 86.7 | 87.7 | 88.9 | 15.0 | 6.4 |
| 3 | 73.6 | 79.6 | 86.9 | 88.2 | 89.4 | 14.6 | 6.0 |
| 4 | 75.0 | 80.9 | 87.2 | 89.4 | 90.9 | 14.4 | 5.9 |
| 5 | 77.2 | 82.4 | 87.4 | 90.9 | 90.9 | 13.7 | 5.2 |
| 6 | 79.6 | 84.9 | 88.6 | 92.7 | 92.7 | 13.1 | 5.3 |
| 7 | 81.6 | 87.1 | 90.1 | 94.3 | 95.4 | 12.7 | 5.5 |
| 8 | 82.2 | 87.8 | 90.8 | 94.9 | 96.3 | 12.7 | 5.6 |
| 9 | 82.1 | 87.8 | 91.4 | 94.9 | 96.4 | 12.8 | 5.7 |
| 10 | 81.3 | 86.9 | 91.0 | 94.4 | 94.4 | 13.1 | 5.6 |
| 11 | 81.1 | 86.7 | 90.9 | 94.2 | 94.2 | 13.1 | 5.6 |
| 12 | 81.5 | 86.9 | 90.8 | 94.5 | 94.5 | 13.0 | 5.4 |
| 13 | 82.9 | 88.1 | 91.7 | 95.7 | 95.7 | 12.8 | 5.2 |
| 14 | 84.2 | 89.5 | 92.8 | 97.2 | 98.8 | 13.0 | 5.3 |
| 15 | 85.3 | 90.7 | 93.6 | 98.3 | 100.4 | 13.0 | 5.4 |
| 16 | 85.7 | 91.1 | 93.9 | 98.8 | 100.6 | 13.1 | 5.4 |
| 17 | 85.7 | 91.0 | 94.0 | 98.6 | 100.1 | 12.9 | 5.3 |
| 18 | 85.0 | 90.3 | 94.0 | 97.9 | 99.2 | 12.9 | 5.3 |
| OH → 19 | 84.5 | 89.8 | 94.2 | 97.6 | 99.2 | 13.1 | 5.3 |
| 20 | 84.5 | 89.4 | 94.4 | 97.4 | 99.0 | 12.9 | 4.9 |
| 21 | 85.0 | 89.6 | 94.5 | 97.0 | 98.3 | 12.0 | 4.6 |
| 22 | 85.2 | 89.7 | 94.7 | 96.9 | 96.9 | 11.7 | 4.5 |
| 23 | 84.6 | 89.3 | 94.6 | 96.6 | 96.6 | 12.0 | 4.7 |
| 24 | 83.9 | 88.7 | 94.3 | 96.1 | 96.1 | 12.2 | 4.8 |
| 25 | 82.9 | 87.6 | 93.4 | 95.1 | 95.1 | 12.2 | 4.7 |
| 26 | 82.2 | 86.8 | 92.3 | 94.4 | 94.4 | 12.2 | 4.6 |
| 27 | 80.6 | 85.3 | 91.0 | 93.1 | 93.1 | 12.5 | 4.7 |
| 28 | 79.0 | 83.8 | 89.6 | 91.7 | 91.7 | 12.7 | 4.8 |
| 29 | 76.3 | 82.0 | 88.5 | 90.1 | 90.1 | 13.3 | 5.2 |
| 30 | 75.4 | 80.8 | 87.8 | 88.9 | 90.1 | 13.5 | 5.4 |
| 31 | 74.0 | 79.8 | 87.1 | 88.0 | 89.1 | 14.0 | 5.8 |
| 32 | 73.8 | 79.4 | 86.6 | 87.6 | 87.6 | 13.8 | 5.6 |
| 33 | 73.0 | 78.9 | 85.9 | 87.0 | 88.2 | 14.0 | 5.9 |

TABLE G-IX

NOISE LEVEL TIME HISTORY DATA

SIKORSKY S-64

With Truck

OCTOBER 28 1976

EVENT 67 95 KT. FLY BY MIC. 150 METERS WEST

1/2 SECOND INTEGRATION VS NOISE INDEXES
(DB RE 20 MICRO PA)

| INT | DBA | DBD | OASPL | PNL | PNLT | PNL-DBA | DBD-DBA |
|---------|------|------|-------|------|------|---------|---------|
| 1 | 69.9 | 78.8 | 88.7 | 86.7 | 86.7 | 16.8 | 8.9 |
| 2 | 73.1 | 79.6 | 88.9 | 87.6 | 87.6 | 14.5 | 6.5 |
| 3 | 75.4 | 81.0 | 89.2 | 88.8 | 88.8 | 13.4 | 5.6 |
| 4 | 76.6 | 81.9 | 89.6 | 89.9 | 89.9 | 13.3 | 5.3 |
| 5 | 79.1 | 83.9 | 90.4 | 91.6 | 93.1 | 12.5 | 4.8 |
| 6 | 81.3 | 85.8 | 91.5 | 93.7 | 95.0 | 12.4 | 4.5 |
| 7 | 83.0 | 86.9 | 92.0 | 94.9 | 96.1 | 11.9 | 3.9 |
| 8 | 84.0 | 87.9 | 92.5 | 95.9 | 97.2 | 11.9 | 3.9 |
| 9 | 85.2 | 89.0 | 92.7 | 97.1 | 97.1 | 11.9 | 3.8 |
| 10 | 86.2 | 90.1 | 92.9 | 97.9 | 97.9 | 11.7 | 3.9 |
| 11 | 86.5 | 90.3 | 92.4 | 97.7 | 97.7 | 11.2 | 3.8 |
| 12 | 86.2 | 89.7 | 91.8 | 97.1 | 97.1 | 10.9 | 3.5 |
| 13 | 86.4 | 90.2 | 92.2 | 97.2 | 97.2 | 10.8 | 3.8 |
| 14 | 87.2 | 91.1 | 93.1 | 98.3 | 98.3 | 11.1 | 3.9 |
| OH → 15 | 87.8 | 91.9 | 94.0 | 99.1 | 99.1 | 11.3 | 4.1 |
| 16 | 87.7 | 92.0 | 94.5 | 99.2 | 99.2 | 11.5 | 4.3 |
| 17 | 87.4 | 91.7 | 94.8 | 98.9 | 98.9 | 11.5 | 4.3 |
| 18 | 86.6 | 90.8 | 94.7 | 98.1 | 98.1 | 11.5 | 4.2 |
| 19 | 85.1 | 89.2 | 94.0 | 96.6 | 96.6 | 11.5 | 4.1 |
| 20 | 83.0 | 87.4 | 92.7 | 94.8 | 94.8 | 11.8 | 4.4 |
| 21 | 81.5 | 85.9 | 91.3 | 93.4 | 93.4 | 11.9 | 4.4 |
| 22 | 80.5 | 84.7 | 90.0 | 92.3 | 92.3 | 11.8 | 4.2 |
| 23 | 79.0 | 83.1 | 88.7 | 91.0 | 91.0 | 12.0 | 4.1 |
| 24 | 76.9 | 81.6 | 87.6 | 89.5 | 89.5 | 12.6 | 4.7 |
| 25 | 75.1 | 80.4 | 86.5 | 88.4 | 89.4 | 13.3 | 5.3 |
| 26 | 74.6 | 79.9 | 85.8 | 87.9 | 87.9 | 13.3 | 5.3 |
| 27 | 73.6 | 79.2 | 84.8 | 87.4 | 87.4 | 13.8 | 5.6 |

TABLE G-VI

NOISE LEVEL TIME HISTORY DATA

SIKORSKY S-64

With truck

OCTOBER 28 1976

EVENT 68 95 KT. FLY BY MIC. 150 METERS WEST

1/2 SECOND INTEGRATION VS NOISE INDEXES
(DB RE 20 MICRO PA)

| INT | DBA | DBD | OASPL | PNL | PNLT | PNL-DBA | DBD-DBA |
|---------|------|------|-------|------|------|---------|---------|
| 1 | 71.6 | 78.9 | 88.3 | 86.8 | 86.8 | 15.2 | 7.3 |
| 2 | 72.5 | 79.5 | 88.9 | 87.3 | 87.3 | 14.8 | 7.0 |
| 3 | 73.1 | 80.0 | 89.6 | 87.7 | 88.9 | 14.6 | 6.9 |
| 4 | 75.0 | 81.4 | 90.9 | 88.8 | 88.8 | 13.8 | 6.4 |
| 5 | 78.7 | 83.5 | 91.6 | 91.3 | 93.3 | 12.6 | 4.8 |
| 6 | 80.2 | 84.9 | 92.3 | 92.4 | 94.3 | 12.2 | 4.7 |
| 7 | 81.0 | 85.7 | 92.4 | 93.2 | 94.7 | 12.2 | 4.7 |
| 8 | 82.5 | 86.9 | 93.2 | 95.0 | 95.0 | 12.5 | 4.4 |
| 9 | 83.9 | 88.0 | 94.1 | 96.3 | 97.3 | 12.4 | 4.1 |
| 10 | 85.0 | 89.1 | 94.8 | 97.2 | 97.2 | 12.2 | 4.1 |
| 11 | 84.9 | 89.0 | 94.5 | 97.0 | 97.0 | 12.1 | 4.1 |
| 12 | 84.5 | 88.8 | 93.4 | 96.3 | 96.3 | 11.8 | 4.3 |
| 13 | 84.5 | 88.4 | 92.2 | 95.8 | 95.8 | 11.3 | 3.9 |
| 14 | 85.1 | 89.1 | 91.9 | 96.2 | 96.2 | 11.1 | 4.0 |
| 15 | 85.7 | 89.7 | 92.1 | 96.9 | 96.9 | 11.2 | 4.0 |
| OH → 16 | 85.6 | 89.6 | 92.3 | 96.9 | 96.9 | 11.3 | 4.0 |
| 17 | 85.3 | 89.3 | 92.6 | 96.5 | 96.5 | 11.2 | 4.0 |
| 18 | 84.5 | 88.7 | 93.0 | 96.1 | 96.1 | 11.6 | 4.2 |
| 19 | 84.1 | 88.3 | 93.3 | 96.0 | 96.0 | 11.9 | 4.2 |
| 20 | 83.4 | 87.8 | 93.3 | 95.4 | 95.4 | 12.0 | 4.4 |
| 21 | 82.7 | 87.0 | 92.8 | 94.6 | 94.6 | 11.9 | 4.3 |
| 22 | 81.6 | 85.9 | 91.7 | 93.2 | 93.2 | 11.6 | 4.3 |
| 23 | 80.3 | 84.3 | 90.4 | 92.2 | 92.2 | 11.9 | 4.0 |
| 24 | 79.4 | 83.5 | 89.1 | 91.3 | 91.3 | 11.9 | 4.1 |
| 25 | 78.2 | 82.8 | 88.1 | 90.6 | 90.6 | 12.4 | 4.6 |
| 26 | 76.9 | 82.0 | 87.1 | 89.7 | 89.7 | 12.8 | 5.1 |
| 27 | 76.6 | 81.8 | 86.3 | 89.3 | 89.3 | 12.7 | 5.2 |
| 28 | 75.5 | 80.7 | 85.2 | 88.4 | 89.7 | 12.9 | 5.2 |
| 29 | 74.1 | 79.6 | 84.2 | 87.4 | 88.5 | 13.3 | 5.5 |
| 30 | 71.8 | 77.9 | 83.2 | 86.2 | 86.2 | 14.4 | 6.1 |
| 31 | 71.3 | 77.6 | 82.7 | 85.8 | 86.9 | 14.5 | 6.3 |

TABLE G-VI

NOISE LEVEL TIME HISTORY DATA

SIKORSKY S-64

With truck

OCTOBER 28 1976

EVENT 69 95 KT. FLY BY MIC. 150 METERS WEST

1/2 SECOND INTEGRATION VS NOISE INDEXES
(DB RE 20 MICRO PA)

| INT | DBA | DBD | GASPL | PNL | PNLT | PNL-DBA | DBD-DBA |
|---------|------|------|-------|------|------|---------|---------|
| 1 | 72.1 | 79.0 | 89.2 | 87.1 | 87.1 | 15.0 | 6.9 |
| 2 | 74.6 | 80.5 | 89.9 | 88.5 | 89.5 | 13.9 | 5.9 |
| 3 | 76.5 | 81.7 | 90.0 | 89.6 | 91.3 | 13.1 | 5.2 |
| 4 | 78.3 | 83.1 | 90.2 | 90.9 | 92.4 | 12.6 | 4.8 |
| 5 | 79.9 | 84.1 | 90.0 | 92.1 | 92.1 | 12.2 | 4.2 |
| 6 | 81.0 | 85.3 | 90.6 | 93.6 | 94.6 | 12.6 | 4.3 |
| 7 | 82.3 | 86.3 | 91.0 | 94.4 | 94.4 | 12.1 | 4.0 |
| 8 | 83.1 | 87.6 | 91.6 | 95.3 | 95.3 | 12.2 | 4.5 |
| 9 | 84.2 | 88.5 | 91.8 | 95.8 | 95.8 | 11.6 | 4.3 |
| 10 | 85.9 | 90.0 | 92.4 | 97.1 | 97.1 | 11.2 | 4.1 |
| 11 | 87.1 | 90.9 | 93.0 | 97.7 | 97.7 | 10.6 | 3.8 |
| 12 | 87.6 | 91.4 | 93.3 | 98.4 | 98.4 | 10.8 | 3.8 |
| ON → 13 | 87.1 | 91.2 | 93.3 | 98.4 | 98.4 | 11.3 | 4.1 |
| 14 | 86.4 | 90.8 | 93.5 | 98.0 | 98.0 | 11.6 | 4.4 |
| 15 | 85.5 | 90.1 | 93.9 | 97.3 | 97.3 | 11.8 | 4.6 |
| 16 | 84.5 | 89.2 | 93.8 | 96.4 | 96.4 | 11.9 | 4.7 |
| 17 | 83.3 | 87.9 | 93.3 | 95.3 | 95.3 | 12.0 | 4.6 |
| 18 | 82.1 | 86.7 | 92.2 | 94.2 | 94.2 | 12.1 | 4.6 |
| 19 | 81.2 | 85.7 | 90.9 | 93.3 | 93.3 | 12.1 | 4.5 |
| 20 | 80.1 | 84.6 | 89.6 | 92.4 | 92.4 | 12.3 | 4.5 |
| 21 | 79.0 | 83.3 | 88.3 | 91.0 | 91.0 | 12.0 | 4.3 |
| 22 | 77.6 | 82.0 | 87.0 | 89.7 | 89.7 | 12.1 | 4.4 |
| 23 | 76.3 | 81.0 | 85.9 | 88.9 | 90.2 | 12.6 | 4.7 |
| 24 | 75.3 | 80.4 | 85.2 | 88.2 | 89.7 | 12.9 | 5.1 |
| 25 | 74.3 | 79.5 | 84.4 | 87.5 | 87.5 | 13.2 | 5.3 |

TABLE G-V

NOISE LEVEL TIME HISTORY DATA

SIKORSKY S-64

With Truck

OCTOBER 28 1976

EVENT 43 9 DEGREE APPROACH MIC. 150 METERS EAST

1/2 SECOND INTEGRATION VS NOISE INDEXES
(DB RE 20 MICRO PA)

| INT | DBA | DBD | OASPL | PNL | PNLT | PNL-DBA | DBD-DBA |
|---------|------|------|-------|------|------|---------|---------|
| 1 | 66.7 | 75.5 | 83.4 | 84.3 | 84.3 | 17.6 | 8.8 |
| 3 | 68.8 | 76.5 | 83.9 | 85.2 | 85.2 | 16.4 | 7.7 |
| 5 | 70.4 | 77.1 | 84.4 | 85.9 | 85.9 | 15.5 | 6.7 |
| 7 | 73.5 | 78.7 | 84.7 | 87.4 | 87.4 | 13.9 | 5.2 |
| 9 | 74.3 | 79.3 | 85.8 | 88.0 | 88.0 | 13.7 | 5.0 |
| 11 | 73.4 | 78.6 | 86.2 | 87.4 | 87.4 | 14.0 | 5.2 |
| 13 | 72.4 | 78.4 | 86.5 | 86.9 | 86.9 | 14.5 | 6.0 |
| 15 | 73.7 | 79.2 | 86.9 | 87.7 | 87.7 | 14.0 | 5.5 |
| 17 | 75.0 | 80.1 | 87.6 | 88.6 | 88.6 | 13.6 | 5.1 |
| 19 | 72.4 | 78.6 | 87.8 | 87.0 | 88.2 | 14.6 | 6.2 |
| 21 | 70.8 | 78.1 | 88.2 | 86.4 | 87.9 | 15.6 | 7.3 |
| 23 | 71.4 | 78.5 | 88.8 | 86.8 | 88.1 | 15.4 | 7.1 |
| 25 | 71.6 | 78.8 | 89.5 | 87.0 | 87.0 | 15.4 | 7.2 |
| 27 | 73.9 | 79.8 | 89.6 | 87.6 | 87.6 | 13.7 | 5.9 |
| 29 | 75.9 | 81.2 | 90.2 | 89.2 | 90.2 | 13.3 | 5.3 |
| 31 | 77.2 | 82.3 | 91.1 | 90.0 | 91.1 | 12.8 | 5.1 |
| 33 | 79.8 | 84.1 | 92.1 | 91.9 | 93.2 | 12.1 | 4.3 |
| 35 | 82.7 | 86.7 | 92.0 | 94.3 | 96.5 | 11.6 | 4.0 |
| 37 | 83.2 | 87.4 | 91.9 | 94.8 | 97.1 | 11.6 | 4.2 |
| 39 | 80.9 | 85.8 | 90.3 | 93.2 | 94.7 | 12.3 | 4.9 |
| OH → 41 | 82.7 | 87.1 | 90.0 | 94.7 | 95.8 | 12.0 | 4.4 |
| 43 | 82.9 | 87.4 | 90.8 | 95.3 | 95.3 | 12.4 | 4.5 |
| 45 | 82.9 | 87.4 | 90.9 | 95.0 | 96.0 | 12.1 | 4.5 |
| 47 | 81.7 | 86.5 | 90.8 | 94.4 | 94.4 | 12.7 | 4.8 |
| 49 | 80.3 | 86.0 | 90.8 | 93.8 | 95.3 | 13.5 | 5.7 |
| 51 | 79.9 | 85.6 | 90.3 | 94.0 | 94.0 | 14.1 | 5.7 |
| 53 | 78.0 | 83.7 | 89.1 | 92.1 | 92.1 | 14.1 | 5.7 |
| 55 | 73.8 | 80.3 | 87.4 | 89.2 | 89.2 | 15.4 | 6.5 |
| 57 | 74.0 | 80.7 | 87.7 | 89.7 | 91.4 | 15.7 | 6.7 |
| 59 | 74.0 | 80.5 | 87.0 | 89.3 | 91.5 | 15.3 | 6.5 |
| 61 | 69.6 | 77.6 | 84.6 | 86.3 | 86.3 | 16.7 | 8.0 |
| 63 | 66.8 | 75.6 | 83.0 | 84.0 | 84.0 | 17.2 | 8.8 |
| 65 | 65.0 | 74.5 | 81.7 | 83.2 | 83.2 | 18.2 | 9.5 |

TABLE G-VI

NOISE LEVEL TIME HISTORY DATA

SIKORSKY S-64

With truck

OCTOBER 28 1976

EVENT 51 6 DEGREE APPROACH MIC. 150 METERS EAST

1/2 SECOND INTEGRATION VS NOISE INDEXES
(DB RE 20 MICRO PA)

| INT | DBA | DBD | OASPL | PNL | PNLT | PNL-DBA | DBD-DBA |
|---------|------|------|-------|------|------|---------|---------|
| 1 | 64.6 | 75.2 | 82.9 | 84.3 | 84.3 | 19.7 | 10.6 |
| 3 | 66.6 | 75.6 | 83.1 | 84.6 | 84.6 | 18.0 | 9.0 |
| 5 | 70.7 | 77.0 | 83.8 | 85.5 | 85.5 | 14.8 | 6.3 |
| 7 | 73.0 | 78.9 | 85.5 | 87.5 | 88.8 | 14.5 | 5.9 |
| 9 | 72.2 | 79.4 | 87.4 | 87.6 | 87.6 | 15.4 | 7.2 |
| 11 | 71.0 | 79.2 | 87.7 | 88.0 | 88.0 | 17.0 | 8.2 |
| 13 | 71.2 | 79.2 | 87.1 | 88.0 | 88.0 | 16.8 | 8.0 |
| 15 | 70.8 | 78.5 | 87.0 | 87.3 | 88.6 | 16.5 | 7.7 |
| 17 | 71.3 | 79.2 | 88.7 | 89.0 | 90.3 | 17.7 | 7.9 |
| 19 | 71.4 | 78.7 | 87.7 | 87.7 | 87.7 | 16.3 | 7.3 |
| 21 | 73.1 | 78.8 | 87.2 | 87.4 | 87.4 | 14.3 | 5.7 |
| 23 | 73.9 | 79.5 | 88.3 | 87.8 | 87.8 | 13.9 | 5.6 |
| 25 | 74.5 | 80.0 | 89.2 | 88.2 | 88.2 | 13.7 | 5.5 |
| 27 | 74.7 | 80.4 | 89.9 | 89.1 | 90.6 | 14.4 | 5.7 |
| 29 | 74.6 | 80.0 | 89.4 | 89.0 | 91.0 | 14.4 | 5.4 |
| 31 | 75.7 | 81.1 | 90.4 | 89.4 | 89.4 | 13.7 | 5.4 |
| 33 | 78.1 | 82.7 | 91.3 | 90.7 | 91.8 | 12.6 | 4.6 |
| 35 | 80.5 | 84.3 | 91.5 | 92.1 | 93.6 | 11.6 | 3.8 |
| 37 | 80.9 | 85.2 | 91.5 | 92.7 | 92.7 | 11.8 | 4.3 |
| 39 | 81.6 | 85.9 | 91.6 | 93.3 | 94.4 | 11.7 | 4.3 |
| 41 | 82.0 | 86.3 | 91.0 | 94.0 | 94.0 | 12.0 | 4.3 |
| OH → 43 | 82.7 | 86.9 | 90.5 | 94.4 | 94.4 | 11.7 | 4.2 |
| 45 | 82.7 | 86.8 | 90.8 | 94.5 | 94.5 | 11.8 | 4.1 |
| 47 | 81.8 | 86.2 | 90.7 | 94.2 | 94.2 | 12.4 | 4.4 |
| 49 | 80.6 | 85.4 | 90.1 | 93.5 | 93.5 | 12.9 | 4.8 |
| 51 | 79.7 | 85.0 | 90.0 | 93.6 | 94.7 | 13.9 | 5.3 |
| 53 | 80.0 | 85.3 | 89.3 | 93.3 | 93.3 | 13.3 | 5.3 |
| 55 | 77.0 | 82.5 | 88.0 | 90.9 | 92.0 | 13.9 | 5.5 |
| 57 | 75.2 | 81.3 | 87.3 | 89.9 | 89.9 | 14.7 | 6.1 |
| 59 | 73.6 | 80.3 | 86.8 | 88.8 | 90.5 | 15.2 | 6.7 |
| 61 | 72.2 | 79.5 | 85.9 | 88.4 | 89.6 | 16.2 | 7.3 |
| 63 | 70.8 | 79.1 | 85.9 | 87.7 | 87.7 | 16.9 | 8.3 |
| 65 | 74.9 | 81.8 | 87.8 | 90.2 | 91.3 | 15.3 | 6.9 |
| 67 | 75.9 | 82.4 | 87.5 | 90.6 | 92.1 | 14.7 | 6.5 |
| 69 | 69.1 | 77.2 | 83.1 | 85.5 | 85.5 | 16.4 | 8.1 |
| 71 | 64.6 | 74.7 | 80.7 | 83.4 | 83.4 | 18.8 | 10.1 |
| 73 | 63.1 | 73.7 | 79.5 | 82.8 | 82.8 | 19.7 | 10.6 |
| 75 | 60.7 | 72.6 | 77.7 | .0 | .0 | -60.6 | 11.9 |

TABLE G-V

NOISE LEVEL TIME HISTORY DATA

SIKORSKY S-64

with truck

OCTOBER 28 1976

EVENT 67 95 KT. FLY BY MIC. 150 METERS EAST

1/2 SECOND INTEGRATION VS NOISE INDEXES
(DB RE 20 MICRO PA)

| INT | DBA | DBD | OASPL | PNL | PNLT | PNL-DBA | DBD-DBA |
|---------|------|------|-------|------|------|---------|---------|
| 1 | 69.8 | 77.5 | 88.2 | 85.4 | 86.5 | 15.6 | 7.7 |
| 2 | 70.9 | 78.2 | 88.7 | 85.9 | 85.9 | 15.0 | 7.3 |
| 3 | 73.6 | 79.6 | 89.0 | 87.4 | 87.4 | 13.8 | 6.0 |
| 4 | 76.6 | 81.0 | 89.4 | 89.3 | 89.3 | 12.7 | 4.4 |
| 5 | 79.7 | 83.0 | 89.9 | 91.2 | 92.4 | 11.5 | 3.3 |
| 6 | 80.9 | 84.2 | 90.6 | 92.4 | 93.9 | 11.5 | 3.3 |
| 7 | 80.7 | 84.5 | 91.2 | 92.6 | 94.1 | 11.9 | 3.8 |
| 8 | 80.2 | 84.5 | 91.8 | 92.8 | 94.2 | 12.6 | 4.3 |
| 9 | 81.5 | 85.9 | 92.5 | 94.0 | 94.0 | 12.5 | 4.4 |
| 10 | 82.6 | 86.8 | 93.0 | 94.7 | 94.7 | 12.1 | 4.2 |
| 11 | 83.9 | 88.0 | 93.6 | 95.7 | 95.7 | 11.8 | 4.1 |
| 12 | 84.4 | 88.5 | 93.9 | 96.2 | 96.2 | 11.8 | 4.1 |
| 13 | 85.0 | 89.1 | 94.0 | 96.3 | 97.5 | 11.3 | 4.1 |
| 14 | 85.1 | 89.4 | 94.0 | 96.5 | 97.5 | 11.4 | 4.3 |
| 15 | 85.8 | 90.0 | 94.1 | 97.0 | 97.5 | 11.2 | 4.2 |
| 16 | 86.5 | 90.6 | 94.5 | 97.7 | 97.7 | 11.2 | 4.1 |
| OH → 17 | 86.7 | 90.5 | 94.6 | 98.0 | 98.0 | 11.3 | 3.8 |
| 18 | 86.4 | 90.4 | 94.6 | 97.9 | 97.9 | 11.5 | 4.0 |
| 19 | 85.8 | 89.9 | 93.9 | 97.4 | 97.4 | 11.6 | 4.1 |
| 20 | 84.7 | 89.1 | 92.8 | 96.6 | 96.6 | 11.9 | 4.4 |
| 21 | 83.4 | 87.7 | 91.1 | 95.2 | 95.2 | 11.8 | 4.3 |
| 22 | 81.7 | 86.1 | 89.3 | 93.5 | 93.5 | 11.8 | 4.4 |
| 23 | 80.6 | 84.7 | 87.7 | 92.4 | 92.4 | 11.8 | 4.1 |
| 24 | 79.2 | 83.4 | 86.4 | 90.9 | 90.9 | 11.7 | 4.2 |
| 25 | 78.8 | 82.7 | 85.2 | 90.4 | 90.4 | 11.6 | 3.9 |
| 26 | 78.3 | 82.2 | 84.4 | 90.1 | 91.2 | 11.8 | 3.9 |
| 27 | 77.5 | 81.4 | 83.7 | 89.8 | 89.8 | 12.3 | 3.9 |
| 28 | 76.7 | 80.8 | 83.4 | 89.3 | 90.4 | 12.6 | 4.1 |
| 29 | 75.3 | 79.6 | 82.8 | 88.3 | 89.7 | 13.0 | 4.3 |
| 30 | 73.7 | 78.5 | 82.0 | 87.2 | 87.2 | 13.5 | 4.8 |
| 31 | 72.1 | 77.1 | 80.9 | 85.6 | 85.6 | 13.5 | 5.0 |

TABLE G-V

NOISE LEVEL TIME HISTORY DATA

SIKORSKY S-64
With truck

OCTOBER 28 1976

EVENT 68 95 KT. FLY BY MIC. 150 METERS EAST

1/2 SECOND INTEGRATION VS NOISE INDEXES
(DB RE 20 MICRO PA)

| INT | DBA | DBD | OASPL | PNL | PNLT | PNL-DBA | DBD-DBA |
|---------|------|------|-------|------|------|---------|---------|
| 1 | 66.8 | 77.4 | 88.6 | 84.3 | 84.3 | 18.0 | 10.6 |
| 2 | 68.8 | 78.1 | 89.1 | 85.8 | 85.8 | 17.0 | 9.3 |
| 3 | 72.0 | 79.3 | 89.7 | 87.5 | 87.5 | 15.5 | 7.3 |
| 4 | 74.9 | 80.5 | 90.5 | 89.0 | 89.0 | 14.1 | 5.6 |
| 5 | 78.9 | 83.5 | 91.8 | 91.7 | 92.8 | 12.8 | 4.6 |
| 6 | 82.1 | 86.2 | 93.0 | 94.2 | 94.2 | 12.1 | 4.1 |
| 7 | 83.0 | 87.3 | 93.8 | 95.2 | 95.2 | 12.2 | 4.3 |
| 8 | 82.8 | 87.4 | 94.2 | 95.4 | 95.4 | 12.6 | 4.6 |
| 9 | 82.7 | 88.0 | 94.7 | 95.7 | 95.7 | 13.0 | 5.3 |
| 10 | 83.2 | 88.5 | 95.2 | 96.0 | 96.0 | 12.8 | 5.3 |
| 11 | 83.7 | 88.8 | 95.4 | 96.1 | 97.5 | 12.4 | 5.1 |
| 12 | 83.3 | 88.0 | 95.2 | 95.5 | 96.8 | 12.2 | 4.7 |
| 13 | 82.8 | 87.4 | 95.1 | 94.4 | 94.4 | 11.6 | 4.6 |
| 14 | 83.2 | 87.7 | 95.1 | 94.6 | 94.6 | 11.4 | 4.5 |
| 15 | 84.1 | 87.9 | 95.0 | 95.5 | 95.5 | 11.4 | 3.8 |
| 16 | 84.4 | 88.2 | 94.8 | 95.7 | 95.7 | 11.3 | 3.8 |
| OH → 17 | 84.2 | 88.4 | 94.4 | 95.5 | 95.5 | 11.3 | 4.2 |
| 18 | 84.4 | 88.8 | 94.0 | 96.0 | 96.0 | 11.6 | 4.4 |
| 19 | 84.6 | 88.9 | 93.3 | 96.3 | 96.3 | 11.7 | 4.3 |
| 20 | 84.1 | 88.3 | 92.3 | 95.7 | 95.7 | 11.6 | 4.2 |
| 21 | 82.9 | 87.1 | 90.8 | 94.4 | 94.4 | 11.5 | 4.2 |
| 22 | 81.8 | 85.7 | 89.1 | 93.0 | 93.0 | 11.2 | 3.9 |
| 23 | 80.9 | 84.7 | 87.7 | 92.4 | 92.4 | 11.5 | 3.8 |
| 24 | 79.7 | 83.7 | 86.4 | 91.4 | 91.4 | 11.7 | 4.0 |
| 25 | 78.7 | 82.9 | 85.3 | 90.8 | 90.8 | 12.1 | 4.2 |
| 26 | 77.4 | 81.8 | 84.1 | 89.4 | 89.4 | 12.0 | 4.4 |
| 27 | 76.0 | 80.6 | 83.2 | 88.6 | 88.6 | 12.6 | 4.6 |
| 28 | 73.7 | 78.6 | 81.6 | 86.9 | 87.9 | 13.2 | 4.9 |
| 29 | 72.3 | 77.7 | 80.9 | 86.2 | 86.2 | 13.9 | 5.4 |
| 30 | 72.1 | 77.3 | 80.5 | 85.8 | 87.2 | 13.7 | 5.2 |
| 31 | 72.1 | 77.3 | 80.8 | 85.7 | 87.1 | 13.6 | 5.2 |

TABLE G-V

NOISE LEVEL TIME HISTORY DATA

SIKORSKY S-64

With truck

OCTOBER 28 1976

EVENT 69 95 KT. FLY BY MIC. 150 METERS EAST

1/2 SECOND INTEGRATION VS NOISE INDEXES
(DB RE 20 MICRO PA)

| INT | DBA | DBD | OASPL | PNL | PNLT | PNL-DBA | DBD-DBA |
|---------|------|------|-------|------|------|---------|---------|
| 1 | 68.4 | 77.0 | 87.2 | 84.9 | 84.9 | 16.5 | 8.6 |
| 2 | 70.7 | 78.0 | 87.7 | 86.0 | 86.0 | 15.3 | 7.3 |
| 3 | 74.5 | 79.9 | 88.3 | 87.9 | 89.2 | 13.4 | 5.4 |
| 4 | 78.2 | 82.7 | 89.2 | 90.9 | 92.4 | 12.7 | 4.5 |
| 5 | 80.7 | 84.6 | 90.3 | 92.6 | 93.9 | 11.9 | 3.9 |
| 6 | 81.8 | 85.5 | 90.8 | 93.5 | 93.5 | 11.7 | 3.7 |
| 7 | 81.8 | 85.4 | 91.2 | 93.5 | 93.5 | 11.7 | 3.6 |
| 8 | 81.5 | 85.3 | 91.5 | 93.6 | 93.6 | 12.1 | 3.8 |
| 9 | 81.5 | 85.5 | 92.4 | 93.6 | 93.6 | 12.1 | 4.0 |
| 10 | 82.0 | 86.1 | 92.9 | 93.8 | 93.8 | 11.8 | 4.1 |
| 11 | 82.5 | 86.8 | 93.4 | 94.0 | 95.2 | 11.5 | 4.3 |
| 12 | 83.5 | 87.7 | 93.5 | 94.5 | 95.5 | 11.0 | 4.2 |
| 13 | 84.7 | 88.6 | 93.8 | 95.3 | 95.3 | 10.6 | 3.9 |
| 14 | 86.2 | 89.6 | 94.0 | 96.9 | 97.5 | 10.7 | 3.4 |
| 15 | 86.6 | 90.1 | 94.2 | 97.9 | 98.4 | 11.3 | 3.5 |
| OH → 16 | 86.6 | 90.2 | 94.3 | 97.9 | 97.9 | 11.3 | 3.6 |
| 17 | 86.0 | 90.0 | 94.3 | 97.5 | 97.5 | 11.5 | 4.0 |
| 18 | 85.7 | 89.5 | 94.0 | 96.8 | 96.8 | 11.1 | 3.8 |
| 19 | 84.7 | 88.8 | 93.4 | 96.2 | 96.2 | 11.5 | 4.1 |
| 20 | 83.6 | 87.8 | 92.0 | 95.3 | 95.3 | 11.7 | 4.2 |
| 21 | 82.5 | 86.7 | 90.5 | 94.1 | 94.1 | 11.6 | 4.2 |
| 22 | 81.8 | 85.9 | 88.8 | 93.2 | 93.2 | 11.4 | 4.1 |
| 23 | 81.0 | 85.0 | 87.5 | 92.6 | 92.6 | 11.6 | 4.0 |
| 24 | 79.5 | 83.9 | 86.4 | 91.6 | 91.6 | 12.1 | 4.4 |
| 25 | 77.6 | 82.2 | 85.2 | 90.1 | 90.1 | 12.5 | 4.6 |
| 26 | 76.3 | 81.0 | 84.2 | 89.0 | 89.0 | 12.7 | 4.7 |
| 27 | 75.7 | 80.4 | 83.7 | 88.4 | 89.6 | 12.7 | 4.7 |
| 28 | 75.0 | 79.7 | 82.9 | 87.7 | 87.7 | 12.7 | 4.7 |
| 29 | 73.5 | 78.5 | 82.3 | 86.7 | 86.7 | 13.2 | 5.0 |

TABLE G-VI

NOISE LEVEL TIME HISTORY DATA

SIKORSKY S-64

with truck

OCTOBER 28 1976

EVENT 43 9 DEGREE APPROACH MIC. CENTERLINE (HARD)

1/2 SECOND INTEGRATION VS NOISE INDEXES
(DB RE 20 MICRO PA)

| INT | DBA | DBD | OASPL | PNL | PNLT | PNL-DBA | DBD-DBA |
|---------|------|------|-------|-------|-------|---------|---------|
| 1 | 75.2 | 81.9 | 91.2 | 89.2 | 89.2 | 14.0 | 6.7 |
| 2 | 76.3 | 82.6 | 91.9 | 90.0 | 90.0 | 13.7 | 6.3 |
| 3 | 77.1 | 83.2 | 92.6 | 90.7 | 90.7 | 13.6 | 6.1 |
| 4 | 78.2 | 84.1 | 92.8 | 91.7 | 91.7 | 13.5 | 5.9 |
| 5 | 78.7 | 84.7 | 92.7 | 92.3 | 93.4 | 13.6 | 6.0 |
| 6 | 80.2 | 86.1 | 92.8 | 93.6 | 95.3 | 13.4 | 5.9 |
| 7 | 82.4 | 87.9 | 93.8 | 95.6 | 97.5 | 13.2 | 5.5 |
| 8 | 83.6 | 89.4 | 94.9 | 96.8 | 98.8 | 13.2 | 5.8 |
| 9 | 83.8 | 89.8 | 95.3 | 97.2 | 98.6 | 13.4 | 6.0 |
| 10 | 82.9 | 89.4 | 95.2 | 96.7 | 98.0 | 13.8 | 6.5 |
| 11 | 82.5 | 89.3 | 95.1 | 96.5 | 97.8 | 14.0 | 6.8 |
| 12 | 83.2 | 89.8 | 95.3 | 97.0 | 98.7 | 13.8 | 6.6 |
| 13 | 84.4 | 90.9 | 95.8 | 98.3 | 99.9 | 13.9 | 6.5 |
| 14 | 85.6 | 92.2 | 96.7 | 99.7 | 101.5 | 14.1 | 6.6 |
| 15 | 86.4 | 93.3 | 97.5 | 100.7 | 102.4 | 14.3 | 6.9 |
| 16 | 86.6 | 93.4 | 97.8 | 100.9 | 102.6 | 14.3 | 6.8 |
| 17 | 86.6 | 93.4 | 98.1 | 100.8 | 102.2 | 14.2 | 6.8 |
| OH → 18 | 86.8 | 93.3 | 98.4 | 100.7 | 100.7 | 13.9 | 6.5 |
| 19 | 87.2 | 94.0 | 99.1 | 101.4 | 101.4 | 14.2 | 6.8 |
| 20 | 88.2 | 95.0 | 100.0 | 102.4 | 102.4 | 14.2 | 6.8 |
| 21 | 88.3 | 95.3 | 100.3 | 102.5 | 102.5 | 14.2 | 7.0 |
| 22 | 88.0 | 95.1 | 100.4 | 102.4 | 102.4 | 14.4 | 7.1 |
| 23 | 86.6 | 93.7 | 99.6 | 101.3 | 101.3 | 14.7 | 7.1 |
| 24 | 85.0 | 92.2 | 98.7 | 99.6 | 99.6 | 14.6 | 7.2 |
| 25 | 84.4 | 90.9 | 97.8 | 98.3 | 98.3 | 13.9 | 6.5 |
| 26 | 85.1 | 91.6 | 97.9 | 99.0 | 99.0 | 13.9 | 6.5 |
| 27 | 86.0 | 92.5 | 97.9 | 100.0 | 100.0 | 14.0 | 6.5 |
| 28 | 85.5 | 92.1 | 97.2 | 99.8 | 99.8 | 14.3 | 6.6 |
| 29 | 84.1 | 90.4 | 96.1 | 98.3 | 99.6 | 14.2 | 6.3 |
| 30 | 81.7 | 87.7 | 94.5 | 95.7 | 97.0 | 14.0 | 6.0 |
| 31 | 80.0 | 85.2 | 93.3 | 93.1 | 94.1 | 13.1 | 5.2 |
| 32 | 78.9 | 83.9 | 92.1 | 91.7 | 91.7 | 12.8 | 5.0 |
| 33 | 77.7 | 83.0 | 91.3 | 90.9 | 90.9 | 13.2 | 5.3 |
| 34 | 76.1 | 81.8 | 90.0 | 90.0 | 90.0 | 13.9 | 5.7 |
| 35 | 74.3 | 80.6 | 88.8 | 89.0 | 89.0 | 14.7 | 6.3 |
| 36 | 73.2 | 79.7 | 87.6 | 88.2 | 88.2 | 15.0 | 6.5 |

TABLE G-V

NOISE LEVEL TIME HISTORY DATA

SIKORSKY S-64

with truck

OCTOBER 28 1976

EVENT 49 60 KT.FLY BY MIC. CENTERLINE(HARD)

1/2 SECOND INTEGRATION VS NOISE INDEXES
(DB RE 20 MICRO PA)

| INT | DBA | DBD | OASPL | PNL | PNLT | PNL-DBA | DBD-DBA |
|---------|------|------|-------|------|------|---------|---------|
| 1 | 69.7 | 77.5 | 85.4 | 85.2 | 85.2 | 15.5 | 7.8 |
| 2 | 71.3 | 78.4 | 86.0 | 86.3 | 87.4 | 15.0 | 7.1 |
| 3 | 72.7 | 79.6 | 86.9 | 87.4 | 89.0 | 14.7 | 6.9 |
| 4 | 74.5 | 81.0 | 88.0 | 88.7 | 89.9 | 14.2 | 6.5 |
| 5 | 75.5 | 81.5 | 88.3 | 89.5 | 89.5 | 14.0 | 6.0 |
| 6 | 76.0 | 82.1 | 88.9 | 90.3 | 90.3 | 14.3 | 6.1 |
| 7 | 76.6 | 82.3 | 89.2 | 90.7 | 91.7 | 14.1 | 5.7 |
| 8 | 77.1 | 83.0 | 90.2 | 91.3 | 91.3 | 14.2 | 5.9 |
| 9 | 78.0 | 83.6 | 90.9 | 91.9 | 91.9 | 13.9 | 5.6 |
| 10 | 78.6 | 84.2 | 91.8 | 92.3 | 92.3 | 13.7 | 5.6 |
| 11 | 79.8 | 85.4 | 92.2 | 92.9 | 92.9 | 13.1 | 5.6 |
| 12 | 80.9 | 86.3 | 92.6 | 94.0 | 94.0 | 13.1 | 5.4 |
| 13 | 82.0 | 87.4 | 93.3 | 95.4 | 95.4 | 13.4 | 5.4 |
| 14 | 83.2 | 88.0 | 93.9 | 96.0 | 96.0 | 12.8 | 4.8 |
| OH → 15 | 84.1 | 89.1 | 94.3 | 96.6 | 96.6 | 12.5 | 5.0 |
| 16 | 84.5 | 89.4 | 93.9 | 96.7 | 96.7 | 12.2 | 4.9 |
| 17 | 84.3 | 89.3 | 93.4 | 96.6 | 96.6 | 12.3 | 5.0 |
| 18 | 84.1 | 88.7 | 93.0 | 96.4 | 96.4 | 12.3 | 4.6 |
| 19 | 83.6 | 88.2 | 93.4 | 95.8 | 95.8 | 12.2 | 4.6 |
| 20 | 83.7 | 88.2 | 93.8 | 95.2 | 95.2 | 11.5 | 4.5 |
| 21 | 82.9 | 87.7 | 93.9 | 94.5 | 94.5 | 11.6 | 4.8 |
| 22 | 82.3 | 87.2 | 93.8 | 93.9 | 93.9 | 11.6 | 4.9 |
| 23 | 81.2 | 85.7 | 93.2 | 92.7 | 92.7 | 11.5 | 4.5 |
| 24 | 80.7 | 84.9 | 92.4 | 92.3 | 93.5 | 11.6 | 4.2 |
| 25 | 80.6 | 84.7 | 91.7 | 92.3 | 92.3 | 11.7 | 4.1 |
| 26 | 80.3 | 84.8 | 91.3 | 92.3 | 92.3 | 12.0 | 4.5 |
| 27 | 80.3 | 84.6 | 90.7 | 91.9 | 91.9 | 11.6 | 4.3 |
| 28 | 80.1 | 84.3 | 90.3 | 91.6 | 91.6 | 11.5 | 4.2 |
| 29 | 80.2 | 83.9 | 89.8 | 91.5 | 92.6 | 11.3 | 3.7 |
| 30 | 79.7 | 83.7 | 89.3 | 91.3 | 92.6 | 11.6 | 4.0 |
| 31 | 78.7 | 82.8 | 88.1 | 90.5 | 91.8 | 11.8 | 4.1 |
| 32 | 77.3 | 82.1 | 87.6 | 89.4 | 90.6 | 12.1 | 4.8 |
| 33 | 76.5 | 81.1 | 86.9 | 88.5 | 89.9 | 12.0 | 4.6 |
| 34 | 75.8 | 80.7 | 86.6 | 88.2 | 89.4 | 12.4 | 4.9 |
| 35 | 75.1 | 79.7 | 85.3 | 87.6 | 89.0 | 12.5 | 4.6 |
| 36 | 73.4 | 78.6 | 84.6 | 86.4 | 88.2 | 13.0 | 5.2 |
| 37 | 71.3 | 77.3 | 82.9 | 84.7 | 86.0 | 13.4 | 6.0 |
| 38 | 69.0 | 76.7 | 82.1 | 83.8 | 83.8 | 14.8 | 7.7 |

TABLE G-IV

NOISE LEVEL TIME HISTORY DATA

SIKORSKY S-64

With truck

OCTOBER 28 1976

EVENT 50 60 KT. FLY BY MIC.CENTERLINE(HARD)

1/2 SECOND INTEGRATION VS NOISE INDEXES
(DB RE 20 MICRO PA)

| INT | DBA | DBD | OASPL | PNL | PNLT | PNL-DBA | DBD-DBA |
|---------|------|------|-------|------|------|---------|---------|
| 1 | 72.2 | 79.3 | 88.3 | 87.0 | 88.5 | 14.8 | 7.1 |
| 2 | 72.3 | 79.5 | 88.5 | 87.1 | 88.4 | 14.8 | 7.2 |
| 3 | 72.9 | 80.2 | 88.6 | 87.9 | 88.9 | 15.0 | 7.3 |
| 4 | 75.2 | 81.3 | 89.1 | 88.7 | 89.8 | 13.5 | 6.1 |
| 5 | 77.0 | 82.1 | 89.7 | 89.8 | 91.5 | 12.8 | 5.1 |
| 6 | 77.9 | 83.3 | 90.3 | 90.7 | 92.4 | 12.8 | 5.4 |
| 7 | 78.9 | 84.4 | 91.1 | 92.1 | 93.6 | 13.2 | 5.5 |
| 8 | 79.9 | 85.8 | 92.1 | 93.8 | 93.8 | 13.9 | 5.9 |
| 9 | 82.2 | 88.3 | 93.5 | 96.0 | 96.0 | 13.8 | 6.1 |
| 10 | 83.6 | 89.8 | 94.7 | 97.4 | 97.4 | 13.8 | 6.2 |
| 11 | 84.0 | 90.0 | 94.8 | 97.6 | 97.6 | 13.6 | 6.0 |
| 12 | 84.2 | 90.3 | 95.1 | 97.9 | 97.9 | 13.7 | 6.1 |
| 13 | 84.0 | 89.8 | 94.6 | 97.8 | 97.8 | 13.8 | 5.8 |
| 14 | 83.7 | 89.3 | 94.1 | 97.5 | 97.5 | 13.8 | 5.6 |
| 15 | 82.8 | 87.8 | 93.0 | 96.1 | 96.1 | 13.3 | 5.0 |
| 16 | 82.8 | 87.5 | 92.5 | 95.1 | 95.1 | 12.3 | 4.7 |
| 17 | 83.8 | 88.1 | 93.1 | 95.7 | 95.7 | 11.9 | 4.3 |
| OH → 18 | 84.2 | 88.1 | 93.1 | 95.8 | 95.8 | 11.6 | 3.9 |
| 19 | 84.2 | 88.2 | 92.9 | 95.9 | 95.9 | 11.7 | 4.0 |
| 20 | 83.5 | 87.6 | 92.2 | 95.5 | 95.5 | 12.0 | 4.1 |
| 21 | 82.8 | 87.3 | 92.1 | 94.5 | 94.5 | 11.7 | 4.5 |
| 22 | 82.2 | 86.9 | 92.6 | 94.0 | 94.0 | 11.8 | 4.7 |
| 23 | 81.6 | 86.3 | 93.0 | 93.4 | 93.4 | 11.8 | 4.7 |
| 24 | 80.9 | 85.5 | 92.7 | 92.5 | 92.5 | 11.6 | 4.6 |
| 25 | 79.6 | 84.2 | 92.3 | 91.4 | 91.4 | 11.8 | 4.6 |
| 26 | 78.5 | 83.5 | 91.5 | 90.4 | 90.4 | 11.9 | 5.0 |
| 27 | 78.3 | 83.5 | 90.9 | 90.3 | 90.3 | 12.0 | 5.2 |
| 28 | 78.3 | 83.4 | 90.4 | 90.3 | 90.3 | 12.0 | 5.1 |
| 29 | 78.4 | 83.1 | 90.0 | 90.1 | 90.1 | 11.7 | 4.7 |
| 30 | 78.3 | 82.5 | 89.6 | 90.2 | 91.3 | 11.9 | 4.2 |
| 31 | 78.0 | 82.2 | 88.8 | 90.1 | 91.5 | 12.1 | 4.2 |
| 32 | 77.5 | 82.1 | 88.2 | 89.9 | 91.4 | 12.4 | 4.6 |
| 33 | 77.4 | 81.9 | 87.6 | 89.7 | 91.0 | 12.3 | 4.5 |
| 34 | 77.4 | 81.7 | 87.1 | 89.5 | 90.7 | 12.1 | 4.3 |
| 35 | 77.3 | 81.4 | 86.7 | 89.3 | 90.5 | 12.0 | 4.1 |
| 36 | 76.4 | 80.9 | 86.0 | 88.5 | 89.6 | 12.1 | 4.5 |
| 37 | 75.3 | 80.2 | 85.4 | 87.6 | 87.6 | 12.3 | 4.9 |
| 38 | 74.0 | 79.2 | 84.6 | 86.6 | 87.7 | 12.6 | 5.2 |
| 39 | 73.3 | 78.5 | 84.2 | 86.4 | 88.1 | 13.1 | 5.2 |
| 40 | 72.8 | 78.1 | 83.4 | 85.9 | 87.9 | 13.1 | 5.3 |
| 41 | 71.5 | 77.5 | 82.7 | 85.0 | 86.8 | 13.5 | 6.0 |

TABLE G-V

NOISE LEVEL TIME HISTORY DATA

SIKORSKY S-64

With truck

OCTOBER 28 1976

EVENT 51 6 DEGREE APPROACH MIC. CENTERLINE(HARD)

1/2 SECOND INTEGRATION VS NOISE INDEXES
(DB RE 20 MICRO PA)

| INT | DBA | DBD | OASPL | PNL | PNLT | PNL-DBA | DBD-DBA |
|---------|------|------|-------|-------|-------|---------|---------|
| 1 | 73.0 | 81.0 | 89.7 | 88.2 | 89.6 | 15.2 | 8.0 |
| 2 | 73.9 | 81.3 | 90.0 | 88.7 | 90.1 | 14.8 | 7.4 |
| 3 | 75.3 | 82.2 | 90.4 | 89.8 | 91.3 | 14.5 | 6.9 |
| 4 | 76.7 | 83.2 | 90.7 | 90.6 | 90.6 | 13.9 | 6.5 |
| 5 | 78.5 | 84.5 | 91.3 | 91.7 | 91.7 | 13.2 | 6.0 |
| 6 | 79.7 | 85.7 | 92.2 | 92.7 | 92.7 | 13.0 | 6.0 |
| 7 | 80.7 | 86.6 | 93.0 | 93.5 | 94.6 | 12.8 | 5.9 |
| 8 | 81.1 | 87.1 | 93.6 | 94.0 | 95.3 | 12.9 | 6.0 |
| 9 | 81.2 | 87.1 | 94.0 | 94.0 | 95.4 | 12.8 | 5.9 |
| 10 | 80.8 | 87.0 | 94.3 | 93.9 | 93.9 | 13.1 | 6.2 |
| 11 | 81.3 | 87.6 | 94.8 | 94.7 | 94.7 | 13.4 | 6.3 |
| 12 | 83.1 | 89.4 | 95.7 | 96.6 | 96.6 | 13.5 | 6.3 |
| 13 | 84.6 | 91.0 | 96.6 | 98.1 | 98.1 | 13.5 | 6.4 |
| 14 | 85.7 | 92.3 | 97.6 | 99.1 | 99.1 | 13.4 | 6.6 |
| 15 | 86.2 | 92.9 | 98.0 | 99.9 | 99.9 | 13.7 | 6.7 |
| 16 | 86.8 | 93.5 | 98.4 | 100.9 | 102.3 | 14.1 | 6.7 |
| 17 | 86.9 | 93.5 | 98.3 | 101.1 | 101.1 | 14.2 | 6.6 |
| 18 | 87.0 | 93.4 | 98.4 | 101.1 | 101.1 | 14.1 | 6.4 |
| OH → 19 | 86.8 | 93.0 | 98.2 | 100.6 | 100.6 | 13.8 | 6.2 |
| 20 | 86.5 | 92.8 | 98.1 | 100.1 | 100.1 | 13.6 | 6.3 |
| 21 | 86.0 | 92.3 | 97.9 | 99.8 | 99.8 | 13.8 | 6.3 |
| 22 | 85.5 | 91.8 | 98.0 | 99.3 | 99.3 | 13.8 | 6.3 |
| 23 | 84.7 | 90.9 | 98.3 | 98.6 | 98.6 | 13.9 | 6.2 |
| 24 | 83.9 | 90.0 | 98.5 | 97.9 | 97.9 | 14.0 | 6.1 |
| 25 | 82.7 | 88.3 | 98.1 | 96.7 | 96.7 | 14.0 | 6.1 |
| 26 | 82.0 | 87.9 | 97.2 | 95.7 | 95.7 | 13.7 | 5.9 |
| 27 | 81.3 | 87.3 | 95.9 | 95.1 | 96.1 | 13.8 | 6.0 |
| 28 | 81.4 | 87.8 | 95.1 | 95.4 | 95.4 | 14.0 | 6.4 |
| 29 | 81.4 | 87.8 | 94.4 | 95.6 | 95.6 | 14.2 | 6.4 |
| 30 | 81.3 | 87.4 | 93.6 | 95.4 | 96.4 | 14.1 | 6.1 |
| 31 | 80.0 | 86.0 | 92.3 | 94.2 | 94.2 | 14.2 | 6.0 |
| 32 | 79.0 | 84.8 | 91.4 | 92.7 | 92.7 | 13.7 | 5.8 |
| 33 | 78.0 | 83.8 | 90.5 | 91.4 | 91.4 | 13.4 | 5.8 |
| 34 | 77.1 | 83.0 | 90.1 | 90.7 | 91.8 | 13.6 | 5.9 |
| 35 | 75.2 | 81.6 | 89.1 | 89.6 | 89.6 | 14.4 | 6.4 |
| 36 | 73.0 | 80.4 | 88.3 | 88.7 | 88.7 | 15.7 | 7.4 |
| 37 | 72.3 | 79.5 | 87.1 | 88.2 | 89.3 | 15.9 | 7.2 |

TABLE G-V

NOISE LEVEL TIME HISTORY DATA

SIKORSKY S-64

With truck

OCTOBER 28 1976

EVENT 55 85 KT. FLY BY MIC.CENTERLINE(HARD)

1/2 SECOND INTEGRATION VS NOISE INDEXES
(DB RE 20 MICRO PA)

| INT | DBA | DBD | OASPL | PNL | PNLT | PNL-DBA | DBD-DBA |
|---------|------|------|-------|------|------|---------|---------|
| 1 | 70.6 | 78.8 | 91.0 | 86.5 | 87.7 | 15.9 | 8.2 |
| 2 | 71.6 | 79.5 | 91.4 | 87.1 | 87.1 | 15.5 | 7.9 |
| 3 | 73.1 | 80.5 | 91.9 | 87.9 | 87.9 | 14.8 | 7.4 |
| 4 | 74.3 | 81.1 | 92.1 | 88.8 | 90.3 | 14.5 | 6.8 |
| 5 | 74.8 | 81.5 | 92.1 | 89.2 | 90.6 | 14.4 | 6.7 |
| 6 | 76.1 | 82.6 | 92.1 | 90.2 | 90.2 | 14.1 | 6.5 |
| 7 | 76.7 | 83.2 | 92.4 | 90.7 | 90.7 | 14.0 | 6.5 |
| 8 | 77.5 | 83.9 | 93.3 | 91.4 | 91.4 | 13.9 | 6.4 |
| 9 | 78.5 | 84.6 | 94.2 | 91.9 | 91.9 | 13.4 | 6.1 |
| 10 | 80.0 | 85.7 | 95.3 | 93.3 | 93.3 | 13.3 | 5.7 |
| 11 | 80.8 | 86.4 | 95.9 | 93.7 | 93.7 | 12.9 | 5.6 |
| 12 | 81.8 | 87.2 | 96.2 | 94.7 | 94.7 | 12.9 | 5.4 |
| 13 | 82.4 | 87.9 | 95.7 | 95.4 | 95.4 | 13.0 | 5.5 |
| 14 | 83.4 | 88.7 | 95.0 | 96.5 | 96.5 | 13.1 | 5.3 |
| 15 | 83.8 | 89.2 | 94.0 | 96.7 | 96.7 | 12.9 | 5.4 |
| OH → 16 | 84.4 | 89.3 | 92.8 | 96.5 | 96.5 | 12.1 | 4.9 |
| 17 | 84.2 | 88.9 | 91.9 | 96.1 | 96.1 | 11.9 | 4.7 |
| 18 | 84.0 | 88.4 | 91.8 | 95.7 | 95.7 | 11.7 | 4.4 |
| 19 | 83.3 | 87.5 | 92.3 | 94.7 | 94.7 | 11.4 | 4.2 |
| 20 | 82.6 | 86.9 | 93.0 | 93.9 | 93.9 | 11.3 | 4.3 |
| 21 | 82.0 | 86.3 | 93.8 | 93.5 | 93.5 | 11.5 | 4.3 |
| 22 | 81.2 | 85.8 | 93.7 | 92.9 | 92.9 | 11.7 | 4.6 |
| 23 | 80.5 | 84.8 | 92.7 | 92.1 | 92.1 | 11.6 | 4.3 |
| 24 | 79.0 | 83.2 | 91.1 | 91.0 | 91.0 | 12.0 | 4.2 |
| 25 | 77.8 | 82.2 | 90.2 | 90.0 | 90.0 | 12.2 | 4.4 |
| 26 | 76.1 | 81.1 | 89.4 | 88.7 | 88.7 | 12.6 | 5.0 |
| 27 | 75.5 | 80.8 | 88.3 | 88.4 | 88.4 | 12.9 | 5.3 |
| 28 | 74.5 | 80.0 | 87.0 | 87.6 | 87.6 | 13.1 | 5.5 |
| 29 | 74.4 | 79.9 | 86.2 | 87.4 | 87.4 | 13.0 | 5.5 |
| 30 | 73.8 | 79.2 | 85.2 | 86.9 | 88.2 | 13.1 | 5.4 |
| 31 | 73.3 | 78.8 | 84.3 | 86.4 | 87.7 | 13.1 | 5.5 |
| 32 | 72.0 | 77.9 | 83.3 | 85.2 | 85.2 | 13.2 | 5.9 |

TABLE G-V

NOISE LEVEL TIME HISTORY DATA

SIKORSKY S-64

With truck

OCTOBER 28 1976

EVENT 66 85 KT. FLY BY MIC. CENTERLINE (HARD)

1/2 SECOND INTEGRATION VS NOISE INDEXES
(DB RE 20 MICRO PA)

| INT | DBA | DBD | OASPL | PNL | PNLT | PNL-DBA | DBD-DBA |
|---------|------|------|-------|------|------|---------|---------|
| 1 | 74.1 | 80.9 | 91.0 | 89.5 | 90.8 | 15.4 | 6.8 |
| 2 | 73.7 | 81.0 | 91.9 | 89.4 | 90.4 | 15.7 | 7.3 |
| 3 | 74.2 | 81.5 | 92.6 | 89.4 | 89.4 | 15.2 | 7.3 |
| 4 | 76.1 | 82.5 | 93.2 | 90.3 | 90.3 | 14.2 | 6.4 |
| 5 | 77.7 | 83.5 | 94.2 | 91.4 | 91.4 | 13.7 | 5.8 |
| 6 | 78.7 | 84.5 | 95.5 | 92.6 | 92.6 | 13.9 | 5.8 |
| 7 | 80.1 | 85.6 | 96.7 | 93.5 | 93.5 | 13.4 | 5.5 |
| 8 | 81.1 | 86.8 | 97.2 | 94.5 | 94.5 | 13.4 | 5.7 |
| 9 | 82.8 | 88.2 | 97.5 | 96.4 | 96.4 | 13.6 | 5.4 |
| 10 | 83.7 | 89.1 | 97.3 | 97.4 | 97.4 | 13.7 | 5.4 |
| OH → 11 | 84.7 | 90.0 | 96.9 | 98.1 | 98.1 | 13.4 | 5.3 |
| 12 | 85.3 | 90.2 | 95.7 | 97.8 | 97.8 | 12.5 | 4.9 |
| 13 | 85.3 | 89.9 | 94.5 | 97.8 | 97.8 | 12.5 | 4.6 |
| 14 | 84.8 | 89.3 | 92.9 | 97.1 | 97.1 | 12.3 | 4.5 |
| 15 | 83.6 | 88.1 | 92.7 | 95.9 | 95.9 | 12.3 | 4.5 |
| 16 | 82.8 | 87.4 | 92.9 | 94.4 | 94.4 | 11.6 | 4.6 |
| 17 | 82.1 | 86.6 | 93.0 | 93.7 | 93.7 | 11.6 | 4.5 |
| 18 | 81.7 | 86.0 | 92.5 | 93.2 | 94.5 | 11.5 | 4.3 |
| 19 | 80.9 | 85.0 | 91.2 | 92.3 | 93.8 | 11.4 | 4.1 |
| 20 | 80.0 | 84.0 | 89.8 | 91.5 | 93.0 | 11.5 | 4.0 |
| 21 | 79.4 | 83.5 | 88.7 | 90.9 | 90.9 | 11.5 | 4.1 |
| 22 | 78.8 | 82.6 | 87.7 | 90.2 | 90.2 | 11.4 | 3.8 |
| 23 | 77.5 | 81.7 | 87.0 | 89.4 | 89.4 | 11.9 | 4.2 |
| 24 | 76.0 | 80.6 | 86.5 | 88.5 | 89.8 | 12.5 | 4.6 |
| 25 | 75.0 | 80.4 | 86.4 | 88.1 | 89.5 | 13.1 | 5.4 |
| 26 | 75.3 | 80.6 | 86.1 | 88.2 | 89.9 | 12.9 | 5.3 |
| 27 | 75.0 | 80.3 | 85.7 | 88.1 | 89.6 | 13.1 | 5.3 |
| 28 | 74.7 | 79.9 | 85.1 | 87.9 | 89.7 | 13.2 | 5.2 |

TABLE G-V

NOISE LEVEL TIME HISTORY DATA

SIKORSKY S-64

With truck

OCTOBER 28 1976

EVENT 67 95 KT. FLY BY MIC. CENTERLINE (HARD)

1/2 SECOND INTEGRATION VS NOISE INDEXES
(DB RE 20 MICRO PA)

| INT | DBA | DBD | OASPL | PNL | PNLT | PNL-DBA | DBD-DBA |
|---------|------|------|-------|------|------|---------|---------|
| 1 | 70.9 | 79.5 | 92.0 | 86.4 | 86.4 | 15.5 | 8.6 |
| 2 | 72.8 | 80.6 | 93.0 | 87.3 | 87.3 | 14.5 | 7.8 |
| 3 | 75.0 | 82.0 | 93.7 | 88.9 | 90.3 | 13.9 | 7.0 |
| 4 | 76.9 | 83.0 | 94.7 | 90.4 | 90.4 | 13.5 | 6.1 |
| 5 | 78.4 | 84.4 | 95.7 | 92.0 | 92.0 | 13.6 | 6.0 |
| 6 | 79.3 | 85.6 | 96.9 | 93.2 | 93.2 | 13.9 | 6.3 |
| 7 | 81.6 | 87.5 | 97.9 | 94.8 | 95.5 | 13.2 | 5.9 |
| 8 | 83.3 | 89.1 | 98.4 | 96.9 | 97.7 | 13.6 | 5.8 |
| 9 | 85.0 | 90.5 | 98.3 | 98.5 | 99.0 | 13.5 | 5.5 |
| 10 | 85.9 | 91.3 | 97.7 | 99.1 | 99.1 | 13.2 | 5.4 |
| OH → 11 | 86.5 | 91.7 | 96.6 | 99.2 | 99.2 | 12.7 | 5.2 |
| 12 | 86.6 | 91.6 | 95.5 | 98.8 | 98.8 | 12.2 | 5.0 |
| 13 | 86.8 | 91.3 | 94.4 | 98.6 | 98.6 | 11.8 | 4.5 |
| 14 | 86.4 | 90.7 | 94.0 | 97.8 | 97.8 | 11.4 | 4.3 |
| 15 | 85.5 | 89.7 | 93.2 | 96.4 | 96.4 | 10.9 | 4.2 |
| 16 | 84.0 | 88.0 | 92.1 | 94.8 | 94.8 | 10.8 | 4.0 |
| 17 | 82.4 | 86.3 | 90.6 | 93.4 | 93.4 | 11.0 | 3.9 |
| 18 | 81.3 | 85.1 | 89.6 | 92.6 | 92.6 | 11.3 | 3.8 |
| 19 | 80.7 | 84.9 | 89.2 | 92.1 | 92.1 | 11.4 | 4.2 |
| 20 | 80.8 | 84.9 | 88.6 | 92.0 | 92.0 | 11.2 | 4.1 |
| 21 | 80.4 | 84.8 | 88.1 | 91.9 | 92.9 | 11.5 | 4.4 |
| 22 | 79.3 | 83.8 | 87.4 | 91.1 | 91.1 | 11.8 | 4.5 |
| 23 | 77.9 | 82.8 | 87.2 | 90.4 | 90.4 | 12.5 | 4.9 |
| 24 | 77.2 | 81.9 | 86.7 | 90.0 | 91.2 | 12.8 | 4.7 |
| 25 | 76.8 | 81.3 | 86.0 | 89.7 | 90.9 | 12.9 | 4.5 |
| 26 | 75.9 | 80.7 | 85.5 | 89.0 | 90.2 | 13.1 | 4.8 |
| 27 | 74.7 | 80.1 | 84.9 | 88.3 | 89.4 | 13.6 | 5.4 |
| 28 | 73.4 | 79.6 | 84.5 | 87.7 | 89.2 | 14.3 | 6.2 |

TABLE G-V

NOISE LEVEL TIME HISTORY DATA

SIKORSKY S-64

With Truck

OCTOBER 28 1976

EVENT 68 95 KT. FLY BY MIC. CENTERLINE (HARD)

1/2 SECOND INTEGRATION VS NOISE INDEXES
(DB RE 20 MICRO PA)

| INT | DBA | DBD | OASPL | PNL | PNLT | PNL-DBA | DED-DBA |
|---------|------|------|-------|------|------|---------|---------|
| 1 | 72.4 | 81.6 | 94.0 | 38.8 | 90.2 | 16.4 | 9.2 |
| 2 | 74.0 | 82.5 | 95.1 | 89.7 | 89.7 | 15.7 | 8.5 |
| 3 | 74.4 | 82.8 | 95.8 | 90.1 | 90.1 | 15.7 | 8.4 |
| 4 | 75.6 | 83.9 | 96.7 | 91.4 | 91.4 | 15.8 | 8.3 |
| 5 | 78.1 | 85.5 | 97.6 | 92.9 | 92.9 | 14.8 | 7.4 |
| 6 | 80.0 | 86.8 | 98.5 | 94.0 | 95.4 | 14.0 | 6.8 |
| 7 | 81.5 | 88.0 | 99.1 | 94.8 | 94.8 | 13.3 | 6.5 |
| 8 | 82.0 | 88.0 | 99.1 | 95.0 | 95.0 | 13.0 | 6.0 |
| 9 | 82.2 | 88.3 | 98.8 | 95.7 | 95.7 | 13.5 | 6.1 |
| 10 | 83.1 | 88.8 | 98.4 | 96.8 | 96.8 | 13.7 | 5.7 |
| 11 | 84.2 | 89.8 | 97.8 | 97.8 | 97.8 | 13.6 | 5.6 |
| 12 | 85.8 | 90.6 | 96.6 | 98.4 | 98.4 | 12.6 | 4.8 |
| OH → 13 | 86.5 | 90.8 | 94.6 | 97.9 | 97.9 | 11.4 | 4.3 |
| 14 | 86.7 | 90.8 | 93.3 | 97.9 | 97.9 | 11.2 | 4.1 |
| 15 | 86.2 | 90.2 | 92.8 | 97.3 | 97.3 | 11.1 | 4.0 |
| 16 | 85.5 | 89.8 | 93.3 | 96.9 | 96.9 | 11.4 | 4.3 |
| 17 | 84.2 | 88.7 | 93.5 | 95.7 | 95.7 | 11.5 | 4.5 |
| 18 | 83.2 | 87.7 | 93.1 | 94.6 | 94.6 | 11.4 | 4.5 |
| 19 | 81.9 | 86.2 | 92.0 | 93.5 | 93.5 | 11.6 | 4.3 |
| 20 | 80.8 | 85.0 | 90.5 | 92.6 | 92.6 | 11.8 | 4.2 |
| 21 | 79.4 | 84.2 | 89.4 | 91.6 | 91.6 | 12.2 | 4.8 |
| 22 | 78.2 | 83.3 | 88.3 | 90.3 | 90.3 | 12.1 | 5.1 |
| 23 | 77.5 | 82.4 | 87.6 | 89.6 | 89.6 | 12.1 | 4.9 |
| 24 | 77.0 | 81.7 | 86.7 | 89.2 | 90.2 | 12.2 | 4.7 |
| 25 | 76.5 | 81.5 | 86.1 | 88.9 | 88.9 | 12.4 | 5.0 |
| 26 | 76.3 | 81.3 | 85.4 | 88.7 | 88.7 | 12.4 | 5.0 |
| 27 | 76.3 | 81.0 | 85.5 | 88.9 | 88.9 | 12.6 | 4.7 |
| 28 | 76.1 | 80.7 | 85.1 | 88.7 | 90.2 | 12.6 | 4.6 |

TABLE G-IV

NOISE LEVEL TIME HISTORY DATA

SIKORSKY S-64

With truck

OCTOBER 28 1976

EVENT 69 95 KT. FLY BY MIC. CENTERLINE (HARD)

1/2 SECOND INTEGRATION VS NOISE INDEXES
(DB RE 20 MICRO PA)

| INT | DBA | DBD | OASPL | PNL | PNLT | PNL-DBA | DBD-DBA |
|---------|------|------|-------|------|------|---------|---------|
| 1 | 72.8 | 80.7 | 93.0 | 88.8 | 88.8 | 16.0 | 7.9 |
| 2 | 73.3 | 81.2 | 93.5 | 89.1 | 89.1 | 15.8 | 7.9 |
| 3 | 74.9 | 82.2 | 94.3 | 90.2 | 90.2 | 15.3 | 7.3 |
| 4 | 76.9 | 83.9 | 95.3 | 91.4 | 91.4 | 14.5 | 7.0 |
| 5 | 79.5 | 85.8 | 96.5 | 93.1 | 93.1 | 13.6 | 6.3 |
| 6 | 82.1 | 87.9 | 97.2 | 95.7 | 96.4 | 13.6 | 5.8 |
| 7 | 83.9 | 89.5 | 97.5 | 97.5 | 98.1 | 13.6 | 5.6 |
| 8 | 85.6 | 90.8 | 97.0 | 98.5 | 98.5 | 12.9 | 5.2 |
| 9 | 86.5 | 91.8 | 96.1 | 98.9 | 98.9 | 12.4 | 5.3 |
| OH → 10 | 86.6 | 91.6 | 94.7 | 98.4 | 98.4 | 11.8 | 5.0 |
| 11 | 86.3 | 90.9 | 93.3 | 98.0 | 98.0 | 11.7 | 4.6 |
| 12 | 86.1 | 90.4 | 92.6 | 97.6 | 97.6 | 11.5 | 4.3 |
| 13 | 85.9 | 90.2 | 92.0 | 97.0 | 97.0 | 11.1 | 4.3 |
| 14 | 84.7 | 89.2 | 91.2 | 95.8 | 95.8 | 11.1 | 4.5 |
| 15 | 82.5 | 86.9 | 89.8 | 93.7 | 94.9 | 11.2 | 4.4 |
| 16 | 80.3 | 84.8 | 88.6 | 92.0 | 92.0 | 11.7 | 4.5 |
| 17 | 79.5 | 84.1 | 88.1 | 91.4 | 91.4 | 11.9 | 4.6 |
| 18 | 78.6 | 83.2 | 87.5 | 90.5 | 90.5 | 11.9 | 4.6 |
| 19 | 77.4 | 82.3 | 86.8 | 89.7 | 89.7 | 12.3 | 4.9 |
| 20 | 76.2 | 81.2 | 86.0 | 88.6 | 88.6 | 12.4 | 5.0 |
| 21 | 75.0 | 80.4 | 85.1 | 88.0 | 88.0 | 13.0 | 5.4 |
| 22 | 74.4 | 80.0 | 84.5 | 87.4 | 88.6 | 13.0 | 5.6 |
| 23 | 74.3 | 79.7 | 84.0 | 87.3 | 88.6 | 13.0 | 5.4 |

TABLE G-II

NOISE LEVEL TIME HISTORY DATA

SIKORSKY S-64

with truck

OCTOBER 28 1976

EVENT 70 3 DEGREE APPROACH MIC. CENTERLINE(HARD)

1/2 SECOND INTEGRATION VS NOISE INDEXES
(DB RE 20 MICRO PA)

| INT | DBA | DBD | OASPL | PNL | PNLT | PNL-DBA | DBD-DBA |
|---------|------|------|-------|-------|-------|---------|---------|
| 1 | 73.2 | 81.0 | 90.0 | 88.8 | 89.9 | 15.6 | 7.8 |
| 2 | 74.5 | 81.6 | 90.3 | 89.3 | 89.3 | 14.8 | 7.1 |
| 3 | 77.0 | 83.1 | 90.9 | 91.3 | 91.3 | 14.3 | 6.1 |
| 4 | 79.3 | 84.6 | 91.3 | 92.6 | 92.6 | 13.3 | 5.3 |
| 5 | 80.0 | 85.2 | 91.6 | 92.9 | 94.1 | 12.9 | 5.2 |
| 6 | 80.3 | 85.6 | 92.1 | 92.9 | 94.4 | 12.6 | 5.3 |
| 7 | 79.9 | 85.5 | 92.3 | 93.0 | 94.4 | 13.1 | 5.6 |
| 8 | 80.7 | 86.2 | 92.9 | 93.8 | 93.8 | 13.1 | 5.5 |
| 9 | 82.0 | 87.5 | 93.8 | 94.8 | 94.8 | 12.8 | 5.5 |
| 10 | 82.5 | 88.0 | 94.4 | 95.1 | 95.1 | 12.6 | 5.5 |
| 11 | 82.6 | 88.4 | 95.0 | 95.5 | 96.7 | 12.9 | 5.8 |
| 12 | 82.1 | 88.2 | 95.4 | 95.5 | 96.1 | 13.4 | 6.1 |
| 13 | 82.9 | 89.2 | 96.1 | 96.6 | 97.3 | 13.7 | 6.3 |
| 14 | 83.8 | 90.1 | 96.8 | 97.4 | 98.1 | 13.6 | 6.3 |
| 15 | 84.9 | 91.3 | 97.8 | 98.5 | 99.0 | 13.6 | 6.4 |
| 16 | 85.5 | 92.0 | 98.4 | 99.3 | 99.3 | 13.8 | 6.5 |
| 17 | 86.0 | 92.6 | 98.8 | 100.0 | 100.0 | 14.0 | 6.6 |
| 18 | 87.1 | 93.2 | 99.0 | 100.6 | 100.6 | 13.5 | 6.1 |
| 19 | 87.9 | 93.8 | 99.2 | 101.2 | 101.2 | 13.3 | 5.9 |
| OH → 20 | 88.2 | 93.9 | 99.2 | 101.4 | 101.4 | 13.2 | 5.7 |
| 21 | 87.6 | 93.2 | 98.7 | 100.9 | 100.9 | 13.3 | 5.6 |
| 22 | 86.6 | 91.9 | 98.8 | 99.8 | 99.8 | 13.2 | 5.3 |
| 23 | 85.9 | 91.0 | 99.3 | 98.3 | 98.3 | 12.4 | 5.1 |
| 24 | 85.2 | 90.3 | 99.5 | 97.5 | 97.5 | 12.3 | 5.1 |
| 25 | 84.6 | 89.9 | 98.8 | 96.9 | 98.0 | 12.3 | 5.3 |
| 26 | 83.7 | 89.2 | 97.6 | 96.1 | 97.5 | 12.4 | 5.5 |
| 27 | 83.1 | 88.2 | 96.2 | 95.2 | 96.8 | 12.1 | 5.1 |
| 28 | 82.5 | 87.5 | 95.4 | 94.7 | 96.1 | 12.2 | 5.0 |
| 29 | 82.1 | 86.5 | 94.1 | 94.0 | 95.1 | 11.9 | 4.4 |
| 30 | 81.7 | 86.2 | 93.1 | 93.6 | 94.8 | 11.9 | 4.5 |
| 31 | 81.4 | 85.7 | 91.9 | 93.2 | 94.6 | 11.8 | 4.3 |
| 32 | 80.9 | 85.1 | 91.0 | 92.8 | 94.5 | 11.9 | 4.2 |
| 33 | 80.4 | 84.6 | 90.6 | 92.5 | 94.1 | 12.1 | 4.2 |
| 34 | 79.5 | 83.7 | 90.1 | 91.6 | 92.8 | 12.1 | 4.2 |
| 35 | 78.4 | 82.9 | 89.5 | 90.5 | 90.5 | 12.1 | 4.5 |
| 36 | 76.8 | 81.9 | 88.1 | 89.2 | 89.2 | 12.4 | 5.1 |
| 37 | 75.1 | 81.0 | 87.4 | 88.1 | 89.2 | 13.0 | 5.9 |
| 38 | 73.6 | 80.0 | 86.3 | 87.3 | 88.5 | 13.7 | 6.4 |

TABLE G-V

NOISE LEVEL TIME HISTORY DATA

SIKORSKY S-64

with truck

OCTOBER 28 1976

EVENT 67 95 KT. FLY BY MIC. CENTERLINE(SOFT)

1/2 SECOND INTEGRATION VS NOISE INDEXES
(DB RE 20 MICRO PA)

| INT | DBA | DBD | OASPL | PNL | PNLT | PNL-DBA | DBD-DBA |
|---------|------|------|-------|------|------|---------|---------|
| 1 | 69.2 | 77.8 | 90.6 | 86.1 | 86.1 | 16.9 | 8.6 |
| 2 | 70.3 | 78.5 | 91.1 | 86.5 | 86.5 | 16.2 | 8.2 |
| 3 | 74.1 | 80.1 | 92.2 | 88.2 | 89.6 | 14.1 | 6.0 |
| 4 | 76.2 | 81.7 | 93.4 | 89.7 | 91.2 | 13.5 | 5.5 |
| 5 | 77.5 | 83.0 | 94.5 | 91.0 | 91.0 | 13.5 | 5.5 |
| 6 | 78.8 | 84.4 | 95.6 | 92.2 | 92.2 | 13.4 | 5.6 |
| 7 | 81.0 | 86.7 | 96.6 | 94.4 | 94.4 | 13.4 | 5.7 |
| 8 | 83.5 | 89.0 | 97.2 | 96.8 | 96.8 | 13.3 | 5.5 |
| 9 | 85.3 | 90.3 | 97.3 | 98.2 | 98.2 | 12.9 | 5.0 |
| OH → 10 | 85.8 | 90.8 | 96.8 | 98.5 | 98.5 | 12.7 | 5.0 |
| 11 | 86.3 | 90.9 | 95.9 | 98.6 | 98.6 | 12.3 | 4.6 |
| 12 | 86.1 | 90.9 | 94.8 | 98.9 | 98.9 | 12.8 | 4.8 |
| 13 | 85.8 | 90.3 | 93.4 | 98.3 | 98.3 | 12.5 | 4.5 |
| 14 | 84.6 | 89.0 | 92.1 | 96.6 | 96.6 | 12.0 | 4.4 |
| 15 | 83.4 | 87.4 | 91.1 | 95.0 | 95.0 | 11.6 | 4.0 |
| 16 | 82.1 | 86.1 | 90.5 | 93.5 | 93.5 | 11.4 | 4.0 |
| 17 | 80.9 | 85.0 | 89.5 | 92.7 | 92.7 | 11.8 | 4.1 |
| 18 | 80.0 | 83.9 | 88.7 | 91.7 | 91.7 | 11.7 | 3.9 |
| 19 | 79.8 | 83.6 | 87.9 | 91.3 | 91.3 | 11.5 | 3.8 |
| 20 | 79.4 | 83.4 | 87.3 | 90.9 | 90.9 | 11.5 | 4.0 |
| 21 | 78.3 | 82.5 | 86.7 | 90.0 | 90.0 | 11.7 | 4.2 |
| 22 | 77.5 | 81.7 | 86.0 | 89.3 | 90.5 | 11.8 | 4.2 |
| 23 | 77.0 | 81.4 | 85.6 | 89.4 | 90.8 | 12.4 | 4.4 |
| 24 | 76.4 | 80.7 | 85.0 | 89.2 | 90.2 | 12.8 | 4.3 |
| 25 | 74.8 | 79.4 | 84.4 | 88.0 | 89.5 | 13.2 | 4.6 |
| 26 | 72.8 | 78.2 | 83.6 | 86.9 | 88.5 | 14.1 | 5.4 |
| 27 | 72.3 | 78.0 | 83.2 | 86.8 | 88.1 | 14.5 | 5.7 |

TABLE G-V

NOISE LEVEL TIME HISTORY DATA

SIKORSKY S-64

with truck

OCTOBER 28 1976

EVENT 68 95 KT. FLY BY MIC. CENTERLINE(SOFT)

1/2 SECOND INTEGRATION VS NOISE INDEXES
(DB RE 20 MICRO PA)

| INT | DBA | DBD | OASPL | PNL | PNLT | PNL-DBA | DBD-DBA |
|---------|------|------|-------|------|------|---------|---------|
| 1 | 69.3 | 78.6 | 91.8 | 86.5 | 86.5 | 17.2 | 9.3 |
| 2 | 70.9 | 79.7 | 92.9 | 87.6 | 87.6 | 16.7 | 8.8 |
| 3 | 72.1 | 80.5 | 93.6 | 88.6 | 88.6 | 16.5 | 8.4 |
| 4 | 74.4 | 82.0 | 94.7 | 89.9 | 89.9 | 15.5 | 7.6 |
| 5 | 77.1 | 83.9 | 95.8 | 91.3 | 92.8 | 14.2 | 6.8 |
| 6 | 80.3 | 86.1 | 97.0 | 93.4 | 93.4 | 13.1 | 5.8 |
| 7 | 81.2 | 86.8 | 97.6 | 94.0 | 94.0 | 12.8 | 5.6 |
| 8 | 81.9 | 87.7 | 97.7 | 95.2 | 95.2 | 13.3 | 5.8 |
| 9 | 81.8 | 87.9 | 97.6 | 95.7 | 95.7 | 13.9 | 6.1 |
| 10 | 82.9 | 88.8 | 97.7 | 96.7 | 96.7 | 13.8 | 5.9 |
| 11 | 84.0 | 89.6 | 97.4 | 97.4 | 97.4 | 13.4 | 5.6 |
| 12 | 84.9 | 89.8 | 96.5 | 97.6 | 97.6 | 12.7 | 4.9 |
| OH → 13 | 85.3 | 89.8 | 94.9 | 97.6 | 97.6 | 12.3 | 4.5 |
| 14 | 85.3 | 89.4 | 93.3 | 97.6 | 97.6 | 12.3 | 4.1 |
| 15 | 84.7 | 88.8 | 92.1 | 96.7 | 96.7 | 12.0 | 4.1 |
| 16 | 84.1 | 88.0 | 91.7 | 95.5 | 95.5 | 11.4 | 3.9 |
| 17 | 82.7 | 86.6 | 91.6 | 94.1 | 94.1 | 11.4 | 3.9 |
| 18 | 81.3 | 85.4 | 91.4 | 93.1 | 93.1 | 11.8 | 4.1 |
| 19 | 79.5 | 84.0 | 90.3 | 91.2 | 91.2 | 11.7 | 4.5 |
| 20 | 78.0 | 82.7 | 88.9 | 90.3 | 90.3 | 12.3 | 4.7 |
| 21 | 77.2 | 81.8 | 87.9 | 89.8 | 89.8 | 12.6 | 4.6 |
| 22 | 76.5 | 80.8 | 86.9 | 88.8 | 88.8 | 12.3 | 4.3 |
| 23 | 76.4 | 80.7 | 86.3 | 88.6 | 88.6 | 12.2 | 4.3 |
| 24 | 75.8 | 80.3 | 85.2 | 88.1 | 88.1 | 12.3 | 4.5 |
| 25 | 75.3 | 79.8 | 84.5 | 87.7 | 87.7 | 12.4 | 4.5 |
| 26 | 74.7 | 79.3 | 83.8 | 87.5 | 88.8 | 12.8 | 4.6 |
| 27 | 74.4 | 79.2 | 83.7 | 87.7 | 88.8 | 13.3 | 4.8 |
| 28 | 73.8 | 78.6 | 83.1 | 87.2 | 88.7 | 13.4 | 4.8 |

TABLE G-V

NOISE LEVEL TIME HISTORY DATA

SIKORSKY S-64

with truck

OCTOBER 28 1976

EVENT 69 95 KT. FLY BY MIC. CENTERLINE (SOFT)

1/2 SECOND INTEGRATION VS NOISE INDEXES
(DB RE 20 MICRO PA)

| INT | DBA | DBD | OASPL | PNL | PNLT | PNL-DBA | DBD-DBA |
|---------|------|------|-------|------|------|---------|---------|
| 1 | 70.4 | 79.0 | 91.5 | 87.5 | 87.5 | 17.1 | 8.6 |
| 2 | 72.1 | 80.2 | 92.4 | 88.3 | 89.5 | 16.2 | 8.1 |
| 3 | 74.0 | 81.4 | 93.1 | 89.2 | 89.2 | 15.2 | 7.4 |
| 4 | 75.5 | 82.8 | 94.2 | 90.2 | 90.2 | 14.7 | 7.3 |
| 5 | 77.8 | 84.5 | 95.4 | 91.7 | 91.7 | 13.9 | 6.7 |
| 6 | 80.8 | 86.8 | 96.3 | 94.3 | 94.3 | 13.5 | 6.0 |
| 7 | 83.4 | 88.8 | 96.7 | 96.6 | 96.6 | 13.2 | 5.4 |
| 8 | 84.9 | 90.1 | 96.5 | 97.6 | 97.6 | 12.7 | 5.2 |
| 9 | 85.5 | 90.4 | 95.9 | 97.8 | 97.8 | 12.3 | 4.9 |
| OH → 10 | 86.2 | 90.7 | 95.0 | 98.5 | 98.5 | 12.3 | 4.5 |
| 11 | 86.0 | 90.2 | 93.6 | 98.3 | 98.3 | 12.3 | 4.2 |
| 12 | 85.3 | 89.4 | 92.0 | 97.3 | 97.3 | 12.0 | 4.1 |
| 13 | 83.7 | 88.0 | 90.6 | 95.4 | 96.4 | 11.7 | 4.3 |
| 14 | 82.3 | 87.0 | 89.8 | 93.9 | 94.9 | 11.6 | 4.7 |
| 15 | 81.2 | 85.8 | 89.0 | 92.6 | 93.7 | 11.4 | 4.6 |
| 16 | 79.9 | 84.3 | 88.0 | 91.5 | 91.5 | 11.6 | 4.4 |
| 17 | 78.3 | 82.5 | 87.3 | 90.4 | 90.4 | 12.1 | 4.2 |
| 18 | 76.9 | 81.3 | 86.4 | 89.1 | 89.1 | 12.2 | 4.4 |
| 19 | 75.4 | 80.0 | 85.4 | 88.3 | 88.3 | 12.9 | 4.6 |
| 20 | 75.1 | 79.8 | 84.7 | 88.1 | 89.1 | 13.0 | 4.7 |
| 21 | 75.3 | 79.9 | 84.2 | 87.9 | 89.4 | 12.6 | 4.6 |

TABLE G-IV

NOISE LEVEL TIME HISTORY DATA

SIKORSKY S-64

Without truck

OCTOBER 28 1976

EVENT 80 105 KT. FLY BY MIC. 150 METERS WEST

1/2 SECOND INTEGRATION VS NOISE INDEXES
(DB RE 20 MICRO PA)

| INT | DBA | DBD | OASPL | PNL | PNLT | PNL-DBA | DBD-DBA |
|---------|------|------|-------|------|------|---------|---------|
| 1 | 71.4 | 79.5 | 89.3 | 88.0 | 89.5 | 16.6 | 8.1 |
| 2 | 72.9 | 80.2 | 89.8 | 88.7 | 89.7 | 15.8 | 7.3 |
| 3 | 74.0 | 81.2 | 90.7 | 89.7 | 89.7 | 15.7 | 7.2 |
| 4 | 75.9 | 82.2 | 91.0 | 90.6 | 92.0 | 14.7 | 6.3 |
| 5 | 77.8 | 83.7 | 91.4 | 91.9 | 93.2 | 14.1 | 5.9 |
| 6 | 80.1 | 85.1 | 91.6 | 93.2 | 93.2 | 13.1 | 5.0 |
| 7 | 81.7 | 86.5 | 91.6 | 94.1 | 94.1 | 12.4 | 4.8 |
| 8 | 83.7 | 87.9 | 91.4 | 94.9 | 94.9 | 11.2 | 4.2 |
| 9 | 84.7 | 89.2 | 91.3 | 96.1 | 96.1 | 11.4 | 4.5 |
| 10 | 85.4 | 89.7 | 91.5 | 96.6 | 96.6 | 11.2 | 4.3 |
| 11 | 85.8 | 90.0 | 92.1 | 97.3 | 97.3 | 11.5 | 4.2 |
| OH → 12 | 86.7 | 90.3 | 92.7 | 98.1 | 98.1 | 11.4 | 3.6 |
| 13 | 86.8 | 90.6 | 93.3 | 98.2 | 98.2 | 11.4 | 3.8 |
| 14 | 86.5 | 90.4 | 93.2 | 97.7 | 97.7 | 11.2 | 3.9 |
| 15 | 85.4 | 89.8 | 93.2 | 96.9 | 96.9 | 11.5 | 4.4 |
| 16 | 84.7 | 88.9 | 92.3 | 96.2 | 96.2 | 11.5 | 4.2 |
| 17 | 83.6 | 87.9 | 91.3 | 95.4 | 95.4 | 11.8 | 4.3 |
| 18 | 82.1 | 86.4 | 89.6 | 93.9 | 93.9 | 11.8 | 4.3 |
| 19 | 80.4 | 84.5 | 88.2 | 92.1 | 92.1 | 11.7 | 4.1 |
| 20 | 78.8 | 82.8 | 87.1 | 90.3 | 90.3 | 11.5 | 4.0 |
| 21 | 77.0 | 81.2 | 85.7 | 89.0 | 89.0 | 12.0 | 4.2 |
| 22 | 74.5 | 79.6 | 84.2 | 87.4 | 88.6 | 12.9 | 5.1 |
| 23 | 73.3 | 79.0 | 83.4 | 87.1 | 87.1 | 13.8 | 5.7 |
| 24 | 72.5 | 78.3 | 82.8 | 86.4 | 87.7 | 13.9 | 5.8 |

TABLE G-V
NOISE LEVEL TIME HISTORY DATA

SIKORSKY S-64
Without truck

OCTOBER 28 1976

EVENT 81 105 KT. FLY BY MIC. 150 METERS WEST

1/2 SECOND INTEGRATION VS NOISE INDEXES
(DB RE 20 MICRO PA)

| INT | DBA | DBD | OASPL | PNL | PNLT | PNL-DBA | DBD-DBA |
|---------|------|------|-------|------|------|---------|---------|
| 1 | 73.4 | 80.6 | 89.7 | 89.1 | 90.2 | 15.7 | 7.2 |
| 2 | 75.3 | 82.0 | 90.5 | 90.6 | 92.6 | 15.3 | 6.7 |
| 3 | 76.2 | 83.0 | 91.2 | 91.6 | 93.2 | 15.4 | 6.8 |
| 4 | 77.3 | 83.9 | 91.8 | 92.4 | 92.4 | 15.1 | 6.6 |
| 5 | 80.3 | 85.8 | 91.9 | 93.7 | 94.9 | 13.4 | 5.5 |
| 6 | 81.7 | 86.8 | 92.0 | 94.3 | 94.3 | 12.6 | 5.1 |
| 7 | 83.0 | 87.8 | 91.5 | 94.9 | 94.9 | 11.9 | 4.8 |
| 8 | 82.6 | 87.3 | 91.1 | 94.5 | 94.5 | 11.9 | 4.7 |
| 9 | 84.3 | 88.4 | 91.4 | 95.5 | 95.5 | 11.2 | 4.1 |
| 10 | 84.9 | 89.0 | 91.8 | 96.3 | 96.3 | 11.4 | 4.1 |
| 11 | 85.6 | 89.8 | 92.2 | 97.0 | 97.0 | 11.4 | 4.2 |
| 12 | 86.6 | 90.5 | 92.6 | 97.9 | 97.9 | 11.3 | 3.9 |
| OH → 13 | 87.7 | 91.4 | 93.1 | 98.6 | 98.6 | 10.9 | 3.7 |
| 14 | 87.5 | 91.2 | 93.2 | 98.5 | 98.5 | 11.0 | 3.7 |
| 15 | 86.0 | 89.9 | 92.3 | 97.3 | 97.3 | 11.3 | 3.9 |
| 16 | 83.7 | 87.9 | 91.4 | 95.5 | 95.5 | 11.8 | 4.2 |
| 17 | 83.8 | 87.6 | 90.5 | 95.3 | 95.3 | 11.5 | 3.8 |
| 18 | 83.5 | 87.0 | 89.6 | 95.1 | 95.1 | 11.6 | 3.5 |
| 19 | 82.6 | 85.9 | 88.1 | 94.0 | 94.0 | 11.4 | 3.3 |
| 20 | 79.9 | 83.6 | 86.3 | 91.6 | 91.6 | 11.7 | 3.7 |
| 21 | 78.4 | 82.4 | 85.2 | 89.8 | 89.8 | 11.4 | 4.0 |
| 22 | 77.4 | 81.7 | 84.6 | 89.2 | 90.4 | 11.8 | 4.3 |
| 23 | 76.9 | 81.2 | 84.0 | 89.0 | 90.2 | 12.1 | 4.3 |
| 24 | 76.2 | 80.4 | 83.2 | 88.6 | 88.6 | 12.4 | 4.2 |
| 25 | 74.9 | 79.5 | 82.7 | 87.6 | 88.7 | 12.7 | 4.6 |

TABLE G-II

NOISE LEVEL TIME HISTORY DATA

SIKORSKY S-64

Without truck

OCTOBER 28 1976

EVENT 80 105 KT. FLY BY MIC. 150 METERS EAST

1/2 SECOND INTEGRATION VS NOISE INDEXES
(DB RE 20 MICRO PA)

| INT | DBA | DBD | OASPL | PNL | PNLT | PNL-DBA | DBD-DBA |
|---------|------|------|-------|------|------|---------|---------|
| 1 | 67.4 | 77.3 | 89.2 | 84.9 | 84.9 | 17.5 | 9.9 |
| 2 | 68.9 | 78.0 | 89.8 | 85.5 | 85.5 | 16.6 | 9.1 |
| 3 | 73.1 | 79.6 | 90.8 | 87.1 | 87.1 | 14.0 | 6.5 |
| 4 | 74.0 | 80.6 | 91.8 | 87.8 | 87.8 | 13.8 | 6.6 |
| 5 | 75.5 | 81.4 | 92.5 | 88.8 | 90.0 | 13.3 | 5.9 |
| 6 | 77.2 | 82.5 | 93.1 | 90.2 | 91.8 | 13.0 | 5.3 |
| 7 | 78.5 | 83.3 | 93.5 | 91.1 | 92.7 | 12.6 | 4.8 |
| 8 | 79.3 | 84.0 | 94.0 | 92.0 | 92.0 | 12.7 | 4.7 |
| 9 | 80.5 | 85.2 | 94.3 | 93.1 | 93.1 | 12.6 | 4.7 |
| 10 | 81.8 | 86.2 | 94.7 | 93.9 | 93.9 | 12.1 | 4.4 |
| 11 | 82.9 | 87.2 | 95.2 | 94.3 | 94.3 | 11.4 | 4.3 |
| 12 | 82.9 | 87.2 | 95.5 | 94.4 | 94.4 | 11.5 | 4.3 |
| 13 | 82.6 | 87.0 | 95.1 | 94.4 | 94.4 | 11.8 | 4.4 |
| 14 | 82.3 | 86.9 | 94.3 | 94.2 | 94.2 | 11.9 | 4.6 |
| 15 | 83.2 | 87.9 | 93.6 | 95.0 | 95.0 | 11.8 | 4.7 |
| OH → 16 | 83.8 | 88.4 | 93.4 | 95.5 | 95.5 | 11.7 | 4.6 |
| 17 | 83.9 | 88.4 | 92.9 | 95.6 | 95.6 | 11.7 | 4.5 |
| 18 | 82.8 | 87.2 | 91.9 | 94.9 | 94.9 | 12.1 | 4.4 |
| 19 | 82.4 | 86.7 | 90.6 | 94.8 | 94.8 | 12.4 | 4.3 |
| 20 | 81.4 | 85.6 | 89.1 | 93.9 | 93.9 | 12.5 | 4.2 |
| 21 | 80.9 | 85.0 | 88.0 | 93.2 | 93.2 | 12.3 | 4.1 |
| 22 | 79.0 | 83.3 | 86.9 | 91.4 | 91.4 | 12.4 | 4.3 |
| 23 | 77.6 | 82.1 | 86.1 | 90.2 | 90.2 | 12.6 | 4.5 |
| 24 | 75.8 | 80.7 | 85.0 | 88.8 | 88.8 | 13.0 | 4.9 |
| 25 | 73.5 | 79.0 | 83.7 | 87.1 | 88.4 | 13.6 | 5.5 |
| 26 | 72.1 | 78.0 | 82.7 | 86.2 | 87.3 | 14.1 | 5.9 |
| 27 | 70.8 | 76.8 | 81.8 | 85.6 | 85.6 | 14.8 | 6.0 |
| 28 | 70.5 | 76.8 | 81.5 | 85.7 | 86.8 | 15.1 | 6.2 |

TABLE G-V

NOISE LEVEL TIME HISTORY DATA

SIKORSKY S-64

Without truck

OCTOBER 28 1976

EVENT 81 105 KT. FLY BY MIC. 150 METERS EAST

1/2 SECOND INTEGRATION VS NOISE INDEXES
(DB RE 20 MICRO PA)

| INT | DBA | DBD | OASPL | PNL | PNLT | PNL-DBA | DBD-DBA |
|---------|------|------|-------|------|------|---------|---------|
| 1 | 66.7 | 77.7 | 90.2 | 85.3 | 85.3 | 18.6 | 11.0 |
| 2 | 67.7 | 78.4 | 90.9 | 85.9 | 87.0 | 18.2 | 10.7 |
| 3 | 69.1 | 78.9 | 91.5 | 86.5 | 87.8 | 17.4 | 9.8 |
| 4 | 72.5 | 80.2 | 92.2 | 88.3 | 89.4 | 15.8 | 7.7 |
| 5 | 76.0 | 81.6 | 92.9 | 90.2 | 91.2 | 14.2 | 5.6 |
| 6 | 77.3 | 82.9 | 93.2 | 91.3 | 91.3 | 13.5 | 5.1 |
| 7 | 79.4 | 84.3 | 93.2 | 92.3 | 92.3 | 12.9 | 4.9 |
| 8 | 79.9 | 84.7 | 93.4 | 92.7 | 92.7 | 12.8 | 4.8 |
| 9 | 80.6 | 85.3 | 93.8 | 93.2 | 93.2 | 12.6 | 4.7 |
| 10 | 81.0 | 85.6 | 94.1 | 93.6 | 93.6 | 12.6 | 4.6 |
| 11 | 81.9 | 86.6 | 94.0 | 94.1 | 94.1 | 12.2 | 4.7 |
| 12 | 82.5 | 87.0 | 94.0 | 94.6 | 94.6 | 12.1 | 4.5 |
| 13 | 82.8 | 87.2 | 93.7 | 94.6 | 94.6 | 11.8 | 4.4 |
| OH → 14 | 82.8 | 86.9 | 93.1 | 94.3 | 94.3 | 11.5 | 4.1 |
| 15 | 82.2 | 86.2 | 91.7 | 93.6 | 93.6 | 11.4 | 4.0 |
| 16 | 81.2 | 85.4 | 90.2 | 92.9 | 92.9 | 11.7 | 4.2 |
| 17 | 80.6 | 84.9 | 89.1 | 92.5 | 92.5 | 11.9 | 4.3 |
| 18 | 80.5 | 84.8 | 88.4 | 92.6 | 92.6 | 12.1 | 4.3 |
| 19 | 80.8 | 84.9 | 87.8 | 92.8 | 92.8 | 12.0 | 4.1 |
| 20 | 79.7 | 84.1 | 86.7 | 92.0 | 92.0 | 12.3 | 4.4 |
| 21 | 78.5 | 83.0 | 85.7 | 90.8 | 90.8 | 12.3 | 4.5 |
| 22 | 75.9 | 80.7 | 84.4 | 88.9 | 88.9 | 13.0 | 4.8 |
| 23 | 74.7 | 79.7 | 83.8 | 87.9 | 89.0 | 13.2 | 5.0 |
| 24 | 73.3 | 78.6 | 83.5 | 87.1 | 88.5 | 13.8 | 5.3 |
| 25 | 73.2 | 78.3 | 83.3 | 87.1 | 88.1 | 13.9 | 5.1 |
| 26 | 73.2 | 78.3 | 83.3 | 86.9 | 86.9 | 13.7 | 5.1 |
| 27 | 72.6 | 77.6 | 82.7 | 86.3 | 86.3 | 13.7 | 5.0 |
| 28 | 71.3 | 77.0 | 82.1 | 85.5 | 85.5 | 14.2 | 5.7 |
| 29 | 69.5 | 75.8 | 81.0 | 84.2 | 84.2 | 14.7 | 6.3 |
| 30 | 68.7 | 75.3 | 80.5 | 83.8 | 83.8 | 15.1 | 6.6 |

TABLE G-V

NOISE LEVEL TIME HISTORY DATA

SIKORSKY S-64

Without truck

OCTOBER 28 1976

EVENT 74 6 DEGREE APPROACH MIC. CENTERLINE(HARD)

1/2 SECOND INTEGRATION VS NOISE INDEXES
(DB RE 20 MICRO PA)

| INT | DBA | DBD | OASPL | PNL | PNLT | PNL-DBA | DBD-DBA |
|----------|------|------|-------|-------|-------|---------|---------|
| 1 | 68.2 | 78.1 | 88.5 | 85.6 | 85.6 | 17.4 | 9.9 |
| 2 | 69.2 | 78.6 | 88.9 | 86.2 | 86.2 | 17.0 | 9.4 |
| 3 | 70.4 | 79.2 | 89.3 | 86.5 | 86.5 | 16.1 | 8.8 |
| 4 | 74.3 | 80.8 | 89.8 | 88.1 | 88.1 | 13.8 | 6.5 |
| 5 | 78.1 | 82.8 | 90.8 | 90.9 | 92.1 | 12.8 | 4.7 |
| 6 | 80.2 | 84.4 | 92.0 | 92.5 | 93.7 | 12.3 | 4.2 |
| 7 | 80.7 | 84.8 | 92.8 | 93.2 | 93.2 | 12.5 | 4.1 |
| 8 | 79.7 | 84.4 | 93.4 | 92.6 | 92.6 | 12.9 | 4.7 |
| 9 | 78.3 | 83.7 | 93.5 | 91.8 | 92.9 | 13.5 | 5.4 |
| 10 | 77.2 | 83.6 | 93.8 | 91.1 | 92.4 | 13.9 | 6.4 |
| 11 | 78.2 | 84.3 | 93.9 | 91.7 | 91.7 | 13.5 | 6.1 |
| 12 | 79.0 | 85.0 | 94.2 | 92.4 | 92.4 | 13.4 | 6.0 |
| 13 | 79.6 | 85.5 | 94.5 | 93.0 | 93.0 | 13.4 | 5.9 |
| 14 | 79.7 | 85.8 | 94.9 | 93.3 | 93.3 | 13.6 | 6.1 |
| 15 | 79.9 | 85.9 | 95.2 | 93.7 | 94.9 | 13.8 | 6.0 |
| 16 | 80.8 | 87.1 | 95.8 | 94.6 | 96.8 | 13.8 | 6.3 |
| 17 | 82.4 | 88.8 | 96.3 | 96.1 | 98.7 | 13.7 | 6.4 |
| 18 | 83.9 | 90.4 | 96.9 | 97.6 | 100.3 | 13.7 | 6.5 |
| 19 | 85.1 | 91.7 | 97.6 | 99.0 | 101.3 | 13.9 | 6.6 |
| 20 | 85.5 | 92.1 | 98.1 | 99.5 | 101.2 | 14.0 | 6.6 |
| 21 | 85.4 | 92.1 | 98.4 | 99.6 | 100.9 | 14.2 | 6.7 |
| 22 | 85.5 | 92.0 | 98.7 | 99.6 | 100.8 | 14.1 | 6.5 |
| 23 | 85.8 | 92.5 | 99.0 | 99.9 | 99.9 | 14.1 | 6.7 |
| 24 | 86.0 | 92.5 | 98.9 | 100.1 | 100.1 | 14.1 | 6.5 |
| 25 | 85.7 | 92.3 | 98.4 | 99.6 | 99.6 | 13.9 | 6.6 |
| 26 | 85.2 | 91.8 | 97.5 | 98.9 | 98.9 | 13.7 | 6.6 |
| oil → 27 | 84.9 | 91.4 | 96.6 | 96.8 | 98.8 | 13.9 | 6.5 |
| 28 | 84.5 | 90.7 | 95.8 | 98.6 | 98.6 | 14.1 | 6.2 |
| 29 | 84.2 | 90.4 | 95.5 | 98.4 | 98.4 | 14.2 | 6.2 |
| 30 | 84.4 | 90.7 | 95.5 | 98.3 | 98.3 | 13.9 | 6.3 |
| 31 | 84.5 | 90.9 | 95.4 | 98.1 | 98.1 | 13.6 | 6.4 |
| 32 | 84.4 | 90.7 | 95.1 | 98.0 | 98.0 | 13.6 | 6.3 |
| 33 | 83.6 | 89.6 | 94.4 | 97.0 | 97.0 | 13.4 | 6.0 |
| 34 | 82.6 | 88.3 | 93.6 | 95.6 | 96.7 | 13.0 | 5.7 |
| 35 | 81.2 | 86.9 | 92.9 | 94.3 | 95.5 | 13.1 | 5.7 |
| 36 | 80.9 | 86.4 | 92.3 | 93.6 | 94.8 | 12.7 | 5.5 |
| 37 | 80.3 | 86.1 | 91.9 | 93.6 | 93.6 | 13.3 | 5.8 |
| 38 | 80.0 | 85.6 | 91.3 | 93.2 | 94.3 | 13.2 | 5.6 |
| 39 | 78.5 | 84.2 | 90.4 | 92.0 | 92.0 | 13.5 | 5.7 |
| 40 | 76.8 | 82.6 | 89.3 | 90.2 | 91.3 | 13.4 | 5.8 |
| 41 | 74.8 | 80.9 | 88.8 | 88.5 | 89.7 | 13.7 | 6.1 |
| 42 | 73.9 | 80.1 | 88.2 | 87.5 | 88.8 | 13.6 | 6.2 |
| 43 | 74.5 | 80.3 | 87.7 | 87.9 | 89.2 | 13.4 | 5.8 |

TABLE G-V

NOISE LEVEL TIME HISTORY DATA

SIKORSKY S-64

Without truck

OCTOBER 28 1976

EVENT 76 85 KT. FLY BY MIC. CENTERLINE(HARD)

1/2 SECOND INTEGRATION VS NOISE INDEXES
(DB RE 20 MICRO PA)

| INT | DBA | DBD | OASPL | PNL | PNLT | PNL-DBA | DBD-DBA |
|---------|------|------|-------|-------|-------|---------|---------|
| 1 | 70.9 | 80.5 | 91.5 | 87.9 | 89.1 | 17.0 | 9.6 |
| 2 | 71.8 | 81.1 | 92.0 | 88.9 | 88.9 | 17.1 | 9.3 |
| 3 | 72.9 | 81.6 | 92.7 | 89.5 | 89.5 | 16.6 | 8.7 |
| 4 | 76.2 | 83.2 | 93.2 | 90.6 | 91.6 | 14.4 | 7.0 |
| 5 | 79.3 | 85.1 | 93.9 | 92.5 | 92.5 | 13.2 | 5.8 |
| 6 | 80.6 | 86.2 | 95.0 | 93.6 | 93.6 | 13.0 | 5.6 |
| 7 | 82.6 | 87.9 | 96.0 | 95.3 | 95.3 | 12.7 | 5.3 |
| 8 | 84.9 | 89.5 | 97.1 | 96.7 | 96.7 | 11.8 | 4.6 |
| 9 | 86.6 | 91.1 | 98.0 | 97.8 | 99.1 | 11.2 | 4.5 |
| 10 | 86.7 | 91.6 | 98.6 | 98.5 | 99.7 | 11.8 | 4.9 |
| 11 | 86.8 | 91.8 | 99.4 | 99.3 | 100.4 | 12.5 | 5.0 |
| 12 | 86.7 | 91.9 | 99.4 | 99.8 | 100.8 | 13.1 | 5.2 |
| 13 | 87.3 | 92.3 | 98.6 | 100.2 | 100.7 | 12.9 | 5.0 |
| OH → 14 | 87.3 | 92.2 | 96.9 | 99.8 | 99.8 | 12.5 | 4.9 |
| 15 | 87.3 | 91.9 | 95.3 | 99.2 | 99.2 | 11.9 | 4.6 |
| 16 | 86.9 | 91.3 | 93.9 | 99.1 | 99.1 | 12.2 | 4.4 |
| 17 | 86.5 | 90.8 | 92.9 | 99.0 | 100.4 | 12.5 | 4.3 |
| 18 | 85.5 | 89.9 | 91.8 | 98.4 | 100.4 | 12.9 | 4.4 |
| 19 | 84.3 | 88.6 | 91.0 | 96.9 | 98.9 | 12.6 | 4.3 |
| 20 | 82.2 | 86.6 | 90.5 | 94.6 | 96.1 | 12.4 | 4.4 |
| 21 | 80.5 | 84.8 | 89.5 | 91.9 | 92.9 | 11.4 | 4.3 |
| 22 | 78.6 | 83.1 | 88.2 | 90.4 | 91.9 | 11.8 | 4.5 |
| 23 | 77.2 | 82.1 | 87.0 | 89.4 | 90.7 | 12.2 | 4.9 |
| 24 | 76.4 | 81.4 | 86.6 | 88.8 | 90.1 | 12.4 | 5.0 |
| 25 | 76.0 | 81.1 | 86.2 | 88.5 | 88.5 | 12.5 | 5.1 |
| 26 | 75.4 | 80.5 | 86.1 | 88.1 | 88.1 | 12.7 | 5.1 |

TABLE G-V
NOISE LEVEL TIME HISTORY DATA

SIKORSKY S-64

without truck

OCTOBER 28 1976

EVENT 77 85 KT. FLY BY MIC. CENTERLINE (HARD)

1/2 SECOND INTEGRATION VS NOISE INDEXES
(DB RE 20 MICRO PA)

| INT | DBA | DBD | OASPL | PNL | PNLT | PNL-DBA | DBD-DBA |
|---------|------|------|-------|-------|-------|---------|---------|
| 1 | 73.3 | 81.1 | 91.2 | 88.9 | 89.9 | 15.6 | 7.8 |
| 2 | 73.5 | 81.4 | 91.5 | 89.0 | 89.0 | 15.5 | 7.9 |
| 3 | 74.6 | 81.8 | 91.9 | 89.4 | 90.5 | 14.8 | 7.2 |
| 4 | 79.0 | 84.2 | 92.9 | 91.9 | 91.9 | 12.9 | 5.2 |
| 5 | 81.4 | 86.2 | 93.9 | 93.5 | 93.5 | 12.1 | 4.8 |
| 6 | 82.1 | 87.1 | 95.2 | 94.3 | 94.3 | 12.2 | 5.0 |
| 7 | 83.3 | 87.9 | 96.1 | 95.2 | 96.5 | 11.9 | 4.6 |
| 8 | 84.1 | 88.5 | 96.8 | 95.7 | 96.8 | 11.6 | 4.4 |
| 9 | 84.7 | 89.4 | 97.1 | 96.4 | 97.1 | 11.7 | 4.7 |
| 10 | 85.6 | 90.6 | 97.3 | 97.6 | 98.3 | 12.0 | 5.0 |
| 11 | 86.2 | 91.4 | 97.4 | 98.8 | 99.5 | 12.6 | 5.2 |
| 12 | 86.9 | 92.2 | 97.5 | 99.9 | 100.5 | 13.0 | 5.3 |
| 13 | 87.0 | 92.3 | 97.2 | 100.1 | 100.1 | 13.1 | 5.3 |
| 14 | 87.3 | 92.2 | 96.4 | 99.9 | 99.9 | 12.6 | 4.9 |
| 04 → 15 | 86.7 | 91.6 | 94.9 | 98.7 | 98.7 | 12.0 | 4.9 |
| 16 | 85.9 | 90.5 | 93.1 | 97.8 | 97.8 | 11.9 | 4.6 |
| 17 | 84.7 | 89.0 | 91.4 | 96.5 | 96.5 | 11.8 | 4.3 |
| 18 | 83.9 | 87.8 | 90.4 | 95.4 | 95.4 | 11.5 | 3.9 |
| 19 | 82.9 | 86.9 | 90.0 | 94.3 | 94.3 | 11.4 | 4.0 |
| 20 | 81.9 | 86.0 | 89.6 | 93.0 | 94.2 | 11.1 | 4.1 |
| 21 | 80.9 | 85.0 | 89.2 | 92.1 | 93.5 | 11.2 | 4.1 |
| 22 | 79.8 | 83.9 | 88.3 | 91.1 | 92.4 | 11.3 | 4.1 |
| 23 | 78.9 | 83.2 | 87.8 | 90.6 | 91.6 | 11.7 | 4.3 |
| 24 | 77.7 | 82.5 | 87.0 | 89.6 | 89.6 | 11.9 | 4.8 |
| 25 | 76.1 | 81.3 | 86.3 | 88.8 | 88.8 | 12.7 | 5.2 |
| 26 | 74.7 | 80.1 | 85.3 | 87.7 | 87.7 | 13.0 | 5.4 |
| 27 | 74.5 | 80.0 | 85.1 | 87.4 | 88.5 | 12.9 | 5.5 |

TABLE G-V

NOISE LEVEL TIME HISTORY DATA

SIKORSKY S-64

Without truck

OCTOBER 28 1976

EVENT 78 95 KT. FLY BY MIC. CENTERLINE (HARD)

1/2 SECOND INTEGRATION VS NOISE INDEXES
(DB RE 20 MICRO PA)

| INT | DBA | DBD | OASPL | PNL | PNLT | PNL-DBA | DBD-DBA |
|---------|------|------|-------|-------|-------|---------|---------|
| 1 | 71.6 | 81.5 | 93.4 | 88.8 | 88.8 | 17.2 | 9.9 |
| 2 | 72.6 | 82.0 | 94.0 | 89.6 | 89.6 | 17.0 | 9.4 |
| 3 | 76.3 | 83.8 | 94.9 | 91.2 | 91.2 | 14.9 | 7.5 |
| 4 | 80.0 | 86.1 | 95.8 | 93.6 | 93.6 | 13.6 | 6.1 |
| 5 | 84.9 | 89.8 | 97.1 | 97.2 | 98.6 | 12.3 | 4.9 |
| 6 | 86.2 | 90.7 | 97.8 | 98.2 | 98.2 | 12.0 | 4.5 |
| 7 | 87.3 | 91.7 | 98.3 | 98.8 | 100.0 | 11.5 | 4.4 |
| 8 | 87.4 | 92.3 | 98.7 | 99.3 | 100.7 | 11.9 | 4.9 |
| 9 | 88.2 | 93.5 | 99.5 | 100.8 | 102.2 | 12.6 | 5.3 |
| 10 | 88.2 | 93.9 | 100.0 | 101.7 | 102.9 | 13.5 | 5.7 |
| 11 | 87.9 | 93.5 | 99.7 | 101.6 | 102.3 | 13.7 | 5.6 |
| OH → 12 | 86.9 | 92.4 | 98.5 | 100.5 | 100.5 | 13.6 | 5.5 |
| 13 | 86.0 | 91.3 | 96.5 | 98.7 | 98.7 | 12.7 | 5.3 |
| 14 | 85.3 | 90.2 | 94.0 | 97.7 | 97.7 | 12.4 | 4.9 |
| 15 | 84.5 | 89.0 | 91.5 | 96.5 | 96.5 | 12.0 | 4.5 |
| 16 | 83.4 | 87.5 | 89.5 | 95.0 | 95.0 | 11.6 | 4.1 |
| 17 | 81.8 | 86.1 | 88.6 | 93.5 | 93.5 | 11.7 | 4.3 |
| 18 | 80.9 | 85.4 | 88.5 | 92.8 | 92.8 | 11.9 | 4.5 |
| 19 | 80.1 | 84.6 | 88.2 | 92.1 | 92.1 | 12.0 | 4.5 |
| 20 | 79.5 | 84.1 | 87.7 | 91.4 | 91.4 | 11.9 | 4.6 |
| 21 | 78.5 | 83.2 | 87.1 | 90.5 | 90.5 | 12.0 | 4.7 |
| 22 | 77.4 | 82.3 | 86.8 | 90.0 | 90.0 | 12.6 | 4.9 |
| 23 | 77.0 | 81.8 | 86.5 | 89.4 | 89.4 | 12.4 | 4.8 |
| 24 | 76.9 | 81.8 | 86.4 | 89.3 | 90.4 | 12.4 | 4.9 |

TABLE G-IV

NOISE LEVEL TIME HISTORY DATA

SIKORSKY S-64

Without truck

OCTOBER 28 1976

EVENT 79 95 KT. FLY BY MIC. CENTERLINE (HA. D)

1/2 SECOND INTEGRATION VS NOISE INDEXES
(DB RE 20 MICRO PA)

| INT | DBA | DBD | OASPL | PNL | PNLT | PNL-DBA | DBD-DBA |
|---------|------|------|-------|-------|-------|---------|---------|
| 1 | 72.2 | 80.9 | 92.0 | 88.3 | 88.8 | 16.6 | 8.7 |
| 2 | 74.6 | 82.1 | 92.8 | 90.1 | 90.1 | 15.5 | 7.5 |
| 3 | 76.7 | 83.4 | 93.6 | 91.2 | 91.2 | 14.5 | 6.7 |
| 4 | 79.1 | 85.2 | 94.6 | 92.7 | 92.7 | 13.6 | 6.1 |
| 5 | 80.7 | 86.4 | 95.3 | 94.5 | 94.5 | 13.8 | 5.7 |
| 6 | 82.4 | 87.4 | 96.0 | 95.6 | 96.8 | 13.2 | 5.0 |
| 7 | 83.9 | 88.9 | 96.9 | 96.5 | 97.6 | 12.6 | 5.0 |
| 8 | 86.0 | 90.9 | 97.8 | 98.0 | 99.3 | 12.0 | 4.9 |
| 9 | 88.2 | 93.1 | 98.9 | 100.6 | 101.9 | 12.4 | 4.9 |
| 10 | 89.3 | 94.4 | 99.4 | 102.2 | 103.2 | 12.9 | 5.1 |
| OH → 11 | 89.2 | 94.4 | 99.2 | 102.3 | 103.0 | 13.1 | 5.2 |
| 12 | 88.2 | 93.5 | 97.8 | 101.3 | 101.3 | 13.1 | 5.3 |
| 13 | 87.1 | 91.9 | 95.7 | 99.4 | 99.4 | 12.3 | 4.8 |
| 14 | 86.5 | 91.0 | 93.4 | 98.2 | 98.2 | 11.7 | 4.5 |
| 15 | 86.0 | 90.1 | 91.7 | 97.1 | 97.1 | 11.1 | 4.1 |
| 16 | 84.9 | 89.0 | 90.3 | 96.0 | 97.4 | 11.1 | 4.1 |
| 17 | 83.1 | 87.2 | 89.2 | 94.2 | 95.7 | 11.1 | 4.1 |
| 18 | 80.8 | 85.2 | 88.1 | 92.6 | 94.4 | 11.8 | 4.4 |
| 19 | 79.2 | 83.3 | 86.7 | 90.8 | 92.2 | 11.6 | 4.1 |
| 20 | 79.1 | 82.8 | 86.5 | 90.6 | 92.0 | 11.5 | 3.7 |
| 21 | 78.3 | 82.8 | 86.9 | 90.4 | 90.4 | 12.1 | 4.5 |
| 22 | 77.6 | 82.3 | 86.9 | 89.9 | 89.9 | 12.3 | 4.7 |

TABLE G-II

NOISE LEVEL TIME HISTORY DATA

SIKORSKY S-64

Without truck

OCTOBER 28 1976

EVENT 80 105 KT. FLY BY MIC. CENTERLINE (HARD)

1/2 SECOND INTEGRATION VS NOISE INDEXES
(DB RE 20 MICRO PA)

| INT | DBA | DBD | OASPL | PNL | PNLT | PNL-DBA | DBD-DBA |
|---------|------|------|-------|-------|-------|---------|---------|
| 1 | 71.3 | 81.2 | 93.1 | 89.1 | 90.3 | 17.8 | 9.9 |
| 2 | 71.5 | 81.7 | 93.7 | 89.2 | 89.2 | 17.7 | 10.2 |
| 3 | 72.5 | 82.4 | 94.5 | 89.8 | 89.8 | 17.3 | 9.9 |
| 4 | 77.0 | 84.5 | 95.6 | 91.4 | 91.4 | 14.4 | 7.5 |
| 5 | 81.1 | 87.3 | 97.3 | 94.7 | 95.8 | 13.6 | 6.2 |
| 6 | 83.4 | 89.2 | 98.6 | 96.7 | 97.2 | 13.3 | 5.8 |
| 7 | 84.1 | 89.6 | 99.4 | 97.0 | 98.0 | 12.9 | 5.5 |
| 8 | 85.2 | 91.1 | 99.8 | 98.4 | 99.6 | 13.2 | 5.9 |
| 9 | 87.2 | 93.1 | 100.2 | 101.2 | 102.3 | 14.0 | 5.9 |
| 10 | 88.5 | 94.2 | 99.9 | 102.3 | 103.1 | 13.8 | 5.7 |
| OH → 11 | 88.4 | 93.8 | 98.7 | 101.9 | 101.9 | 13.5 | 5.4 |
| 12 | 87.0 | 92.2 | 96.4 | 99.7 | 99.7 | 12.7 | 5.2 |
| 13 | 85.6 | 90.5 | 93.8 | 97.9 | 97.9 | 12.3 | 4.9 |
| 14 | 84.7 | 89.5 | 92.3 | 96.9 | 98.1 | 12.2 | 4.8 |
| 15 | 84.1 | 88.6 | 90.9 | 96.3 | 97.7 | 12.2 | 4.5 |
| 16 | 82.7 | 87.3 | 90.0 | 94.7 | 96.1 | 12.0 | 4.6 |
| 17 | 81.8 | 86.1 | 88.8 | 93.4 | 94.9 | 11.6 | 4.3 |
| 18 | 80.7 | 84.8 | 87.5 | 92.2 | 93.8 | 11.5 | 4.1 |
| 19 | 79.6 | 83.9 | 87.0 | 91.3 | 92.9 | 11.7 | 4.3 |
| 20 | 77.5 | 82.5 | 86.7 | 90.2 | 91.4 | 12.7 | 5.0 |
| 21 | 75.1 | 81.1 | 86.5 | 89.0 | 89.0 | 13.9 | 6.0 |
| 22 | 73.3 | 80.1 | 86.0 | 88.2 | 88.2 | 14.9 | 6.8 |

TABLE G-V

NOISE LEVEL TIME HISTORY DATA

SIKORSKY S-64

Without truck

OCTOBER 28 1976

EVENT 81 105 KT. FLY BY MIC. CENTERLINE(HARD)

1/2 SECOND INTEGRATION VS NOISE INDEXES
(DB RE 20 MICRO PA)

| INT | DBA | DBD | OASPL | PNL | PNLT | PNL-DBA | DBD-DBA |
|---------|------|------|-------|-------|-------|---------|---------|
| 1 | 70.4 | 80.9 | 92.5 | 88.2 | 88.2 | 17.8 | 10.5 |
| 2 | 72.3 | 81.8 | 93.1 | 89.2 | 89.2 | 16.9 | 9.5 |
| 3 | 75.3 | 83.1 | 94.0 | 90.7 | 91.7 | 15.4 | 7.8 |
| 4 | 78.3 | 84.9 | 94.9 | 92.0 | 92.0 | 13.7 | 6.6 |
| 5 | 81.3 | 87.2 | 95.6 | 94.6 | 94.6 | 13.3 | 5.9 |
| 6 | 84.0 | 89.2 | 96.2 | 96.5 | 97.6 | 12.5 | 5.2 |
| 7 | 84.9 | 90.1 | 97.0 | 97.2 | 97.2 | 12.3 | 5.2 |
| 8 | 85.5 | 90.6 | 98.2 | 97.9 | 98.9 | 12.4 | 5.1 |
| 9 | 87.7 | 92.8 | 99.8 | 100.5 | 101.7 | 12.8 | 5.1 |
| 10 | 88.8 | 94.1 | 100.6 | 102.1 | 103.1 | 13.3 | 5.3 |
| 11 | 89.6 | 94.7 | 100.2 | 102.7 | 103.4 | 13.1 | 5.1 |
| 12 | 88.7 | 93.7 | 98.4 | 101.5 | 101.5 | 12.8 | 5.0 |
| 13 | 87.8 | 92.4 | 95.7 | 99.6 | 99.6 | 11.8 | 4.6 |
| OH → 14 | 86.3 | 90.8 | 92.8 | 97.9 | 97.9 | 11.6 | 4.5 |
| 15 | 85.1 | 89.5 | 91.1 | 96.7 | 96.7 | 11.6 | 4.4 |
| 16 | 83.6 | 87.9 | 89.9 | 95.4 | 96.7 | 11.8 | 4.3 |
| 17 | 81.7 | 86.3 | 89.0 | 93.6 | 95.0 | 11.9 | 4.6 |
| 18 | 80.2 | 85.0 | 87.8 | 91.9 | 93.4 | 11.7 | 4.8 |
| 19 | 79.7 | 84.1 | 86.8 | 91.4 | 92.7 | 11.7 | 4.4 |
| 20 | 79.3 | 83.8 | 86.2 | 90.9 | 92.5 | 11.6 | 4.5 |
| 21 | 78.1 | 82.9 | 86.3 | 90.4 | 91.9 | 12.3 | 4.8 |
| 22 | 76.5 | 82.0 | 86.1 | 89.7 | 91.2 | 13.2 | 5.5 |

TABLE G-VI

NOISE LEVEL FREQUENCY SPECTRA TIME HISTORY

SIKORSKY S-64

with truck

OCTOBER 28 1976

EVENT 43 9 DEGREE APPROACH MIC. 150 METERS WEST

1/3 OCTAVE FREQUENCY BAND VS TIME (SECONDS)
(DB RE 20 MICRO PA)

| BAND | -10.0 | -8.0 | -6.0 | -4.0 | -2.0 | 0 | 2.0 | 4.0 | 5.5 |
|-------|-------|------|------|------|-------|-------|------|------|------|
| 17 | 70.4 | 70.6 | 75.3 | 74.7 | 75.1 | 77.6 | 78.9 | 82.5 | 81.7 |
| 18 | 83.2 | 84.9 | 85.9 | 86.0 | 85.9 | 81.6 | 79.9 | 80.7 | 76.7 |
| 19 | 71.7 | 74.4 | 74.8 | 75.7 | 77.8 | 76.4 | 76.1 | 78.3 | 79.2 |
| 20 | 71.7 | 70.8 | 72.1 | 72.5 | 73.3 | 70.9 | 74.0 | 76.4 | 77.7 |
| 21 | 81.6 | 76.7 | 74.8 | 72.1 | 71.6 | 75.9 | 75.8 | 69.3 | 72.1 |
| 22 | 68.0 | 63.5 | 65.6 | 74.9 | 80.0 | 83.8 | 81.0 | 70.9 | 65.7 |
| 23 | 63.5 | 67.5 | 75.0 | 83.5 | 86.5 | 86.4 | 86.5 | 77.2 | 68.3 |
| 24 | 73.1 | 78.5 | 80.9 | 86.5 | 87.5 | 88.3 | 87.4 | 78.7 | 71.8 |
| 25 | 77.5 | 80.8 | 81.0 | 82.2 | 81.9 | 78.5 | 77.6 | 78.6 | 74.1 |
| 26 | 75.9 | 77.1 | 76.1 | 73.6 | 77.4 | 79.4 | 78.9 | 73.1 | 72.8 |
| 27 | 67.8 | 65.8 | 65.0 | 72.6 | 78.3 | 77.4 | 78.6 | 74.8 | 66.2 |
| 28 | 62.3 | 67.0 | 70.1 | 69.7 | 73.2 | 76.2 | 76.0 | 73.2 | 70.1 |
| 29 | 66.1 | 66.9 | 65.9 | 71.3 | 74.9 | 75.2 | 75.3 | 71.7 | 68.6 |
| 30 | 61.0 | 64.3 | 67.6 | 67.6 | 74.5 | 74.4 | 74.2 | 69.4 | 67.6 |
| 31 | 60.5 | 61.3 | 64.7 | 66.6 | 72.6 | 73.0 | 74.7 | 70.1 | 68.3 |
| 32 | 59.4 | 60.9 | 63.9 | 66.1 | 72.1 | 71.7 | 71.4 | 67.5 | 64.8 |
| 33 | 55.9 | 56.9 | 59.6 | 62.8 | 68.7 | 68.9 | 68.8 | 65.9 | 62.4 |
| 34 | 55.0 | 55.4 | 56.1 | 59.7 | 66.3 | 66.3 | 66.1 | 62.1 | 59.6 |
| 35 | 55.0 | 55.0 | 55.2 | 57.1 | 63.6 | 63.8 | 63.6 | 59.9 | 57.1 |
| 36 | 55.0 | 55.0 | 55.0 | 55.0 | 59.6 | 61.2 | 60.7 | 57.2 | 55.3 |
| 37 | 55.0 | 55.0 | 55.6 | 57.1 | 65.4 | 64.8 | 61.0 | 57.6 | 55.3 |
| 38 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 | 55.3 | 55.4 | 55.0 | 55.0 |
| 39 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 |
| 40 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 |
| A | 76.7 | 78.7 | 79.6 | 82.7 | 85.7 | 85.7 | 85.4 | 80.5 | 77.1 |
| D | 82.4 | 84.2 | 85.2 | 88.8 | 90.9 | 91.1 | 90.6 | 85.5 | 82.4 |
| OASPL | 89.2 | 90.6 | 91.4 | 93.0 | 93.8 | 95.3 | 95.3 | 91.4 | 88.2 |
| PNL | 90.3 | 92.1 | 93.0 | 96.2 | 98.8 | 99.2 | 98.7 | 93.6 | 90.3 |
| PNLT | 91.8 | 92.1 | 94.5 | 96.2 | 101.5 | 101.4 | 98.7 | 93.6 | 90.3 |

LOWER LIMIT OF ANALYSIS SYSTEM= 55.0

TABLE G-VI

NOISE LEVEL FREQUENCY SPECTRA TIME HISTORY

SIKORSKY S-64

with truck

OCTOBER 28 1976

EVENT 51 6 DEGREE APPROACH MIC. 150 METERS WEST

1/3 OCTAVE FREQUENCY BAND VS TIME (SECONDS)
(DB RE 20 MICRO PA)

| BAND | -8.0 | -6.5 | -5.0 | -3.5 | -2.0 | -0.5 | 0 | 1.0 | 2.5 | 5.0 |
|-------|------|------|------|------|-------|------|------|------|------|------|
| 17 | 69.2 | 70.9 | 73.3 | 73.8 | 76.1 | 76.6 | 77.8 | 79.4 | 80.4 | 80.3 |
| 18 | 80.7 | 83.6 | 86.3 | 84.9 | 84.6 | 82.6 | 82.3 | 83.6 | 81.8 | 79.1 |
| 19 | 71.1 | 72.4 | 75.5 | 76.7 | 74.2 | 73.6 | 73.0 | 74.9 | 76.3 | 76.2 |
| 20 | 73.0 | 71.8 | 73.3 | 74.7 | 73.6 | 70.7 | 68.8 | 69.8 | 72.5 | 76.4 |
| 21 | 75.5 | 73.4 | 74.9 | 70.4 | 68.0 | 73.2 | 74.1 | 74.1 | 72.5 | 67.5 |
| 22 | 65.4 | 63.4 | 64.5 | 68.5 | 77.8 | 82.0 | 81.9 | 80.6 | 77.9 | 65.5 |
| 23 | 62.6 | 68.4 | 75.1 | 78.1 | 84.7 | 86.9 | 86.6 | 84.4 | 81.5 | 71.3 |
| 24 | 69.2 | 78.7 | 84.3 | 83.3 | 88.0 | 86.1 | 84.7 | 82.6 | 83.3 | 75.1 |
| 25 | 74.6 | 82.2 | 84.6 | 82.4 | 83.6 | 76.8 | 74.2 | 73.3 | 77.6 | 74.7 |
| 26 | 74.0 | 77.2 | 78.0 | 74.0 | 75.1 | 77.7 | 78.1 | 79.5 | 78.2 | 69.5 |
| 27 | 66.7 | 65.1 | 67.2 | 73.0 | 79.1 | 78.2 | 77.0 | 77.4 | 79.4 | 71.3 |
| 28 | 58.3 | 67.7 | 71.2 | 72.1 | 74.3 | 74.9 | 75.5 | 77.6 | 75.4 | 70.9 |
| 29 | 62.2 | 66.9 | 66.2 | 70.0 | 75.3 | 75.2 | 75.6 | 76.8 | 73.8 | 68.7 |
| 30 | 58.9 | 65.5 | 67.4 | 68.6 | 73.1 | 75.2 | 74.9 | 75.5 | 73.2 | 66.1 |
| 31 | 57.9 | 62.1 | 64.0 | 67.6 | 71.0 | 73.5 | 73.4 | 74.2 | 72.4 | 66.6 |
| 32 | 55.9 | 61.6 | 63.3 | 66.1 | 70.4 | 72.6 | 72.4 | 72.4 | 68.7 | 63.0 |
| 33 | 55.0 | 57.6 | 59.0 | 62.0 | 67.1 | 69.1 | 69.1 | 69.8 | 67.1 | 61.2 |
| 34 | 55.0 | 55.4 | 56.4 | 59.0 | 62.9 | 65.8 | 66.0 | 66.4 | 63.8 | 57.0 |
| 35 | 55.0 | 55.0 | 55.0 | 55.6 | 60.1 | 62.8 | 63.0 | 63.2 | 60.9 | 55.0 |
| 36 | 55.0 | 55.0 | 55.0 | 55.0 | 56.3 | 58.8 | 59.4 | 59.8 | 57.7 | 55.0 |
| 37 | 55.0 | 55.0 | 55.0 | 55.0 | 61.9 | 60.9 | 61.9 | 61.3 | 57.1 | 55.0 |
| 38 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 |
| 39 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 |
| 40 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 |
| A | 73.6 | 79.6 | 82.1 | 81.5 | 85.3 | 85.0 | 84.5 | 85.0 | 83.9 | 76.8 |
| D | 79.6 | 84.9 | 87.8 | 86.9 | 90.7 | 90.3 | 89.8 | 89.6 | 88.7 | 82.0 |
| OASPL | 86.9 | 88.6 | 91.4 | 90.8 | 93.6 | 94.0 | 94.2 | 94.5 | 94.3 | 88.5 |
| PNL | 88.2 | 92.7 | 94.9 | 94.5 | 98.3 | 97.9 | 97.6 | 97.0 | 96.1 | 90.1 |
| PNLT | 89.4 | 92.7 | 96.4 | 94.5 | 100.4 | 99.2 | 99.2 | 98.3 | 96.1 | 90.1 |

LOWER LIMIT OF ANALYSIS SYSTEM= 55.0

TABLE G-VI

NOISE LEVEL FREQUENCY SPECTRA TIME HISTORY

SIKORSKY S-64

with truck

OCTOBER 28 1976

EVENT 67 95 KT. FLY BY MIC. 150 METERS WEST

1/3 OCTAVE FREQUENCY BAND VS TIME (SECONDS)
(DB RE 20 MICRO PA)

| BAND | -6.0 | -4.5 | -3.0 | -1.5 | 0 | .5 | 1.5 | 3.0 | 4.5 | 5.5 |
|-------|------|------|------|------|------|------|------|------|------|------|
| 17 | 78.0 | 79.3 | 77.9 | 74.2 | 79.1 | 81.9 | 85.6 | 81.4 | 81.9 | 82.3 |
| 18 | 82.0 | 85.1 | 87.8 | 87.5 | 91.1 | 91.3 | 88.3 | 77.8 | 75.1 | 72.5 |
| 19 | 73.1 | 78.3 | 79.7 | 78.6 | 75.7 | 75.9 | 75.9 | 75.9 | 75.5 | 74.1 |
| 20 | 71.2 | 75.7 | 77.0 | 75.4 | 72.9 | 71.2 | 70.7 | 73.2 | 76.3 | 76.7 |
| 21 | 78.7 | 82.8 | 83.3 | 74.4 | 69.0 | 70.1 | 71.1 | 64.7 | 66.6 | 68.7 |
| 22 | 69.2 | 71.8 | 69.9 | 66.5 | 74.0 | 77.5 | 79.3 | 73.5 | 63.0 | 60.4 |
| 23 | 69.0 | 67.6 | 64.9 | 76.5 | 81.8 | 83.1 | 82.3 | 76.6 | 69.5 | 62.9 |
| 24 | 63.6 | 65.4 | 74.6 | 81.0 | 84.4 | 84.9 | 83.7 | 79.4 | 75.1 | 70.4 |
| 25 | 61.5 | 73.6 | 81.3 | 82.8 | 81.5 | 80.4 | 76.7 | 75.3 | 73.9 | 72.2 |
| 26 | 69.0 | 77.8 | 83.2 | 80.5 | 80.9 | 82.2 | 82.3 | 75.5 | 69.2 | 70.6 |
| 27 | 71.9 | 79.1 | 80.0 | 76.8 | 83.7 | 83.4 | 82.4 | 78.5 | 70.2 | 65.0 |
| 28 | 70.8 | 74.0 | 75.2 | 79.8 | 79.2 | 80.2 | 79.4 | 72.2 | 70.1 | 67.8 |
| 29 | 66.1 | 70.4 | 77.7 | 77.8 | 80.5 | 79.7 | 77.2 | 72.5 | 69.4 | 66.5 |
| 30 | 65.6 | 73.5 | 75.4 | 78.0 | 79.6 | 79.5 | 77.6 | 71.9 | 67.2 | 66.0 |
| 31 | 64.5 | 68.9 | 74.6 | 75.9 | 78.1 | 78.3 | 77.1 | 70.1 | 65.9 | 64.2 |
| 32 | 59.8 | 66.3 | 71.2 | 73.9 | 75.7 | 75.1 | 72.8 | 66.9 | 61.4 | 60.5 |
| 33 | 56.0 | 61.3 | 66.0 | 69.5 | 71.8 | 71.4 | 69.5 | 63.6 | 57.9 | 56.7 |
| 34 | 55.0 | 60.2 | 65.3 | 65.6 | 68.1 | 68.2 | 66.0 | 58.9 | 55.2 | 55.0 |
| 35 | 55.0 | 55.4 | 58.7 | 60.0 | 64.2 | 64.0 | 61.7 | 55.3 | 55.0 | 55.0 |
| 36 | 55.0 | 55.0 | 55.0 | 55.8 | 58.6 | 58.9 | 57.5 | 55.0 | 55.0 | 55.0 |
| 37 | 55.0 | 55.0 | 55.0 | 55.0 | 55.2 | 56.1 | 55.8 | 55.0 | 55.0 | 55.0 |
| 38 | 55.0 | 55.0 | 55.0 | 55.0 | 55.4 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 |
| 39 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 |
| 40 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 |
| A | 75.4 | 81.3 | 85.2 | 86.2 | 87.8 | 87.7 | 86.6 | 81.5 | 76.9 | 74.6 |
| D | 81.0 | 85.8 | 89.0 | 89.7 | 91.9 | 92.0 | 90.8 | 85.9 | 81.6 | 79.9 |
| OASPL | 89.2 | 91.5 | 92.7 | 91.8 | 94.0 | 94.5 | 94.7 | 91.3 | 87.6 | 85.8 |
| PNL | 88.8 | 93.7 | 97.1 | 97.1 | 99.1 | 99.2 | 98.1 | 93.4 | 89.5 | 87.9 |
| PNLT | 88.8 | 95.0 | 97.1 | 97.1 | 99.1 | 99.2 | 98.1 | 93.4 | 89.5 | 87.9 |

LOWER LIMIT OF ANALYSIS SYSTEM= 55.0

TABLE G - VI

NOISE LEVEL FREQUENCY SPECTRA TIME HISTORY

SIKORSKY S-64

With truck

OCTOBER 28 1976

EVENT 68 95 KT. FLY BY MIC. 150 METERS WEST

1/3 OCTAVE FREQUENCY BAND VS TIME (SECONDS)
(DB RE 20 MICRO PA)

| BAND | -7.0 | -5.0 | -3.5 | -3.0 | -1.0 | 0 | 1.0 | 3.0 | 5.0 | 7.0 |
|-------|------|------|------|------|------|------|------|------|------|------|
| 17 | 79.4 | 82.5 | 82.4 | 81.8 | 74.6 | 76.7 | 80.0 | 79.4 | 80.6 | 80.2 |
| 18 | 82.2 | 85.3 | 89.1 | 90.1 | 88.7 | 88.7 | 88.9 | 78.0 | 73.6 | 70.5 |
| 19 | 74.6 | 77.3 | 79.4 | 79.4 | 76.5 | 74.3 | 73.3 | 73.0 | 74.8 | 71.5 |
| 20 | 74.1 | 75.7 | 76.7 | 76.4 | 73.6 | 70.4 | 68.4 | 70.0 | 72.1 | 72.7 |
| 21 | 75.7 | 81.4 | 83.5 | 82.7 | 68.9 | 69.7 | 71.2 | 68.6 | 65.0 | 67.5 |
| 22 | 69.0 | 71.6 | 72.4 | 70.6 | 71.0 | 74.0 | 75.4 | 74.2 | 63.4 | 60.3 |
| 23 | 68.7 | 69.8 | 66.3 | 68.5 | 78.6 | 80.6 | 80.1 | 78.2 | 70.8 | 61.1 |
| 24 | 64.9 | 61.9 | 74.6 | 76.7 | 81.5 | 82.1 | 80.1 | 79.4 | 75.7 | 66.1 |
| 25 | 59.6 | 70.6 | 79.1 | 81.5 | 81.1 | 79.2 | 73.6 | 73.3 | 74.7 | 69.3 |
| 26 | 63.2 | 75.8 | 82.0 | 83.5 | 75.7 | 78.7 | 80.5 | 77.6 | 69.6 | 69.5 |
| 27 | 68.1 | 77.0 | 79.5 | 79.2 | 80.5 | 81.7 | 79.2 | 77.8 | 71.7 | 63.1 |
| 28 | 67.8 | 73.4 | 72.8 | 75.9 | 77.5 | 77.6 | 78.5 | 75.0 | 70.8 | 64.9 |
| 29 | 66.2 | 68.7 | 76.3 | 77.0 | 77.4 | 77.4 | 76.5 | 72.6 | 69.5 | 64.9 |
| 30 | 60.6 | 73.3 | 73.4 | 75.6 | 76.3 | 77.0 | 75.1 | 71.7 | 67.3 | 62.1 |
| 31 | 61.8 | 65.3 | 72.7 | 73.1 | 74.0 | 75.8 | 74.2 | 70.5 | 65.8 | 61.8 |
| 32 | 57.2 | 60.3 | 70.1 | 70.7 | 72.6 | 72.5 | 71.1 | 66.0 | 62.3 | 58.8 |
| 33 | 55.4 | 59.0 | 64.2 | 64.9 | 68.3 | 69.0 | 68.1 | 62.9 | 58.7 | 55.2 |
| 34 | 55.0 | 56.3 | 62.0 | 62.2 | 64.5 | 65.0 | 64.3 | 58.6 | 55.2 | 55.0 |
| 35 | 55.0 | 55.0 | 56.3 | 56.6 | 60.0 | 60.7 | 60.4 | 55.7 | 55.0 | 55.0 |
| 36 | 55.0 | 55.0 | 55.0 | 55.0 | 55.5 | 56.0 | 56.2 | 55.0 | 55.0 | 55.0 |
| 37 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 |
| 38 | 55.0 | 55.0 | 55.0 | 55.0 | 55.5 | 55.2 | 55.0 | 55.0 | 55.0 | 55.0 |
| 39 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 |
| 40 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 |
| A | 72.5 | 80.2 | 83.9 | 85.0 | 85.1 | 85.6 | 84.5 | 31.6 | 76.9 | 71.8 |
| D | 79.5 | 84.9 | 88.0 | 89.1 | 89.1 | 89.6 | 88.7 | 85.9 | 82.0 | 77.9 |
| OASPL | 88.9 | 92.3 | 94.1 | 94.8 | 91.9 | 92.3 | 93.0 | 91.7 | 87.1 | 83.2 |
| PNL | 87.3 | 92.4 | 96.3 | 97.2 | 96.2 | 96.9 | 96.1 | 93.2 | 89.7 | 86.2 |
| PNLT | 87.3 | 94.3 | 97.3 | 97.2 | 96.2 | 96.9 | 96.1 | 93.2 | 89.7 | 86.2 |

LOWER LIMIT OF ANALYSIS SYSTEM= 55.0

TABLE G-VI

NOISE LEVEL FREQUENCY SPECTRA TIME HISTORY

SIKORSKY S-64

With truck

OCTOBER 28 1976

EVENT 69 95 KT. FLY BY MIC. 150 METERS WEST

1/3 OCTAVE FREQUENCY BAND VS TIME (SECONDS)
(DB RE 20 MICRO PA)

| BAND | -6.0 | -4.5 | -3.0 | -1.5 | 0 | 1.5 | 3.0 | 4.5 | 6.0 |
|-------|------|------|------|------|------|------|------|------|------|
| 17 | 76.7 | 77.6 | 77.3 | 75.3 | 78.7 | 86.8 | 84.1 | 77.1 | 79.7 |
| 18 | 81.0 | 83.5 | 86.7 | 88.5 | 90.2 | 88.8 | 76.1 | 73.1 | 71.8 |
| 19 | 74.1 | 75.2 | 78.2 | 77.7 | 77.0 | 74.4 | 75.7 | 76.5 | 72.9 |
| 20 | 72.1 | 73.7 | 75.0 | 74.8 | 72.5 | 69.8 | 72.2 | 75.4 | 76.5 |
| 21 | 77.3 | 79.7 | 79.9 | 74.9 | 69.5 | 70.2 | 65.2 | 65.0 | 67.3 |
| 22 | 67.8 | 68.9 | 66.9 | 66.5 | 74.2 | 78.2 | 74.3 | 65.8 | 59.1 |
| 23 | 65.5 | 66.5 | 63.0 | 75.5 | 81.3 | 81.1 | 77.8 | 71.1 | 63.3 |
| 24 | 58.4 | 62.4 | 70.8 | 81.9 | 83.8 | 81.6 | 78.9 | 74.7 | 69.6 |
| 25 | 59.1 | 71.2 | 78.2 | 82.6 | 81.1 | 74.3 | 74.8 | 73.9 | 72.0 |
| 26 | 66.8 | 74.9 | 80.0 | 78.4 | 79.4 | 80.3 | 76.6 | 70.4 | 70.9 |
| 27 | 68.6 | 75.1 | 76.3 | 77.9 | 83.2 | 79.8 | 77.9 | 72.8 | 64.2 |
| 28 | 67.5 | 71.7 | 71.7 | 78.7 | 78.1 | 78.5 | 73.1 | 73.0 | 68.2 |
| 29 | 62.1 | 68.1 | 75.5 | 78.8 | 79.5 | 76.3 | 73.8 | 69.7 | 67.1 |
| 30 | 61.9 | 71.2 | 74.0 | 77.9 | 79.0 | 75.7 | 71.2 | 67.7 | 65.1 |
| 31 | 62.1 | 65.2 | 71.9 | 76.5 | 77.2 | 74.3 | 69.7 | 66.3 | 62.8 |
| 32 | 57.0 | 64.0 | 68.0 | 74.1 | 74.6 | 71.4 | 66.3 | 62.4 | 59.8 |
| 33 | 55.0 | 59.3 | 63.3 | 69.8 | 70.2 | 66.7 | 62.3 | 58.1 | 55.5 |
| 34 | 55.0 | 56.7 | 62.1 | 66.3 | 66.8 | 63.0 | 58.1 | 55.2 | 55.0 |
| 35 | 55.0 | 55.0 | 55.8 | 61.2 | 61.7 | 59.4 | 55.3 | 55.0 | 55.0 |
| 36 | 55.0 | 55.0 | 55.0 | 56.7 | 57.1 | 55.6 | 55.0 | 55.0 | 55.0 |
| 37 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 |
| 38 | 55.0 | 55.0 | 55.0 | 55.0 | 55.3 | 55.0 | 55.0 | 55.0 | 55.0 |
| 39 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 |
| 40 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 |
| A | 72.1 | 78.3 | 82.3 | 85.9 | 87.1 | 84.5 | 81.2 | 77.6 | 74.3 |
| D | 79.0 | 83.1 | 86.3 | 90.0 | 91.2 | 89.2 | 85.7 | 82.0 | 79.6 |
| OASPL | 89.2 | 90.2 | 91.0 | 92.4 | 93.3 | 93.8 | 90.9 | 87.0 | 84.4 |
| PNL | 87.1 | 90.9 | 94.4 | 97.1 | 98.4 | 96.4 | 93.3 | 89.7 | 87.5 |
| PNLT | 87.1 | 92.4 | 94.4 | 97.1 | 98.4 | 96.4 | 93.3 | 89.7 | 87.5 |

LOWER LIMIT OF ANALYSIS SYSTEM= 55.0

TABLE G-VI

NOISE LEVEL FREQUENCY SPECTRA TIME HISTORY

SIKORSKY S-64

with truck

OCTOBER 28 1976

EVENT 43 9 DEGREE APPROACH MIC. 150 METERS EAST

1/3 OCTAVE FREQUENCY BAND VS TIME (SECONDS)
(DB RE 20 MICRO PA)

| BAND | -17.0 | -13.5 | -10.0 | -6.5 | -3.0 | 0 | .5 | 4.0 | 7.5 | 10.0 |
|-------|-------|-------|-------|------|------|------|------|------|------|------|
| 17 | 68.7 | 69.8 | 73.0 | 74.4 | 77.8 | 82.0 | 82.3 | 81.1 | 78.4 | 75.5 |
| 18 | 76.0 | 80.1 | 80.9 | 81.2 | 78.9 | 82.3 | 82.3 | 84.1 | 78.5 | 73.8 |
| 19 | 66.9 | 69.3 | 71.2 | 73.2 | 74.7 | 78.2 | 79.4 | 83.6 | 80.6 | 74.4 |
| 20 | 71.1 | 70.8 | 71.0 | 71.7 | 77.2 | 78.2 | 78.4 | 80.6 | 80.8 | 77.8 |
| 21 | 76.0 | 76.2 | 76.6 | 73.1 | 71.2 | 68.8 | 69.0 | 75.5 | 76.1 | 73.2 |
| 22 | 67.3 | 69.1 | 64.2 | 63.4 | 65.2 | 72.0 | 74.2 | 65.5 | 74.7 | 69.9 |
| 23 | 67.6 | 64.7 | 58.2 | 63.3 | 73.9 | 77.4 | 78.6 | 74.4 | 72.9 | 72.3 |
| 24 | 59.8 | 62.2 | 64.6 | 70.7 | 77.2 | 79.9 | 80.6 | 79.2 | 66.5 | 69.7 |
| 25 | 66.9 | 67.3 | 68.7 | 72.9 | 78.2 | 77.5 | 77.7 | 78.5 | 63.0 | 61.9 |
| 26 | 71.3 | 70.3 | 67.8 | 72.3 | 74.3 | 70.0 | 70.0 | 77.9 | 67.4 | 55.6 |
| 27 | 72.2 | 68.4 | 63.4 | 65.5 | 72.2 | 75.3 | 76.7 | 68.7 | 68.8 | 56.1 |
| 28 | 63.3 | 62.6 | 58.4 | 68.1 | 75.2 | 73.1 | 73.6 | 73.3 | 67.5 | 59.7 |
| 29 | 65.5 | 64.0 | 63.4 | 66.5 | 76.5 | 75.4 | 75.7 | 68.9 | 62.0 | 61.5 |
| 30 | 64.8 | 63.2 | 59.2 | 67.1 | 73.2 | 72.1 | 72.5 | 69.8 | 63.1 | 59.1 |
| 31 | 58.5 | 60.2 | 59.5 | 62.7 | 73.1 | 72.5 | 72.8 | 69.6 | 64.5 | 58.9 |
| 32 | 57.2 | 58.0 | 59.7 | 62.2 | 72.1 | 71.1 | 71.1 | 66.3 | 60.4 | 56.4 |
| 33 | 55.0 | 55.0 | 56.0 | 58.8 | 67.4 | 68.1 | 68.4 | 64.1 | 56.9 | 55.0 |
| 34 | 55.0 | 55.0 | 55.0 | 56.3 | 64.5 | 65.3 | 65.8 | 60.8 | 55.1 | 55.0 |
| 35 | 55.0 | 55.0 | 55.0 | 55.0 | 62.2 | 62.3 | 63.0 | 57.9 | 55.0 | 55.0 |
| 36 | 55.0 | 55.0 | 55.0 | 55.0 | 58.2 | 58.8 | 59.4 | 55.5 | 55.0 | 55.0 |
| 37 | 55.0 | 55.0 | 55.0 | 55.0 | 63.2 | 60.5 | 60.6 | 55.0 | 55.0 | 55.0 |
| 38 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 |
| 39 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 |
| 40 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 |
| A | 73.5 | 72.5 | 70.8 | 75.2 | 82.7 | 82.7 | 82.9 | 80.3 | 73.8 | 69.6 |
| D | 78.7 | 78.4 | 78.1 | 80.8 | 86.7 | 87.1 | 87.4 | 86.0 | 80.4 | 77.6 |
| OASPL | 84.7 | 86.5 | 88.2 | 89.9 | 92.0 | 90.0 | 90.5 | 90.8 | 87.6 | 84.6 |
| PNL | 87.4 | 86.9 | 86.4 | 88.6 | 94.3 | 94.7 | 95.2 | 93.8 | 89.5 | 86.3 |
| PNLT | 87.4 | 86.9 | 87.9 | 88.6 | 96.5 | 95.8 | 96.3 | 95.3 | 89.5 | 86.3 |

LOWER LIMIT OF ANALYSIS SYSTEM= 55.0

TABLE G-VI

NOISE LEVEL FREQUENCY SPECTRA TIME HISTORY

SIKORSKY S-64

With truck

OCTOBER 28 1976

EVENT 51 6 DEGREE APPROACH MIC. 150 METERS EAST

1/3 OCTAVE FREQUENCY BAND VS TIME (SECONDS)
(DB RE 20 MICRO PA)

| BAND | -20.0 | -15.5 | -11.0 | -6.5 | -2.0 | 0 | 2.5 | 7.0 | 11.5 | 13.5 |
|-------|-------|-------|-------|------|------|------|------|------|------|------|
| 17 | 68.6 | 70.9 | 70.8 | 69.8 | 77.1 | 80.9 | 81.9 | 77.4 | 78.4 | 74.7 |
| 18 | 75.5 | 84.4 | 81.9 | 79.9 | 84.2 | 85.3 | 82.0 | 78.0 | 76.2 | 70.5 |
| 19 | 70.9 | 76.8 | 70.5 | 72.3 | 78.6 | 77.4 | 80.8 | 81.7 | 77.6 | 73.0 |
| 20 | 70.8 | 72.2 | 72.4 | 75.4 | 77.4 | 75.5 | 75.4 | 81.3 | 79.7 | 75.2 |
| 21 | 75.5 | 79.2 | 75.1 | 75.4 | 69.2 | 67.5 | 70.0 | 74.2 | 74.2 | 71.2 |
| 22 | 66.1 | 70.5 | 68.9 | 65.7 | 67.4 | 73.8 | 74.8 | 73.5 | 74.5 | 65.8 |
| 23 | 63.8 | 66.3 | 65.2 | 63.5 | 75.8 | 77.0 | 79.1 | 70.5 | 79.4 | 64.4 |
| 24 | 60.8 | 64.5 | 60.8 | 67.2 | 77.8 | 78.5 | 79.4 | 66.8 | 78.2 | 63.8 |
| 25 | 58.1 | 63.2 | 65.7 | 72.5 | 76.5 | 74.8 | 76.0 | 72.3 | 76.1 | 64.1 |
| 26 | 62.2 | 66.1 | 70.9 | 74.3 | 71.4 | 73.2 | 71.0 | 72.5 | 70.8 | 62.4 |
| 27 | 63.4 | 68.6 | 71.3 | 66.9 | 75.0 | 77.7 | 76.3 | 71.3 | 65.9 | 58.1 |
| 28 | 59.3 | 63.4 | 64.7 | 63.5 | 73.4 | 73.2 | 71.7 | 66.7 | 62.6 | 56.4 |
| 29 | 57.1 | 60.7 | 64.3 | 67.4 | 75.6 | 75.7 | 73.8 | 62.3 | 63.5 | 55.5 |
| 30 | 55.5 | 60.3 | 63.7 | 61.7 | 72.2 | 74.0 | 72.0 | 62.0 | 62.3 | 55.1 |
| 31 | 55.0 | 56.7 | 58.5 | 59.9 | 71.2 | 72.4 | 70.7 | 62.5 | 65.6 | 55.0 |
| 32 | 55.0 | 55.0 | 56.3 | 59.3 | 69.2 | 71.4 | 67.9 | 59.5 | 60.0 | 55.0 |
| 33 | 55.0 | 55.0 | 55.0 | 56.3 | 65.9 | 67.6 | 65.5 | 56.4 | 56.3 | 55.0 |
| 34 | 55.0 | 55.0 | 55.0 | 55.2 | 62.3 | 63.8 | 62.3 | 55.0 | 55.0 | 55.0 |
| 35 | 55.0 | 55.0 | 55.0 | 55.0 | 59.5 | 60.9 | 59.6 | 55.0 | 55.0 | 55.0 |
| 36 | 55.0 | 55.0 | 55.0 | 55.0 | 55.9 | 57.1 | 56.5 | 55.0 | 55.0 | 55.0 |
| 37 | 55.0 | 55.0 | 55.0 | 55.0 | 58.9 | 57.2 | 56.8 | 55.0 | 55.0 | 55.0 |
| 38 | 55.0 | 55.0 | 55.0 | 55.0 | 55.2 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 |
| 39 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 |
| 40 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 |
| A | 66.6 | 71.3 | 73.1 | 74.5 | 81.6 | 82.7 | 81.4 | 75.2 | 76.4 | 66.1 |
| D | 75.6 | 79.3 | 78.8 | 80.0 | 85.9 | 86.9 | 86.0 | 81.3 | 82.9 | 75.4 |
| OASPL | 83.1 | 87.4 | 87.2 | 89.8 | 91.6 | 90.5 | 90.3 | 87.3 | 88.2 | 81.6 |
| PNL | 84.6 | 88.0 | 87.4 | 88.8 | 93.3 | 94.4 | 93.9 | 89.9 | 91.1 | 84.2 |
| PNLT | 84.6 | 88.0 | 87.4 | 90.4 | 94.4 | 94.4 | 93.9 | 89.9 | 92.6 | 84.2 |

LOWER LIMIT OF ANALYSIS SYSTEM= 55.0

TABLE G-VI

NOISE LEVEL FREQUENCY SPECTRA TIME HISTORY

SIKORSKY S-64

With truck

OCTOBER 28 1976

EVENT 67 95 KT. FLY BY MIC. 150 METERS EAST

1/3 OCTAVE FREQUENCY BAND VS TIME (SECONDS)
(DB RE 20 MICRO PA)

| BAND | -7.0 | -5.5 | -4.0 | -2.5 | -1.0 | 0 | .5 | 2.0 | 3.5 | 6.5 |
|-------|------|------|------|------|------|------|------|------|------|------|
| 17 | 78.2 | 77.7 | 78.0 | 75.5 | 75.4 | 79.2 | 82.4 | 85.0 | 79.6 | 69.6 |
| 18 | 81.5 | 82.2 | 85.6 | 89.6 | 89.8 | 91.1 | 90.9 | 83.6 | 73.9 | 70.0 |
| 19 | 70.2 | 71.1 | 74.9 | 76.5 | 76.3 | 74.7 | 74.5 | 74.4 | 76.7 | 74.5 |
| 20 | 66.7 | 70.7 | 72.5 | 73.9 | 73.9 | 74.7 | 74.3 | 72.7 | 75.4 | 75.5 |
| 21 | 77.6 | 81.0 | 79.7 | 76.3 | 68.7 | 68.6 | 67.9 | 66.9 | 66.3 | 67.5 |
| 22 | 67.2 | 69.3 | 68.8 | 65.2 | 68.1 | 73.5 | 74.9 | 72.6 | 64.7 | 63.7 |
| 23 | 66.3 | 73.2 | 68.2 | 68.8 | 78.2 | 80.6 | 81.5 | 78.3 | 71.5 | 58.2 |
| 24 | 63.4 | 64.3 | 67.7 | 76.4 | 81.6 | 82.7 | 82.4 | 81.1 | 75.8 | 61.6 |
| 25 | 60.6 | 70.3 | 75.8 | 80.9 | 82.3 | 80.3 | 78.3 | 76.0 | 76.2 | 68.3 |
| 26 | 66.4 | 77.1 | 79.3 | 81.6 | 77.3 | 78.4 | 79.6 | 76.7 | 71.5 | 71.9 |
| 27 | 70.1 | 78.5 | 79.7 | 77.7 | 80.1 | 82.7 | 82.8 | 80.0 | 74.8 | 69.7 |
| 28 | 69.9 | 75.9 | 73.0 | 78.1 | 79.6 | 77.9 | 77.3 | 74.5 | 72.5 | 63.6 |
| 29 | 62.7 | 67.9 | 72.8 | 76.5 | 78.6 | 79.5 | 78.3 | 75.3 | 70.5 | 66.7 |
| 30 | 64.2 | 71.3 | 72.0 | 76.0 | 76.9 | 77.6 | 77.9 | 73.9 | 69.1 | 64.3 |
| 31 | 62.2 | 65.6 | 71.3 | 74.5 | 76.4 | 76.7 | 76.1 | 73.4 | 68.8 | 63.8 |
| 32 | 57.1 | 63.6 | 68.2 | 71.7 | 73.3 | 74.2 | 73.7 | 70.2 | 63.9 | 59.0 |
| 33 | 55.0 | 57.9 | 62.8 | 68.2 | 70.0 | 70.5 | 69.8 | 66.4 | 59.9 | 55.1 |
| 34 | 55.0 | 55.2 | 59.2 | 64.1 | 66.2 | 66.3 | 65.9 | 62.3 | 56.1 | 55.0 |
| 35 | 55.0 | 55.0 | 55.5 | 58.9 | 62.1 | 62.5 | 61.8 | 58.6 | 55.0 | 55.0 |
| 36 | 55.0 | 55.0 | 55.0 | 55.1 | 57.1 | 57.6 | 57.2 | 55.7 | 55.0 | 55.0 |
| 37 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 | 55.4 | 55.4 | 55.3 | 55.0 | 55.0 |
| 38 | 55.0 | 55.0 | 55.0 | 55.0 | 58.1 | 56.8 | 55.5 | 55.0 | 55.0 | 55.0 |
| 39 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 |
| 40 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 |
| A | 73.6 | 80.9 | 81.5 | 84.4 | 85.8 | 86.7 | 86.4 | 83.4 | 79.2 | 73.7 |
| D | 79.6 | 84.2 | 85.9 | 88.5 | 90.0 | 90.5 | 90.4 | 87.7 | 83.4 | 78.5 |
| OASPL | 89.0 | 90.6 | 92.5 | 93.9 | 94.1 | 94.6 | 94.6 | 91.1 | 86.4 | 82.0 |
| PNL | 87.4 | 92.4 | 94.0 | 96.2 | 97.0 | 98.0 | 97.9 | 95.2 | 90.9 | 87.2 |
| PNLT | 87.4 | 93.9 | 94.0 | 96.2 | 97.5 | 98.0 | 97.9 | 95.2 | 90.9 | 87.2 |

LOWER LIMIT OF ANALYSIS SYSTEM= 55.0

TABLE G-VI

NOISE LEVEL FREQUENCY SPECTRA TIME HISTORY

SIKORSKY S-64

With Truck

OCTOBER 28 1976

EVENT 68 95 KT. FLY BY MIC. 150 METERS EAST

1/3 OCTAVE FREQUENCY BAND VS TIME (SECONDS)
(DB RE 20 MICRO PA)

| BAND | -7.0 | -5.5 | -4.0 | -3.0 | -2.5 | -1.0 | 0 | .5 | 2.0 | 3.5 | 6.0 |
|-------|------|------|------|------|------|------|------|------|------|------|------|
| 17 | 80.5 | 82.8 | 82.9 | 79.4 | 77.0 | 75.1 | 77.0 | 78.9 | 82.1 | 76.6 | 68.4 |
| 18 | 82.4 | 84.4 | 86.6 | 87.1 | 86.3 | 87.6 | 89.3 | 89.4 | 83.2 | 73.6 | 70.9 |
| 19 | 72.4 | 74.8 | 77.9 | 76.8 | 75.6 | 75.5 | 72.7 | 72.0 | 72.9 | 74.7 | 72.9 |
| 20 | 68.4 | 72.7 | 74.0 | 73.5 | 72.7 | 70.1 | 67.7 | 66.4 | 68.4 | 72.2 | 72.7 |
| 21 | 77.8 | 79.9 | 81.8 | 78.7 | 74.7 | 67.5 | 73.3 | 74.2 | 70.0 | 63.6 | 67.0 |
| 22 | 68.8 | 69.9 | 71.4 | 67.7 | 65.3 | 71.7 | 75.3 | 76.5 | 73.6 | 71.2 | 61.8 |
| 23 | 68.0 | 71.1 | 66.7 | 72.9 | 75.0 | 78.1 | 80.4 | 81.6 | 79.0 | 74.9 | 60.9 |
| 24 | 60.7 | 67.9 | 76.0 | 79.9 | 80.0 | 80.6 | 79.4 | 79.3 | 79.4 | 77.9 | 67.0 |
| 25 | 63.7 | 75.2 | 81.3 | 83.6 | 82.9 | 77.5 | 72.7 | 72.1 | 71.8 | 73.7 | 70.1 |
| 26 | 68.0 | 81.7 | 82.5 | 81.7 | 79.6 | 76.8 | 79.1 | 80.2 | 79.1 | 71.9 | 70.0 |
| 27 | 67.9 | 80.9 | 77.4 | 74.5 | 75.5 | 80.2 | 78.7 | 76.9 | 75.8 | 75.7 | 64.1 |
| 28 | 66.3 | 73.6 | 73.9 | 78.0 | 77.9 | 75.6 | 77.0 | 78.7 | 77.3 | 71.5 | 65.3 |
| 29 | 59.8 | 71.7 | 73.8 | 73.2 | 72.6 | 75.5 | 76.0 | 77.0 | 74.3 | 72.3 | 65.5 |
| 30 | 61.2 | 69.8 | 71.3 | 73.2 | 72.4 | 75.3 | 75.3 | 75.4 | 73.5 | 70.0 | 61.4 |
| 31 | 59.3 | 62.9 | 69.6 | 70.7 | 71.0 | 73.9 | 74.2 | 74.2 | 72.4 | 68.7 | 61.2 |
| 32 | 57.2 | 60.3 | 66.1 | 68.4 | 68.2 | 71.6 | 71.9 | 71.8 | 69.2 | 64.7 | 58.2 |
| 33 | 55.0 | 56.6 | 60.3 | 64.1 | 64.4 | 67.0 | 67.8 | 68.0 | 65.5 | 60.9 | 55.1 |
| 34 | 55.0 | 55.0 | 59.1 | 61.6 | 61.2 | 64.0 | 64.2 | 64.0 | 61.4 | 56.4 | 55.0 |
| 35 | 55.0 | 55.0 | 55.7 | 57.0 | 57.0 | 60.0 | 60.7 | 60.5 | 57.4 | 55.0 | 55.0 |
| 36 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 | 56.2 | 56.3 | 56.3 | 55.0 | 55.0 | 55.0 |
| 37 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 | 55.9 | 55.9 | 55.0 | 55.0 | 55.0 |
| 38 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 | 56.1 | 55.8 | 55.3 | 55.0 | 55.0 | 55.0 |
| 39 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 |
| 40 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 |
| A | 72.0 | 82.1 | 82.7 | 83.7 | 83.3 | 84.1 | 84.2 | 84.4 | 82.9 | 79.7 | 72.3 |
| D | 79.3 | 86.2 | 88.0 | 88.8 | 88.0 | 87.9 | 88.4 | 88.8 | 87.1 | 83.7 | 77.7 |
| OASPL | 89.7 | 93.0 | 94.7 | 95.4 | 95.2 | 95.0 | 94.4 | 94.0 | 90.8 | 86.4 | 80.9 |
| PNL | 87.5 | 94.2 | 95.7 | 96.1 | 95.5 | 95.5 | 95.5 | 96.0 | 94.4 | 91.4 | 86.2 |
| PNLT | 87.5 | 94.2 | 95.7 | 97.5 | 96.8 | 95.5 | 95.5 | 96.0 | 94.4 | 91.4 | 86.2 |

LOWER LIMIT OF ANALYSIS SYSTEM= 55.0

TABLE G-VI

NOISE LEVEL FREQUENCY SPECTRA TIME HISTORY

SIKORSKY S-64

With truck

OCTOBER 28 1976

EVENT 69 95 KT. FLY BY MIC. 150 METERS EAST

1/3 OCTAVE FREQUENCY BAND VS TIME (SECONDS)
(DB RE 20 MICRO PA)

| BAND | -7.0 | -5.5 | -4.0 | -2.5 | -1.0 | -.5 | 0 | .5 | 2.0 | 3.5 | 6.0 |
|-------|------|------|------|------|------|------|------|------|------|------|------|
| 17 | 76.0 | 76.5 | 77.5 | 77.9 | 74.8 | 75.8 | 78.3 | 81.0 | 86.4 | 80.6 | 71.9 |
| 18 | 80.9 | 82.9 | 84.9 | 88.4 | 89.3 | 90.1 | 90.7 | 90.9 | 84.7 | 75.5 | 73.2 |
| 19 | 70.1 | 71.1 | 74.0 | 75.6 | 74.5 | 75.8 | 76.1 | 75.7 | 74.5 | 77.2 | 74.6 |
| 20 | 67.8 | 70.5 | 71.7 | 73.0 | 72.2 | 72.0 | 70.9 | 70.5 | 70.8 | 74.3 | 74.2 |
| 21 | 76.3 | 78.8 | 76.3 | 72.6 | 66.0 | 66.8 | 69.1 | 71.0 | 69.7 | 64.0 | 68.3 |
| 22 | 66.7 | 66.8 | 66.1 | 62.8 | 70.0 | 72.0 | 73.7 | 76.6 | 75.0 | 71.6 | 60.7 |
| 23 | 64.1 | 72.6 | 63.7 | 68.6 | 77.7 | 79.9 | 80.7 | 81.0 | 79.8 | 75.2 | 63.5 |
| 24 | 59.3 | 63.4 | 67.8 | 75.6 | 80.8 | 82.0 | 82.2 | 81.9 | 80.6 | 78.7 | 70.6 |
| 25 | 58.8 | 71.3 | 75.4 | 79.1 | 79.8 | 78.8 | 77.3 | 75.2 | 73.3 | 74.9 | 72.0 |
| 26 | 65.9 | 77.9 | 80.1 | 78.5 | 76.1 | 78.3 | 79.9 | 80.8 | 80.3 | 74.2 | 70.8 |
| 27 | 67.6 | 79.3 | 78.0 | 71.8 | 82.0 | 83.4 | 83.3 | 82.0 | 78.8 | 77.1 | 64.8 |
| 28 | 65.3 | 75.5 | 72.5 | 76.5 | 77.9 | 77.6 | 78.5 | 78.9 | 76.8 | 72.1 | 69.3 |
| 29 | 60.6 | 70.0 | 74.3 | 73.8 | 79.7 | 79.5 | 78.6 | 77.1 | 74.1 | 73.2 | 67.9 |
| 30 | 60.6 | 71.4 | 70.8 | 75.5 | 76.3 | 76.8 | 77.1 | 77.4 | 73.7 | 71.1 | 67.0 |
| 31 | 59.8 | 64.7 | 71.0 | 71.6 | 75.9 | 76.3 | 76.0 | 75.9 | 72.5 | 70.2 | 64.5 |
| 32 | 55.6 | 62.1 | 67.5 | 69.5 | 73.6 | 74.2 | 74.0 | 73.5 | 68.5 | 66.1 | 60.9 |
| 33 | 55.0 | 56.8 | 61.6 | 64.9 | 69.1 | 69.7 | 69.4 | 69.2 | 64.4 | 61.9 | 56.6 |
| 34 | 55.0 | 55.3 | 58.9 | 62.0 | 65.3 | 65.6 | 65.3 | 65.1 | 60.5 | 58.1 | 55.0 |
| 35 | 55.0 | 55.0 | 55.0 | 57.0 | 61.9 | 62.6 | 62.2 | 61.8 | 57.2 | 55.0 | 55.0 |
| 36 | 55.0 | 55.0 | 55.0 | 55.0 | 56.6 | 57.1 | 57.2 | 57.0 | 55.0 | 55.0 | 55.0 |
| 37 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 |
| 38 | 55.0 | 55.0 | 55.0 | 55.0 | 58.1 | 58.1 | 56.5 | 55.4 | 55.0 | 55.0 | 55.0 |
| 39 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 |
| 40 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 |
| A | 70.7 | 80.7 | 81.5 | 82.5 | 86.2 | 86.6 | 86.6 | 86.0 | 83.6 | 81.0 | 75.0 |
| D | 78.0 | 84.6 | 85.3 | 86.8 | 89.6 | 90.1 | 90.2 | 90.0 | 87.8 | 85.0 | 79.7 |
| OASPL | 87.7 | 90.3 | 91.5 | 93.4 | 94.0 | 94.2 | 94.3 | 94.3 | 92.0 | 87.5 | 82.9 |
| PNL | 86.0 | 92.6 | 93.6 | 94.0 | 96.9 | 97.9 | 97.9 | 97.5 | 95.3 | 92.6 | 87.7 |
| PNLT | 86.0 | 93.9 | 93.6 | 95.2 | 97.5 | 98.4 | 97.9 | 97.5 | 95.3 | 92.6 | 87.7 |

LOWER LIMIT OF ANALYSIS SYSTEM= 55.0

TABLE G-VI

NOISE LEVEL FREQUENCY SPECTRA TIME HISTORY

SIKORSKY S-64

With truck

OCTOBER 28 1976

EVENT 43 9 DEGREE APPROACH MIC. CENTERLINE (HARD)

1/3 OCTAVE FREQUENCY BAND VS TIME (SECONDS)
(DB RE 20 MICRO PA)

| BAND | -7.0 | -5.0 | -3.0 | -1.0 | 0 | 1.0 | 3.0 | 5.0 | 7.0 |
|-------|------|------|------|-------|-------|-------|------|------|------|
| 17 | 74.0 | 76.8 | 79.9 | 80.7 | 84.5 | 86.9 | 86.8 | 87.5 | 85.8 |
| 18 | 84.5 | 86.7 | 87.3 | 86.5 | 84.3 | 84.2 | 83.9 | 87.0 | 79.9 |
| 19 | 71.2 | 73.8 | 76.2 | 74.7 | 72.2 | 80.2 | 76.7 | 85.2 | 82.1 |
| 20 | 69.7 | 72.8 | 73.3 | 78.5 | 85.6 | 89.0 | 85.7 | 82.3 | 80.6 |
| 21 | 75.3 | 74.7 | 73.6 | 89.1 | 91.3 | 93.0 | 90.8 | 76.0 | 75.7 |
| 22 | 64.0 | 72.3 | 81.6 | 90.6 | 91.0 | 93.1 | 89.3 | 82.0 | 71.1 |
| 23 | 74.0 | 83.7 | 87.6 | 91.6 | 88.0 | 88.2 | 86.6 | 88.1 | 66.6 |
| 24 | 80.6 | 86.3 | 86.3 | 85.6 | 79.1 | 84.7 | 80.9 | 89.6 | 71.6 |
| 25 | 77.9 | 83.5 | 78.5 | 79.7 | 83.2 | 87.2 | 83.7 | 84.7 | 73.2 |
| 26 | 75.0 | 75.3 | 73.1 | 81.2 | 80.1 | 81.8 | 79.2 | 76.8 | 73.2 |
| 27 | 66.3 | 74.1 | 74.3 | 74.3 | 79.7 | 80.3 | 78.0 | 76.9 | 73.3 |
| 28 | 67.5 | 72.7 | 69.3 | 73.8 | 75.7 | 77.3 | 74.2 | 74.2 | 70.4 |
| 29 | 62.9 | 71.1 | 69.9 | 73.6 | 75.6 | 76.3 | 73.0 | 72.1 | 71.8 |
| 30 | 64.7 | 69.0 | 69.3 | 72.3 | 74.5 | 74.6 | 72.5 | 68.6 | 69.6 |
| 31 | 60.8 | 68.9 | 67.0 | 70.6 | 73.9 | 73.3 | 72.8 | 70.5 | 69.8 |
| 32 | 60.1 | 67.3 | 66.9 | 71.7 | 73.9 | 72.9 | 69.9 | 66.8 | 65.8 |
| 33 | 57.8 | 64.5 | 63.7 | 68.0 | 70.6 | 69.9 | 67.1 | 64.2 | 62.1 |
| 34 | 56.1 | 62.0 | 61.5 | 65.5 | 68.5 | 68.5 | 65.5 | 62.3 | 60.0 |
| 35 | 55.0 | 59.5 | 59.5 | 62.9 | 65.2 | 66.7 | 63.2 | 58.9 | 55.9 |
| 36 | 55.0 | 55.4 | 56.4 | 60.3 | 62.4 | 63.6 | 61.4 | 57.8 | 55.3 |
| 37 | 55.3 | 61.3 | 61.0 | 63.6 | 62.3 | 62.3 | 61.0 | 57.0 | 55.1 |
| 38 | 55.0 | 55.4 | 55.6 | 56.5 | 56.8 | 58.5 | 55.9 | 55.0 | 55.0 |
| 39 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 | 56.7 | 55.1 | 55.0 | 55.0 |
| 40 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 |
| A | 78.2 | 83.6 | 83.2 | 86.6 | 86.8 | 88.2 | 85.0 | 85.5 | 78.3 |
| D | 84.1 | 89.4 | 89.8 | 93.4 | 93.3 | 95.0 | 92.2 | 92.1 | 83.9 |
| OASPL | 92.8 | 94.9 | 95.3 | 97.8 | 98.4 | 100.0 | 98.7 | 97.2 | 92.1 |
| PNL | 91.7 | 96.8 | 97.0 | 100.9 | 100.7 | 102.4 | 99.6 | 99.8 | 91.7 |
| PNLT | 91.7 | 98.8 | 98.7 | 102.6 | 100.7 | 102.4 | 99.6 | 99.8 | 91.7 |

LOWER LIMIT OF ANALYSIS SYSTEM= 55.0

TABLE G-VI

NOISE LEVEL FREQUENCY SPECTRA TIME HISTORY

SIKORSKY S-64

with truck

OCTOBER 28 1976

EVENT 49 60 KT. FLY BY MIC. CENTERLINE(HARD)

1/3 OCTAVE FREQUENCY BAND VS TIME (SECONDS)
(DB RE 20 MICRO PA)

| BAND | -10.0 | -7.0 | -4.0 | -1.0 | 0 | .5 | 2.0 | 5.0 | 8.0 | 11.0 |
|-------|-------|------|------|------|------|------|------|------|------|------|
| 17 | 66.0 | 67.2 | 72.9 | 76.6 | 76.5 | 75.7 | 77.0 | 81.6 | 83.1 | 78.8 |
| 18 | 78.6 | 80.0 | 86.4 | 87.6 | 85.3 | 83.5 | 80.3 | 74.1 | 75.9 | 70.3 |
| 19 | 68.3 | 70.5 | 74.4 | 72.8 | 67.6 | 66.2 | 67.4 | 71.1 | 76.6 | 72.4 |
| 20 | 69.5 | 70.6 | 72.3 | 66.3 | 73.3 | 74.8 | 78.1 | 70.4 | 75.5 | 73.1 |
| 21 | 75.6 | 75.2 | 77.0 | 77.3 | 83.1 | 83.7 | 84.5 | 71.8 | 65.8 | 66.0 |
| 22 | 66.0 | 63.4 | 62.6 | 75.7 | 78.5 | 79.4 | 77.9 | 77.9 | 63.1 | 58.3 |
| 23 | 65.8 | 60.8 | 67.0 | 83.4 | 83.3 | 82.2 | 74.9 | 75.3 | 69.5 | 56.5 |
| 24 | 58.3 | 58.6 | 71.3 | 77.1 | 75.1 | 72.9 | 73.8 | 72.8 | 73.7 | 60.1 |
| 25 | 62.0 | 65.3 | 73.4 | 69.9 | 76.5 | 78.6 | 78.9 | 71.8 | 72.4 | 61.9 |
| 26 | 65.5 | 66.5 | 70.0 | 76.5 | 76.9 | 76.5 | 77.1 | 75.6 | 68.4 | 64.7 |
| 27 | 65.8 | 64.6 | 64.9 | 75.4 | 76.4 | 77.7 | 76.7 | 72.1 | 70.3 | 64.6 |
| 28 | 62.5 | 59.1 | 68.6 | 73.2 | 75.2 | 75.9 | 76.8 | 72.4 | 71.0 | 62.1 |
| 29 | 57.3 | 61.1 | 66.0 | 73.0 | 75.7 | 76.3 | 76.0 | 72.2 | 70.8 | 66.2 |
| 30 | 60.3 | 60.5 | 67.4 | 72.2 | 75.7 | 76.3 | 75.3 | 71.5 | 68.9 | 62.6 |
| 31 | 57.8 | 57.5 | 66.1 | 72.0 | 74.1 | 74.5 | 74.2 | 72.3 | 71.9 | 64.0 |
| 32 | 57.0 | 56.5 | 65.9 | 71.4 | 74.0 | 74.2 | 71.6 | 67.7 | 67.0 | 60.0 |
| 33 | 55.0 | 55.1 | 63.3 | 68.1 | 70.3 | 70.7 | 68.9 | 64.8 | 61.4 | 55.7 |
| 34 | 55.0 | 55.0 | 60.3 | 65.7 | 67.6 | 67.9 | 67.3 | 61.8 | 58.7 | 55.0 |
| 35 | 55.0 | 55.0 | 58.2 | 62.8 | 64.6 | 65.2 | 64.7 | 58.2 | 55.3 | 55.0 |
| 36 | 55.0 | 55.0 | 55.2 | 59.1 | 60.5 | 61.1 | 61.6 | 56.1 | 55.0 | 55.0 |
| 37 | 55.0 | 55.0 | 55.0 | 55.8 | 58.4 | 60.2 | 61.5 | 57.2 | 55.0 | 55.0 |
| 38 | 55.0 | 55.0 | 55.2 | 57.1 | 58.1 | 58.5 | 56.7 | 55.0 | 55.0 | 55.0 |
| 39 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 |
| 40 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 |
| A | 69.3 | 69.7 | 76.6 | 82.0 | 84.1 | 84.5 | 83.6 | 80.6 | 78.7 | 71.3 |
| D | 77.4 | 77.5 | 82.3 | 87.4 | 89.1 | 89.4 | 88.2 | 84.7 | 82.8 | 77.3 |
| OASPL | 83.8 | 85.4 | 89.2 | 93.3 | 94.3 | 93.9 | 93.4 | 91.7 | 88.1 | 82.9 |
| PNL | 85.3 | 85.2 | 90.7 | 95.4 | 96.6 | 96.7 | 95.8 | 92.3 | 90.5 | 84.7 |
| PNLT | 85.3 | 85.2 | 91.7 | 95.4 | 96.6 | 96.7 | 95.8 | 92.3 | 91.8 | 86.0 |

LOWER LIMIT OF ANALYSIS SYSTEM= 55.0

TABLE G-VI

NOISE LEVEL FREQUENCY SPECTRA TIME HISTORY

SIKORSKY S-64

With truck

OCTOBER 28 1976

EVENT 50 60 KT. FLY BY MIC. CENTERLINE (HARD)

1/3 OCTAVE FREQUENCY BAND VS TIME (SECONDS)
(DB RE 20 MICRO PA)

| BAND | -11.0 | -8.0 | -5.0 | -2.0 | 0 | 1.0 | 4.0 | 7.0 | 10.0 | 11.0 |
|-------|-------|------|------|------|------|------|------|------|------|------|
| 17 | 69.9 | 71.0 | 74.7 | 76.2 | 74.1 | 74.3 | 80.7 | 83.5 | 78.6 | 77.6 |
| 18 | 81.3 | 82.7 | 86.2 | 85.8 | 81.7 | 79.6 | 72.1 | 75.0 | 71.9 | 71.3 |
| 19 | 72.4 | 73.1 | 77.9 | 73.7 | 65.4 | 64.9 | 65.2 | 76.8 | 76.1 | 75.0 |
| 20 | 71.3 | 70.8 | 74.2 | 67.7 | 76.0 | 78.4 | 71.6 | 74.3 | 74.7 | 73.4 |
| 21 | 75.7 | 75.8 | 75.1 | 79.2 | 84.7 | 85.1 | 71.7 | 62.8 | 65.7 | 65.6 |
| 22 | 65.9 | 62.8 | 66.9 | 81.7 | 80.2 | 78.3 | 76.1 | 67.1 | 59.3 | 59.4 |
| 23 | 64.8 | 58.0 | 77.6 | 87.6 | 81.0 | 74.9 | 73.6 | 70.2 | 59.4 | 55.6 |
| 24 | 58.9 | 65.7 | 82.0 | 83.2 | 71.8 | 73.5 | 68.3 | 72.1 | 65.3 | 61.1 |
| 25 | 67.9 | 70.2 | 78.7 | 73.0 | 78.7 | 77.6 | 71.9 | 70.9 | 67.2 | 64.1 |
| 26 | 68.8 | 70.8 | 72.7 | 78.7 | 75.8 | 76.6 | 72.8 | 67.0 | 67.2 | 65.8 |
| 27 | 66.0 | 66.2 | 70.1 | 75.3 | 77.4 | 76.8 | 70.7 | 71.9 | 64.1 | 65.0 |
| 28 | 61.8 | 62.5 | 72.3 | 75.5 | 75.4 | 75.8 | 70.2 | 69.5 | 67.0 | 64.1 |
| 29 | 57.8 | 65.4 | 69.4 | 74.2 | 76.0 | 75.3 | 70.8 | 70.9 | 69.1 | 69.5 |
| 30 | 62.5 | 60.4 | 68.9 | 71.9 | 76.7 | 75.3 | 69.5 | 68.9 | 65.1 | 63.0 |
| 31 | 57.7 | 59.6 | 67.1 | 71.3 | 74.6 | 73.9 | 70.5 | 71.3 | 65.5 | 64.5 |
| 32 | 58.0 | 59.0 | 65.5 | 70.7 | 72.7 | 71.4 | 66.9 | 65.3 | 61.7 | 58.0 |
| 33 | 55.0 | 55.7 | 63.3 | 67.3 | 69.3 | 68.5 | 64.0 | 60.1 | 56.6 | 55.0 |
| 34 | 55.0 | 55.0 | 60.1 | 64.0 | 66.4 | 66.3 | 60.2 | 56.4 | 55.0 | 55.0 |
| 35 | 55.0 | 55.0 | 56.9 | 60.9 | 63.2 | 63.0 | 57.4 | 55.0 | 55.0 | 55.0 |
| 36 | 55.0 | 55.0 | 55.0 | 56.5 | 59.1 | 59.3 | 55.5 | 55.0 | 55.0 | 55.0 |
| 37 | 55.0 | 55.0 | 55.0 | 55.0 | 57.6 | 57.3 | 55.3 | 55.0 | 55.0 | 55.0 |
| 38 | 55.0 | 55.0 | 55.0 | 55.1 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 |
| 39 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 |
| 40 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 |
| A | 71.0 | 72.3 | 79.9 | 83.7 | 84.2 | 83.5 | 78.5 | 77.5 | 74.0 | 72.8 |
| D | 78.7 | 79.5 | 85.8 | 89.3 | 88.1 | 87.6 | 83.5 | 82.1 | 79.2 | 78.1 |
| OASPL | 86.7 | 88.5 | 92.1 | 94.1 | 93.1 | 92.2 | 91.5 | 88.2 | 84.6 | 83.4 |
| PNL | 86.1 | 87.1 | 93.8 | 97.5 | 95.8 | 95.5 | 90.4 | 89.9 | 86.6 | 85.9 |
| PNLT | 87.7 | 88.4 | 93.8 | 97.5 | 95.8 | 95.5 | 90.4 | 91.4 | 87.7 | 87.9 |

LOWER LIMIT OF ANALYSIS SYSTEM= 55.0

TABLE G-III

NOISE LEVEL FREQUENCY SPECTRA TIME HISTORY

SIKORSKY S-64

With truck

OCTOBER 28 1976

EVENT 51 6 DEGREE APPROACH MIC.CENTERLINE(HARD)

1/3 OCTAVE FREQUENCY BAND VS TIME (SECONDS)
(DB RE 20 MICRO PA)

| BAND | -7.0 | -5.0 | -3.0 | -1.5 | -1.0 | 0 | 1.0 | 3.0 | 5.0 | 7.0 |
|-------|------|------|------|-------|-------|-------|------|------|------|------|
| 17 | 75.0 | 76.6 | 77.9 | 73.8 | 75.2 | 79.1 | 79.3 | 83.5 | 87.2 | 84.0 |
| 18 | 83.6 | 85.1 | 86.6 | 86.5 | 86.1 | 84.7 | 82.6 | 79.5 | 80.6 | 78.3 |
| 19 | 72.1 | 72.2 | 75.0 | 71.9 | 71.2 | 70.8 | 74.9 | 72.3 | 79.7 | 78.3 |
| 20 | 72.1 | 73.4 | 70.9 | 74.7 | 78.3 | 84.0 | 86.4 | 82.2 | 76.5 | 78.0 |
| 21 | 78.6 | 76.0 | 72.3 | 84.7 | 86.7 | 90.0 | 90.9 | 84.9 | 75.7 | 73.1 |
| 22 | 66.9 | 67.4 | 81.3 | 88.9 | 89.6 | 90.6 | 89.8 | 86.2 | 80.9 | 68.4 |
| 23 | 72.2 | 78.9 | 88.3 | 92.8 | 92.3 | 89.8 | 85.2 | 83.3 | 83.7 | 69.2 |
| 24 | 79.7 | 83.4 | 88.4 | 87.4 | 85.8 | 81.3 | 79.9 | 76.0 | 84.4 | 75.6 |
| 25 | 79.2 | 82.9 | 81.2 | 77.6 | 79.6 | 82.9 | 82.5 | 78.3 | 75.1 | 76.5 |
| 26 | 74.5 | 76.8 | 74.8 | 80.4 | 80.6 | 79.4 | 78.6 | 74.2 | 71.5 | 74.7 |
| 27 | 67.5 | 68.4 | 77.1 | 75.8 | 75.8 | 79.2 | 78.1 | 76.6 | 71.5 | 68.5 |
| 28 | 67.5 | 70.5 | 71.3 | 75.0 | 75.5 | 76.1 | 76.5 | 73.5 | 71.3 | 68.3 |
| 29 | 67.4 | 64.7 | 70.8 | 73.6 | 74.4 | 75.7 | 76.2 | 73.0 | 71.0 | 70.4 |
| 30 | 65.1 | 65.5 | 69.8 | 71.9 | 73.1 | 75.2 | 75.8 | 72.1 | 68.9 | 67.8 |
| 31 | 61.9 | 62.3 | 68.8 | 70.4 | 71.8 | 73.3 | 73.7 | 73.1 | 69.4 | 69.2 |
| 32 | 60.3 | 61.5 | 68.2 | 70.1 | 72.5 | 73.5 | 71.9 | 69.0 | 65.5 | 65.0 |
| 33 | 56.7 | 58.2 | 64.0 | 68.5 | 69.4 | 69.0 | 68.8 | 67.1 | 63.1 | 61.0 |
| 34 | 55.2 | 55.8 | 61.9 | 69.0 | 69.5 | 66.8 | 68.3 | 65.0 | 60.3 | 58.1 |
| 35 | 55.0 | 55.0 | 59.0 | 60.9 | 62.8 | 64.2 | 65.3 | 62.1 | 56.9 | 55.0 |
| 36 | 55.0 | 55.0 | 55.6 | 57.2 | 58.5 | 60.2 | 61.5 | 59.8 | 55.3 | 55.0 |
| 37 | 55.0 | 55.0 | 56.6 | 57.0 | 57.7 | 58.5 | 59.7 | 59.7 | 55.0 | 55.0 |
| 38 | 55.0 | 55.0 | 56.9 | 55.3 | 55.8 | 56.2 | 56.6 | 55.3 | 55.0 | 55.0 |
| 39 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 | 55.4 | 55.0 | 55.0 | 55.0 |
| 40 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 |
| A | 78.5 | 81.2 | 84.6 | 86.8 | 86.9 | 86.8 | 86.0 | 82.7 | 81.4 | 78.0 |
| D | 84.5 | 87.1 | 91.0 | 93.5 | 93.5 | 93.0 | 92.3 | 88.8 | 87.8 | 83.8 |
| QASPL | 91.3 | 94.0 | 96.6 | 98.4 | 98.3 | 98.2 | 97.9 | 98.1 | 94.4 | 90.5 |
| PNL | 91.7 | 94.0 | 98.1 | 100.9 | 101.1 | 100.6 | 99.8 | 96.7 | 95.6 | 91.4 |
| PNLT | 91.7 | 95.4 | 98.1 | 102.3 | 101.1 | 100.6 | 99.8 | 96.7 | 95.6 | 91.4 |

LOWER LIMIT OF ANALYSIS SYSTEM= 55.0

TABLE G-VI

NOISE LEVEL FREQUENCY SPECTRA TIME HISTORY

SIKORSKY S-64

with truck

OCTOBER 28 1976

EVENT 55 85 KT. FLY BY MIC. CENTERLINE(HARD)

1/3 OCTAVE FREQUENCY BAND VS TIME (SECONDS)
(DB RE 20 MICRO PA)

| BAND | -10.0 | -7.5 | -5.0 | -2.5 | .5 | 0 | 2.5 | 5.0 | 7.5 | 8.0 |
|-------|-------|------|------|------|------|------|------|------|------|------|
| 17 | 78.3 | 79.3 | 78.5 | 77.8 | 72.8 | 73.1 | 77.6 | 82.9 | 79.7 | 77.2 |
| 18 | 82.9 | 82.8 | 85.5 | 87.3 | 85.1 | 82.7 | 74.3 | 72.6 | 71.6 | 70.8 |
| 19 | 72.2 | 71.0 | 73.0 | 73.1 | 68.8 | 67.3 | 66.2 | 69.9 | 73.1 | 72.2 |
| 20 | 69.2 | 68.3 | 69.8 | 68.2 | 73.1 | 76.2 | 80.0 | 68.5 | 70.9 | 71.2 |
| 21 | 75.6 | 74.9 | 78.6 | 71.8 | 83.5 | 83.9 | 77.9 | 64.3 | 64.0 | 64.1 |
| 22 | 66.0 | 65.0 | 65.2 | 69.6 | 79.5 | 79.7 | 78.8 | 72.2 | 58.4 | 58.3 |
| 23 | 65.3 | 63.1 | 63.5 | 81.4 | 84.3 | 82.8 | 73.1 | 72.9 | 63.9 | 61.3 |
| 24 | 60.4 | 57.8 | 69.2 | 80.5 | 75.4 | 74.0 | 72.2 | 72.8 | 70.5 | 68.2 |
| 25 | 56.8 | 63.0 | 69.3 | 75.5 | 77.5 | 79.3 | 77.8 | 65.9 | 68.7 | 67.9 |
| 26 | 59.2 | 67.3 | 69.7 | 71.4 | 78.3 | 77.7 | 74.4 | 70.9 | 65.5 | 66.1 |
| 27 | 64.0 | 66.7 | 65.8 | 75.7 | 75.2 | 76.4 | 75.5 | 69.8 | 61.6 | 60.2 |
| 28 | 64.8 | 63.3 | 65.5 | 71.3 | 73.9 | 74.7 | 74.2 | 69.7 | 66.5 | 64.9 |
| 29 | 61.9 | 59.3 | 68.3 | 72.7 | 75.5 | 76.6 | 74.1 | 68.7 | 64.6 | 64.7 |
| 30 | 57.9 | 62.8 | 66.8 | 69.1 | 74.5 | 76.1 | 73.5 | 66.7 | 65.2 | 64.6 |
| 31 | 60.1 | 59.2 | 65.1 | 67.7 | 73.1 | 74.4 | 72.1 | 67.1 | 67.1 | 64.6 |
| 32 | 56.3 | 57.4 | 66.8 | 67.6 | 72.5 | 73.5 | 68.7 | 64.5 | 61.4 | 59.8 |
| 33 | 55.0 | 55.2 | 66.0 | 66.0 | 71.9 | 72.0 | 66.5 | 59.3 | 56.4 | 55.8 |
| 34 | 55.0 | 55.0 | 60.6 | 62.8 | 68.0 | 68.0 | 63.6 | 56.2 | 55.0 | 55.0 |
| 35 | 55.0 | 55.0 | 56.4 | 58.4 | 62.7 | 63.5 | 60.2 | 55.0 | 55.0 | 55.0 |
| 36 | 55.0 | 55.0 | 55.0 | 55.0 | 58.7 | 59.5 | 57.2 | 55.0 | 55.0 | 55.0 |
| 37 | 55.0 | 55.0 | 55.0 | 55.0 | 56.2 | 57.5 | 56.1 | 55.0 | 55.0 | 55.0 |
| 38 | 55.0 | 55.0 | 55.0 | 55.4 | 55.4 | 55.7 | 55.0 | 55.0 | 55.0 | 55.0 |
| 39 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 |
| 40 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 |
| A | 69.9 | 70.6 | 76.1 | 80.8 | 83.8 | 84.4 | 82.0 | 76.1 | 73.3 | 72.0 |
| D | 78.2 | 78.8 | 82.6 | 86.4 | 89.2 | 89.3 | 86.3 | 81.1 | 78.8 | 77.9 |
| OASPL | 88.6 | 91.0 | 92.1 | 95.9 | 94.0 | 92.8 | 93.8 | 89.4 | 84.3 | 83.3 |
| PNL | 86.3 | 86.5 | 90.2 | 93.7 | 96.7 | 96.5 | 93.5 | 88.7 | 86.4 | 85.2 |
| PNLT | 86.3 | 87.7 | 90.2 | 93.7 | 96.7 | 96.5 | 93.5 | 88.7 | 87.7 | 85.2 |

LOWER LIMIT OF ANALYSIS SYSTEM= 55.0

TABLE G-VI

NOISE LEVEL FREQUENCY SPECTRA TIME HISTORY

SIKORSKY S-64

with truck

OCTOBER 28 1976

EVENT 66 85 KT. FLY BY MIC. CENTERLINE(HARD)

1/3 OCTAVE FREQUENCY BAND VS TIME (SECONDS)
(DB RE 20 MICRO PA)

| BAND | -6.5 | -4.5 | -2.5 | -.5 | 0 | 1.5 | 3.5 | 5.5 | 7.5 | 9.5 |
|-------|------|------|------|------|------|------|------|------|------|------|
| 17 | 74.0 | 77.4 | 78.5 | 75.2 | 75.7 | 74.5 | 76.6 | 82.4 | 80.5 | 77.6 |
| 18 | 81.1 | 84.8 | 87.9 | 89.1 | 88.3 | 81.2 | 70.4 | 71.9 | 74.1 | 70.1 |
| 19 | 71.7 | 74.1 | 76.8 | 75.0 | 72.1 | 65.6 | 63.3 | 71.9 | 78.3 | 75.9 |
| 20 | 71.5 | 72.9 | 74.8 | 70.7 | 74.1 | 79.5 | 76.5 | 69.6 | 76.9 | 76.8 |
| 21 | 76.1 | 80.8 | 80.3 | 82.3 | 86.2 | 87.4 | 75.8 | 60.6 | 64.7 | 67.2 |
| 22 | 68.4 | 68.1 | 67.0 | 77.9 | 79.8 | 77.8 | 77.4 | 70.6 | 62.3 | 66.8 |
| 23 | 68.5 | 68.4 | 74.0 | 85.9 | 86.2 | 78.1 | 74.7 | 72.3 | 63.8 | 59.9 |
| 24 | 61.3 | 60.2 | 75.2 | 80.7 | 78.3 | 75.3 | 72.4 | 74.1 | 70.8 | 60.3 |
| 25 | 58.1 | 66.7 | 74.4 | 74.5 | 77.4 | 78.6 | 76.6 | 69.8 | 70.8 | 66.6 |
| 26 | 64.5 | 70.4 | 73.1 | 77.4 | 78.4 | 78.4 | 75.2 | 71.8 | 70.2 | 69.8 |
| 27 | 67.9 | 70.1 | 70.2 | 76.2 | 76.9 | 77.7 | 75.4 | 73.6 | 63.9 | 68.9 |
| 28 | 68.1 | 64.6 | 70.6 | 74.6 | 75.5 | 76.5 | 73.7 | 70.9 | 67.1 | 64.4 |
| 29 | 64.7 | 63.9 | 68.6 | 74.9 | 76.2 | 76.7 | 73.1 | 71.6 | 68.0 | 64.7 |
| 30 | 62.4 | 65.7 | 69.7 | 75.2 | 76.2 | 76.6 | 72.5 | 69.8 | 66.2 | 64.5 |
| 31 | 62.0 | 61.5 | 67.6 | 73.8 | 74.4 | 75.7 | 74.6 | 69.5 | 69.1 | 63.2 |
| 32 | 59.3 | 59.6 | 65.7 | 72.9 | 73.9 | 73.7 | 69.1 | 65.5 | 62.0 | 57.0 |
| 33 | 55.9 | 56.0 | 63.3 | 70.0 | 70.8 | 69.9 | 66.1 | 60.8 | 56.7 | 55.0 |
| 34 | 55.0 | 55.0 | 60.8 | 66.7 | 67.4 | 66.8 | 63.7 | 57.6 | 55.0 | 55.0 |
| 35 | 55.0 | 55.0 | 58.4 | 63.4 | 64.1 | 64.1 | 60.0 | 55.0 | 55.0 | 55.0 |
| 36 | 55.0 | 55.0 | 55.3 | 59.2 | 59.9 | 59.8 | 57.2 | 55.0 | 55.0 | 55.0 |
| 37 | 55.0 | 55.0 | 55.0 | 55.2 | 55.8 | 59.2 | 56.7 | 55.0 | 55.0 | 55.0 |
| 38 | 55.0 | 55.0 | 55.5 | 55.8 | 56.1 | 55.8 | 55.0 | 55.0 | 55.0 | 55.0 |
| 39 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 |
| 40 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 |
| A | 72.7 | 73.7 | 78.7 | 83.7 | 84.7 | 84.8 | 81.7 | 78.8 | 75.3 | 72.9 |
| D | 79.3 | 81.0 | 84.5 | 89.1 | 90.0 | 89.3 | 86.0 | 82.6 | 80.6 | 78.8 |
| OASPL | 88.3 | 91.9 | 95.5 | 97.3 | 96.9 | 92.9 | 92.5 | 87.7 | 86.1 | 83.8 |
| PNL | 86.7 | 89.4 | 92.6 | 97.4 | 98.1 | 97.1 | 93.2 | 90.2 | 88.2 | 86.6 |
| PNLT | 86.7 | 90.4 | 92.6 | 97.4 | 98.1 | 97.1 | 94.5 | 90.2 | 89.9 | 86.6 |

LOWER LIMIT OF ANALYSIS SYSTEM= 55.0

TABLE G-VI

NOISE LEVEL FREQUENCY SPECTRA TIME HISTORY

SIKORSKY S-64

with truck

OCTOBER 28 1976

EVENT 67 95 KT. FLY BY MIC. CENTERLINE (HARD)

1/3 OCTAVE FREQUENCY BAND VS TIME (SECONDS)
(DB RE 20 MICRO PA)

| BAND | -4.5 | -2.5 | -.5 | 0 | 1.5 | 3.5 | 5.5 | 7.5 | 9.5 | 12.0 |
|-------|------|------|------|------|------|------|------|------|------|------|
| 17 | 81.2 | 81.9 | 74.7 | 75.2 | 79.3 | 83.0 | 82.1 | 80.3 | 76.7 | 75.3 |
| 18 | 82.8 | 88.3 | 88.9 | 86.4 | 78.3 | 71.8 | 73.0 | 71.8 | 72.6 | 70.8 |
| 19 | 72.3 | 76.4 | 74.6 | 70.4 | 67.3 | 70.5 | 77.3 | 77.6 | 78.0 | 77.5 |
| 20 | 69.3 | 74.2 | 74.6 | 76.4 | 81.8 | 71.2 | 77.8 | 78.8 | 79.5 | 79.8 |
| 21 | 75.2 | 78.6 | 87.1 | 87.8 | 84.3 | 68.7 | 68.4 | 69.5 | 69.7 | 72.3 |
| 22 | 65.7 | 68.0 | 78.8 | 80.5 | 79.0 | 77.4 | 64.4 | 68.2 | 70.2 | 71.0 |
| 23 | 60.9 | 76.0 | 87.7 | 86.6 | 74.5 | 76.3 | 69.5 | 59.1 | 67.1 | 71.1 |
| 24 | 60.5 | 74.7 | 79.7 | 77.1 | 77.7 | 76.0 | 76.3 | 64.9 | 65.2 | 72.5 |
| 25 | 65.5 | 74.1 | 78.5 | 80.8 | 80.3 | 72.8 | 74.9 | 69.6 | 62.3 | 70.9 |
| 26 | 69.4 | 72.7 | 80.2 | 79.8 | 79.9 | 75.7 | 72.7 | 72.3 | 67.0 | 65.4 |
| 27 | 69.0 | 71.3 | 78.2 | 79.2 | 79.2 | 73.9 | 70.6 | 70.9 | 68.9 | 63.3 |
| 28 | 61.5 | 72.3 | 76.5 | 78.6 | 79.4 | 73.6 | 73.4 | 66.5 | 68.0 | 65.1 |
| 29 | 65.5 | 70.2 | 76.0 | 77.5 | 78.7 | 73.6 | 70.8 | 68.9 | 64.3 | 66.4 |
| 30 | 63.6 | 70.4 | 76.1 | 77.7 | 77.6 | 72.2 | 70.8 | 67.2 | 62.4 | 64.6 |
| 31 | 61.9 | 68.1 | 74.4 | 76.3 | 76.8 | 72.6 | 71.7 | 69.0 | 65.6 | 63.7 |
| 32 | 58.9 | 67.1 | 74.4 | 76.0 | 74.9 | 68.7 | 66.8 | 63.5 | 58.2 | 55.8 |
| 33 | 55.8 | 63.8 | 70.7 | 71.7 | 71.9 | 64.3 | 61.1 | 57.5 | 55.0 | 55.0 |
| 34 | 55.3 | 62.4 | 68.7 | 69.5 | 69.4 | 61.5 | 57.2 | 55.6 | 55.0 | 55.0 |
| 35 | 55.0 | 59.8 | 65.6 | 66.5 | 66.0 | 57.7 | 55.0 | 55.0 | 55.0 | 55.0 |
| 36 | 55.0 | 56.1 | 61.7 | 62.6 | 62.9 | 55.3 | 55.0 | 55.0 | 55.0 | 55.0 |
| 37 | 55.0 | 55.0 | 57.3 | 58.9 | 59.8 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 |
| 38 | 55.0 | 57.0 | 57.9 | 58.7 | 56.9 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 |
| 39 | 55.0 | 55.0 | 55.0 | 55.2 | 55.2 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 |
| 40 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 |
| A | 72.8 | 79.3 | 85.9 | 86.5 | 86.4 | 81.3 | 79.3 | 75.9 | 73.0 | 73.8 |
| D | 80.6 | 85.6 | 91.3 | 91.7 | 90.7 | 85.1 | 83.8 | 80.7 | 79.4 | 80.3 |
| OASPL | 93.0 | 96.9 | 97.7 | 96.6 | 94.0 | 89.6 | 87.4 | 85.5 | 84.5 | 84.4 |
| PNL | 87.3 | 93.2 | 99.1 | 99.2 | 97.8 | 92.6 | 91.1 | 89.0 | 88.0 | 88.5 |
| PNLT | 87.3 | 93.2 | 99.1 | 99.2 | 97.8 | 92.6 | 91.1 | 90.2 | 89.8 | 88.5 |

LOWER LIMIT OF ANALYSIS SYSTEM= 55.0

TABLE G-VI

NOISE LEVEL FREQUENCY SPECTRA TIME HISTORY

SIKORSKY S-64

With truck

OCTOBER 28 1976

EVENT 68 95 KT. FLY BY MIC. CENTERLINE(HARD)

1/3 OCTAVE FREQUENCY BAND VS TIME (SECONDS)
(DB RE 20 MICRO PA)

| BAND | -7.0 | -5.0 | -3.0 | -1.0 | 0 | 1.0 | 3.0 | 5.0 | 7.0 | 8.5 |
|-------|------|------|------|------|------|------|------|------|------|------|
| 17 | 84.0 | 87.2 | 87.2 | 76.0 | 70.7 | 76.0 | 79.8 | 84.0 | 81.8 | 78.5 |
| 18 | 83.5 | 86.3 | 89.7 | 87.8 | 83.0 | 79.0 | 71.0 | 72.7 | 72.2 | 72.2 |
| 19 | 75.1 | 77.4 | 79.4 | 72.0 | 67.3 | 68.9 | 66.7 | 73.9 | 76.3 | 75.3 |
| 20 | 72.4 | 72.7 | 72.6 | 70.4 | 76.1 | 77.6 | 74.9 | 73.2 | 74.8 | 76.5 |
| 21 | 73.8 | 77.7 | 75.6 | 83.9 | 85.7 | 83.7 | 72.5 | 61.7 | 61.6 | 69.8 |
| 22 | 66.6 | 69.3 | 68.7 | 79.4 | 80.4 | 78.7 | 79.2 | 66.1 | 63.9 | 66.5 |
| 23 | 65.7 | 64.0 | 79.9 | 86.6 | 84.2 | 76.6 | 76.2 | 72.2 | 61.0 | 60.6 |
| 24 | 60.3 | 61.3 | 81.1 | 80.0 | 74.9 | 76.1 | 73.3 | 74.2 | 68.7 | 60.3 |
| 25 | 56.6 | 67.0 | 80.4 | 77.0 | 80.6 | 79.5 | 76.3 | 71.8 | 72.5 | 67.7 |
| 26 | 62.5 | 71.0 | 76.0 | 78.2 | 79.0 | 79.5 | 77.1 | 68.3 | 72.5 | 71.3 |
| 27 | 66.7 | 70.5 | 73.3 | 75.5 | 79.6 | 80.1 | 75.1 | 71.5 | 67.8 | 70.3 |
| 28 | 67.2 | 64.4 | 74.6 | 74.9 | 77.5 | 79.0 | 74.0 | 69.8 | 66.9 | 67.0 |
| 29 | 62.0 | 65.4 | 70.7 | 75.3 | 78.6 | 78.3 | 74.1 | 69.8 | 69.9 | 66.4 |
| 30 | 63.5 | 64.6 | 69.1 | 74.9 | 78.0 | 78.6 | 73.1 | 67.7 | 67.0 | 63.9 |
| 31 | 62.9 | 63.5 | 68.4 | 73.6 | 76.5 | 77.1 | 73.2 | 69.1 | 67.5 | 64.6 |
| 32 | 58.2 | 60.9 | 66.5 | 72.4 | 75.0 | 74.3 | 69.3 | 66.0 | 64.1 | 60.1 |
| 33 | 55.1 | 57.6 | 63.4 | 69.4 | 71.7 | 71.6 | 66.1 | 61.0 | 58.7 | 55.6 |
| 34 | 55.0 | 55.1 | 61.7 | 66.6 | 68.4 | 68.5 | 63.4 | 57.4 | 55.3 | 55.0 |
| 35 | 55.0 | 55.0 | 58.4 | 63.3 | 65.4 | 65.4 | 59.4 | 55.1 | 55.0 | 55.0 |
| 36 | 55.0 | 55.0 | 55.4 | 59.3 | 61.5 | 61.5 | 56.4 | 55.0 | 55.0 | 55.0 |
| 37 | 55.0 | 55.0 | 55.0 | 55.6 | 59.4 | 60.0 | 55.3 | 55.0 | 55.0 | 55.0 |
| 38 | 55.0 | 55.0 | 55.9 | 57.6 | 58.0 | 56.1 | 55.0 | 55.0 | 55.0 | 55.0 |
| 39 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 |
| 40 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 |
| A | 71.7 | 74.4 | 81.5 | 84.2 | 86.5 | 86.2 | 81.9 | 77.5 | 76.3 | 74.2 |
| D | 80.1 | 82.8 | 88.0 | 89.8 | 90.8 | 90.2 | 86.2 | 82.4 | 81.0 | 79.6 |
| OASPL | 91.7 | 95.8 | 99.1 | 97.8 | 94.6 | 92.8 | 92.0 | 87.6 | 85.5 | 84.0 |
| PNL | 87.5 | 90.1 | 94.8 | 97.8 | 97.9 | 97.3 | 93.5 | 89.6 | 88.9 | 87.6 |
| PNLT | 87.5 | 90.1 | 94.8 | 97.8 | 97.9 | 97.3 | 93.5 | 89.6 | 88.9 | 87.6 |

LOWER LIMIT OF ANALYSIS SYSTEM= 55.0

TABLE G-VI

NOISE LEVEL FREQUENCY SPECTRA TIME HISTORY

SIKORSKY S-64

With truck

OCTOBER 28 1976

EVENT 69 95 KT. FLY BY MIC. CENTERLINE(HARD)

1/3 OCTAVE FREQUENCY BAND VS TIME (SECONDS)
(DB RE 20 MICRO PA)

| BAND | -4.5 | -3.5 | -2.5 | -1.5 | -.5 | 0 | .5 | 1.5 | 2.5 | 5.0 |
|-------|------|------|------|------|------|------|------|------|------|------|
| 17 | 80.7 | 79.0 | 77.9 | 74.9 | 73.8 | 73.8 | 76.4 | 79.6 | 77.2 | 82.6 |
| 18 | 85.3 | 86.4 | 88.4 | 89.6 | 87.2 | 83.9 | 80.5 | 76.3 | 69.9 | 71.7 |
| 19 | 74.3 | 75.4 | 75.8 | 74.9 | 70.0 | 67.6 | 67.5 | 66.3 | 66.0 | 73.7 |
| 20 | 71.9 | 73.0 | 72.1 | 68.6 | 75.3 | 77.6 | 78.8 | 81.2 | 76.8 | 74.7 |
| 21 | 77.0 | 77.3 | 74.2 | 81.1 | 86.4 | 87.0 | 85.9 | 80.6 | 74.9 | 62.8 |
| 22 | 66.3 | 65.8 | 66.9 | 74.3 | 80.0 | 80.6 | 80.1 | 80.7 | 79.0 | 61.6 |
| 23 | 60.7 | 67.3 | 80.1 | 86.3 | 86.3 | 84.1 | 81.1 | 74.2 | 75.6 | 69.1 |
| 24 | 62.0 | 70.1 | 76.8 | 80.4 | 77.6 | 75.3 | 76.0 | 76.1 | 72.9 | 73.4 |
| 25 | 66.4 | 70.9 | 73.8 | 73.4 | 80.3 | 80.8 | 80.0 | 79.7 | 76.6 | 72.6 |
| 26 | 69.0 | 70.2 | 69.8 | 78.9 | 80.3 | 79.4 | 78.7 | 78.4 | 75.9 | 68.8 |
| 27 | 68.0 | 65.5 | 73.7 | 78.0 | 80.3 | 80.8 | 80.1 | 79.2 | 74.8 | 71.2 |
| 28 | 62.9 | 67.7 | 70.8 | 75.1 | 77.8 | 78.1 | 78.2 | 77.6 | 73.4 | 68.9 |
| 29 | 65.2 | 65.8 | 70.6 | 74.9 | 77.8 | 78.3 | 78.1 | 76.9 | 73.5 | 68.6 |
| 30 | 64.1 | 65.9 | 70.2 | 74.5 | 77.8 | 78.2 | 78.3 | 77.6 | 72.8 | 66.5 |
| 31 | 63.1 | 63.6 | 68.4 | 73.0 | 76.2 | 76.5 | 77.0 | 77.9 | 75.3 | 67.0 |
| 32 | 60.3 | 61.5 | 66.3 | 72.4 | 75.2 | 75.5 | 75.3 | 74.0 | 70.1 | 62.4 |
| 33 | 56.7 | 58.4 | 62.6 | 68.4 | 71.4 | 72.1 | 71.8 | 71.3 | 66.6 | 57.8 |
| 34 | 56.1 | 57.7 | 63.4 | 67.2 | 68.9 | 69.6 | 69.6 | 69.5 | 64.7 | 55.5 |
| 35 | 55.0 | 55.4 | 60.6 | 64.0 | 65.8 | 66.8 | 67.0 | 65.4 | 60.4 | 55.0 |
| 36 | 55.0 | 55.0 | 56.2 | 58.9 | 62.0 | 62.9 | 63.1 | 61.5 | 57.0 | 55.0 |
| 37 | 55.0 | 55.0 | 55.0 | 55.4 | 57.8 | 59.0 | 59.8 | 58.8 | 55.3 | 55.0 |
| 38 | 55.0 | 55.0 | 57.9 | 58.8 | 58.0 | 58.4 | 58.5 | 56.4 | 55.0 | 55.0 |
| 39 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 |
| 40 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 |
| A | 72.8 | 74.9 | 79.5 | 83.9 | 86.5 | 86.6 | 86.3 | 85.9 | 82.5 | 76.2 |
| D | 80.7 | 82.2 | 85.8 | 89.5 | 91.8 | 91.6 | 90.9 | 90.2 | 86.9 | 81.2 |
| OASPL | 93.0 | 94.3 | 96.5 | 97.5 | 96.1 | 94.7 | 93.3 | 92.0 | 89.8 | 86.0 |
| PNL | 88.8 | 90.2 | 93.1 | 97.5 | 98.9 | 98.4 | 98.0 | 97.0 | 93.7 | 88.6 |
| PNLT | 88.8 | 90.2 | 93.1 | 98.1 | 98.9 | 98.4 | 98.0 | 97.0 | 94.9 | 88.6 |

LOWER LIMIT OF ANALYSIS SYSTEM= 55.0

TABLE G-VI

NOISE LEVEL FREQUENCY SPECTRA TIME HISTORY

SIKORSKY S-64

With truck

OCTOBER 28 1976

EVENT 70 3 DEGREE APPROACH MIC. CENTERLINE(HARD)

1/3 OCTAVE FREQUENCY BAND VS TIME (SECONDS)
(DB RE 20 MICRO PA)

| BAND | -8.5 | -6.5 | -4.5 | -2.5 | -.5 | 0 | 1.5 | 3.5 | 5.5 | 7.5 |
|-------|------|------|------|------|-------|-------|------|------|------|------|
| 17 | 73.2 | 74.4 | 76.2 | 77.0 | 81.7 | 82.4 | 81.8 | 84.7 | 87.3 | 85.9 |
| 18 | 85.7 | 86.3 | 88.0 | 88.7 | 87.7 | 85.8 | 81.9 | 77.3 | 78.9 | 76.4 |
| 19 | 74.3 | 75.7 | 79.1 | 77.1 | 70.2 | 68.9 | 74.0 | 71.3 | 78.4 | 80.8 |
| 20 | 73.7 | 75.4 | 76.0 | 71.6 | 80.9 | 83.0 | 81.2 | 77.1 | 75.7 | 78.2 |
| 21 | 79.3 | 81.2 | 78.9 | 75.5 | 90.0 | 91.2 | 87.0 | 77.5 | 64.8 | 71.5 |
| 22 | 73.5 | 72.0 | 68.3 | 84.3 | 91.5 | 91.3 | 83.8 | 82.3 | 71.3 | 63.6 |
| 23 | 70.3 | 69.0 | 78.2 | 88.8 | 89.2 | 88.0 | 77.1 | 81.0 | 75.1 | 65.2 |
| 24 | 70.0 | 78.1 | 83.7 | 86.6 | 82.4 | 81.5 | 78.7 | 75.3 | 77.1 | 71.7 |
| 25 | 74.1 | 79.4 | 82.8 | 78.8 | 85.0 | 85.9 | 81.7 | 76.1 | 74.4 | 73.0 |
| 26 | 77.0 | 77.8 | 79.0 | 78.6 | 83.0 | 82.2 | 80.6 | 77.5 | 71.9 | 70.8 |
| 27 | 72.9 | 74.9 | 70.6 | 79.0 | 82.4 | 83.1 | 79.3 | 74.9 | 74.7 | 65.6 |
| 28 | 66.1 | 68.2 | 73.7 | 72.6 | 77.8 | 79.5 | 78.7 | 73.8 | 71.9 | 70.1 |
| 29 | 65.9 | 71.4 | 69.5 | 72.7 | 76.8 | 77.7 | 77.3 | 74.5 | 73.7 | 70.9 |
| 30 | 65.8 | 66.3 | 69.8 | 71.7 | 76.3 | 77.5 | 76.6 | 73.0 | 71.9 | 70.7 |
| 31 | 61.7 | 64.8 | 67.8 | 69.6 | 74.8 | 75.5 | 76.0 | 76.2 | 74.7 | 70.9 |
| 32 | 59.0 | 62.4 | 65.8 | 69.1 | 73.3 | 73.7 | 73.6 | 69.9 | 69.1 | 66.8 |
| 33 | 56.7 | 59.3 | 62.4 | 65.5 | 70.4 | 70.7 | 70.0 | 67.9 | 65.2 | 61.9 |
| 34 | 55.2 | 56.8 | 59.7 | 62.6 | 67.3 | 67.9 | 68.7 | 64.7 | 61.0 | 56.7 |
| 35 | 55.0 | 55.5 | 57.3 | 59.6 | 64.5 | 65.4 | 66.3 | 60.8 | 56.3 | 55.0 |
| 36 | 55.0 | 55.0 | 55.0 | 56.2 | 61.1 | 61.7 | 62.8 | 58.5 | 55.0 | 55.0 |
| 37 | 55.0 | 55.0 | 55.0 | 59.2 | 59.7 | 61.0 | 63.0 | 59.9 | 55.4 | 55.0 |
| 38 | 55.0 | 55.0 | 56.2 | 60.2 | 57.4 | 58.3 | 59.2 | 55.3 | 55.0 | 55.0 |
| 39 | 55.0 | 55.0 | 55.0 | 55.0 | 55.4 | 56.0 | 58.5 | 55.0 | 55.0 | 55.0 |
| 40 | 55.0 | 55.0 | 55.0 | 55.0 | 55.2 | 55.4 | 55.4 | 55.0 | 55.0 | 55.0 |
| A | 77.0 | 79.9 | 82.6 | 84.9 | 87.9 | 88.2 | 85.9 | 83.1 | 81.4 | 78.4 |
| D | 83.1 | 85.5 | 88.4 | 91.3 | 93.8 | 93.9 | 91.0 | 88.2 | 85.7 | 82.9 |
| OASPL | 90.9 | 92.3 | 95.0 | 97.8 | 99.2 | 99.2 | 99.3 | 96.2 | 91.9 | 89.5 |
| PNL | 91.3 | 93.0 | 95.5 | 98.5 | 101.2 | 101.4 | 98.3 | 95.2 | 93.2 | 90.5 |
| PNLT | 91.3 | 94.4 | 96.7 | 99.0 | 101.2 | 101.4 | 98.3 | 96.8 | 94.6 | 90.5 |

LOWER LIMIT OF ANALYSIS SYSTEM= 55.0

TABLE G-VI

NOISE LEVEL FREQUENCY SPECTRA TIME HISTORY

SIKORSKY S-64

With truck

OCTOBER 28 1976

EVENT 67 95 KT. FLY BY MIC. CENTERLINE(SOFT)

1/3 OCTAVE FREQUENCY BAND VS TIME (SECONDS)
(DB RE 20 MICRO PA)

| BAND | -4.0 | -2.5 | -1.0 | 0 | .5 | 2.0 | 3.5 | 5.0 | 6.5 | 8.0 |
|-------|------|------|------|------|------|------|------|------|------|------|
| 17 | 79.9 | 80.0 | 77.5 | 75.2 | 74.6 | 79.1 | 78.4 | 80.3 | 79.0 | 77.8 |
| 18 | 82.7 | 86.3 | 89.5 | 88.9 | 86.8 | 79.4 | 69.6 | 71.5 | 70.6 | 71.0 |
| 19 | 72.0 | 75.0 | 75.3 | 72.3 | 68.8 | 66.5 | 68.0 | 73.6 | 75.5 | 75.6 |
| 20 | 66.9 | 69.3 | 66.9 | 74.8 | 78.4 | 80.7 | 73.2 | 72.2 | 75.5 | 77.1 |
| 21 | 70.6 | 72.2 | 80.8 | 86.8 | 89.2 | 85.7 | 74.0 | 62.7 | 65.4 | 67.0 |
| 22 | 60.2 | 64.7 | 74.3 | 78.9 | 79.8 | 80.6 | 77.8 | 68.7 | 61.6 | 65.1 |
| 23 | 66.5 | 74.8 | 85.6 | 86.6 | 84.8 | 75.7 | 77.4 | 73.7 | 67.9 | 60.3 |
| 24 | 66.5 | 74.7 | 80.2 | 77.3 | 75.4 | 76.8 | 74.0 | 76.2 | 73.3 | 66.1 |
| 25 | 66.7 | 73.6 | 74.8 | 79.3 | 80.9 | 80.0 | 73.6 | 73.3 | 73.5 | 68.6 |
| 26 | 67.5 | 69.3 | 79.3 | 81.0 | 79.5 | 77.3 | 76.4 | 70.9 | 73.3 | 69.8 |
| 27 | 62.0 | 70.4 | 78.9 | 79.4 | 79.7 | 78.3 | 74.4 | 73.6 | 67.4 | 67.2 |
| 28 | 62.1 | 71.2 | 75.1 | 77.6 | 78.5 | 77.3 | 73.4 | 72.0 | 72.1 | 64.9 |
| 29 | 62.6 | 67.3 | 73.4 | 76.7 | 77.5 | 76.5 | 73.2 | 72.5 | 68.4 | 66.4 |
| 30 | 59.5 | 68.6 | 73.5 | 76.3 | 77.2 | 75.9 | 71.8 | 71.0 | 68.2 | 62.7 |
| 31 | 58.3 | 65.7 | 71.4 | 74.6 | 75.7 | 76.6 | 72.0 | 70.8 | 67.7 | 65.0 |
| 32 | 56.8 | 64.1 | 70.2 | 73.5 | 74.4 | 72.6 | 68.2 | 67.1 | 62.6 | 57.8 |
| 33 | 55.0 | 60.1 | 66.7 | 70.3 | 71.0 | 69.2 | 64.4 | 62.1 | 56.7 | 55.0 |
| 34 | 55.0 | 58.4 | 64.1 | 66.6 | 67.7 | 66.2 | 61.4 | 58.7 | 55.0 | 55.0 |
| 35 | 55.0 | 55.5 | 60.7 | 63.1 | 64.4 | 63.1 | 57.6 | 55.0 | 55.0 | 55.0 |
| 36 | 55.0 | 55.0 | 57.0 | 59.7 | 60.4 | 60.1 | 55.3 | 55.0 | 55.0 | 55.0 |
| 37 | 55.0 | 55.0 | 55.0 | 55.5 | 56.7 | 56.8 | 55.0 | 55.0 | 55.0 | 55.0 |
| 38 | 55.0 | 55.0 | 58.0 | 56.7 | 56.4 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 |
| 39 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 |
| 40 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 |
| A | 70.3 | 77.5 | 83.5 | 85.8 | 86.3 | 84.6 | 80.9 | 79.4 | 77.0 | 72.8 |
| D | 73.5 | 83.0 | 89.0 | 90.8 | 90.9 | 89.0 | 85.0 | 83.4 | 81.4 | 78.2 |
| OASPL | 91.1 | 94.5 | 97.2 | 96.8 | 95.9 | 92.1 | 89.5 | 87.3 | 85.6 | 83.6 |
| PNL | 86.5 | 91.0 | 96.8 | 98.5 | 98.6 | 96.6 | 92.7 | 90.9 | 89.4 | 86.9 |
| PNLT | 86.5 | 91.0 | 96.8 | 98.5 | 98.6 | 96.6 | 92.7 | 90.9 | 90.8 | 88.5 |

LOWER LIMIT OF ANALYSIS SYSTEM= 55.0

TABLE G-VI

NOISE LEVEL FREQUENCY SPECTRA TIME HISTORY

SIKORSKY S-64

With truck

OCTOBER 28 1976

EVENT 68 95 KT. FLY BY MIC. CENTERLINE(SOFT)

1/3 OCTAVE FREQUENCY BAND VS TIME (SECONDS)
(DB RE 20 MICRO PA)

| BAND | -5.5 | -3.5 | -1.5 | 0 | .5 | 2.5 | 4.5 | 6.5 | 8.5 |
|-------|------|------|------|------|------|------|------|------|------|
| 17 | 85.1 | 86.4 | 77.1 | 72.4 | 73.4 | 75.9 | 80.9 | 77.5 | 75.0 |
| 18 | 84.2 | 86.6 | 87.7 | 83.8 | 81.3 | 68.9 | 71.5 | 68.4 | 69.8 |
| 19 | 74.6 | 77.2 | 73.8 | 67.8 | 68.4 | 61.7 | 69.3 | 74.0 | 73.8 |
| 20 | 69.6 | 71.1 | 67.7 | 76.8 | 79.1 | 76.5 | 67.7 | 71.9 | 75.0 |
| 21 | 70.2 | 72.4 | 81.7 | 88.0 | 88.5 | 76.1 | 61.2 | 61.8 | 64.2 |
| 22 | 61.4 | 67.5 | 77.9 | 79.6 | 79.3 | 77.0 | 70.9 | 59.4 | 61.7 |
| 23 | 62.3 | 80.0 | 86.3 | 83.1 | 79.3 | 73.9 | 72.9 | 66.3 | 59.1 |
| 24 | 64.8 | 79.2 | 81.0 | 74.8 | 75.9 | 72.9 | 72.9 | 71.4 | 65.5 |
| 25 | 66.0 | 79.2 | 75.5 | 79.9 | 79.3 | 76.8 | 67.7 | 72.3 | 68.7 |
| 26 | 67.7 | 74.4 | 78.0 | 78.4 | 78.0 | 75.1 | 71.7 | 71.0 | 70.9 |
| 27 | 65.3 | 73.4 | 76.0 | 79.6 | 79.4 | 76.8 | 71.6 | 65.2 | 66.6 |
| 28 | 61.5 | 74.0 | 73.1 | 77.6 | 78.0 | 75.1 | 67.8 | 69.0 | 62.4 |
| 29 | 63.1 | 68.9 | 72.2 | 77.1 | 77.7 | 74.0 | 69.3 | 64.8 | 65.5 |
| 30 | 61.5 | 69.1 | 72.4 | 76.5 | 77.1 | 72.8 | 68.0 | 65.6 | 63.7 |
| 31 | 60.2 | 66.3 | 71.4 | 75.1 | 75.4 | 71.7 | 67.4 | 65.8 | 63.7 |
| 32 | 57.5 | 64.9 | 69.8 | 73.6 | 73.6 | 68.3 | 64.1 | 60.9 | 58.0 |
| 33 | 55.1 | 60.9 | 66.5 | 69.6 | 69.5 | 64.8 | 59.4 | 55.7 | 55.0 |
| 34 | 55.0 | 58.5 | 63.6 | 66.7 | 67.0 | 62.5 | 56.1 | 55.0 | 55.0 |
| 35 | 55.0 | 55.4 | 60.6 | 63.2 | 63.3 | 58.7 | 55.0 | 55.0 | 55.0 |
| 36 | 55.0 | 55.0 | 56.4 | 58.9 | 59.3 | 55.9 | 55.0 | 55.0 | 55.0 |
| 37 | 55.0 | 55.0 | 55.0 | 56.6 | 57.2 | 55.2 | 55.0 | 55.0 | 55.0 |
| 38 | 55.0 | 55.0 | 55.0 | 55.1 | 55.1 | 55.0 | 55.0 | 55.0 | 55.0 |
| 39 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 |
| 40 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 |
| A | 70.9 | 80.3 | 82.9 | 85.3 | 85.3 | 81.3 | 76.5 | 74.7 | 72.5 |
| D | 79.7 | 86.1 | 88.8 | 89.8 | 89.4 | 85.4 | 80.8 | 79.3 | 77.7 |
| OASPL | 92.9 | 97.0 | 97.7 | 94.9 | 93.3 | 91.4 | 86.9 | 83.8 | 81.9 |
| PNL | 87.6 | 93.4 | 96.7 | 97.6 | 97.6 | 93.1 | 88.8 | 87.5 | 86.6 |
| PNLT | 87.6 | 93.4 | 96.7 | 97.6 | 97.6 | 93.1 | 88.8 | 88.8 | 86.6 |

LOWER LIMIT OF ANALYSIS SYSTEM= 55.0

TABLE G-VI

NOISE LEVEL FREQUENCY SPECTRA TIME HISTORY

SIKORSKY S-64

with truck

OCTOBER 28 1976

EVENT 69 95 KT. FLY BY MIC. CENTERLINE (SOFT)

1/3 OCTAVE FREQUENCY BAND VS TIME (SECONDS)
(DB RE 20 MICRO PA)

| BAND | -4.5 | -3.0 | -1.5 | 0 | 1.5 | 3.0 | 4.5 | 6.0 | 8.0 |
|-------|------|------|------|------|------|------|------|------|------|
| 17 | 79.6 | 78.0 | 75.2 | 74.0 | 78.3 | 77.1 | 81.0 | 79.2 | 77.1 |
| 18 | 84.8 | 86.3 | 89.3 | 85.2 | 76.6 | 68.9 | 69.8 | 71.0 | 71.1 |
| 19 | 73.6 | 74.9 | 74.0 | 68.4 | 65.4 | 65.5 | 70.8 | 73.8 | 75.6 |
| 20 | 68.1 | 69.0 | 67.6 | 79.2 | 79.9 | 70.8 | 69.9 | 73.4 | 75.6 |
| 21 | 69.8 | 71.0 | 82.6 | 89.2 | 81.8 | 73.0 | 62.2 | 62.0 | 65.9 |
| 22 | 60.1 | 64.1 | 75.4 | 80.3 | 79.5 | 78.0 | 69.7 | 61.3 | 63.2 |
| 23 | 67.1 | 76.2 | 85.5 | 82.5 | 74.1 | 75.6 | 71.8 | 66.0 | 60.2 |
| 24 | 67.1 | 75.4 | 78.2 | 75.2 | 76.2 | 72.2 | 73.6 | 72.6 | 65.6 |
| 25 | 67.3 | 73.0 | 74.9 | 80.6 | 79.2 | 72.2 | 70.3 | 73.0 | 68.5 |
| 26 | 66.4 | 67.1 | 80.2 | 79.2 | 77.4 | 75.1 | 68.7 | 71.0 | 69.3 |
| 27 | 61.7 | 67.3 | 77.4 | 79.9 | 77.6 | 72.0 | 70.7 | 66.3 | 66.1 |
| 28 | 63.0 | 66.3 | 74.8 | 78.1 | 76.1 | 71.4 | 67.1 | 69.0 | 62.1 |
| 29 | 61.3 | 65.1 | 72.4 | 78.1 | 76.1 | 71.4 | 67.5 | 65.3 | 64.6 |
| 30 | 60.4 | 65.5 | 73.4 | 77.4 | 75.1 | 70.4 | 66.3 | 66.5 | 61.8 |
| 31 | 58.8 | 63.8 | 70.7 | 75.8 | 76.2 | 71.6 | 65.6 | 67.5 | 62.8 |
| 32 | 56.9 | 61.7 | 69.4 | 74.4 | 71.3 | 67.3 | 61.7 | 60.7 | 56.4 |
| 33 | 55.0 | 58.5 | 66.4 | 70.7 | 68.0 | 63.8 | 57.1 | 55.8 | 55.0 |
| 34 | 55.0 | 57.6 | 64.1 | 67.9 | 65.3 | 61.5 | 55.3 | 55.0 | 55.0 |
| 35 | 55.0 | 55.7 | 61.1 | 64.2 | 62.0 | 57.2 | 55.0 | 55.0 | 55.0 |
| 36 | 55.0 | 55.0 | 56.8 | 60.3 | 58.1 | 55.1 | 55.0 | 55.0 | 55.0 |
| 37 | 55.0 | 55.0 | 55.0 | 56.9 | 55.7 | 55.0 | 55.0 | 55.0 | 55.0 |
| 38 | 55.0 | 55.0 | 55.6 | 55.9 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 |
| 39 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 |
| 40 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 |
| A | 70.4 | 75.5 | 83.4 | 86.2 | 83.7 | 79.9 | 75.4 | 75.3 | 71.7 |
| D | 79.0 | 82.8 | 88.8 | 90.7 | 88.0 | 84.3 | 80.0 | 80.0 | 77.4 |
| OASPL | 91.5 | 94.2 | 96.7 | 95.0 | 90.6 | 88.0 | 85.4 | 84.2 | 82.4 |
| PNL | 87.5 | 90.2 | 96.6 | 98.5 | 95.4 | 91.5 | 88.3 | 88.0 | 86.2 |
| PNLT | 87.5 | 90.2 | 96.6 | 98.5 | 96.4 | 91.5 | 88.3 | 89.3 | 87.4 |

LOWER LIMIT OF ANALYSIS SYSTEM= 55.0

TABLE G-VI

NOISE LEVEL FREQUENCY SPECTRA TIME HISTORY

SIKORSKY S-64

Without truck

OCTOBER 28 1976

EVENT 80 105 KT. FLY BY MIC. 150 METERS WEST

1/3 OCTAVE FREQUENCY BAND VS TIME (SECONDS)
(DB RE 20 MICRO PA)

| BAND | -6.5 | -5.0 | -3.5 | -2.0 | -0.5 | 0 | 1.0 | 2.5 | 4.0 | 5.5 |
|-------|------|------|------|------|------|------|------|------|------|------|
| 17 | 79.0 | 80.4 | 79.8 | 77.0 | 76.5 | 77.1 | 82.7 | 84.5 | 74.3 | 74.8 |
| 18 | 82.3 | 84.8 | 88.1 | 88.4 | 87.0 | 88.0 | 87.7 | 78.5 | 72.2 | 70.5 |
| 19 | 73.7 | 76.7 | 78.5 | 78.1 | 76.1 | 75.8 | 74.9 | 74.5 | 75.5 | 73.1 |
| 20 | 71.8 | 75.0 | 75.6 | 76.6 | 73.6 | 70.6 | 68.9 | 72.4 | 73.4 | 74.5 |
| 21 | 76.1 | 78.0 | 79.9 | 77.8 | 69.3 | 68.1 | 68.4 | 64.8 | 63.7 | 65.8 |
| 22 | 68.0 | 68.5 | 69.0 | 66.0 | 72.1 | 73.9 | 76.9 | 74.5 | 66.1 | 60.2 |
| 23 | 65.7 | 62.3 | 60.9 | 72.2 | 79.4 | 80.1 | 80.5 | 80.6 | 71.5 | 62.6 |
| 24 | 59.0 | 59.6 | 67.5 | 79.2 | 82.2 | 82.4 | 83.5 | 80.4 | 74.8 | 67.0 |
| 25 | 56.0 | 63.6 | 71.8 | 79.1 | 81.4 | 79.1 | 76.8 | 75.4 | 75.4 | 70.6 |
| 26 | 62.3 | 67.4 | 74.4 | 76.9 | 76.7 | 79.8 | 81.1 | 79.5 | 70.6 | 70.8 |
| 27 | 64.6 | 67.1 | 68.6 | 73.1 | 82.0 | 83.5 | 82.5 | 80.5 | 73.6 | 66.8 |
| 28 | 63.4 | 62.8 | 67.1 | 76.5 | 76.7 | 77.6 | 79.6 | 76.1 | 72.9 | 67.3 |
| 29 | 59.9 | 63.8 | 71.3 | 75.3 | 77.4 | 78.0 | 77.8 | 75.3 | 71.7 | 67.3 |
| 30 | 60.5 | 66.1 | 68.2 | 76.1 | 77.1 | 78.5 | 77.8 | 74.0 | 68.6 | 64.3 |
| 31 | 58.1 | 61.8 | 67.4 | 73.3 | 76.2 | 77.0 | 76.5 | 73.4 | 68.1 | 62.5 |
| 32 | 57.0 | 60.2 | 65.2 | 71.1 | 73.6 | 74.0 | 72.5 | 69.8 | 64.0 | 60.1 |
| 33 | 55.0 | 57.4 | 61.6 | 67.0 | 70.4 | 71.0 | 69.8 | 66.1 | 61.2 | 55.6 |
| 34 | 55.0 | 55.8 | 60.1 | 64.6 | 66.1 | 66.9 | 65.7 | 61.5 | 57.0 | 55.0 |
| 35 | 55.0 | 55.0 | 56.2 | 60.1 | 62.3 | 63.2 | 62.1 | 57.1 | 55.0 | 55.0 |
| 36 | 55.0 | 55.0 | 55.0 | 56.4 | 57.9 | 58.7 | 58.0 | 55.0 | 55.0 | 55.0 |
| 37 | 55.0 | 55.0 | 55.0 | 55.0 | 55.8 | 56.3 | 56.0 | 55.0 | 55.0 | 55.0 |
| 38 | 55.0 | 55.0 | 55.4 | 55.8 | 55.9 | 55.1 | 55.0 | 55.0 | 55.0 | 55.0 |
| 39 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 |
| 40 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 |
| A | 69.6 | 72.9 | 77.8 | 83.7 | 85.8 | 86.7 | 86.5 | 83.6 | 78.8 | 73.3 |
| D | 78.3 | 80.2 | 83.7 | 87.9 | 90.0 | 90.3 | 90.4 | 87.9 | 82.8 | 79.0 |
| OASPL | 88.1 | 89.8 | 91.4 | 91.4 | 92.1 | 92.7 | 93.2 | 91.3 | 87.1 | 83.4 |
| PNL | 86.3 | 88.7 | 91.9 | 94.9 | 97.3 | 98.1 | 97.7 | 95.4 | 90.3 | 87.1 |
| PNLT | 86.3 | 89.7 | 93.2 | 94.9 | 97.3 | 98.1 | 97.7 | 95.4 | 90.3 | 87.1 |

LOWER LIMIT OF ANALYSIS SYSTEM= 55.0

TABLE G-VI

NOISE LEVEL FREQUENCY SPECTRA TIME HISTORY

SIKORSKY S-64

Without truck

OCTOBER 28 1976

EVENT 81 105 KT. FLY BY MIC. 150 METERS WEST

1/3 OCTAVE FREQUENCY BAND VS TIME (SECONDS)
(DB RE 20 MICRO PA)

| BAND | -6.5 | -5.0 | -3.5 | -2.0 | -0.5 | 0 | 1.0 | 2.5 | 4.0 | 6.5 |
|-------|------|------|------|------|------|------|------|------|------|------|
| 17 | 78.9 | 79.4 | 78.0 | 75.0 | 78.6 | 81.3 | 84.6 | 83.2 | 72.7 | 76.6 |
| 18 | 83.4 | 87.0 | 89.4 | 88.5 | 88.4 | 88.7 | 85.3 | 74.6 | 71.7 | 69.5 |
| 19 | 74.5 | 77.3 | 77.6 | 76.9 | 74.9 | 74.2 | 72.6 | 73.9 | 72.3 | 74.3 |
| 20 | 72.5 | 74.6 | 75.6 | 74.4 | 72.0 | 69.8 | 67.5 | 73.6 | 73.6 | 73.4 |
| 21 | 79.7 | 83.6 | 82.9 | 74.1 | 68.9 | 69.7 | 68.3 | 64.8 | 63.5 | 66.5 |
| 22 | 69.7 | 72.0 | 70.0 | 67.1 | 74.8 | 76.5 | 78.8 | 71.6 | 61.4 | 62.9 |
| 23 | 68.1 | 66.3 | 64.2 | 75.4 | 80.3 | 80.6 | 80.2 | 78.5 | 70.3 | 56.9 |
| 24 | 61.9 | 62.7 | 74.8 | 79.5 | 82.7 | 83.2 | 82.1 | 78.6 | 72.5 | 61.0 |
| 25 | 57.3 | 66.9 | 74.7 | 79.7 | 78.0 | 76.5 | 74.7 | 75.2 | 74.7 | 67.1 |
| 26 | 64.4 | 70.5 | 78.3 | 76.3 | 79.3 | 82.2 | 82.4 | 76.7 | 69.2 | 70.0 |
| 27 | 66.2 | 69.9 | 73.6 | 78.1 | 82.6 | 83.2 | 81.0 | 80.9 | 73.9 | 67.7 |
| 28 | 65.3 | 67.4 | 73.1 | 77.8 | 78.5 | 80.1 | 79.5 | 75.9 | 72.7 | 63.9 |
| 29 | 62.5 | 66.2 | 75.3 | 77.3 | 78.6 | 79.6 | 77.0 | 76.2 | 70.8 | 67.4 |
| 30 | 62.7 | 70.1 | 72.8 | 76.2 | 79.1 | 79.6 | 75.9 | 74.4 | 68.7 | 62.6 |
| 31 | 62.1 | 64.1 | 70.7 | 74.5 | 77.3 | 78.7 | 76.3 | 73.8 | 68.6 | 63.3 |
| 32 | 58.6 | 63.4 | 68.9 | 72.5 | 74.1 | 75.0 | 72.5 | 69.5 | 64.4 | 60.3 |
| 33 | 56.3 | 59.4 | 65.6 | 68.9 | 70.7 | 71.6 | 68.9 | 65.6 | 60.9 | 56.1 |
| 34 | 55.1 | 58.6 | 64.4 | 65.1 | 67.1 | 67.6 | 64.8 | 61.8 | 56.8 | 55.0 |
| 35 | 55.0 | 55.6 | 59.2 | 60.6 | 63.6 | 63.9 | 60.6 | 56.1 | 55.0 | 55.0 |
| 36 | 55.0 | 55.0 | 55.4 | 56.8 | 58.9 | 59.2 | 56.6 | 55.0 | 55.0 | 55.0 |
| 37 | 55.0 | 55.0 | 55.0 | 55.0 | 56.5 | 56.5 | 55.2 | 55.0 | 55.0 | 55.0 |
| 38 | 55.0 | 55.0 | 55.4 | 57.0 | 55.2 | 55.2 | 55.0 | 55.0 | 55.0 | 55.0 |
| 39 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 |
| 40 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 |
| A | 71.8 | 76.2 | 81.7 | 84.3 | 86.6 | 87.7 | 86.0 | 83.5 | 78.4 | 73.0 |
| D | 80.0 | 83.0 | 86.8 | 88.4 | 90.5 | 91.4 | 89.9 | 87.0 | 82.4 | 78.1 |
| OASPL | 89.1 | 91.2 | 92.0 | 91.4 | 92.6 | 93.1 | 92.3 | 89.6 | 85.2 | 82.0 |
| PNL | 83.4 | 91.6 | 94.3 | 95.5 | 97.9 | 98.6 | 97.3 | 95.1 | 89.8 | 86.4 |
| PNLT | 88.4 | 93.2 | 94.3 | 95.5 | 97.9 | 98.6 | 97.3 | 95.1 | 89.8 | 87.8 |

LOWER LIMIT OF ANALYSIS SYSTEM= 55.0

TABLE G-VI

NOISE LEVEL FREQUENCY SPECTRA TIME HISTORY

SIKORSKY S-64

Without truck

OCTOBER 28 1976

EVENT 80 105 KT. FLY BY MIC. 150 METERS EAST

1/3 OCTAVE FREQUENCY BAND VS TIME (SECONDS)
(DB RE 20 MICRO PA)

| BAND | -7.0 | -5.0 | -3.0 | -1.0 | 0 | .5 | 1.0 | 3.0 | 5.0 | 7.0 |
|-------|------|------|------|------|------|------|------|------|------|------|
| 17 | 82.6 | 84.6 | 79.6 | 75.5 | 78.0 | 80.1 | 82.4 | 81.5 | 78.6 | 77.0 |
| 18 | 81.4 | 84.3 | 87.9 | 88.5 | 88.1 | 87.6 | 86.3 | 73.9 | 70.1 | 69.1 |
| 19 | 71.6 | 73.8 | 76.9 | 74.8 | 72.8 | 73.0 | 74.8 | 72.9 | 72.8 | 72.3 |
| 20 | 67.9 | 72.8 | 73.8 | 75.2 | 73.8 | 73.1 | 71.8 | 76.2 | 76.0 | 72.6 |
| 21 | 74.4 | 77.7 | 73.9 | 70.2 | 65.9 | 65.0 | 65.0 | 65.9 | 64.7 | 67.5 |
| 22 | 66.4 | 67.3 | 66.9 | 67.1 | 72.0 | 73.2 | 74.2 | 65.1 | 58.7 | 67.0 |
| 23 | 58.7 | 65.5 | 63.1 | 74.7 | 76.4 | 77.1 | 77.2 | 72.6 | 60.2 | 59.1 |
| 24 | 59.4 | 60.6 | 71.7 | 78.7 | 80.2 | 80.6 | 80.3 | 76.8 | 68.1 | 57.9 |
| 25 | 58.3 | 65.7 | 76.7 | 79.1 | 78.6 | 77.7 | 76.4 | 75.2 | 70.3 | 64.5 |
| 26 | 60.4 | 72.8 | 78.7 | 74.4 | 76.3 | 77.8 | 77.4 | 70.0 | 69.3 | 69.1 |
| 27 | 62.8 | 74.3 | 74.2 | 76.8 | 79.9 | 80.2 | 79.0 | 75.8 | 62.6 | 66.2 |
| 28 | 63.0 | 70.1 | 72.0 | 75.7 | 74.8 | 74.8 | 74.2 | 71.2 | 66.4 | 60.0 |
| 29 | 60.2 | 66.0 | 74.6 | 75.2 | 76.2 | 75.7 | 74.6 | 72.2 | 63.3 | 62.8 |
| 30 | 59.5 | 70.5 | 73.4 | 73.3 | 75.8 | 75.6 | 74.5 | 69.3 | 62.6 | 61.6 |
| 31 | 59.6 | 65.4 | 71.1 | 71.5 | 73.3 | 73.5 | 72.4 | 68.6 | 60.4 | 60.9 |
| 32 | 55.9 | 63.4 | 69.8 | 69.3 | 70.9 | 70.9 | 69.8 | 65.6 | 58.2 | 57.7 |
| 33 | 55.0 | 58.2 | 65.6 | 66.9 | 69.3 | 68.8 | 67.8 | 62.1 | 55.1 | 55.0 |
| 34 | 55.0 | 55.2 | 63.2 | 63.2 | 64.2 | 63.6 | 62.3 | 57.4 | 55.0 | 55.0 |
| 35 | 55.0 | 55.3 | 59.1 | 59.2 | 60.7 | 60.3 | 58.9 | 55.0 | 55.0 | 55.0 |
| 36 | 55.0 | 55.0 | 55.3 | 55.8 | 56.5 | 56.1 | 55.2 | 55.0 | 55.0 | 55.0 |
| 37 | 55.0 | 55.0 | 55.0 | 55.0 | 55.4 | 55.3 | 55.1 | 55.0 | 55.0 | 55.0 |
| 38 | 55.0 | 55.0 | 55.3 | 55.5 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 |
| 39 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 |
| 40 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 |
| A | 68.9 | 77.2 | 81.8 | 82.3 | 83.8 | 83.9 | 82.8 | 79.0 | 72.1 | 70.6 |
| D | 78.0 | 82.5 | 85.2 | 86.9 | 88.4 | 88.4 | 87.2 | 83.3 | 78.0 | 76.6 |
| OASPL | 89.8 | 93.1 | 94.7 | 94.3 | 93.4 | 92.9 | 91.9 | 86.9 | 82.7 | 80.8 |
| PNL | 85.5 | 90.2 | 93.9 | 94.2 | 95.5 | 95.6 | 94.9 | 91.4 | 86.2 | 85.5 |
| PNLT | 85.5 | 91.8 | 93.9 | 94.2 | 95.5 | 95.6 | 94.9 | 91.4 | 87.3 | 85.5 |

LOWER LIMIT OF ANALYSIS SYSTEM= 55.0

TABLE G-VII

NOISE LEVEL FREQUENCY SPECTRA TIME HISTORY

SIKORSKY S-64

Without truck

OCTOBER 28 1976

EVENT 81 105 KT. FLY BY MIC. 150 METERS EAST

1/3 OCTAVE FREQUENCY BAND VS TIME (SECONDS)
(DB RE 20 MICRO PA)

| BAND | -7.5 | -5.5 | -3.5 | -1.5 | 0 | .5 | 2.5 | 4.5 | 6.5 | 7.5 |
|-------|------|------|------|------|------|------|------|------|------|------|
| 17 | 80.1 | 81.1 | 78.2 | 78.0 | 79.9 | 81.2 | 82.5 | 78.9 | 79.3 | 78.3 |
| 18 | 80.7 | 83.1 | 88.1 | 88.9 | 87.9 | 86.7 | 74.7 | 72.7 | 70.3 | 68.9 |
| 19 | 70.1 | 72.9 | 75.4 | 75.0 | 72.9 | 71.4 | 75.8 | 74.7 | 75.5 | 72.0 |
| 20 | 67.5 | 70.9 | 73.2 | 74.0 | 68.5 | 68.2 | 75.7 | 76.6 | 73.7 | 70.8 |
| 21 | 74.1 | 77.2 | 73.2 | 67.8 | 65.6 | 65.6 | 64.9 | 65.9 | 67.3 | 66.0 |
| 22 | 64.8 | 65.3 | 64.2 | 67.8 | 72.5 | 73.0 | 69.2 | 60.4 | 66.1 | 66.7 |
| 23 | 58.6 | 59.9 | 61.1 | 75.7 | 76.8 | 76.0 | 74.9 | 65.5 | 58.2 | 59.8 |
| 24 | 55.7 | 58.9 | 67.3 | 77.4 | 78.0 | 77.5 | 77.6 | 70.9 | 59.1 | 55.7 |
| 25 | 56.6 | 61.5 | 73.3 | 77.0 | 72.9 | 71.8 | 75.4 | 72.1 | 65.6 | 57.5 |
| 26 | 56.2 | 64.1 | 76.3 | 73.1 | 77.1 | 76.6 | 72.0 | 69.6 | 69.1 | 64.2 |
| 27 | 57.1 | 63.4 | 73.9 | 77.8 | 78.5 | 77.6 | 78.0 | 66.1 | 68.1 | 66.3 |
| 28 | 56.8 | 61.2 | 69.8 | 73.2 | 74.6 | 74.6 | 72.4 | 69.3 | 63.9 | 65.3 |
| 29 | 55.6 | 56.6 | 71.7 | 74.9 | 73.6 | 73.4 | 73.5 | 66.1 | 66.2 | 59.5 |
| 30 | 55.0 | 61.0 | 71.6 | 73.5 | 73.7 | 73.1 | 70.6 | 65.9 | 63.7 | 61.1 |
| 31 | 56.3 | 57.7 | 68.5 | 71.0 | 72.7 | 71.9 | 70.2 | 65.6 | 63.6 | 59.7 |
| 32 | 55.0 | 55.7 | 66.5 | 69.7 | 69.9 | 68.7 | 66.4 | 61.8 | 59.1 | 56.7 |
| 33 | 55.0 | 55.0 | 63.4 | 66.5 | 67.1 | 66.4 | 63.6 | 57.3 | 55.8 | 55.0 |
| 34 | 55.0 | 55.0 | 63.7 | 62.8 | 63.1 | 62.2 | 58.2 | 55.0 | 55.0 | 55.0 |
| 35 | 55.0 | 55.0 | 58.9 | 59.6 | 59.3 | 58.2 | 55.0 | 55.0 | 55.0 | 55.0 |
| 36 | 55.0 | 55.0 | 55.6 | 55.7 | 55.8 | 55.3 | 55.0 | 55.0 | 55.0 | 55.0 |
| 37 | 55.0 | 55.0 | 55.0 | 56.0 | 55.4 | 55.2 | 55.0 | 55.0 | 55.0 | 55.0 |
| 38 | 55.0 | 55.0 | 57.1 | 57.6 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 |
| 39 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 |
| 40 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 |
| A | 65.1 | 69.1 | 79.4 | 81.9 | 82.8 | 82.2 | 80.8 | 74.7 | 72.6 | 69.5 |
| D | 76.6 | 78.9 | 84.3 | 86.6 | 86.9 | 86.2 | 84.9 | 79.7 | 77.6 | 75.8 |
| OASPL | 89.0 | 91.5 | 93.2 | 94.0 | 93.1 | 91.7 | 87.8 | 83.8 | 82.7 | 81.0 |
| PNL | 84.0 | 86.5 | 92.3 | 94.1 | 94.3 | 93.6 | 92.8 | 87.9 | 86.3 | 84.2 |
| PNLT | 84.0 | 87.8 | 92.3 | 94.1 | 94.3 | 93.6 | 92.8 | 89.0 | 86.3 | 84.2 |

LOWER LIMIT OF ANALYSIS SYSTEM= 55.0

TABLE G-VI

NOISE LEVEL FREQUENCY SPECTRA TIME HISTORY

SIKORSKY S-64

without truck

OCTOBER 28 1976

EVENT 74 6 DEGREE APPROACH MIC. CENTERLINE(HARD)

1/3 OCTAVE FREQUENCY BAND VS TIME (SECONDS)
(DB RE 20 MICRO PA)

| BAND | -11.5 | -9.0 | -6.5 | -4.0 | -1.5 | 0 | 1.0 | 3.5 | 6.0 | 6.5 |
|-------|-------|------|------|-------|-------|------|------|------|------|------|
| 17 | 70.2 | 73.5 | 74.1 | 75.4 | 77.6 | 76.1 | 79.3 | 81.3 | 84.9 | 84.2 |
| 18 | 83.3 | 87.0 | 87.5 | 88.0 | 86.3 | 83.4 | 82.9 | 77.8 | 77.8 | 77.2 |
| 19 | 68.6 | 73.4 | 74.1 | 75.9 | 71.5 | 73.9 | 75.6 | 70.6 | 75.6 | 75.6 |
| 20 | 69.4 | 72.0 | 75.8 | 72.0 | 80.8 | 83.9 | 84.9 | 81.5 | 75.1 | 76.1 |
| 21 | 78.3 | 81.5 | 79.8 | 73.5 | 87.8 | 90.3 | 89.5 | 83.9 | 69.1 | 68.8 |
| 22 | 64.5 | 67.1 | 65.8 | 84.4 | 90.3 | 87.4 | 85.5 | 84.0 | 75.4 | 70.1 |
| 23 | 70.5 | 69.6 | 74.5 | 89.9 | 89.8 | 83.3 | 79.9 | 82.2 | 78.4 | 75.4 |
| 24 | 62.8 | 74.2 | 80.4 | 86.3 | 83.5 | 76.8 | 79.1 | 77.1 | 78.6 | 75.5 |
| 25 | 71.5 | 75.5 | 79.8 | 81.2 | 81.0 | 81.7 | 79.8 | 79.3 | 76.9 | 74.7 |
| 26 | 72.4 | 76.9 | 75.4 | 76.0 | 82.5 | 78.7 | 79.1 | 77.0 | 69.4 | 65.8 |
| 27 | 71.6 | 75.0 | 69.0 | 77.6 | 77.1 | 78.1 | 77.6 | 75.1 | 72.6 | 68.8 |
| 28 | 63.9 | 65.9 | 71.4 | 72.6 | 74.6 | 75.0 | 75.5 | 72.9 | 68.4 | 68.2 |
| 29 | 63.3 | 69.0 | 67.9 | 73.5 | 74.2 | 75.2 | 74.8 | 72.9 | 68.6 | 67.0 |
| 30 | 62.2 | 65.3 | 68.9 | 71.3 | 73.3 | 74.8 | 73.8 | 70.8 | 66.2 | 65.4 |
| 31 | 58.9 | 64.7 | 66.0 | 69.1 | 71.6 | 72.3 | 72.1 | 73.0 | 67.7 | 67.5 |
| 32 | 57.1 | 63.5 | 64.7 | 70.8 | 71.2 | 71.4 | 70.8 | 68.4 | 63.6 | 63.2 |
| 33 | 55.6 | 59.0 | 61.4 | 65.9 | 67.2 | 68.2 | 68.7 | 65.4 | 60.8 | 60.5 |
| 34 | 55.0 | 55.3 | 58.5 | 63.5 | 64.7 | 66.7 | 66.3 | 63.7 | 57.3 | 56.7 |
| 35 | 55.0 | 55.0 | 56.3 | 60.7 | 62.8 | 63.8 | 64.1 | 60.5 | 55.0 | 55.0 |
| 36 | 55.0 | 55.0 | 55.0 | 56.9 | 59.6 | 61.2 | 62.0 | 58.9 | 55.0 | 55.0 |
| 37 | 55.0 | 55.0 | 57.7 | 64.6 | 59.1 | 60.5 | 61.5 | 56.9 | 55.0 | 55.0 |
| 38 | 55.0 | 55.0 | 55.0 | 58.3 | 55.6 | 56.3 | 57.6 | 55.1 | 55.0 | 55.0 |
| 39 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 | 55.5 | 56.7 | 55.0 | 55.0 | 55.0 |
| 40 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 |
| A | 74.3 | 78.3 | 79.7 | 85.1 | 86.0 | 84.9 | 84.2 | 82.6 | 78.5 | 76.8 |
| D | 80.8 | 83.7 | 85.8 | 91.7 | 92.5 | 91.4 | 90.4 | 88.3 | 84.2 | 82.6 |
| OASPL | 89.8 | 93.5 | 94.9 | 97.6 | 98.9 | 96.6 | 95.5 | 93.6 | 90.4 | 89.3 |
| PNL | 88.1 | 91.8 | 93.3 | 99.0 | 100.1 | 98.8 | 98.4 | 95.6 | 92.0 | 90.2 |
| PNLT | 88.1 | 92.9 | 93.3 | 101.3 | 100.1 | 98.8 | 98.4 | 96.7 | 92.0 | 91.3 |

LOWER LIMIT OF ANALYSIS SYSTEM= 55.0

TABLE G-VI

NOISE LEVEL FREQUENCY SPECTRA TIME HISTORY

SIKORSKY S-64

Without truck

OCTOBER 28 1976

EVENT 76 85 KT. FLY BY MIC. CENTERLINE(HARD)

1/3 OCTAVE FREQUENCY BAND VS TIME (SECONDS)
(DB RE 20 MICRO PA)

| BAND | -5.5 | -4.5 | -3.5 | -2.5 | -1.5 | -1.0 | -.5 | 0 | .5 | 1.5 | 4.5 |
|-------|------|------|------|------|-------|-------|-------|------|------|-------|------|
| 17 | 80.4 | 80.6 | 80.8 | 80.8 | 78.3 | 76.6 | 76.2 | 76.1 | 75.5 | 77.9 | 77.8 |
| 18 | 85.6 | 86.7 | 88.2 | 89.4 | 90.1 | 89.4 | 88.0 | 86.0 | 84.3 | 80.8 | 70.2 |
| 19 | 74.0 | 74.9 | 76.2 | 76.3 | 75.1 | 73.7 | 71.0 | 68.3 | 68.0 | 68.3 | 69.5 |
| 20 | 70.6 | 70.9 | 72.4 | 73.1 | 69.8 | 69.9 | 73.6 | 76.1 | 79.0 | 80.9 | 66.6 |
| 21 | 81.5 | 81.2 | 81.6 | 78.5 | 79.5 | 83.1 | 86.9 | 87.9 | 88.4 | 86.2 | 66.2 |
| 22 | 68.5 | 68.1 | 68.0 | 68.9 | 76.9 | 79.3 | 81.1 | 82.0 | 82.3 | 79.5 | 73.0 |
| 23 | 68.0 | 64.1 | 73.1 | 81.0 | 87.3 | 88.8 | 89.0 | 87.6 | 84.9 | 75.9 | 72.2 |
| 24 | 67.3 | 77.8 | 80.1 | 83.0 | 83.2 | 81.5 | 79.7 | 76.5 | 75.6 | 76.1 | 71.9 |
| 25 | 71.5 | 78.7 | 81.7 | 83.0 | 79.5 | 77.9 | 80.1 | 81.4 | 81.6 | 79.8 | 67.2 |
| 26 | 69.6 | 75.9 | 79.1 | 79.6 | 81.1 | 82.4 | 82.7 | 81.6 | 80.9 | 79.6 | 73.1 |
| 27 | 66.1 | 71.8 | 73.7 | 81.2 | 82.4 | 81.3 | 80.7 | 80.9 | 81.2 | 78.9 | 70.2 |
| 28 | 59.4 | 66.9 | 75.1 | 80.2 | 78.5 | 78.5 | 79.0 | 79.4 | 79.8 | 78.7 | 69.6 |
| 29 | 60.9 | 69.4 | 71.2 | 77.7 | 77.4 | 76.9 | 78.0 | 78.8 | 79.3 | 77.9 | 68.8 |
| 30 | 60.8 | 66.4 | 73.3 | 77.4 | 76.6 | 76.2 | 77.0 | 78.0 | 79.0 | 77.8 | 67.8 |
| 31 | 59.6 | 66.6 | 69.4 | 74.1 | 74.7 | 74.9 | 75.7 | 76.4 | 77.5 | 77.5 | 70.4 |
| 32 | 57.8 | 66.2 | 68.7 | 74.9 | 75.7 | 74.4 | 75.1 | 75.8 | 76.1 | 78.7 | 65.2 |
| 33 | 56.2 | 62.6 | 65.5 | 68.3 | 69.9 | 70.3 | 71.9 | 73.0 | 73.2 | 71.5 | 61.1 |
| 34 | 55.0 | 58.1 | 61.8 | 65.1 | 67.7 | 68.2 | 68.3 | 68.9 | 69.1 | 67.9 | 58.0 |
| 35 | 55.0 | 55.4 | 59.3 | 62.2 | 65.0 | 65.5 | 65.7 | 65.8 | 66.0 | 65.8 | 55.3 |
| 36 | 55.0 | 55.0 | 56.2 | 58.0 | 60.4 | 61.2 | 61.5 | 62.4 | 62.9 | 62.3 | 55.0 |
| 37 | 55.0 | 55.0 | 55.0 | 55.5 | 58.1 | 58.4 | 58.2 | 60.3 | 61.4 | 61.1 | 55.0 |
| 38 | 55.0 | 55.0 | 55.3 | 60.2 | 63.6 | 62.5 | 59.6 | 58.3 | 57.2 | 56.6 | 55.0 |
| 39 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 | 55.1 | 55.0 |
| 40 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 |
| A | 72.9 | 79.3 | 82.6 | 86.6 | 86.8 | 86.7 | 87.3 | 87.3 | 87.3 | 86.5 | 77.2 |
| D | 81.6 | 85.1 | 87.9 | 91.1 | 91.8 | 91.9 | 92.3 | 92.2 | 91.9 | 90.8 | 82.1 |
| OASPL | 92.7 | 93.9 | 96.0 | 98.0 | 99.4 | 99.4 | 98.6 | 96.9 | 95.3 | 92.9 | 87.0 |
| PNL | 89.5 | 92.5 | 95.3 | 97.8 | 99.3 | 99.8 | 100.2 | 99.8 | 99.2 | 99.0 | 89.4 |
| PNLT | 89.5 | 92.5 | 95.3 | 99.1 | 100.4 | 100.8 | 100.7 | 99.8 | 99.2 | 100.4 | 90.7 |

LOWER LIMIT OF ANALYSIS SYSTEM= 55.0

TABLE C-VI

NOISE LEVEL FREQUENCY SPECTRA TIME HISTORY

SIKORSKY S-64

Without truck

OCTOBER 28 1976

EVENT 77 85 KT. FLY BY MIC. CENTERLINE(HARD)

1/3 OCTAVE FREQUENCY BAND VS TIME (SECONDS)
(DB RE 20 MICRO PA)

| BAND | -6.0 | -4.5 | -3.0 | -1.5 | 0 | 1.5 | 3.0 | 4.5 |
|-------|------|------|------|-------|------|------|------|------|
| 17 | 78.0 | 79.1 | 78.3 | 73.5 | 73.4 | 79.6 | 77.4 | 80.3 |
| 18 | 84.9 | 87.0 | 88.5 | 87.6 | 83.2 | 78.5 | 69.6 | 70.7 |
| 19 | 72.7 | 73.6 | 74.2 | 71.4 | 65.7 | 65.9 | 65.4 | 69.7 |
| 20 | 68.5 | 69.6 | 69.1 | 68.6 | 78.2 | 79.0 | 73.7 | 71.9 |
| 21 | 80.0 | 80.1 | 73.6 | 83.0 | 88.1 | 82.1 | 72.6 | 62.3 |
| 22 | 66.6 | 65.9 | 70.3 | 80.0 | 81.0 | 77.0 | 76.1 | 72.5 |
| 23 | 66.6 | 73.3 | 80.9 | 88.8 | 84.8 | 71.8 | 73.7 | 72.2 |
| 24 | 70.6 | 80.6 | 82.0 | 82.9 | 75.6 | 74.3 | 70.6 | 74.6 |
| 25 | 73.1 | 80.6 | 80.9 | 78.4 | 83.3 | 79.2 | 75.4 | 69.3 |
| 26 | 72.1 | 79.0 | 76.8 | 84.2 | 80.8 | 77.6 | 74.8 | 72.3 |
| 27 | 69.4 | 74.2 | 80.9 | 80.9 | 80.6 | 77.8 | 73.3 | 71.9 |
| 28 | 62.4 | 74.8 | 79.3 | 78.2 | 78.5 | 76.4 | 72.0 | 69.0 |
| 29 | 65.7 | 72.2 | 75.3 | 77.5 | 76.6 | 76.0 | 72.3 | 69.5 |
| 30 | 62.6 | 72.0 | 74.7 | 76.9 | 77.7 | 75.6 | 71.1 | 68.0 |
| 31 | 62.0 | 69.1 | 72.7 | 75.5 | 76.5 | 75.0 | 73.7 | 69.5 |
| 32 | 59.5 | 66.7 | 70.8 | 74.7 | 74.9 | 71.6 | 68.3 | 65.5 |
| 33 | 57.2 | 63.0 | 67.5 | 71.0 | 72.4 | 69.1 | 65.3 | 61.0 |
| 34 | 55.3 | 59.6 | 64.8 | 68.2 | 68.1 | 66.3 | 61.8 | 57.4 |
| 35 | 55.0 | 56.5 | 61.4 | 65.3 | 65.3 | 63.0 | 58.3 | 55.1 |
| 36 | 55.0 | 55.0 | 56.6 | 60.7 | 61.6 | 59.4 | 56.4 | 55.0 |
| 37 | 55.0 | 55.0 | 55.8 | 59.7 | 60.7 | 58.5 | 55.5 | 55.0 |
| 38 | 55.0 | 55.0 | 59.1 | 61.2 | 57.0 | 55.7 | 55.0 | 55.0 |
| 39 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 |
| 40 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 |
| A | 74.6 | 82.1 | 84.7 | 86.9 | 86.7 | 83.9 | 80.9 | 77.7 |
| D | 81.8 | 87.1 | 89.4 | 92.2 | 91.6 | 87.8 | 85.0 | 82.5 |
| OASPL | 91.9 | 95.2 | 97.1 | 97.5 | 94.9 | 90.4 | 89.2 | 87.0 |
| PNL | 89.4 | 94.3 | 96.4 | 99.9 | 98.7 | 95.4 | 92.1 | 89.6 |
| PNLT | 90.5 | 94.3 | 97.1 | 100.5 | 96.7 | 95.4 | 92.5 | 89.6 |

LOWER LIMIT OF ANALYSIS SYSTEM= 55.0

TABLE G-VI

NOISE LEVEL FREQUENCY SPECTRA TIME HISTORY

SIKORSKY S-64

Without truck

OCTOBER 28 1976

EVENT 78 95 KT. FLY BY MIC. CENTERLINE (HARD)

1/3 OCTAVE FREQUENCY BAND VS TIME (SECONDS)
(DB RE 20 MICRO PA)

| BAND | -4.5 | -3.5 | -2.5 | -1.5 | -1.0 | -.5 | 0 | .5 | 1.5 | 2.5 | 3.0 |
|-------|------|------|-------|-------|-------|-------|-------|------|------|------|------|
| 17 | 83.9 | 82.5 | 80.6 | 76.9 | 75.3 | 74.9 | 74.8 | 75.7 | 80.9 | 80.7 | 77.5 |
| 18 | 87.2 | 88.3 | 89.5 | 89.6 | 89.0 | 88.1 | 86.5 | 84.7 | 80.5 | 72.9 | 70.2 |
| 19 | 76.0 | 75.6 | 75.4 | 74.2 | 72.4 | 69.7 | 67.6 | 67.7 | 66.3 | 66.0 | 67.1 |
| 20 | 72.8 | 72.9 | 70.9 | 68.1 | 69.4 | 73.9 | 77.0 | 80.2 | 80.8 | 77.6 | 76.1 |
| 21 | 82.2 | 83.2 | 80.0 | 82.2 | 85.6 | 88.1 | 88.2 | 88.7 | 85.7 | 75.6 | 74.1 |
| 22 | 69.4 | 69.4 | 68.8 | 76.5 | 79.7 | 81.1 | 82.0 | 81.7 | 79.7 | 77.6 | 77.2 |
| 23 | 66.6 | 77.6 | 81.4 | 89.9 | 92.0 | 91.8 | 89.8 | 85.1 | 74.6 | 73.7 | 75.3 |
| 24 | 73.5 | 82.6 | 84.3 | 87.6 | 87.2 | 84.6 | 79.8 | 75.1 | 74.9 | 71.6 | 72.0 |
| 25 | 76.2 | 84.7 | 85.0 | 79.5 | 80.5 | 82.2 | 82.7 | 81.4 | 77.7 | 76.5 | 75.3 |
| 26 | 74.0 | 82.6 | 81.9 | 82.1 | 83.5 | 83.1 | 81.4 | 78.8 | 76.0 | 75.6 | 76.6 |
| 27 | 68.4 | 74.6 | 81.9 | 83.4 | 81.2 | 79.1 | 79.0 | 79.0 | 76.7 | 75.4 | 74.0 |
| 28 | 62.9 | 77.8 | 81.0 | 81.1 | 80.3 | 79.2 | 77.3 | 77.1 | 75.9 | 73.1 | 71.7 |
| 29 | 65.4 | 72.6 | 78.4 | 78.9 | 77.7 | 77.3 | 77.0 | 77.4 | 76.7 | 73.8 | 72.5 |
| 30 | 62.0 | 75.2 | 77.9 | 78.9 | 78.2 | 77.2 | 77.7 | 78.1 | 76.2 | 73.2 | 71.7 |
| 31 | 62.5 | 71.5 | 75.1 | 75.3 | 74.9 | 75.2 | 75.5 | 75.5 | 75.9 | 73.8 | 72.5 |
| 32 | 61.1 | 69.0 | 72.5 | 73.9 | 74.3 | 75.3 | 75.5 | 75.0 | 73.0 | 70.4 | 69.0 |
| 33 | 58.0 | 64.5 | 68.8 | 70.5 | 70.6 | 71.6 | 71.8 | 71.8 | 70.4 | 67.4 | 65.7 |
| 34 | 55.7 | 61.1 | 65.3 | 68.2 | 68.6 | 69.0 | 69.1 | 69.0 | 67.4 | 63.8 | 62.1 |
| 35 | 55.0 | 58.0 | 62.6 | 65.0 | 65.2 | 65.5 | 65.9 | 65.0 | 64.8 | 61.0 | 58.7 |
| 36 | 55.0 | 55.4 | 57.6 | 60.3 | 60.7 | 61.5 | 62.0 | 62.0 | 60.9 | 58.2 | 56.7 |
| 37 | 55.0 | 55.0 | 55.8 | 57.6 | 58.0 | 58.8 | 59.7 | 60.6 | 60.0 | 57.1 | 56.1 |
| 38 | 55.0 | 55.4 | 62.2 | 65.1 | 63.7 | 61.2 | 59.1 | 57.8 | 56.3 | 55.1 | 55.0 |
| 39 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 |
| 40 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 |
| A | 76.3 | 84.9 | 87.3 | 88.2 | 88.2 | 87.9 | 86.9 | 86.0 | 84.5 | 81.8 | 80.9 |
| D | 83.8 | 89.8 | 91.7 | 93.5 | 93.9 | 92.5 | 92.4 | 91.3 | 89.0 | 86.1 | 85.4 |
| OASPL | 94.9 | 97.1 | 98.3 | 99.5 | 100.0 | 99.7 | 98.5 | 96.5 | 91.5 | 88.6 | 88.5 |
| PNL | 91.2 | 97.2 | 98.8 | 100.8 | 101.7 | 101.6 | 100.5 | 93.7 | 96.5 | 93.5 | 92.8 |
| PNLT | 91.2 | 98.6 | 100.0 | 102.2 | 102.9 | 102.3 | 100.5 | 98.7 | 96.5 | 93.5 | 92.8 |

LOWER LIMIT OF ANALYSIS SYSTEM= 55.0

TABLE G-VI

NOISE LEVEL FREQUENCY SPECTRA TIME HISTORY

SIKORSKY S-64

without truck

OCTOBER 28 1976

EVENT 79 95 KT. FLY BY MIC. CENTERLINE (HARD)

1/3 OCTAVE FREQUENCY BAND VS TIME (SECONDS)
(DB RE 20 MICRO PA)

| BAND | -3.5 | -2.5 | -1.5 | -.5 | 0 | .5 | 1.5 | 2.5 | 3.5 | 4.0 |
|-------|------|------|------|-------|-------|-------|------|------|------|------|
| 17 | 81.3 | 79.7 | 77.4 | 75.5 | 75.5 | 74.9 | 77.4 | 80.7 | 74.6 | 75.5 |
| 18 | 87.7 | 88.6 | 89.1 | 88.3 | 87.3 | 85.4 | 81.5 | 76.2 | 69.2 | 69.9 |
| 19 | 75.7 | 75.6 | 74.2 | 70.9 | 68.9 | 67.1 | 66.8 | 65.3 | 66.4 | 67.8 |
| 20 | 72.6 | 71.2 | 69.3 | 71.4 | 75.7 | 77.8 | 81.1 | 80.0 | 76.7 | 67.7 |
| 21 | 83.2 | 82.0 | 77.7 | 86.4 | 89.0 | 89.2 | 87.1 | 79.6 | 72.3 | 67.4 |
| 22 | 69.8 | 68.6 | 72.2 | 80.5 | 82.0 | 82.3 | 80.3 | 80.8 | 80.5 | 76.3 |
| 23 | 69.8 | 77.5 | 85.6 | 92.3 | 92.1 | 90.1 | 79.3 | 74.4 | 75.0 | 73.5 |
| 24 | 76.9 | 80.6 | 83.7 | 86.4 | 84.6 | 79.6 | 77.0 | 75.5 | 71.2 | 72.8 |
| 25 | 79.6 | 82.7 | 81.2 | 83.0 | 84.5 | 84.4 | 80.1 | 79.3 | 74.2 | 70.3 |
| 26 | 76.8 | 78.8 | 79.5 | 84.9 | 84.8 | 83.0 | 79.3 | 77.5 | 75.5 | 74.8 |
| 27 | 70.4 | 73.0 | 81.3 | 81.5 | 81.1 | 81.3 | 79.8 | 78.2 | 73.3 | 70.3 |
| 28 | 66.7 | 75.3 | 78.6 | 80.2 | 79.9 | 79.1 | 78.4 | 76.3 | 71.3 | 71.0 |
| 29 | 66.8 | 70.7 | 76.5 | 79.4 | 79.3 | 78.7 | 78.4 | 76.7 | 71.3 | 70.5 |
| 30 | 64.5 | 71.1 | 76.2 | 79.1 | 79.2 | 78.3 | 76.9 | 74.9 | 70.7 | 69.5 |
| 31 | 64.2 | 69.3 | 74.1 | 77.3 | 77.3 | 77.3 | 77.9 | 77.4 | 74.6 | 72.2 |
| 32 | 62.5 | 67.7 | 71.6 | 76.0 | 76.8 | 76.8 | 75.6 | 71.8 | 67.7 | 66.7 |
| 33 | 59.0 | 63.6 | 68.0 | 72.0 | 73.2 | 73.2 | 72.3 | 69.0 | 64.3 | 62.8 |
| 34 | 57.1 | 61.2 | 66.2 | 69.3 | 70.1 | 70.2 | 69.0 | 66.2 | 62.6 | 60.5 |
| 35 | 55.0 | 59.3 | 63.4 | 66.2 | 66.7 | 66.8 | 66.1 | 63.1 | 58.6 | 56.1 |
| 36 | 55.0 | 55.8 | 59.3 | 62.1 | 62.4 | 62.7 | 62.6 | 59.3 | 55.6 | 55.2 |
| 37 | 55.0 | 55.0 | 56.2 | 58.0 | 58.7 | 59.8 | 60.4 | 57.8 | 56.3 | 55.9 |
| 38 | 55.0 | 56.6 | 63.4 | 62.5 | 61.0 | 59.7 | 56.5 | 55.0 | 55.0 | 55.0 |
| 39 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 |
| 40 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 |
| A | 79.1 | 82.4 | 86.0 | 89.3 | 89.2 | 88.2 | 86.5 | 84.9 | 80.8 | 79.2 |
| D | 85.2 | 87.4 | 90.9 | 94.4 | 94.4 | 93.5 | 91.0 | 89.0 | 85.2 | 83.3 |
| OASPL | 94.6 | 96.0 | 97.8 | 99.4 | 99.2 | 97.8 | 93.4 | 90.3 | 88.1 | 86.7 |
| PNL | 92.7 | 95.6 | 98.0 | 102.2 | 102.3 | 101.3 | 98.2 | 96.0 | 92.6 | 90.8 |
| PNLT | 92.7 | 96.3 | 99.3 | 103.2 | 103.0 | 101.3 | 98.2 | 97.4 | 94.4 | 92.2 |

LOWER LIMIT OF ANALYSIS SYSTEM= 55.0

TABLE G-VI

NOISE LEVEL FREQUENCY SPECTRA TIME HISTORY

SIKORSKY S-64

Without truck

OCTOBER 28 1976

EVENT 80 105 KT. FLY BY MIC. CENTERLINE(HARD)

1/3 OCTAVE FREQUENCY BAND VS TIME (SECONDS)
(DB RE 20 MICRO PA)

| BAND | -3.5 | -2.5 | -1.5 | -.5 | 0 | .5 | 1.5 | 2.5 | 3.5 | 4.0 |
|-------|------|------|------|-------|-------|------|------|------|------|------|
| 17 | 85.7 | 84.5 | 81.5 | 76.6 | 75.5 | 76.0 | 81.3 | 80.2 | 78.0 | 80.1 |
| 18 | 86.7 | 89.7 | 90.9 | 89.0 | 86.9 | 84.7 | 79.7 | 71.6 | 70.7 | 70.4 |
| 19 | 77.7 | 78.2 | 77.4 | 72.2 | 70.2 | 69.7 | 68.3 | 68.0 | 69.7 | 70.6 |
| 20 | 74.0 | 71.2 | 69.7 | 75.6 | 73.4 | 81.4 | 82.5 | 78.9 | 70.0 | 74.5 |
| 21 | 79.7 | 82.0 | 80.1 | 88.1 | 88.7 | 88.6 | 85.2 | 77.1 | 68.3 | 64.0 |
| 22 | 69.2 | 70.2 | 74.5 | 81.6 | 82.3 | 81.9 | 79.6 | 80.8 | 74.5 | 72.0 |
| 23 | 68.7 | 79.7 | 86.8 | 92.3 | 91.2 | 86.8 | 74.6 | 76.7 | 75.1 | 72.1 |
| 24 | 75.9 | 82.3 | 83.6 | 84.3 | 82.1 | 77.3 | 77.0 | 73.2 | 75.4 | 76.8 |
| 25 | 77.3 | 83.6 | 80.3 | 83.1 | 83.6 | 82.5 | 79.6 | 76.6 | 70.7 | 71.6 |
| 26 | 74.6 | 80.3 | 78.3 | 83.7 | 83.5 | 80.8 | 76.5 | 75.7 | 75.2 | 73.3 |
| 27 | 66.7 | 74.8 | 78.9 | 80.3 | 81.0 | 80.7 | 77.4 | 75.0 | 72.4 | 72.1 |
| 28 | 65.3 | 75.0 | 76.0 | 78.8 | 79.0 | 78.5 | 76.8 | 73.7 | 71.8 | 70.7 |
| 29 | 65.2 | 71.5 | 74.8 | 78.2 | 78.4 | 77.6 | 76.9 | 74.0 | 70.8 | 70.1 |
| 30 | 63.7 | 72.3 | 75.5 | 77.9 | 78.2 | 77.4 | 76.0 | 73.8 | 71.2 | 70.0 |
| 31 | 62.1 | 70.9 | 73.7 | 76.7 | 76.8 | 76.0 | 78.0 | 76.4 | 74.8 | 73.5 |
| 32 | 60.5 | 66.6 | 72.4 | 76.3 | 76.7 | 75.6 | 72.9 | 70.6 | 68.7 | 67.3 |
| 33 | 58.0 | 64.6 | 68.9 | 73.3 | 73.5 | 72.7 | 70.2 | 67.4 | 63.5 | 61.8 |
| 34 | 56.6 | 61.3 | 66.5 | 70.3 | 70.3 | 69.4 | 67.4 | 65.6 | 61.5 | 59.4 |
| 35 | 55.3 | 59.0 | 63.1 | 67.3 | 67.7 | 66.8 | 64.6 | 61.3 | 56.6 | 55.6 |
| 36 | 55.0 | 55.9 | 59.3 | 63.2 | 63.8 | 63.1 | 61.4 | 58.6 | 55.4 | 55.1 |
| 37 | 55.0 | 55.0 | 56.3 | 59.9 | 61.4 | 61.9 | 60.4 | 59.0 | 57.8 | 56.2 |
| 38 | 55.0 | 58.0 | 62.9 | 62.6 | 61.1 | 59.3 | 56.2 | 55.1 | 55.0 | 55.0 |
| 39 | 55.0 | 55.0 | 55.0 | 55.4 | 55.8 | 55.6 | 55.1 | 55.0 | 55.0 | 55.0 |
| 40 | 55.0 | 55.0 | 55.0 | 55.0 | 55.3 | 55.3 | 55.0 | 55.0 | 55.0 | 55.0 |
| A | 77.0 | 83.4 | 85.2 | 88.5 | 88.4 | 87.0 | 84.7 | 82.7 | 80.7 | 79.6 |
| D | 84.5 | 89.2 | 91.1 | 94.2 | 93.8 | 92.2 | 89.5 | 87.3 | 84.8 | 83.9 |
| OASPL | 95.6 | 98.6 | 99.8 | 99.9 | 98.7 | 96.4 | 92.3 | 90.0 | 87.5 | 87.0 |
| PNL | 91.4 | 96.7 | 98.4 | 102.3 | 101.9 | 99.7 | 96.9 | 94.7 | 92.2 | 91.3 |
| PNLT | 91.4 | 97.2 | 99.6 | 103.1 | 101.9 | 99.7 | 98.1 | 96.1 | 93.8 | 92.9 |

LOWER LIMIT OF ANALYSIS SYSTEM= 55.0

TABLE G-VI

NOISE LEVEL FREQUENCY SPECTRA TIME HISTORY

SIKORSKY S-64

Without Truck

OCTOBER 28 1976

EVENT 81 105 KT. FLY BY MIC. CENTERLINE (HARD)

1/3 OCTAVE FREQUENCY BAND VS TIME (SECONDS)
(DB RE 20 MICRO PA)

| BAND | -5.0 | -4.0 | -3.0 | -2.0 | -1.5 | -1.0 | 0 | 1.0 | 2.0 | 2.5 |
|-------|------|------|------|-------|-------|-------|------|------|------|------|
| 17 | 85.0 | 84.3 | 81.7 | 78.5 | 76.8 | 76.0 | 78.2 | 80.2 | 76.4 | 76.5 |
| 18 | 87.5 | 87.8 | 89.2 | 89.4 | 88.1 | 84.9 | 80.0 | 74.6 | 68.5 | 68.8 |
| 19 | 77.0 | 77.3 | 76.9 | 73.9 | 71.5 | 68.3 | 66.6 | 67.5 | 64.9 | 67.3 |
| 20 | 73.1 | 72.6 | 70.8 | 70.8 | 74.1 | 75.7 | 81.0 | 80.9 | 75.7 | 68.2 |
| 21 | 81.6 | 82.0 | 79.1 | 87.4 | 89.5 | 89.0 | 85.4 | 78.9 | 71.7 | 68.3 |
| 22 | 70.0 | 70.7 | 71.5 | 80.9 | 82.2 | 82.4 | 78.8 | 80.7 | 80.5 | 76.1 |
| 23 | 70.1 | 81.5 | 86.4 | 92.2 | 92.3 | 90.1 | 79.3 | 74.8 | 75.7 | 74.8 |
| 24 | 76.1 | 82.5 | 83.4 | 87.0 | 86.0 | 81.1 | 78.0 | 77.0 | 70.7 | 72.8 |
| 25 | 77.8 | 83.2 | 81.6 | 81.6 | 84.9 | 84.9 | 80.9 | 78.5 | 73.6 | 71.8 |
| 26 | 76.5 | 81.1 | 79.4 | 84.6 | 85.2 | 83.7 | 80.2 | 76.6 | 75.5 | 75.3 |
| 27 | 69.5 | 75.1 | 81.3 | 82.2 | 82.5 | 81.9 | 79.7 | 76.6 | 71.9 | 72.1 |
| 28 | 65.2 | 77.0 | 78.8 | 80.0 | 80.3 | 79.6 | 78.7 | 74.8 | 71.2 | 71.7 |
| 29 | 65.9 | 72.4 | 76.4 | 79.3 | 79.9 | 79.8 | 78.2 | 74.5 | 70.4 | 70.5 |
| 30 | 64.1 | 72.4 | 74.1 | 77.9 | 79.6 | 80.1 | 78.2 | 74.5 | 70.4 | 70.2 |
| 31 | 63.1 | 70.1 | 72.0 | 76.3 | 77.4 | 77.4 | 77.3 | 76.7 | 73.6 | 72.8 |
| 32 | 61.7 | 67.2 | 69.3 | 74.4 | 76.4 | 76.9 | 74.7 | 70.8 | 67.7 | 67.4 |
| 33 | 58.1 | 63.5 | 65.4 | 71.4 | 73.4 | 73.5 | 71.9 | 67.7 | 63.5 | 62.7 |
| 34 | 56.8 | 60.6 | 62.7 | 68.5 | 69.9 | 70.3 | 69.4 | 65.3 | 61.1 | 59.9 |
| 35 | 55.0 | 58.5 | 60.5 | 65.7 | 67.3 | 67.6 | 66.5 | 61.8 | 56.9 | 55.2 |
| 36 | 55.0 | 55.1 | 57.0 | 61.1 | 62.8 | 63.2 | 61.9 | 59.0 | 55.6 | 55.0 |
| 37 | 55.0 | 55.0 | 55.0 | 57.4 | 59.0 | 59.9 | 60.2 | 59.0 | 56.4 | 55.3 |
| 38 | 55.0 | 55.5 | 61.1 | 62.3 | 61.0 | 59.2 | 56.2 | 55.3 | 55.0 | 55.0 |
| 39 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 |
| 40 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 |
| A | 78.3 | 84.0 | 85.5 | 88.8 | 89.6 | 88.7 | 86.3 | 83.6 | 80.2 | 79.7 |
| D | 84.9 | 89.2 | 90.6 | 94.1 | 94.7 | 93.7 | 90.8 | 87.9 | 85.0 | 84.1 |
| OASPL | 94.9 | 96.2 | 98.2 | 100.6 | 100.2 | 98.4 | 92.8 | 89.9 | 87.8 | 86.8 |
| PNL | 92.0 | 96.5 | 97.9 | 102.1 | 102.7 | 101.5 | 97.9 | 95.4 | 91.9 | 91.4 |
| PNLT | 92.0 | 97.6 | 98.9 | 103.1 | 103.4 | 101.5 | 97.9 | 96.7 | 93.4 | 92.7 |

LOWER LIMIT OF ANALYSIS SYSTEM= 55.0

TABLE G-VII
5 FOOT HOVER TEST

1/3 OCTAVE NOISE LEVEL FREQUENCY SPECTRA

SIKORSKY S-64
With truck

OCTOBER 28 1976

EVENT 35, 0 DEGREES, MICROPHONE 150 METERS WEST

1/3 OCTAVE BAND VS LEVEL (AVE OVER 19 SECONDS)
(DB RE 20 MICRO PA)

| BAND | ENERGY AVERAGE | MAX | MIN | ARITH. AVERAGE | STD DEV |
|-------|-------------------|-------|------|-------------------|------------|
| 14 | 72.6 | 76.4 | 68.4 | 72.1 | 2.1 |
| 15 | 75.5 | 77.6 | 72.7 | 75.3 | 1.4 |
| 16 | 80.5 | 84.2 | 76.0 | 80.1 | 1.8 |
| 17 | 81.3 | 84.0 | 77.8 | 81.0 | 1.6 |
| 18 | 82.6 | 85.8 | 79.2 | 82.3 | 1.7 |
| 19 | 84.3 | 86.6 | 81.8 | 84.1 | 1.5 |
| 20 | 86.7 | 90.1 | 83.6 | 86.3 | 1.9 |
| 21 | 87.9 | 91.7 | 82.3 | 87.3 | 2.4 |
| 22 | 87.9 | 91.2 | 81.1 | 87.1 | 2.9 |
| 23 | 89.7 | 95.4 | 82.5 | 88.5 | 3.3 |
| 24 | 89.5 | 93.8 | 82.0 | 88.5 | 3.2 |
| 25 | 87.6 | 90.8 | 78.6 | 86.6 | 3.3 |
| 26 | 86.1 | 89.3 | 78.0 | 85.1 | 3.2 |
| 27 | 86.5 | 90.2 | 78.6 | 85.6 | 3.0 |
| 28 | 85.1 | 90.0 | 79.7 | 84.5 | 2.4 |
| 29 | 82.3 | 84.9 | 76.7 | 81.8 | 2.3 |
| 30 | 80.0 | 82.3 | 74.6 | 79.7 | 2.0 |
| 31 | 77.9 | 80.1 | 71.9 | 77.5 | 2.0 |
| 32 | 76.2 | 78.4 | 70.9 | 75.9 | 1.9 |
| 33 | 73.0 | 75.2 | 67.8 | 72.6 | 1.9 |
| 34 | 69.5 | 71.6 | 65.0 | 69.3 | 1.7 |
| 35 | 66.3 | 68.3 | 62.7 | 66.1 | 1.6 |
| 36 | 62.6 | 64.2 | 59.2 | 62.4 | 1.5 |
| 37 | 61.1 | 63.0 | 58.0 | 61.0 | 1.3 |
| 38 | 61.4 | 64.3 | 58.3 | 61.1 | 1.6 |
| 39 | 55.0 | 55.0 | 55.0 | 55.0 | .0 |
| 40 | 55.0 | 55.0 | 55.0 | 55.0 | .0 |
| DBA | 91.3 | 94.7 | 85.1 | 90.8 | 2.4 |
| DBD | 96.1 | 99.5 | 90.0 | 95.6 | 2.4 |
| OASPL | 98.2 | 101.5 | 92.7 | 97.7 | 2.3 |
| PNL | 103.3 | 106.5 | 97.2 | 102.8 | 2.2 |
| PNLT | 103.7 | 107.1 | 97.2 | 103.1 | 2.4 |

270°
(Microphone Location
Relative to Helicopter)

TABLE G-VII
5 FOOT HOVER TEST

1/3 OCTAVE NOISE LEVEL FREQUENCY SPECTRA

SIKORSKY S-64

With truck

OCTOBER 28 1976

EVENT 36, 45 DEGREES, MICROPHONE 150 METERS WEST

1/3 OCTAVE BAND VS LEVEL (AVE OVER 19 SECONDS)
(DB RE 20 MICRO PA)

| BAND | ENERGY AVERAGE | MAX | MIN | ARITH. AVERAGE | STD DEV |
|-------|-------------------|-------|------|-------------------|------------|
| 14 | 73.6 | 77.4 | 67.9 | 72.8 | 2.6 |
| 15 | 74.0 | 76.8 | 69.2 | 73.7 | 1.7 |
| 16 | 79.7 | 82.9 | 73.7 | 79.0 | 2.5 |
| 17 | 88.2 | 90.2 | 85.2 | 88.1 | 1.3 |
| 18 | 91.0 | 92.7 | 88.5 | 90.8 | 1.1 |
| 19 | 80.2 | 82.7 | 76.5 | 79.9 | 1.8 |
| 20 | 83.6 | 86.9 | 79.5 | 83.3 | 1.7 |
| 21 | 84.5 | 87.7 | 79.9 | 84.1 | 2.0 |
| 22 | 83.7 | 89.8 | 79.0 | 82.7 | 2.8 |
| 23 | 85.4 | 93.1 | 79.0 | 83.6 | 3.4 |
| 24 | 86.1 | 93.4 | 78.6 | 84.6 | 3.2 |
| 25 | 85.7 | 92.9 | 77.9 | 84.3 | 3.2 |
| 26 | 84.4 | 89.6 | 78.2 | 83.6 | 2.5 |
| 27 | 84.9 | 89.7 | 79.2 | 84.2 | 2.6 |
| 28 | 83.0 | 87.4 | 79.4 | 82.5 | 2. |
| 29 | 81.0 | 83.5 | 77.9 | 80.7 | 1.4 |
| 30 | 79.6 | 82.1 | 76.2 | 79.4 | 1.4 |
| 31 | 78.2 | 80.4 | 75.8 | 78.1 | 1.3 |
| 32 | 76.6 | 79.1 | 74.4 | 76.4 | 1.2 |
| 33 | 74.7 | 78.2 | 71.7 | 74.4 | 1.7 |
| 34 | 71.8 | 75.2 | 68.3 | 71.4 | 1.8 |
| 35 | 68.4 | 72.1 | 65.3 | 68.1 | 1.7 |
| 36 | 64.2 | 67.5 | 61.5 | 63.9 | 1.6 |
| 37 | 59.3 | 62.0 | 56.9 | 59.1 | 1.3 |
| 38 | 55.9 | 57.6 | 55.0 | 55.9 | .7 |
| 39 | 55.0 | 55.0 | 55.0 | 55.0 | .0 |
| 40 | 55.0 | 55.0 | 55.0 | 55.0 | .0 |
| DBA | 89.8 | 94.3 | 86.6 | 89.4 | 1.8 |
| DBD | 94.5 | 99.4 | 91.3 | 94.0 | 1.8 |
| OASPL | 96.9 | 101.1 | 93.8 | 96.5 | 1.6 |
| PNL | 102.0 | 106.0 | 98.8 | 101.6 | 1.7 |
| PNLT | 102.0 | 106.0 | 98.8 | 101.6 | 1.7 |

225°

(Microphone Location
Relative to Helicopter)

TABLE G-VII
5 FOOT HOVER TEST

1/3 OCTAVE NOISE LEVEL FREQUENCY SPECTRA

SIKORSKY S-64

With truck

OCTOBER 28 1976

EVENT 37, 90 DEGREES, MICROPHONE 150 METERS WEST

1/3 OCTAVE BAND VS LEVEL (AVE OVER 19 SECONDS)
(DB RE 20 MICRO PA)

| BAND | ENERGY AVERAGE | MAX | MIN | ARITH. AVERAGE | STD DEV |
|-------|-------------------|-------|-------|-------------------|------------|
| 14 | 74.8 | 79.5 | 69.1 | 74.0 | 2.7 |
| 15 | 77.4 | 79.9 | 72.8 | 77.0 | 1.9 |
| 16 | 84.3 | 87.3 | 79.3 | 83.9 | 1.8 |
| 17 | 88.5 | 91.0 | 85.2 | 88.2 | 1.9 |
| 18 | 90.6 | 93.3 | 86.6 | 90.3 | 1.7 |
| 19 | 87.4 | 92.6 | 82.2 | 86.6 | 2.7 |
| 20 | 90.6 | 95.9 | 85.0 | 89.7 | 2.8 |
| 21 | 91.7 | 96.1 | 86.5 | 90.9 | 2.5 |
| 22 | 90.5 | 96.2 | 84.6 | 89.5 | 2.9 |
| 23 | 91.7 | 97.7 | 84.4 | 90.4 | 3.2 |
| 24 | 92.0 | 96.4 | 86.0 | 91.2 | 2.7 |
| 25 | 91.2 | 94.8 | 85.9 | 90.6 | 2.4 |
| 26 | 89.5 | 93.4 | 83.8 | 88.8 | 2.5 |
| 27 | 88.6 | 92.4 | 84.3 | 88.0 | 2.2 |
| 28 | 86.7 | 91.7 | 82.1 | 85.9 | 2.6 |
| 29 | 84.1 | 89.2 | 80.2 | 83.3 | 2.5 |
| 30 | 82.3 | 86.3 | 78.4 | 81.6 | 2.4 |
| 31 | 80.4 | 83.2 | 77.5 | 80.0 | 1.8 |
| 32 | 78.9 | 81.7 | 76.1 | 78.6 | 1.7 |
| 33 | 75.6 | 78.0 | 72.5 | 75.3 | 1.4 |
| 34 | 72.6 | 75.3 | 69.0 | 72.3 | 1.8 |
| 35 | 70.0 | 72.3 | 66.6 | 69.7 | 1.7 |
| 36 | 66.4 | 68.6 | 62.9 | 66.1 | 1.6 |
| 37 | 61.5 | 63.5 | 58.2 | 61.3 | 1.5 |
| 38 | 56.8 | 58.5 | 55.0 | 56.7 | 1.0 |
| 39 | 55.0 | 55.0 | 55.0 | 55.0 | .0 |
| 40 | 55.0 | 55.0 | 55.0 | 55.0 | .0 |
| DBA | 93.7 | 97.5 | 90.3 | 93.2 | 2.1 |
| DBD | 98.8 | 102.5 | 95.0 | 98.3 | 2.1 |
| OASPL | 101.3 | 105.3 | 97.3 | 100.8 | 2.1 |
| PNL | 106.2 | 109.8 | 102.3 | 105.7 | 2.0 |
| PNLT | 106.2 | 109.8 | 102.3 | 105.7 | 2.0 |

180°
(Microphone Location
Relative to Helicopter)

TABLE G-VII
5 FOOT HOVER TEST

1/3 OCTAVE NOISE LEVEL FREQUENCY SPECTRA

SIKORSKY S-64

with truck

OCTOBER 28 1976

EVENT 38, 135 DEGREES, MICROPHONE 150 METERS WEST

1/3 OCTAVE BAND VS LEVEL (AVE OVER 19 SECONDS)
(DB RE 20 MICRO PA)

| BAND | ENERGY AVERAGE | MAX | MIN | ARITH. AVERAGE | STD DEV |
|-------|-------------------|-------|-------|-------------------|------------|
| 14 | 75.1 | 79.5 | 72.5 | 74.9 | 1.4 |
| 15 | 81.7 | 84.5 | 77.7 | 81.2 | 2.1 |
| 16 | 88.8 | 92.0 | 84.4 | 88.1 | 2.5 |
| 17 | 90.7 | 94.5 | 88.0 | 90.3 | 1.8 |
| 18 | 91.3 | 93.6 | 88.7 | 91.1 | 1.4 |
| 19 | 93.0 | 97.1 | 88.2 | 92.3 | 2.6 |
| 20 | 94.5 | 98.8 | 89.1 | 93.7 | 2.6 |
| 21 | 95.1 | 99.9 | 89.2 | 94.3 | 2.6 |
| 22 | 95.3 | 100.8 | 89.2 | 94.0 | 3.2 |
| 23 | 95.9 | 101.7 | 88.0 | 94.4 | 3.5 |
| 24 | 96.2 | 102.3 | 90.9 | 95.0 | 3.1 |
| 25 | 94.6 | 99.6 | 86.8 | 93.3 | 3.5 |
| 26 | 91.6 | 95.5 | 85.1 | 90.8 | 2.8 |
| 27 | 91.6 | 95.9 | 85.8 | 90.8 | 2.7 |
| 28 | 89.5 | 93.7 | 84.8 | 88.8 | 2.6 |
| 29 | 87.3 | 91.5 | 82.5 | 86.6 | 2.5 |
| 30 | 85.0 | 87.9 | 81.9 | 84.6 | 1.9 |
| 31 | 83.7 | 87.7 | 80.1 | 83.2 | 2.1 |
| 32 | 81.8 | 85.9 | 77.7 | 81.3 | 2.1 |
| 33 | 79.1 | 82.7 | 75.8 | 78.6 | 2.0 |
| 34 | 75.6 | 79.1 | 72.0 | 75.1 | 2.2 |
| 35 | 72.1 | 75.2 | 69.0 | 71.7 | 1.8 |
| 36 | 68.6 | 71.4 | 66.0 | 68.3 | 1.6 |
| 37 | 65.3 | 66.4 | 65.0 | 65.3 | .4 |
| 38 | 65.0 | 65.0 | 65.0 | 65.0 | .0 |
| 39 | 65.0 | 65.0 | 65.0 | 65.0 | .0 |
| 40 | 65.0 | 65.0 | 65.0 | 65.0 | .0 |
| DBA | 97.0 | 101.5 | 92.3 | 96.2 | 2.6 |
| DBD | 102.2 | 106.7 | 97.7 | 101.4 | 2.6 |
| OASPL | 104.8 | 109.6 | 100.4 | 104.0 | 2.6 |
| PNL | 109.7 | 114.3 | 105.6 | 109.0 | 2.5 |
| PNLT | 109.7 | 114.3 | 105.6 | 109.0 | 2.5 |

135°
*(Microphone Location
Relative to Helicopter)*

TABLE G-VII

5 FOOT HOVER TEST

1/3 OCTAVE NOISE LEVEL FREQUENCY SPECTRA

SIKORSKY S-64

With truck

OCTOBER 28 1976

EVENT 39, 180 DEGREES, MICROPHONE 150 METERS WEST

1/3 OCTAVE BAND VS LEVEL (AVE OVER 19 SECONDS)
(DB RE 20 MICRO PA)

| BAND | ENERGY AVERAGE | MAX | MIN | ARITH. AVERAGE | STD DEV |
|-------|-------------------|-------|-------|-------------------|------------|
| 14 | 73.6 | 77.9 | 68.1 | 72.9 | 2.7 |
| 15 | 77.2 | 80.4 | 71.9 | 76.6 | 2.2 |
| 16 | 82.3 | 85.2 | 76.1 | 81.6 | 2.7 |
| 17 | 84.5 | 88.0 | 80.9 | 84.1 | 1.9 |
| 18 | 86.1 | 89.4 | 83.0 | 85.7 | 1.9 |
| 19 | 86.6 | 89.6 | 82.1 | 86.3 | 1.8 |
| 20 | 88.6 | 91.7 | 83.5 | 88.3 | 1.9 |
| 21 | 89.8 | 92.4 | 84.8 | 89.3 | 2.1 |
| 22 | 89.5 | 92.9 | 85.0 | 89.0 | 2.0 |
| 23 | 89.3 | 92.3 | 84.6 | 88.9 | 2.1 |
| 24 | 90.4 | 93.3 | 85.5 | 89.8 | 2.2 |
| 25 | 89.5 | 93.1 | 84.3 | 89.0 | 2.2 |
| 26 | 87.5 | 91.1 | 83.9 | 87.0 | 2.1 |
| 27 | 87.2 | 91.0 | 82.8 | 86.7 | 2.1 |
| 28 | 85.6 | 89.7 | 82.3 | 85.1 | 2.0 |
| 29 | 83.0 | 86.9 | 79.9 | 82.6 | 1.9 |
| 30 | 80.2 | 83.6 | 76.5 | 79.9 | 1.7 |
| 31 | 78.7 | 81.3 | 75.2 | 78.4 | 1.7 |
| 32 | 77.2 | 79.8 | 72.9 | 76.8 | 1.9 |
| 33 | 74.3 | 76.7 | 70.2 | 74.0 | 1.6 |
| 34 | 71.4 | 75.2 | 67.0 | 71.1 | 1.9 |
| 35 | 68.3 | 70.9 | 65.1 | 68.0 | 1.6 |
| 36 | 65.7 | 67.5 | 65.0 | 65.6 | .7 |
| 37 | 65.0 | 65.2 | 65.0 | 65.0 | .0 |
| 38 | 65.0 | 65.1 | 65.0 | 65.0 | .0 |
| 39 | 65.0 | 65.0 | 65.0 | 65.0 | .0 |
| 40 | 65.0 | 65.0 | 65.0 | 65.0 | .0 |
| DBA | 92.3 | 95.5 | 89.1 | 92.0 | 1.7 |
| DBD | 97.4 | 100.3 | 94.1 | 97.1 | 1.6 |
| OASPL | 99.5 | 102.3 | 95.6 | 99.2 | 1.6 |
| PNL | 104.8 | 107.5 | 101.1 | 104.5 | 1.6 |
| PNLT | 104.8 | 107.5 | 101.1 | 104.5 | 1.6 |

90°
(Microphone Location
Relative to Helicopter)

TABLE G-VII

5 FOOT HOVER TEST

1/3 OCTAVE NOISE LEVEL FREQUENCY SPECTRA

SIKORSKY S-64

With truck

OCTOBER 28 1976

EVENT 10, 225 DEGREES, MICROPHONE 150 METERS WEST

1/3 OCTAVE BAND VS LEVEL (AVE OVER 19 SECONDS)
(DB RE 20 MICRO PA)

| BAND | ENERGY AVERAGE | MAX | MIN | ARITH. AVERAGE | STD DEV |
|-------|-------------------|-------|------|-------------------|------------|
| 14 | 72.6 | 76.7 | 68.8 | 72.0 | 2.2 |
| 15 | 75.3 | 78.3 | 71.8 | 75.1 | 1.6 |
| 16 | 80.7 | 83.5 | 77.3 | 80.3 | 1.8 |
| 17 | 79.8 | 82.1 | 76.0 | 79.5 | 1.5 |
| 18 | 80.8 | 83.5 | 78.5 | 80.6 | 1.4 |
| 19 | 82.1 | 85.4 | 80.0 | 81.9 | 1.2 |
| 20 | 84.6 | 86.9 | 82.0 | 84.5 | 1.1 |
| 21 | 83.9 | 85.2 | 82.6 | 83.9 | .6 |
| 22 | 81.5 | 84.6 | 77.4 | 81.2 | 1.5 |
| 23 | 81.8 | 84.3 | 78.1 | 81.5 | 1.7 |
| 24 | 83.3 | 86.6 | 79.6 | 82.9 | 2.0 |
| 25 | 83.4 | 87.3 | 79.1 | 82.9 | 2.0 |
| 26 | 81.9 | 83.8 | 78.5 | 81.7 | 1.4 |
| 27 | 82.1 | 84.4 | 77.1 | 81.7 | 1.8 |
| 28 | 80.5 | 82.5 | 75.6 | 80.2 | 1.7 |
| 29 | 79.0 | 80.1 | 74.5 | 78.7 | 1.5 |
| 30 | 77.4 | 79.3 | 72.6 | 77.1 | 1.5 |
| 31 | 75.4 | 77.0 | 71.2 | 75.2 | 1.5 |
| 32 | 74.0 | 75.8 | 70.2 | 73.8 | 1.4 |
| 33 | 71.7 | 74.1 | 69.1 | 71.5 | 1.4 |
| 34 | 70.7 | 74.9 | 68.0 | 70.4 | 1.7 |
| 35 | 67.7 | 70.6 | 65.5 | 67.5 | 1.2 |
| 36 | 65.4 | 67.0 | 65.0 | 65.3 | .6 |
| 37 | 69.7 | 73.1 | 66.3 | 69.5 | 1.6 |
| 38 | 70.2 | 73.7 | 65.2 | 69.7 | 2.1 |
| 39 | 65.0 | 65.0 | 65.0 | 65.0 | .0 |
| 40 | 65.0 | 65.0 | 65.0 | 65.0 | .0 |
| DBA | 87.6 | 89.1 | 83.9 | 87.4 | 1.2 |
| DBD | 93.3 | 94.5 | 91.3 | 93.2 | .8 |
| OASPL | 94.6 | 95.8 | 93.2 | 94.5 | .7 |
| PNL | 100.5 | 102.0 | 98.0 | 100.3 | 1.0 |
| PNLT | 100.9 | 103.2 | 98.0 | 100.8 | 1.2 |

45°
(Microphone Location
Relative to Helicopter)

TABLE G-VII
5 FOOT HOVER TEST

1/3 OCTAVE NOISE LEVEL FREQUENCY SPECTRA

SIKORSKY S-64

with truck

OCTOBER 28 1976

EVENT 41, 270 DEGREES, MICROPHONE 150 METERS WEST

1/3 OCTAVE BAND VS LEVEL (AVE OVER 19 SECONDS)
(DB RE 20 MICRO PA)

| BAND | ENERGY AVERAGE | MAX | MIN | ARITH. AVERAGE | STD DEV |
|-------|-------------------|-------|------|-------------------|------------|
| 14 | 72.6 | 78.0 | 66.0 | 71.7 | 2.7 |
| 15 | 74.4 | 77.4 | 69.9 | 74.1 | 1.8 |
| 16 | 76.8 | 79.3 | 72.9 | 76.5 | 1.5 |
| 17 | 76.8 | 78.7 | 74.6 | 76.7 | 1.0 |
| 18 | 77.2 | 78.8 | 74.2 | 77.0 | 1.0 |
| 19 | 78.7 | 80.1 | 76.1 | 78.6 | 1.0 |
| 20 | 80.2 | 82.2 | 77.9 | 80.1 | 1.0 |
| 21 | 79.8 | 81.7 | 77.1 | 79.6 | 1.0 |
| 22 | 79.1 | 82.2 | 76.6 | 78.8 | 1.6 |
| 23 | 80.2 | 83.4 | 76.6 | 79.8 | 1.8 |
| 24 | 81.1 | 83.9 | 77.2 | 80.8 | 1.7 |
| 25 | 80.5 | 83.6 | 75.0 | 79.9 | 2.3 |
| 26 | 78.4 | 81.5 | 74.0 | 78.0 | 2.0 |
| 27 | 77.8 | 80.6 | 74.9 | 77.5 | 1.5 |
| 28 | 76.0 | 78.7 | 73.1 | 75.7 | 1.5 |
| 29 | 74.0 | 77.7 | 71.5 | 73.7 | 1.5 |
| 30 | 72.8 | 73.6 | 69.0 | 72.1 | 2.2 |
| 31 | 71.3 | 74.0 | 67.5 | 70.6 | 2.2 |
| 32 | 70.1 | 72.0 | 66.1 | 69.7 | 1.8 |
| 33 | 68.5 | 70.4 | 65.7 | 68.3 | 1.4 |
| 34 | 66.9 | 70.1 | 63.8 | 66.6 | 1.5 |
| 35 | 66.0 | 68.4 | 63.2 | 65.8 | 1.4 |
| 36 | 62.6 | 64.8 | 60.2 | 62.5 | 1.2 |
| 37 | 68.0 | 70.3 | 65.8 | 67.8 | 1.3 |
| 38 | 69.4 | 72.7 | 66.3 | 69.1 | 1.6 |
| 39 | 55.0 | 55.3 | 55.0 | 55.0 | .0 |
| 40 | 55.0 | 55.0 | 55.0 | 55.0 | .0 |
| DBA | 84.0 | 87.1 | 81.8 | 83.8 | 1.3 |
| DBD | 89.6 | 91.7 | 87.7 | 89.5 | 1.0 |
| OASPL | 91.3 | 92.7 | 90.1 | 91.3 | .7 |
| PNL | 97.1 | 99.1 | 95.0 | 97.0 | 1.0 |
| PNLT | 98.6 | 100.7 | 96.4 | 98.5 | 1.1 |

0°
(Microphone Location
Relative to Helicopter)

TABLE G-VII
5 FOOT HOVER TEST

1/3 OCTAVE NOISE LEVEL FREQUENCY SPECTRA

SIKORSKY S-64

With truck

OCTOBER 28 1976

EVENT 42, 315, DEGREES, MICROPHONE 150 METERS WEST

1/3 OCTAVE BAND VS LEVEL (AVE OVER 19 SECONDS)
(DB RE 20 MICRO PA)

| BAND | ENERGY AVERAGE | MAX | MIN | ARITH. AVERAGE | STD DEV |
|-------|-------------------|-------|------|-------------------|------------|
| 14 | 71.8 | 75.7 | 67.2 | 71.4 | 2.0 |
| 15 | 74.9 | 76.7 | 72.4 | 74.8 | 1.0 |
| 16 | 81.6 | 83.8 | 79.5 | 81.5 | 1.2 |
| 17 | 80.6 | 82.5 | 78.0 | 80.4 | 1.2 |
| 18 | 83.9 | 85.8 | 81.7 | 83.8 | .9 |
| 19 | 82.8 | 86.5 | 79.9 | 82.5 | 1.7 |
| 20 | 84.6 | 86.9 | 81.3 | 84.3 | 1.6 |
| 21 | 84.2 | 86.6 | 81.0 | 84.0 | 1.3 |
| 22 | 81.9 | 84.8 | 78.3 | 81.6 | 1.4 |
| 23 | 81.8 | 86.2 | 77.4 | 81.3 | 2.0 |
| 24 | 83.4 | 87.6 | 77.8 | 83.0 | 2.0 |
| 25 | 84.3 | 89.1 | 79.2 | 83.6 | 2.4 |
| 26 | 82.8 | 86.3 | 78.0 | 82.4 | 1.9 |
| 27 | 83.1 | 86.1 | 77.9 | 82.8 | 1.8 |
| 28 | 82.0 | 84.2 | 78.2 | 81.8 | 1.3 |
| 29 | 81.3 | 83.4 | 77.5 | 81.1 | 1.4 |
| 30 | 79.9 | 82.2 | 77.4 | 79.8 | 1.2 |
| 31 | 77.3 | 79.0 | 75.1 | 77.2 | .9 |
| 32 | 75.8 | 77.1 | 73.4 | 75.7 | 1.0 |
| 33 | 75.7 | 78.4 | 72.7 | 75.4 | 1.5 |
| 34 | 72.1 | 74.4 | 68.7 | 71.9 | 1.4 |
| 35 | 68.7 | 70.3 | 66.3 | 68.6 | 1.0 |
| 36 | 66.9 | 68.9 | 64.9 | 66.8 | 1.2 |
| 37 | 72.7 | 74.8 | 70.6 | 72.6 | 1.2 |
| 38 | 72.1 | 74.6 | 69.3 | 71.9 | 1.4 |
| 39 | 57.0 | 58.5 | 55.4 | 56.9 | .9 |
| 40 | 55.0 | 55.0 | 55.0 | 55.0 | .0 |
| DBA | 89.3 | 91.7 | 85.8 | 89.1 | 1.3 |
| DBD | 94.0 | 96.4 | 90.9 | 93.9 | 1.2 |
| OASPL | 94.6 | 96.9 | 92.0 | 94.5 | 1.2 |
| PNL | 101.6 | 104.1 | 98.6 | 101.5 | 1.3 |
| PNLT | 102.9 | 105.0 | 99.8 | 102.7 | 1.3 |

315°
(Microphone Location
Relative to Helicopter)

TABLE G-VII
5 FOOT HOVER TEST

1/3 OCTAVE NOISE LEVEL FREQUENCY SPECTRA

SIKORSKY S-64

With truck

OCTOBER 28 1976

EVENT 35, 0 DEGREES, MICROPHONE 150 METERS EAST

1/3 OCTAVE BAND VS LEVEL (AVE OVER 19 SECONDS)
(DB RE 20 MICRO PA)

| BAND | ENERGY AVERAGE | MAX | MIN | ARITH. AVERAGE | STD DEV |
|-------|-------------------|------|------|-------------------|------------|
| 14 | 71.7 | 75.2 | 68.5 | 71.5 | 1.4 |
| 15 | 74.2 | 77.5 | 71.6 | 74.1 | 1.2 |
| 16 | 80.0 | 84.6 | 77.3 | 79.7 | 1.6 |
| 17 | 81.2 | 83.4 | 78.1 | 81.0 | 1.5 |
| 18 | 84.2 | 86.7 | 81.6 | 83.9 | 1.5 |
| 19 | 82.5 | 85.1 | 79.4 | 82.3 | 1.2 |
| 20 | 83.2 | 84.8 | 79.8 | 83.0 | 1.4 |
| 21 | 81.8 | 83.9 | 78.3 | 81.6 | 1.5 |
| 22 | 76.3 | 78.5 | 73.3 | 76.1 | 1.2 |
| 23 | 74.6 | 76.9 | 72.7 | 74.5 | 1.1 |
| 24 | 73.6 | 76.4 | 71.3 | 73.4 | 1.4 |
| 25 | 72.0 | 74.1 | 69.5 | 71.7 | 1.4 |
| 26 | 73.0 | 76.6 | 69.9 | 72.7 | 1.7 |
| 27 | 72.7 | 75.3 | 69.8 | 72.5 | 1.4 |
| 28 | 73.0 | 76.4 | 70.1 | 72.7 | 1.7 |
| 29 | 72.3 | 75.0 | 69.9 | 72.1 | 1.1 |
| 30 | 71.5 | 74.2 | 68.9 | 71.3 | 1.3 |
| 31 | 70.7 | 73.0 | 68.5 | 70.6 | 1.2 |
| 32 | 70.1 | 71.7 | 67.9 | 69.9 | 1.0 |
| 33 | 69.1 | 70.5 | 66.6 | 68.9 | 1.2 |
| 34 | 66.3 | 67.9 | 64.2 | 66.2 | 1.1 |
| 35 | 63.6 | 65.5 | 61.4 | 63.5 | 1.1 |
| 36 | 61.1 | 63.3 | 59.1 | 61.0 | 1.1 |
| 37 | 63.1 | 65.5 | 60.7 | 62.9 | 1.3 |
| 38 | 63.3 | 66.9 | 60.2 | 63.0 | 1.7 |
| 39 | 59.0 | 61.0 | 57.6 | 59.0 | .9 |
| 40 | 55.0 | 55.0 | 55.0 | 55.0 | .0 |
| DBA | 81.1 | 83.1 | 79.3 | 81.0 | 1.0 |
| DBD | 87.0 | 88.4 | 85.3 | 86.9 | .9 |
| OASPL | 91.1 | 92.3 | 89.5 | 91.0 | .7 |
| PNL | 95.0 | 96.9 | 93.4 | 94.9 | 1.0 |
| PNLT | 95.2 | 97.5 | 93.4 | 95.0 | 1.1 |

90°

(Microphone Location
relative to Helicopter)

TABLE G-VII
5 FOOT HOVER TEST

1/3 OCTAVE NOISE LEVEL FREQUENCY SPECTRA

SIKORSKY S-64

With truck

OCTOBER 28 1976

EVENT 36, 45 DEGREES, MICROPHONE 150 METERS EAST

1/3 OCTAVE BAND VS LEVEL (AVE OVER 19 SECONDS)
(DB RE 20 MICRO PA)

| BAND | ENERGY AVERAGE | MAX | MIN | ARITH. AVERAGE | STD DEV |
|-------|-------------------|-------|------|-------------------|------------|
| 14 | 74.6 | 79.3 | 70.9 | 73.9 | 2.2 |
| 15 | 74.9 | 77.9 | 71.9 | 74.7 | 1.3 |
| 16 | 81.3 | 84.8 | 76.6 | 80.8 | 2.1 |
| 17 | 79.0 | 81.8 | 75.8 | 78.6 | 1.9 |
| 18 | 80.6 | 83.1 | 77.6 | 80.4 | 1.4 |
| 19 | 82.3 | 83.8 | 80.1 | 82.2 | .9 |
| 20 | 84.0 | 85.7 | 81.1 | 83.8 | 1.2 |
| 21 | 82.8 | 86.1 | 78.0 | 82.4 | 1.9 |
| 22 | 77.6 | 80.2 | 74.9 | 77.3 | 1.5 |
| 23 | 75.4 | 77.7 | 71.5 | 75.1 | 1.8 |
| 24 | 74.4 | 76.6 | 70.5 | 74.1 | 1.9 |
| 25 | 73.1 | 76.2 | 67.1 | 72.4 | 2.6 |
| 26 | 72.9 | 77.2 | 67.6 | 72.2 | 2.6 |
| 27 | 72.6 | 77.1 | 66.7 | 71.7 | 3.0 |
| 28 | 72.6 | 77.5 | 67.3 | 71.7 | 2.9 |
| 29 | 73.4 | 78.2 | 66.8 | 72.3 | 3.1 |
| 30 | 73.3 | 77.9 | 67.3 | 72.4 | 2.8 |
| 31 | 72.6 | 76.7 | 65.7 | 71.7 | 2.9 |
| 32 | 71.6 | 75.0 | 64.2 | 70.8 | 2.9 |
| 33 | 71.4 | 74.6 | 64.4 | 70.8 | 2.6 |
| 34 | 71.6 | 74.5 | 65.4 | 71.1 | 2.2 |
| 35 | 67.5 | 70.1 | 61.8 | 67.1 | 2.0 |
| 36 | 64.5 | 66.7 | 59.6 | 64.2 | 1.7 |
| 37 | 71.7 | 74.9 | 68.5 | 71.5 | 1.5 |
| 38 | 72.2 | 75.2 | 66.5 | 71.8 | 2.0 |
| 39 | 63.4 | 65.0 | 60.7 | 63.3 | 1.0 |
| 40 | 55.0 | 55.0 | 55.0 | 55.0 | .0 |
| DBA | 83.4 | 86.6 | 77.9 | 82.9 | 2.2 |
| DBD | 90.0 | 92.4 | 85.6 | 89.7 | 1.8 |
| OASPL | 92.1 | 92.3 | 90.5 | 92.1 | .8 |
| PNL | 97.9 | 100.1 | 93.5 | 97.5 | 1.7 |
| PNLT | 99.3 | 101.6 | 95.3 | 99.0 | 1.7 |

45°
(Microphone Location
Relative to Helicopter)

TABLE G-VII

5 FOOT HOVER TEST

1/3 OCTAVE NOISE LEVEL FREQUENCY SPECTRA

SIKORSKY S-64

With truck

OCTOBER 28, 1976

EVENT 37, 90 DEGREES, MICROPHONE 150 METERS EAST

1/3 OCTAVE BAND VS LEVEL (AVE OVER 19 SECONDS)
(DB RE 20 MICRO PA)

| BAND | ENERGY AVERAGE | MAX | MIN | ARITH. AVERAGE | STD DEV |
|-------|-------------------|-------|------|-------------------|------------|
| 14 | 70.2 | 74.2 | 63.1 | 69.5 | 2.6 |
| 15 | 73.2 | 76.6 | 68.4 | 72.8 | 2.0 |
| 16 | 79.7 | 83.6 | 74.2 | 79.1 | 2.4 |
| 17 | 78.1 | 81.0 | 70.6 | 77.8 | 1.9 |
| 18 | 80.3 | 83.2 | 74.1 | 80.0 | 1.9 |
| 19 | 81.0 | 84.2 | 75.9 | 80.7 | 1.8 |
| 20 | 82.0 | 84.2 | 76.1 | 81.7 | 1.8 |
| 21 | 80.8 | 84.0 | 72.9 | 80.3 | 2.2 |
| 22 | 79.5 | 83.8 | 73.8 | 78.9 | 2.3 |
| 23 | 75.9 | 80.8 | 70.3 | 75.2 | 2.4 |
| 24 | 76.5 | 80.4 | 72.3 | 75.8 | 2.3 |
| 25 | 75.8 | 79.4 | 71.7 | 75.3 | 2.1 |
| 26 | 76.2 | 80.2 | 72.9 | 75.8 | 1.9 |
| 27 | 76.3 | 79.7 | 72.3 | 75.9 | 2.0 |
| 28 | 75.6 | 79.1 | 71.6 | 75.3 | 1.8 |
| 29 | 75.1 | 77.8 | 70.3 | 74.8 | 1.8 |
| 30 | 73.6 | 75.7 | 69.6 | 73.3 | 1.7 |
| 31 | 72.2 | 74.3 | 67.6 | 71.9 | 1.7 |
| 32 | 71.4 | 73.5 | 67.9 | 71.2 | 1.5 |
| 33 | 71.9 | 73.4 | 67.8 | 71.7 | 1.4 |
| 34 | 71.4 | 72.7 | 67.5 | 71.2 | 1.2 |
| 35 | 69.5 | 71.6 | 64.9 | 69.2 | 1.6 |
| 36 | 66.2 | 68.7 | 61.4 | 65.9 | 1.8 |
| 37 | 71.6 | 73.5 | 68.3 | 71.5 | 1.2 |
| 38 | 74.9 | 78.1 | 69.4 | 74.6 | 1.8 |
| 39 | 55.3 | 57.2 | 55.0 | 55.3 | .6 |
| 40 | 55.0 | 55.0 | 55.0 | 55.0 | .0 |
| DBA | 84.2 | 86.4 | 80.8 | 84.0 | 1.4 |
| DBD | 90.4 | 92.0 | 87.1 | 90.2 | 1.2 |
| OASPL | 92.2 | 94.2 | 90.2 | 92.1 | 1.0 |
| PNL | 99.1 | 101.0 | 95.2 | 98.9 | 1.4 |
| PNLT | 101.1 | 103.0 | 97.1 | 100.8 | 1.5 |

0°
(Microphone Location
Relative to Helicopter)

TABLE G-VII
5 FOOT HOVER TEST

1/3 OCTAVE NOISE LEVEL FREQUENCY SPECTRA

SIKORSKY S-64

with truck

OCTOBER 28, 1976

EVENT 38, 135 DEGREES, MICROPHONE 150 METERS EAST

1/3 OCTAVE BAND VS LEVEL (AVE OVER 19 SECONDS)
(DB RE 20 MICRO PA)

| BAND | ENERGY AVERAGE | MAX | MIN | ARITH. AVERAGE | STD DEV |
|-------|-------------------|-------|------|-------------------|------------|
| 14 | 70.2 | 73.9 | 59.9 | 69.3 | 3.1 |
| 15 | 74.7 | 79.1 | 65.9 | 73.9 | 2.9 |
| 16 | 81.3 | 85.2 | 73.6 | 80.4 | 3.0 |
| 17 | 80.4 | 84.2 | 72.6 | 79.6 | 2.8 |
| 18 | 81.8 | 85.1 | 76.4 | 81.2 | 2.4 |
| 19 | 81.6 | 84.9 | 74.4 | 81.0 | 2.4 |
| 20 | 84.0 | 87.9 | 76.6 | 83.1 | 2.9 |
| 21 | 82.4 | 85.5 | 76.6 | 81.8 | 2.5 |
| 22 | 81.2 | 83.8 | 78.3 | 81.1 | 1.1 |
| 23 | 75.6 | 78.5 | 72.9 | 75.5 | 1.2 |
| 24 | 74.7 | 77.4 | 72.7 | 74.5 | 1.2 |
| 25 | 72.8 | 75.6 | 69.8 | 72.5 | 1.5 |
| 26 | 73.5 | 76.7 | 70.1 | 73.2 | 1.7 |
| 27 | 73.7 | 76.8 | 69.7 | 73.4 | 1.8 |
| 28 | 73.4 | 75.8 | 69.5 | 73.1 | 1.7 |
| 29 | 73.8 | 76.5 | 71.0 | 73.5 | 1.5 |
| 30 | 73.5 | 76.3 | 70.9 | 73.3 | 1.4 |
| 31 | 72.5 | 74.9 | 69.9 | 72.3 | 1.4 |
| 32 | 71.9 | 75.0 | 69.0 | 71.6 | 1.5 |
| 33 | 72.4 | 75.9 | 69.7 | 72.1 | 1.6 |
| 34 | 71.3 | 74.7 | 68.0 | 70.9 | 1.9 |
| 35 | 68.1 | 71.4 | 64.3 | 67.7 | 1.9 |
| 36 | 65.7 | 69.2 | 62.1 | 65.3 | 1.9 |
| 37 | 69.0 | 71.6 | 65.1 | 68.6 | 1.9 |
| 38 | 73.9 | 77.4 | 70.3 | 73.5 | 2.0 |
| 39 | 55.6 | 57.1 | 55.0 | 55.5 | .7 |
| 40 | 55.0 | 55.0 | 55.0 | 55.0 | .0 |
| DBA | 83.5 | 86.1 | 81.0 | 83.3 | 1.3 |
| DEB | 89.9 | 92.4 | 87.5 | 89.7 | 1.3 |
| OASPL | 92.4 | 93.5 | 91.5 | 92.3 | .5 |
| PNL | 98.4 | 100.7 | 96.0 | 98.2 | 1.3 |
| PNLT | 100.3 | 102.9 | 97.6 | 100.1 | 1.4 |

315°
(Microphone Location
Relative to Helicopter)

TABLE G-VII
5 FOOT HOVER TEST

1/3 OCTAVE NOISE LEVEL FREQUENCY SPECTRA

SIKORSKY S-64

With truck

OCTOBER 28 1976

EVENT 39, 180 DEGREES, MICROPHONE 150 METERS EAST

1/3 OCTAVE BAND VS LEVEL (AVE OVER 19 SECONDS)
(DB RE 20 MICRO PA)

| BAND | ENERGY AVERAGE | MAX | MIN | ARITH. AVERAGE | STD DEV |
|-------|-------------------|-------|------|-------------------|------------|
| 14 | 73.6 | 78.5 | 70.2 | 73.1 | 2.0 |
| 15 | 74.5 | 77.1 | 71.1 | 74.3 | 1.3 |
| 16 | 79.4 | 82.2 | 74.7 | 79.0 | 1.9 |
| 17 | 82.9 | 85.2 | 79.5 | 82.7 | 1.3 |
| 18 | 85.8 | 88.6 | 81.7 | 85.5 | 1.7 |
| 19 | 83.6 | 85.6 | 81.9 | 83.5 | .9 |
| 20 | 86.3 | 89.2 | 84.3 | 86.1 | 1.2 |
| 21 | 87.5 | 91.2 | 83.4 | 87.1 | 1.9 |
| 22 | 82.7 | 84.7 | 78.6 | 82.5 | 1.5 |
| 23 | 79.5 | 82.2 | 75.3 | 79.2 | 1.7 |
| 24 | 78.4 | 80.7 | 74.8 | 78.1 | 1.7 |
| 25 | 77.9 | 80.6 | 74.2 | 77.4 | 2.2 |
| 26 | 78.8 | 80.6 | 73.2 | 78.2 | 2.4 |
| 27 | 79.9 | 81.7 | 73.1 | 79.0 | 2.8 |
| 28 | 79.7 | 82.3 | 72.5 | 78.9 | 2.8 |
| 29 | 79.3 | 82.3 | 71.9 | 78.3 | 3.0 |
| 30 | 77.0 | 79.5 | 70.3 | 76.3 | 2.7 |
| 31 | 75.2 | 77.6 | 69.8 | 74.6 | 2.4 |
| 32 | 73.6 | 75.9 | 68.8 | 73.1 | 2.1 |
| 33 | 71.1 | 73.9 | 67.2 | 70.8 | 1.7 |
| 34 | 68.5 | 71.1 | 65.7 | 68.2 | 1.4 |
| 35 | 65.9 | 67.9 | 65.0 | 65.8 | .8 |
| 36 | 65.1 | 65.5 | 65.0 | 65.0 | .1 |
| 37 | 65.0 | 65.3 | 65.0 | 65.0 | .1 |
| 38 | 65.4 | 67.1 | 65.0 | 65.4 | .5 |
| 39 | 65.2 | 66.0 | 65.0 | 65.2 | .3 |
| 40 | 65.0 | 65.0 | 65.0 | 65.0 | .0 |
| DBA | 86.1 | 88.7 | 81.3 | 85.6 | 2.3 |
| DBD | 91.1 | 92.8 | 88.6 | 90.9 | 1.5 |
| OASPL | 94.6 | 95.9 | 92.5 | 94.5 | 1.0 |
| PNL | 99.4 | 102.3 | 97.0 | 99.2 | 1.4 |
| PNLT | 99.4 | 102.3 | 97.0 | 99.2 | 1.4 |

270°
(Microphone Location
Relative to Helicopter)

TABLE G-VII

5 FOOT HOVER TEST

1/3 OCTAVE NOISE LEVEL FREQUENCY SPECTRA

SIKORSKY S-64

With Truck

OCTOBER 28, 1976

EVENT 40, 225 DEGREES, MICROPHONE 150 METERS EAST

1/3 OCTAVE BAND VS LEVEL (AVE OVER 19 SECONDS)
(DB RE 20 MICRO PA)

| BAND | ENERGY AVERAGE | MAX | MIN | ARITH. AVERAGE | STD DEV |
|------|-------------------|-------|------|-------------------|------------|
| 14 | 70.1 | 74.1 | 61.6 | 68.9 | 3.4 |
| 15 | 74.7 | 77.6 | 69.6 | 74.2 | 2.3 |
| 16 | 81.9 | 85.4 | 74.6 | 81.3 | 2.5 |
| 17 | 85.6 | 90.9 | 76.9 | 84.6 | 3.2 |
| 18 | 87.7 | 92.1 | 78.9 | 86.9 | 2.9 |
| 19 | 82.8 | 86.1 | 76.9 | 82.2 | 2.4 |
| 20 | 84.0 | 86.6 | 77.6 | 83.4 | 2.5 |
| 21 | 82.7 | 85.9 | 77.1 | 82.0 | 2.4 |
| 22 | 79.9 | 82.2 | 77.2 | 79.7 | 1.3 |
| 23 | 75.6 | 77.5 | 70.9 | 75.4 | 1.7 |
| 24 | 77.5 | 80.4 | 71.1 | 76.9 | 2.5 |
| 25 | 76.3 | 80.4 | 69.6 | 75.4 | 2.8 |
| 26 | 76.4 | 82.1 | 69.6 | 75.3 | 3.1 |
| 27 | 76.1 | 81.8 | 69.0 | 74.9 | 3.3 |
| 28 | 75.7 | 80.8 | 70.2 | 74.8 | 2.9 |
| 29 | 74.8 | 81.3 | 68.5 | 73.7 | 2.9 |
| 30 | 72.3 | 77.5 | 66.8 | 71.7 | 2.2 |
| 31 | 71.3 | 75.6 | 68.5 | 71.0 | 1.6 |
| 32 | 69.8 | 73.8 | 67.2 | 69.5 | 1.5 |
| 33 | 72.9 | 75.4 | 68.8 | 72.5 | 1.9 |
| 34 | 65.9 | 68.0 | 65.0 | 65.8 | .8 |
| 35 | 65.0 | 65.1 | 65.0 | 65.0 | .0 |
| 36 | 65.0 | 65.0 | 65.0 | 65.0 | .0 |
| 37 | 65.0 | 65.0 | 65.0 | 65.0 | .0 |
| 38 | 65.0 | 65.0 | 65.0 | 65.0 | .0 |
| 39 | 65.0 | 65.0 | 65.0 | 65.0 | .0 |
| 40 | 65.0 | 65.0 | 65.0 | 65.0 | .0 |
| 1/3A | 83.2 | 87.4 | 79.9 | 82.9 | 1.7 |
| 1/3B | 89.5 | 91.5 | 87.8 | 89.4 | .9 |
| 1/3C | 94.4 | 96.6 | 92.4 | 94.3 | 1.0 |
| 1/3D | 98.7 | 100.4 | 96.2 | 98.6 | 1.2 |
| 1/3E | 99.9 | 101.5 | 96.2 | 99.8 | 1.1 |

225°
*(Microphone Location
Relative to Helicopter)*

TABLE G-VII
5 FOOT HOVER TEST

1/3 OCTAVE NOISE LEVEL FREQUENCY SPECTRA

SIKORSKY S-64

With truck

OCTOBER 28, 1976

EVENT 41, 270 DEGREES, MICROPHONE 150 METERS EAST

1/3 OCTAVE BAND VS LEVEL (AVE OVER 19 SECONDS)
(DB RE 20 MICRO PA)

| BAND | ENERGY AVERAGE | MAX | MIN | ARITH. AVERAGE | STD DEV |
|-------|-------------------|-------|------|-------------------|------------|
| 14 | 70.4 | 75.1 | 61.9 | 69.4 | 3.0 |
| 15 | 75.5 | 78.4 | 71.4 | 75.1 | 1.7 |
| 16 | 80.6 | 83.6 | 73.1 | 80.2 | 2.0 |
| 17 | 86.2 | 88.9 | 81.9 | 85.9 | 1.9 |
| 18 | 88.1 | 91.2 | 83.1 | 87.6 | 2.1 |
| 19 | 80.5 | 82.5 | 75.1 | 80.2 | 1.7 |
| 20 | 83.5 | 85.9 | 78.4 | 83.0 | 2.1 |
| 21 | 83.7 | 87.0 | 75.4 | 83.1 | 2.5 |
| 22 | 80.3 | 84.1 | 77.1 | 79.9 | 1.9 |
| 23 | 73.6 | 77.5 | 70.2 | 73.0 | 2.1 |
| 24 | 73.7 | 78.9 | 69.7 | 72.9 | 2.6 |
| 25 | 70.2 | 72.1 | 66.2 | 69.5 | 2.3 |
| 26 | 69.7 | 73.7 | 65.2 | 69.1 | 2.3 |
| 27 | 69.4 | 73.2 | 65.0 | 68.6 | 2.7 |
| 28 | 68.5 | 72.7 | 65.0 | 67.9 | 2.2 |
| 29 | 68.1 | 69.8 | 65.0 | 67.4 | 2.4 |
| 30 | 68.5 | 74.2 | 65.4 | 67.7 | 2.5 |
| 31 | 68.6 | 70.4 | 65.5 | 67.8 | 2.5 |
| 32 | 67.7 | 68.8 | 65.2 | 66.9 | 2.3 |
| 33 | 69.9 | 70.0 | 66.1 | 68.8 | 2.6 |
| 34 | 65.6 | 65.1 | 65.0 | 65.4 | 1.2 |
| 35 | 65.1 | 65.0 | 65.0 | 65.1 | .4 |
| 36 | 65.0 | 65.0 | 65.0 | 65.0 | .1 |
| 37 | 65.0 | 65.0 | 65.0 | 65.0 | .0 |
| 38 | 65.0 | 65.0 | 65.0 | 65.0 | .0 |
| 39 | 65.0 | 65.0 | 65.0 | 65.0 | .0 |
| 40 | 65.0 | 65.0 | 65.0 | 65.0 | .0 |
| DBA | 79.8 | 80.2 | 76.6 | 79.2 | 2.1 |
| DBD | 88.2 | 88.0 | 86.7 | 88.0 | 1.3 |
| OASPL | 94.3 | 95.9 | 92.5 | 94.1 | 1.2 |
| PNL | 96.4 | 100.5 | 94.8 | 96.2 | 1.4 |
| PNLT | 97.1 | 102.5 | 94.8 | 96.6 | 1.9 |

*180°
(Microphone Location
Relative to Helicopter)*

TABLE G-VII
5 FOOT HOVER TEST

1/3 OCTAVE NOISE LEVEL FREQUENCY SPECTRA

SIKORSKY S-64

With truck

OCTOBER 28 1976

EVENT 42, 315 DEGREES, MICROPHONE 150 METERS EAST

1/3 OCTAVE BAND VS LEVEL (AVE OVER 19 SECONDS)
(DB RE 20 MICRO PA)

| BAND | ENERGY AVERAGE | MAX | MIN | ARITH. AVERAGE | STD DEV |
|-------|-------------------|------|------|-------------------|------------|
| 14 | 74.1 | 79.8 | 69.5 | 73.1 | 2.8 |
| 15 | 75.8 | 77.9 | 72.2 | 75.6 | 1.6 |
| 16 | 80.7 | 83.3 | 76.4 | 80.4 | 1.6 |
| 17 | 79.9 | 82.4 | 77.6 | 79.7 | 1.2 |
| 18 | 83.6 | 86.0 | 81.2 | 83.4 | 1.3 |
| 19 | 81.9 | 83.4 | 79.8 | 81.9 | .8 |
| 20 | 85.8 | 87.6 | 83.6 | 85.7 | .8 |
| 21 | 87.5 | 89.4 | 84.9 | 87.4 | 1.0 |
| 22 | 79.9 | 82.5 | 76.7 | 79.7 | 1.5 |
| 23 | 77.1 | 79.7 | 73.9 | 76.8 | 1.5 |
| 24 | 75.1 | 78.0 | 72.3 | 74.9 | 1.5 |
| 25 | 73.8 | 75.9 | 71.1 | 73.7 | 1.3 |
| 26 | 74.0 | 76.1 | 71.6 | 73.8 | 1.2 |
| 27 | 73.4 | 75.3 | 70.7 | 73.2 | 1.2 |
| 28 | 73.1 | 75.2 | 69.3 | 72.9 | 1.3 |
| 29 | 72.3 | 74.3 | 69.4 | 72.1 | 1.2 |
| 30 | 71.0 | 72.6 | 68.1 | 70.9 | 1.0 |
| 31 | 72.3 | 75.2 | 69.5 | 72.1 | 1.3 |
| 32 | 70.6 | 72.8 | 68.7 | 70.5 | .9 |
| 33 | 71.6 | 73.7 | 69.4 | 71.4 | 1.3 |
| 34 | 65.9 | 67.0 | 65.1 | 65.9 | .4 |
| 35 | 65.0 | 65.1 | 65.0 | 65.0 | .0 |
| 36 | 65.0 | 65.0 | 65.0 | 65.0 | .0 |
| 37 | 65.0 | 65.0 | 65.0 | 65.0 | .0 |
| 38 | 65.0 | 65.0 | 65.0 | 65.0 | .0 |
| 39 | 65.0 | 65.0 | 65.0 | 65.0 | .0 |
| 40 | 65.0 | 65.0 | 65.0 | 65.0 | .0 |
| DBA | 81.8 | 83.0 | 79.7 | 81.7 | .8 |
| DBD | 88.7 | 89.4 | 87.7 | 88.7 | .5 |
| OASPL | 92.9 | 94.3 | 91.5 | 92.9 | .6 |
| PNL | 97.6 | 98.4 | 96.4 | 97.5 | .5 |
| PNLT | 98.3 | 99.4 | 96.7 | 98.3 | .7 |

135°
*(Microphone Location
Relative to Helicopter)*

TABLE G-VII

5 FOOT HOVER TEST

1/3 OCTAVE NOISE LEVEL FREQUENCY SPECTRA

SIKORSKY S-64

Without truck

OCTOBER 28 1976

EVENT 86, 0 DEGREES, MICROPHONE 150 METERS WEST

1/3 OCTAVE BAND VS LEVEL (AVE OVER 19 SECONDS)
(DBA RE 20 MICRO PA)

| BAND | ENERGY AVERAGE | MAX | MIN | ARITH. AVERAGE | STD DEV |
|-------|-------------------|-------|------|-------------------|------------|
| 14 | 67.7 | 69.6 | 66.2 | 67.6 | .9 |
| 15 | 72.3 | 76.1 | 70.0 | 72.1 | 1.3 |
| 16 | 77.1 | 82.4 | 73.0 | 76.5 | 2.2 |
| 17 | 77.6 | 81.5 | 74.3 | 77.2 | 1.8 |
| 18 | 78.6 | 81.2 | 74.8 | 78.2 | 1.7 |
| 19 | 81.2 | 86.0 | 76.4 | 80.3 | 2.5 |
| 20 | 82.1 | 85.6 | 77.9 | 81.6 | 2.0 |
| 21 | 81.2 | 85.8 | 77.3 | 80.6 | 2.2 |
| 22 | 80.4 | 85.3 | 75.6 | 79.7 | 2.3 |
| 23 | 81.5 | 86.7 | 74.8 | 80.8 | 2.5 |
| 24 | 81.5 | 85.8 | 73.9 | 80.8 | 2.7 |
| 25 | 79.5 | 82.6 | 73.4 | 79.1 | 2.1 |
| 26 | 79.3 | 81.6 | 74.8 | 78.9 | 1.9 |
| 27 | 79.3 | 82.4 | 75.2 | 78.9 | 1.9 |
| 28 | 77.9 | 81.9 | 73.2 | 77.4 | 2.2 |
| 29 | 76.4 | 80.0 | 72.0 | 75.9 | 2.0 |
| 30 | 74.6 | 78.0 | 70.1 | 74.3 | 1.8 |
| 31 | 72.0 | 74.6 | 68.8 | 71.8 | 1.4 |
| 32 | 69.9 | 72.0 | 67.2 | 69.7 | 1.2 |
| 33 | 67.2 | 69.3 | 65.1 | 67.0 | 1.2 |
| 34 | 65.3 | 66.6 | 65.0 | 65.3 | .5 |
| 35 | 65.0 | 65.0 | 65.0 | 65.0 | .0 |
| 36 | 65.0 | 65.0 | 65.0 | 65.0 | .0 |
| 37 | 65.0 | 65.0 | 65.0 | 65.0 | .0 |
| 38 | 65.0 | 65.0 | 65.0 | 65.0 | .0 |
| 39 | 65.0 | 65.0 | 65.0 | 65.0 | .0 |
| 40 | 65.0 | 65.0 | 65.0 | 65.0 | .0 |
| DBA | 84.3 | 87.1 | 80.8 | 84.0 | 1.7 |
| DBD | 89.8 | 92.5 | 87.3 | 89.6 | 1.3 |
| OASPL | 91.7 | 95.4 | 88.8 | 91.5 | 1.5 |
| PNL | 97.7 | 100.5 | 94.9 | 97.5 | 1.3 |
| PNLT | 97.7 | 100.5 | 94.9 | 97.5 | 1.3 |

270°
(Microphone Locator
Relative to Helicopter)

TABLE G-VII
5 FOOT HOVER TEST

1/3 OCTAVE NOISE LEVEL FREQUENCY SPECTRA

SIKORSKY S-64

Without Truck

OCTOBER 28 1976

EVENT 87, 45 DEGREES, MICROPHONE 150 METERS WEST

1/3 OCTAVE BAND VS LEVEL (AVE OVER 19 SECONDS)
(DBA RE 20 MICRO PA)

| BAND | ENERGY AVERAGE | MAX | MIN | ARITH. AVERAGE | STD DEV |
|-------|-------------------|------|------|-------------------|------------|
| 14 | 66.2 | 68.0 | 64.1 | 66.1 | 1.0 |
| 15 | 70.2 | 72.5 | 66.9 | 70.0 | 1.4 |
| 16 | 75.0 | 78.1 | 71.0 | 74.5 | 2.0 |
| 17 | 83.9 | 85.5 | 81.7 | 83.8 | 1.0 |
| 18 | 85.8 | 87.5 | 83.9 | 85.7 | .9 |
| 19 | 79.1 | 80.6 | 77.0 | 79.0 | 1.1 |
| 20 | 82.2 | 84.9 | 79.3 | 82.0 | 1.6 |
| 21 | 82.5 | 84.9 | 77.2 | 82.1 | 2.1 |
| 22 | 80.1 | 83.4 | 75.4 | 79.8 | 1.5 |
| 23 | 80.8 | 85.0 | 77.4 | 80.3 | 2.0 |
| 24 | 80.8 | 83.4 | 77.3 | 80.5 | 1.6 |
| 25 | 79.1 | 82.6 | 76.0 | 78.8 | 1.8 |
| 26 | 78.7 | 81.7 | 75.4 | 78.4 | 1.6 |
| 27 | 79.1 | 82.7 | 74.9 | 78.7 | 1.8 |
| 28 | 78.1 | 80.8 | 74.8 | 77.8 | 1.6 |
| 29 | 76.6 | 79.4 | 73.0 | 76.4 | 1.4 |
| 30 | 75.3 | 76.9 | 70.9 | 75.1 | 1.3 |
| 31 | 75.0 | 76.8 | 70.6 | 74.6 | 1.6 |
| 32 | 73.1 | 75.7 | 69.8 | 72.8 | 1.6 |
| 33 | 70.9 | 73.4 | 67.8 | 70.6 | 1.4 |
| 34 | 68.5 | 71.5 | 65.1 | 68.3 | 1.4 |
| 35 | 65.3 | 69.4 | 62.5 | 65.0 | 1.4 |
| 36 | 60.7 | 63.3 | 58.1 | 60.5 | 1.2 |
| 37 | 55.9 | 57.5 | 55.0 | 55.9 | .6 |
| 38 | 55.0 | 55.0 | 55.0 | 55.0 | .0 |
| 39 | 55.0 | 55.0 | 55.0 | 55.0 | .0 |
| 40 | 55.0 | 55.0 | 55.0 | 55.0 | .0 |
| DBA | 85.1 | 87.6 | 82.4 | 85.0 | 1.3 |
| DBD | 89.8 | 92.2 | 87.8 | 89.7 | 1.1 |
| OASPL | 92.5 | 94.1 | 91.0 | 92.4 | .8 |
| PNL | 97.5 | 99.6 | 95.1 | 97.4 | 1.1 |
| PNLT | 97.5 | 99.6 | 95.5 | 97.4 | 1.1 |

225°
(Microphone Location
Relative to Helicopter)

TABLE G-VII
5 FOOT HOVER TEST

1/3 OCTAVE NOISE LEVEL FREQUENCY SPECTRA

SIKORSKY S-64

Without Truck

OCTOBER 28 1976

EVENT 88, 90 DEGREES, MICROPHONE 150 METERS WEST

1/3 OCTAVE BAND VS LEVEL (AVE OVER 19 SECONDS)
(DB RE 20 MICRO PA)

| BAND | ENERGY AVERAGE | MAX | MIN | ARITH. AVERAGE | STD DEV |
|-------|-------------------|-------|------|-------------------|------------|
| 14 | 69.5 | 71.5 | 66.0 | 69.3 | 1.4 |
| 15 | 79.1 | 82.3 | 72.5 | 78.3 | 2.9 |
| 16 | 86.4 | 89.0 | 77.8 | 85.5 | 3.2 |
| 17 | 88.8 | 90.8 | 87.1 | 88.7 | 1.0 |
| 18 | 89.9 | 91.8 | 88.3 | 89.8 | .9 |
| 19 | 86.8 | 89.9 | 83.1 | 86.4 | 1.8 |
| 20 | 89.3 | 92.0 | 87.2 | 89.2 | 1.2 |
| 21 | 90.1 | 92.7 | 87.6 | 89.9 | 1.3 |
| 22 | 88.6 | 91.0 | 84.6 | 88.4 | 1.5 |
| 23 | 88.3 | 92.2 | 82.9 | 87.9 | 2.0 |
| 24 | 88.0 | 91.0 | 82.9 | 87.6 | 1.9 |
| 25 | 85.7 | 89.6 | 80.6 | 85.3 | 2.1 |
| 26 | 84.8 | 88.4 | 81.0 | 84.4 | 1.9 |
| 27 | 84.0 | 86.4 | 79.9 | 83.7 | 1.6 |
| 28 | 82.2 | 84.5 | 77.0 | 82.0 | 1.6 |
| 29 | 80.9 | 82.6 | 76.7 | 80.7 | 1.5 |
| 30 | 79.3 | 81.9 | 74.4 | 79.0 | 1.7 |
| 31 | 78.4 | 80.7 | 74.1 | 78.1 | 1.7 |
| 32 | 75.8 | 78.6 | 72.5 | 75.6 | 1.3 |
| 33 | 72.0 | 73.8 | 70.0 | 71.9 | .9 |
| 34 | 69.1 | 70.9 | 66.5 | 69.0 | 1.1 |
| 35 | 65.6 | 67.2 | 63.2 | 65.5 | .9 |
| 36 | 61.0 | 62.6 | 59.3 | 61.0 | .7 |
| 37 | 56.6 | 57.4 | 55.5 | 56.6 | .5 |
| 38 | 55.0 | 55.0 | 55.0 | 55.0 | .0 |
| 39 | 55.0 | 55.0 | 55.0 | 55.0 | .0 |
| 40 | 55.0 | 55.0 | 55.0 | 55.0 | .0 |
| DBA | 89.8 | 91.6 | 86.0 | 89.6 | 1.3 |
| DBD | 95.0 | 96.8 | 91.7 | 94.8 | 1.3 |
| OASPL | 98.8 | 100.3 | 96.2 | 98.6 | 1.1 |
| PNL | 102.7 | 104.3 | 99.5 | 102.5 | 1.2 |
| PNLT | 102.7 | 104.3 | 99.5 | 102.5 | 1.2 |

180°
(Microphone Location)
(Relative To Helicopter)

TABLE G-VII
S FOJT HOVER TEST

1/3 OCTAVE NOISE LEVEL FREQUENCY SPECTRA

SIKORSKY S-64

Without truck

OCTOBER 23 1976

EVENT 89, 135 DEGREES, MICROPHONE 150 METERS WEST

1/3 OCTAVE BAND VS LEVEL (AVE OVER 19 SECONDS)
(DBA RE 20 MICRO PA)

| BAND | ENERGY AVERAGE | MAX | MIN | ARITH. AVERAGE | STD DEV |
|-------|-------------------|-------|-------|-------------------|------------|
| 14 | 70.1 | 72.4 | 66.6 | 69.5 | 1.5 |
| 15 | 78.6 | 80.8 | 75.2 | 78.3 | 1.6 |
| 16 | 85.3 | 87.9 | 80.7 | 84.9 | 2.0 |
| 17 | 89.3 | 92.2 | 86.2 | 89.0 | 1.5 |
| 18 | 88.8 | 91.5 | 85.5 | 88.6 | 1.4 |
| 19 | 90.9 | 95.9 | 85.7 | 90.3 | 2.2 |
| 20 | 93.0 | 98.2 | 89.5 | 92.4 | 2.1 |
| 21 | 92.5 | 97.1 | 88.5 | 91.9 | 2.1 |
| 22 | 92.4 | 97.9 | 87.2 | 91.4 | 2.9 |
| 23 | 92.2 | 98.5 | 85.9 | 90.8 | 3.3 |
| 24 | 90.8 | 96.1 | 85.0 | 89.9 | 2.8 |
| 25 | 87.7 | 91.5 | 82.4 | 87.0 | 2.5 |
| 26 | 86.2 | 89.1 | 81.0 | 85.7 | 2.3 |
| 27 | 86.3 | 89.2 | 83.2 | 86.0 | 1.6 |
| 28 | 85.2 | 88.7 | 80.8 | 84.7 | 2.2 |
| 29 | 82.8 | 86.1 | 79.3 | 82.4 | 1.9 |
| 30 | 80.6 | 83.1 | 77.8 | 80.3 | 1.6 |
| 31 | 79.8 | 82.5 | 77.2 | 79.5 | 1.5 |
| 32 | 77.1 | 79.6 | 75.1 | 77.0 | 1.3 |
| 33 | 74.8 | 77.0 | 73.1 | 74.7 | 1.0 |
| 34 | 70.8 | 74.1 | 68.1 | 70.6 | 1.4 |
| 35 | 67.2 | 70.6 | 65.5 | 67.0 | 1.3 |
| 36 | 65.1 | 65.6 | 65.0 | 65.1 | .2 |
| 37 | 65.0 | 65.0 | 65.0 | 65.0 | .0 |
| 38 | 65.0 | 65.0 | 65.0 | 65.0 | .0 |
| 39 | 65.0 | 65.0 | 65.0 | 65.0 | .0 |
| 40 | 65.0 | 65.0 | 65.0 | 65.0 | .0 |
| DBA | 92.2 | 96.1 | 88.8 | 91.7 | 1.9 |
| DBD | 97.7 | 102.1 | 94.3 | 97.2 | 2.0 |
| OASPI | 101.3 | 105.8 | 98.0 | 100.8 | 2.0 |
| PNL | 105.6 | 109.8 | 102.4 | 105.1 | 1.9 |
| PNLT | 105.6 | 109.8 | 102.4 | 105.1 | 1.9 |

135°

(Microphone Location
Relative to Helicopter)

TABLE G-VIII
5 FOOT HOVER TEST

1/3 OCTAVE NOISE LEVEL FREQUENCY SPECTRA

SIKORSKY S-64

without truck

OCTOBER 28 1976

EVENT 90, 180 DEGREES, MICROPHONE 150 METERS WEST

1/3 OCTAVE BAND VS LEVEL (AVE OVER 19 SECONDS)
(DB RE 20 MICRO PA)

| BAND | ENERGY AVERAGE | MAX | MIN | ARITH. AVERAGE | STD DEV |
|-------|-------------------|-------|------|-------------------|------------|
| 14 | 67.1 | 70.0 | 65.4 | 66.9 | 1.2 |
| 15 | 71.7 | 73.7 | 69.1 | 71.6 | 1.2 |
| 16 | 76.9 | 79.6 | 72.4 | 76.6 | 1.8 |
| 17 | 80.8 | 83.1 | 77.5 | 80.5 | 1.5 |
| 18 | 80.7 | 83.2 | 76.8 | 80.5 | 1.4 |
| 19 | 82.0 | 84.0 | 78.6 | 81.7 | 1.5 |
| 20 | 85.1 | 87.2 | 81.2 | 84.9 | 1.5 |
| 21 | 84.9 | 86.9 | 80.9 | 84.7 | 1.5 |
| 22 | 83.8 | 86.4 | 78.8 | 83.6 | 1.7 |
| 23 | 83.4 | 87.3 | 78.2 | 82.9 | 2.1 |
| 24 | 84.1 | 88.2 | 79.8 | 83.6 | 2.3 |
| 25 | 82.6 | 87.0 | 77.7 | 82.1 | 2.2 |
| 26 | 82.4 | 86.9 | 77.5 | 81.3 | 2.2 |
| 27 | 81.6 | 85.2 | 77.6 | 81.1 | 2.0 |
| 28 | 80.4 | 84.4 | 76.3 | 80.0 | 1.9 |
| 29 | 77.6 | 79.8 | 75.0 | 77.4 | 1.3 |
| 30 | 75.5 | 76.9 | 72.7 | 75.3 | 1.2 |
| 31 | 74.3 | 75.9 | 71.9 | 74.2 | 1.0 |
| 32 | 72.4 | 74.6 | 69.0 | 72.2 | 1.3 |
| 33 | 69.1 | 70.6 | 66.5 | 69.0 | 1.0 |
| 34 | 66.1 | 67.4 | 65.0 | 66.0 | .7 |
| 35 | 65.0 | 65.0 | 65.0 | 65.0 | .0 |
| 36 | 65.0 | 65.0 | 65.0 | 65.0 | .0 |
| 37 | 65.2 | 66.0 | 65.0 | 65.2 | .3 |
| 38 | 65.0 | 65.0 | 65.0 | 65.0 | .0 |
| 39 | 65.0 | 65.0 | 65.0 | 65.0 | .0 |
| 40 | 65.0 | 65.0 | 65.0 | 65.0 | .0 |
| DBA | 86.8 | 90.1 | 83.8 | 86.5 | 1.6 |
| DBD | 92.0 | 94.9 | 89.2 | 91.8 | 1.4 |
| OASPL | 94.4 | 96.9 | 91.5 | 94.2 | 1.3 |
| PNL | 99.8 | 102.4 | 97.3 | 99.6 | 1.3 |
| PNLT | 99.8 | 102.4 | 97.3 | 99.6 | 1.3 |

90°
(Microphone Location
Relative to Helicopter)

TABLE G-VII
5 FOOT HOVER TEST

1/3 OCTAVE NOISE LEVEL FREQUENCY SPECTRA

SIKORSKY S-64

Without truck

OCTOBER 28 1976

EVENT 92, 225 DEGREES, MICROPHONE 150 METERS WEST

1/3 OCTAVE BAND VS LEVEL (AVE OVER 19 SECONDS)
(DB RE 20 MICRO PA)

| BAND | ENERGY AVERAGE | MAX | MIN | ARITH. AVERAGE | STD DEV |
|-------|-------------------|-------|------|-------------------|------------|
| 14 | 66.4 | 68.3 | 64.5 | 66.3 | 1.0 |
| 15 | 69.0 | 72.3 | 65.1 | 68.7 | 1.5 |
| 16 | 75.3 | 80.4 | 70.4 | 74.7 | 2.2 |
| 17 | 76.1 | 80.1 | 72.8 | 75.8 | 1.5 |
| 18 | 78.1 | 81.2 | 75.3 | 77.8 | 1.5 |
| 19 | 80.6 | 82.9 | 77.3 | 80.4 | 1.5 |
| 20 | 82.4 | 84.0 | 79.8 | 82.3 | 1.1 |
| 21 | 81.8 | 84.4 | 78.9 | 81.6 | 1.4 |
| 22 | 80.0 | 82.8 | 76.2 | 79.6 | 2.0 |
| 23 | 79.0 | 83.7 | 74.8 | 78.1 | 2.6 |
| 24 | 79.2 | 83.2 | 74.5 | 78.4 | 2.6 |
| 25 | 78.7 | 82.6 | 72.9 | 77.7 | 2.9 |
| 26 | 78.9 | 83.5 | 71.4 | 77.9 | 3.1 |
| 27 | 79.7 | 84.1 | 72.6 | 78.5 | 3.2 |
| 28 | 78.9 | 84.5 | 72.6 | 77.7 | 3.1 |
| 29 | 77.2 | 81.4 | 71.3 | 76.4 | 2.7 |
| 30 | 75.8 | 80.2 | 69.7 | 75.1 | 2.6 |
| 31 | 73.9 | 77.6 | 68.3 | 73.4 | 2.1 |
| 32 | 71.5 | 74.9 | 67.3 | 71.1 | 1.8 |
| 33 | 68.6 | 71.8 | 64.6 | 68.3 | 1.6 |
| 34 | 66.3 | 68.4 | 61.8 | 66.0 | 1.7 |
| 35 | 64.4 | 66.3 | 60.6 | 64.2 | 1.5 |
| 36 | 61.3 | 63.1 | 57.7 | 61.1 | 1.4 |
| 37 | 72.0 | 74.4 | 68.0 | 71.7 | 1.6 |
| 38 | 58.8 | 61.1 | 56.1 | 58.6 | 1.2 |
| 39 | 56.8 | 58.0 | 55.5 | 56.8 | .6 |
| 40 | 55.0 | 55.0 | 55.0 | 55.0 | .0 |
| DBA | 85.1 | 88.7 | 79.9 | 84.5 | 2.3 |
| DBD | 89.8 | 92.7 | 85.5 | 89.5 | 1.8 |
| OASPL | 91.5 | 94.4 | 89.0 | 91.3 | 1.5 |
| PNL | 98.0 | 100.6 | 93.9 | 97.7 | 1.7 |
| PNLT | 101.9 | 104.3 | 97.6 | 101.6 | 1.7 |

45°
(Microphone Location
Position to Helicopter)

TABLE G-VII
5 FOOT HOVER TEST

1/3 OCTAVE NOISE LEVEL FREQUENCY SPECTRA

SIKORSKY S-64

Without truck

OCTOBER 28 1976

EVENT 93, 270 DEGREES, MICROPHONE 150 METERS WEST

1/3 OCTAVE BAND VS LEVEL (AVE OVER 19 SECONDS)
(DBA RE 20 MICRO PA)

| BAND | ENERGY AVERAGE | MAX | MIN | ARITH. AVERAGE | STD DEV |
|-------|-------------------|-------|------|-------------------|------------|
| 14 | 65.7 | 67.9 | 62.0 | 65.4 | 1.7 |
| 15 | 71.1 | 72.9 | 65.2 | 70.8 | 1.6 |
| 16 | 78.3 | 80.9 | 67.9 | 77.8 | 2.4 |
| 17 | 79.1 | 82.5 | 75.8 | 78.8 | 1.6 |
| 18 | 81.7 | 84.8 | 77.5 | 81.5 | 1.6 |
| 19 | 81.2 | 83.8 | 78.9 | 81.1 | 1.2 |
| 20 | 83.5 | 86.7 | 81.2 | 83.3 | 1.4 |
| 21 | 82.5 | 85.3 | 78.9 | 82.2 | 1.6 |
| 22 | 80.4 | 84.7 | 77.4 | 80.1 | 1.5 |
| 23 | 79.6 | 82.5 | 76.7 | 79.4 | 1.3 |
| 24 | 79.8 | 81.5 | 76.6 | 79.6 | 1.4 |
| 25 | 78.4 | 80.4 | 74.1 | 78.1 | 1.5 |
| 26 | 78.6 | 80.7 | 73.3 | 78.3 | 1.9 |
| 27 | 79.7 | 83.4 | 72.6 | 79.2 | 2.1 |
| 28 | 78.6 | 80.5 | 72.1 | 78.3 | 1.7 |
| 29 | 77.0 | 78.9 | 71.9 | 75.8 | 1.4 |
| 30 | 74.7 | 76.2 | 69.9 | 74.5 | 1.3 |
| 31 | 72.5 | 74.1 | 69.2 | 72.4 | 1.1 |
| 32 | 70.9 | 72.7 | 68.0 | 70.8 | 1.2 |
| 33 | 69.4 | 71.5 | 65.9 | 69.2 | 1.2 |
| 34 | 68.2 | 70.4 | 65.2 | 68.0 | 1.5 |
| 35 | 68.5 | 71.3 | 64.9 | 68.2 | 1.7 |
| 36 | 62.7 | 65.3 | 57.9 | 62.5 | 1.4 |
| 37 | 70.0 | 73.0 | 66.3 | 67.6 | 1.5 |
| 38 | 59.4 | 62.3 | 56.1 | 59.1 | 1.5 |
| 39 | 57.1 | 58.6 | 55.5 | 57.0 | .6 |
| 40 | 55.0 | 55.0 | 55.0 | 55.0 | .0 |
| DBA | 85.0 | 86.7 | 81.0 | 84.8 | 1.1 |
| EDB | 90.0 | 91.6 | 87.1 | 89.3 | 1.0 |
| UASPL | 92.0 | 93.7 | 90.3 | 92.0 | .9 |
| PNL | 98.0 | 99.4 | 94.9 | 97.0 | 1.0 |
| PNLT | 100.2 | 102.2 | 97.6 | 100.8 | 1.0 |

0°
(Microphone Location
Relative to Helicopter)

TABLE G-VII
5 FOOT HOVER TEST

1/3 OCTAVE NOISE LEVEL FREQUENCY SPECTRA

SIKORSKY S-64

Without Truck

OCTOBER 28 1976

EVENT 86, 0 DEGREES, MICROPHONE 150 METERS EAST

1/3 OCTAVE BAND VS LEVEL (AVE OVER 19 SECONDS)
(DB RE 20 MICRO PA)

| BAND | ENERGY AVERAGE | MAX | MIN | ARITH. AVERAGE | STD DEV |
|-------|-------------------|------|------|-------------------|------------|
| 14 | 69.1 | 70.7 | 67.4 | 69.0 | 1.0 |
| 15 | 72.6 | 74.2 | 70.4 | 72.5 | 1.0 |
| 16 | 76.7 | 78.8 | 74.2 | 76.5 | 1.2 |
| 17 | 77.0 | 78.8 | 75.1 | 76.9 | .9 |
| 18 | 79.1 | 80.3 | 76.6 | 79.0 | 1.0 |
| 19 | 81.2 | 84.1 | 78.9 | 81.1 | 1.2 |
| 20 | 83.8 | 86.4 | 82.2 | 83.7 | 1.0 |
| 21 | 82.4 | 84.0 | 79.9 | 82.3 | 1.1 |
| 22 | 77.8 | 81.5 | 75.4 | 77.6 | 1.4 |
| 23 | 74.6 | 76.2 | 72.7 | 74.5 | 1.0 |
| 24 | 74.5 | 76.9 | 72.0 | 74.3 | 1.2 |
| 25 | 73.2 | 75.7 | 70.1 | 73.1 | 1.2 |
| 26 | 72.6 | 74.4 | 69.9 | 72.4 | 1.2 |
| 27 | 71.9 | 73.8 | 69.0 | 71.7 | 1.3 |
| 28 | 71.2 | 72.7 | 69.4 | 71.1 | .9 |
| 29 | 70.4 | 72.2 | 67.5 | 70.2 | 1.0 |
| 30 | 69.5 | 71.2 | 66.9 | 69.4 | .9 |
| 31 | 69.6 | 71.4 | 67.1 | 69.4 | 1.2 |
| 32 | 67.9 | 70.1 | 65.5 | 67.8 | .9 |
| 33 | 67.5 | 69.8 | 65.6 | 67.3 | 1.1 |
| 34 | 65.1 | 66.0 | 65.0 | 65.1 | .2 |
| 35 | 65.0 | 65.0 | 65.0 | 65.0 | .0 |
| 36 | 65.0 | 65.0 | 65.0 | 65.0 | .0 |
| 37 | 65.5 | 67.0 | 65.0 | 65.5 | .7 |
| 38 | 65.0 | 65.0 | 65.0 | 65.0 | .0 |
| 39 | 65.0 | 65.0 | 65.0 | 65.0 | .0 |
| 40 | 65.0 | 65.0 | 65.0 | 65.0 | .0 |
| DBA | 79.5 | 80.9 | 77.1 | 79.4 | .8 |
| DBD | 86.9 | 88.0 | 85.8 | 86.9 | .5 |
| OASPL | 90.4 | 91.4 | 89.4 | 90.4 | .5 |
| PNL | 95.1 | 95.9 | 93.9 | 95.1 | .5 |
| PNLT | 95.1 | 95.9 | 93.9 | 95.1 | .5 |

90°
(Microphone located
position to Helicopter)

TABLE G-VII

5 FOOT HOVER TEST

1/3 OCTAVE NOISE LEVEL FREQUENCY SPECTRA

SIKORSKY S-64

Without track

OCTOBER 28 1976

EVENT 87, 45 DEGREES, MICROPHONE 150 METERS EAST

1/3 OCTAVE BAND VS LEVEL (AVE OVER 19 SECONDS)
(DB RE 20 MICRO PA)

| BAND | ENERGY AVERAGE | MAX | MIN | ARITH. AVERAGE | STD DEV |
|-------|-------------------|-------|------|-------------------|------------|
| 14 | 64.3 | 66.2 | 62.5 | 64.3 | .9 |
| 15 | 70.2 | 71.7 | 68.5 | 70.1 | .9 |
| 16 | 76.4 | 79.0 | 73.2 | 76.1 | 1.8 |
| 17 | 74.7 | 80.4 | 70.6 | 74.0 | 2.3 |
| 18 | 76.4 | 81.4 | 72.5 | 75.7 | 2.2 |
| 19 | 80.7 | 84.7 | 77.2 | 80.3 | 1.9 |
| 20 | 82.5 | 84.9 | 78.6 | 82.2 | 1.8 |
| 21 | 80.3 | 83.1 | 77.5 | 80.0 | 1.6 |
| 22 | 75.1 | 78.3 | 72.3 | 74.7 | 1.7 |
| 23 | 72.4 | 76.5 | 68.6 | 71.9 | 2.0 |
| 24 | 72.6 | 76.2 | 68.2 | 72.1 | 2.3 |
| 25 | 71.3 | 76.0 | 65.1 | 70.6 | 2.6 |
| 26 | 70.9 | 74.9 | 64.9 | 70.2 | 2.6 |
| 27 | 71.3 | 76.1 | 64.8 | 70.5 | 2.7 |
| 28 | 72.1 | 76.0 | 66.4 | 71.3 | 2.8 |
| 29 | 73.7 | 78.2 | 67.8 | 72.8 | 2.8 |
| 30 | 72.8 | 78.1 | 67.5 | 71.8 | 3.0 |
| 31 | 71.3 | 76.1 | 66.5 | 70.5 | 2.6 |
| 32 | 69.9 | 73.7 | 64.9 | 69.2 | 2.5 |
| 33 | 69.2 | 72.5 | 64.7 | 68.5 | 2.4 |
| 34 | 66.8 | 69.1 | 62.0 | 66.3 | 2.1 |
| 35 | 65.5 | 68.1 | 61.1 | 65.0 | 2.0 |
| 36 | 62.4 | 64.8 | 58.9 | 62.1 | 1.7 |
| 37 | 74.0 | 76.4 | 69.1 | 73.5 | 2.2 |
| 38 | 60.2 | 62.5 | 56.6 | 59.9 | 1.8 |
| 39 | 57.5 | 58.7 | 55.8 | 57.4 | .9 |
| 40 | 55.0 | 55.0 | 55.0 | 55.0 | .0 |
| DBA | 81.8 | 84.7 | 77.7 | 81.3 | 2.1 |
| DBD | 88.4 | 90.2 | 84.9 | 88.0 | 1.8 |
| OASPL | 89.3 | 92.0 | 87.1 | 89.1 | 1.4 |
| PNL | 96.8 | 98.6 | 93.3 | 96.5 | 1.8 |
| PNLT | 101.0 | 103.0 | 97.1 | 100.6 | 1.9 |

45°
(Microphone Location
Relative to Helicopter)

TABLE G-VII
5 FOOT HOVER TEST

1/3 OCTAVE NOISE LEVEL FREQUENCY SPECTRA

SIKORSKY S-64

Without Truck

OCTOBER 28, 1976

EVENT 88, 90 DEGREES, MICROPHONE 150 METERS EAST

1/3 OCTAVE BAND VS LEVEL (AVE OVER 19 SECONDS)
(DB RE 20 MICRO PA)

| BAND | ENERGY AVERAGE | MAX | MIN | ARITH. AVERAGE | STD DEV |
|-------|-------------------|-------|------|-------------------|------------|
| 14 | 65.2 | 67.0 | 62.5 | 65.1 | 1.1 |
| 15 | 72.3 | 73.8 | 70.1 | 72.2 | 1.0 |
| 16 | 78.6 | 80.5 | 74.9 | 78.4 | 1.5 |
| 17 | 81.7 | 83.6 | 79.2 | 81.6 | 1.0 |
| 18 | 82.6 | 84.3 | 79.8 | 82.4 | 1.1 |
| 19 | 79.1 | 81.6 | 75.8 | 78.9 | 1.4 |
| 20 | 81.7 | 83.3 | 77.8 | 81.5 | 1.4 |
| 21 | 80.3 | 82.8 | 76.4 | 80.1 | 1.4 |
| 22 | 77.0 | 80.5 | 71.1 | 76.3 | 2.6 |
| 23 | 71.9 | 73.9 | 67.3 | 71.5 | 1.9 |
| 24 | 73.0 | 76.7 | 68.5 | 72.6 | 2.0 |
| 25 | 71.6 | 73.9 | 68.6 | 71.3 | 1.6 |
| 26 | 72.1 | 75.5 | 68.6 | 71.6 | 1.9 |
| 27 | 71.0 | 75.5 | 68.1 | 71.4 | 1.9 |
| 28 | 71.4 | 74.5 | 67.5 | 71.0 | 1.7 |
| 29 | 71.2 | 74.7 | 67.7 | 70.9 | 1.8 |
| 30 | 70.2 | 72.9 | 66.9 | 69.9 | 1.5 |
| 31 | 68.8 | 71.6 | 65.8 | 68.5 | 1.6 |
| 32 | 67.7 | 70.5 | 63.9 | 67.4 | 1.6 |
| 33 | 68.8 | 71.8 | 63.2 | 68.4 | 2.1 |
| 34 | 67.0 | 73.2 | 62.0 | 66.6 | 2.0 |
| 35 | 67.3 | 71.1 | 60.9 | 66.6 | 2.6 |
| 36 | 61.3 | 64.7 | 56.0 | 60.7 | 2.3 |
| 37 | 69.4 | 72.6 | 64.3 | 69.0 | 2.1 |
| 38 | 57.7 | 60.4 | 55.1 | 57.4 | 1.7 |
| 39 | 55.0 | 55.0 | 55.0 | 55.0 | .0 |
| 40 | 55.5 | 58.0 | 53.0 | 55.4 | .8 |
| DBA | 80.5 | 83.1 | 77.1 | 80.2 | 1.5 |
| DBD | 85.9 | 89.2 | 83.3 | 86.7 | 1.4 |
| OASPL | 90.0 | 90.9 | 87.8 | 89.9 | .8 |
| FNL | 95.1 | 97.4 | 91.3 | 94.9 | 1.5 |
| PNLT | 98.4 | 100.8 | 94.2 | 98.2 | 1.6 |

0°
(Microphone Location
Relative to Helicopter)

TABLE G-VII
5 FOOT HOVER TEST

1/3 OCTAVE NOISE LEVEL FREQUENCY SPECTRA

SIKORSKY S-64

Without truck

OCTOBER 28 1976

EVENT 89, 135 DEGREES, MICROPHONE 150 METERS EAST

1/3 OCTAVE BAND VS LEVEL (AVE OVER 19 SECONDS)
(DB RE 20 MICRO PA)

| BAND | ENERGY AVERAGE | MAX | MIN | ARITH. AVERAGE | STD DEV |
|-------|-------------------|-------|------|-------------------|------------|
| 14 | 64.9 | 67.5 | 61.3 | 64.6 | 1.6 |
| 15 | 69.5 | 71.3 | 66.8 | 69.3 | 1.3 |
| 16 | 75.1 | 77.6 | 70.1 | 74.3 | 2.3 |
| 17 | 78.8 | 82.7 | 74.2 | 78.2 | 2.4 |
| 18 | 79.2 | 81.8 | 76.2 | 78.8 | 1.3 |
| 19 | 80.0 | 82.8 | 78.1 | 79.8 | 1.1 |
| 20 | 83.5 | 85.8 | 80.7 | 83.4 | 1.1 |
| 21 | 81.2 | 83.4 | 79.0 | 81.0 | 1.1 |
| 22 | 77.7 | 81.5 | 72.7 | 77.0 | 2.4 |
| 23 | 73.6 | 77.0 | 68.3 | 73.1 | 2.4 |
| 24 | 74.1 | 78.3 | 68.5 | 73.4 | 2.4 |
| 25 | 73.9 | 76.0 | 67.3 | 73.2 | 2.5 |
| 26 | 74.8 | 76.2 | 69.7 | 74.2 | 2.3 |
| 27 | 75.3 | 76.8 | 70.2 | 74.6 | 2.5 |
| 28 | 74.5 | 76.5 | 70.2 | 74.3 | 2.1 |
| 29 | 75.0 | 77.9 | 71.8 | 74.7 | 1.8 |
| 30 | 74.2 | 76.4 | 70.4 | 73.9 | 1.7 |
| 31 | 73.9 | 76.1 | 69.4 | 73.7 | 1.4 |
| 32 | 71.8 | 73.8 | 69.0 | 71.6 | 1.4 |
| 32 | 70.7 | 73.5 | 67.1 | 70.4 | 1.6 |
| 34 | 68.4 | 69.8 | 65.3 | 68.2 | 1.5 |
| 35 | 66.7 | 68.6 | 63.5 | 66.5 | 1.5 |
| 36 | 63.9 | 66.3 | 60.9 | 63.7 | 1.4 |
| 37 | 74.9 | 78.1 | 71.1 | 74.4 | 2.0 |
| 38 | 63.5 | 66.2 | 50.9 | 63.3 | 1.5 |
| 39 | 59.2 | 60.5 | 58.0 | 59.1 | .7 |
| 40 | 55.0 | 55.0 | 55.0 | 55.0 | .0 |
| DBA | 83.7 | 85.5 | 81.1 | 83.5 | 1.5 |
| DBD | 89.8 | 92.2 | 87.0 | 89.6 | 1.4 |
| OASPL | 90.1 | 91.8 | 88.4 | 90.0 | .9 |
| PWL | 98.4 | 101.1 | 95.6 | 98.1 | 1.5 |
| PWLT | 102.1 | 105.2 | 99.0 | 101.8 | 1.7 |

315°

(Microphone Location
Relative to Helicopter)

TABLE G-VII

5 FOOT HOVER TEST

1/3 OCTAVE NOISE LEVEL FREQUENCY SPECTRA

SIKORSKY S-64

Without Truck

OCTOBER 28, 1976

EVENT 90, 180 DEGREES, MICROPHONE 150 METERS EAST

1/3 OCTAVE BAND VS LEVEL (AVE OVER 19 SECONDS)
(DB RE 20 MICRO PA)

| BAND | ENERGY AVERAGE | MAX | MIN | ARITH. AVERAGE | STD DEV |
|-------|-------------------|-------|------|-------------------|------------|
| 14 | 68.7 | 70.0 | 66.8 | 68.6 | .9 |
| 15 | 73.7 | 74.6 | 72.1 | 73.6 | .8 |
| 16 | 79.6 | 80.6 | 76.9 | 79.4 | 1.3 |
| 17 | 81.8 | 86.0 | 77.2 | 81.0 | 2.6 |
| 18 | 81.9 | 86.0 | 77.3 | 81.2 | 2.5 |
| 19 | 81.6 | 83.9 | 79.0 | 81.5 | 1.1 |
| 20 | 84.5 | 86.3 | 81.3 | 84.4 | 1.1 |
| 21 | 82.6 | 85.2 | 79.8 | 82.4 | 1.3 |
| 22 | 78.6 | 81.0 | 75.9 | 78.4 | 1.3 |
| 23 | 75.1 | 79.0 | 70.5 | 74.6 | 2.1 |
| 24 | 76.9 | 80.5 | 72.5 | 76.3 | 2.3 |
| 25 | 76.8 | 80.2 | 70.6 | 76.4 | 2.1 |
| 26 | 78.7 | 82.1 | 73.9 | 78.3 | 2.1 |
| 27 | 79.3 | 81.4 | 75.2 | 79.0 | 1.7 |
| 28 | 79.6 | 81.7 | 75.4 | 79.3 | 1.6 |
| 29 | 79.7 | 81.9 | 75.8 | 79.4 | 1.5 |
| 30 | 78.2 | 80.7 | 73.5 | 77.9 | 1.7 |
| 31 | 77.2 | 79.8 | 73.8 | 76.9 | 1.7 |
| 32 | 75.2 | 77.7 | 70.2 | 74.8 | 2.0 |
| 33 | 73.1 | 75.9 | 68.6 | 72.6 | 2.1 |
| 34 | 69.2 | 71.7 | 65.5 | 68.9 | 1.7 |
| 35 | 64.0 | 66.2 | 60.8 | 63.8 | 1.5 |
| 36 | 59.0 | 60.9 | 56.7 | 58.8 | 1.2 |
| 37 | 62.9 | 64.8 | 59.4 | 62.3 | 1.6 |
| 38 | 55.2 | 55.6 | 55.0 | 55.2 | .2 |
| 39 | 55.0 | 55.0 | 55.0 | 55.0 | .0 |
| 40 | 55.0 | 55.0 | 55.0 | 55.0 | .0 |
| DBA | 86.4 | 88.4 | 82.7 | 86.2 | 1.5 |
| DBD | 90.4 | 92.3 | 87.4 | 90.2 | 1.3 |
| OASPL | 92.2 | 94.3 | 91.0 | 92.2 | .9 |
| PNL | 98.1 | 100.2 | 95.2 | 97.9 | 1.3 |
| PNLT | 100.0 | 102.2 | 96.9 | 99.7 | 1.4 |

270°

(Microphone Location
Relative to Helicopter)

TABLE G-VII
5 FOOT HOVER TEST

1/3 OCTAVE NOISE LEVEL FREQUENCY SPECTRA

SIKORSKY S-64

Without truck

OCTOBER 28, 1976

EVENT 92, 225 DEGREES, MICROPHONE 150 METERS EAST

1/3 OCTAVE BAND VS LEVEL (AVE OVER 19 SECONDS)
(DB RE 20 MICRO PA)

| BAND | ENERGY AVERAGE | MAX | MIN | ARITH. AVERAGE | STD DEV |
|-------|-------------------|-------|------|-------------------|------------|
| 14 | 67.0 | 69.6 | 63.9 | 66.9 | 1.1 |
| 15 | 72.8 | 75.1 | 70.3 | 72.5 | 1.4 |
| 16 | 81.6 | 83.9 | 78.4 | 81.6 | 1.6 |
| 17 | 84.4 | 86.8 | 80.7 | 84.2 | 1.5 |
| 18 | 86.4 | 89.2 | 83.2 | 86.2 | 1.4 |
| 19 | 82.7 | 84.4 | 80.0 | 82.5 | 1.2 |
| 20 | 84.2 | 86.5 | 81.3 | 84.1 | 1.1 |
| 21 | 82.4 | 85.4 | 78.7 | 82.2 | 1.5 |
| 22 | 81.7 | 85.3 | 78.4 | 81.4 | 1.8 |
| 23 | 80.7 | 84.3 | 75.8 | 80.2 | 2.1 |
| 24 | 81.6 | 84.0 | 77.9 | 81.3 | 1.6 |
| 25 | 80.7 | 83.2 | 76.2 | 80.4 | 1.7 |
| 26 | 79.8 | 82.5 | 74.7 | 79.4 | 2.0 |
| 27 | 80.9 | 84.1 | 76.1 | 80.4 | 2.2 |
| 28 | 79.5 | 81.9 | 75.5 | 79.2 | 1.8 |
| 29 | 78.1 | 80.3 | 74.1 | 77.8 | 1.6 |
| 30 | 76.3 | 78.1 | 72.9 | 76.1 | 1.4 |
| 31 | 76.5 | 79.5 | 73.8 | 76.3 | 1.2 |
| 32 | 74.2 | 76.7 | 71.7 | 74.0 | 1.3 |
| 33 | 73.2 | 75.5 | 70.6 | 73.0 | 1.3 |
| 34 | 68.2 | 70.1 | 65.0 | 68.0 | 1.3 |
| 35 | 64.8 | 66.8 | 61.9 | 64.6 | 1.3 |
| 36 | 60.8 | 62.9 | 58.3 | 60.7 | 1.2 |
| 37 | 56.9 | 58.7 | 55.1 | 56.3 | 1.0 |
| 38 | 55.0 | 55.0 | 55.0 | 55.0 | .0 |
| 39 | 55.0 | 55.0 | 55.0 | 55.0 | .0 |
| 40 | 55.0 | 55.0 | 55.0 | 55.0 | .0 |
| DBA | 86.3 | 88.4 | 83.0 | 86.1 | 1.4 |
| DBD | 94.7 | 96.2 | 92.1 | 94.5 | 1.1 |
| OASPL | 93.8 | 95.1 | 92.4 | 93.7 | .7 |
| FNL | 98.8 | 100.3 | 96.2 | 98.7 | 1.1 |
| FNLT | 98.8 | 100.3 | 96.2 | 98.7 | 1.1 |

225°

(Microphone Location
Relative to Helicopter)

TABLE G-VII

5 FOOT HOVER TEST

1/3 OCTAVE NOISE LEVEL FREQUENCY SPECTRA

SIKORSKY S-64

Without truck

OCTOBER 28 1976

EVENT 93, 270 DEGREES, MICROPHONE 150 METERS EAST

1/3 OCTAVE BAND VS LEVEL (AVE OVER 19 SECONDS)
(DB RE 20 MICRO PA)

| BAND | ENERGY AVERAGE | MAX | MIN | ARITH. AVERAGE | STD DEV |
|-------|-------------------|-------|------|-------------------|------------|
| 14 | 68.0 | 70.0 | 65.6 | 67.8 | 1.1 |
| 15 | 73.5 | 74.8 | 71.6 | 73.4 | 1.1 |
| 16 | 81.3 | 82.9 | 79.2 | 81.2 | 1.3 |
| 17 | 84.3 | 86.3 | 82.5 | 84.2 | .8 |
| 18 | 87.2 | 88.8 | 84.4 | 87.2 | .9 |
| 19 | 83.4 | 85.1 | 80.0 | 83.2 | 1.3 |
| 20 | 87.0 | 88.1 | 83.8 | 86.9 | .9 |
| 21 | 87.1 | 88.6 | 85.1 | 87.0 | .9 |
| 22 | 80.2 | 82.4 | 78.0 | 80.1 | 1.2 |
| 23 | 75.3 | 77.5 | 73.0 | 75.1 | 1.2 |
| 24 | 76.2 | 79.3 | 72.8 | 75.7 | 2.1 |
| 25 | 74.3 | 79.4 | 70.6 | 73.6 | 2.3 |
| 26 | 73.9 | 78.6 | 69.8 | 73.3 | 2.2 |
| 27 | 73.6 | 78.4 | 69.3 | 73.0 | 2.3 |
| 28 | 73.4 | 77.5 | 68.6 | 72.6 | 2.5 |
| 29 | 73.8 | 77.9 | 68.4 | 73.3 | 2.2 |
| 30 | 72.1 | 76.0 | 67.2 | 71.6 | 2.1 |
| 31 | 74.9 | 80.7 | 68.3 | 73.6 | 3.2 |
| 32 | 71.1 | 75.7 | 66.6 | 70.4 | 2.3 |
| 33 | 70.0 | 73.2 | 67.0 | 69.7 | 1.8 |
| 34 | 65.9 | 69.5 | 62.2 | 65.6 | 1.8 |
| 35 | 62.9 | 65.9 | 60.1 | 62.7 | 1.4 |
| 36 | 60.3 | 62.4 | 58.4 | 60.2 | 1.0 |
| 37 | 57.7 | 59.8 | 56.0 | 57.7 | .9 |
| 38 | 55.0 | 55.0 | 55.0 | 55.0 | .0 |
| 39 | 55.0 | 55.0 | 55.0 | 55.0 | .0 |
| 40 | 55.0 | 55.0 | 55.0 | 55.0 | .0 |
| DBA | 82.7 | 86.4 | 78.9 | 82.3 | 1.9 |
| DBD | 88.6 | 91.1 | 86.3 | 88.4 | 1.2 |
| OASPL | 94.0 | 95.5 | 92.6 | 94.0 | .6 |
| PNL | 96.9 | 99.2 | 94.7 | 96.8 | 1.0 |
| PNLT | 97.6 | 100.9 | 94.7 | 97.3 | 1.6 |

180°

(Microphone Location
Relative to Helicopter)

TABLE G-VII
500 FOOT HOVER TEST

1/3 OCTAVE NOISE LEVEL FREQUENCY SPECTRA

SIKORSKY S-64
With truck

OCTOBER 28 1976

EVENT 45, 0 DEGREES, MICROPHONE 150 METERS WEST

1/3 OCTAVE BAND VS LEVEL (AVE OVER 19 SECONDS)
(DB RE 20 MICRO PA)

| BAND | ENERGY AVERAGE | MAX | MIN | ARITH. AVERAGE | STD DEV |
|-------|-------------------|-------|------|-------------------|------------|
| 14 | 72.2 | 76.6 | 66.5 | 71.3 | 2.9 |
| 15 | 72.5 | 75.2 | 69.6 | 72.2 | 1.5 |
| 16 | 74.1 | 77.1 | 69.7 | 73.8 | 1.6 |
| 17 | 78.1 | 80.3 | 76.0 | 77.9 | 1.1 |
| 18 | 80.5 | 82.4 | 78.1 | 80.4 | 1.0 |
| 19 | 75.8 | 78.4 | 74.0 | 75.7 | 1.1 |
| 20 | 72.7 | 75.4 | 70.6 | 72.5 | 1.2 |
| 21 | 69.1 | 71.1 | 67.0 | 69.0 | 1.1 |
| 22 | 78.3 | 81.3 | 75.8 | 78.0 | 1.5 |
| 23 | 83.8 | 86.1 | 80.7 | 83.6 | 1.4 |
| 24 | 86.0 | 88.6 | 82.8 | 85.7 | 1.5 |
| 25 | 80.9 | 84.3 | 77.5 | 80.5 | 2.0 |
| 26 | 79.7 | 81.2 | 76.7 | 79.5 | 1.2 |
| 27 | 83.5 | 86.2 | 80.9 | 83.3 | 1.4 |
| 28 | 79.4 | 80.5 | 75.6 | 79.2 | 1.2 |
| 29 | 79.0 | 81.1 | 76.2 | 78.8 | 1.2 |
| 30 | 76.9 | 79.1 | 73.2 | 76.7 | 1.3 |
| 31 | 75.4 | 77.0 | 71.0 | 75.2 | 1.3 |
| 32 | 71.9 | 74.0 | 68.4 | 71.7 | 1.2 |
| 33 | 69.4 | 71.1 | 66.0 | 69.3 | 1.2 |
| 34 | 64.1 | 65.7 | 60.5 | 64.0 | 1.2 |
| 35 | 60.1 | 61.5 | 56.9 | 59.9 | 1.1 |
| 36 | 56.3 | 57.7 | 55.0 | 56.2 | .7 |
| 37 | 55.0 | 55.0 | 55.0 | 55.0 | .0 |
| 38 | 55.0 | 55.0 | 55.0 | 55.0 | .0 |
| 39 | 55.0 | 55.0 | 55.0 | 55.0 | .0 |
| 40 | 55.0 | 55.0 | 55.0 | 55.0 | .0 |
| DBA | 86.9 | 88.5 | 84.7 | 86.8 | .9 |
| DBD | 91.2 | 92.7 | 89.3 | 91.1 | .3 |
| OASPL | 92.5 | 94.4 | 90.4 | 92.4 | 1.1 |
| PNL | 98.2 | 100.0 | 96.3 | 98.1 | 1.0 |
| PNLT | 98.2 | 100.0 | 96.3 | 98.1 | 1.0 |

*270°
(Microphone Location
Relative to Helicopter)*

TABLE G-VII
500 FOOT HOVER TEST

1/3 OCTAVE NOISE LEVEL FREQUENCY SPECTRA

SIKORSKY S-64

With Truck

OCTOBER 28 1976

EVENT 45, 0 DEGREES, MICROPHONE 150 METERS EAST

1/3 OCTAVE BAND VS LEVEL (AVE OVER 19 SECONDS)
(DB RE 20 MICRO PA)

| BAND | ENERGY AVERAGE | MAX | MIN | ARITH- AVERAGE | STD DEV |
|-------|-------------------|-------|------|-------------------|------------|
| 14 | 74.2 | 75.7 | 71.4 | 74.1 | 1.1 |
| 15 | 74.8 | 77.0 | 72.7 | 74.7 | 1.0 |
| 16 | 78.6 | 80.8 | 75.4 | 78.4 | 1.3 |
| 17 | 79.7 | 81.6 | 77.8 | 79.6 | 1.0 |
| 18 | 80.6 | 82.4 | 77.7 | 80.5 | 1.0 |
| 19 | 72.1 | 74.2 | 70.1 | 72.0 | 1.0 |
| 20 | 72.7 | 74.5 | 70.7 | 72.5 | 1.3 |
| 21 | 82.1 | 84.3 | 78.7 | 81.8 | 1.6 |
| 22 | 86.6 | 88.5 | 83.3 | 86.3 | 1.6 |
| 23 | 87.4 | 88.8 | 84.7 | 87.2 | 1.3 |
| 24 | 83.9 | 85.5 | 81.2 | 83.8 | 1.2 |
| 25 | 84.0 | 85.5 | 81.6 | 83.9 | 1.1 |
| 26 | 86.8 | 88.2 | 83.9 | 86.7 | 1.0 |
| 27 | 82.3 | 83.9 | 80.0 | 82.2 | 1.0 |
| 28 | 81.6 | 83.5 | 78.3 | 81.5 | 1.1 |
| 29 | 80.1 | 81.4 | 76.8 | 80.0 | 1.1 |
| 30 | 77.8 | 79.1 | 74.9 | 77.7 | 1.1 |
| 31 | 76.5 | 78.0 | 73.6 | 76.3 | 1.2 |
| 32 | 73.7 | 75.2 | 71.2 | 73.6 | 1.0 |
| 33 | 71.2 | 73.3 | 68.6 | 71.0 | 1.2 |
| 34 | 67.1 | 68.4 | 65.2 | 67.1 | .8 |
| 35 | 64.1 | 65.5 | 62.6 | 64.1 | .8 |
| 36 | 60.8 | 62.3 | 59.4 | 60.7 | .8 |
| 37 | 57.3 | 59.0 | 56.0 | 57.3 | .8 |
| 38 | 55.6 | 56.8 | 55.0 | 55.3 | .5 |
| 39 | 55.3 | 55.8 | 55.0 | 55.3 | .3 |
| 40 | 55.0 | 55.0 | 55.0 | 55.0 | .0 |
| DBA | 88.7 | 90.1 | 86.2 | 88.6 | .9 |
| DBD | 93.3 | 94.3 | 91.0 | 93.2 | .9 |
| OASPL | 94.8 | 95.9 | 92.5 | 94.7 | 1.0 |
| PNL | 100.7 | 101.9 | 98.3 | 100.7 | .9 |
| PNLT | 100.7 | 101.9 | 98.3 | 100.7 | .9 |

90°
(Microphone Location
Relative to Helicopter)

TABLE G-VII
500 FOOT HOVER TEST

1/3 OCTAVE NOISE LEVEL FREQUENCY SPECTRA

SIKORSKY S-64

Without truck

OCTOBER 28 1976

EVENT 72, 0 DEGREES, MICROPHONE 150 METERS WEST

1/3 OCTAVE BAND VS LEVEL (AVE OVER 19 SECONDS)
(DB RE 20 MICRO PA)

| BAND | ENERGY AVERAGE | MAX | MIN | ARITH. AVERAGE | STD DEV |
|-------|-------------------|-------|------|-------------------|------------|
| 14 | 66.8 | 69.1 | 63.4 | 66.5 | 1.4 |
| 15 | 70.8 | 73.4 | 67.9 | 70.6 | 1.4 |
| 16 | 74.4 | 78.2 | 70.2 | 73.8 | 2.1 |
| 17 | 75.8 | 77.9 | 74.4 | 75.7 | .8 |
| 18 | 78.0 | 79.4 | 76.4 | 77.9 | .8 |
| 19 | 67.0 | 69.0 | 65.2 | 66.8 | 1.0 |
| 20 | 74.9 | 76.6 | 72.8 | 74.9 | .9 |
| 21 | 82.1 | 84.7 | 80.0 | 82.0 | 1.2 |
| 22 | 85.0 | 87.5 | 81.7 | 84.5 | 2.0 |
| 23 | 85.7 | 88.7 | 81.5 | 85.1 | 2.5 |
| 24 | 79.7 | 82.8 | 75.0 | 79.0 | 2.6 |
| 25 | 85.0 | 87.6 | 80.4 | 84.4 | 2.4 |
| 26 | 82.6 | 84.4 | 78.6 | 82.2 | 1.9 |
| 27 | 82.5 | 85.1 | 78.9 | 82.1 | 2.0 |
| 28 | 79.5 | 82.1 | 75.8 | 79.0 | 2.0 |
| 29 | 78.4 | 81.0 | 74.8 | 78.0 | 2.0 |
| 30 | 75.9 | 78.4 | 72.8 | 75.7 | 1.5 |
| 31 | 75.8 | 77.8 | 72.8 | 75.5 | 1.6 |
| 32 | 71.8 | 73.7 | 69.9 | 71.7 | 1.1 |
| 33 | 67.8 | 70.0 | 65.5 | 67.7 | 1.1 |
| 34 | 63.2 | 65.0 | 61.6 | 63.2 | .9 |
| 35 | 60.0 | 64.5 | 58.0 | 59.7 | 1.4 |
| 36 | 56.0 | 59.2 | 55.1 | 55.9 | .9 |
| 37 | 55.9 | 57.6 | 55.0 | 55.8 | .9 |
| 38 | 55.0 | 55.1 | 55.0 | 55.0 | .0 |
| 39 | 55.0 | 55.0 | 55.0 | 55.0 | .0 |
| 40 | 55.0 | 55.0 | 55.0 | 55.0 | .0 |
| DBA | 87.2 | 89.2 | 83.6 | 86.9 | 1.8 |
| DBD | 91.8 | 93.4 | 88.5 | 91.4 | 1.8 |
| OASPL | 93.3 | 94.9 | 90.6 | 93.0 | 1.6 |
| PNL | 98.5 | 100.2 | 95.5 | 98.2 | 1.7 |
| PNLT | 98.5 | 100.9 | 95.5 | 98.2 | 1.7 |

270°

(Microphone location
Relative to Helicopter)

TABLE G-VII
500 FOOT HOVER TEST

1/3 OCTAVE NOISE LEVEL FREQUENCY SPECTRA

SIKORSKY S-64

Without truck

OCTOBER 28 1976

EVENT 72, 0 DEGREES, MICROPHONE 150 METERS EAST

1/3 OCTAVE BAND VS LEVEL (AVE OVER 19 SECONDS)
(DB RE 20 MICRO PA)

| BAND | ENERGY AVERAGE | MAX | MIN | ARITH. AVERAGE | STD DEV |
|-------|-------------------|------|------|-------------------|------------|
| 14 | 69.6 | 74.8 | 64.4 | 68.5 | 2.9 |
| 15 | 71.4 | 76.6 | 68.2 | 70.8 | 2.1 |
| 16 | 77.4 | 82.9 | 71.6 | 76.5 | 2.6 |
| 17 | 76.2 | 78.9 | 73.9 | 76.0 | 1.2 |
| 18 | 77.7 | 80.1 | 74.4 | 77.6 | 1.2 |
| 19 | 74.0 | 76.9 | 71.3 | 73.8 | 1.3 |
| 20 | 71.5 | 73.4 | 69.2 | 71.4 | 1.0 |
| 21 | 68.6 | 70.2 | 66.4 | 68.5 | 1.0 |
| 22 | 75.1 | 77.0 | 73.1 | 74.9 | 1.1 |
| 23 | 79.5 | 81.4 | 77.5 | 79.4 | 1.1 |
| 24 | 81.8 | 83.9 | 79.3 | 81.7 | 1.1 |
| 25 | 77.3 | 79.7 | 73.4 | 77.0 | 1.6 |
| 26 | 76.1 | 78.1 | 72.9 | 75.8 | 1.6 |
| 27 | 79.3 | 81.9 | 76.8 | 79.0 | 1.3 |
| 28 | 73.9 | 75.8 | 71.2 | 73.7 | 1.3 |
| 29 | 73.8 | 76.5 | 71.4 | 73.6 | 1.4 |
| 30 | 71.7 | 74.1 | 68.9 | 71.5 | 1.4 |
| 31 | 70.0 | 72.4 | 67.0 | 69.8 | 1.3 |
| 32 | 66.6 | 68.8 | 63.5 | 66.4 | 1.4 |
| 33 | 63.2 | 66.1 | 59.9 | 63.0 | 1.4 |
| 34 | 58.2 | 60.9 | 56.3 | 58.0 | 1.2 |
| 35 | 55.4 | 57.1 | 55.0 | 55.4 | .6 |
| 36 | 55.0 | 55.0 | 55.0 | 55.0 | .0 |
| 37 | 55.0 | 55.0 | 55.0 | 55.0 | .0 |
| 38 | 55.0 | 55.0 | 55.0 | 55.0 | .0 |
| 39 | 55.0 | 55.0 | 55.0 | 55.0 | .0 |
| 40 | 55.0 | 55.0 | 55.0 | 55.0 | .0 |
| DBA | 82.2 | 84.2 | 80.3 | 82.1 | 1.1 |
| DBD | 86.6 | 88.2 | 84.8 | 86.5 | .9 |
| OASPL | 89.2 | 91.7 | 87.6 | 89.1 | 1.0 |
| PNL | 94.2 | 95.8 | 92.5 | 94.1 | .9 |
| PNLT | 94.2 | 95.8 | 92.5 | 94.1 | .9 |

90°

(Microphone level
relative to Helicopter)

TABLE G-VIII

500 FOOT HOVER TEST

1/3 OCTAVE NOISE LEVEL FREQUENCY SPECTRA

SIKORSKY S-64

With truck

OCTOBER 28 1976

EVENT 45, 0 DEGREES, CENTERLINE MIC. (HARD SITE)

1/3 OCTAVE BAND VS LEVEL (AVE OVER 19 SECONDS)
(DB RE 20 MICRO PA)

| BAND | ENERGY AVERAGE | MAX | MIN | ARITH. AVERAGE | STD DEV |
|-------|-------------------|-------|-------|-------------------|------------|
| 14 | 76.0 | 79.2 | 72.3 | 75.7 | 1.7 |
| 15 | 75.7 | 77.7 | 72.2 | 75.5 | 1.2 |
| 16 | 76.6 | 79.9 | 71.9 | 76.1 | 2.1 |
| 17 | 83.1 | 84.0 | 81.8 | 83.0 | .6 |
| 18 | 82.6 | 83.6 | 80.2 | 82.5 | .9 |
| 19 | 70.3 | 72.0 | 68.1 | 70.2 | .9 |
| 20 | 82.9 | 85.3 | 80.7 | 82.8 | 1.1 |
| 21 | 87.8 | 90.2 | 83.8 | 87.5 | 1.7 |
| 22 | 90.5 | 93.3 | 85.0 | 90.0 | 2.2 |
| 23 | 88.4 | 90.6 | 83.4 | 88.1 | 2.0 |
| 24 | 87.0 | 88.3 | 83.3 | 86.8 | 1.4 |
| 25 | 92.0 | 93.3 | 89.4 | 91.9 | 1.1 |
| 26 | 87.6 | 89.0 | 84.6 | 87.5 | .9 |
| 27 | 88.8 | 90.0 | 86.6 | 88.7 | .8 |
| 28 | 85.5 | 86.6 | 83.8 | 85.4 | .8 |
| 29 | 83.8 | 84.9 | 82.3 | 83.7 | .6 |
| 30 | 82.5 | 83.6 | 81.0 | 82.4 | .7 |
| 31 | 80.0 | 81.2 | 78.8 | 80.0 | .6 |
| 32 | 77.2 | 78.2 | 76.1 | 77.2 | .5 |
| 33 | 74.2 | 75.6 | 72.9 | 74.2 | .7 |
| 34 | 70.8 | 71.8 | 69.8 | 70.8 | .5 |
| 35 | 68.1 | 69.2 | 67.0 | 68.1 | .6 |
| 36 | 64.8 | 66.2 | 63.8 | 64.7 | .6 |
| 37 | 62.1 | 63.7 | 59.8 | 62.0 | .9 |
| 38 | 59.4 | 61.6 | 56.6 | 59.2 | 1.2 |
| 39 | 55.0 | 55.0 | 55.0 | 55.0 | .0 |
| 40 | 55.0 | 55.0 | 55.0 | 55.0 | .0 |
| DBA | 92.8 | 93.6 | 91.1 | 92.7 | .7 |
| DBD | 97.4 | 98.3 | 95.3 | 97.3 | .9 |
| OASPL | 98.8 | 100.2 | 96.0 | 98.7 | 1.2 |
| PNL | 104.8 | 105.7 | 102.7 | 104.7 | .8 |
| PNLT | 104.8 | 105.7 | 102.7 | 104.7 | .8 |

*(Helicopter Location
Directly Overhead)*

TABLE G-III

500 FOOT HOVER TEST

1/3 OCTAVE NOISE LEVEL FREQUENCY SPECTRA

SIKORSKY S-64

Without truck

OCTOBER 28 1976

EVENT 72, 0 DEGREES, CENTERLINE MIC. (HARD SITE)

1/3 OCTAVE BAND VS LEVEL (AVE OVER 19 SECONDS)
(DB RE 20 MICRO PA)

| BAND | ENERGY AVERAGE | MAX | MIN | ARITH. AVERAGE | STD DEV |
|-------|-------------------|-------|------|-------------------|------------|
| 14 | 72.2 | 75.5 | 67.9 | 71.5 | 2.4 |
| 15 | 73.7 | 79.3 | 69.6 | 72.7 | 2.8 |
| 16 | 78.7 | 84.7 | 70.4 | 77.0 | 3.9 |
| 17 | 77.2 | 79.7 | 74.4 | 77.0 | 1.2 |
| 18 | 78.6 | 80.8 | 76.0 | 78.3 | 1.5 |
| 19 | 68.5 | 69.9 | 67.1 | 68.4 | .7 |
| 20 | 81.0 | 83.2 | 78.6 | 80.8 | 1.3 |
| 21 | 86.4 | 87.8 | 83.6 | 86.3 | 1.1 |
| 22 | 87.9 | 90.3 | 84.6 | 87.5 | 1.9 |
| 23 | 85.8 | 88.3 | 82.3 | 85.4 | 2.1 |
| 24 | 83.8 | 85.6 | 81.0 | 83.6 | 1.4 |
| 25 | 88.9 | 91.4 | 84.8 | 88.4 | 2.2 |
| 26 | 85.0 | 87.3 | 82.4 | 84.8 | 1.4 |
| 27 | 86.2 | 88.4 | 82.9 | 85.9 | 1.7 |
| 28 | 83.1 | 85.3 | 80.4 | 82.9 | 1.5 |
| 29 | 79.8 | 81.3 | 78.0 | 79.7 | 1.0 |
| 30 | 77.5 | 79.1 | 76.4 | 77.5 | .8 |
| 31 | 76.7 | 78.0 | 74.2 | 76.6 | 1.0 |
| 32 | 72.9 | 73.8 | 71.0 | 72.8 | .7 |
| 33 | 69.3 | 71.8 | 67.3 | 69.0 | 1.5 |
| 34 | 65.3 | 66.8 | 62.8 | 65.2 | 1.1 |
| 35 | 62.1 | 63.9 | 59.8 | 61.9 | 1.2 |
| 36 | 58.8 | 60.8 | 56.7 | 58.6 | 1.1 |
| 37 | 58.1 | 61.6 | 55.8 | 57.8 | 1.4 |
| 38 | 55.1 | 55.5 | 55.0 | 55.1 | .2 |
| 39 | 55.0 | 55.2 | 55.0 | 55.0 | .1 |
| 40 | 55.0 | 55.0 | 55.0 | 55.0 | .0 |
| DBA | 89.6 | 91.3 | 87.3 | 89.4 | 1.3 |
| DBD | 94.4 | 96.1 | 92.1 | 94.2 | 1.3 |
| OASPL | 97.2 | 98.8 | 96.0 | 97.2 | .7 |
| PNL | 101.3 | 103.0 | 99.1 | 101.2 | 1.2 |
| PNLT | 101.4 | 103.0 | 99.1 | 101.3 | 1.1 |

(Helicopter Location)
(Directly Overhead)

TABLE G-VIII
 Helicopter Noise Level Data
 SIKORSKY 564 OCTOBER 28, 1976
 With Truck

max RMS Noise Level - dBA re 20 μ Pa

| HELICOPTER OPERATION | RUN NUMBER | MICROPHONE OFFSET TO THE WEST | | MICROPHONE OFFSET TO THE EAST | |
|-------------------------|---------------|----------------------------------|----------------|----------------------------------|--------------|
| | | 150M | 75 M. | 75 M. | 150M |
| 5 FT. HOVER 0° | 35 | 95.3 | 103.0 | 91.0 | 87.3 |
| | | (270°) | | (90°) | |
| 5 FT. HOVER 45° | 36 | 95.8 | 102.8 | 96.8 | 87.3 |
| | | (225°) | | (45°) | |
| 5 FT. HOVER 90° | 37 | 99.5 | 104.0 | 96.5 | 86.3 |
| | | (180°) | | (0°) | |
| 5 FT. HOVER 135° | 38 | 101.8 | 105.8 | 96.3 | 88.0 |
| | | (135°) | | (315°) | |
| 5 FT. HOVER 180° | 39 | 98.3 | 101.0 | 94.3 | 90.3 |
| | | (90°) | | (270°) | |
| 5 FT. HOVER 225° | 40 | 91.0 | 97.3 | 97.0 | 87.8 |
| | | (45°) | | (225°) | |
| 5 FT. HOVER 270° | 41 | 89.5 | 97.5 | 92.0 | 84.8 |
| | | (0°) | | (180°) | |
| 5 FT. HOVER 315° | 42 | 93.3 | 99.5 | 93.8 | 83.0 |
| | | (315°) | | (135°) | |
| 500 FT. HOVER 0° | 45 | 88.0 | 93.3 * | 92.8 * | 91.0 |
| | | (270°) | | (90°) | |
| 500 FT. HOVER 90° | 46 47 | 87.5 88.8 | 92.5 94.0 * | 91.8 * | 93.5 91.8 |
| | | (180°) | | (0°) | |

* Microphone at centerline

TABLE G-VIII
Helicopter Noise Level Data

SIKORSKY 564

OCTOBER 28, 1976

With truck

max RMS Noise Level - dBA @ 20 m Pa

| HELICOPTER OPERATION | RUN NUMBER | MICROPHONE OFFSET TO THE WEST 150M | | MICROPHONE OFFSET TO THE EAST 150M | |
|---------------------------|---------------|--|------------------|--|------------------|
| | | OVER Concrete | OVER Concrete | OVER Grass | OVER Concrete |
| | | CENTER LINE | CENTER LINE | CENTER LINE | CENTER LINE |
| 3° GLIDE SLOPE | 70 | 85.5 | 89.0 | 88.0 | 85.8 |
| | 71 | 84.8 | 87.3 | 85.8 | 85.8 |
| 6° GLIDE SLOPE | 51 | 86.0 | 86.8 | 84.0 | 83.3 |
| | 52 | 85.0 | 88.8 | 86.8 | 81.8 |
| 9° GLIDE SLOPE | 43 | 87.0 | 89.5 | 87.5 | 84.5 |
| | 44 | 86.8 | 87.8 | 87.0 | 83.0 |
| 60 KT LEVEL FLYOVER | 49 | 84.0 | 84.8 | 82.3 | 84.8 |
| | 50 | 84.8 | 85.0 | 84.3 | 85.5 |
| 85 KT LEVEL FLYOVER | 55 | 84.0 | 84.0 | 82.3 | 84.3 |
| | 66 | 87.5 | 85.8 | 84.8 | 86.0 |
| 95 KT LEVEL FLYOVER | 67 | 87.8 | 87.0 | 86.3 | 87.3 |
| | 68 | 86.5 | 86.8 | 85.3 | 85.3 |
| | 69 | 88.0 | 87.0 | 86.5 | 87.3 |

TABLE G-VIII
 Helicopter Noise Level Data
 SIKORSKY 564 OCTOBER 28, 1976
 Without truck
 max RMS Noise level - dBA re 20 μ P_a

| HELICOPTER OPERATION | RUN NUMBER | MICROPHONE OFFSET TO THE WEST | | MICROPHONE OFFSET TO THE EAST | |
|-------------------------|---------------|----------------------------------|----------------|----------------------------------|------|
| | | 150M | 75 M | 75 M | 150M |
| 5 FT. HOVER 0° | 86 | 86.8 | 90.3 (270°) | 91.0 (90°) | 85.0 |
| 5 FT. HOVER 45° | 87 | 88.5 | 91.8 (225°) | 93.5 (45°) | 85.5 |
| 5 FT. HOVER 90° | 88 | 93.5 | 97.3 (180°) | 93.5 (0°) | 85.0 |
| 5 FT. HOVER 135° | 89 | 99.3 | 99.8 (135°) | 97.5 (315°) | 85.0 |
| 5 FT. HOVER 180° | 90 | 89.5 | 91.5 (90°) | 94.8 (270°) | 89.8 |
| 5 FT. HOVER 225° | 92 | 88.5 | 92.0 (45°) | 96.3 (225°) | 92.3 |
| 5 FT. HOVER 270° | 93 | 89.0 | 91.5 (0°) | 93.0 (180°) | 96.3 |
| 5 FT. HOVER 315° | | — | — | — | — |
| 500 FT. HOVER | | — | — | — | — |
| 500 FT. HOVER | | — | — | — | — |

TABLE G-VIII
Helicopter Noise Level Data

SIKORSKY S 64 OCTOBER 28, 1976

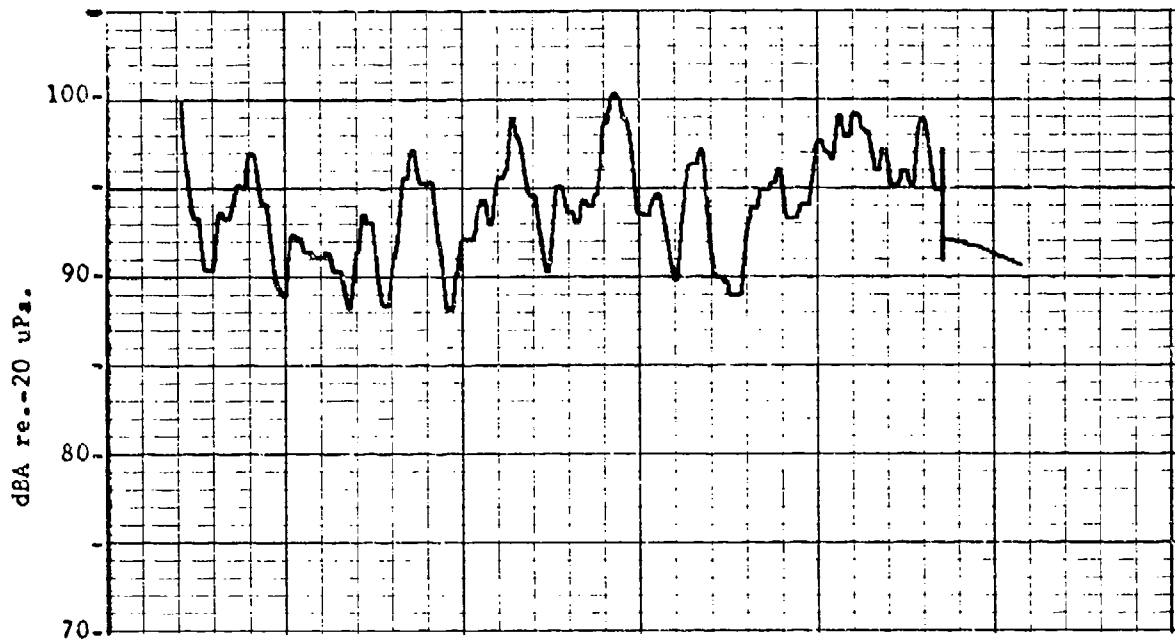
Without truck

max A₁₅ Noise Level - dBA @ 20 m Pa

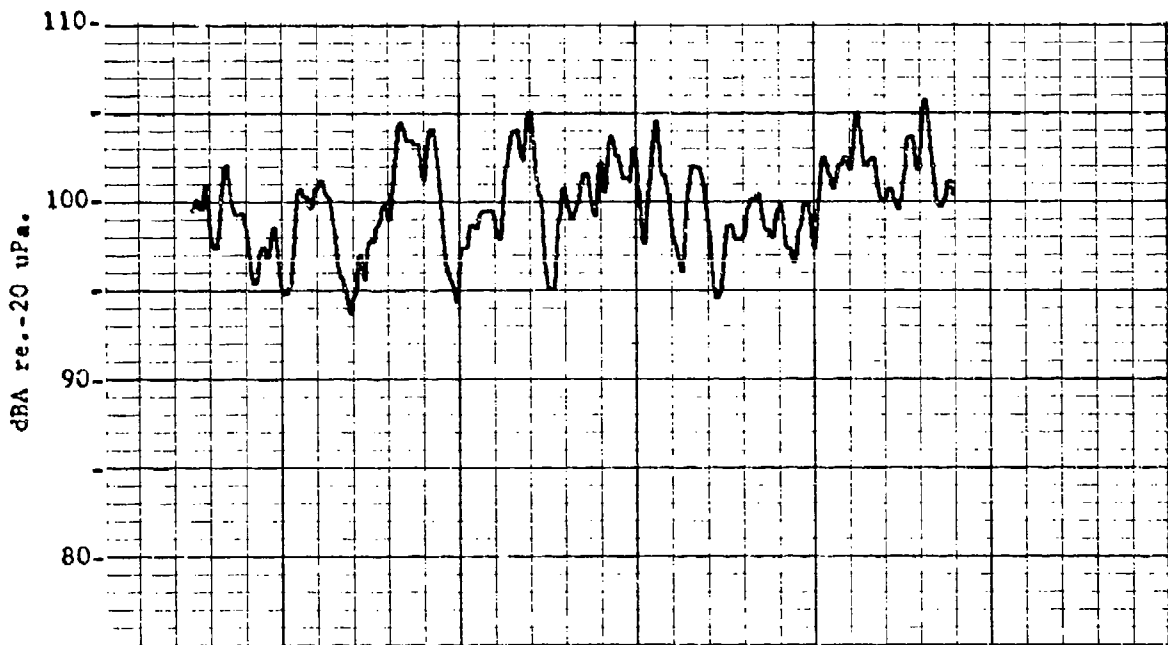
| HELICOPTER OPERATION | RUN NUMBER | MICROPHONE OFFSET TO THE WEST 150M CENTER LINE | | MICROPHONE OFFSET TO THE EAST CENTER LINE 150M | |
|----------------------------|---------------|--|------------------|--|------------------|
| | | OVER Concrete | OVER Concrete | OVER Grass | OVER Concrete |
| 3° GLIDE SLOPE | | — | — | — | — |
| 6° GLIDE SLOPE | 74 | 86.5 | 85.8 | 83.8 | 82.8 |
| | 75 | 86.0 | 86.5 | 83.5 | 83.5 |
| 9° GLIDE SLOPE | | — | — | — | — |
| 85 KT LEVEL FLYOVER | 76 | 86.5 | 87.3 | 85.0 | 83.0 |
| | 77 | 85.0 | 87.3 | 83.8 | 83.5 |
| 95 KT LEVEL FLYOVER | 78 | 85.5 | 86.5 | 84.5 | 82.0 |
| | 79 | 88.3 | 89.8 | 85.8 | 86.0 |
| 105 KT LEVEL FLYOVER | 80 | 87.5 | 89.3 | 85.3 | 83.8 |
| | 81 | 89.0 | 89.5 | 86.8 | 82.8 |

TABLE G-IX

← 10 SEC →



150 METERS WEST OF CENTER LINE

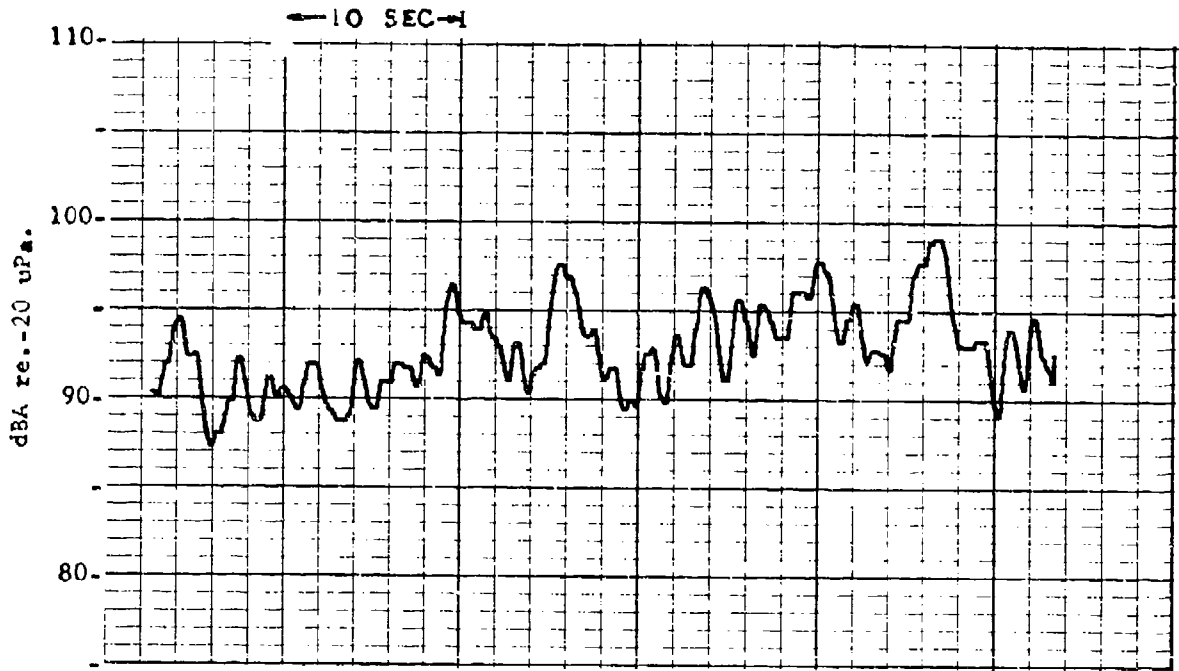


75 METERS WEST OF CENTER LINE

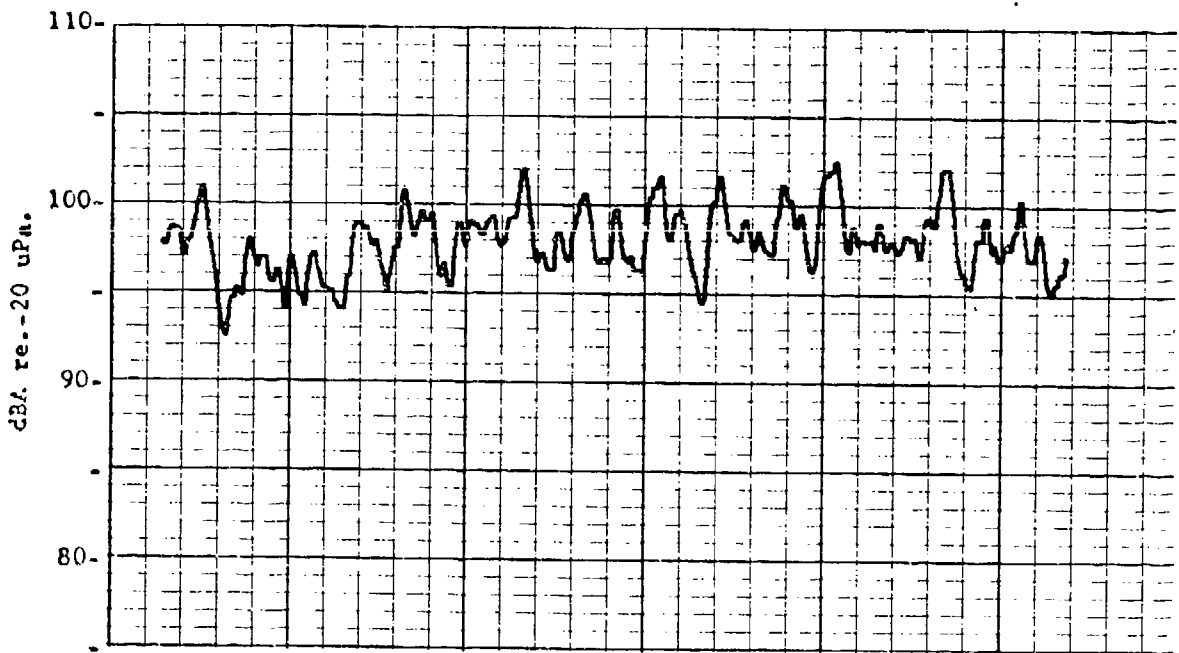
NOISE LEVEL TIME HISTORIES
SIKORSKY S-64 HELICOPTER
90° HOVER - 5 FT.

RUN 37

TABLE G-IX



150 METERS WEST OF CENTER LINE



75 METERS WEST OF CENTER LINE

NOISE LEVEL TIME HISTORIES
SIKORSKY S-64 HELICOPTER

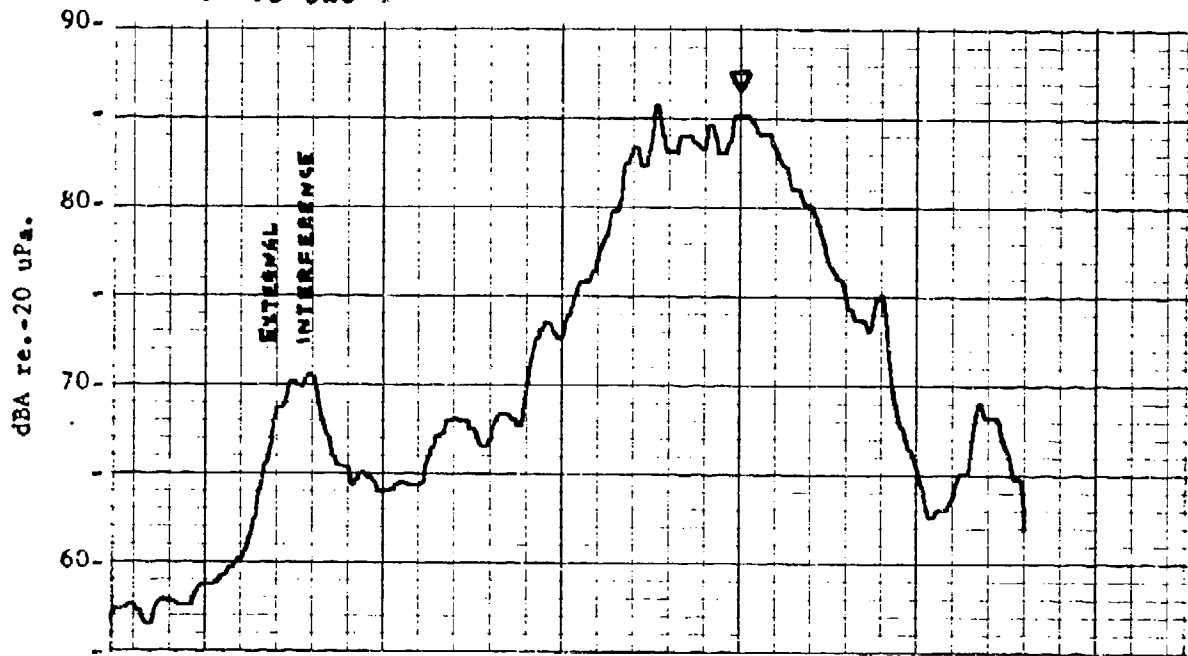
180° HOVER - 5 FT.

RUN 39

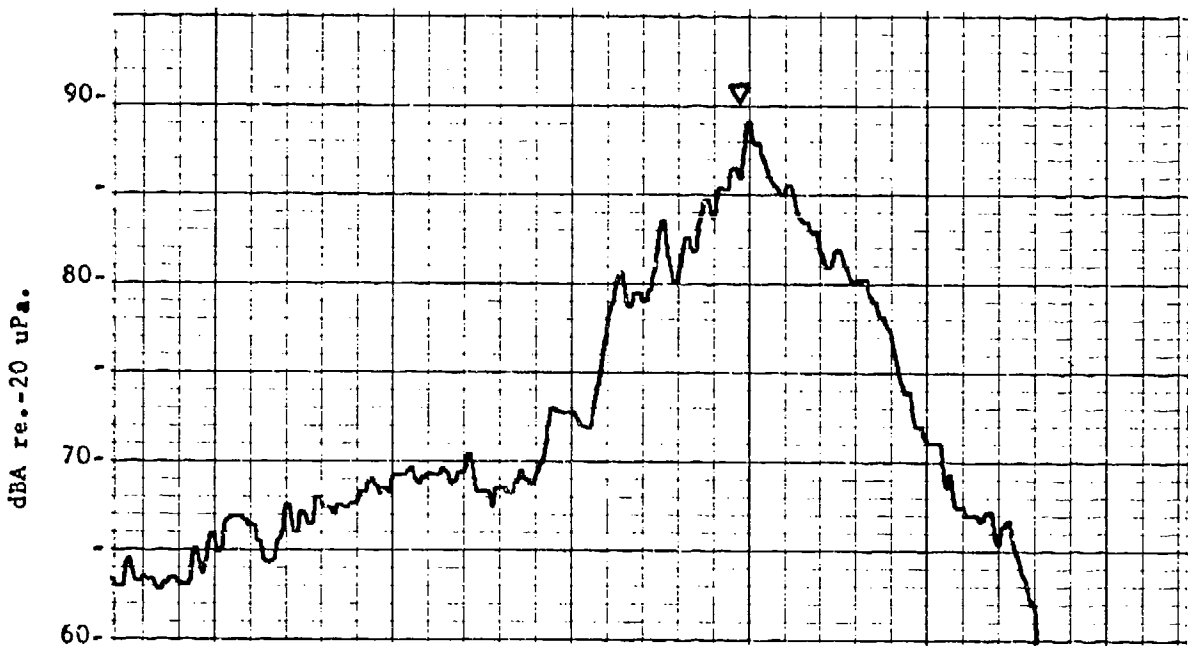
TABLE G-IX

▽ = CENTER CROSSING

← 10 SEC →



150 METERS WEST OF FLIGHT PATH



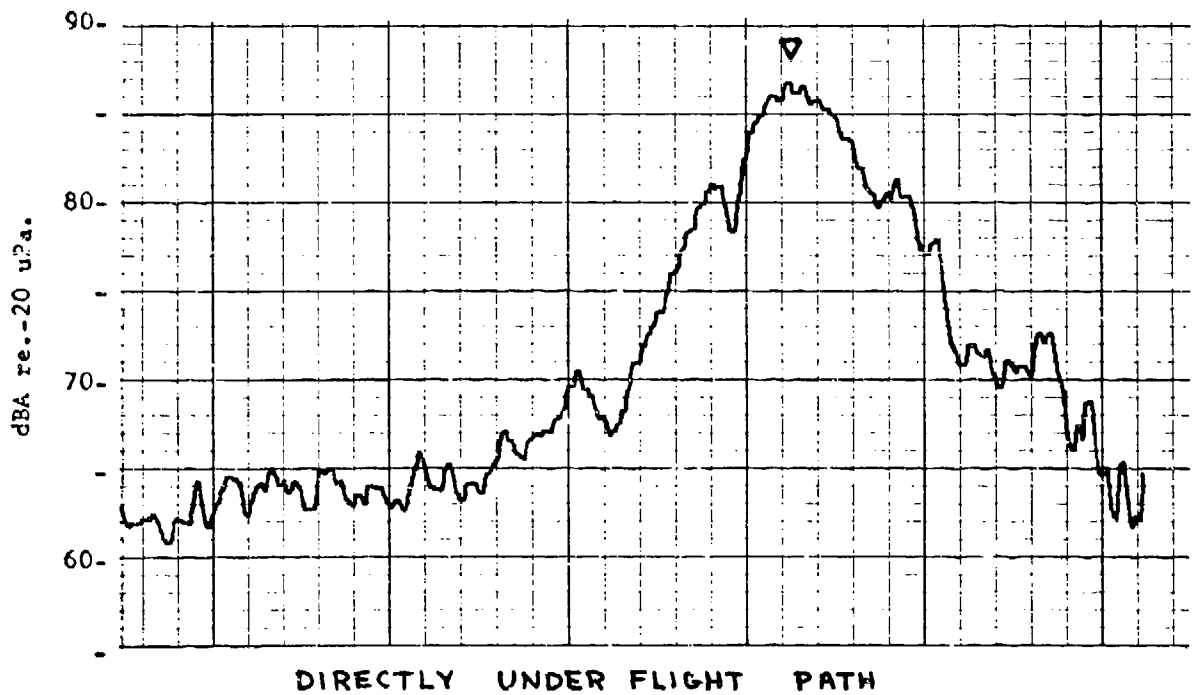
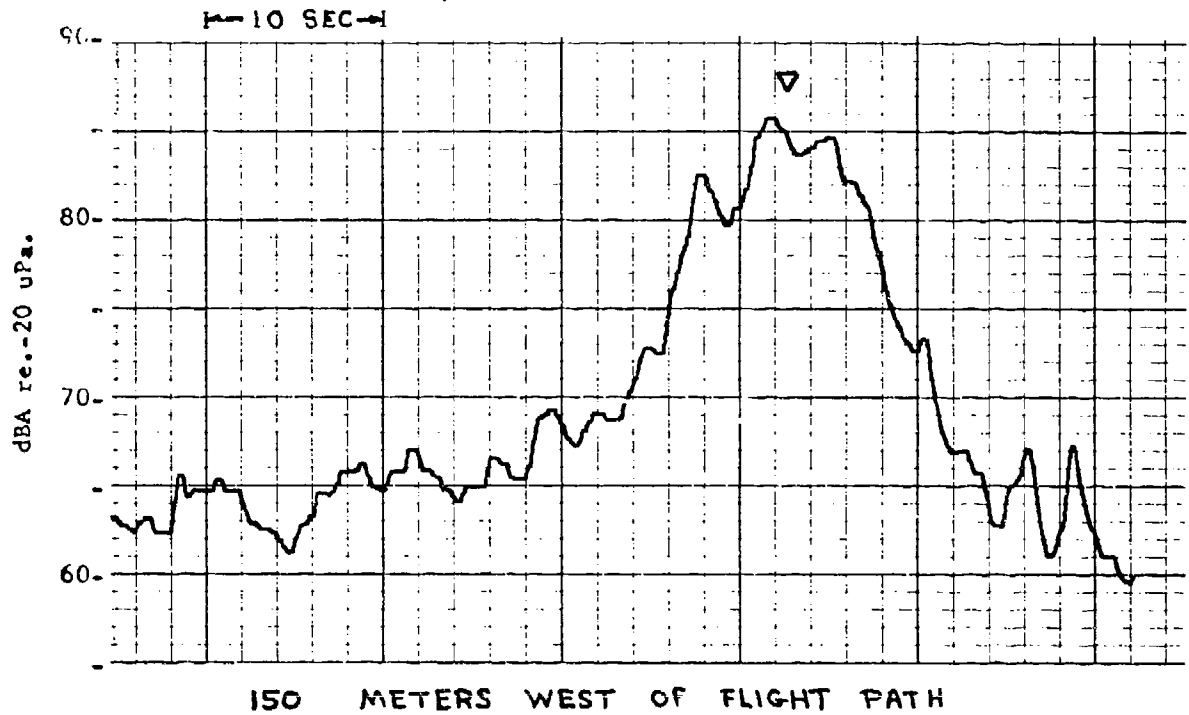
DIRECTLY UNDER FLIGHT PATH

NOISE LEVEL TIME HISTORIES
SIKORSKY S-64 HELICOPTER
3° APPROACH

RUN 70

TABLE G-IX

▽ = CENTER CROSSING

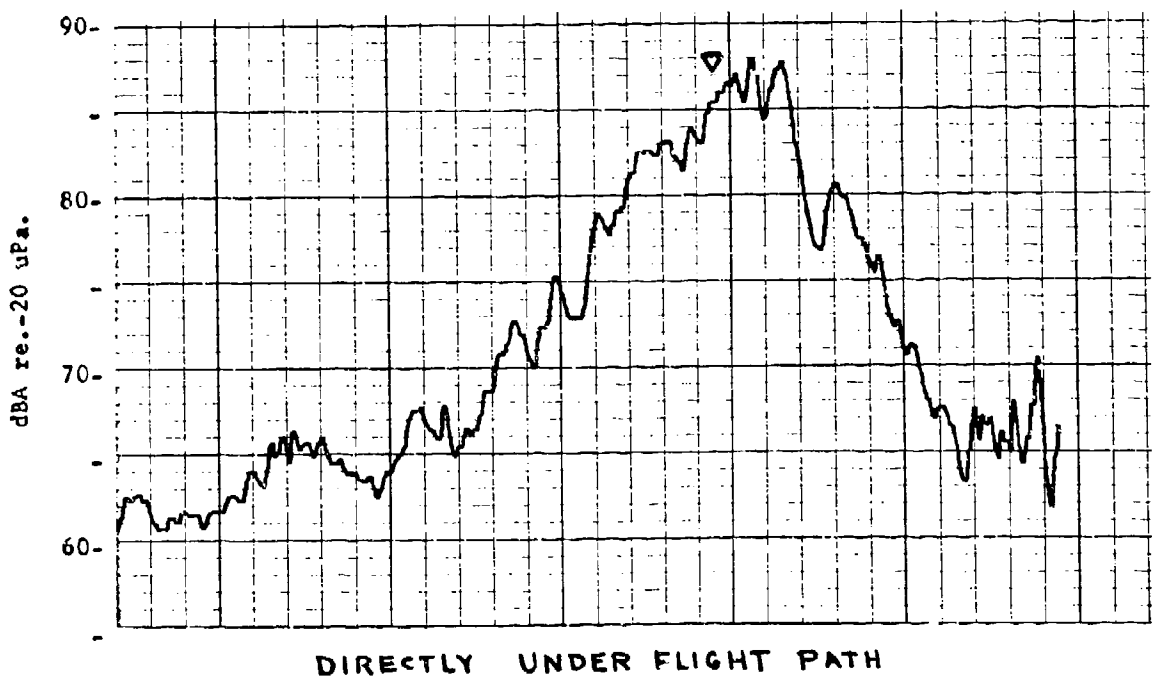
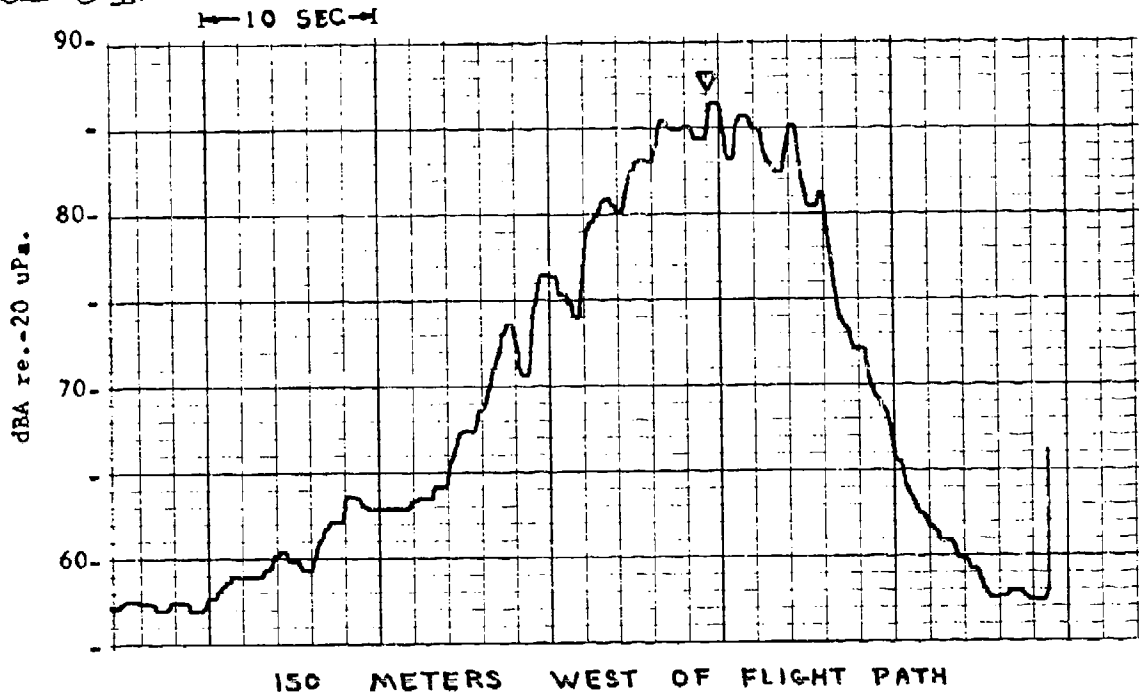


NOISE LEVEL TIME HISTORIES
SIKORSKY S-64 HELICOPTER
6° APPROACH

RUN 51

TABLE G-IX

▽ = CENTER CROSSING

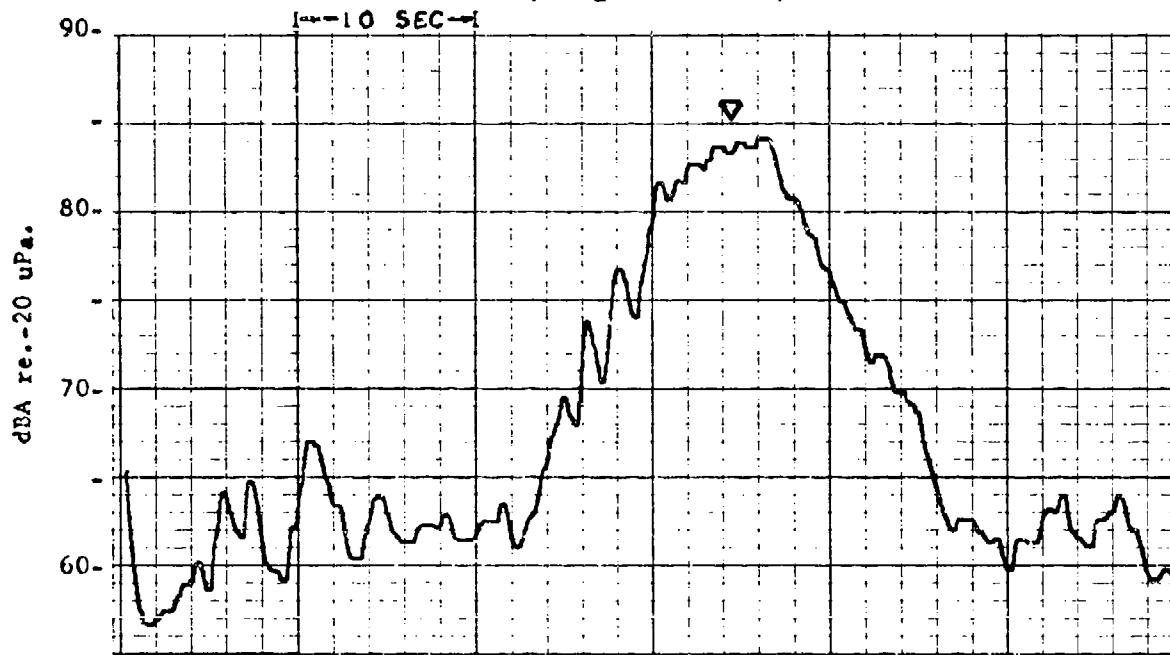


NOISE LEVEL TIME HISTORIES
SIKORSKY S-64 HELICOPTER
9° APPROACH

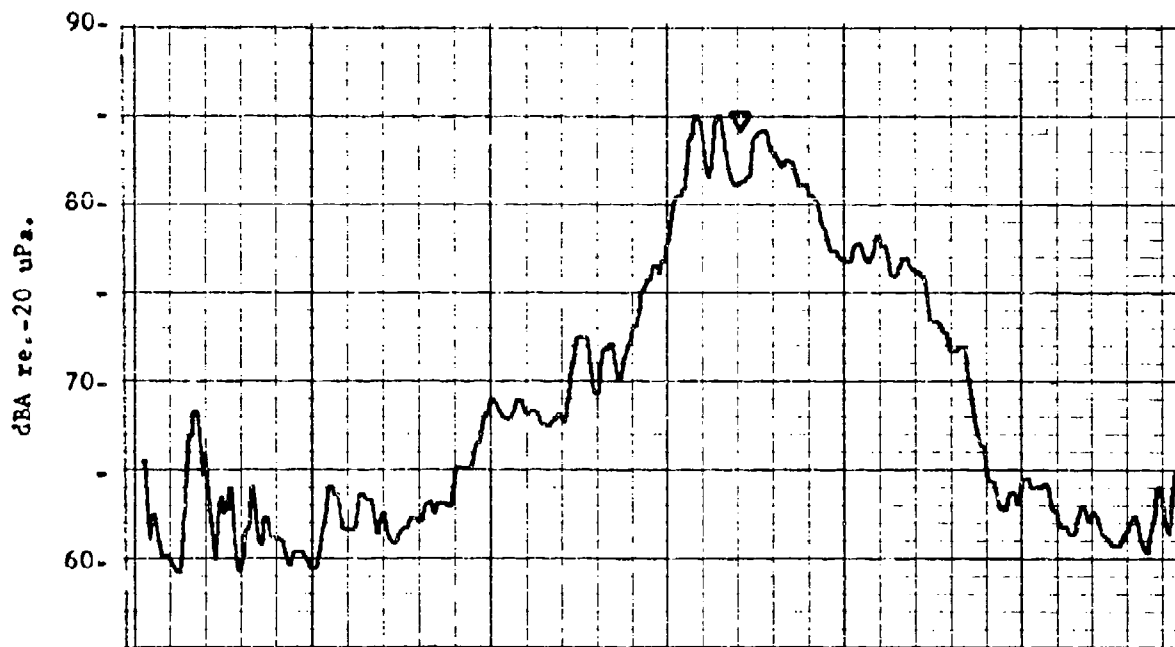
RUN 44

TABLE G-IX

▽ = CENTER CROSSING



150 METERS WEST OF FLIGHT PATH



DIRECTLY UNDER FLIGHT PATH

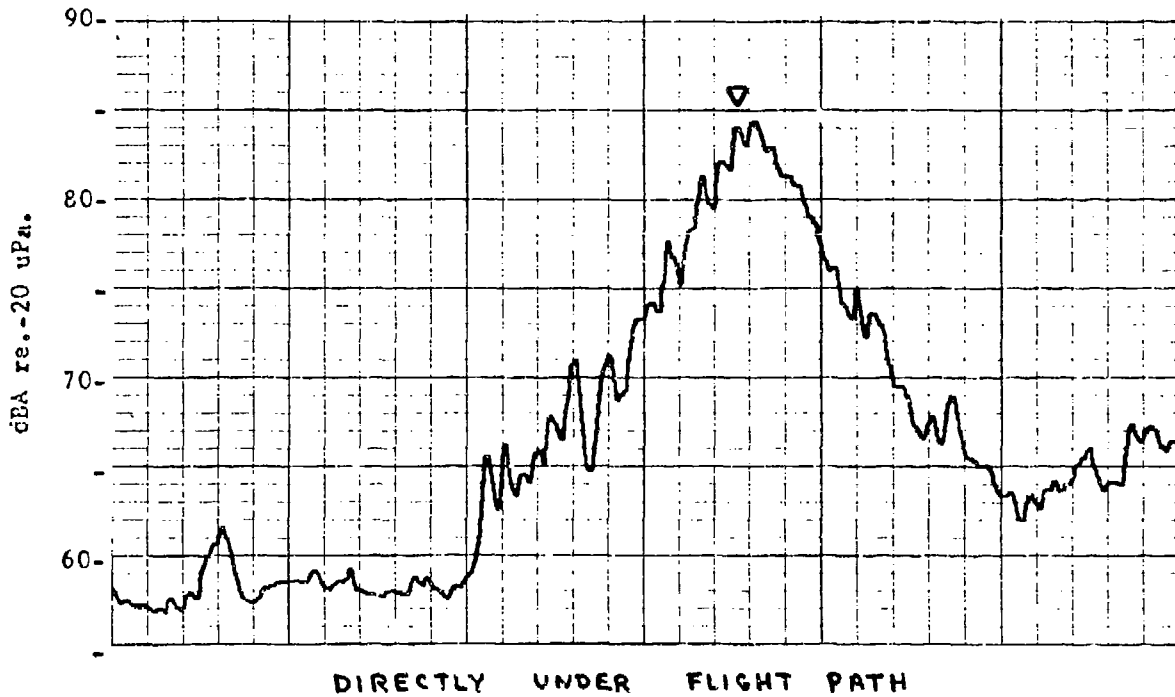
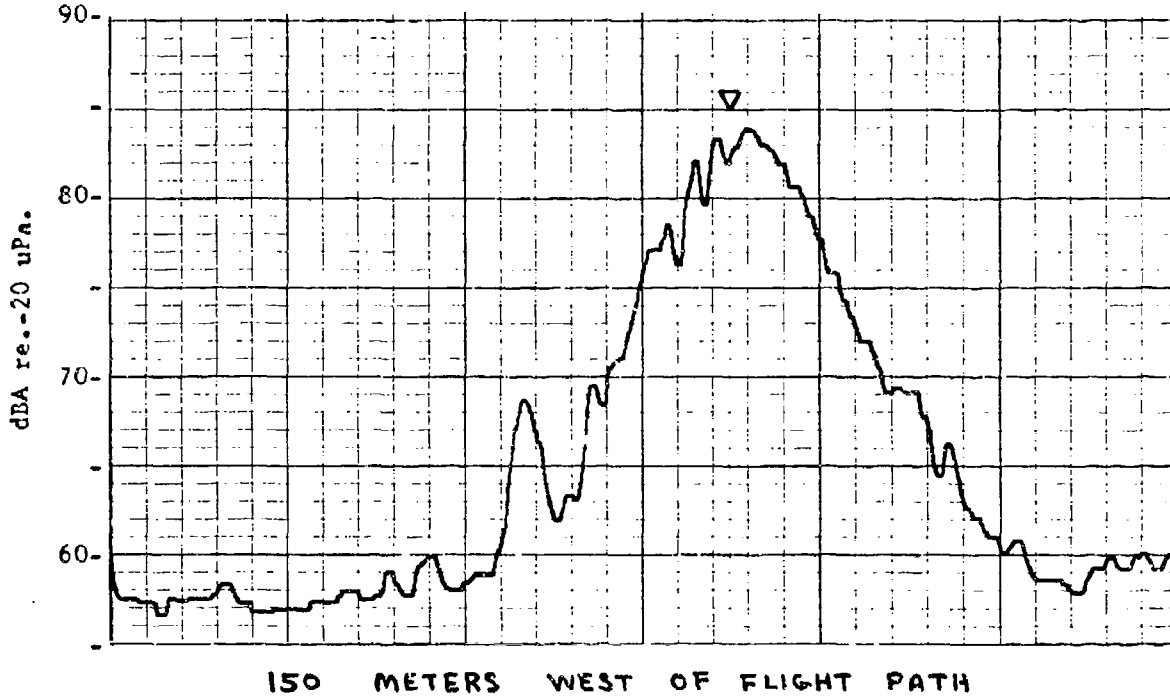
NOISE LEVEL TIME HISTORIES
SIXORSKY S-64 HELICOPTER
60 KTS LEVEL FLYOVER

RUN 50

TABLE G-IX

← 10 SEC →

▽ = CENTER CROSSING



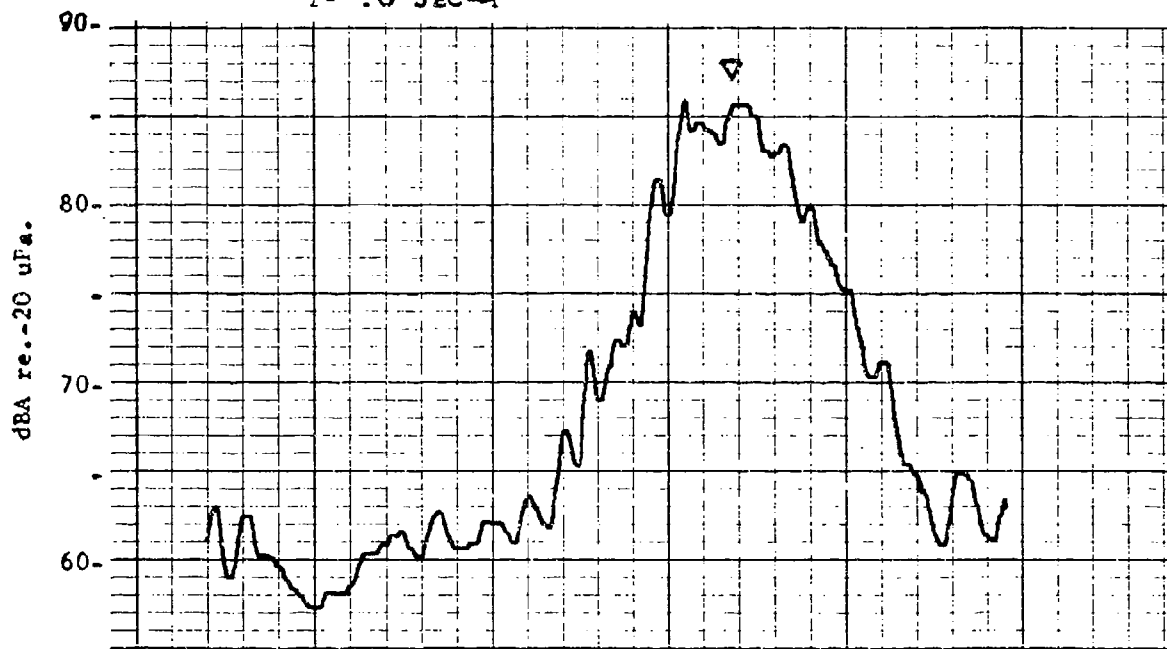
NOISE LEVEL TIME HISTORIES
SIKORSKY S-64 HELICOPTER
85 KTS LEVEL FLYOVER

RUN 55

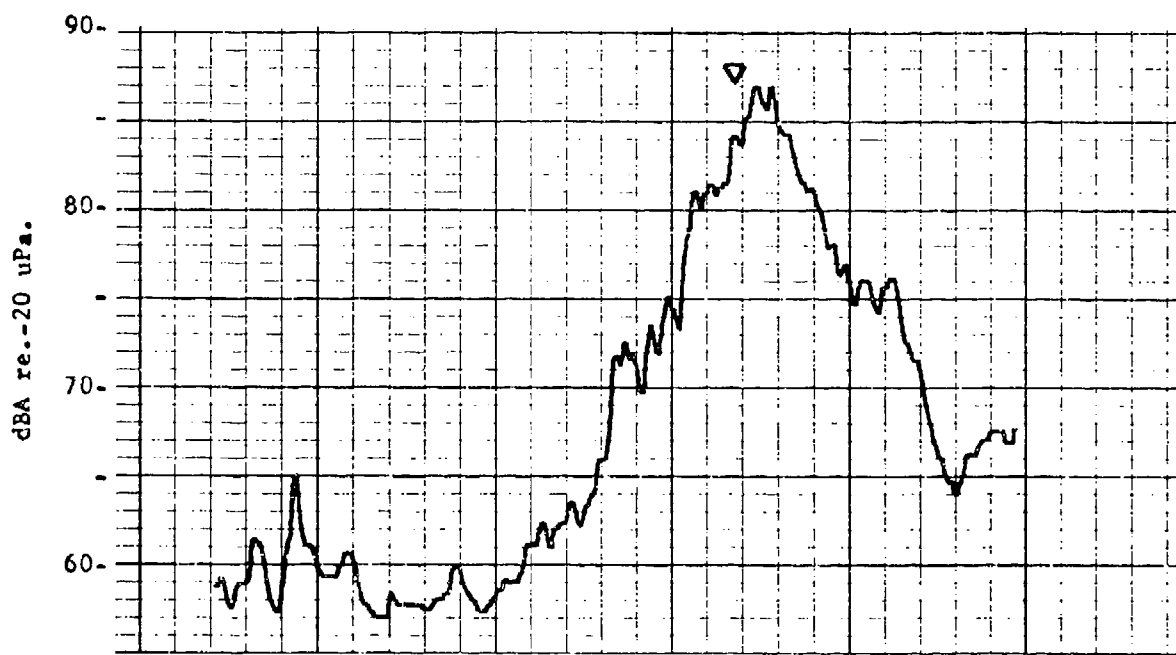
TABLE G-IX

▽ = CENTER CROSSING

← 10 SEC →



150 METERS WEST OF FLIGHT PATH



DIRECTLY UNDER FLIGHT PATH

NOISE LEVEL TIME HISTORIES
SIKORSKY S-64 HELICOPTER
LEVEL FLYOVER - 95 KTS

RUN 68

DATA TABLE H

Boeing Vertol "Chinook" (CH-47C)

TEST DATE: 10-13-76

TEST SITE: DULLES AIRPORT

| SECTION - H | CONTENT | PAGE # |
|-------------|---|--------|
| I | RUN LIST | 680 |
| II | GROUND AND FLIGHT LOG DATA | 683 |
| III | METEOROLOGICAL DATA | 686 |
| IV | LEVEL FLYOVER AND APPROACH NOISE DATA | 687 |
| V | TIME HISTORIES | 689 |
| VI | 1/3-OCTAVE BAND SPECTRA--FLYOVER AND APPROACH | 726 |
| VII | 1/3-OCTAVE BAND SPECTRA--5 FOOT HOVER | 763 |
| VIII | MAXIMUM dBA NOISE LEVEL (ALL RUNS) | 785 |
| IX | SELECTED dBA TIME HISTORIES--GRAPHIC PLOTS | 788 |

THE NOISE LEVELS PRESENTED IN SECTIONS IV, V AND VI
 HAVE BEEN TABULATED FOR THE SELECTED RUNS AND MICROPHONE
 LOCATIONS INDICATED ON THE FOLLOWING PAGE.

TABLE H-I

LIST OF RUNS SELECTED FOR ANALYSIS

| RUN# | TEST CONDITION | MICROPHONE LOCATION | | | | |
|------|----------------------|---------------------|------------------------------|-----------------|------------------------------|------------------------------|
| | | WEST | | EAST | | |
| | | 150 m SIDELINE | CENTER LINE | CENTER LINE | 150m SIDELINE | |
| 12 | 6° Approach | 50 Kts | X | | X | |
| 17 | Level Flyover | 60 Kts | | | X | |
| 18 | ↓ | ↓ | | | X | |
| 20 | 9° Approach | 60 Kts | | | X | |
| 22 | Level Flyover | 100 Kts | X | | X | X |
| 23 | ↓ | ↓ | X | | X | X |
| 24 | ↓ | 141 Kts | X | X | X | X |
| 25 | ↓ | ↓ | X | X | X | X |
| 26 | ↓ | ↓ | X | X | X | X |
| 27 | ↓ | ↓ | X | X | X | X |
| 28 | ↓ | 150 Kts | X | | X | X |
| 29 | ↓ | ↓ | X | | X | X |
| 30 | ↓ | 126 Kts | | | X | |
| 31 | ↓ | ↓ | | | X | |
| 35 | 3° Approach | 60 Kts | | | X | |
| | Microphone Locations | | Over Transpo Site Surface | Over Plywood | Over Transpo Site Surface | Over Transpo Site Surface |

GENERAL COMMENTS

- o The weather conditions during the test were excellent with very low winds and clear and sunny skies.
- o Because the "Chinook's" gross weight during testing was greatly effected by its rate of fuel consumption, a table has been inserted which provides a log of the gross weight as a function of time.
- o No EPNL levels were calculated for the centerline microphones of run 22 and 23 because the microphone gains were set such that the lower limit of the dynamic range of the data recording system was not low enough to include the 10 dB down points necessary to calculate the EPNL levels.
- o During the 5 foot hover portion of the test, the down-wash of the "Chinook" was so strong that it knocked over both the East and West 246 feet (75 meter) sideline microphones. As a result, no data was obtained at these locations.

UNAVAILABLE COPY

TABLE H-II Ground and Flight Log Data

Boeing Vertol
 Model: CH-47C "Chinook" Registration Number: Test Date: Oct. 13, 1976

| Time | Target Conditions | | Actual Conditions | | | | Ground Weather (10 ft.) | | | Comments | | |
|------------|-------------------|----------|-------------------|---------|-----------|---------------|-------------------------|-----|------|----------|----|------------|
| | Type | Velocity | Altitude | Heading | Air Speed | Rpm or Torque | Altitude | RAM | Temp | | RH | Wind Speed |
| 1 11:05 | Hover | 0 | 5 ft | 0° N | 0 | 56% | 5 ft | 245 | 12°C | | | |
| 2 11:06 | | | | 0° N | | | | | ↓ | | | |
| 3 11:07 | | | | 45° E | | | | | 13 | | | |
| 4 11:08 | | | | 90° E | | | | | | | | |
| 5 11:09 | | | | 135° | | | | | | | | |
| 6 11:10 | | | | 180° S | | | | | | | | |
| 7 11:12 | | | | 225° | | | | | | | | |
| 8 11:13 | | | | 270° W | | | | | | | | |
| 9 11:15 | | | | 315° | | | | | | | | |
| 10 11:16 | | | | 0° N | | | | | | | | |
| 11 11:40 | 6° App. | 60 kts | 400 ft | S | 60 kts | 267% | 400 ft | 245 | 15°C | | | |
| 12 11:44 | | | | | | 26 | | | ↓ | | | |
| 13 11:50 | | | | | | 28 | | | | | | |
| 14 11:54 | | | | | | 28 | | | | | | |
| 15 11:59 | Hover | 0 | 500 ft | 180° S | 0 | 64% | 500 ft | 245 | 12°C | | | |
| 16 11:59.5 | | | | 70° E | 0 | 60 | | | ↓ | | | |
| 17 12:01 | Level Flyover | 60 kts | 500 ft | S | 60 kts | 42% | 500 ft | 245 | 19°C | | | |
| 18 12:05 | | | | | | 40 | | | ↓ | | | |
| 19 12:10 | 9° App. | 60 kts | 400 ft | S | 60 kts | 24% | 400 ft | 245 | 14°C | | | |
| 20 12:14 | | | | | | 24% | | | ↓ | | | |
| 21 12:17 | | | | | | 24% | | | 16°C | | | |
| 22 12:24 | Level Flyover | 100 kts | 500 ft | S | 100 kts | 49% | 500 ft | 245 | 15°C | | | |
| 23 12:26 | | | | | | 49% | | | ↓ | | | |

good run possible interference of very fine oil fog.

Abort

Test (Flms 1-10) begins the downwash of the big Chinook. In addition, the downwash also created over the 250 ft microphones for

made it impossible to take readings for

of the big Chinook

of the hover position.

of the North

Sound Level Meter Readings at the Standard location - 100 ft

at the Standard location - 100 ft runs @ 10.

TABLE H-II Ground and Flight Log Data

| Run | Time | Target Conditions | | Registration | | Actual Conditions | | Ground Weather (10 ft) | | Comments | | | | | |
|-----|-------|----------------------------|----------|--------------|------|-------------------|-----------|------------------------|----------|----------|-----|------|------|----|------------|
| | | Type | Velocity | Altitude | dB A | Heading | Air Speed | Rate of Turn | Altitude | | RPM | DAT | Temp | FH | Wind Speed |
| 24 | 15:30 | Level | 141 kts | 500 ft | 90.0 | S | 141 kts | 0 | 58% | 500 ft | 245 | 15°C | | | |
| 25 | 15:34 | | | | 96.5 | | | | 64 | | | 16°C | | | |
| | | Stopped for Concord Flight | | | | | | | | | | | | | |
| 26 | 1:28 | | | | 89.0 | | | | 66 | | | 19°C | | | |
| 27 | 1:31 | | | | 87.5 | | | | 66 | | | ↓ | | | |
| 28 | 1:35 | | | | 89.0 | | | | 72 | | | 20°C | | | |
| 29 | 1:29 | | | | 89.3 | | | | 73 | | | ↓ | | | |
| 30 | 1:42 | | | | 80.0 | | | | 54 | | | 20°C | | | |
| 31 | 1:46 | | | | 78.0 | | | | 54 | | | ↓ | | | |
| 32 | 1:51 | 3° App | | 400 ft | 85.6 | | 60 kts | 250 ft/min | 36% | 400 ft | 245 | 20°C | | | |
| 33 | 1:53 | | | | 86.5 | | | 300 | 34% | | | ↓ | | | |
| 34 | 1:56 | | | | 87.0 | | | | | | | | | | |
| 35 | 2:00 | | | | | | | | | | | | | | |

Abort

LUCKY

Helicopter Model: CH-47 C "Chinook"
 Boeing Vertol
 Registration Number: 1576
 Test Date: Oct. 13, 1976

BOEING VERTOL "CHINOOK" CH-47C

LOG OF GROSS WEIGHT vs. TIME

| <u>Time</u> | <u>Run #</u> | <u>Fuel (lbs.)</u> | <u>Total Gross Weight</u> |
|--------------------|--------------|--------------------|---------------------------|
| 11:00 | 1 | .6900 | 41,000 |
| 11:15 | 9 | 6100 | 40,200 |
| 11:38 | 11 | 5300 | 39,400 |
| 11:50 | 13 | 4800 | 38,900 |
| 12:05 | 18 | 4300 | 38,400 |
| 12:21 | 22 | 3700 | 37,800 |
| 12:32 | 25 | 3300 | 37,400 |
| ----- REFUEL ----- | | | |
| 1:25 | 26 | 6900 | 41,000 |
| 1:36 | 28 | 6300 | 40,400 |
| 1:42 | 30 | 6000 | 40,100 |
| 1:56 | 34 | 5500 | 39,600 |

TABLE H-III
 METEOROLOGICAL DATA
 DULLES INTERNATIONAL AIRPORT
 OCTOBER 13, 1976

| TIME (Hours) | TEMP. (°F) | BAR. PRESS. (mmHg) | REL. HOM. (%) | WIND SPEED (mph) | WIND DIRECTION (Degrees) | REMARKS |
|-----------------|---------------|--------------------------|---------------------|------------------------|--------------------------------|-----------|
| 1100 | 57 | | 64 | 3-4 | 190 | Sky-Clear |
| 1115 | 58 | | 61 | 9-11 | 170 | |
| 1130 | 60 | | 60 | 3-7 | 170 | |
| 1145 | 61 | | 56 | 4-6 | 190 | |
| 1200 | 62 | | 55 | 4-5 | 180 | |
| 1215 | 64 | 754 | 50 | 4-5 | 180 | |
| 1230 | 64 | | 50 | 3-6 | 170 | |
| 1245 | 66 | | 48 | 5-6 | 200 | |
| 1300 | 68 | | 44 | 5-6 | 180 | |
| 1315 | 68 | | 42 | 4-6 | 190 | |
| 1330 | 70 | | 40 | 5-7 | 190 | |
| 1345 | 74 | | 37 | 5-7 | 190 | |
| 1400 | 78 | 748 | 35 | 4-7 | 180 | |
| 1415 | 79 | | 34 | 4-5 | 180 | |
| 1430 | 79 | | 34 | 7-8 | 210 | |
| 1445 | 79 | | 33 | 9-10 | 200 | |
| 1500 | 80 | | 33 | 11-14 | 200 | |
| 1515 | 80 | | 32 | 7-12 | 210 | |
| 1530 | 80 | | 32 | 9-16 | 190 | |

L
 10/13/76

TABLE H-IV

HELICOPTER APPROACH AND FLYOVER NOISE DATA

JERROL CH-47 C

OCTOBER 13, 1976

MICROPHONE OFFSET 150 METERS WEST
 (LEVELS-DB RE 20 MICRO PA)

| EVENT | EPNL | DBA(M) | DBD(M) | OASPL | PNL(M) | PNLT(M) | LEL | DJR(A) | DJR(P) | IC |
|-------|-------|--------|--------|-------|--------|---------|------|--------|--------|-----|
| 12 | 103.8 | 91.1 | 96.8 | 99.4 | 104.0 | 105.8 | 85.0 | 29.5 | 29.5 | 1.8 |
| 22 | 97.8 | 83.7 | 89.3 | 96.1 | 97.5 | 98.0 | 79.7 | 19.5 | 24.5 | 1.3 |
| 23 | 97.3 | 80.9 | 87.8 | 95.6 | 95.5 | 96.3 | 77.6 | 25.0 | 27.0 | 1.1 |
| 24 | 104.8 | 89.7 | 97.6 | 104.7 | 105.0 | 105.4 | 86.5 | 17.5 | 18.0 | 1.7 |
| 25 | 105.8 | 93.7 | 100.6 | 106.3 | 107.8 | 108.4 | 89.4 | 12.5 | 13.0 | 1.3 |
| 26 | 106.1 | 91.2 | 98.2 | 104.8 | 106.4 | 107.3 | 87.4 | 17.0 | 16.0 | 1.2 |
| 27 | 106.5 | 94.2 | 99.5 | 106.5 | 107.7 | 108.5 | 89.5 | 15.0 | 16.5 | 1.1 |
| 28 | 106.5 | 95.5 | 103.4 | 109.7 | 111.0 | 111.0 | 91.5 | 8.5 | 9.0 | .0 |
| 29 | 107.0 | 96.1 | 103.2 | 109.7 | 110.9 | 110.9 | 92.4 | 8.5 | 9.5 | .0 |

MICROPHONE OFFSET 150 METERS EAST
 (LEVELS-DB RE 20 MICRO PA)

| EVENT | EPNL | DBA(M) | DBD(M) | OASPL | PNL(M) | PNLT(M) | LEL | DJR(A) | DJR(P) | IC |
|-------|-------|--------|--------|-------|--------|---------|------|--------|--------|-----|
| 12 | 103.1 | 86.4 | 91.8 | 98.5 | 99.6 | 101.1 | 81.1 | 54.0 | 62.0 | 1.5 |
| 22 | 100.6 | 86.0 | 90.7 | 97.3 | 98.6 | 100.4 | 81.0 | 25.5 | 28.5 | 1.8 |
| 23 | 97.0 | 79.6 | 88.7 | 90.7 | 95.7 | 95.7 | 76.7 | 26.0 | 26.5 | .0 |
| 24 | 103.9 | 89.9 | 97.5 | 103.9 | 104.3 | 104.3 | 85.5 | 21.0 | 19.5 | .0 |
| 25 | 104.0 | 91.4 | 99.4 | 105.4 | 105.5 | 105.8 | 86.7 | 16.0 | 13.0 | 1.7 |
| 26 | 106.0 | 93.1 | 100.0 | 106.7 | 108.1 | 108.1 | 89.0 | 11.5 | 12.0 | .0 |
| 27 | 107.3 | 95.6 | 102.0 | 107.9 | 110.6 | 110.6 | 91.4 | 10.0 | 10.5 | .0 |
| 28 | 109.0 | 99.5 | 105.8 | 110.3 | 113.3 | 114.5 | 95.7 | 6.0 | 7.0 | 1.2 |
| 29 | 109.1 | 98.7 | 105.4 | 109.9 | 112.6 | 112.6 | 95.7 | 7.0 | 8.0 | .0 |

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TABLE H-IX

HELICOPTER APPROACH AND FLYOVER NOISE DATA

VERTOL CH-47 C

OCTOBER 13, 1976

CENTERLINE MICROPHONE (SOFT SITE)
(LEVELS-DB RE 20 MICRØ PA)

| EVENT | EPNL | DBA(M) | DBD(M) | OASPL | PNL(M) | PNL1(M) | LEQ | DUR(A) | DUR(P) | TC |
|-------|-------|--------|--------|-------|--------|---------|------|--------|--------|-----|
| 12 | 107.6 | 95.8 | 102.3 | 105.7 | 108.6 | 108.2 | 91.8 | 15.5 | 21.0 | .0 |
| 17 | 105.6 | 90.0 | 96.0 | 100.8 | 104.1 | 104.1 | 85.0 | 36.5 | 38.5 | .0 |
| 18 | 106.9 | 91.5 | 97.0 | 100.8 | 105.0 | 105.0 | 86.2 | 42.0 | 44.5 | .0 |
| 20 | 107.5 | 95.1 | 101.8 | 105.3 | 108.2 | 108.2 | 90.7 | 18.0 | 23.0 | .0 |
| 22 | ----- | 88.6 | 93.1 | 97.8 | 101.5 | 101.5 | 83.2 | 22.0 | ----- | .0 |
| 23 | ----- | 84.2 | 91.2 | 98.1 | 99.7 | 99.7 | 79.6 | 26.5 | ----- | .0 |
| 24 | 106.5 | 91.1 | 99.1 | 105.6 | 106.1 | 106.1 | 87.3 | 20.0 | 20.5 | .0 |
| 25 | 106.8 | 92.7 | 100.7 | 106.5 | 108.1 | 108.1 | 88.0 | 17.5 | 18.0 | .0 |
| 26 | 106.4 | 92.9 | 100.9 | 106.1 | 107.4 | 107.4 | 88.1 | 17.0 | 17.0 | .0 |
| 27 | 108.9 | 96.0 | 103.3 | 108.6 | 110.0 | 111.1 | 91.7 | 14.0 | 14.0 | 1.4 |
| 28 | 109.0 | 97.6 | 104.9 | 109.8 | 111.4 | 111.4 | 92.7 | 13.0 | 13.5 | .0 |
| 29 | 111.3 | 99.3 | 106.6 | 111.1 | 113.5 | 113.5 | 95.4 | 13.0 | 13.5 | .0 |
| 30 | 103.5 | 88.8 | 98.0 | 104.9 | 105.1 | 105.1 | 84.4 | 16.5 | 16.5 | .0 |
| 31 | 104.2 | 87.9 | 96.3 | 103.3 | 103.9 | 103.9 | 85.4 | 17.0 | 18.5 | .0 |
| 35 | 108.1 | 94.4 | 100.8 | 104.6 | 107.6 | 107.6 | 90.6 | 19.0 | 46.0 | .0 |

CENTERLINE MICROPHONE (HARD SITE)
(LEVELS-DB RE 20 MICRØ PA)

| EVENT | EPNL | DBA(M) | DBD(M) | OASPL | PNL(M) | PNL1(M) | LEQ | DUR(A) | DUR(P) | TC |
|-------|-------|--------|--------|-------|--------|---------|------|--------|--------|-----|
| 24 | 106.8 | 90.7 | 98.9 | 106.3 | 106.0 | 106.0 | 87.6 | 20.5 | 20.5 | .0 |
| 25 | 107.5 | 94.4 | 103.1 | 108.3 | 109.2 | 109.2 | 89.0 | 17.5 | 18.0 | .0 |
| 26 | 106.6 | 92.6 | 100.8 | 106.3 | 107.5 | 108.1 | 88.2 | 17.5 | 17.5 | 1.1 |
| 27 | 108.7 | 95.2 | 103.1 | 109.4 | 110.6 | 110.6 | 91.8 | 14.0 | 14.0 | .0 |

----- INSUFFICIENT DATA - 10 DB DOWN POINTS NOT DISCERNIBLE ABOVE AMBIENT LEVELS

TABLE H-V

NOISE LEVEL TIME HISTORY DATA

VERTOL CH-47 C

OCTOBER 13, 1976

EVENT 12, 6 DEGREE APPROACH, MIC. 150 METERS WEST

1/2 SECOND INTEGRATION VS NOISE INDEXES
(DB RE 20 MICRO PA)

| INT | DBA | DBD | JASPL | PNL | PNLT | PNL-DBA | DBD-DBA |
|--------------|------|------|-------|-------|-------|---------|---------|
| 1 | 75.2 | 83.0 | 92.3 | 91.6 | 92.8 | 16.4 | 7.8 |
| 3 | 77.1 | 84.3 | 92.1 | 92.8 | 92.8 | 15.7 | 7.2 |
| 5 | 80.8 | 85.7 | 92.3 | 94.1 | 95.1 | 13.3 | 4.9 |
| 7 | 80.9 | 86.2 | 92.5 | 94.7 | 95.8 | 13.8 | 5.3 |
| 9 | 77.7 | 84.7 | 92.4 | 93.1 | 94.3 | 15.4 | 7.0 |
| 11 | 75.8 | 83.9 | 91.9 | 92.1 | 92.1 | 16.3 | 8.1 |
| 13 | 75.7 | 82.7 | 92.2 | 91.0 | 91.0 | 15.3 | 7.0 |
| 15 | 79.3 | 84.3 | 92.8 | 92.8 | 92.8 | 13.5 | 5.0 |
| 17 | 83.0 | 88.2 | 94.4 | 96.2 | 96.2 | 13.2 | 5.2 |
| 19 | 81.9 | 88.2 | 94.6 | 96.3 | 97.6 | 14.4 | 6.3 |
| 21 | 82.4 | 87.4 | 94.1 | 95.7 | 97.0 | 13.3 | 5.0 |
| 23 | 81.6 | 86.7 | 94.2 | 94.8 | 96.0 | 13.2 | 5.1 |
| 25 | 82.4 | 87.0 | 94.7 | 95.9 | 97.5 | 13.5 | 4.6 |
| 27 | 84.6 | 88.6 | 94.2 | 97.0 | 98.3 | 12.4 | 4.0 |
| 29 | 85.9 | 90.7 | 94.7 | 98.4 | 98.4 | 12.5 | 4.8 |
| 31 | 86.4 | 91.3 | 95.2 | 98.4 | 100.3 | 12.0 | 4.9 |
| 33 | 86.0 | 91.2 | 95.8 | 98.5 | 100.9 | 12.5 | 5.2 |
| 35 | 87.2 | 92.1 | 95.4 | 99.6 | 99.6 | 12.4 | 4.9 |
| 37 | 87.0 | 91.5 | 95.3 | 99.1 | 99.1 | 12.1 | 4.5 |
| 39 | 88.4 | 93.2 | 96.6 | 100.6 | 100.6 | 12.2 | 4.8 |
| 41 | 90.7 | 96.0 | 99.0 | 103.7 | 105.7 | 13.0 | 5.3 |
| 42 | 91.1 | 96.8 | 99.4 | 104.0 | 105.8 | 12.9 | 5.7 |
| 44 | 88.1 | 94.6 | 98.3 | 101.4 | 101.4 | 13.3 | 6.5 |
| 46 | 86.0 | 92.7 | 98.1 | 100.2 | 100.2 | 14.2 | 6.7 |
| 48 | 84.6 | 91.4 | 97.7 | 99.1 | 99.1 | 14.5 | 6.8 |
| 50 | 84.0 | 90.8 | 97.2 | 98.7 | 98.7 | 14.7 | 6.8 |
| O.H. 52 → 51 | 84.8 | 91.1 | 96.7 | 99.1 | 99.1 | 14.3 | 6.3 |
| 54 | 84.5 | 90.2 | 95.7 | 98.1 | 98.1 | 13.6 | 5.7 |
| 56 | 85.2 | 91.3 | 95.6 | 99.1 | 99.1 | 13.9 | 6.1 |
| 58 | 85.4 | 91.2 | 94.9 | 99.1 | 99.1 | 13.7 | 5.8 |
| 60 | 82.9 | 88.4 | 93.1 | 96.5 | 97.5 | 13.6 | 5.5 |
| 62 | 81.4 | 86.8 | 91.4 | 94.8 | 94.8 | 13.4 | 5.4 |
| 64 | 81.2 | 86.3 | 91.3 | 94.7 | 95.9 | 13.5 | 5.1 |
| 66 | 79.7 | 85.2 | 90.8 | 93.3 | 94.4 | 13.6 | 5.5 |
| 68 | 76.7 | 82.2 | 88.1 | 90.3 | 91.7 | 13.6 | 5.5 |
| 70 | 73.8 | 79.7 | 86.7 | 88.2 | 89.4 | 14.4 | 5.9 |
| 72 | 71.5 | 78.0 | 85.8 | 86.3 | 86.3 | 14.8 | 6.5 |

TABLE H-IV

NOISE LEVEL TIME HISTORY DATA

VERTOL CH-47 C

OCTOBER 13, 1976

EVENT 22, 100 KT. FLY BY, MIC. 150 METERS WEST

1/2 SECOND INTEGRATION VS NOISE INDEXES
(DB RE 20 MICRO PA)

| INT | DBA | DBD | OASPL | PNL | PNLT | PNL-DBA | DBD-DBA |
|-----------|------|------|-------|------|------|---------|---------|
| 1 | 64.8 | 77.5 | 88.0 | 85.0 | 85.0 | 20.2 | 12.7 |
| 3 | 66.0 | 78.6 | 89.0 | 86.1 | 86.1 | 20.1 | 12.6 |
| 5 | 67.6 | 79.5 | 89.7 | 86.9 | 86.9 | 19.3 | 11.9 |
| 7 | 70.4 | 80.7 | 90.8 | 88.4 | 88.4 | 18.0 | 10.3 |
| 9 | 71.4 | 81.6 | 91.6 | 89.4 | 89.4 | 18.0 | 10.2 |
| 11 | 71.7 | 82.1 | 92.1 | 89.5 | 91.2 | 17.8 | 10.4 |
| 13 | 71.2 | 81.7 | 92.0 | 89.1 | 89.1 | 17.9 | 10.5 |
| 15 | 71.0 | 81.4 | 91.8 | 89.0 | 89.0 | 18.0 | 10.4 |
| 17 | 71.6 | 82.1 | 92.5 | 89.8 | 89.8 | 18.2 | 10.5 |
| 19 | 75.6 | 84.4 | 93.7 | 91.9 | 91.9 | 16.3 | 8.8 |
| 21 | 77.5 | 85.5 | 94.5 | 93.2 | 93.2 | 15.7 | 8.0 |
| 23 | 77.6 | 85.4 | 94.5 | 93.3 | 94.3 | 15.7 | 7.8 |
| 25 | 78.4 | 85.4 | 94.3 | 93.4 | 93.4 | 15.0 | 7.0 |
| 27 | 79.5 | 86.3 | 94.2 | 94.1 | 95.4 | 14.6 | 6.8 |
| 29 | 77.6 | 85.2 | 94.0 | 93.2 | 94.3 | 15.6 | 7.6 |
| 31 | 79.2 | 87.0 | 94.9 | 94.4 | 94.4 | 15.2 | 7.8 |
| 33 | 82.3 | 88.7 | 94.8 | 96.8 | 98.0 | 14.5 | 6.4 |
| 35 | 83.7 | 89.3 | 93.9 | 97.4 | 97.4 | 13.7 | 5.6 |
| 37 | 82.2 | 88.1 | 94.1 | 95.8 | 95.8 | 13.6 | 5.9 |
| 39 | 80.8 | 88.3 | 95.2 | 95.8 | 95.8 | 15.0 | 7.5 |
| O.H. → 41 | 81.2 | 88.9 | 96.1 | 96.4 | 97.6 | 15.2 | 7.7 |
| 43 | 79.2 | 86.7 | 95.2 | 94.1 | 95.3 | 14.9 | 7.5 |
| 45 | 78.3 | 84.8 | 93.3 | 92.5 | 93.6 | 14.2 | 6.5 |
| 47 | 80.0 | 85.4 | 91.7 | 93.0 | 93.0 | 13.0 | 5.4 |
| 49 | 80.1 | 85.4 | 91.2 | 92.6 | 92.6 | 12.5 | 5.3 |
| 51 | 78.5 | 83.9 | 90.0 | 91.1 | 91.1 | 12.6 | 5.4 |
| 53 | 76.9 | 82.2 | 88.8 | 89.5 | 89.5 | 12.6 | 5.3 |
| 55 | 75.1 | 80.4 | 87.2 | 87.8 | 89.0 | 12.7 | 5.3 |
| 57 | 73.2 | 78.4 | 85.6 | 86.3 | 86.3 | 13.1 | 5.2 |
| 59 | 72.6 | 78.0 | 84.5 | 86.0 | 87.8 | 13.4 | 5.4 |
| 61 | 71.3 | 77.1 | 84.0 | 84.9 | 84.9 | 13.6 | 5.8 |

TABLE H-VI

NOISE LEVEL TIME HISTORY DATA

VERTOL CH-47 C

OCTOBER 13, 1976

EVENT 23, 100 KI. FLY BY, MIC. 150 METERS WEST

1/2 SECOND INTEGRATION VS NOISE INDEXES
(DB RE 20 MICRO PA)

| INT | DBA | DBD | OASPL | PNL | PNLT | PNL-DBA | DBD-DBA |
|---------|------|------|-------|------|------|---------|---------|
| 1 | 61.4 | 75.0 | 85.6 | 82.5 | 82.5 | 21.1 | 13.6 |
| 3 | 63.1 | 76.2 | 86.7 | 83.3 | 83.3 | 20.2 | 13.1 |
| 5 | 65.1 | 77.6 | 88.2 | 84.7 | 84.7 | 19.6 | 12.5 |
| 7 | 67.0 | 79.3 | 89.6 | 86.3 | 86.3 | 19.3 | 12.3 |
| 9 | 68.2 | 80.6 | 91.2 | 87.6 | 87.6 | 19.4 | 12.4 |
| 11 | 70.4 | 82.3 | 92.7 | 89.3 | 89.3 | 18.9 | 11.9 |
| 13 | 72.7 | 83.9 | 94.2 | 91.0 | 91.0 | 18.3 | 11.2 |
| 15 | 74.1 | 85.3 | 95.5 | 92.1 | 92.1 | 18.0 | 11.2 |
| 17 | 73.9 | 84.8 | 95.3 | 92.0 | 92.0 | 18.1 | 10.9 |
| 19 | 73.3 | 83.2 | 93.8 | 90.7 | 90.7 | 17.4 | 9.9 |
| 21 | 74.2 | 83.6 | 93.5 | 91.3 | 91.3 | 17.1 | 9.4 |
| 23 | 73.7 | 83.7 | 93.6 | 91.1 | 91.1 | 17.4 | 10.0 |
| 25 | 72.6 | 83.3 | 93.9 | 90.9 | 90.9 | 18.3 | 10.7 |
| 27 | 72.7 | 83.2 | 94.2 | 91.1 | 91.1 | 18.4 | 10.5 |
| 29 | 74.1 | 83.4 | 94.4 | 92.0 | 93.2 | 17.9 | 9.3 |
| 31 | 76.2 | 84.7 | 95.0 | 93.2 | 93.2 | 17.0 | 8.5 |
| 33 | 76.6 | 85.5 | 94.8 | 93.3 | 94.8 | 16.7 | 8.9 |
| 35 | 78.5 | 86.5 | 94.7 | 94.2 | 95.5 | 15.7 | 8.0 |
| 37 | 80.0 | 86.8 | 93.4 | 94.4 | 94.4 | 14.4 | 6.8 |
| 39 | 80.8 | 87.6 | 93.5 | 95.4 | 95.4 | 14.6 | 6.8 |
| 41 | 80.1 | 87.8 | 94.3 | 95.1 | 95.1 | 15.0 | 7.7 |
| O.K. 43 | 79.9 | 87.7 | 94.9 | 95.2 | 95.2 | 15.3 | 7.8 |
| 45 | 80.4 | 87.6 | 95.5 | 95.2 | 96.3 | 14.8 | 7.2 |
| 47 | 80.1 | 86.3 | 94.2 | 93.9 | 95.3 | 13.8 | 6.2 |
| 49 | 80.4 | 86.0 | 92.5 | 93.8 | 94.9 | 13.4 | 5.6 |
| 51 | 80.4 | 85.3 | 90.9 | 93.2 | 93.2 | 12.8 | 4.9 |
| 53 | 79.6 | 84.3 | 89.3 | 92.0 | 92.0 | 12.4 | 4.7 |
| 55 | 77.7 | 82.7 | 89.1 | 90.3 | 91.6 | 12.6 | 5.0 |
| 57 | 75.6 | 80.9 | 88.0 | 89.0 | 90.1 | 13.4 | 5.3 |
| 59 | 73.0 | 78.9 | 85.8 | 86.9 | 86.9 | 13.9 | 5.9 |
| 61 | 70.3 | 76.6 | 83.7 | 84.3 | 85.7 | 14.0 | 6.3 |
| 63 | 68.9 | 75.6 | 82.4 | 83.4 | 83.4 | 14.5 | 6.7 |
| 65 | 67.7 | 75.0 | 81.7 | 83.1 | 83.1 | 15.4 | 7.3 |
| 67 | 66.4 | 74.2 | 80.9 | 82.6 | 82.6 | 16.2 | 7.8 |

TABLE H-IV

NOISE LEVEL TIME HISTORY DATA

VERTOL CH-47 C

OCTOBER 13, 1976

EVENT 24, 141 KT. FLY BY, MIC. 150 METERS WEST

1/2 SECOND INTEGRATION VS NOISE INDEXES
(DB RE 20 MICRO PA)

| INT | DBA | DBD | OASPL | PNL | PNLT | PNL-DBA | DBD-DBA |
|-----------|------|------|-------|-------|-------|---------|---------|
| 1 | 74.8 | 83.9 | 92.2 | 91.6 | 91.6 | 16.8 | 9.1 |
| 2 | 77.3 | 85.9 | 93.8 | 93.5 | 93.5 | 16.2 | 8.6 |
| 3 | 78.1 | 86.7 | 94.6 | 94.6 | 94.6 | 16.5 | 8.6 |
| 4 | 78.6 | 87.0 | 95.1 | 95.1 | 95.1 | 16.5 | 8.4 |
| 5 | 79.0 | 86.8 | 95.2 | 95.8 | 95.8 | 16.8 | 7.8 |
| 6 | 79.3 | 87.1 | 95.5 | 96.4 | 96.4 | 17.1 | 7.8 |
| 7 | 79.6 | 87.7 | 96.2 | 96.8 | 96.8 | 17.2 | 8.1 |
| 8 | 79.7 | 88.5 | 96.8 | 97.0 | 97.0 | 17.3 | 8.8 |
| 9 | 80.9 | 89.7 | 97.7 | 97.8 | 97.8 | 16.9 | 8.8 |
| 10 | 82.5 | 91.3 | 98.6 | 99.2 | 99.2 | 16.7 | 8.8 |
| 11 | 84.1 | 92.7 | 99.7 | 100.9 | 100.9 | 16.8 | 8.6 |
| 12 | 85.1 | 93.6 | 100.5 | 101.9 | 101.9 | 16.8 | 8.5 |
| 13 | 86.6 | 94.6 | 101.3 | 102.8 | 102.8 | 16.2 | 8.0 |
| 14 | 87.3 | 95.4 | 101.9 | 103.4 | 103.4 | 16.1 | 8.1 |
| 15 | 87.5 | 95.5 | 102.3 | 104.0 | 104.0 | 16.5 | 8.0 |
| 16 | 88.1 | 95.8 | 102.5 | 104.0 | 104.0 | 15.9 | 7.7 |
| 17 | 88.3 | 96.0 | 102.8 | 104.2 | 104.2 | 15.9 | 7.7 |
| 18 | 89.3 | 97.1 | 103.8 | 104.5 | 104.5 | 15.2 | 7.8 |
| 19 | 89.6 | 97.6 | 104.5 | 105.0 | 105.0 | 15.4 | 8.0 |
| 20 | 89.4 | 97.6 | 104.7 | 105.0 | 105.0 | 15.6 | 8.2 |
| 21 | 88.4 | 96.6 | 104.2 | 104.4 | 104.4 | 16.0 | 8.2 |
| 22 | 88.2 | 96.1 | 103.8 | 103.8 | 105.4 | 15.6 | 7.9 |
| 23 | 88.1 | 95.6 | 103.8 | 103.7 | 105.4 | 15.6 | 7.5 |
| 24 | 87.8 | 95.6 | 104.0 | 103.5 | 104.9 | 15.7 | 7.8 |
| 25 | 88.7 | 96.4 | 104.3 | 103.8 | 105.0 | 15.1 | 7.7 |
| 26 | 88.9 | 96.4 | 104.1 | 103.8 | 105.1 | 14.9 | 7.5 |
| 27 | 89.7 | 96.2 | 103.5 | 103.5 | 103.5 | 13.8 | 6.5 |
| 28 | 88.4 | 94.6 | 102.5 | 102.2 | 103.7 | 13.8 | 6.2 |
| 29 | 87.4 | 93.3 | 101.5 | 100.6 | 102.5 | 13.2 | 5.9 |
| 30 | 84.9 | 91.7 | 100.5 | 99.0 | 100.3 | 14.1 | 6.8 |
| 31 | 84.3 | 91.4 | 99.8 | 98.6 | 98.6 | 14.3 | 7.1 |
| 32 | 84.8 | 92.4 | 99.2 | 99.7 | 99.7 | 14.9 | 7.6 |
| O.H. → 33 | 85.1 | 92.7 | 98.7 | 100.2 | 100.2 | 15.1 | 7.6 |
| 34 | 85.2 | 92.6 | 98.2 | 100.0 | 100.0 | 14.8 | 7.4 |
| 35 | 84.5 | 91.4 | 97.3 | 99.1 | 99.1 | 14.6 | 6.9 |
| 36 | 83.8 | 90.3 | 95.7 | 98.0 | 98.0 | 14.2 | 6.5 |
| 37 | 83.4 | 89.3 | 93.8 | 97.1 | 97.1 | 13.7 | 5.9 |
| 38 | 82.8 | 88.4 | 92.4 | 96.1 | 96.1 | 13.3 | 5.6 |
| 39 | 82.5 | 87.7 | 91.3 | 95.1 | 95.1 | 12.6 | 5.2 |
| 40 | 81.7 | 86.4 | 89.7 | 93.8 | 93.8 | 12.1 | 4.7 |
| 41 | 81.0 | 85.9 | 88.6 | 93.2 | 93.2 | 12.2 | 4.9 |
| 42 | 79.6 | 84.6 | 87.9 | 92.3 | 92.3 | 12.7 | 5.0 |

TABLE H-VI

NOISE LEVEL TIME HISTORY DATA

VERTOL CH-47 C

OCTOBER 13, 1976

EVENT 25, 141 KT. FLY BY, MIC. 150 METERS WEST

1/2 SECOND INTEGRATION VS NOISE INDEXES
(DB RE 20 MICRO PA)

| INT | DBA | DBD | OASPL | PNL | PNLT | PNL-DBA | DBD-DBA |
|-----------|------|-------|-------|-------|-------|---------|---------|
| 1 | 77.1 | 85.9 | 94.1 | 94.0 | 94.0 | 16.9 | 8.8 |
| 2 | 77.0 | 85.8 | 94.4 | 94.2 | 94.2 | 17.2 | 8.8 |
| 3 | 78.4 | 86.6 | 95.2 | 95.1 | 95.1 | 16.7 | 8.2 |
| 4 | 82.1 | 89.5 | 96.4 | 97.7 | 97.7 | 15.6 | 7.4 |
| 5 | 83.4 | 90.9 | 98.0 | 99.3 | 99.3 | 15.9 | 7.5 |
| 6 | 84.6 | 92.6 | 99.9 | 101.1 | 101.1 | 16.5 | 8.0 |
| 7 | 85.6 | 94.5 | 101.9 | 102.7 | 102.7 | 17.1 | 8.9 |
| 8 | 89.4 | 96.8 | 103.6 | 105.0 | 105.0 | 15.6 | 7.4 |
| 9 | 91.9 | 98.8 | 104.8 | 106.5 | 106.5 | 14.6 | 6.9 |
| 10 | 93.7 | 100.6 | 105.9 | 107.8 | 107.8 | 14.1 | 6.9 |
| 11 | 93.3 | 100.6 | 106.0 | 107.7 | 107.7 | 14.4 | 7.3 |
| 12 | 92.4 | 100.4 | 106.3 | 107.6 | 107.6 | 15.2 | 8.0 |
| 13 | 90.3 | 99.1 | 105.9 | 106.3 | 106.3 | 16.0 | 8.8 |
| 14 | 92.1 | 99.6 | 106.1 | 107.1 | 108.2 | 15.0 | 7.5 |
| 15 | 92.9 | 99.4 | 105.8 | 107.1 | 108.4 | 14.2 | 6.5 |
| 16 | 92.8 | 99.2 | 105.6 | 106.8 | 108.3 | 14.0 | 6.4 |
| 17 | 90.2 | 97.3 | 104.6 | 104.7 | 106.2 | 14.5 | 7.1 |
| 18 | 88.2 | 95.8 | 103.6 | 103.3 | 104.7 | 15.1 | 7.6 |
| 19 | 86.6 | 94.6 | 102.9 | 102.1 | 103.6 | 15.5 | 8.0 |
| 20 | 87.7 | 94.7 | 102.8 | 102.5 | 102.5 | 14.8 | 7.0 |
| 21 | 87.2 | 94.0 | 102.4 | 102.2 | 103.7 | 15.0 | 6.8 |
| 22 | 86.8 | 93.0 | 101.6 | 101.1 | 102.8 | 14.3 | 6.2 |
| 23 | 85.3 | 91.7 | 100.4 | 99.7 | 99.7 | 14.4 | 6.4 |
| 24 | 84.2 | 91.0 | 99.5 | 98.1 | 98.1 | 13.9 | 6.8 |
| 25 | 84.1 | 91.3 | 98.6 | 99.0 | 99.0 | 14.9 | 7.2 |
| O.H. → 26 | 84.6 | 92.0 | 98.2 | 99.8 | 99.8 | 15.2 | 7.4 |
| 27 | 84.6 | 92.0 | 97.7 | 99.9 | 99.9 | 15.3 | 7.4 |
| 28 | 84.2 | 91.2 | 97.0 | 99.0 | 99.0 | 14.8 | 7.0 |
| 29 | 83.6 | 89.8 | 95.7 | 97.9 | 97.9 | 14.3 | 6.2 |
| 30 | 83.5 | 89.2 | 94.3 | 97.1 | 97.1 | 13.6 | 5.7 |
| 31 | 83.5 | 89.0 | 93.3 | 96.8 | 96.8 | 13.2 | 5.4 |
| 32 | 83.4 | 88.5 | 91.9 | 96.1 | 96.1 | 12.7 | 5.1 |

TABLE H-V

NOISE LEVEL TIME HISTORY DATA

VERTOL CH-47 C

OCTOBER 13, 1976

EVENT 26, 141 KT. FLY BY, MIC. 150 METERS WEST

1/2 SECOND INTEGRATION VS NOISE INDEXES
(DR RE 20 MICRO PA)

| INT | DBA | DBD | OASPL | PNL | PNLI | PNL-DRA | DBD-DRA |
|-----------|------|------|-------|-------|-------|---------|---------|
| 1 | 73.3 | 83.5 | 90.5 | 93.0 | 93.0 | 19.7 | 10.2 |
| 2 | 74.1 | 84.6 | 92.7 | 93.8 | 93.8 | 19.7 | 10.5 |
| 3 | 74.6 | 85.4 | 94.5 | 95.2 | 95.2 | 20.6 | 10.8 |
| 4 | 77.5 | 87.1 | 96.2 | 96.7 | 96.7 | 19.2 | 9.6 |
| 5 | 81.4 | 89.5 | 97.9 | 99.0 | 99.0 | 17.6 | 8.1 |
| 6 | 84.1 | 92.3 | 99.9 | 101.4 | 101.4 | 17.3 | 8.2 |
| 7 | 86.0 | 94.6 | 101.9 | 103.2 | 103.2 | 17.2 | 8.6 |
| 8 | 87.0 | 95.7 | 103.0 | 104.1 | 104.1 | 17.1 | 8.7 |
| 9 | 87.3 | 96.3 | 103.6 | 104.6 | 104.6 | 17.3 | 9.0 |
| 10 | 87.2 | 96.3 | 103.7 | 104.6 | 104.6 | 17.4 | 9.1 |
| 11 | 87.8 | 96.5 | 103.7 | 105.0 | 105.0 | 17.2 | 8.7 |
| 12 | 89.3 | 96.6 | 103.8 | 106.1 | 106.1 | 16.8 | 7.3 |
| 13 | 89.9 | 96.9 | 103.9 | 106.2 | 106.2 | 16.3 | 7.0 |
| 14 | 91.1 | 97.8 | 104.2 | 106.4 | 106.4 | 15.3 | 6.7 |
| 15 | 91.2 | 98.2 | 104.5 | 106.1 | 107.3 | 14.9 | 7.0 |
| 16 | 91.0 | 98.2 | 104.7 | 106.3 | 106.3 | 15.3 | 7.2 |
| 17 | 89.7 | 97.7 | 104.8 | 105.6 | 105.6 | 15.9 | 8.0 |
| 18 | 88.9 | 97.0 | 104.6 | 105.2 | 106.9 | 16.3 | 8.1 |
| 19 | 88.9 | 96.5 | 104.3 | 104.3 | 106.1 | 15.9 | 7.6 |
| 20 | 88.3 | 95.5 | 103.9 | 104.0 | 105.4 | 15.7 | 7.2 |
| 21 | 88.0 | 95.3 | 104.0 | 103.8 | 105.5 | 15.8 | 7.3 |
| 22 | 88.2 | 95.1 | 104.1 | 104.0 | 105.5 | 15.8 | 6.9 |
| 23 | 88.2 | 95.1 | 104.1 | 104.1 | 105.4 | 15.9 | 6.9 |
| 24 | 88.6 | 95.3 | 103.7 | 104.0 | 104.0 | 15.4 | 6.7 |
| 25 | 88.7 | 95.2 | 103.3 | 103.9 | 105.2 | 15.2 | 6.5 |
| 26 | 88.2 | 94.4 | 102.3 | 102.7 | 104.4 | 14.5 | 6.2 |
| 27 | 86.3 | 92.5 | 100.8 | 100.7 | 101.8 | 14.4 | 6.2 |
| 28 | 84.2 | 90.9 | 99.4 | 98.7 | 98.7 | 14.5 | 6.7 |
| 29 | 84.0 | 91.4 | 98.7 | 98.9 | 98.9 | 14.9 | 7.4 |
| 30 | 84.3 | 91.9 | 98.2 | 99.5 | 99.5 | 15.2 | 7.6 |
| D.H. → 31 | 84.6 | 92.3 | 97.9 | 100.0 | 100.0 | 15.4 | 7.7 |
| 32 | 84.2 | 91.8 | 97.5 | 99.7 | 99.7 | 15.5 | 7.6 |
| 33 | 83.5 | 90.8 | 96.8 | 99.0 | 99.0 | 15.5 | 7.3 |
| 34 | 82.9 | 89.3 | 95.3 | 97.9 | 97.9 | 15.0 | 6.4 |
| 35 | 82.8 | 88.8 | 93.6 | 97.3 | 97.3 | 14.5 | 6.0 |
| 36 | 82.4 | 88.2 | 92.1 | 96.6 | 96.6 | 14.2 | 5.8 |
| 37 | 82.2 | 87.9 | 91.5 | 96.0 | 96.0 | 13.8 | 5.7 |
| 38 | 81.4 | 87.2 | 90.6 | 95.3 | 95.3 | 13.9 | 5.8 |

TABLE H-V

NOISE LEVEL TIME HISTORY DATA

VERTOL CH-47 C

OCTOBER 13, 1976

EVENT 27: 141 KT. FLY BY, MIC: 150 METERS WEST

1/2 SECOND INTEGRATION VS NOISE INDEXES
(DB RE 20 MICRO PA)

| INT | DBA | DRD | OASPL | PNL | PVLT | PNL-DBA | DRD-DBA |
|----------|------|------|-------|-------|-------|---------|---------|
| 1 | 76.1 | 84.6 | 87.5 | 93.3 | 93.3 | 17.2 | 8.5 |
| 2 | 76.3 | 85.0 | 89.3 | 93.8 | 93.8 | 17.5 | 8.7 |
| 3 | 77.1 | 86.2 | 91.4 | 94.9 | 94.9 | 17.8 | 9.1 |
| 4 | 79.2 | 88.7 | 94.2 | 96.7 | 96.7 | 17.5 | 9.5 |
| 5 | 84.8 | 93.7 | 98.3 | 100.7 | 100.7 | 15.9 | 8.9 |
| 6 | 86.7 | 95.4 | 100.3 | 102.5 | 102.5 | 15.8 | 8.7 |
| 7 | 86.9 | 95.4 | 100.6 | 102.7 | 102.7 | 15.8 | 8.5 |
| 8 | 85.3 | 93.6 | 99.9 | 101.7 | 101.7 | 16.4 | 8.3 |
| 9 | 84.4 | 92.5 | 99.6 | 101.2 | 101.2 | 16.8 | 8.1 |
| 10 | 84.9 | 92.5 | 99.9 | 101.8 | 101.8 | 16.9 | 7.6 |
| 11 | 86.0 | 93.0 | 100.4 | 102.8 | 102.8 | 16.8 | 7.0 |
| 12 | 86.9 | 94.0 | 101.0 | 103.6 | 103.6 | 16.7 | 7.1 |
| 13 | 86.7 | 93.9 | 101.1 | 103.7 | 103.7 | 17.0 | 7.2 |
| 14 | 86.2 | 93.3 | 100.6 | 103.1 | 103.1 | 16.9 | 7.1 |
| 15 | 85.5 | 92.1 | 99.6 | 102.3 | 102.3 | 16.8 | 6.6 |
| 16 | 84.9 | 91.5 | 99.3 | 101.7 | 102.8 | 16.8 | 6.6 |
| 17 | 86.6 | 93.4 | 101.2 | 103.1 | 103.1 | 16.5 | 6.8 |
| 18 | 88.0 | 95.9 | 103.3 | 104.8 | 104.8 | 16.8 | 7.9 |
| 19 | 90.6 | 98.1 | 104.8 | 106.4 | 106.4 | 15.8 | 7.5 |
| 20 | 91.5 | 98.8 | 105.7 | 107.1 | 107.1 | 15.6 | 7.3 |
| 21 | 92.3 | 99.4 | 106.1 | 107.7 | 107.7 | 15.4 | 7.1 |
| 22 | 92.5 | 99.4 | 106.5 | 107.4 | 107.4 | 14.9 | 6.9 |
| 23 | 93.0 | 99.5 | 106.4 | 107.4 | 108.5 | 14.4 | 6.5 |
| 24 | 93.5 | 99.2 | 106.2 | 107.3 | 108.3 | 13.8 | 5.7 |
| 25 | 93.5 | 98.9 | 105.6 | 107.1 | 108.5 | 13.6 | 5.4 |
| 26 | 94.2 | 99.5 | 105.1 | 107.0 | 107.0 | 12.8 | 5.3 |
| 27 | 93.4 | 98.7 | 104.2 | 105.8 | 105.8 | 12.4 | 5.3 |
| 28 | 91.8 | 97.1 | 103.0 | 104.7 | 104.7 | 12.9 | 5.3 |
| 29 | 87.3 | 93.0 | 101.4 | 101.9 | 101.9 | 14.6 | 5.7 |
| 30 | 84.9 | 92.0 | 100.0 | 99.7 | 99.7 | 14.8 | 7.1 |
| 31 | 85.4 | 92.8 | 99.2 | 100.7 | 100.7 | 15.3 | 7.4 |
| 32 | 86.0 | 93.5 | 98.8 | 101.4 | 101.4 | 15.4 | 7.5 |
| OH. → 33 | 85.5 | 93.1 | 98.3 | 101.1 | 101.1 | 15.6 | 7.6 |
| 34 | 84.3 | 91.7 | 97.1 | 99.9 | 99.9 | 15.6 | 7.4 |
| 35 | 83.6 | 90.6 | 95.5 | 98.8 | 98.8 | 15.2 | 7.0 |
| 36 | 83.5 | 90.1 | 94.0 | 98.3 | 98.3 | 14.8 | 6.6 |
| 37 | 82.9 | 89.3 | 92.6 | 97.3 | 97.3 | 14.4 | 6.4 |
| 38 | 81.9 | 87.9 | 90.9 | 96.1 | 96.1 | 14.2 | 6.0 |
| 39 | 80.6 | 86.4 | 89.1 | 94.6 | 94.6 | 14.0 | 5.8 |

TABLE H-VI

NOISE LEVEL TIME HISTORY DATA

VERTOL CH-47 C

OCTOBER 13, 1976

EVENT 28, 150 KT. FLY BY, MIC. 150 METERS WEST

1/2 SECOND INTEGRATION VS NOISE INDEXES
(DB RE 20 MICRO PA)

| INT | DBA | DBD | OASPL | PNL | PNLT | PNL-DBA | DBD-DBA |
|----------|------|-------|-------|-------|-------|---------|---------|
| 1 | 78.4 | 87.9 | 96.2 | 97.2 | 97.2 | 18.8 | 9.5 |
| 2 | 79.5 | 89.3 | 97.8 | 98.4 | 98.4 | 18.9 | 9.8 |
| 3 | 81.4 | 91.1 | 99.6 | 99.8 | 99.8 | 18.4 | 9.7 |
| 4 | 83.6 | 92.9 | 101.6 | 102.2 | 102.2 | 18.6 | 9.3 |
| 5 | 85.4 | 95.1 | 103.5 | 104.0 | 104.0 | 18.6 | 9.7 |
| 6 | 88.4 | 97.4 | 105.2 | 105.7 | 105.7 | 17.3 | 9.0 |
| 7 | 91.0 | 99.7 | 106.5 | 107.0 | 107.0 | 16.0 | 8.7 |
| 8 | 93.2 | 101.5 | 107.7 | 108.8 | 108.8 | 15.6 | 8.3 |
| 9 | 95.4 | 103.2 | 109.2 | 110.8 | 110.8 | 15.4 | 7.8 |
| 10 | 95.5 | 103.4 | 109.7 | 111.0 | 111.0 | 15.5 | 7.9 |
| 11 | 94.7 | 102.7 | 109.4 | 110.3 | 110.3 | 15.6 | 8.0 |
| 12 | 92.9 | 100.9 | 108.2 | 108.4 | 108.4 | 15.5 | 8.0 |
| 13 | 91.7 | 99.4 | 107.2 | 107.4 | 107.4 | 15.7 | 7.7 |
| 14 | 91.3 | 98.3 | 106.2 | 107.1 | 107.1 | 15.8 | 7.0 |
| 15 | 90.6 | 97.5 | 105.4 | 106.2 | 106.2 | 15.6 | 6.9 |
| 16 | 90.4 | 96.5 | 104.4 | 105.0 | 105.0 | 14.6 | 6.1 |
| 17 | 89.3 | 95.7 | 103.9 | 104.3 | 104.3 | 15.0 | 6.4 |
| 18 | 88.0 | 94.9 | 103.3 | 103.0 | 103.0 | 15.0 | 6.9 |
| 19 | 86.9 | 95.1 | 102.5 | 102.6 | 102.6 | 15.7 | 8.2 |
| GM. → 20 | 86.1 | 94.5 | 101.4 | 102.1 | 102.1 | 16.0 | 8.4 |
| 21 | 85.3 | 93.6 | 100.1 | 101.2 | 101.2 | 15.9 | 8.3 |
| 22 | 84.1 | 91.8 | 98.7 | 99.8 | 99.8 | 15.7 | 7.7 |
| 23 | 83.2 | 90.4 | 96.5 | 98.5 | 98.5 | 15.3 | 7.2 |
| 24 | 82.7 | 89.0 | 94.0 | 97.4 | 98.4 | 14.7 | 6.3 |

TABLE H-V

NOISE LEVEL TIME HISTORY DATA

VERTOL CH-47 C

OCTOBER 13, 1976

EVENT 29, 150 KT. FLY BY, MIC. 150 METERS WEST

1/2 SECOND INTEGRATION VS NOISE INDEXES
(DB RE 20 MICRO PA)

| INT | DBA | DBD | OASPL | PNL | PNLT | PNL-DBA | DBD-DBA |
|-----------|------|-------|-------|-------|-------|---------|---------|
| 3 | 77.8 | 86.8 | 94.3 | 96.2 | 96.2 | 18.4 | 9.0 |
| 4 | 82.1 | 91.0 | 98.2 | 99.3 | 99.3 | 17.2 | 8.9 |
| 5 | 86.1 | 94.5 | 101.7 | 103.3 | 103.3 | 17.2 | 8.4 |
| 6 | 88.5 | 96.9 | 103.7 | 105.2 | 105.2 | 16.7 | 8.4 |
| 7 | 89.5 | 97.7 | 104.5 | 106.0 | 106.0 | 16.5 | 8.2 |
| 8 | 90.2 | 98.4 | 104.9 | 106.2 | 106.2 | 16.0 | 8.2 |
| 9 | 91.6 | 99.1 | 105.3 | 107.1 | 107.1 | 15.5 | 7.5 |
| 10 | 94.1 | 101.7 | 107.3 | 108.5 | 108.5 | 14.4 | 7.6 |
| 11 | 95.9 | 102.9 | 109.0 | 110.2 | 110.2 | 14.3 | 7.0 |
| 12 | 96.1 | 103.2 | 109.7 | 110.9 | 110.9 | 14.8 | 7.1 |
| 13 | 94.9 | 102.0 | 109.2 | 110.4 | 110.4 | 15.5 | 7.1 |
| 14 | 95.0 | 101.9 | 108.4 | 109.7 | 109.7 | 14.7 | 6.9 |
| 15 | 94.3 | 100.9 | 107.4 | 108.8 | 110.1 | 14.5 | 6.6 |
| 16 | 93.7 | 99.9 | 106.5 | 107.7 | 108.7 | 14.0 | 6.2 |
| 17 | 90.7 | 97.0 | 104.8 | 105.5 | 105.5 | 14.8 | 6.3 |
| 18 | 89.2 | 95.1 | 103.2 | 103.7 | 103.7 | 14.5 | 5.9 |
| 19 | 88.2 | 94.0 | 102.1 | 102.7 | 102.7 | 14.5 | 6.4 |
| 20 | 86.4 | 93.0 | 101.1 | 101.5 | 101.5 | 15.1 | 7.5 |
| D.N. → 21 | 86.0 | 93.7 | 100.5 | 101.2 | 101.2 | 15.2 | 7.7 |
| 22 | 85.4 | 93.1 | 99.7 | 100.7 | 100.7 | 15.3 | 7.7 |
| 23 | 84.6 | 92.1 | 98.7 | 99.8 | 99.8 | 15.2 | 7.5 |
| 24 | 84.1 | 91.1 | 97.2 | 99.1 | 99.1 | 15.0 | 7.0 |
| 25 | 83.5 | 90.1 | 95.0 | 98.4 | 98.4 | 14.9 | 6.6 |

TABLE H-V

NOISE LEVEL TIME HISTORY DATA

VERTOL CH-47 C

OCTOBER 13, 1976

EVENT 12, 6 DEGREE APPROACH, MIC. 150 METERS EAST

1/2 SECOND INTEGRATION VS NOISE INDEXES
(DB RE 20 MICRO PA)

| INT | DBA | DBD | JASPL | PNL | PNLT | PNL-DBA | DBD-DBA |
|----------------|------|------|-------|------|-------|---------|---------|
| 1 | 72.2 | 81.2 | 87.3 | 89.4 | 90.5 | 17.2 | 9.0 |
| 5 | 73.8 | 82.7 | 88.2 | 90.6 | 90.6 | 16.8 | 8.9 |
| 9 | 73.3 | 82.6 | 88.6 | 90.8 | 90.8 | 17.5 | 9.3 |
| 13 | 73.3 | 82.5 | 88.7 | 90.9 | 90.9 | 17.6 | 9.2 |
| 17 | 75.1 | 82.9 | 87.8 | 90.8 | 90.8 | 15.7 | 7.8 |
| 21 | 74.6 | 81.7 | 86.8 | 89.4 | 89.4 | 14.8 | 7.1 |
| 25 | 72.6 | 80.3 | 86.1 | 88.6 | 88.6 | 16.0 | 7.7 |
| 29 | 77.2 | 84.0 | 88.2 | 91.5 | 91.5 | 14.3 | 6.8 |
| 33 | 76.8 | 84.1 | 88.5 | 92.0 | 92.0 | 15.2 | 7.3 |
| 37 | 76.2 | 84.7 | 90.0 | 92.6 | 92.6 | 16.4 | 8.5 |
| 41 | 77.1 | 85.7 | 90.7 | 93.6 | 93.6 | 16.5 | 8.6 |
| 45 | 75.1 | 82.5 | 87.3 | 90.4 | 90.4 | 15.3 | 7.4 |
| 49 | 78.2 | 82.4 | 87.2 | 90.7 | 92.1 | 12.5 | 4.2 |
| 53 | 73.1 | 79.7 | 87.4 | 89.0 | 90.1 | 15.9 | 6.6 |
| 57 | 69.8 | 79.2 | 88.8 | 89.0 | 89.0 | 19.2 | 9.4 |
| 61 | 69.2 | 77.7 | 87.7 | 87.6 | 87.6 | 18.4 | 8.5 |
| 65 | 72.1 | 80.9 | 90.2 | 89.8 | 89.8 | 17.7 | 8.8 |
| 69 | 73.7 | 81.4 | 89.2 | 90.5 | 90.5 | 16.8 | 7.7 |
| 73 | 75.0 | 81.0 | 88.9 | 90.5 | 91.7 | 15.5 | 6.0 |
| 77 | 72.9 | 80.4 | 88.9 | 89.8 | 91.0 | 16.5 | 7.5 |
| 81 | 78.2 | 83.9 | 90.1 | 92.7 | 93.9 | 14.5 | 5.7 |
| 85 | 79.3 | 84.7 | 91.5 | 93.8 | 93.8 | 14.5 | 5.4 |
| 89 | 83.1 | 88.2 | 93.9 | 97.0 | 98.6 | 13.9 | 5.1 |
| 93 | 84.2 | 88.5 | 93.6 | 97.0 | 98.3 | 12.8 | 4.3 |
| 97 | 85.4 | 89.9 | 94.7 | 98.6 | 99.7 | 13.2 | 4.5 |
| 101 | 84.5 | 89.8 | 94.1 | 98.3 | 99.5 | 13.8 | 5.3 |
| 105 | 84.7 | 90.1 | 95.7 | 98.3 | 98.3 | 13.6 | 5.4 |
| 107 | 86.4 | 91.8 | 98.5 | 99.6 | 101.1 | 13.2 | 5.4 |
| 111 | 84.7 | 89.9 | 96.8 | 97.6 | 97.6 | 12.9 | 5.2 |
| o.H. 115 → 118 | 84.3 | 89.9 | 96.2 | 97.9 | 97.9 | 13.6 | 5.6 |
| 119 | 83.0 | 88.4 | 95.4 | 96.2 | 96.2 | 13.2 | 5.4 |
| 123 | 83.3 | 88.9 | 96.1 | 97.2 | 98.4 | 13.9 | 5.6 |
| 127 | 82.1 | 87.3 | 91.9 | 95.4 | 97.2 | 13.3 | 5.2 |
| 131 | 81.1 | 86.5 | 89.7 | 95.1 | 97.0 | 14.0 | 5.4 |
| 135 | 75.9 | 81.6 | 87.2 | 90.1 | 91.7 | 14.2 | 5.7 |
| 139 | 71.9 | 78.1 | 85.3 | 86.3 | 86.3 | 14.4 | 6.2 |
| 143 | 70.5 | 77.3 | 83.5 | 86.0 | 87.2 | 15.5 | 6.8 |

TABLE H-V

NOISE LEVEL TIME HISTORY DATA

VERTOL CH-47 C

OCTOBER 13, 1976

EVENT 22, 100 KT. FLY BY, MIC. 150 METERS EAST

1/2 SECOND INTEGRATION VS NOISE INDEXES
(DB RE 20 MICRO PA)

| INT | DBA | DBD | OASPL | PNL | PNLT | PNL-DBA | DBD-DBA |
|--------------|------|------|-------|------|-------|---------|---------|
| 3 | 66.4 | 76.7 | 86.6 | 84.5 | 84.5 | 18.1 | 10.3 |
| 5 | 70.4 | 79.9 | 88.6 | 87.7 | 87.7 | 17.3 | 9.5 |
| 7 | 72.1 | 81.9 | 90.1 | 89.1 | 90.2 | 17.0 | 9.8 |
| 9 | 74.9 | 82.9 | 91.2 | 90.7 | 92.8 | 15.8 | 8.0 |
| 11 | 75.2 | 83.1 | 92.0 | 91.3 | 93.1 | 16.1 | 7.9 |
| 13 | 74.8 | 84.6 | 93.4 | 92.1 | 92.1 | 17.3 | 9.8 |
| 15 | 79.2 | 87.5 | 95.0 | 94.7 | 94.7 | 15.5 | 8.3 |
| 17 | 83.0 | 90.5 | 96.8 | 97.7 | 97.7 | 14.7 | 7.5 |
| 19 | 82.6 | 90.5 | 97.3 | 97.6 | 97.6 | 15.0 | 7.9 |
| 21 | 81.0 | 89.3 | 96.8 | 97.1 | 98.2 | 16.1 | 8.3 |
| 23 | 78.5 | 86.8 | 95.3 | 95.2 | 95.2 | 16.7 | 8.3 |
| 25 | 78.3 | 86.0 | 94.6 | 94.6 | 94.6 | 16.3 | 7.7 |
| 27 | 80.7 | 86.6 | 94.8 | 95.9 | 97.4 | 15.2 | 5.9 |
| 29 | 81.4 | 87.8 | 95.6 | 96.8 | 98.0 | 15.4 | 6.4 |
| 31 | 80.2 | 87.4 | 95.8 | 95.5 | 96.9 | 15.3 | 7.2 |
| 33 | 78.8 | 87.1 | 96.1 | 95.2 | 96.6 | 16.4 | 8.3 |
| 35 | 83.1 | 88.6 | 96.2 | 96.9 | 96.9 | 13.8 | 5.5 |
| 37 | 86.0 | 90.3 | 96.1 | 98.6 | 100.4 | 12.6 | 4.3 |
| 39 | 82.0 | 87.6 | 94.4 | 95.5 | 97.3 | 13.5 | 5.6 |
| 41 | 78.2 | 84.9 | 94.5 | 93.1 | 94.2 | 14.9 | 6.7 |
| 43 | 82.6 | 87.6 | 94.6 | 96.3 | 98.0 | 13.7 | 5.0 |
| 45 | 84.3 | 89.7 | 95.0 | 98.4 | 98.4 | 14.1 | 5.4 |
| 47 | 83.0 | 88.8 | 94.2 | 97.2 | 98.7 | 14.2 | 5.8 |
| 49 | 78.8 | 85.7 | 93.8 | 93.8 | 93.8 | 15.0 | 6.9 |
| O.H. 51 → 52 | 77.1 | 84.3 | 94.6 | 91.9 | 91.9 | 14.8 | 7.2 |
| 53 | 76.5 | 83.3 | 93.3 | 90.9 | 92.1 | 14.4 | 6.8 |
| 55 | 77.9 | 83.7 | 91.2 | 91.4 | 91.4 | 13.5 | 5.8 |
| 57 | 78.6 | 83.9 | 92.7 | 91.5 | 92.5 | 12.9 | 5.3 |
| 59 | 78.4 | 83.8 | 93.2 | 91.6 | 92.7 | 13.2 | 5.4 |
| 61 | 79.2 | 83.7 | 90.4 | 91.9 | 91.9 | 12.7 | 4.5 |
| 63 | 78.4 | 82.7 | 87.5 | 90.7 | 90.7 | 12.3 | 4.3 |
| 65 | 75.4 | 79.8 | 84.5 | 88.1 | 88.1 | 12.7 | 4.4 |
| 67 | 72.7 | 77.7 | 83.3 | 86.2 | 87.9 | 13.5 | 5.0 |
| 69 | 69.5 | 75.3 | 83.0 | 84.2 | 86.3 | 14.7 | 5.8 |

TABLE H-V

NOISE LEVEL TIME HISTORY DATA

VERTOL CH-47 C

OCTOBER 13, 1976

EVENT 23, 110 KT. FLY BY, MIC. 150 METERS EAST

1/2 SECOND INTEGRATION VS NOISE INDEXES
(DB RE 20 MICRO PA)

| INT | DBA | DBD | OASPL | PNL | PNLT | PNL-DBA | DBD-DBA |
|--------------|------|------|-------|------|------|---------|---------|
| 1 | 59.8 | 72.3 | 83.9 | 82.3 | 82.3 | 22.5 | 12.5 |
| 3 | 60.9 | 73.2 | 85.0 | 82.6 | 82.6 | 21.7 | 12.3 |
| 5 | 61.9 | 74.8 | 86.6 | 83.3 | 83.3 | 21.4 | 12.9 |
| 7 | 64.9 | 77.4 | 88.9 | 86.0 | 86.0 | 21.1 | 12.5 |
| 9 | 69.7 | 80.6 | 91.0 | 89.2 | 89.2 | 19.5 | 10.9 |
| 11 | 75.3 | 84.2 | 93.6 | 92.4 | 92.4 | 17.1 | 8.9 |
| 13 | 78.9 | 88.1 | 96.2 | 95.1 | 95.1 | 16.2 | 9.2 |
| 14 | 79.5 | 88.7 | 96.7 | 95.7 | 95.7 | 16.2 | 9.2 |
| 16 | 77.9 | 87.6 | 96.2 | 95.3 | 95.3 | 17.4 | 9.7 |
| 18 | 77.6 | 85.9 | 95.2 | 94.7 | 94.7 | 17.1 | 8.3 |
| 20 | 77.5 | 84.6 | 94.3 | 93.7 | 95.0 | 16.2 | 7.1 |
| 22 | 74.1 | 83.3 | 93.3 | 91.9 | 93.3 | 17.8 | 9.2 |
| 24 | 72.8 | 82.8 | 93.3 | 91.6 | 91.6 | 18.8 | 10.0 |
| 26 | 74.3 | 84.2 | 93.7 | 92.5 | 92.5 | 18.2 | 9.9 |
| 28 | 75.3 | 84.9 | 93.5 | 92.9 | 94.2 | 17.6 | 9.6 |
| 30 | 74.5 | 83.0 | 93.6 | 91.9 | 91.9 | 17.4 | 8.5 |
| 32 | 75.5 | 83.4 | 95.2 | 91.4 | 92.5 | 15.9 | 7.9 |
| 34 | 76.7 | 84.9 | 94.8 | 92.8 | 94.0 | 16.1 | 8.2 |
| 36 | 78.0 | 85.0 | 92.5 | 93.5 | 93.5 | 15.5 | 7.0 |
| 38 | 76.9 | 84.0 | 92.1 | 92.3 | 93.4 | 15.4 | 7.1 |
| o.h. 40 → 41 | 77.6 | 84.8 | 94.7 | 92.8 | 92.8 | 15.2 | 7.2 |
| 42 | 77.1 | 84.0 | 94.4 | 91.1 | 91.1 | 14.0 | 6.9 |
| 44 | 76.8 | 83.3 | 91.6 | 91.3 | 91.3 | 14.5 | 6.5 |
| 46 | 78.8 | 84.0 | 91.9 | 91.5 | 92.6 | 12.7 | 5.2 |
| 48 | 79.6 | 84.8 | 93.6 | 92.1 | 93.5 | 12.5 | 5.2 |
| 50 | 78.3 | 83.4 | 90.6 | 90.8 | 90.8 | 12.5 | 5.1 |
| 52 | 78.5 | 83.2 | 87.5 | 90.7 | 92.0 | 12.2 | 4.7 |
| 54 | 76.7 | 81.4 | 85.5 | 89.5 | 89.5 | 12.8 | 4.7 |
| 56 | 74.2 | 79.3 | 84.4 | 87.7 | 90.1 | 13.5 | 5.1 |
| 58 | 72.2 | 77.2 | 83.3 | 85.6 | 87.1 | 13.4 | 5.0 |
| 60 | 70.1 | 75.2 | 81.9 | 83.5 | 83.5 | 13.4 | 5.1 |
| 62 | 67.0 | 73.1 | 80.5 | 82.5 | 82.5 | 15.5 | 6.1 |
| 64 | 66.0 | 72.2 | 79.4 | 82.1 | 82.1 | 16.1 | 6.2 |
| 66 | 66.0 | 72.3 | 78.5 | 82.1 | 82.1 | 16.1 | 6.3 |

TABLE H-V

NOISE LEVEL TIME HISTORY DATA

VERTOL CH-47 C

OCTOBER 13, 1976

EVENT 24, 141 KT. FLY BY, MIC. 150 METERS EAST

1/2 SECOND INTEGRATION VS NOISE INDEXES
(DB RE 20 MICRO PA)

| INT | DBA | DBD | OASPL | PNL | PNLI | PNL-DBA | DBD-DBA |
|-----------|------|------|-------|-------|-------|---------|---------|
| 1 | 73.5 | 82.5 | 90.2 | 91.2 | 91.2 | 17.7 | 9.0 |
| 2 | 74.5 | 83.7 | 91.2 | 92.0 | 92.0 | 17.5 | 9.2 |
| 3 | 76.1 | 85.3 | 92.3 | 93.2 | 93.2 | 17.1 | 9.2 |
| 4 | 80.0 | 87.0 | 93.4 | 95.0 | 95.0 | 15.0 | 7.0 |
| 5 | 81.7 | 88.6 | 94.7 | 96.3 | 96.3 | 14.6 | 6.9 |
| 6 | 82.2 | 89.4 | 95.7 | 96.9 | 96.9 | 14.7 | 7.2 |
| 7 | 82.2 | 90.0 | 96.4 | 97.4 | 97.4 | 15.2 | 7.8 |
| 8 | 83.7 | 91.1 | 97.4 | 99.2 | 100.3 | 15.6 | 7.4 |
| 9 | 85.4 | 92.5 | 98.6 | 100.9 | 101.9 | 15.5 | 7.1 |
| 10 | 86.9 | 93.9 | 99.6 | 101.8 | 102.9 | 14.9 | 7.0 |
| 11 | 87.4 | 94.6 | 100.4 | 101.8 | 101.8 | 14.4 | 7.2 |
| 12 | 87.5 | 95.1 | 101.3 | 101.7 | 101.7 | 14.2 | 7.6 |
| 13 | 87.4 | 95.6 | 102.2 | 101.8 | 101.8 | 14.4 | 8.2 |
| 14 | 88.3 | 96.4 | 103.0 | 102.6 | 102.6 | 14.3 | 8.1 |
| 15 | 88.5 | 96.6 | 103.2 | 102.9 | 102.9 | 14.4 | 8.1 |
| 16 | 88.9 | 96.7 | 103.0 | 103.2 | 103.2 | 14.3 | 7.8 |
| 17 | 88.5 | 96.3 | 102.7 | 103.0 | 103.0 | 14.5 | 7.8 |
| 18 | 89.4 | 96.9 | 103.0 | 103.3 | 103.3 | 13.9 | 7.5 |
| 19 | 89.9 | 97.5 | 103.5 | 103.8 | 103.8 | 13.9 | 7.6 |
| 20 | 89.8 | 97.5 | 103.8 | 104.3 | 104.3 | 14.5 | 7.7 |
| 21 | 88.7 | 96.9 | 103.7 | 104.1 | 104.1 | 15.4 | 8.2 |
| 22 | 88.2 | 96.7 | 103.9 | 103.7 | 103.7 | 15.5 | 8.5 |
| 23 | 87.7 | 96.7 | 103.9 | 103.2 | 103.2 | 15.5 | 9.0 |
| 24 | 87.1 | 96.3 | 103.7 | 103.1 | 103.1 | 16.0 | 9.2 |
| 25 | 85.4 | 95.4 | 103.5 | 102.3 | 102.3 | 16.9 | 10.0 |
| 26 | 84.7 | 94.8 | 103.4 | 101.9 | 101.9 | 17.2 | 10.1 |
| 27 | 84.6 | 94.7 | 103.3 | 101.9 | 101.9 | 17.3 | 10.1 |
| 28 | 84.3 | 93.8 | 102.5 | 101.3 | 101.3 | 17.0 | 9.5 |
| 29 | 83.2 | 92.4 | 101.4 | 100.3 | 101.4 | 17.1 | 9.2 |
| 30 | 82.0 | 90.9 | 100.9 | 98.7 | 98.7 | 16.7 | 8.9 |
| 31 | 80.8 | 90.3 | 101.3 | 98.0 | 98.0 | 17.2 | 9.5 |
| 32 | 81.4 | 90.4 | 101.4 | 98.2 | 98.2 | 16.7 | 9.0 |
| 33 | 81.3 | 89.5 | 100.6 | 97.2 | 97.2 | 15.9 | 8.2 |
| 34 | 81.8 | 88.7 | 99.2 | 96.2 | 97.4 | 14.4 | 6.9 |
| 35 | 81.5 | 88.3 | 98.3 | 96.0 | 97.3 | 14.5 | 6.8 |
| O.M. → 36 | 81.6 | 88.4 | 98.5 | 96.2 | 96.2 | 14.6 | 6.8 |
| 37 | 81.0 | 88.0 | 98.5 | 95.9 | 95.9 | 14.9 | 7.0 |
| 38 | 81.0 | 87.7 | 97.5 | 95.5 | 95.5 | 14.5 | 6.7 |
| 39 | 81.3 | 87.4 | 95.3 | 95.2 | 95.2 | 13.9 | 6.1 |
| 40 | 81.5 | 87.0 | 93.3 | 94.8 | 94.8 | 13.3 | 5.5 |
| 41 | 81.0 | 86.0 | 93.4 | 94.1 | 94.1 | 13.1 | 5.0 |
| 42 | 80.8 | 85.5 | 93.7 | 93.3 | 94.5 | 12.5 | 4.7 |
| 43 | 80.5 | 85.3 | 93.3 | 92.8 | 93.8 | 12.3 | 4.8 |
| 44 | 80.3 | 85.1 | 92.0 | 92.3 | 92.3 | 12.0 | 4.8 |
| 45 | 79.6 | 84.2 | 90.6 | 91.7 | 91.7 | 12.1 | 4.6 |

TABLE H-V

VERTOL CH-47 C

OCTOBER 13, 1976

EVENT 25, 141 KT. FLY BY, MIC. 150 METERS EAST

1/2 SECOND INTEGRATION VS NOISE INDEXES
(DB RE 20 MICRO PA)

| INT | DBA | DBD | OASPL | PNL | PNLT | PNL-DBA | DBD-DBA |
|-----------|------|------|-------|-------|-------|---------|---------|
| 1 | 76.3 | 83.1 | 88.4 | 91.3 | 91.3 | 15.0 | 6.8 |
| 2 | 77.0 | 84.3 | 90.2 | 92.2 | 92.2 | 15.2 | 7.3 |
| 3 | 79.1 | 86.7 | 92.7 | 94.3 | 94.3 | 15.2 | 7.6 |
| 4 | 80.6 | 88.5 | 95.0 | 96.3 | 96.3 | 15.7 | 7.9 |
| 5 | 81.3 | 89.8 | 96.9 | 97.3 | 97.3 | 16.0 | 8.5 |
| 6 | 81.2 | 90.3 | 98.3 | 97.8 | 97.8 | 16.6 | 9.1 |
| 7 | 82.2 | 91.2 | 99.8 | 99.8 | 99.8 | 17.6 | 9.0 |
| 8 | 87.1 | 93.4 | 100.9 | 101.7 | 101.7 | 14.6 | 6.3 |
| 9 | 89.7 | 95.3 | 102.2 | 103.2 | 103.2 | 13.5 | 5.6 |
| 10 | 91.2 | 97.7 | 103.6 | 104.8 | 104.8 | 13.6 | 6.5 |
| 11 | 91.4 | 98.8 | 104.8 | 105.5 | 105.5 | 14.1 | 7.4 |
| 12 | 91.1 | 99.4 | 105.4 | 105.5 | 105.5 | 14.4 | 8.3 |
| 13 | 91.0 | 99.3 | 105.4 | 105.4 | 105.4 | 14.4 | 8.3 |
| 14 | 90.6 | 98.7 | 104.9 | 105.4 | 105.4 | 14.8 | 8.1 |
| 15 | 90.1 | 98.0 | 104.6 | 105.1 | 105.1 | 15.0 | 7.9 |
| 16 | 88.7 | 97.3 | 104.4 | 104.5 | 105.5 | 15.8 | 8.6 |
| 17 | 88.0 | 97.2 | 104.6 | 104.1 | 105.8 | 16.1 | 9.2 |
| 18 | 87.2 | 96.7 | 104.5 | 103.6 | 103.6 | 16.4 | 9.5 |
| 19 | 87.1 | 96.5 | 104.5 | 103.3 | 103.3 | 16.2 | 9.4 |
| 20 | 86.6 | 95.9 | 104.2 | 103.3 | 103.3 | 16.7 | 9.3 |
| 21 | 86.2 | 95.6 | 103.8 | 102.8 | 102.8 | 16.6 | 9.4 |
| 22 | 84.9 | 94.6 | 103.0 | 101.9 | 101.9 | 17.0 | 9.7 |
| 23 | 83.5 | 93.1 | 101.8 | 100.7 | 100.7 | 17.2 | 9.6 |
| 24 | 82.9 | 91.6 | 101.3 | 99.5 | 99.5 | 16.6 | 8.7 |
| 25 | 82.6 | 90.7 | 101.4 | 98.9 | 99.9 | 16.3 | 8.1 |
| 26 | 82.8 | 90.7 | 101.7 | 99.2 | 100.2 | 16.4 | 7.9 |
| 27 | 82.1 | 90.0 | 101.1 | 98.3 | 99.4 | 16.2 | 7.9 |
| 28 | 81.6 | 88.9 | 99.9 | 96.9 | 96.9 | 15.3 | 7.3 |
| 29 | 80.9 | 87.9 | 98.8 | 95.5 | 95.5 | 14.6 | 7.0 |
| O.H. → 30 | 80.8 | 87.7 | 98.8 | 94.9 | 94.9 | 14.1 | 6.9 |
| 31 | 81.3 | 87.9 | 98.9 | 95.1 | 95.1 | 13.8 | 6.6 |
| 32 | 81.5 | 87.7 | 97.9 | 95.0 | 95.0 | 13.5 | 6.2 |

TABLE H-7

NOISE LEVEL TIME HISTORY DATA

VERTOL CH-47 C

OCTOBER 13, 1976

EVENT 26, 141 KT. FLY BY, MIC. 150 METERS EAST

1/2 SECOND INTEGRATION VS NOISE INDEXES
(DB RE 20 MICRO PA)

| INT | DBA | DBD | OASPL | PNL | PNLT | PNL-DBA | DBD-DBA |
|-----------|------|-------|-------|-------|-------|---------|---------|
| 1 | 76.5 | 85.4 | 92.5 | 95.7 | 95.7 | 19.2 | 8.9 |
| 2 | 77.1 | 86.2 | 93.6 | 96.1 | 96.1 | 19.0 | 9.1 |
| 3 | 78.4 | 87.7 | 95.3 | 97.3 | 97.3 | 18.9 | 9.3 |
| 4 | 80.6 | 89.9 | 97.2 | 98.7 | 98.7 | 18.1 | 9.3 |
| 5 | 86.2 | 94.2 | 100.5 | 102.3 | 102.3 | 16.1 | 8.0 |
| 6 | 89.2 | 96.8 | 103.1 | 105.2 | 105.2 | 16.0 | 7.6 |
| 7 | 91.7 | 98.8 | 105.1 | 107.0 | 107.0 | 15.3 | 7.1 |
| 8 | 93.1 | 99.9 | 106.2 | 108.1 | 108.1 | 15.0 | 6.8 |
| 9 | 92.9 | 100.0 | 106.4 | 107.9 | 107.9 | 15.0 | 7.1 |
| 10 | 92.4 | 99.9 | 106.4 | 108.0 | 108.0 | 15.6 | 7.5 |
| 11 | 91.5 | 99.9 | 106.6 | 107.8 | 107.8 | 16.3 | 8.4 |
| 12 | 91.1 | 99.7 | 106.7 | 107.6 | 107.6 | 16.5 | 8.6 |
| 13 | 90.1 | 98.6 | 106.1 | 107.1 | 107.1 | 17.0 | 8.5 |
| 14 | 89.5 | 97.0 | 105.0 | 106.2 | 106.2 | 16.7 | 7.5 |
| 15 | 89.0 | 96.2 | 104.2 | 105.6 | 105.6 | 16.6 | 7.2 |
| 16 | 88.4 | 96.2 | 103.9 | 105.3 | 105.3 | 16.9 | 7.8 |
| 17 | 87.9 | 96.2 | 104.2 | 105.3 | 106.4 | 17.4 | 8.3 |
| 18 | 87.4 | 95.6 | 103.9 | 104.7 | 104.7 | 17.3 | 8.2 |
| 19 | 86.8 | 95.0 | 103.8 | 103.8 | 103.8 | 17.0 | 8.2 |
| 20 | 85.8 | 94.5 | 103.4 | 103.6 | 103.6 | 17.8 | 8.7 |
| 21 | 85.8 | 94.7 | 103.3 | 103.5 | 103.5 | 17.7 | 8.9 |
| 22 | 84.7 | 93.7 | 102.5 | 102.8 | 102.8 | 18.1 | 9.0 |
| 23 | 83.6 | 92.5 | 102.0 | 101.3 | 101.3 | 17.7 | 8.9 |
| 24 | 82.6 | 91.4 | 101.9 | 100.5 | 101.5 | 17.9 | 8.8 |
| 25 | 83.3 | 91.5 | 101.9 | 100.5 | 100.5 | 17.2 | 8.2 |
| 26 | 83.2 | 90.9 | 101.7 | 99.7 | 99.7 | 16.5 | 7.7 |
| 27 | 82.8 | 89.7 | 100.7 | 98.4 | 98.4 | 15.6 | 6.9 |
| 28 | 81.9 | 88.8 | 99.9 | 97.1 | 97.1 | 15.2 | 6.9 |
| O.H. → 29 | 81.6 | 88.5 | 99.7 | 96.6 | 96.6 | 15.0 | 6.9 |
| 30 | 81.7 | 88.5 | 99.4 | 96.7 | 96.7 | 15.0 | 6.8 |

TABLE H-V

NOISE LEVEL TIME HISTORY DATA

VERTOL CH-47 C

OCTOBER 13, 1976

EVENT 27, 141 KT. FLY BY, MIC. 150 METERS EAST

1/2 SECOND INTEGRATION VS NOISE INDEXES
(DB RE 20 MICRO PA)

| INT | DBA | DBD | OASPL | PNL | PNLT | PNL-DBA | DBD-DBA |
|-----------|------|-------|-------|-------|-------|---------|---------|
| 1 | 79.6 | 86.7 | 91.6 | 96.0 | 96.0 | 16.4 | 7.1 |
| 2 | 81.7 | 89.5 | 93.7 | 97.9 | 99.0 | 16.2 | 7.2 |
| 3 | 84.3 | 91.9 | 95.8 | 99.5 | 99.5 | 15.2 | 7.6 |
| 4 | 85.4 | 93.1 | 97.9 | 101.1 | 101.1 | 15.7 | 7.7 |
| 5 | 86.5 | 94.2 | 99.9 | 102.0 | 102.0 | 15.5 | 7.7 |
| 6 | 87.0 | 95.3 | 102.2 | 103.7 | 103.7 | 16.7 | 8.3 |
| 7 | 88.6 | 97.2 | 104.1 | 105.6 | 105.6 | 17.0 | 8.6 |
| 8 | 92.9 | 100.1 | 106.0 | 107.7 | 107.7 | 14.8 | 7.2 |
| 9 | 95.4 | 101.7 | 107.4 | 110.2 | 110.2 | 14.8 | 6.3 |
| 10 | 95.6 | 102.0 | 107.9 | 110.6 | 110.6 | 15.0 | 6.4 |
| 11 | 94.3 | 101.2 | 107.6 | 110.0 | 110.0 | 15.7 | 6.9 |
| 12 | 92.7 | 100.4 | 107.0 | 108.8 | 108.8 | 16.1 | 7.7 |
| 13 | 92.5 | 100.0 | 106.7 | 108.4 | 108.4 | 15.9 | 7.5 |
| 14 | 92.1 | 99.5 | 106.4 | 108.2 | 108.2 | 16.1 | 7.4 |
| 15 | 92.2 | 99.8 | 106.6 | 108.6 | 108.6 | 16.4 | 7.6 |
| 16 | 92.8 | 99.9 | 106.6 | 108.8 | 108.8 | 16.0 | 7.1 |
| 17 | 92.3 | 99.5 | 106.5 | 108.1 | 108.1 | 15.8 | 7.2 |
| 18 | 90.8 | 98.1 | 105.8 | 106.9 | 106.9 | 16.1 | 7.3 |
| 19 | 88.0 | 96.2 | 104.5 | 105.4 | 105.4 | 17.4 | 8.2 |
| 20 | 87.2 | 94.8 | 103.3 | 104.2 | 104.2 | 17.0 | 7.6 |
| 21 | 86.3 | 94.1 | 103.5 | 102.7 | 102.7 | 16.4 | 7.8 |
| 22 | 86.0 | 93.9 | 103.7 | 102.8 | 102.8 | 16.8 | 7.9 |
| 23 | 85.7 | 93.5 | 103.5 | 102.2 | 102.2 | 16.5 | 7.8 |
| 24 | 85.0 | 91.7 | 102.1 | 100.5 | 100.5 | 15.5 | 6.7 |
| 25 | 84.2 | 90.3 | 100.8 | 98.9 | 98.9 | 14.7 | 6.1 |
| 26 | 83.1 | 89.5 | 100.0 | 97.6 | 97.6 | 14.5 | 6.4 |
| O.H. → 27 | 82.5 | 89.5 | 100.3 | 97.7 | 97.7 | 15.2 | 7.0 |

TABLE H-V

NOISE LEVEL TIME HISTORY DATA

VERTOL CH-47 C

OCTOBER 13, 1975

EVENT 28, 150 KT. FLY BY, MIC. 150 METERS EAST

1/2 SECOND INTEGRATION VS NOISE INDEXES
(DB RE 20 MICRO PA)

| INT | DBA | DBD | OASPL | PNL | PNLI | PNL-DBA | DBD-DBA |
|-----|------|-------|-------|-------|-------|---------|---------|
| 1 | 80.0 | 89.4 | 96.5 | 98.2 | 98.2 | 18.2 | 9.4 |
| 2 | 83.8 | 92.6 | 99.0 | 100.6 | 100.6 | 16.8 | 8.8 |
| 3 | 86.7 | 94.8 | 101.9 | 103.0 | 103.0 | 16.3 | 8.1 |
| 4 | 88.1 | 96.2 | 103.9 | 105.0 | 105.0 | 16.9 | 8.1 |
| 5 | 89.7 | 98.0 | 105.4 | 106.6 | 106.6 | 16.9 | 8.3 |
| 6 | 92.8 | 100.4 | 107.0 | 109.1 | 109.1 | 16.3 | 7.6 |
| 7 | 97.8 | 104.1 | 108.9 | 111.8 | 112.4 | 14.0 | 6.3 |
| 8 | 99.0 | 105.4 | 109.9 | 112.9 | 113.5 | 13.9 | 6.4 |
| 9 | 99.5 | 105.8 | 110.3 | 113.3 | 114.5 | 13.8 | 6.3 |
| 10 | 97.6 | 104.6 | 109.9 | 112.6 | 112.6 | 15.0 | 7.0 |
| 11 | 96.3 | 103.5 | 109.1 | 111.6 | 111.6 | 15.3 | 7.2 |
| 12 | 94.5 | 102.1 | 108.3 | 110.3 | 110.3 | 15.8 | 7.6 |
| 13 | 93.8 | 101.1 | 107.7 | 109.4 | 109.4 | 15.6 | 7.3 |
| 14 | 92.8 | 100.0 | 107.2 | 108.8 | 108.8 | 16.0 | 7.2 |
| 15 | 91.1 | 98.7 | 106.1 | 107.4 | 108.7 | 16.3 | 7.6 |
| 16 | 89.8 | 96.9 | 105.0 | 105.7 | 105.7 | 15.9 | 7.1 |
| 17 | 88.8 | 96.2 | 105.1 | 104.4 | 104.4 | 15.6 | 7.4 |
| 18 | 88.1 | 95.7 | 105.1 | 104.1 | 104.1 | 16.0 | 7.6 |
| 19 | 87.3 | 95.1 | 104.8 | 103.5 | 103.5 | 16.2 | 7.8 |
| 20 | 86.1 | 93.1 | 103.2 | 101.8 | 101.8 | 15.7 | 7.0 |

O.M. → 22

TABLE H-V

NOISE LEVEL TIME HISTORY DATA

VERTOL CH-47 C

OCTOBER 13, 1976

EVENT 24, 141 KT. FLY BY, CENTERLINE MIC. (HARD SITE)

1/2 SECOND INTEGRATION VS NOISE INDEXES
(DB RE 20 MICRO PA)

| INT | DBA | DBD | GASPL | PNL | PNLT | PNL-DBA | DBD-DBA |
|-----------|------|------|-------|-------|-------|---------|---------|
| 1 | 73.1 | 82.9 | 87.9 | 93.0 | 93.0 | 19.9 | 9.8 |
| 3 | 74.3 | 84.1 | 90.0 | 93.5 | 93.5 | 19.2 | 9.8 |
| 5 | 75.6 | 85.0 | 92.1 | 94.3 | 94.3 | 18.7 | 9.4 |
| 7 | 78.2 | 87.6 | 94.6 | 96.2 | 96.2 | 18.0 | 9.4 |
| 9 | 82.7 | 91.1 | 98.0 | 99.7 | 99.7 | 17.0 | 8.4 |
| 11 | 88.5 | 96.6 | 102.0 | 103.8 | 103.8 | 15.3 | 8.1 |
| 13 | 90.7 | 98.7 | 104.3 | 105.8 | 105.8 | 15.1 | 8.0 |
| 14 | 90.6 | 98.8 | 104.7 | 106.0 | 106.0 | 15.4 | 8.2 |
| 16 | 90.2 | 98.4 | 104.5 | 105.7 | 105.7 | 15.5 | 8.2 |
| 18 | 88.6 | 97.0 | 103.7 | 105.0 | 105.0 | 16.4 | 8.4 |
| 20 | 86.7 | 94.6 | 102.3 | 103.3 | 103.3 | 16.6 | 7.9 |
| 22 | 85.8 | 93.2 | 101.3 | 102.3 | 102.3 | 16.5 | 7.4 |
| 24 | 85.6 | 92.9 | 101.6 | 102.1 | 102.1 | 16.5 | 7.3 |
| 26 | 87.6 | 96.4 | 103.9 | 103.8 | 103.8 | 16.2 | 8.8 |
| 28 | 88.5 | 98.2 | 105.5 | 105.0 | 105.0 | 16.5 | 9.7 |
| 30 | 88.8 | 98.7 | 106.3 | 105.5 | 105.5 | 16.7 | 9.9 |
| 32 | 87.5 | 97.3 | 105.6 | 104.7 | 104.7 | 17.2 | 9.8 |
| 34 | 84.9 | 94.8 | 104.2 | 103.2 | 104.4 | 18.3 | 9.9 |
| 36 | 84.5 | 94.2 | 103.7 | 102.1 | 102.1 | 17.6 | 9.7 |
| 38 | 87.9 | 96.0 | 103.2 | 103.4 | 103.4 | 15.5 | 8.1 |
| D.H. → 40 | 89.0 | 96.7 | 102.6 | 104.0 | 104.0 | 15.0 | 7.7 |
| 42 | 88.2 | 96.2 | 102.5 | 103.9 | 103.9 | 15.7 | 8.0 |
| 44 | 86.8 | 93.8 | 99.8 | 102.2 | 102.2 | 15.4 | 7.0 |
| 46 | 85.0 | 91.0 | 96.7 | 98.9 | 98.9 | 13.9 | 6.0 |
| 48 | 80.7 | 86.9 | 92.5 | 95.2 | 95.2 | 14.5 | 6.2 |
| 50 | 78.4 | 84.6 | 89.7 | 93.6 | 93.6 | 15.2 | 6.2 |
| 52 | 75.4 | 82.8 | 87.2 | 92.5 | 92.5 | 17.1 | 7.4 |
| 54 | 74.4 | 81.9 | 84.8 | 91.9 | 91.9 | 17.5 | 7.5 |

TABLE H-II

NOISE LEVEL TIME HISTORY DATA

VERTOL CH-47 C

OCTOBER 13, 1976

EVENT 29, 150 KT. FLY BY, MIC. 150 METERS EAST

1/2 SECOND INTEGRATION VS NOISE INDEXES
(DB RE 20 MICRO PA)

| INT | DBA | DBD | OASPL | PNL | PNLT | PNL-DBA | DBD-DBA |
|-----------|------|-------|-------|-------|-------|---------|---------|
| 2 | 80.8 | 89.9 | 95.7 | 98.1 | 98.1 | 17.3 | 9.1 |
| 3 | 82.4 | 91.5 | 97.7 | 99.8 | 99.8 | 17.4 | 9.1 |
| 4 | 83.7 | 92.6 | 99.5 | 101.1 | 101.1 | 17.4 | 8.9 |
| 5 | 86.8 | 95.0 | 102.5 | 104.2 | 104.2 | 17.4 | 8.2 |
| 6 | 95.0 | 102.0 | 106.0 | 109.7 | 109.7 | 14.7 | 7.0 |
| 7 | 98.2 | 104.6 | 108.2 | 111.7 | 111.7 | 13.5 | 6.4 |
| 8 | 98.7 | 105.4 | 109.3 | 112.6 | 112.6 | 13.9 | 6.7 |
| 9 | 98.5 | 105.1 | 109.9 | 112.5 | 112.5 | 14.0 | 6.6 |
| 10 | 97.5 | 104.6 | 109.9 | 112.5 | 112.5 | 15.0 | 7.1 |
| 11 | 96.9 | 104.1 | 109.5 | 112.0 | 112.0 | 15.1 | 7.2 |
| 12 | 95.6 | 103.2 | 109.2 | 111.2 | 111.2 | 15.6 | 7.6 |
| 13 | 95.1 | 102.4 | 108.9 | 110.6 | 110.6 | 15.5 | 7.3 |
| 14 | 94.9 | 101.8 | 108.5 | 110.3 | 110.3 | 15.4 | 6.9 |
| 15 | 94.9 | 101.4 | 108.1 | 109.8 | 109.8 | 14.9 | 6.5 |
| 16 | 93.6 | 100.1 | 107.1 | 109.0 | 109.0 | 15.4 | 6.5 |
| 17 | 91.8 | 98.6 | 106.2 | 107.6 | 107.6 | 15.8 | 6.8 |
| 18 | 87.6 | 95.8 | 104.7 | 104.6 | 104.6 | 17.0 | 8.2 |
| 19 | 86.5 | 94.2 | 104.0 | 102.9 | 102.9 | 16.4 | 7.7 |
| 20 | 86.7 | 93.5 | 103.5 | 102.0 | 102.0 | 15.3 | 6.8 |
| 21 | 86.6 | 93.0 | 103.0 | 101.6 | 101.6 | 15.0 | 6.4 |
| 22 | 85.2 | 91.9 | 102.6 | 99.9 | 99.9 | 14.7 | 6.7 |
| o.H. → 23 | | | | | | | |

TABLE H-V

NOISE LEVEL TIME HISTORY DATA

VERTOL CH-47 C

OCTOBER 13, 1976

EVENT 25, 141 KT. FLY BY, CENTERLINE MIC. (HARD SITE)

1/2 SECOND INTEGRATION VS NOISE INDEXES
(DB RE 20 MICRO PA)

| INT | DBA | DBD | OASPL | PNL | PNLT | PNL-DBA | DBD-DBA |
|----------|------|-------|-------|-------|-------|---------|---------|
| 1 | 76.5 | 85.5 | 91.1 | 94.5 | 94.5 | 18.0 | 9.0 |
| 2 | 78.1 | 87.1 | 93.1 | 95.9 | 95.9 | 17.8 | 9.0 |
| 3 | 79.6 | 89.4 | 95.4 | 97.5 | 97.5 | 17.9 | 9.8 |
| 4 | 80.7 | 91.1 | 97.4 | 98.8 | 98.8 | 18.1 | 10.4 |
| 5 | 82.4 | 92.9 | 99.3 | 100.3 | 100.3 | 17.9 | 10.5 |
| 6 | 84.7 | 95.2 | 101.4 | 102.4 | 102.4 | 17.7 | 10.5 |
| 7 | 87.3 | 97.4 | 103.4 | 104.6 | 104.6 | 17.3 | 10.1 |
| 8 | 89.4 | 99.2 | 105.2 | 106.3 | 106.3 | 16.9 | 9.8 |
| 9 | 91.3 | 100.7 | 106.5 | 107.6 | 107.6 | 16.3 | 9.4 |
| 10 | 93.4 | 102.2 | 107.6 | 108.7 | 108.7 | 15.3 | 8.8 |
| 11 | 94.4 | 103.1 | 108.3 | 109.2 | 109.2 | 14.8 | 8.7 |
| 12 | 94.3 | 102.8 | 108.1 | 109.0 | 109.0 | 14.7 | 8.5 |
| 13 | 93.1 | 101.8 | 107.2 | 108.3 | 108.3 | 15.2 | 8.7 |
| 14 | 91.5 | 100.1 | 105.9 | 107.3 | 107.3 | 15.8 | 8.6 |
| 15 | 90.6 | 99.1 | 105.2 | 106.4 | 106.4 | 15.8 | 8.5 |
| 16 | 89.7 | 98.2 | 104.7 | 105.6 | 105.6 | 15.9 | 8.5 |
| 17 | 89.1 | 97.7 | 104.5 | 105.2 | 105.2 | 16.1 | 8.6 |
| 18 | 88.3 | 97.0 | 104.2 | 104.6 | 104.6 | 16.3 | 8.7 |
| 19 | 87.7 | 96.4 | 103.8 | 104.2 | 104.2 | 16.5 | 8.7 |
| 20 | 87.2 | 95.7 | 103.5 | 103.7 | 103.7 | 16.5 | 8.5 |
| 21 | 87.0 | 95.3 | 103.7 | 103.5 | 103.5 | 16.5 | 8.3 |
| 22 | 87.2 | 95.3 | 104.2 | 103.9 | 103.9 | 16.7 | 8.6 |
| 23 | 87.7 | 96.8 | 105.0 | 104.5 | 104.5 | 16.8 | 9.1 |
| 24 | 87.9 | 97.6 | 105.7 | 105.0 | 105.0 | 17.1 | 9.7 |
| 25 | 87.4 | 97.6 | 105.9 | 104.9 | 104.9 | 17.5 | 10.2 |
| 26 | 86.4 | 97.2 | 105.9 | 104.5 | 104.5 | 18.1 | 10.8 |
| 27 | 85.3 | 96.3 | 105.5 | 104.1 | 104.1 | 18.8 | 11.0 |
| 28 | 84.4 | 95.4 | 105.1 | 103.6 | 103.6 | 19.2 | 11.0 |
| 29 | 84.0 | 94.5 | 104.3 | 102.9 | 102.9 | 18.9 | 10.5 |
| 30 | 85.4 | 94.7 | 103.9 | 102.3 | 102.3 | 16.9 | 9.3 |
| 31 | 86.5 | 95.1 | 103.5 | 102.3 | 102.3 | 15.8 | 8.6 |
| OH. → 32 | 87.7 | 95.9 | 102.9 | 103.1 | 103.1 | 15.4 | 8.2 |
| 33 | 87.8 | 95.7 | 102.1 | 103.3 | 103.3 | 15.5 | 7.9 |
| 34 | 87.7 | 95.4 | 101.9 | 103.1 | 103.1 | 15.4 | 7.7 |
| 35 | 87.0 | 94.8 | 101.5 | 103.1 | 103.1 | 16.1 | 7.8 |
| 36 | 87.0 | 94.7 | 101.0 | 102.9 | 102.9 | 15.9 | 7.7 |
| 37 | 87.1 | 94.4 | 100.2 | 102.7 | 102.7 | 15.6 | 7.3 |
| 38 | 86.8 | 93.5 | 99.4 | 101.8 | 101.8 | 15.0 | 6.7 |
| 39 | 85.6 | 91.9 | 98.1 | 99.9 | 99.9 | 14.3 | 6.3 |
| 40 | 83.7 | 89.3 | 95.8 | 97.9 | 97.9 | 14.2 | 6.1 |
| 41 | 81.9 | 88.2 | 94.0 | 96.5 | 96.5 | 14.6 | 6.3 |
| 42 | 80.2 | 86.8 | 92.5 | 95.3 | 95.3 | 15.1 | 6.6 |

TABLE H-V

NOISE LEVEL TIME HISTORY DATA

VERTOL CH-47 C

OCTOBER 13, 1976

EVENT 26, 141 KT. FLY BY, CENTERLINE MIC. (HARD SITE)

1/2 SECOND INTEGRATION VS NOISE INDEXES
(DB RE 20 MICRO PA)

| INT | DBA | DBD | OASPL | PNL | PNLT | PNL-DBA | DBD-DBA |
|-----------|------|-------|-------|-------|-------|---------|---------|
| 1 | 76.1 | 85.2 | 91.4 | 94.2 | 94.2 | 18.1 | 9.1 |
| 2 | 77.0 | 85.7 | 92.3 | 94.6 | 94.6 | 17.6 | 8.7 |
| 3 | 78.2 | 86.7 | 93.8 | 95.7 | 95.7 | 17.5 | 8.5 |
| 4 | 79.7 | 88.2 | 95.9 | 97.2 | 97.2 | 17.5 | 8.5 |
| 5 | 82.5 | 91.8 | 98.9 | 99.9 | 99.9 | 17.4 | 9.3 |
| 6 | 86.6 | 95.7 | 102.0 | 103.3 | 103.3 | 16.7 | 9.1 |
| 7 | 90.6 | 99.2 | 104.5 | 105.9 | 105.9 | 15.3 | 8.6 |
| 8 | 92.6 | 100.8 | 105.7 | 107.5 | 107.5 | 14.9 | 8.2 |
| 9 | 92.5 | 100.5 | 105.5 | 107.3 | 107.3 | 14.8 | 8.0 |
| 10 | 90.7 | 98.5 | 104.1 | 105.7 | 105.7 | 15.0 | 7.8 |
| 11 | 87.6 | 95.5 | 102.3 | 103.7 | 103.7 | 16.1 | 7.9 |
| 12 | 86.6 | 94.5 | 101.8 | 102.9 | 102.9 | 16.3 | 7.9 |
| 13 | 86.4 | 94.5 | 101.8 | 102.7 | 102.7 | 16.3 | 8.1 |
| 14 | 85.8 | 94.1 | 101.7 | 102.6 | 102.6 | 16.8 | 8.3 |
| 15 | 85.7 | 94.1 | 101.9 | 102.7 | 102.7 | 17.0 | 8.4 |
| 16 | 87.3 | 95.5 | 102.9 | 103.7 | 103.7 | 16.4 | 8.2 |
| 17 | 88.6 | 96.7 | 103.7 | 104.7 | 104.7 | 16.1 | 8.1 |
| 18 | 89.5 | 97.8 | 104.5 | 105.6 | 105.6 | 16.1 | 8.3 |
| 19 | 90.0 | 98.7 | 105.5 | 106.6 | 106.6 | 16.6 | 8.7 |
| 20 | 90.3 | 99.2 | 106.3 | 107.0 | 108.1 | 16.7 | 8.9 |
| 21 | 89.6 | 98.6 | 106.1 | 106.4 | 106.4 | 16.8 | 9.0 |
| 22 | 88.2 | 97.0 | 105.1 | 105.0 | 105.0 | 16.8 | 8.8 |
| 23 | 86.9 | 95.8 | 104.5 | 104.0 | 104.0 | 17.1 | 8.9 |
| 24 | 87.5 | 96.2 | 104.7 | 104.1 | 104.1 | 16.6 | 8.7 |
| 25 | 87.5 | 96.4 | 104.8 | 104.3 | 104.3 | 16.8 | 8.9 |
| 26 | 86.9 | 96.0 | 104.4 | 103.9 | 103.9 | 17.0 | 9.1 |
| 27 | 85.1 | 95.3 | 103.8 | 103.1 | 103.1 | 17.0 | 9.2 |
| 28 | 87.5 | 95.9 | 103.5 | 103.3 | 103.3 | 15.8 | 8.4 |
| 29 | 88.3 | 96.0 | 103.5 | 103.4 | 103.4 | 15.1 | 7.7 |
| 30 | 88.9 | 96.6 | 103.3 | 104.0 | 104.0 | 15.1 | 7.7 |
| 31 | 88.7 | 96.6 | 102.9 | 103.8 | 103.8 | 15.1 | 7.9 |
| O.N. → 32 | 88.2 | 96.1 | 102.4 | 103.6 | 103.6 | 15.4 | 7.9 |
| 33 | 87.2 | 95.2 | 101.7 | 103.2 | 103.2 | 16.0 | 8.0 |
| 34 | 86.4 | 93.9 | 100.8 | 102.4 | 102.4 | 16.0 | 7.5 |
| 35 | 86.3 | 93.3 | 99.7 | 101.9 | 101.9 | 15.6 | 7.0 |
| 36 | 86.1 | 92.3 | 98.5 | 100.7 | 100.7 | 14.6 | 6.2 |
| 37 | 85.3 | 91.2 | 97.2 | 99.1 | 99.1 | 13.8 | 5.9 |
| 38 | 84.1 | 89.6 | 95.6 | 97.7 | 97.7 | 13.6 | 5.5 |
| 39 | 82.0 | 87.9 | 94.1 | 96.3 | 96.3 | 14.3 | 5.9 |
| 40 | 80.0 | 86.2 | 92.2 | 94.8 | 94.8 | 14.8 | 6.2 |
| 41 | 77.9 | 84.7 | 90.6 | 93.7 | 93.7 | 15.8 | 6.8 |

TABLE H-V

NOISE LEVEL TIME HISTORY DATA

VERTOL CH-47 C

OCTOBER 13, 1976

EVENT 27, 141 KT. FLY BY, CENTERLINE MIC. (HARD SITE)

1/2 SECOND INTEGRATION VS NOISE INDEXES
(DB RE 20 MICRO PA)

| INT | DBA | DBD | OASPL | PNL | PNLI | PNL-DBA | DBD-DBA |
|-----------|------|-------|-------|-------|-------|---------|---------|
| 1 | 78.1 | 86.3 | 94.4 | 95.6 | 95.6 | 17.5 | 8.2 |
| 2 | 78.0 | 87.0 | 96.1 | 96.7 | 96.7 | 18.7 | 9.0 |
| 3 | 79.1 | 88.9 | 97.8 | 98.2 | 98.2 | 19.1 | 9.8 |
| 4 | 82.2 | 92.1 | 100.4 | 100.5 | 100.5 | 18.3 | 9.9 |
| 5 | 89.2 | 97.6 | 103.9 | 104.9 | 104.9 | 15.7 | 8.4 |
| 6 | 93.1 | 101.2 | 106.3 | 107.7 | 107.7 | 14.6 | 8.1 |
| 7 | 94.7 | 102.7 | 107.7 | 109.1 | 109.1 | 14.4 | 8.0 |
| 8 | 95.2 | 103.1 | 108.0 | 109.7 | 109.7 | 14.5 | 7.9 |
| 9 | 94.9 | 102.4 | 107.7 | 109.6 | 109.6 | 14.7 | 7.5 |
| 10 | 94.2 | 101.8 | 107.5 | 109.2 | 109.2 | 15.0 | 7.6 |
| 11 | 94.3 | 102.0 | 108.0 | 110.0 | 110.0 | 15.7 | 7.7 |
| 12 | 94.2 | 102.6 | 108.7 | 110.2 | 110.2 | 16.0 | 8.4 |
| 13 | 94.5 | 103.0 | 109.2 | 110.6 | 110.6 | 16.1 | 8.5 |
| 14 | 94.7 | 103.1 | 109.4 | 110.2 | 110.2 | 15.5 | 8.4 |
| 15 | 94.4 | 102.6 | 109.0 | 110.1 | 110.1 | 15.7 | 8.2 |
| 16 | 93.1 | 101.5 | 108.4 | 109.0 | 109.0 | 15.9 | 8.4 |
| 17 | 90.8 | 99.8 | 107.3 | 107.6 | 107.6 | 16.8 | 9.0 |
| 18 | 89.7 | 98.6 | 106.7 | 106.3 | 106.3 | 16.6 | 8.9 |
| 19 | 89.3 | 97.9 | 106.1 | 105.5 | 105.5 | 16.2 | 8.6 |
| 20 | 89.0 | 97.5 | 105.6 | 105.0 | 105.0 | 16.0 | 8.5 |
| 21 | 89.1 | 97.2 | 105.2 | 104.4 | 104.4 | 15.3 | 8.1 |
| 22 | 88.8 | 96.7 | 104.8 | 104.2 | 104.2 | 15.4 | 7.9 |
| 23 | 88.4 | 96.3 | 104.3 | 103.7 | 103.7 | 15.3 | 7.9 |
| 24 | 88.2 | 96.3 | 103.4 | 103.8 | 103.8 | 15.6 | 8.1 |
| 25 | 89.5 | 97.4 | 103.5 | 104.7 | 104.7 | 15.2 | 7.9 |
| 0.H. → 26 | 89.9 | 97.6 | 103.3 | 105.0 | 105.0 | 15.1 | 7.7 |
| 27 | 89.5 | 97.2 | 103.2 | 104.9 | 104.9 | 15.4 | 7.7 |
| 28 | 88.5 | 96.1 | 102.2 | 104.2 | 104.2 | 15.7 | 7.6 |
| 29 | 88.3 | 95.5 | 101.5 | 103.7 | 103.7 | 15.4 | 7.2 |
| 30 | 87.3 | 94.0 | 100.2 | 102.3 | 102.3 | 15.0 | 6.7 |
| 31 | 85.6 | 91.8 | 98.2 | 100.1 | 100.1 | 14.5 | 6.2 |
| 32 | 82.7 | 88.7 | 95.2 | 97.0 | 97.0 | 14.3 | 6.0 |
| 33 | 81.1 | 87.2 | 93.0 | 95.6 | 95.6 | 14.5 | 6.1 |
| 34 | 79.3 | 85.7 | 90.9 | 94.2 | 94.2 | 14.9 | 6.4 |

TABLE H-V

NOISE LEVEL TIME HISTORY DATA

VERTOL CH-47 C

OCTOBER 13, 1976

EVENT 12, 6 DEGREE APPROACH, CENTERLINE MIC. (SOFT SIDE)

1/2 SECOND INTEGRATION VS NOISE INDEXES
(DB RE 20 MICRO PA)

| INT | DBA | DBD | OASPL | PNL | PNLT | PNL-DBA | DBD-DBA |
|-----------|------|-------|-------|-------|-------|---------|---------|
| 1 | 78.6 | 86.1 | 92.9 | 95.7 | 95.7 | 17.1 | 7.5 |
| 3 | 78.5 | 86.4 | 93.2 | 95.8 | 95.8 | 17.3 | 7.9 |
| 5 | 79.9 | 87.1 | 94.1 | 96.7 | 96.7 | 16.8 | 7.2 |
| 7 | 82.8 | 88.9 | 95.3 | 98.5 | 98.5 | 15.7 | 6.1 |
| 9 | 84.2 | 89.8 | 96.5 | 99.7 | 99.7 | 15.5 | 5.6 |
| 11 | 83.9 | 89.3 | 95.7 | 99.1 | 100.6 | 15.2 | 5.4 |
| 13 | 84.3 | 90.4 | 96.2 | 99.6 | 101.6 | 15.3 | 6.1 |
| 15 | 85.2 | 91.3 | 96.5 | 100.2 | 100.2 | 15.0 | 6.1 |
| 17 | 87.4 | 93.4 | 98.2 | 102.2 | 103.5 | 14.8 | 6.0 |
| 19 | 88.9 | 94.4 | 98.7 | 103.1 | 104.7 | 14.2 | 5.5 |
| 21 | 87.9 | 93.2 | 98.2 | 101.7 | 102.8 | 13.8 | 5.3 |
| 23 | 88.9 | 94.7 | 99.3 | 102.8 | 102.8 | 13.9 | 5.8 |
| 25 | 91.4 | 97.0 | 101.5 | 104.5 | 104.5 | 13.1 | 5.6 |
| 27 | 92.1 | 98.0 | 102.4 | 105.5 | 105.5 | 13.4 | 5.9 |
| 29 | 92.0 | 98.1 | 102.3 | 105.6 | 105.6 | 13.6 | 6.1 |
| 31 | 92.4 | 98.2 | 102.5 | 105.6 | 105.6 | 13.2 | 5.8 |
| 33 | 94.3 | 100.8 | 104.1 | 107.4 | 107.4 | 13.1 | 6.5 |
| O.H. → 35 | 95.8 | 102.3 | 105.5 | 108.6 | 108.6 | 12.8 | 6.5 |
| 37 | 95.2 | 102.0 | 105.6 | 108.1 | 108.1 | 12.9 | 6.8 |
| 39 | 92.7 | 99.6 | 104.0 | 106.2 | 106.2 | 13.5 | 6.9 |
| 41 | 90.9 | 97.5 | 102.2 | 104.7 | 104.7 | 13.8 | 6.6 |
| 43 | 89.1 | 95.1 | 99.6 | 102.6 | 103.9 | 13.5 | 6.0 |
| 45 | 85.7 | 92.0 | 96.9 | 100.4 | 100.4 | 14.7 | 6.3 |
| 47 | 84.1 | 90.2 | 95.8 | 99.0 | 99.0 | 14.9 | 6.1 |
| 49 | 83.2 | 88.9 | 94.4 | 98.0 | 98.0 | 14.8 | 5.7 |
| 51 | 80.8 | 86.9 | 92.5 | 95.8 | 97.0 | 15.0 | 6.1 |
| 53 | 78.2 | 84.6 | 90.7 | 94.0 | 95.1 | 15.8 | 6.4 |
| 55 | 75.5 | 82.4 | 88.3 | .0 | .0 | -75.4 | 6.9 |

TABLE H-V

NOISE LEVEL TIME HISTORY DATA

VERTOL CH-47 C

OCTOBER 13, 1976

EVENT 17, 60 KT. FLY BY, CENTERLINE MIC. (SOFT SITE)

1/2 SECOND INTEGRATION VS NOISE INDEXES
(DB RE 20 MICRO PA)

| INT | DBA | DBD | OASPL | PNL | PNLT | PNL-DBA | DBD-DBA |
|--------------|------|------|-------|-------|-------|---------|---------|
| 1 | 72.9 | 81.4 | 87.6 | 92.7 | 92.7 | 19.8 | 8.5 |
| 3 | 72.4 | 81.3 | 87.8 | 92.7 | 92.7 | 20.3 | 8.9 |
| 5 | 73.2 | 82.0 | 88.4 | 93.1 | 93.1 | 19.9 | 8.8 |
| 7 | 76.9 | 84.4 | 90.5 | 94.6 | 94.6 | 17.7 | 7.5 |
| 9 | 81.8 | 87.4 | 93.2 | 97.3 | 98.4 | 15.5 | 5.6 |
| 11 | 85.2 | 90.5 | 95.3 | 99.9 | 99.9 | 14.7 | 5.3 |
| 13 | 86.9 | 91.9 | 95.6 | 101.1 | 101.1 | 14.2 | 5.0 |
| 15 | 87.2 | 91.6 | 95.4 | 100.8 | 100.8 | 13.6 | 4.4 |
| 17 | 85.5 | 89.5 | 94.4 | 99.1 | 99.1 | 13.6 | 4.0 |
| 19 | 81.1 | 87.1 | 91.9 | 96.3 | 96.3 | 15.2 | 6.0 |
| 21 | 79.2 | 85.0 | 90.2 | 94.8 | 94.8 | 15.6 | 5.8 |
| 23 | 74.2 | 81.9 | 89.0 | 93.2 | 93.2 | 19.0 | 7.7 |
| 25 | 72.9 | 81.6 | 88.6 | 92.8 | 92.8 | 19.9 | 8.7 |
| 27 | 78.9 | 85.1 | 91.0 | 94.5 | 94.5 | 15.6 | 6.2 |
| 29 | 80.5 | 86.0 | 91.9 | 95.8 | 96.8 | 15.3 | 5.5 |
| 31 | 80.4 | 85.1 | 91.0 | 94.9 | 96.2 | 14.5 | 4.7 |
| 33 | 74.7 | 82.3 | 89.3 | 93.4 | 93.4 | 18.7 | 7.6 |
| 35 | 74.3 | 82.1 | 89.9 | 93.1 | 93.1 | 18.8 | 7.8 |
| 37 | 76.0 | 83.8 | 91.2 | 93.7 | 93.7 | 17.7 | 7.8 |
| 39 | 79.6 | 85.7 | 92.1 | 95.6 | 95.6 | 16.0 | 6.1 |
| 41 | 81.9 | 87.1 | 92.3 | 97.2 | 98.8 | 15.3 | 5.2 |
| 43 | 85.2 | 89.6 | 94.2 | 99.3 | 100.4 | 14.1 | 4.4 |
| 45 | 85.8 | 90.2 | 94.6 | 99.5 | 101.1 | 13.7 | 4.4 |
| 47 | 84.9 | 90.0 | 94.3 | 99.0 | 101.1 | 14.1 | 5.1 |
| 49 | 83.9 | 89.7 | 94.4 | 99.0 | 99.0 | 15.1 | 5.8 |
| 51 | 84.5 | 90.8 | 95.5 | 100.1 | 101.6 | 15.6 | 6.3 |
| 53 | 86.2 | 92.4 | 97.0 | 101.2 | 101.2 | 15.0 | 6.2 |
| 55 | 88.2 | 93.7 | 98.3 | 101.8 | 103.6 | 13.6 | 5.5 |
| 57 | 88.7 | 94.8 | 100.1 | 102.8 | 102.8 | 14.1 | 6.1 |
| 59 | 89.4 | 95.7 | 100.8 | 104.1 | 104.1 | 14.7 | 6.3 |
| 61 | 90.0 | 96.0 | 100.2 | 104.0 | 104.0 | 14.0 | 6.0 |
| 63 | 89.3 | 94.9 | 98.7 | 102.6 | 102.6 | 13.3 | 5.6 |
| 65 | 86.3 | 92.7 | 97.4 | 100.4 | 100.4 | 14.1 | 6.4 |
| o.h. 67 → 68 | 84.9 | 91.8 | 96.8 | 100.0 | 100.0 | 15.1 | 6.9 |
| 69 | 85.4 | 92.6 | 97.4 | 100.6 | 100.6 | 15.2 | 7.2 |
| 71 | 85.9 | 92.7 | 97.7 | 100.6 | 100.6 | 14.7 | 6.8 |
| 73 | 86.7 | 93.3 | 98.7 | 100.7 | 100.7 | 14.0 | 6.6 |
| 75 | 87.3 | 93.5 | 99.6 | 100.6 | 100.6 | 13.3 | 6.2 |
| 77 | 84.5 | 90.2 | 97.8 | 98.0 | 99.0 | 13.5 | 5.7 |
| 79 | 81.4 | 87.0 | 93.7 | 95.6 | 97.1 | 14.2 | 5.6 |
| 81 | 79.1 | 84.7 | 89.7 | 94.2 | 96.0 | 15.1 | 5.6 |
| 83 | 77.1 | 83.1 | 88.0 | 92.9 | 94.3 | 15.8 | 6.0 |
| 85 | 75.4 | 81.9 | 87.2 | 92.5 | 92.5 | 17.1 | 6.5 |
| 87 | 74.9 | 81.5 | 86.9 | 92.3 | 92.3 | 17.4 | 6.6 |
| 89 | 73.7 | 80.8 | 86.6 | 91.9 | 91.9 | 18.2 | 7.1 |

TABLE H-V

NOISE LEVEL TIME HISTORY DATA

VERTOL CH-47 C

OCTOBER 13, 1976

EVENT 20, 9 DEGREE APPROACH, CENTERLINE MIC. (SOFT SITE)

1/2 SECOND INTEGRATION VS NOISE INDEXES
(DB RE 20 MICRO PA)

| INT | DBA | DBD | OASPL | PNL | PNLT | PNL-DBA | DBD-DBA |
|-----------|------|-------|-------|-------|-------|---------|---------|
| 1 | 78.3 | 84.6 | 91.2 | 94.7 | 94.7 | 16.4 | 6.3 |
| 3 | 78.2 | 85.0 | 91.9 | 95.1 | 95.1 | 16.9 | 6.8 |
| 5 | 80.0 | 85.3 | 92.7 | 95.9 | 95.9 | 15.9 | 5.8 |
| 7 | 81.6 | 87.0 | 93.6 | 97.1 | 98.1 | 15.5 | 5.4 |
| 9 | 82.7 | 88.2 | 94.5 | 98.2 | 99.9 | 15.5 | 5.5 |
| 11 | 83.5 | 88.6 | 94.6 | 98.4 | 100.0 | 14.9 | 5.1 |
| 13 | 85.1 | 89.9 | 95.0 | 99.1 | 99.1 | 14.0 | 4.8 |
| 15 | 85.2 | 90.2 | 95.6 | 99.0 | 99.0 | 13.8 | 5.0 |
| 17 | 86.6 | 91.9 | 97.0 | 100.3 | 101.8 | 13.7 | 5.3 |
| 19 | 86.6 | 92.2 | 97.3 | 100.4 | 101.5 | 13.8 | 5.6 |
| 21 | 86.3 | 91.9 | 97.5 | 100.7 | 100.7 | 14.4 | 5.6 |
| 23 | 87.1 | 93.0 | 98.7 | 101.6 | 102.7 | 14.5 | 5.9 |
| 25 | 88.4 | 94.5 | 99.4 | 102.5 | 103.5 | 14.1 | 6.1 |
| 27 | 88.9 | 95.4 | 100.1 | 102.9 | 102.9 | 14.0 | 6.5 |
| 29 | 89.8 | 96.3 | 101.0 | 103.3 | 104.4 | 13.5 | 6.5 |
| 31 | 91.2 | 97.6 | 101.7 | 104.7 | 104.7 | 13.5 | 6.4 |
| 33 | 93.0 | 99.4 | 102.9 | 106.3 | 106.3 | 13.3 | 6.4 |
| 35 | 93.8 | 100.3 | 103.7 | 107.3 | 107.3 | 13.5 | 6.5 |
| o.H. → 37 | 94.6 | 101.5 | 104.7 | 108.0 | 108.0 | 13.4 | 6.9 |
| 38 | 95.1 | 101.8 | 105.1 | 108.2 | 108.2 | 13.1 | 6.7 |
| 40 | 93.9 | 100.7 | 104.8 | 107.2 | 107.2 | 13.3 | 6.8 |
| 42 | 91.3 | 98.4 | 103.2 | 105.2 | 106.2 | 13.9 | 7.1 |
| 44 | 90.4 | 96.5 | 101.8 | 104.0 | 105.6 | 13.6 | 6.1 |
| 46 | 88.7 | 94.7 | 100.1 | 102.6 | 103.8 | 13.9 | 6.0 |
| 48 | 85.1 | 91.1 | 96.8 | 99.4 | 99.4 | 14.3 | 6.0 |
| 50 | 83.5 | 89.1 | 94.1 | 98.0 | 98.0 | 14.5 | 5.6 |
| 52 | 82.0 | 87.5 | 93.0 | 96.9 | 97.9 | 14.9 | 5.5 |
| 54 | 80.1 | 85.9 | 91.5 | 95.7 | 97.2 | 15.6 | 5.8 |
| 56 | 76.7 | 83.5 | 89.6 | 93.6 | 94.8 | 16.9 | 6.8 |
| 58 | 74.6 | 82.2 | 87.7 | .0 | .0 | -74.5 | 7.6 |

TABLE H-II

NOISE LEVEL TIME HISTORY DATA

VERTOL CH-47 C

OCTOBER 13, 1976

EVENT 18, 60 KI. FLY BY, CENTERLINE MIC. (SOFT SITE)

1/2 SECOND INTEGRATION VS NOISE INDEXES
(DB RE 20 MICRO PA)

| INT | DBA | DBD | OASPL | PNL | PNLT | PNL-DBA | DBD-DBA |
|----------------|------|------|-------|-------|-------|---------|---------|
| 1 | 70.9 | 79.1 | 81.7 | .0 | .0 | -70.8 | 8.2 |
| 4 | 74.2 | 80.6 | 84.2 | 92.2 | 92.2 | 18.0 | 6.4 |
| 7 | 74.3 | 81.0 | 84.9 | 92.3 | 92.3 | 18.0 | 6.7 |
| 10 | 78.4 | 85.1 | 90.0 | 95.1 | 95.1 | 16.7 | 6.7 |
| 13 | 82.6 | 88.6 | 93.0 | 97.9 | 97.9 | 15.3 | 6.0 |
| 16 | 85.6 | 91.1 | 94.0 | 99.1 | 99.1 | 13.5 | 5.5 |
| 19 | 84.4 | 91.1 | 95.4 | 99.3 | 99.3 | 14.9 | 6.7 |
| 22 | 80.5 | 88.8 | 94.7 | 97.7 | 97.7 | 17.2 | 8.3 |
| 25 | 79.2 | 86.7 | 92.0 | 96.1 | 96.1 | 16.9 | 7.5 |
| 28 | 79.5 | 86.2 | 91.8 | 95.9 | 95.9 | 16.4 | 6.7 |
| 31 | 78.0 | 85.5 | 92.0 | 95.6 | 95.6 | 17.6 | 7.5 |
| 34 | 78.7 | 86.7 | 93.5 | 96.7 | 96.7 | 18.0 | 8.0 |
| 37 | 85.0 | 90.5 | 95.3 | 99.0 | 99.0 | 14.0 | 5.5 |
| 40 | 82.7 | 87.4 | 93.1 | 97.0 | 97.0 | 14.3 | 4.7 |
| 43 | 86.2 | 90.5 | 94.9 | 99.2 | 100.6 | 13.0 | 4.3 |
| 46 | 83.9 | 89.5 | 95.0 | 98.6 | 98.6 | 14.7 | 5.6 |
| 49 | 81.4 | 87.3 | 93.5 | 96.8 | 98.0 | 15.4 | 5.9 |
| 52 | 82.8 | 89.2 | 95.2 | 98.8 | 100.1 | 16.0 | 6.4 |
| 55 | 83.8 | 89.2 | 94.5 | 98.6 | 100.3 | 14.8 | 5.4 |
| 58 | 86.6 | 92.2 | 97.4 | 101.2 | 102.5 | 14.6 | 5.6 |
| 61 | 85.7 | 91.1 | 96.5 | 100.3 | 100.3 | 14.6 | 5.4 |
| 64 | 86.9 | 92.2 | 97.1 | 101.2 | 101.2 | 14.3 | 5.3 |
| 67 | 84.4 | 90.2 | 95.8 | 99.1 | 100.7 | 14.7 | 5.8 |
| 70 | 86.5 | 92.9 | 97.9 | 101.9 | 101.9 | 15.4 | 6.4 |
| 73 | 89.2 | 94.6 | 99.1 | 102.6 | 102.6 | 13.4 | 5.4 |
| 76 | 91.5 | 96.7 | 100.8 | 105.0 | 105.0 | 13.5 | 5.2 |
| 79 | 91.5 | 97.0 | 99.8 | 104.1 | 104.1 | 12.6 | 5.5 |
| 82 | 89.0 | 95.0 | 97.8 | 102.4 | 102.4 | 13.4 | 6.0 |
| O.H. - 82 → 83 | | | | | | | |
| 85 | 90.5 | 96.3 | 100.3 | 103.8 | 103.8 | 13.3 | 5.8 |
| 88 | 86.5 | 92.9 | 98.7 | 100.9 | 100.9 | 14.4 | 6.4 |
| 91 | 85.9 | 91.5 | 98.0 | 99.1 | 100.2 | 13.2 | 5.6 |
| 94 | 82.7 | 88.2 | 95.6 | 96.7 | 98.1 | 14.0 | 5.5 |
| 97 | 79.6 | 85.8 | 92.2 | 94.8 | 96.3 | 15.2 | 6.2 |
| 100 | 77.1 | 83.3 | 89.6 | 93.3 | 93.3 | 16.2 | 6.2 |
| 103 | 77.4 | 83.6 | 88.7 | 93.3 | 93.3 | 15.9 | 6.2 |
| 106 | 74.4 | 81.3 | 87.6 | 92.5 | 92.5 | 18.1 | 6.9 |
| 109 | 73.8 | 80.9 | 87.0 | 92.0 | 92.0 | 18.2 | 7.1 |

TABLE H-V

NOISE LEVEL TIME HISTORY DATA

VERTOL CH-47 C

OCTOBER 13, 1976

EVENT 22, 100 KI. FLY BY, CENTERLINE MIC. (SOFI SITE)

1/2 SECOND INTEGRATION VS NOISE INDEXES
(DB RE 20 MICRO PA)

| INT | DBA | DBD | OASPL | PNL | PNLT | PNL-DBA | DBD-DBA |
|-------------------------|------|------|-------|-------|-------|---------|---------|
| 7 | 69.5 | 79.8 | 86.5 | 92.1 | 92.1 | 22.6 | 10.3 |
| 9 | 74.1 | 82.2 | 89.3 | 93.2 | 93.2 | 19.1 | 8.1 |
| 11 | 75.7 | 83.5 | 90.6 | 93.8 | 93.8 | 18.1 | 7.8 |
| 13 | 75.0 | 83.9 | 91.6 | 94.0 | 94.0 | 19.0 | 8.9 |
| 15 | 76.3 | 85.4 | 92.5 | 95.0 | 95.0 | 18.7 | 9.1 |
| 17 | 77.3 | 86.7 | 93.6 | 95.9 | 95.9 | 18.6 | 9.4 |
| 19 | 77.0 | 86.8 | 94.3 | 96.1 | 96.1 | 19.1 | 9.8 |
| 21 | 77.4 | 87.4 | 94.9 | 96.3 | 96.3 | 18.9 | 10.0 |
| 23 | 78.0 | 87.5 | 95.2 | 96.7 | 96.7 | 18.7 | 9.5 |
| 25 | 78.9 | 87.6 | 95.2 | 96.8 | 96.8 | 17.9 | 8.7 |
| 27 | 79.0 | 87.5 | 94.8 | 96.7 | 96.7 | 17.7 | 8.5 |
| 29 | 78.9 | 87.5 | 94.9 | 96.7 | 96.7 | 17.8 | 8.6 |
| 31 | 78.2 | 87.0 | 94.9 | 96.3 | 96.3 | 18.1 | 8.8 |
| 33 | 77.2 | 86.5 | 95.1 | 95.7 | 95.7 | 18.5 | 9.3 |
| 35 | 76.3 | 86.4 | 95.6 | 95.7 | 95.7 | 19.4 | 10.1 |
| 37 | 77.9 | 87.5 | 96.3 | 96.5 | 96.5 | 18.6 | 9.6 |
| 39 | 82.3 | 88.8 | 97.1 | 97.9 | 97.9 | 15.6 | 6.5 |
| 41 | 86.2 | 91.5 | 97.8 | 100.3 | 100.3 | 14.1 | 5.3 |
| 43 | 86.1 | 91.5 | 97.1 | 100.2 | 100.2 | 14.1 | 5.4 |
| 45 | 81.3 | 88.3 | 96.3 | 97.4 | 97.4 | 16.1 | 7.0 |
| 47 | 82.7 | 89.4 | 96.4 | 98.0 | 98.0 | 15.3 | 6.7 |
| 49 | 86.2 | 91.3 | 96.6 | 100.1 | 100.1 | 13.9 | 5.1 |
| 51 | 88.6 | 93.1 | 96.9 | 101.5 | 101.5 | 12.9 | 4.5 |
| 53 | 86.5 | 92.1 | 96.0 | 100.7 | 100.7 | 14.2 | 5.6 |
| O.H. 55 → 56 | 82.5 | 90.8 | 95.9 | 98.6 | 98.6 | 16.1 | 8.3 |
| 57 | 84.0 | 92.3 | 97.7 | 100.1 | 100.1 | 16.1 | 8.3 |
| 59 | 83.3 | 91.8 | 97.5 | 99.9 | 99.9 | 16.6 | 8.5 |
| 61 | 83.5 | 91.0 | 97.0 | 99.3 | 99.3 | 15.8 | 7.5 |
| 63 | 83.8 | 90.1 | 95.6 | 98.2 | 98.2 | 14.4 | 6.3 |
| 65 | 81.6 | 87.6 | 93.0 | 96.5 | 96.5 | 14.9 | 6.0 |
| 67 | 79.1 | 85.2 | 90.5 | 94.5 | 94.5 | 15.4 | 6.1 |
| 69 | 77.2 | 83.3 | 87.9 | 93.1 | 93.1 | 15.9 | 6.1 |
| 71 | 74.8 | 81.5 | 84.9 | 92.0 | 92.0 | 17.2 | 6.7 |
| 73 | 72.9 | 80.1 | 83.7 | 91.5 | 91.5 | 18.6 | 7.2 |
| 75 | 72.3 | 79.4 | 82.6 | 91.3 | 91.3 | 19.0 | 7.1 |
| 77 | 69.4 | 78.4 | 81.4 | 91.1 | 91.1 | 21.7 | 9.0 |
| 79 | 70.9 | 79.0 | 81.2 | 91.2 | 91.2 | 20.3 | 8.1 |

TABLE H-IV

NOISE LEVEL TIME HISTORY DATA

VERTOL CH-47 C

OCTOBER 13, 1976

EVENT 23, 100 KT. FLY BY, CENTERLINE MIC. (SOFT SITE)

1/2 SECOND INTEGRATION VS NOISE INDEXES
(DB RE 20 MICRO PA)

| INT | DBA | DBD | OASPL | PNL | PNLT | PNL-DBA | DBD-DBA |
|-------------------------|------|------|-------|------|------|---------|---------|
| 4 | 66.4 | 77.7 | 79.9 | 91.0 | 91.0 | 24.6 | 11.3 |
| 7 | 67.8 | 78.7 | 81.2 | 91.4 | 91.4 | 23.6 | 10.9 |
| 10 | 68.8 | 78.9 | 81.7 | 91.5 | 91.5 | 22.7 | 10.1 |
| 13 | 68.2 | 78.5 | 81.5 | 91.4 | 91.4 | 23.2 | 10.3 |
| 16 | 67.5 | 78.4 | 82.4 | 91.5 | 91.5 | 24.0 | 10.9 |
| 19 | 67.1 | 78.8 | 83.5 | 91.6 | 91.6 | 24.5 | 11.7 |
| 22 | 68.0 | 79.5 | 85.5 | 91.9 | 91.9 | 23.9 | 11.5 |
| 25 | 70.2 | 81.0 | 88.5 | 92.6 | 92.6 | 22.4 | 10.8 |
| 28 | 72.2 | 82.7 | 90.8 | 93.3 | 93.3 | 21.1 | 10.5 |
| 31 | 72.6 | 83.4 | 92.1 | 93.6 | 93.6 | 21.0 | 10.8 |
| 34 | 75.5 | 85.7 | 94.0 | 95.5 | 95.5 | 20.0 | 10.2 |
| 37 | 76.3 | 86.5 | 94.8 | 95.9 | 95.9 | 19.6 | 10.2 |
| 40 | 75.7 | 85.9 | 94.2 | 95.4 | 95.4 | 19.7 | 10.2 |
| 43 | 75.3 | 85.8 | 93.9 | 95.2 | 95.2 | 19.9 | 10.5 |
| 46 | 77.4 | 87.2 | 95.5 | 96.4 | 96.4 | 19.0 | 9.8 |
| 49 | 76.9 | 86.8 | 95.5 | 96.1 | 96.1 | 19.2 | 9.9 |
| 52 | 77.2 | 87.7 | 96.8 | 96.5 | 96.5 | 19.3 | 10.5 |
| 55 | 78.7 | 88.8 | 98.0 | 97.8 | 97.8 | 19.1 | 10.1 |
| 58 | 80.2 | 88.4 | 97.8 | 97.6 | 97.6 | 17.4 | 8.2 |
| 61 | 79.4 | 87.8 | 97.3 | 96.4 | 96.4 | 17.0 | 8.4 |
| 64 | 81.3 | 89.0 | 96.1 | 97.3 | 97.3 | 16.0 | 7.7 |
| O.H. 67 → 69 | 81.5 | 89.5 | 94.9 | 97.9 | 97.9 | 16.4 | 8.0 |
| 70 | 82.7 | 90.8 | 96.5 | 99.2 | 99.2 | 16.5 | 8.1 |
| 73 | 83.1 | 91.1 | 96.9 | 99.4 | 99.4 | 16.3 | 8.0 |
| 74 | 83.9 | 91.2 | 97.0 | 99.7 | 99.7 | 15.8 | 7.3 |
| 77 | 81.8 | 87.8 | 93.3 | 96.4 | 96.4 | 14.6 | 6.0 |
| 80 | 78.8 | 85.6 | 90.7 | 94.5 | 94.5 | 15.7 | 6.8 |
| 83 | 76.1 | 82.8 | 87.6 | 92.8 | 92.8 | 16.7 | 6.7 |
| 86 | 73.1 | 80.1 | 83.5 | 91.4 | 91.4 | 18.3 | 7.0 |
| 89 | 71.6 | 79.5 | 81.0 | 91.2 | 91.2 | 19.6 | 7.9 |
| 92 | 72.7 | 79.8 | 80.8 | 91.2 | 91.2 | 18.5 | 7.1 |
| 95 | 69.0 | 78.3 | 78.6 | 90.9 | 90.9 | 21.9 | 9.3 |
| 98 | 68.8 | 78.4 | 77.6 | 90.9 | 90.9 | 22.1 | 9.6 |
| 101 | 67.4 | 78.0 | 76.8 | 90.8 | 90.8 | 23.4 | 10.6 |
| 104 | 66.0 | 77.7 | 75.6 | 90.7 | 90.7 | 24.7 | 11.7 |

TABLE H-V

NOISE LEVEL TIME HISTORY DATA

VERTOL CH-47 C

OCTOBER 13, 1976

EVENT 24, 141 KT. FLY BY, CENTERLINE MIC. (SOFT SITE)

1/2 SECOND INTEGRATION VS NOISE INDEXES
(DB RE 20 MICRO PA)

| INT | DBA | DBD | OASPL | PNL | PNLF | PNL-DBA | DBD-DBA |
|-------------------------|------|------|-------|-------|-------|---------|---------|
| 1 | 73.0 | 81.8 | 87.0 | 92.8 | 92.8 | 19.8 | 8.8 |
| 3 | 74.0 | 82.5 | 89.1 | 93.2 | 93.2 | 19.2 | 8.5 |
| 5 | 75.4 | 84.5 | 91.6 | 93.9 | 93.9 | 18.5 | 9.1 |
| 7 | 78.3 | 87.1 | 94.1 | 96.0 | 96.0 | 17.7 | 8.8 |
| 9 | 83.6 | 91.2 | 98.2 | 100.1 | 100.1 | 16.5 | 7.6 |
| 11 | 86.9 | 95.3 | 101.7 | 103.4 | 103.4 | 16.5 | 8.4 |
| 13 | 89.5 | 97.9 | 103.9 | 105.1 | 105.1 | 15.6 | 8.4 |
| 15 | 91.0 | 99.0 | 104.8 | 106.1 | 106.1 | 15.1 | 8.0 |
| 17 | 90.5 | 98.8 | 104.5 | 105.9 | 105.9 | 15.4 | 8.3 |
| 19 | 88.5 | 96.7 | 103.1 | 104.4 | 105.4 | 15.9 | 8.2 |
| 21 | 86.4 | 93.9 | 101.4 | 102.6 | 102.6 | 16.2 | 7.5 |
| 23 | 84.9 | 92.2 | 100.4 | 101.2 | 101.2 | 16.3 | 7.3 |
| 25 | 85.9 | 94.2 | 101.9 | 102.1 | 102.1 | 16.2 | 8.3 |
| 27 | 86.9 | 96.2 | 103.6 | 103.6 | 103.6 | 16.7 | 9.3 |
| 29 | 87.3 | 97.0 | 105.0 | 104.4 | 104.4 | 17.1 | 9.7 |
| 31 | 87.4 | 97.4 | 105.6 | 104.8 | 104.8 | 17.4 | 10.0 |
| 33 | 85.5 | 95.2 | 104.1 | 103.7 | 104.9 | 18.2 | 9.7 |
| 35 | 84.3 | 93.9 | 103.4 | 102.3 | 102.3 | 18.0 | 9.6 |
| 37 | 86.3 | 94.7 | 102.8 | 101.9 | 101.9 | 15.6 | 8.4 |
| O.H. 39 → 40 | 88.2 | 95.7 | 101.6 | 103.2 | 103.2 | 15.0 | 7.5 |
| 41 | 88.1 | 95.6 | 101.7 | 103.6 | 103.6 | 15.5 | 7.5 |
| 43 | 86.9 | 94.2 | 99.8 | 102.6 | 102.6 | 15.7 | 7.3 |
| 45 | 84.8 | 90.8 | 96.8 | 99.3 | 99.3 | 14.5 | 6.0 |
| 47 | 81.2 | 86.9 | 92.8 | 95.6 | 95.6 | 14.4 | 5.7 |
| 49 | 78.4 | 84.6 | 89.7 | 93.7 | 93.7 | 15.3 | 6.2 |
| 51 | 76.5 | 82.8 | 87.2 | 92.7 | 92.7 | 16.2 | 6.3 |
| 53 | 74.1 | 80.9 | 84.5 | 91.7 | 91.7 | 17.6 | 6.8 |

TABLE H-V

NOISE LEVEL TIME HISTORY DATA

VERTOL CH-47 C

OCTOBER 13, 1976

EVENT 25, 141 KT. FLY BY, CENTERLINE MIC. (SOFT SITE)

1/2 SECOND INTEGRATION VS NOISE INDEXES
(DB RE 20 MICRO PA)

| INT | DBA | DBD | OASPL | PNL | PNLT | PNL-DBA | DBD-DBA |
|-----------|------|-------|-------|-------|-------|---------|---------|
| 1 | 76.6 | 85.0 | 91.6 | 94.9 | 94.9 | 18.3 | 8.4 |
| 2 | 77.0 | 85.8 | 93.1 | 95.8 | 95.8 | 18.8 | 8.8 |
| 3 | 77.7 | 87.0 | 94.9 | 96.8 | 96.8 | 19.1 | 9.3 |
| 4 | 79.1 | 89.0 | 96.9 | 98.0 | 98.0 | 18.9 | 9.9 |
| 5 | 81.0 | 91.0 | 98.8 | 99.6 | 99.6 | 18.6 | 10.0 |
| 6 | 83.2 | 93.1 | 100.7 | 101.6 | 101.6 | 18.4 | 9.9 |
| 7 | 85.3 | 95.0 | 102.4 | 103.3 | 103.3 | 18.0 | 9.7 |
| 8 | 87.1 | 96.7 | 103.9 | 104.9 | 104.9 | 17.8 | 9.6 |
| 9 | 89.8 | 98.5 | 105.1 | 106.4 | 106.4 | 16.5 | 8.7 |
| 10 | 91.8 | 100.1 | 106.1 | 107.6 | 107.6 | 15.8 | 8.3 |
| 11 | 92.6 | 100.7 | 106.5 | 108.1 | 108.1 | 15.5 | 8.1 |
| 12 | 92.7 | 100.5 | 106.3 | 107.7 | 107.7 | 15.0 | 7.8 |
| 13 | 91.9 | 99.7 | 105.6 | 107.0 | 107.0 | 15.1 | 7.8 |
| 14 | 91.0 | 99.2 | 105.1 | 106.3 | 106.3 | 15.3 | 8.2 |
| 15 | 90.1 | 98.8 | 104.9 | 105.7 | 105.7 | 15.6 | 8.7 |
| 16 | 89.7 | 98.7 | 105.0 | 105.8 | 105.8 | 16.1 | 9.0 |
| 17 | 89.3 | 98.2 | 104.9 | 105.5 | 105.5 | 16.2 | 8.9 |
| 18 | 88.7 | 97.4 | 104.4 | 105.0 | 105.0 | 16.3 | 8.7 |
| 19 | 87.7 | 96.1 | 103.8 | 104.0 | 104.0 | 16.3 | 8.4 |
| 20 | 86.6 | 95.0 | 103.2 | 103.4 | 103.4 | 16.8 | 8.4 |
| 21 | 86.0 | 94.5 | 103.3 | 103.1 | 103.1 | 17.1 | 8.5 |
| 22 | 86.2 | 94.9 | 103.7 | 103.2 | 103.2 | 17.0 | 8.7 |
| 23 | 86.7 | 95.6 | 104.3 | 103.7 | 103.7 | 17.0 | 8.9 |
| 24 | 86.8 | 95.9 | 104.7 | 103.9 | 103.9 | 17.1 | 9.1 |
| 25 | 86.3 | 96.1 | 104.9 | 104.1 | 104.1 | 17.8 | 9.8 |
| 26 | 85.8 | 96.0 | 104.9 | 104.3 | 104.3 | 18.5 | 10.2 |
| 27 | 85.4 | 95.8 | 104.7 | 104.2 | 104.2 | 18.8 | 10.4 |
| 28 | 84.8 | 95.0 | 104.1 | 103.6 | 103.6 | 18.8 | 10.2 |
| 29 | 84.9 | 94.6 | 103.5 | 102.7 | 102.7 | 17.8 | 9.7 |
| 30 | 85.9 | 94.7 | 103.1 | 102.0 | 102.0 | 16.1 | 8.8 |
| 31 | 86.7 | 95.1 | 102.2 | 102.4 | 102.4 | 15.7 | 8.4 |
| O.H. → 32 | 87.1 | 95.0 | 101.3 | 102.6 | 102.6 | 15.5 | 7.9 |
| 33 | 86.7 | 94.5 | 100.9 | 102.4 | 102.4 | 15.7 | 7.8 |
| 34 | 86.4 | 94.2 | 100.8 | 102.5 | 102.5 | 16.1 | 7.8 |
| 35 | 85.9 | 93.6 | 100.3 | 102.1 | 102.1 | 16.2 | 7.7 |
| 36 | 86.1 | 93.5 | 99.4 | 102.0 | 102.0 | 15.9 | 7.4 |
| 37 | 85.9 | 92.6 | 98.6 | 101.3 | 101.3 | 15.4 | 6.7 |
| 38 | 85.3 | 91.7 | 97.4 | 100.0 | 100.0 | 14.7 | 6.4 |
| 39 | 83.8 | 89.5 | 95.3 | 98.1 | 98.1 | 14.3 | 5.7 |
| 40 | 82.1 | 88.0 | 93.6 | 96.6 | 96.6 | 14.5 | 5.9 |
| 41 | 80.1 | 86.3 | 92.1 | 95.1 | 95.1 | 15.0 | 6.2 |
| 42 | 78.3 | 84.6 | 90.5 | 93.9 | 93.9 | 15.6 | 6.3 |

TABLE H-V

NOISE LEVEL TIME HISTORY DATA

VERTOL CH-47 C

OCTOBER 13, 1976

EVENT 26, 141 KT. FLY BY, CENTERLINE MIC. (SOFT SITE)

1/2 SECOND INTEGRATION VS NOISE INDEXES
(DB RE 20 MICHO PA)

| INT | DBA | DBD | OASPL | PNL | PNLT | PNL-DBA | DBD-DBA |
|-----------|------|-------|-------|-------|-------|---------|---------|
| 1 | 76.8 | 85.7 | 92.0 | 94.9 | 94.9 | 18.1 | 8.9 |
| 2 | 77.2 | 85.8 | 92.7 | 94.9 | 94.9 | 17.7 | 8.6 |
| 3 | 77.6 | 86.4 | 94.2 | 96.1 | 96.1 | 18.5 | 8.8 |
| 4 | 79.3 | 89.0 | 96.8 | 97.9 | 97.9 | 18.6 | 9.7 |
| 5 | 83.8 | 93.5 | 100.2 | 101.5 | 101.5 | 17.7 | 9.7 |
| 6 | 88.2 | 97.2 | 103.2 | 104.5 | 104.5 | 16.3 | 9.0 |
| 7 | 91.8 | 100.1 | 105.3 | 106.5 | 106.5 | 14.7 | 8.3 |
| 8 | 92.9 | 100.9 | 106.1 | 107.4 | 107.4 | 14.5 | 8.0 |
| 9 | 92.4 | 100.2 | 105.6 | 107.0 | 107.0 | 14.6 | 7.8 |
| 10 | 90.2 | 98.0 | 104.2 | 105.8 | 105.8 | 15.6 | 7.8 |
| 11 | 88.2 | 96.1 | 102.9 | 104.3 | 104.3 | 16.1 | 7.9 |
| 12 | 87.6 | 95.8 | 102.5 | 103.9 | 103.9 | 16.3 | 8.2 |
| 13 | 86.9 | 95.5 | 102.4 | 103.5 | 103.5 | 16.6 | 8.6 |
| 14 | 86.1 | 94.8 | 102.2 | 103.0 | 103.0 | 16.9 | 8.7 |
| 15 | 86.0 | 94.4 | 102.5 | 102.9 | 102.9 | 16.9 | 8.4 |
| 16 | 86.9 | 95.1 | 103.0 | 103.2 | 103.2 | 16.3 | 8.2 |
| 17 | 87.5 | 95.9 | 103.5 | 103.9 | 103.9 | 16.4 | 8.4 |
| 18 | 88.6 | 96.7 | 104.4 | 104.9 | 104.9 | 16.3 | 8.1 |
| 19 | 89.7 | 97.8 | 105.3 | 106.1 | 106.1 | 16.4 | 8.1 |
| 20 | 89.7 | 97.9 | 105.5 | 106.3 | 106.3 | 16.6 | 8.2 |
| 21 | 88.6 | 97.1 | 104.9 | 105.4 | 105.4 | 16.8 | 8.5 |
| 22 | 86.5 | 95.5 | 104.1 | 104.0 | 104.0 | 17.5 | 9.0 |
| 23 | 85.6 | 95.2 | 104.0 | 103.6 | 104.7 | 18.0 | 9.6 |
| 24 | 86.1 | 95.7 | 104.3 | 104.0 | 105.2 | 17.9 | 9.6 |
| 25 | 86.2 | 95.5 | 104.2 | 104.0 | 104.0 | 17.8 | 9.3 |
| 26 | 86.7 | 95.3 | 103.7 | 103.7 | 103.7 | 17.0 | 8.6 |
| 27 | 87.1 | 95.2 | 103.3 | 103.1 | 103.1 | 16.0 | 8.1 |
| 28 | 88.0 | 95.6 | 103.1 | 103.3 | 103.3 | 15.3 | 7.6 |
| 29 | 86.4 | 95.8 | 102.7 | 103.4 | 103.4 | 15.0 | 7.4 |
| 30 | 89.0 | 96.2 | 102.3 | 103.8 | 103.8 | 14.8 | 7.2 |
| O.H. → 31 | 88.6 | 95.8 | 101.8 | 103.5 | 103.5 | 14.9 | 7.2 |
| 32 | 87.7 | 95.0 | 101.4 | 103.2 | 103.2 | 15.5 | 7.3 |
| 33 | 86.4 | 93.9 | 100.6 | 102.5 | 102.5 | 16.1 | 7.5 |
| 34 | 85.7 | 93.2 | 99.5 | 101.8 | 101.8 | 16.1 | 7.5 |
| 35 | 85.5 | 92.3 | 98.4 | 100.9 | 100.9 | 15.6 | 7.0 |
| 36 | 84.4 | 90.9 | 97.2 | 99.3 | 99.3 | 14.9 | 6.5 |
| 37 | 83.9 | 89.8 | 95.7 | 97.9 | 97.9 | 14.0 | 5.9 |
| 38 | 82.6 | 88.2 | 94.3 | 96.9 | 96.9 | 14.3 | 5.6 |
| 39 | 81.0 | 86.7 | 92.6 | 95.5 | 95.5 | 14.5 | 5.7 |
| 40 | 79.3 | 85.1 | 90.9 | 94.1 | 94.1 | 14.8 | 5.8 |

TABLE H-V

NOISE LEVEL TIME HISTORY DATA

VERTOL CH-47 C

OCTOBER 13, 1976

EVENT 27, 141 KT. FLY BY, CENTERLINE MIC. (SOFT SITE)

1/2 SECOND INTEGRATION VS NOISE INDEXES
(DB RE 20 MICRO PA)

| INT | DBA | DBD | OASPL | PNL | PNLT | PNL-DBA | DBD-DBA |
|-----------|------|-------|-------|-------|-------|---------|---------|
| 1 | 80.1 | 87.5 | 94.8 | 97.1 | 97.1 | 17.0 | 7.4 |
| 2 | 79.6 | 87.4 | 96.0 | 97.5 | 97.5 | 17.9 | 7.8 |
| 3 | 80.1 | 88.2 | 97.2 | 98.7 | 98.7 | 18.6 | 8.1 |
| 4 | 83.7 | 91.5 | 99.3 | 100.8 | 100.8 | 17.1 | 7.8 |
| 5 | 90.4 | 97.9 | 102.8 | 105.4 | 105.4 | 15.0 | 7.5 |
| 6 | 94.3 | 101.6 | 106.2 | 108.5 | 108.5 | 14.2 | 7.3 |
| 7 | 96.0 | 103.3 | 107.7 | 110.0 | 110.0 | 14.0 | 7.3 |
| 8 | 95.9 | 103.2 | 107.9 | 110.0 | 110.0 | 14.1 | 7.3 |
| 9 | 95.1 | 102.4 | 107.2 | 109.3 | 109.3 | 14.2 | 7.3 |
| 10 | 93.6 | 101.3 | 106.7 | 108.3 | 109.3 | 14.7 | 7.7 |
| 11 | 94.4 | 102.1 | 107.3 | 108.8 | 110.6 | 14.4 | 7.7 |
| 12 | 93.9 | 102.3 | 108.1 | 109.1 | 110.8 | 15.2 | 8.4 |
| 13 | 93.8 | 102.4 | 108.6 | 109.7 | 111.1 | 15.9 | 8.6 |
| 14 | 92.7 | 101.9 | 108.6 | 109.6 | 109.6 | 16.9 | 9.2 |
| 15 | 92.5 | 101.3 | 108.2 | 109.4 | 109.4 | 16.9 | 8.8 |
| 16 | 91.7 | 100.5 | 107.7 | 108.4 | 108.4 | 16.7 | 8.8 |
| 17 | 90.1 | 99.2 | 106.9 | 107.1 | 107.1 | 17.0 | 9.1 |
| 18 | 89.6 | 98.3 | 106.3 | 106.0 | 107.2 | 16.4 | 8.7 |
| 19 | 89.2 | 97.8 | 105.7 | 105.5 | 106.5 | 16.3 | 8.6 |
| 20 | 88.9 | 97.1 | 105.1 | 105.1 | 105.1 | 16.2 | 8.2 |
| 21 | 88.9 | 96.8 | 104.8 | 104.5 | 104.5 | 15.6 | 7.9 |
| 22 | 89.2 | 96.6 | 104.7 | 104.6 | 104.6 | 15.4 | 7.4 |
| 23 | 89.1 | 96.5 | 104.2 | 104.1 | 104.1 | 15.0 | 7.4 |
| 24 | 88.7 | 96.3 | 103.0 | 103.9 | 103.9 | 15.2 | 7.6 |
| 25 | 89.2 | 96.7 | 102.6 | 104.4 | 104.4 | 15.2 | 7.5 |
| O.H. → 26 | 89.7 | 97.1 | 102.8 | 104.8 | 104.8 | 15.1 | 7.4 |
| 27 | 89.3 | 96.8 | 102.8 | 104.8 | 104.8 | 15.5 | 7.5 |
| 28 | 88.7 | 96.1 | 102.0 | 104.1 | 104.1 | 15.4 | 7.4 |
| 29 | 87.9 | 94.8 | 100.9 | 103.4 | 103.4 | 15.5 | 6.9 |
| 30 | 87.0 | 93.5 | 99.8 | 102.0 | 102.0 | 15.0 | 6.5 |
| 31 | 85.4 | 91.6 | 98.0 | 100.3 | 100.3 | 14.9 | 6.2 |
| 32 | 82.9 | 88.7 | 95.3 | 97.1 | 97.1 | 14.2 | 5.8 |
| 33 | 81.1 | 86.8 | 92.9 | 95.6 | 95.6 | 14.5 | 5.7 |
| 34 | 79.3 | 85.0 | 90.5 | 94.2 | 94.2 | 14.9 | 5.7 |

TABLE H-II

NOISE LEVEL TIME HISTORY DATA

VERTOL CH-47 C

OCTOBER 13, 1976

EVENT 28, 150 KT. FLY BY, CENTERLINE MIC. (SOFT SITE)

1/2 SECOND INTEGRATION VS NOISE INDEXES
(DB RE 20 MICRO PA)

| INT | DBA | DBD | OASPL | PNL | PNLT | PNL-DBA | DBD-DBA |
|-----------|------|-------|-------|-------|-------|---------|---------|
| 1 | 76.9 | 85.9 | 93.2 | .0 | .0 | -76.8 | 9.0 |
| 2 | 79.4 | 88.9 | 96.0 | 97.7 | 97.7 | 18.3 | 9.5 |
| 3 | 82.2 | 92.0 | 98.8 | 99.9 | 99.9 | 17.7 | 9.8 |
| 4 | 84.6 | 94.5 | 100.9 | 102.0 | 102.0 | 17.4 | 9.9 |
| 5 | 88.4 | 97.0 | 103.2 | 104.3 | 104.3 | 15.9 | 8.6 |
| 6 | 90.7 | 99.1 | 105.3 | 106.3 | 106.3 | 15.6 | 8.4 |
| 7 | 93.0 | 101.3 | 107.3 | 108.2 | 108.2 | 15.2 | 8.3 |
| 8 | 96.0 | 103.8 | 108.9 | 110.3 | 110.3 | 14.3 | 7.8 |
| 9 | 97.4 | 104.8 | 109.8 | 111.2 | 111.2 | 13.8 | 7.4 |
| 10 | 97.6 | 104.9 | 109.3 | 111.4 | 111.4 | 13.8 | 7.3 |
| 11 | 96.2 | 103.8 | 109.0 | 110.5 | 110.5 | 14.3 | 7.6 |
| 12 | 94.2 | 102.2 | 107.9 | 109.4 | 109.4 | 15.2 | 8.0 |
| 13 | 92.5 | 100.6 | 107.0 | 108.3 | 108.3 | 15.8 | 8.1 |
| 14 | 92.3 | 99.8 | 106.6 | 107.8 | 107.8 | 15.5 | 7.5 |
| 15 | 92.3 | 100.0 | 107.0 | 107.9 | 107.9 | 15.6 | 7.7 |
| 16 | 92.3 | 100.5 | 107.5 | 108.2 | 108.2 | 15.9 | 8.2 |
| 17 | 92.3 | 100.9 | 107.9 | 108.5 | 108.5 | 16.2 | 8.6 |
| 18 | 92.1 | 100.9 | 108.0 | 108.4 | 108.4 | 16.3 | 8.8 |
| 19 | 91.7 | 100.5 | 107.9 | 108.0 | 108.0 | 16.3 | 8.8 |
| 20 | 90.6 | 99.6 | 107.5 | 107.3 | 107.3 | 16.7 | 9.0 |
| 21 | 90.1 | 98.6 | 106.9 | 106.7 | 106.7 | 16.6 | 8.5 |
| 22 | 90.1 | 97.8 | 106.2 | 106.1 | 106.1 | 16.0 | 7.7 |
| 23 | 91.0 | 98.1 | 106.0 | 105.8 | 105.8 | 14.8 | 7.1 |
| 24 | 91.2 | 98.1 | 105.4 | 105.9 | 105.9 | 14.7 | 6.9 |
| 0.H. → 25 | 91.1 | 97.9 | 104.6 | 105.7 | 105.7 | 14.6 | 6.8 |
| 26 | 90.1 | 97.1 | 103.1 | 104.9 | 104.9 | 14.8 | 7.0 |
| 27 | 89.8 | 96.7 | 102.6 | 104.8 | 104.8 | 15.0 | 6.9 |
| 28 | 89.2 | 96.1 | 101.8 | 104.3 | 104.3 | 15.1 | 6.9 |
| 29 | 88.9 | 95.4 | 101.0 | 103.6 | 103.6 | 14.7 | 6.5 |
| 30 | 87.4 | 93.5 | 99.2 | 101.7 | 101.7 | 14.3 | 6.1 |
| 31 | 85.6 | 91.3 | 97.0 | 100.0 | 100.0 | 14.4 | 5.7 |
| 32 | 83.3 | 88.6 | 94.5 | 97.5 | 97.5 | 14.2 | 5.3 |
| 33 | 81.4 | 87.0 | 92.8 | 95.7 | 95.7 | 14.3 | 5.6 |

TABLE H-V

NOISE LEVEL TIME HISTORY DATA

VERTOL CH-47 C

OCTOBER 13, 1976

EVENT 29, 150 KT. FLY BY, CENTERLINE MIC. (SOFT SITE)

1/2 SECOND INTEGRATION VS NOISE INDEXES
(DB RE 20 MICRO PA)

| INT | DBA | DBD | OASPL | PNL | PNLT | PNL-DBA | DBD-DBA |
|---------|------|-------|-------|-------|-------|---------|---------|
| 1 | 82.9 | 89.1 | 95.2 | 98.4 | 98.4 | 15.5 | 6.2 |
| 2 | 84.2 | 90.7 | 97.3 | 99.6 | 99.6 | 15.4 | 6.5 |
| 3 | 86.0 | 92.9 | 99.8 | 101.4 | 101.4 | 15.4 | 6.9 |
| 4 | 87.1 | 94.7 | 101.9 | 103.2 | 103.2 | 16.1 | 7.6 |
| 5 | 89.6 | 97.2 | 104.5 | 105.7 | 105.7 | 16.1 | 7.6 |
| 6 | 90.7 | 99.2 | 106.4 | 107.4 | 107.4 | 16.7 | 8.5 |
| 7 | 92.9 | 101.2 | 107.9 | 109.2 | 109.2 | 16.3 | 8.3 |
| 8 | 96.1 | 103.5 | 109.1 | 111.1 | 111.1 | 15.0 | 7.4 |
| 9 | 98.2 | 104.8 | 109.8 | 112.3 | 112.3 | 14.1 | 6.6 |
| 10 | 98.9 | 105.3 | 110.2 | 112.9 | 112.9 | 14.0 | 6.4 |
| 11 | 98.8 | 105.6 | 110.5 | 113.3 | 113.3 | 14.5 | 6.8 |
| 12 | 99.3 | 106.3 | 110.9 | 113.5 | 113.5 | 14.2 | 7.0 |
| 13 | 99.2 | 106.6 | 111.1 | 113.4 | 113.4 | 14.2 | 7.4 |
| 14 | 99.3 | 106.3 | 110.8 | 113.2 | 113.2 | 13.9 | 7.0 |
| 15 | 98.4 | 105.5 | 110.7 | 112.8 | 112.8 | 14.4 | 7.1 |
| 16 | 97.8 | 104.7 | 110.3 | 112.4 | 112.4 | 14.6 | 6.9 |
| 17 | 96.3 | 103.9 | 110.1 | 111.6 | 111.6 | 15.3 | 7.6 |
| 18 | 94.4 | 102.5 | 109.2 | 110.2 | 110.2 | 15.8 | 8.1 |
| 19 | 92.7 | 101.2 | 108.5 | 108.8 | 108.8 | 16.1 | 8.5 |
| 20 | 90.5 | 99.5 | 107.3 | 107.3 | 108.3 | 16.8 | 9.0 |
| 21 | 89.3 | 98.4 | 106.8 | 106.3 | 106.3 | 17.0 | 9.1 |
| 22 | 89.1 | 97.8 | 106.6 | 105.5 | 105.5 | 16.4 | 8.7 |
| 23 | 90.7 | 98.4 | 106.5 | 105.9 | 105.9 | 15.2 | 7.7 |
| 24 | 91.6 | 98.8 | 105.7 | 106.7 | 106.7 | 15.1 | 7.2 |
| OH → 25 | 92.0 | 99.0 | 105.0 | 106.7 | 106.7 | 14.7 | 7.0 |
| 26 | 91.7 | 98.5 | 104.2 | 106.3 | 106.3 | 14.6 | 6.8 |
| 27 | 91.3 | 98.0 | 103.9 | 106.0 | 106.0 | 14.7 | 6.7 |
| 28 | 90.7 | 97.3 | 102.8 | 105.4 | 105.4 | 14.7 | 6.6 |
| 29 | 90.2 | 96.6 | 101.8 | 104.4 | 104.4 | 14.2 | 6.4 |
| 30 | 88.8 | 95.1 | 100.3 | 103.1 | 103.1 | 14.3 | 6.3 |
| 31 | 86.8 | 92.8 | 98.2 | 101.2 | 101.2 | 14.4 | 6.0 |
| 32 | 83.5 | 89.1 | 94.8 | 98.2 | 98.2 | 14.7 | 5.6 |
| 33 | 81.3 | 86.9 | 92.3 | 95.8 | 95.8 | 14.5 | 5.6 |

TABLE H-IV

NOISE LEVEL TIME HISTORY DATA

VERTOL CH-47 C

OCTOBER 13, 1976

EVENT 30, 126 KT. FLY BY, CENTERLINE MIC. (SOFT SITE)

1/2 SECOND INTEGRATION VS NOISE INDEXES
(DB RE 20 MICRO PA)

| INT | DBA | DBD | JASPL | PNL | PNLT | PNL-DBA | DBD-DBA |
|-----------|------|------|-------|-------|-------|---------|---------|
| 1 | 70.6 | 80.9 | 87.5 | 92.4 | 92.4 | 21.8 | 10.3 |
| 2 | 71.9 | 82.1 | 89.4 | 92.8 | 92.8 | 20.9 | 10.2 |
| 3 | 74.0 | 83.9 | 91.7 | 93.6 | 93.6 | 19.6 | 9.9 |
| 4 | 76.7 | 86.3 | 94.0 | 95.4 | 95.4 | 18.7 | 9.6 |
| 5 | 79.0 | 88.3 | 96.2 | 97.5 | 97.5 | 18.5 | 9.3 |
| 6 | 81.0 | 90.2 | 98.6 | 99.3 | 99.3 | 18.3 | 9.2 |
| 7 | 83.1 | 92.7 | 100.8 | 101.2 | 101.2 | 18.1 | 9.0 |
| 8 | 86.2 | 95.5 | 103.0 | 103.5 | 103.5 | 17.3 | 9.3 |
| 9 | 88.5 | 97.6 | 104.5 | 104.9 | 104.9 | 16.4 | 9.1 |
| 10 | 88.8 | 98.0 | 104.9 | 105.1 | 105.1 | 16.3 | 9.2 |
| 11 | 87.6 | 97.1 | 104.2 | 104.3 | 104.3 | 16.7 | 9.5 |
| 12 | 84.7 | 94.8 | 102.7 | 102.5 | 102.5 | 17.8 | 10.1 |
| 13 | 82.2 | 92.4 | 101.1 | 100.7 | 100.7 | 18.5 | 10.2 |
| 14 | 80.8 | 90.7 | 100.0 | 99.8 | 99.8 | 19.0 | 9.9 |
| 15 | 80.9 | 90.7 | 100.3 | 99.9 | 99.9 | 19.0 | 9.8 |
| 16 | 83.0 | 92.0 | 101.5 | 101.0 | 102.0 | 18.0 | 9.0 |
| 17 | 83.5 | 92.5 | 102.3 | 101.5 | 102.6 | 18.0 | 9.0 |
| 18 | 83.6 | 92.7 | 102.5 | 101.8 | 101.8 | 18.2 | 9.1 |
| 19 | 83.0 | 92.6 | 102.4 | 101.8 | 101.8 | 18.8 | 9.6 |
| 20 | 83.1 | 92.6 | 102.3 | 101.8 | 101.8 | 18.7 | 9.5 |
| 21 | 83.2 | 92.4 | 102.0 | 101.8 | 101.8 | 18.6 | 9.2 |
| 22 | 83.5 | 92.2 | 101.7 | 101.9 | 101.9 | 18.4 | 8.7 |
| 23 | 83.3 | 91.6 | 101.3 | 101.3 | 101.3 | 18.0 | 8.3 |
| 24 | 83.2 | 91.0 | 100.8 | 100.3 | 100.3 | 17.1 | 7.8 |
| 25 | 83.9 | 91.8 | 100.3 | 100.0 | 100.0 | 16.1 | 7.9 |
| 26 | 84.7 | 92.9 | 99.6 | 100.5 | 100.5 | 15.8 | 8.2 |
| 27 | 85.3 | 93.4 | 99.1 | 101.0 | 101.0 | 15.7 | 8.1 |
| 0.H. → 28 | 85.3 | 93.4 | 99.6 | 101.5 | 101.5 | 16.2 | 8.1 |
| 29 | 86.0 | 93.5 | 100.2 | 102.1 | 102.1 | 16.1 | 7.5 |
| 30 | 86.0 | 93.4 | 100.2 | 102.0 | 102.0 | 16.0 | 7.4 |
| 31 | 85.5 | 92.7 | 99.1 | 101.2 | 101.2 | 15.7 | 7.2 |
| 32 | 84.8 | 91.5 | 97.9 | 100.2 | 100.2 | 15.4 | 6.7 |
| 33 | 84.3 | 90.3 | 96.7 | 98.8 | 98.8 | 14.5 | 6.0 |
| 34 | 83.7 | 89.0 | 95.4 | 97.5 | 97.5 | 13.8 | 5.3 |
| 35 | 82.2 | 87.5 | 93.6 | 96.2 | 96.2 | 14.0 | 5.3 |
| 36 | 80.7 | 86.1 | 92.1 | 94.9 | 94.9 | 14.2 | 5.4 |
| 37 | 79.3 | 85.2 | 91.3 | 94.2 | 94.2 | 14.9 | 5.9 |
| 38 | 78.1 | 84.0 | 90.2 | 93.5 | 93.5 | 15.4 | 5.9 |
| 39 | 76.7 | 83.0 | 89.4 | 92.9 | 92.9 | 16.2 | 6.3 |

TABLE H-IV

NOISE LEVEL TIME HISTORY DATA

VERTOL CH-47 C

OCTOBER 13, 1976

EVENT 31, 126 KT. FLY BY, CENTERLINE MIC. (SOFT SITE)

1/2 SECOND INTEGRATION VS NOISE INDEXES
(DB RE 20 MICRO PA)

| INI | DBA | DBD | OASPL | PNL | PNLT | PNL-DBA | DBD-DBA |
|---------|------|------|-------|-------|-------|---------|---------|
| 1 | 70.7 | 80.9 | 86.7 | 92.3 | 92.3 | 21.6 | 10.2 |
| 2 | 72.4 | 82.0 | 88.2 | 92.7 | 92.7 | 20.3 | 9.6 |
| 3 | 74.0 | 83.2 | 89.7 | 93.3 | 93.3 | 19.3 | 9.2 |
| 4 | 75.4 | 84.2 | 91.0 | 94.0 | 94.0 | 18.6 | 8.8 |
| 5 | 76.0 | 84.8 | 92.1 | 94.3 | 94.3 | 18.3 | 8.8 |
| 6 | 76.2 | 85.2 | 93.1 | 95.0 | 95.0 | 18.8 | 9.0 |
| 7 | 76.8 | 86.3 | 94.6 | 96.1 | 96.1 | 19.3 | 9.5 |
| 8 | 78.8 | 88.0 | 96.4 | 97.6 | 97.6 | 18.8 | 9.2 |
| 9 | 81.2 | 90.2 | 98.5 | 99.5 | 99.5 | 18.3 | 9.0 |
| 10 | 83.2 | 92.2 | 100.5 | 101.1 | 101.1 | 17.9 | 9.0 |
| 11 | 85.1 | 94.1 | 102.1 | 102.2 | 102.2 | 17.1 | 9.0 |
| 12 | 86.8 | 95.5 | 103.0 | 103.4 | 103.4 | 16.6 | 8.7 |
| 13 | 87.8 | 96.3 | 103.3 | 103.9 | 103.9 | 16.1 | 8.5 |
| 14 | 87.9 | 96.3 | 103.3 | 103.9 | 103.9 | 16.0 | 8.4 |
| 15 | 87.2 | 95.6 | 103.2 | 103.6 | 103.6 | 16.4 | 8.4 |
| 16 | 86.3 | 94.6 | 103.0 | 103.2 | 103.2 | 16.9 | 8.3 |
| 17 | 85.8 | 94.5 | 102.8 | 102.9 | 102.9 | 17.1 | 8.7 |
| 18 | 86.2 | 95.1 | 102.8 | 102.8 | 102.8 | 16.6 | 8.9 |
| 19 | 86.5 | 95.2 | 102.8 | 102.7 | 102.7 | 16.2 | 8.7 |
| 20 | 86.3 | 95.0 | 102.6 | 102.6 | 102.6 | 16.3 | 8.7 |
| 21 | 85.7 | 94.3 | 102.2 | 102.5 | 102.5 | 16.8 | 8.6 |
| 22 | 85.2 | 94.1 | 102.3 | 102.4 | 102.4 | 17.2 | 8.9 |
| 23 | 84.7 | 93.8 | 102.4 | 102.2 | 102.2 | 17.5 | 9.1 |
| 24 | 84.1 | 93.4 | 102.3 | 102.0 | 102.0 | 17.9 | 9.3 |
| 25 | 83.8 | 92.8 | 102.2 | 101.9 | 101.9 | 18.1 | 9.0 |
| 26 | 83.2 | 92.1 | 102.1 | 101.8 | 101.8 | 18.6 | 8.9 |
| 27 | 83.4 | 91.7 | 101.9 | 101.5 | 101.5 | 18.1 | 8.3 |
| 28 | 83.8 | 92.3 | 101.6 | 101.0 | 101.0 | 17.2 | 8.5 |
| 29 | 85.3 | 93.2 | 100.7 | 101.5 | 101.5 | 16.2 | 7.9 |
| 30 | 86.9 | 94.6 | 100.3 | 102.5 | 102.5 | 15.6 | 7.7 |
| 31 | 87.3 | 94.8 | 100.1 | 102.8 | 102.8 | 15.5 | 7.5 |
| OH → 32 | 87.6 | 95.1 | 100.9 | 103.0 | 103.0 | 15.4 | 7.5 |
| 33 | 87.4 | 95.1 | 101.3 | 103.0 | 103.0 | 15.6 | 7.7 |
| 34 | 87.1 | 95.0 | 101.1 | 102.8 | 102.8 | 15.7 | 7.9 |
| 35 | 86.0 | 93.7 | 99.8 | 101.9 | 101.9 | 15.9 | 7.7 |
| 36 | 85.3 | 92.2 | 98.1 | 100.7 | 100.7 | 15.4 | 6.9 |
| 37 | 84.6 | 90.5 | 96.6 | 98.9 | 98.9 | 14.3 | 5.9 |
| 38 | 83.7 | 89.3 | 95.0 | 97.5 | 97.5 | 13.8 | 5.6 |
| 39 | 81.2 | 86.8 | 92.8 | 95.4 | 95.4 | 14.2 | 5.6 |
| 40 | 79.0 | 84.7 | 90.2 | 93.7 | 93.7 | 14.7 | 5.7 |
| 41 | 77.3 | 83.6 | 88.6 | 92.9 | 92.9 | 15.6 | 6.3 |
| 42 | 77.0 | 83.5 | 87.8 | 92.8 | 92.8 | 15.8 | 6.5 |

TABLE H-V

NOISE LEVEL TIME HISTORY DATA

VERTOL CH-47 C

OCTOBER 13, 1976

EVENT 35, 3 DEGREE APPROACH, CENTERLINE MIC. (SOFT SITE)

1/2 SECOND INTEGRATION VS NOISE INDEXES
(DB RE 20 MICRO PA)

| INT | DBA | DBD | DASPL | PNL | PNLT | PNL-DBA | DBD-DBA |
|-----------|------|-------|-------|-------|-------|---------|---------|
| 1 | 78.1 | 85.9 | 91.3 | 95.8 | 95.8 | 17.7 | 7.8 |
| 4 | 81.4 | 88.3 | 92.8 | 97.1 | 97.1 | 15.7 | 6.9 |
| 7 | 81.2 | 87.8 | 93.3 | 97.2 | 97.2 | 16.0 | 6.6 |
| 10 | 81.0 | 88.8 | 93.8 | 97.6 | 97.6 | 16.6 | 7.8 |
| 13 | 81.5 | 88.6 | 93.5 | 98.2 | 98.2 | 16.7 | 7.1 |
| 16 | 80.9 | 89.0 | 93.7 | 97.5 | 97.5 | 16.6 | 8.1 |
| 19 | 82.4 | 89.4 | 94.4 | 98.1 | 98.1 | 15.7 | 7.0 |
| 22 | 82.2 | 89.5 | 94.3 | 98.1 | 98.1 | 15.9 | 7.3 |
| 25 | 80.7 | 88.6 | 93.9 | 97.4 | 97.4 | 16.7 | 7.9 |
| 28 | 79.2 | 86.7 | 92.2 | 96.1 | 96.1 | 16.9 | 7.5 |
| 31 | 76.2 | 84.5 | 90.9 | 94.5 | 94.5 | 18.3 | 8.3 |
| 34 | 73.1 | 82.3 | 90.1 | 93.4 | 93.4 | 20.3 | 9.2 |
| 37 | 73.8 | 82.4 | 89.9 | 93.4 | 93.4 | 19.6 | 8.6 |
| 40 | 74.6 | 83.1 | 90.0 | 93.6 | 93.6 | 19.0 | 8.5 |
| 43 | 76.2 | 83.7 | 89.7 | 93.9 | 93.9 | 17.7 | 7.5 |
| 46 | 76.1 | 84.2 | 89.3 | 93.9 | 93.9 | 17.8 | 8.1 |
| 49 | 80.1 | 86.0 | 91.4 | 95.6 | 95.6 | 15.5 | 5.9 |
| 52 | 78.4 | 85.3 | 91.9 | 95.4 | 95.4 | 17.0 | 6.9 |
| 55 | 81.0 | 86.9 | 93.4 | 96.9 | 96.9 | 15.9 | 5.9 |
| 58 | 80.5 | 87.2 | 93.2 | 96.5 | 98.1 | 16.0 | 6.7 |
| 61 | 83.6 | 89.3 | 94.2 | 98.1 | 98.1 | 14.5 | 5.7 |
| 64 | 84.1 | 89.3 | 94.6 | 99.1 | 100.7 | 15.0 | 5.2 |
| 67 | 85.6 | 90.5 | 95.0 | 99.3 | 99.3 | 13.7 | 4.9 |
| 70 | 86.5 | 91.7 | 97.7 | 101.1 | 102.2 | 14.6 | 5.2 |
| 73 | 88.8 | 94.0 | 98.3 | 102.5 | 102.5 | 13.7 | 5.2 |
| 76 | 90.8 | 95.7 | 99.7 | 103.9 | 103.9 | 13.1 | 4.9 |
| 79 | 92.5 | 98.3 | 101.9 | 106.6 | 106.6 | 14.1 | 5.8 |
| 82 | 93.8 | 99.2 | 102.8 | 107.4 | 107.4 | 13.6 | 5.4 |
| o.H. → 85 | 93.7 | 99.7 | 103.2 | 107.1 | 107.1 | 13.4 | 6.0 |
| 87 | 94.4 | 100.8 | 104.6 | 107.6 | 107.6 | 13.2 | 6.4 |
| 90 | 91.1 | 97.7 | 102.5 | 105.2 | 105.2 | 14.1 | 6.6 |
| 93 | 90.9 | 97.4 | 102.3 | 104.7 | 104.7 | 13.8 | 6.5 |
| 96 | 85.7 | 91.6 | 97.3 | 99.6 | 99.6 | 13.9 | 5.9 |
| 99 | 83.8 | 89.8 | 94.5 | 98.4 | 99.5 | 14.6 | 6.0 |
| 102 | 79.1 | 85.3 | 91.2 | 94.6 | 94.6 | 15.5 | 6.2 |
| 105 | 75.6 | 82.6 | 89.2 | 93.1 | 94.3 | 17.5 | 7.0 |
| 108 | 74.6 | 81.6 | 87.4 | 92.3 | 92.3 | 17.7 | 7.0 |
| 111 | 70.5 | 79.4 | 85.7 | .0 | .0 | -70.4 | 8.9 |

TABLE H-VII

NOISE LEVEL FREQUENCY SPECTRA TIME HISTORY

VERTOL CH-47 C

OCTOBER 13, 1976

EVENT 12, 6 DEGREE APPROACH, MIC. 150 METERS WEST

1/3 OCTAVE FREQUENCY BAND VS TIME (SECONDS)
(DB RE 20 MICRO PA)

| BAND | -22.0 | -18.0 | -14.0 | -10.0 | -6.0 | -2.0 | 0 | 2.0 | 6.0 | 7.0 |
|-------|-------|-------|-------|-------|-------|------|------|------|------|------|
| 17 | 84.3 | 86.9 | 89.1 | 89.1 | 86.9 | 89.5 | 90.9 | 90.5 | 82.4 | 82.5 |
| 18 | 85.8 | 84.1 | 86.4 | 87.7 | 80.0 | 90.0 | 89.5 | 85.3 | 84.5 | 85.4 |
| 19 | 84.8 | 82.8 | 84.5 | 83.7 | 73.9 | 85.9 | 86.1 | 79.9 | 77.2 | 79.2 |
| 20 | 82.7 | 81.7 | 83.7 | 79.3 | 77.2 | 85.4 | 81.7 | 79.2 | 76.1 | 80.9 |
| 21 | 74.2 | 75.7 | 78.6 | 80.8 | 79.5 | 76.1 | 76.0 | 71.8 | 78.1 | 77.8 |
| 22 | 76.8 | 78.5 | 80.0 | 79.1 | 74.7 | 84.1 | 83.7 | 77.4 | 75.4 | 77.5 |
| 23 | 81.9 | 76.6 | 79.1 | 73.1 | 85.0 | 87.9 | 88.0 | 84.5 | 72.6 | 69.0 |
| 24 | 76.7 | 77.9 | 74.5 | 83.1 | 89.9 | 88.3 | 84.5 | 85.6 | 78.5 | 73.3 |
| 25 | 76.1 | 72.4 | 71.5 | 82.6 | 86.2 | 81.8 | 79.8 | 82.5 | 80.2 | 78.1 |
| 26 | 73.1 | 61.6 | 74.7 | 83.1 | 82.9 | 73.6 | 76.5 | 73.6 | 79.9 | 79.3 |
| 27 | 73.2 | 71.8 | 77.5 | 82.0 | 80.3 | 76.8 | 78.8 | 79.4 | 73.4 | 77.0 |
| 28 | 74.3 | 74.3 | 78.2 | 74.8 | 81.3 | 72.2 | 74.4 | 74.4 | 72.1 | 69.9 |
| 29 | 76.1 | 73.5 | 71.5 | 79.4 | 76.5 | 73.8 | 74.2 | 75.6 | 72.8 | 72.9 |
| 30 | 71.3 | 65.7 | 68.2 | 72.8 | 77.9 | 71.9 | 71.6 | 72.5 | 70.3 | 67.8 |
| 31 | 68.0 | 64.4 | 67.6 | 74.7 | 75.0 | 69.0 | 69.5 | 69.9 | 67.4 | 67.3 |
| 32 | 65.8 | 64.5 | 64.8 | 71.8 | 72.3 | 69.3 | 69.8 | 70.5 | 69.0 | 67.4 |
| 33 | 63.2 | 61.2 | 62.3 | 67.7 | 68.9 | 66.2 | 66.2 | 66.6 | 63.2 | 62.2 |
| 34 | 57.9 | 57.3 | 57.2 | 64.3 | 65.6 | 63.7 | 63.9 | 65.1 | 60.5 | 59.9 |
| 35 | 55.0 | 55.2 | 55.0 | 59.6 | 63.1 | 62.4 | 62.7 | 65.3 | 59.7 | 59.2 |
| 36 | 55.0 | 55.0 | 55.0 | 55.9 | 59.7 | 60.6 | 61.3 | 62.4 | 57.4 | 56.3 |
| 37 | 55.0 | 55.0 | 55.0 | 55.0 | 55.8 | 57.4 | 58.3 | 59.1 | 55.5 | 55.0 |
| 38 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 | 55.1 | 55.4 | 56.1 | 55.0 | 55.0 |
| 39 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 |
| 40 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 |
| A | 80.9 | 79.3 | 81.6 | 86.4 | 88.4 | 85.3 | 84.5 | 84.5 | 81.3 | 80.7 |
| D | 86.2 | 84.3 | 86.7 | 91.3 | 93.2 | 92.1 | 91.1 | 90.5 | 86.7 | 86.0 |
| OASPL | 92.5 | 92.8 | 94.2 | 95.2 | 96.6 | 97.9 | 97.0 | 95.5 | 91.1 | 91.5 |
| PNL | 94.7 | 92.8 | 94.8 | 98.4 | 100.6 | 99.7 | 99.2 | 98.2 | 94.8 | 94.4 |
| PNLT | 95.6 | 92.8 | 96.0 | 100.3 | 100.6 | 99.7 | 99.2 | 98.2 | 96.0 | 95.7 |

LOWER LIMIT OF ANALYSIS SYSTEM= 55.0

TABLE H-VI

NOISE LEVEL FREQUENCY SPECTRA TIME HISTORY

VERTOL CH-47 C

OCTOBER 13, 1976

EVENT 22, 100 KT. FLY BY, MIC. 150 METERS WEST

1/3 OCTAVE FREQUENCY BAND VS TIME (SECONDS)
(DB RE 20 MICRO PA)

| BAND | -17.0 | -14.0 | -11.0 | -8.0 | -5.0 | -2.0 | 0 | 1.0 | 4.0 | 7.0 |
|-------|-------|-------|-------|------|------|------|------|------|------|------|
| 17 | 76.7 | 80.4 | 85.1 | 88.0 | 88.3 | 85.2 | 85.8 | 85.9 | 86.2 | 79.0 |
| 18 | 83.6 | 82.3 | 85.2 | 88.7 | 89.7 | 80.3 | 89.0 | 87.4 | 81.2 | 74.9 |
| 19 | 84.0 | 84.7 | 86.1 | 81.0 | 87.9 | 80.7 | 87.5 | 85.3 | 76.4 | 68.6 |
| 20 | 78.7 | 76.6 | 83.7 | 81.5 | 83.3 | 84.3 | 83.7 | 78.7 | 68.7 | 70.3 |
| 21 | 76.8 | 75.9 | 76.2 | 75.7 | 79.6 | 78.6 | 75.5 | 73.9 | 64.1 | 69.0 |
| 22 | 73.0 | 72.7 | 74.8 | 78.3 | 79.4 | 73.4 | 82.6 | 78.1 | 72.4 | 59.6 |
| 23 | 69.9 | 72.9 | 74.8 | 80.4 | 73.8 | 80.6 | 64.2 | 80.9 | 75.7 | 65.8 |
| 24 | 62.0 | 69.0 | 74.4 | 77.6 | 72.1 | 80.1 | 83.9 | 79.0 | 76.5 | 69.4 |
| 25 | 58.0 | 64.5 | 71.9 | 71.8 | 71.8 | 81.2 | 75.1 | 70.0 | 74.5 | 72.2 |
| 26 | 57.0 | 62.0 | 70.7 | 65.7 | 77.0 | 77.6 | 71.2 | 71.8 | 70.9 | 70.3 |
| 27 | 60.0 | 58.4 | 67.3 | 70.9 | 76.3 | 74.1 | 71.1 | 68.9 | 74.7 | 65.9 |
| 28 | 62.2 | 57.1 | 66.1 | 73.1 | 67.3 | 74.2 | 67.4 | 69.7 | 69.5 | 69.2 |
| 29 | 62.6 | 61.3 | 64.7 | 71.0 | 67.1 | 71.2 | 67.0 | 69.0 | 72.3 | 64.8 |
| 30 | 57.3 | 61.1 | 61.2 | 64.4 | 66.4 | 72.0 | 67.0 | 67.2 | 71.3 | 65.8 |
| 31 | 55.0 | 56.6 | 59.7 | 64.4 | 61.8 | 71.1 | 65.4 | 65.2 | 68.2 | 63.1 |
| 32 | 55.0 | 55.4 | 57.4 | 60.7 | 63.1 | 68.5 | 68.3 | 68.1 | 69.2 | 63.5 |
| 33 | 55.0 | 55.0 | 55.0 | 60.7 | 62.6 | 66.3 | 64.4 | 64.1 | 66.4 | 59.7 |
| 34 | 55.0 | 55.0 | 55.0 | 55.6 | 58.4 | 63.1 | 62.0 | 61.7 | 62.9 | 57.4 |
| 35 | 55.0 | 55.0 | 55.0 | 55.0 | 57.0 | 61.3 | 61.5 | 60.8 | 62.0 | 56.1 |
| 36 | 55.0 | 55.0 | 55.0 | 55.0 | 55.1 | 59.2 | 59.5 | 59.4 | 59.9 | 55.0 |
| 37 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 | 56.7 | 57.8 | 57.7 | 57.3 | 55.0 |
| 38 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 | 55.1 | 55.0 | 55.1 | 55.0 |
| 39 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 |
| 40 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 |
| A | 70.4 | 71.2 | 75.6 | 78.4 | 79.2 | 82.2 | 81.2 | 79.2 | 80.1 | 75.1 |
| D | 80.7 | 81.7 | 84.4 | 85.4 | 87.0 | 88.1 | 88.9 | 86.7 | 85.4 | 80.4 |
| OASFL | 90.8 | 92.0 | 93.7 | 94.3 | 94.9 | 94.1 | 96.1 | 95.2 | 91.2 | 87.2 |
| PNL | 88.4 | 89.1 | 91.9 | 93.4 | 94.4 | 95.8 | 96.4 | 94.1 | 92.6 | 87.8 |
| PNLT | 88.4 | 89.1 | 91.9 | 93.4 | 94.4 | 95.8 | 97.6 | 95.3 | 92.6 | 89.0 |

LOWER LIMIT OF ANALYSIS SYSTEM= 55.0

TABLE H-VI

NOISE LEVEL FREQUENCY SPECTRA TIME HISTORY

VERTOL CH-47 C

OCTOBER 13, 1976

EVENT 23, 100 KT. FLY BY, MIC. 150 METERS WEST

1/3 OCTAVE FREQUENCY BAND VS TIME (SECONDS)
(DB RE 20 MICRO PA)

| BAND | -18.5 | -15.0 | -11.5 | -8.0 | -4.5 | -1.0 | 0 | .5 | 2.5 | 6.0 | 8.0 |
|-------|-------|-------|-------|------|------|------|------|------|------|------|------|
| 17 | 77.1 | 83.2 | 83.7 | 88.2 | 86.5 | 85.4 | 84.8 | 85.9 | 85.6 | 79.3 | 73.2 |
| 18 | 79.5 | 85.1 | 84.1 | 89.0 | 89.2 | 86.8 | 88.8 | 88.7 | 80.8 | 75.8 | 69.7 |
| 19 | 82.3 | 88.4 | 86.2 | 80.9 | 88.2 | 86.5 | 87.0 | 86.3 | 80.3 | 74.6 | 73.3 |
| 20 | 76.7 | 81.2 | 80.8 | 83.6 | 84.6 | 85.5 | 82.7 | 80.4 | 71.2 | 75.0 | 71.5 |
| 21 | 73.5 | 82.4 | 78.5 | 76.7 | 80.3 | 74.1 | 74.0 | 74.7 | 68.5 | 71.5 | 68.2 |
| 22 | 70.3 | 76.9 | 74.6 | 72.1 | 76.4 | 79.5 | 79.5 | 79.6 | 78.5 | 60.6 | 62.3 |
| 23 | 67.0 | 76.0 | 76.1 | 74.5 | 69.0 | 80.7 | 81.6 | 81.7 | 79.7 | 67.3 | 58.2 |
| 24 | 58.4 | 68.5 | 74.6 | 69.0 | 73.8 | 80.6 | 79.7 | 80.1 | 78.5 | 73.2 | 62.1 |
| 25 | 55.0 | 65.4 | 70.6 | 62.4 | 73.6 | 74.8 | 72.6 | 71.9 | 71.7 | 74.3 | 65.2 |
| 26 | 55.0 | 55.2 | 65.6 | 59.4 | 76.5 | 69.1 | 70.8 | 72.2 | 73.7 | 73.2 | 68.4 |
| 27 | 55.1 | 55.8 | 63.4 | 65.9 | 74.7 | 72.2 | 71.3 | 71.0 | 74.4 | 66.8 | 66.2 |
| 28 | 55.0 | 56.5 | 61.2 | 66.1 | 63.6 | 67.4 | 68.6 | 69.9 | 72.2 | 70.6 | 61.0 |
| 29 | 55.0 | 56.2 | 60.9 | 62.4 | 67.9 | 68.3 | 68.1 | 69.3 | 70.9 | 65.6 | 65.0 |
| 30 | 55.0 | 55.1 | 61.6 | 55.6 | 64.7 | 66.9 | 68.1 | 68.4 | 69.8 | 67.0 | 59.8 |
| 31 | 55.0 | 55.0 | 59.7 | 58.6 | 62.1 | 66.0 | 66.1 | 66.5 | 68.6 | 64.9 | 61.0 |
| 32 | 55.0 | 55.0 | 56.7 | 57.1 | 62.9 | 67.9 | 69.3 | 69.5 | 70.5 | 64.0 | 59.9 |
| 33 | 55.0 | 55.0 | 55.5 | 59.1 | 61.8 | 66.0 | 65.8 | 65.9 | 66.1 | 61.4 | 57.3 |
| 34 | 55.0 | 55.0 | 55.0 | 55.4 | 58.3 | 63.8 | 63.5 | 63.7 | 63.4 | 58.5 | 55.6 |
| 35 | 55.0 | 55.0 | 55.0 | 55.0 | 57.5 | 63.0 | 62.5 | 62.6 | 62.9 | 56.8 | 55.0 |
| 36 | 55.0 | 55.0 | 55.0 | 55.0 | 55.5 | 59.6 | 60.4 | 60.8 | 61.0 | 55.3 | 55.0 |
| 37 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 | 58.0 | 59.0 | 59.4 | 58.5 | 55.0 | 55.0 |
| 38 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 | 55.8 | 56.1 | 55.7 | 55.0 | 55.0 |
| 39 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 |
| 40 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 |
| A | 67.0 | 73.6 | 74.2 | 73.0 | 78.5 | 79.9 | 80.1 | 80.4 | 80.4 | 76.7 | 71.5 |
| D | 79.3 | 84.8 | 83.6 | 83.2 | 86.5 | 87.8 | 87.7 | 87.6 | 86.0 | 81.8 | 77.5 |
| OASPL | 89.6 | 94.9 | 93.5 | 94.2 | 94.7 | 94.6 | 95.2 | 95.5 | 92.5 | 88.8 | 84.6 |
| PNL | 86.3 | 91.6 | 91.3 | 91.5 | 94.2 | 95.0 | 95.1 | 95.2 | 93.8 | 89.6 | 85.3 |
| PNLT | 86.3 | 91.6 | 91.3 | 91.5 | 95.5 | 95.0 | 96.2 | 96.3 | 94.9 | 91.1 | 86.9 |

LOWER LIMIT OF ANALYSIS SYSTEM= 55.0

TABLE H-VI

NOISE LEVEL FREQUENCY SPECTRA TIME HISTORY

VERTOL CH-47 C

OCTOBER 13, 1976

EVENT 24, 141 KT. FLY BY, MIC. 150 METERS WEST

1/3 OCTAVE FREQUENCY BAND VS TIME (SECONDS)
(DB RE 20 MICRO PA)

| BAND | -14.5 | -12.0 | -9.5 | -7.0 | -5.5 | -4.5 | -2.0 | 0 | .5 | 3.0 |
|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|------|
| 17 | 91.0 | 92.5 | 95.0 | 97.2 | 96.4 | 94.9 | 90.4 | 87.4 | 89.4 | 85.1 |
| 18 | 82.3 | 90.3 | 93.9 | 97.8 | 99.3 | 99.6 | 93.2 | 91.2 | 91.5 | 79.8 |
| 19 | 86.6 | 84.8 | 88.9 | 90.4 | 95.1 | 93.1 | 92.6 | 92.0 | 91.7 | 79.4 |
| 20 | 87.7 | 92.7 | 97.4 | 99.4 | 95.4 | 92.4 | 90.2 | 90.6 | 88.4 | 74.7 |
| 21 | 82.3 | 85.6 | 89.0 | 92.6 | 95.0 | 93.4 | 87.8 | 80.0 | 76.4 | 68.6 |
| 22 | 79.4 | 87.4 | 91.0 | 95.0 | 89.6 | 88.2 | 81.0 | 83.1 | 83.4 | 78.0 |
| 23 | 76.6 | 80.0 | 88.0 | 89.4 | 87.6 | 85.2 | 76.1 | 86.3 | 87.3 | 80.5 |
| 24 | 77.9 | 72.0 | 81.9 | 84.5 | 80.5 | 77.0 | 78.7 | 87.8 | 87.7 | 80.4 |
| 25 | 77.9 | 71.7 | 81.5 | 84.3 | 78.8 | 72.9 | 82.2 | 83.2 | 81.5 | 77.4 |
| 26 | 73.5 | 68.9 | 78.6 | 82.1 | 76.5 | 78.3 | 85.2 | 74.5 | 74.1 | 72.7 |
| 27 | 69.6 | 70.5 | 77.3 | 84.0 | 81.0 | 83.9 | 81.4 | 75.6 | 74.8 | 76.4 |
| 28 | 68.8 | 69.5 | 76.8 | 79.7 | 83.9 | 84.9 | 74.3 | 70.5 | 71.2 | 71.8 |
| 29 | 67.7 | 64.2 | 74.5 | 72.6 | 77.5 | 77.6 | 80.5 | 71.7 | 71.8 | 75.0 |
| 30 | 68.0 | 66.8 | 75.7 | 71.7 | 79.0 | 78.7 | 75.6 | 72.1 | 72.1 | 72.7 |
| 31 | 65.3 | 65.0 | 75.1 | 73.2 | 76.0 | 75.3 | 74.2 | 69.4 | 69.3 | 70.2 |
| 32 | 62.4 | 63.5 | 72.9 | 71.6 | 73.6 | 72.8 | 70.5 | 69.2 | 70.3 | 70.7 |
| 33 | 58.3 | 61.8 | 70.9 | 68.9 | 71.2 | 70.2 | 67.4 | 68.3 | 67.8 | 68.2 |
| 34 | 56.2 | 59.4 | 66.5 | 65.3 | 68.0 | 66.9 | 64.5 | 66.1 | 66.0 | 65.0 |
| 35 | 55.0 | 58.6 | 65.4 | 60.9 | 62.9 | 63.9 | 63.6 | 65.4 | 65.0 | 63.8 |
| 36 | 55.0 | 55.7 | 62.3 | 58.9 | 60.8 | 59.2 | 61.7 | 63.5 | 63.3 | 61.9 |
| 37 | 55.0 | 55.0 | 55.1 | 55.0 | 56.6 | 57.1 | 57.8 | 61.4 | 61.2 | 58.6 |
| 38 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 | 55.2 | 57.2 | 56.6 | 55.8 |
| 39 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 |
| 40 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 |
| A | 78.6 | 80.9 | 87.3 | 89.6 | 88.2 | 87.8 | 87.4 | 85.1 | 85.2 | 82.5 |
| D | 87.0 | 89.7 | 95.4 | 97.6 | 96.1 | 95.6 | 93.3 | 92.7 | 92.6 | 87.7 |
| OASPL | 95.1 | 97.7 | 101.9 | 104.5 | 103.8 | 104.0 | 101.5 | 98.7 | 98.2 | 91.3 |
| PNL | 95.1 | 97.8 | 103.4 | 105.0 | 103.8 | 103.5 | 100.6 | 100.2 | 100.0 | 95.1 |
| PNLT | 95.1 | 97.8 | 103.4 | 105.0 | 105.4 | 104.9 | 102.5 | 100.2 | 100.0 | 95.1 |

LOWER LIMIT OF ANALYSIS SYSTEM= 55.0

TABLE H-VI

NOISE LEVEL FREQUENCY SPECTRA TIME HISTORY

VERTOL CH-47 C

OCTOBER 13, 1976

EVENT 25, 141 KT. FLY BY, MIC. 150 METERS WEST

1/3 OCTAVE FREQUENCY BAND VS TIME (SECONDS)
(DB RE 20 MICRO PA)

| BAND | -11.0 | -9.5 | -8.0 | -6.5 | -5.5 | -5.0 | -3.5 | -2.0 | -.5 | 0 | 1.5 |
|-------|-------|-------|-------|-------|-------|-------|-------|-------|------|------|------|
| 17 | 92.6 | 95.8 | 96.7 | 97.5 | 97.8 | 97.5 | 93.2 | 90.8 | 84.5 | 86.1 | 88.4 |
| 18 | 88.4 | 92.9 | 95.9 | 99.3 | 100.9 | 100.7 | 97.5 | 93.6 | 87.3 | 89.4 | 87.3 |
| 19 | 85.6 | 90.0 | 92.8 | 93.4 | 96.8 | 97.6 | 97.7 | 93.5 | 88.8 | 90.0 | 87.9 |
| 20 | 89.6 | 97.6 | 101.3 | 100.8 | 97.5 | 95.4 | 94.4 | 92.1 | 88.9 | 89.0 | 79.4 |
| 21 | 82.9 | 90.6 | 94.1 | 96.5 | 98.0 | 97.5 | 89.0 | 88.5 | 83.3 | 79.8 | 73.1 |
| 22 | 81.8 | 89.8 | 96.6 | 96.4 | 92.2 | 90.8 | 86.6 | 80.0 | 81.1 | 82.2 | 82.2 |
| 23 | 80.8 | 84.3 | 93.9 | 91.1 | 91.8 | 91.3 | 79.9 | 75.2 | 84.2 | 85.7 | 85.4 |
| 24 | 76.0 | 78.2 | 88.5 | 85.9 | 84.2 | 82.6 | 69.5 | 77.4 | 85.3 | 87.2 | 84.4 |
| 25 | 73.7 | 79.9 | 88.0 | 83.3 | 79.6 | 77.9 | 73.0 | 81.2 | 82.5 | 82.4 | 76.1 |
| 26 | 74.1 | 79.8 | 86.1 | 79.9 | 78.2 | 79.1 | 81.1 | 85.8 | 77.6 | 74.6 | 76.8 |
| 27 | 76.4 | 79.7 | 87.5 | 81.1 | 84.5 | 85.8 | 83.7 | 81.2 | 75.0 | 75.7 | 75.0 |
| 28 | 73.3 | 76.9 | 83.2 | 78.8 | 87.1 | 88.4 | 80.3 | 74.6 | 72.9 | 71.0 | 72.8 |
| 29 | 72.5 | 71.1 | 82.0 | 75.2 | 83.2 | 83.3 | 76.2 | 80.0 | 71.9 | 73.0 | 72.2 |
| 30 | 71.9 | 70.5 | 80.7 | 76.1 | 80.2 | 80.7 | 77.9 | 75.6 | 72.0 | 72.7 | 71.0 |
| 31 | 70.1 | 73.5 | 78.3 | 75.1 | 80.8 | 81.8 | 70.9 | 74.8 | 69.6 | 69.9 | 69.7 |
| 32 | 72.6 | 72.0 | 76.9 | 70.7 | 77.8 | 77.6 | 70.9 | 72.1 | 69.6 | 70.2 | 70.8 |
| 33 | 70.4 | 67.7 | 76.3 | 69.8 | 76.5 | 76.6 | 67.6 | 70.2 | 69.3 | 69.7 | 68.1 |
| 34 | 62.2 | 63.5 | 71.7 | 67.3 | 75.7 | 75.3 | 64.4 | 66.9 | 66.0 | 66.6 | 65.6 |
| 35 | 58.1 | 60.0 | 68.2 | 66.5 | 70.5 | 70.6 | 60.7 | 64.0 | 65.8 | 66.2 | 64.8 |
| 36 | 56.1 | 55.7 | 61.1 | 60.3 | 66.5 | 66.3 | 57.5 | 64.0 | 63.9 | 64.2 | 62.7 |
| 37 | 55.0 | 55.0 | 58.2 | 57.1 | 61.1 | 60.7 | 55.3 | 57.7 | 60.9 | 61.9 | 61.0 |
| 38 | 55.0 | 55.0 | 55.3 | 55.0 | 62.0 | 61.4 | 55.0 | 55.6 | 57.7 | 58.1 | 57.2 |
| 39 | 55.0 | 55.0 | 55.0 | 55.0 | 56.7 | 56.5 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 |
| 40 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 |
| A | 82.1 | 85.6 | 93.7 | 90.3 | 92.9 | 92.8 | 86.6 | 86.8 | 84.1 | 84.6 | 83.6 |
| D | 89.5 | 94.5 | 100.6 | 99.1 | 99.4 | 99.2 | 94.6 | 93.0 | 91.3 | 92.0 | 89.8 |
| OASPL | 96.4 | 101.9 | 105.9 | 105.9 | 105.8 | 105.6 | 102.9 | 101.6 | 98.6 | 98.2 | 95.7 |
| PNL | 97.7 | 102.7 | 107.8 | 106.3 | 107.1 | 106.8 | 102.1 | 101.1 | 99.0 | 99.8 | 97.9 |
| PNLT | 97.7 | 102.7 | 107.8 | 106.3 | 108.4 | 108.3 | 103.6 | 102.8 | 99.0 | 99.8 | 97.9 |

LOWER LIMIT OF ANALYSIS SYSTEM= 55.0

TABLE H-VI

NOISE LEVEL FREQUENCY SPECTRA TIME HISTORY

VERTOL CH-47 C

OCTOBER 13, 1976

EVENT 26, 141 KT. FLY BY, MIC. 150 METERS WEST

1/3 OCTAVE FREQUENCY BAND VS TIME (SECONDS)
(DB RE 20 MICRO PA)

| BAND | -13.5 | -11.5 | -9.5 | -8.0 | -7.5 | -5.5 | -3.5 | -1.5 | 0 | .5 | 2.0 |
|-------|-------|-------|-------|-------|-------|-------|-------|------|-------|------|------|
| 17 | 93.6 | 97.0 | 98.0 | 98.0 | 97.4 | 96.2 | 94.0 | 88.8 | 87.0 | 88.7 | 87.6 |
| 18 | 77.0 | 91.8 | 96.5 | 98.2 | 98.8 | 99.5 | 98.0 | 88.6 | 90.5 | 90.8 | 82.8 |
| 19 | 88.5 | 94.5 | 89.4 | 89.6 | 92.9 | 98.1 | 98.6 | 87.5 | 91.2 | 90.8 | 82.5 |
| 20 | 85.9 | 98.3 | 99.4 | 98.8 | 99.0 | 93.0 | 96.5 | 87.5 | 88.4 | 85.8 | 74.7 |
| 21 | 81.1 | 93.3 | 91.6 | 94.7 | 96.2 | 95.3 | 87.6 | 84.9 | 78.0 | 76.0 | 73.1 |
| 22 | 77.0 | 91.4 | 93.3 | 96.0 | 95.1 | 91.2 | 86.0 | 79.2 | 83.5 | 84.0 | 80.2 |
| 23 | 74.0 | 90.1 | 91.9 | 91.4 | 91.5 | 87.9 | 79.1 | 81.6 | 86.2 | 86.1 | 83.5 |
| 24 | 72.9 | 83.7 | 86.5 | 88.0 | 88.9 | 82.0 | 71.9 | 81.6 | 86.5 | 85.9 | 81.0 |
| 25 | 70.7 | 79.3 | 85.0 | 83.8 | 83.5 | 73.8 | 77.4 | 79.4 | 79.7 | 77.4 | 74.4 |
| 26 | 69.2 | 77.3 | 81.0 | 78.7 | 77.0 | 71.1 | 84.4 | 80.3 | 75.6 | 77.0 | 77.2 |
| 27 | 69.3 | 76.0 | 81.3 | 78.0 | 76.4 | 79.0 | 84.9 | 74.6 | 74.6 | 73.9 | 75.3 |
| 28 | 68.9 | 73.6 | 79.6 | 77.2 | 77.1 | 83.4 | 79.0 | 74.0 | 71.3 | 72.2 | 75.1 |
| 29 | 68.3 | 72.4 | 78.4 | 75.4 | 77.8 | 80.4 | 78.4 | 72.9 | 72.3 | 72.5 | 74.2 |
| 30 | 68.5 | 72.4 | 79.7 | 77.9 | 77.6 | 70.8 | 78.1 | 72.3 | 71.9 | 71.6 | 72.1 |
| 31 | 68.3 | 71.2 | 76.1 | 80.6 | 79.7 | 72.0 | 75.0 | 70.4 | 69.7 | 69.8 | 70.7 |
| 32 | 66.4 | 68.0 | 75.3 | 76.1 | 75.8 | 69.8 | 73.0 | 69.0 | 69.5 | 69.8 | 70.4 |
| 33 | 65.0 | 65.3 | 71.2 | 72.0 | 71.9 | 67.8 | 71.8 | 69.1 | 68.7 | 68.6 | 68.7 |
| 34 | 65.0 | 65.0 | 68.8 | 71.0 | 70.4 | 65.4 | 67.4 | 66.7 | 67.2 | 67.1 | 65.8 |
| 35 | 65.0 | 65.0 | 65.6 | 67.6 | 67.5 | 65.0 | 65.8 | 65.7 | 66.3 | 66.1 | 65.1 |
| 36 | 65.0 | 65.0 | 65.7 | 65.0 | 65.0 | 65.0 | 65.0 | 65.2 | 65.2 | 65.2 | 65.0 |
| 37 | 65.0 | 65.0 | 65.0 | 65.0 | 65.0 | 65.0 | 65.0 | 65.0 | 65.0 | 65.0 | 65.0 |
| 38 | 65.0 | 65.0 | 65.0 | 65.0 | 65.0 | 65.0 | 65.0 | 65.0 | 65.0 | 65.0 | 65.0 |
| 39 | 65.0 | 65.0 | 65.0 | 65.0 | 65.0 | 65.0 | 65.0 | 65.0 | 65.0 | 65.0 | 65.0 |
| 40 | 65.0 | 65.0 | 65.0 | 65.0 | 65.0 | 65.0 | 65.0 | 65.0 | 65.0 | 65.0 | 65.0 |
| A | 77.5 | 87.0 | 89.3 | 91.2 | 91.0 | 88.3 | 88.6 | 84.2 | 84.6 | 84.2 | 82.8 |
| D | 87.1 | 95.7 | 96.6 | 98.2 | 98.2 | 95.5 | 95.3 | 90.9 | 92.3 | 91.8 | 88.8 |
| OASPL | 96.2 | 103.0 | 103.8 | 104.5 | 104.7 | 103.9 | 103.7 | 99.4 | 97.9 | 97.5 | 93.6 |
| PNL | 96.7 | 104.1 | 106.1 | 106.1 | 106.3 | 104.0 | 104.0 | 98.7 | 100.0 | 99.7 | 97.3 |
| PNLT | 96.7 | 104.1 | 106.1 | 107.3 | 106.3 | 105.4 | 104.0 | 98.7 | 100.0 | 99.7 | 97.3 |

LOWER LIMIT OF ANALYSIS SYSTEM= 65.0

TABLE H-VI

NOISE LEVEL FREQUENCY SPECTRA TIME HISTORY

VERTOL CH-47 C

OCTOBER 13, 1976

EVENT 27, 141 KT. FLY BY, MIC. 150 METERS WEST

1/3 OCTAVE FREQUENCY BAND VS TIME (SECONDS)
(DB RE 20 MICRO PA)

| BAND | -14.5 | -12.5 | -10.5 | -8.5 | -6.5 | -5.0 | -4.5 | -2.5 | -.5 | 0 | 1.5 |
|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|------|
| 17 | 84.9 | 94.4 | 94.8 | 94.8 | 98.7 | 96.4 | 96.0 | 93.8 | 87.8 | 89.3 | 88.1 |
| 18 | 78.2 | 84.0 | 89.2 | 92.5 | 100.1 | 100.7 | 100.0 | 93.2 | 91.1 | 91.9 | 84.9 |
| 19 | 85.1 | 87.3 | 87.3 | 83.6 | 96.4 | 101.0 | 100.7 | 93.1 | 92.0 | 92.2 | 84.5 |
| 20 | 87.8 | 92.9 | 98.0 | 93.8 | 97.8 | 97.9 | 98.5 | 92.6 | 90.1 | 88.5 | 76.6 |
| 21 | 85.8 | 92.0 | 89.4 | 85.5 | 97.3 | 95.4 | 91.3 | 90.8 | 79.6 | 77.0 | 74.3 |
| 22 | 84.6 | 90.0 | 90.1 | 88.0 | 93.5 | 94.7 | 93.4 | 85.8 | 82.6 | 83.1 | 81.6 |
| 23 | 81.5 | 90.7 | 85.5 | 84.7 | 94.4 | 90.1 | 86.7 | 80.0 | 87.1 | 87.1 | 84.5 |
| 24 | 75.8 | 83.7 | 80.7 | 83.4 | 89.6 | 86.1 | 82.5 | 80.8 | 88.5 | 88.1 | 82.8 |
| 25 | 73.0 | 78.9 | 82.4 | 81.8 | 83.6 | 75.9 | 73.7 | 84.2 | 83.1 | 80.8 | 77.0 |
| 26 | 71.3 | 75.9 | 81.4 | 78.8 | 78.4 | 80.7 | 85.7 | 89.7 | 75.5 | 75.2 | 76.4 |
| 27 | 69.7 | 76.1 | 82.8 | 77.8 | 78.2 | 88.1 | 90.5 | 87.6 | 77.1 | 76.7 | 76.1 |
| 28 | 67.4 | 73.0 | 77.8 | 75.1 | 80.8 | 88.9 | 89.6 | 78.1 | 72.0 | 72.6 | 74.2 |
| 29 | 66.9 | 70.5 | 73.4 | 72.0 | 83.7 | 83.4 | 82.4 | 81.3 | 73.5 | 73.1 | 74.6 |
| 30 | 66.3 | 70.0 | 69.2 | 72.9 | 80.8 | 78.5 | 82.0 | 80.3 | 72.9 | 72.6 | 73.0 |
| 31 | 65.4 | 67.6 | 68.9 | 69.6 | 80.0 | 79.6 | 79.0 | 77.4 | 71.0 | 70.8 | 71.4 |
| 32 | 65.0 | 65.6 | 68.1 | 72.5 | 78.9 | 78.6 | 80.0 | 76.1 | 70.8 | 70.6 | 71.3 |
| 33 | 65.0 | 65.0 | 66.4 | 68.3 | 74.8 | 76.0 | 76.9 | 75.0 | 70.4 | 70.0 | 70.0 |
| 34 | 65.0 | 65.0 | 65.0 | 66.2 | 73.1 | 71.7 | 71.8 | 69.9 | 67.9 | 67.8 | 67.7 |
| 35 | 65.0 | 65.0 | 65.0 | 65.1 | 70.8 | 69.1 | 69.4 | 68.0 | 67.2 | 66.9 | 66.2 |
| 36 | 65.0 | 65.0 | 65.0 | 65.0 | 65.9 | 67.0 | 67.4 | 66.2 | 65.7 | 65.4 | 65.3 |
| 37 | 65.0 | 65.0 | 65.0 | 65.0 | 65.0 | 65.4 | 66.0 | 65.0 | 65.0 | 65.0 | 65.0 |
| 38 | 65.0 | 65.0 | 65.0 | 65.0 | 65.0 | 65.0 | 65.0 | 65.0 | 65.0 | 65.0 | 65.0 |
| 39 | 65.0 | 65.0 | 65.0 | 65.0 | 65.0 | 65.0 | 65.0 | 65.0 | 65.0 | 65.0 | 65.0 |
| 40 | 65.0 | 65.0 | 65.0 | 65.0 | 65.0 | 65.0 | 65.0 | 65.0 | 65.0 | 65.0 | 65.0 |
| A | 79.2 | 85.3 | 86.9 | 84.9 | 91.5 | 93.0 | 93.5 | 91.8 | 86.0 | 85.5 | 83.5 |
| D | 88.7 | 93.6 | 94.0 | 91.5 | 96.8 | 99.5 | 99.2 | 97.1 | 90.5 | 93.1 | 90.1 |
| OASPL | 94.2 | 99.9 | 101.0 | 99.3 | 105.7 | 106.4 | 106.2 | 103.0 | 98.8 | 98.3 | 94.0 |
| PNL | 96.7 | 101.7 | 103.6 | 101.7 | 107.1 | 107.4 | 107.3 | 104.7 | 101.4 | 101.1 | 98.3 |
| PNLT | 96.7 | 101.7 | 103.6 | 102.8 | 107.1 | 108.5 | 108.3 | 104.7 | 101.4 | 101.1 | 98.3 |

LOWER LIMIT OF ANALYSIS SYSTEM= 65.0

TABLE H-VI

NOISE LEVEL FREQUENCY SPECTRA TIME HISTORY

VERTOL CH-47 C

OCTOBER 13, 1976

EVENT 28, 150 KT. FLY BY, MIC. 150 METERS WEST

1/3 OCTAVE FREQUENCY BAND VS TIME (SECONDS)
(DB RE 20 MICRO PA)

| BAND | -8.0 | -7.0 | -6.0 | -5.0 | -4.0 | -3.0 | -2.0 | -1.0 | 0 | .5 |
|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 17 | 98.2 | 99.5 | 99.7 | 100.4 | 98.9 | 96.5 | 95.8 | 93.5 | 92.0 | 92.2 |
| 18 | 95.8 | 99.3 | 102.0 | 103.9 | 102.9 | 99.8 | 96.5 | 95.5 | 94.5 | 94.0 |
| 19 | 84.4 | 94.3 | 99.7 | 102.1 | 102.4 | 100.8 | 95.7 | 94.7 | 95.2 | 93.9 |
| 20 | 96.8 | 99.5 | 97.4 | 97.9 | 98.3 | 99.9 | 96.2 | 93.0 | 92.9 | 90.5 |
| 21 | 87.8 | 95.6 | 99.6 | 102.9 | 99.7 | 93.8 | 92.8 | 89.4 | 85.3 | 78.7 |
| 22 | 86.3 | 93.8 | 96.2 | 98.6 | 96.8 | 93.6 | 88.2 | 80.7 | 78.0 | 79.3 |
| 23 | 82.9 | 88.6 | 97.1 | 99.4 | 94.5 | 87.8 | 82.5 | 79.7 | 84.4 | 84.9 |
| 24 | 78.7 | 84.6 | 93.5 | 93.8 | 89.2 | 83.2 | 78.2 | 84.2 | 86.3 | 85.5 |
| 25 | 75.5 | 80.3 | 89.7 | 90.0 | 82.0 | 74.7 | 82.7 | 86.3 | 84.8 | 82.7 |
| 26 | 73.0 | 77.0 | 86.4 | 85.4 | 77.2 | 83.3 | 89.4 | 37.0 | 77.2 | 74.0 |
| 27 | 74.4 | 76.9 | 85.8 | 85.4 | 84.4 | 86.7 | 88.7 | 82.1 | 76.8 | 77.2 |
| 28 | 74.0 | 77.6 | 83.5 | 85.2 | 87.2 | 85.5 | 80.2 | 76.1 | 73.6 | 72.7 |
| 29 | 71.5 | 77.9 | 81.9 | 86.2 | 85.1 | 81.4 | 80.9 | 75.6 | 74.2 | 74.8 |
| 30 | 68.9 | 74.0 | 77.2 | 84.2 | 78.0 | 80.1 | 79.3 | 75.1 | 73.2 | 73.3 |
| 31 | 67.9 | 72.0 | 74.8 | 78.9 | 77.5 | 77.8 | 75.9 | 72.5 | 72.2 | 72.2 |
| 32 | 68.4 | 70.3 | 74.2 | 76.7 | 76.5 | 75.9 | 74.4 | 72.3 | 72.2 | 72.1 |
| 33 | 65.8 | 70.0 | 72.6 | 76.7 | 75.2 | 75.2 | 72.8 | 70.5 | 71.1 | 71.2 |
| 34 | 65.0 | 67.9 | 69.5 | 73.3 | 68.8 | 69.0 | 68.2 | 68.6 | 69.5 | 69.5 |
| 35 | 65.0 | 66.3 | 66.1 | 70.0 | 66.8 | 66.9 | 66.9 | 67.8 | 68.2 | 68.1 |
| 36 | 65.0 | 65.0 | 65.0 | 67.5 | 65.0 | 65.0 | 65.2 | 66.8 | 67.0 | 66.8 |
| 37 | 65.0 | 65.0 | 65.0 | 67.1 | 65.0 | 65.0 | 65.0 | 65.0 | 65.3 | 65.2 |
| 38 | 65.0 | 65.0 | 65.0 | 65.5 | 65.0 | 65.0 | 65.0 | 65.0 | 65.0 | 65.0 |
| 39 | 65.0 | 65.0 | 65.0 | 65.0 | 65.0 | 65.0 | 65.0 | 65.0 | 65.0 | 65.0 |
| 40 | 65.0 | 65.0 | 65.0 | 65.0 | 65.0 | 65.0 | 65.0 | 65.0 | 65.0 | 65.0 |
| A | 83.6 | 88.4 | 93.2 | 95.5 | 92.9 | 91.3 | 90.4 | 88.0 | 86.1 | 85.3 |
| D | 92.9 | 97.4 | 101.5 | 103.4 | 100.9 | 98.3 | 96.5 | 94.9 | 94.5 | 93.6 |
| OASPL | 101.6 | 105.2 | 107.7 | 109.7 | 108.2 | 106.2 | 104.4 | 103.3 | 101.4 | 100.1 |
| PNL | 102.2 | 105.7 | 108.8 | 111.0 | 108.4 | 107.1 | 105.0 | 103.0 | 102.1 | 101.2 |
| PNLT | 102.2 | 105.7 | 108.8 | 111.0 | 108.4 | 107.1 | 105.0 | 103.0 | 102.1 | 101.2 |

LOWER LIMIT OF ANALYSIS SYSTEM= 65.0

TABLE H-VI

NOISE LEVEL FREQUENCY SPECTRA TIME HISTORY

VERTOL CH-47 C

OCTOBER 13, 1976

EVENT 29, 150 KT. FLY BY, MIC. 150 METERS WEST

1/3 OCTAVE FREQUENCY BAND VS TIME (SECONDS)
(DB RE 20 MICRO PA)

| BAND | -8.5 | -7.5 | -6.5 | -5.5 | -4.5 | -3.5 | -2.5 | -1.5 | 0 | .5 |
|-------|------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 17 | 95.3 | 99.2 | 99.9 | 98.1 | 97.7 | 96.3 | 96.2 | 94.3 | 90.3 | 91.4 |
| 18 | 92.1 | 98.0 | 99.6 | 100.2 | 102.6 | 100.3 | 97.5 | 94.5 | 93.1 | 93.1 |
| 19 | 83.9 | 89.7 | 91.8 | 99.2 | 103.8 | 102.8 | 99.2 | 92.3 | 93.5 | 93.0 |
| 20 | 89.4 | 98.2 | 97.5 | 96.2 | 101.1 | 103.2 | 100.8 | 92.5 | 91.5 | 89.2 |
| 21 | 86.6 | 94.4 | 95.1 | 99.4 | 99.7 | 95.2 | 95.2 | 90.3 | 83.9 | 77.3 |
| 22 | 81.6 | 89.2 | 93.7 | 97.3 | 100.7 | 96.9 | 89.6 | 85.8 | 77.6 | 80.2 |
| 23 | 80.2 | 87.5 | 93.9 | 96.6 | 96.3 | 93.1 | 88.3 | 78.8 | 84.0 | 85.0 |
| 24 | 80.5 | 85.2 | 90.0 | 93.2 | 95.1 | 88.6 | 78.5 | 78.3 | 86.2 | 85.9 |
| 25 | 78.3 | 83.8 | 85.1 | 89.0 | 89.2 | 78.5 | 76.9 | 83.7 | 85.0 | 81.9 |
| 26 | 72.0 | 78.4 | 80.7 | 84.2 | 82.7 | 82.5 | 86.9 | 88.4 | 78.8 | 73.4 |
| 27 | 74.0 | 79.0 | 78.6 | 81.3 | 84.8 | 90.9 | 92.1 | 85.6 | 76.6 | 77.2 |
| 28 | 72.5 | 78.5 | 76.5 | 82.0 | 88.3 | 90.3 | 88.1 | 78.1 | 73.7 | 72.8 |
| 29 | 71.6 | 78.2 | 76.0 | 83.2 | 89.3 | 85.8 | 79.4 | 79.5 | 73.8 | 74.4 |
| 30 | 72.1 | 78.1 | 76.8 | 81.7 | 86.6 | 79.4 | 81.5 | 77.1 | 73.1 | 73.4 |
| 31 | 70.8 | 76.8 | 76.0 | 77.9 | 80.2 | 81.1 | 80.6 | 74.7 | 71.9 | 71.8 |
| 32 | 69.6 | 75.6 | 76.8 | 75.2 | 78.7 | 77.2 | 76.6 | 72.7 | 71.8 | 71.7 |
| 33 | 66.8 | 73.0 | 75.5 | 72.8 | 78.2 | 74.2 | 74.3 | 71.8 | 70.9 | 70.9 |
| 34 | 65.6 | 67.0 | 69.7 | 71.4 | 74.9 | 71.0 | 70.9 | 69.5 | 69.5 | 69.5 |
| 35 | 65.0 | 65.6 | 67.7 | 68.4 | 72.6 | 67.9 | 67.9 | 67.4 | 68.0 | 68.5 |
| 36 | 65.0 | 65.0 | 66.6 | 65.6 | 68.0 | 66.6 | 67.0 | 67.3 | 66.8 | 66.7 |
| 37 | 65.0 | 65.0 | 65.0 | 65.0 | 65.2 | 65.1 | 65.1 | 65.0 | 65.0 | 65.0 |
| 38 | 65.0 | 65.0 | 65.0 | 65.0 | 65.0 | 65.0 | 65.0 | 65.0 | 65.0 | 65.0 |
| 39 | 65.0 | 65.0 | 65.0 | 65.0 | 65.0 | 65.0 | 65.0 | 65.0 | 65.0 | 65.0 |
| 40 | 65.0 | 65.0 | 65.0 | 65.0 | 65.0 | 65.0 | 65.0 | 65.0 | 65.0 | 65.0 |
| A | 82.1 | 88.5 | 90.2 | 94.1 | 96.1 | 95.0 | 93.7 | 89.2 | 86.0 | 85.4 |
| D | 91.0 | 96.9 | 98.4 | 101.7 | 103.2 | 101.9 | 99.9 | 95.1 | 93.7 | 93.1 |
| OASPL | 98.2 | 103.7 | 104.9 | 107.3 | 109.7 | 108.4 | 106.5 | 103.2 | 100.5 | 99.7 |
| PNL | 99.3 | 105.2 | 106.2 | 108.5 | 110.9 | 109.7 | 107.7 | 103.7 | 101.2 | 100.7 |
| PNLT | 99.3 | 105.2 | 106.2 | 108.5 | 110.9 | 109.7 | 108.7 | 103.7 | 101.2 | 100.7 |

LOWER LIMIT OF ANALYSIS SYSTEM= 65.0

TABLE H-VI

NOISE LEVEL FREQUENCY SPECTRA TIME HISTORY

VERTOL CH-47 C

OCTOBER 13, 1976

EVENT 12, 6 DEGREE APPROACH, MIC. 150 METERS EAST

1/3 OCTAVE FREQUENCY BAND VS TIME (SECONDS)
(DB RE 20 MICRO PA)

| BAND | -52.5 | -44.0 | -35.5 | -27.0 | -18.5 | -10.0 | -5.5 | -1.5 | 0 | 7.0 | 9.0 |
|-------|-------|-------|-------|-------|-------|-------|-------|------|------|------|------|
| 17 | 74.2 | 68.3 | 71.4 | 80.2 | 79.4 | 88.7 | 90.1 | 88.7 | 86.6 | 82.1 | 79.0 |
| 18 | 82.2 | 80.5 | 81.1 | 86.0 | 80.9 | 89.3 | 88.7 | 87.8 | 87.5 | 82.5 | 82.3 |
| 19 | 77.9 | 77.0 | 79.0 | 80.8 | 85.7 | 87.2 | 83.8 | 85.5 | 81.0 | 80.1 | 77.7 |
| 20 | 84.7 | 79.2 | 81.6 | 78.2 | 82.2 | 89.6 | 83.5 | 81.7 | 76.3 | 83.2 | 77.6 |
| 21 | 83.5 | 77.8 | 77.4 | 70.3 | 82.6 | 85.1 | 81.9 | 72.6 | 71.9 | 79.6 | 76.3 |
| 22 | 79.3 | 78.0 | 76.3 | 73.0 | 76.5 | 79.4 | 70.2 | 81.0 | 80.0 | 76.3 | 73.5 |
| 23 | 73.1 | 80.0 | 72.0 | 72.3 | 74.0 | 73.6 | 79.7 | 81.9 | 81.7 | 68.3 | 68.7 |
| 24 | 69.0 | 79.3 | 67.8 | 68.0 | 71.3 | 75.4 | 86.4 | 84.9 | 83.3 | 73.5 | 62.1 |
| 25 | 67.5 | 78.2 | 72.3 | 69.3 | 68.8 | 81.1 | 85.9 | 82.1 | 77.5 | 78.0 | 68.0 |
| 26 | 66.1 | 71.6 | 73.0 | 65.2 | 63.6 | 81.9 | 84.7 | 75.6 | 76.3 | 80.6 | 71.5 |
| 27 | 63.1 | 67.7 | 70.0 | 64.2 | 68.4 | 82.9 | 77.4 | 80.2 | 80.9 | 75.9 | 71.3 |
| 28 | 62.8 | 61.9 | 73.1 | 61.2 | 73.1 | 76.6 | 81.0 | 74.8 | 75.3 | 68.8 | 67.4 |
| 29 | 62.5 | 61.5 | 70.8 | 61.3 | 70.6 | 78.9 | 75.6 | 76.5 | 75.8 | 74.1 | 61.2 |
| 30 | 56.4 | 59.1 | 68.3 | 56.8 | 64.4 | 78.0 | 74.7 | 72.3 | 72.9 | 68.2 | 64.1 |
| 31 | 55.2 | 56.1 | 62.4 | 55.1 | 66.3 | 75.7 | 72.7 | 70.1 | 69.6 | 66.9 | 60.9 |
| 32 | 55.0 | 55.0 | 59.8 | 55.2 | 67.9 | 73.4 | 71.9 | 69.4 | 68.0 | 66.0 | 64.4 |
| 33 | 55.0 | 55.0 | 56.2 | 55.0 | 63.9 | 70.1 | 69.0 | 64.8 | 64.8 | 62.5 | 57.6 |
| 34 | 55.0 | 55.0 | 55.0 | 55.0 | 61.9 | 64.4 | 64.3 | 63.1 | 62.4 | 61.0 | 55.7 |
| 35 | 55.0 | 55.0 | 55.0 | 55.0 | 57.8 | 61.4 | 61.5 | 60.6 | 60.9 | 59.9 | 55.0 |
| 36 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 | 57.1 | 58.5 | 59.1 | 59.5 | 57.2 | 55.0 |
| 37 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 | 55.9 | 55.7 | 57.1 | 55.0 | 55.0 |
| 38 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 |
| 39 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 |
| 40 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 |
| A | 73.3 | 76.9 | 78.1 | 71.1 | 78.2 | 86.1 | 86.4 | 84.3 | 83.5 | 81.0 | 74.5 |
| D | 82.5 | 83.9 | 82.5 | 79.7 | 83.9 | 90.6 | 91.8 | 89.9 | 88.9 | 86.1 | 80.5 |
| OASPL | 88.7 | 88.2 | 87.5 | 89.4 | 90.1 | 95.2 | 98.5 | 96.2 | 95.9 | 89.4 | 86.8 |
| PNL | 90.9 | 91.4 | 90.9 | 89.2 | 92.7 | 99.1 | 99.6 | 97.9 | 96.7 | 94.9 | 89.0 |
| PNLT | 90.9 | 91.4 | 90.9 | 89.2 | 93.9 | 99.1 | 101.1 | 97.9 | 96.7 | 96.7 | 90.7 |

LOWER LIMIT OF ANALYSIS SYSTEM= 55.0

TABLE H-VI

NOISE LEVEL FREQUENCY SPECTRA TIME HISTORY

VERTOL CH-47 C

OCTOBER 13, 1976

EVENT 22, 100 KT. FLY BY, MIC. 150 METERS EAST

1/3 OCTAVE FREQUENCY BAND VS TIME (SECONDS)
(DB RE 20 MICRO PA)

| BAND | -22.5 | -18.5 | -14.5 | -10.5 | -6.5 | -2.5 | 0 | 1.5 | 5.5 |
|-------|-------|-------|-------|-------|------|------|------|------|------|
| 17 | 76.0 | 80.2 | 85.0 | 88.0 | 81.2 | 84.4 | 86.3 | 87.3 | 75.9 |
| 18 | 82.5 | 85.4 | 86.7 | 91.4 | 86.3 | 86.8 | 83.2 | 80.4 | 80.3 |
| 19 | 83.3 | 89.5 | 90.6 | 85.2 | 87.9 | 88.2 | 72.5 | 75.5 | 78.3 |
| 20 | 78.3 | 83.6 | 87.4 | 88.1 | 85.7 | 81.6 | 72.7 | 70.0 | 71.5 |
| 21 | 79.8 | 87.2 | 86.5 | 86.7 | 81.3 | 74.8 | 67.5 | 65.0 | 67.9 |
| 22 | 76.0 | 82.9 | 81.3 | 80.3 | 77.1 | 66.0 | 72.9 | 74.6 | 61.0 |
| 23 | 74.1 | 77.3 | 75.2 | 73.7 | 72.9 | 75.4 | 77.5 | 75.9 | 68.4 |
| 24 | 68.0 | 74.1 | 71.5 | 72.6 | 66.8 | 83.2 | 77.2 | 76.2 | 73.7 |
| 25 | 66.9 | 74.8 | 71.9 | 74.1 | 73.0 | 82.7 | 69.6 | 70.2 | 75.6 |
| 26 | 65.1 | 78.0 | 72.5 | 70.8 | 79.5 | 78.2 | 64.9 | 68.0 | 73.3 |
| 27 | 59.1 | 73.5 | 65.4 | 64.2 | 79.3 | 70.8 | 70.2 | 71.5 | 65.4 |
| 28 | 62.0 | 67.9 | 66.0 | 68.9 | 76.6 | 76.0 | 63.6 | 66.5 | 70.2 |
| 29 | 58.0 | 61.2 | 70.5 | 75.2 | 66.5 | 72.0 | 67.0 | 68.6 | 69.3 |
| 30 | 56.9 | 55.7 | 67.8 | 72.3 | 72.9 | 73.2 | 64.4 | 68.1 | 70.7 |
| 31 | 55.2 | 56.1 | 64.7 | 66.4 | 68.7 | 73.9 | 63.7 | 65.8 | 68.2 |
| 32 | 55.0 | 55.4 | 62.3 | 62.2 | 69.4 | 72.3 | 66.9 | 67.8 | 67.6 |
| 33 | 55.0 | 55.0 | 59.3 | 62.6 | 65.6 | 69.7 | 61.6 | 64.1 | 64.5 |
| 34 | 55.0 | 55.0 | 55.8 | 56.0 | 63.7 | 66.9 | 61.4 | 62.1 | 60.8 |
| 35 | 55.0 | 55.0 | 55.0 | 55.0 | 59.4 | 64.5 | 59.2 | 59.9 | 57.9 |
| 36 | 55.0 | 55.0 | 55.0 | 55.0 | 55.7 | 60.1 | 57.8 | 58.5 | 56.3 |
| 37 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 | 58.0 | 55.0 | 55.7 | 55.0 |
| 38 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 |
| 39 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 |
| 40 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 |
| A | 72.1 | 79.2 | 78.5 | 80.2 | 82.0 | 83.0 | 76.7 | 77.9 | 78.4 |
| D | 81.9 | 87.5 | 86.8 | 87.4 | 87.6 | 88.8 | 83.8 | 83.7 | 82.7 |
| OASPL | 90.1 | 95.0 | 95.3 | 95.8 | 94.4 | 94.2 | 94.2 | 91.2 | 87.5 |
| PNL | 89.1 | 94.7 | 95.2 | 95.5 | 95.5 | 97.2 | 91.2 | 91.4 | 90.7 |
| PNLT | 90.2 | 94.7 | 95.2 | 96.9 | 97.3 | 98.7 | 92.3 | 91.4 | 90.7 |

LOWER LIMIT OF ANALYSIS SYSTEM= 55.0

TABLE H-VI

NOISE LEVEL FREQUENCY SPECTRA TIME HISTORY

VERTOL CH-47 C

OCTOBER 13, 1976

EVENT 23, 100 KT. FLY BY, MIC. 150 METERS EAST

1/3 OCTAVE FREQUENCY BAND VS TIME (SECONDS)
(DB RE 20 MICRO PA)

| BAND | -17.0 | -13.5 | -10.0 | -6.5 | -3.0 | 0 | .5 | 4.0 | 7.5 | 9.0 |
|-------|-------|-------|-------|------|------|------|------|------|------|------|
| 17 | 76.6 | 86.1 | 86.4 | 80.7 | 84.8 | 85.6 | 86.8 | 83.4 | 70.3 | 70.8 |
| 18 | 79.2 | 87.5 | 89.1 | 87.5 | 85.1 | 85.9 | 80.3 | 82.4 | 76.4 | 70.1 |
| 19 | 82.8 | 90.9 | 82.3 | 88.8 | 88.3 | 75.3 | 74.5 | 76.4 | 76.9 | 73.3 |
| 20 | 72.8 | 89.3 | 85.9 | 85.4 | 83.2 | 76.2 | 75.2 | 74.0 | 72.9 | 68.4 |
| 21 | 71.8 | 87.9 | 83.9 | 80.6 | 76.0 | 69.5 | 67.6 | 67.6 | 69.3 | 67.7 |
| 22 | 61.0 | 83.5 | 77.6 | 75.5 | 69.0 | 71.1 | 71.9 | 66.5 | 64.3 | 62.7 |
| 23 | 61.9 | 79.9 | 70.7 | 70.4 | 65.9 | 76.8 | 76.1 | 72.6 | 59.6 | 57.1 |
| 24 | 61.7 | 76.2 | 69.9 | 69.5 | 73.8 | 77.2 | 75.5 | 76.2 | 65.4 | 56.1 |
| 25 | 56.8 | 75.3 | 69.4 | 59.3 | 74.9 | 72.0 | 71.2 | 75.9 | 69.7 | 63.0 |
| 26 | 55.1 | 75.7 | 69.1 | 68.2 | 75.0 | 66.0 | 66.6 | 69.2 | 71.6 | 67.5 |
| 27 | 55.0 | 70.8 | 58.6 | 70.5 | 68.8 | 70.1 | 70.9 | 59.1 | 67.8 | 66.5 |
| 28 | 55.0 | 65.4 | 65.4 | 68.6 | 67.3 | 65.7 | 65.2 | 68.9 | 61.1 | 59.2 |
| 29 | 55.0 | 62.5 | 67.9 | 62.9 | 67.0 | 67.8 | 68.3 | 72.0 | 68.7 | 63.3 |
| 30 | 55.0 | 55.9 | 62.2 | 58.0 | 63.9 | 65.3 | 66.0 | 69.2 | 61.9 | 62.0 |
| 31 | 55.0 | 56.2 | 58.1 | 62.1 | 63.0 | 64.6 | 64.6 | 68.0 | 62.8 | 61.6 |
| 32 | 55.0 | 56.3 | 56.7 | 59.2 | 64.0 | 67.2 | 66.7 | 67.9 | 62.8 | 61.4 |
| 33 | 55.0 | 55.0 | 56.3 | 61.4 | 64.7 | 64.9 | 64.9 | 64.7 | 58.5 | 56.4 |
| 34 | 55.0 | 55.0 | 55.2 | 56.1 | 60.5 | 63.8 | 63.8 | 61.5 | 57.5 | 55.6 |
| 35 | 55.0 | 55.0 | 55.0 | 55.0 | 58.2 | 60.1 | 60.4 | 59.7 | 56.0 | 55.0 |
| 36 | 55.0 | 55.0 | 55.0 | 55.0 | 56.5 | 58.2 | 58.5 | 57.6 | 55.1 | 55.0 |
| 37 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 | 55.5 | 55.5 | 55.0 | 55.0 | 55.0 |
| 38 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 |
| 39 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 |
| 40 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 |
| A | 64.9 | 79.5 | 75.6 | 75.3 | 77.7 | 77.6 | 77.1 | 79.1 | 74.2 | 71.9 |
| D | 77.4 | 88.7 | 83.8 | 84.9 | 85.4 | 84.6 | 84.0 | 84.4 | 79.3 | 76.7 |
| OASPL | 88.9 | 96.7 | 93.6 | 93.5 | 93.7 | 95.0 | 94.4 | 92.7 | 84.4 | 82.6 |
| PNL | 86.0 | 95.7 | 92.7 | 92.9 | 93.5 | 91.9 | 91.1 | 91.6 | 87.7 | 84.7 |
| PNLT | 86.0 | 95.7 | 94.3 | 94.2 | 93.5 | 91.9 | 91.1 | 92.6 | 90.1 | 84.7 |

LOWER LIMIT OF ANALYSIS SYSTEM= 55.0

TABLE H-VI

NOISE LEVEL FREQUENCY SPECTRA TIME HISTORY

VERTOL CH-47 C

OCTOBER 13, 1976

EVENT 24, 141 KT. FLY BY, MIC. 150 METERS EAST

1/3 OCTAVE FREQUENCY BAND VS TIME (SECONDS)
(DB RE 20 MICRO PA)

| BAND | -16.0 | -13.5 | -11.0 | -8.5 | -6.0 | -3.5 | -1.0 | 0 | 1.5 | 3.0 |
|-------|-------|-------|-------|-------|-------|-------|------|------|------|------|
| 17 | 83.1 | 90.5 | 93.9 | 95.7 | 95.0 | 89.4 | 89.0 | 88.3 | 87.0 | 81.5 |
| 18 | 85.7 | 89.8 | 90.8 | 93.8 | 99.3 | 93.8 | 91.0 | 90.0 | 85.7 | 83.0 |
| 19 | 82.6 | 90.4 | 97.4 | 93.9 | 96.1 | 95.9 | 85.0 | 83.0 | 76.7 | 75.8 |
| 20 | 86.6 | 89.1 | 95.2 | 97.0 | 95.8 | 95.5 | 79.4 | 79.7 | 72.2 | 72.9 |
| 21 | 84.9 | 88.4 | 94.0 | 95.3 | 97.1 | 90.1 | 77.8 | 74.9 | 68.7 | 67.7 |
| 22 | 82.5 | 88.1 | 92.9 | 92.6 | 92.2 | 82.9 | 69.3 | 72.6 | 78.2 | 73.8 |
| 23 | 82.2 | 89.9 | 91.7 | 92.0 | 88.4 | 78.5 | 73.1 | 79.5 | 80.4 | 75.9 |
| 24 | 79.5 | 85.7 | 88.3 | 88.5 | 84.8 | 70.0 | 76.6 | 81.8 | 80.8 | 77.0 |
| 25 | 76.2 | 83.0 | 85.6 | 85.9 | 80.5 | 69.9 | 77.3 | 75.6 | 74.8 | 75.7 |
| 26 | 76.4 | 82.2 | 84.2 | 85.1 | 75.9 | 78.3 | 79.0 | 73.3 | 72.6 | 70.9 |
| 27 | 73.7 | 78.2 | 80.9 | 82.8 | 73.3 | 79.4 | 71.9 | 73.2 | 75.0 | 74.4 |
| 28 | 73.3 | 75.5 | 72.7 | 78.2 | 73.3 | 75.1 | 74.7 | 73.4 | 70.3 | 69.8 |
| 29 | 69.4 | 74.8 | 66.2 | 74.6 | 72.7 | 67.9 | 70.3 | 70.9 | 71.4 | 74.3 |
| 30 | 67.5 | 73.1 | 66.1 | 72.4 | 68.8 | 69.0 | 69.8 | 69.7 | 70.4 | 71.9 |
| 31 | 62.3 | 69.4 | 65.7 | 69.4 | 64.5 | 63.2 | 69.0 | 70.1 | 68.9 | 69.6 |
| 32 | 59.1 | 65.6 | 61.8 | 65.4 | 62.1 | 64.7 | 69.0 | 69.7 | 69.8 | 70.4 |
| 33 | 56.6 | 66.8 | 57.3 | 63.0 | 59.5 | 64.5 | 69.2 | 69.3 | 67.7 | 66.7 |
| 34 | 55.0 | 61.5 | 55.0 | 56.6 | 55.5 | 60.8 | 66.4 | 67.5 | 68.4 | 65.4 |
| 35 | 55.0 | 55.4 | 55.0 | 55.0 | 55.0 | 59.5 | 65.3 | 65.2 | 65.1 | 61.8 |
| 36 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 | 55.6 | 62.3 | 62.8 | 63.4 | 60.0 |
| 37 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 | 55.2 | 61.1 | 61.0 | 59.3 | 56.3 |
| 38 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 | 55.1 | 55.1 | 55.0 |
| 39 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 |
| 40 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 |
| A | 80.0 | 85.4 | 88.3 | 89.9 | 87.1 | 83.2 | 81.8 | 81.6 | 81.3 | 80.8 |
| D | 87.0 | 92.5 | 96.4 | 97.5 | 96.3 | 92.4 | 88.7 | 88.4 | 87.4 | 85.5 |
| OASPL | 93.4 | 98.6 | 103.0 | 103.5 | 103.7 | 101.4 | 99.2 | 98.5 | 95.3 | 93.7 |
| PNL | 95.0 | 100.9 | 102.6 | 103.8 | 103.1 | 100.3 | 96.2 | 96.2 | 95.2 | 93.3 |
| PNLT | 95.0 | 101.9 | 102.6 | 103.8 | 103.1 | 101.4 | 97.4 | 96.2 | 95.2 | 94.5 |

LOWER LIMIT OF ANALYSIS SYSTEM= 55.0

TABLE H-VI

NOISE LEVEL FREQUENCY SPECTRA TIME HISTORY

VERTOL CH-47 C

OCTOBER 13, 1976

EVENT 25, 141 KT. FLY BY, MIC. 150 METERS EAST

1/3 OCTAVE FREQUENCY BAND VS TIME (SECONDS)
(DB RE 20 MICRO PA)

| BAND | -13.0 | -11.5 | -10.0 | -8.5 | -7.0 | -6.5 | -5.5 | -4.0 | -2.5 | 0 | -1.5 |
|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|------|------|
| 17 | 88.8 | 94.2 | 96.4 | 96.7 | 97.1 | 97.2 | 96.4 | 91.1 | 92.3 | 86.5 | 88.2 |
| 18 | 83.0 | 87.2 | 85.3 | 92.5 | 98.2 | 98.9 | 100.3 | 97.2 | 96.3 | 87.7 | 89.6 |
| 19 | 87.5 | 94.5 | 96.3 | 97.6 | 91.2 | 92.3 | 96.9 | 99.2 | 93.1 | 82.8 | 84.1 |
| 20 | 83.0 | 89.9 | 94.0 | 99.2 | 99.2 | 99.1 | 97.0 | 96.5 | 89.3 | 77.6 | 78.8 |
| 21 | 84.8 | 87.8 | 95.9 | 98.4 | 94.9 | 95.0 | 97.2 | 92.8 | 86.2 | 73.2 | 75.5 |
| 22 | 86.0 | 85.6 | 93.8 | 94.6 | 95.0 | 94.9 | 91.9 | 88.2 | 78.9 | 71.2 | 69.8 |
| 23 | 85.5 | 83.6 | 92.2 | 93.0 | 90.1 | 89.0 | 88.2 | 81.9 | 70.3 | 77.9 | 76.6 |
| 24 | 78.5 | 80.2 | 89.3 | 89.6 | 86.9 | 85.1 | 82.2 | 74.1 | 69.6 | 79.2 | 78.9 |
| 25 | 76.1 | 77.9 | 87.8 | 87.7 | 83.9 | 81.0 | 74.7 | 69.4 | 75.0 | 76.0 | 77.4 |
| 26 | 73.9 | 79.5 | 87.6 | 85.8 | 81.4 | 78.2 | 71.7 | 78.0 | 82.0 | 72.3 | 75.8 |
| 27 | 71.1 | 77.9 | 85.2 | 82.7 | 78.4 | 74.5 | 75.4 | 79.1 | 78.8 | 72.7 | 71.6 |
| 28 | 70.1 | 76.1 | 83.6 | 79.6 | 73.1 | 73.5 | 78.0 | 77.3 | 70.0 | 70.8 | 72.2 |
| 29 | 68.7 | 74.9 | 80.8 | 75.7 | 74.3 | 74.9 | 76.4 | 70.3 | 72.1 | 71.5 | 70.3 |
| 30 | 66.7 | 73.5 | 78.3 | 69.1 | 73.4 | 72.8 | 71.0 | 67.5 | 68.1 | 69.4 | 69.5 |
| 31 | 63.6 | 71.4 | 73.7 | 67.1 | 72.2 | 68.3 | 65.6 | 66.1 | 66.3 | 68.9 | 68.4 |
| 32 | 60.8 | 68.3 | 72.1 | 65.5 | 64.4 | 61.3 | 63.4 | 64.0 | 65.4 | 69.2 | 68.2 |
| 33 | 60.3 | 65.7 | 68.2 | 64.3 | 64.7 | 64.1 | 59.5 | 63.9 | 66.7 | 69.3 | 69.1 |
| 34 | 58.7 | 58.8 | 60.9 | 57.1 | 58.7 | 56.6 | 55.0 | 59.8 | 63.0 | 67.6 | 66.1 |
| 35 | 55.9 | 57.1 | 57.7 | 55.0 | 55.7 | 55.5 | 55.0 | 57.0 | 60.7 | 65.4 | 65.3 |
| 36 | 55.0 | 55.0 | 55.7 | 55.0 | 55.0 | 55.0 | 55.0 | 55.1 | 58.6 | 62.3 | 61.8 |
| 37 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 | 58.0 | 59.9 | 61.0 |
| 38 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 | 55.4 | 55.0 |
| 39 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 |
| 40 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 |
| A | 80.6 | 82.2 | 91.2 | 91.0 | 88.7 | 88.0 | 67.1 | 84.9 | 82.6 | 80.8 | 80.9 |
| D | 88.5 | 91.2 | 97.7 | 99.3 | 97.3 | 97.2 | 96.5 | 94.6 | 90.7 | 87.7 | 87.9 |
| OASPL | 95.0 | 99.8 | 103.6 | 105.4 | 104.4 | 104.6 | 104.5 | 103.0 | 101.4 | 98.8 | 98.8 |
| PNL | 96.3 | 99.8 | 104.8 | 105.4 | 104.5 | 104.1 | 103.3 | 101.9 | 98.9 | 94.9 | 95.5 |
| PNLT | 96.3 | 99.8 | 104.8 | 105.4 | 105.5 | 105.8 | 103.3 | 101.9 | 99.9 | 94.9 | 95.5 |

LOWER LIMIT OF ANALYSIS SYSTEM= 55.0

TABLE H-VI

NOISE LEVEL FREQUENCY SPECTRA TIME HISTORY

VERTOL CH-47 C

OCTOBER 13, 1976

EVENT 26, 141 KT. FLY BY, MIC. 150 METERS EAST

1/3 OCTAVE FREQUENCY BAND VS TIME (SECONDS)
(DB RE 20 MICRO PA)

| BAND | -12.5 | -11.0 | -9.5 | -8.0 | -6.5 | -5.0 | -3.5 | -2.0 | -1.0 | 0 | -1.0 |
|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|------|-------|
| 17 | 90.5 | 96.8 | 97.7 | 99.5 | 97.5 | 96.9 | 91.3 | 93.7 | 90.4 | 87.8 | 90.4 |
| 18 | 82.2 | 92.6 | 90.6 | 93.3 | 94.8 | 98.9 | 94.4 | 97.5 | 93.3 | 89.1 | 93.3 |
| 19 | 90.5 | 99.3 | 100.2 | 99.5 | 94.5 | 97.3 | 97.0 | 93.9 | 87.6 | 82.8 | 87.6 |
| 20 | 90.4 | 97.5 | 99.1 | 99.1 | 99.2 | 96.7 | 97.4 | 86.9 | 80.1 | 77.3 | 80.1 |
| 21 | 88.2 | 96.3 | 99.1 | 99.6 | 95.1 | 95.7 | 91.6 | 80.7 | 75.3 | 72.4 | 75.3 |
| 22 | 84.8 | 95.6 | 97.1 | 94.7 | 93.3 | 90.7 | 83.6 | 74.2 | 70.8 | 74.3 | 70.8 |
| 23 | 83.4 | 94.8 | 95.2 | 93.0 | 91.1 | 85.5 | 78.0 | 70.9 | 75.3 | 79.0 | 75.3 |
| 24 | 79.5 | 91.1 | 91.6 | 89.4 | 86.8 | 78.8 | 70.3 | 74.9 | 79.6 | 80.4 | 79.6 |
| 25 | 75.9 | 87.2 | 90.0 | 85.6 | 81.7 | 72.9 | 74.9 | 77.8 | 78.0 | 75.3 | 78.0 |
| 26 | 74.5 | 87.3 | 90.2 | 83.1 | 76.6 | 79.2 | 81.3 | 82.3 | 78.3 | 72.2 | 78.3 |
| 27 | 71.2 | 85.4 | 88.4 | 77.4 | 76.2 | 82.2 | 80.5 | 76.4 | 73.4 | 75.0 | 73.4 |
| 28 | 67.2 | 83.5 | 84.8 | 76.1 | 79.0 | 80.7 | 74.7 | 72.9 | 74.0 | 71.4 | 74.0 |
| 29 | 65.2 | 80.0 | 82.0 | 79.9 | 78.7 | 73.2 | 70.2 | 72.7 | 71.8 | 72.4 | 71.8 |
| 30 | 65.0 | 77.6 | 76.5 | 80.2 | 74.0 | 68.4 | 69.8 | 70.5 | 71.6 | 71.1 | 71.6 |
| 31 | 65.0 | 75.6 | 74.0 | 75.7 | 71.7 | 69.0 | 67.3 | 69.3 | 71.1 | 70.7 | 71.1 |
| 32 | 65.0 | 74.9 | 70.8 | 71.1 | 69.5 | 65.2 | 67.8 | 69.0 | 70.6 | 70.9 | 70.6 |
| 33 | 65.0 | 70.6 | 66.8 | 68.9 | 65.2 | 65.0 | 66.2 | 69.6 | 70.0 | 69.7 | 70.0 |
| 34 | 65.0 | 68.2 | 65.8 | 65.8 | 65.2 | 65.0 | 65.3 | 67.4 | 68.1 | 68.0 | 68.1 |
| 35 | 65.0 | 65.4 | 65.0 | 65.0 | 65.0 | 65.0 | 65.0 | 66.1 | 66.7 | 66.6 | 66.7 |
| 36 | 65.0 | 65.0 | 65.0 | 65.0 | 65.0 | 65.0 | 65.0 | 65.1 | 65.1 | 65.2 | 65.1 |
| 37 | 65.0 | 65.0 | 65.0 | 65.0 | 65.0 | 65.0 | 65.0 | 65.0 | 65.0 | 65.0 | 65.0 |
| 38 | 65.0 | 65.0 | 65.0 | 65.0 | 65.0 | 65.0 | 65.0 | 65.0 | 65.0 | 65.0 | 65.0 |
| 39 | 65.0 | 65.0 | 65.0 | 65.0 | 65.0 | 65.0 | 65.0 | 65.0 | 65.0 | 65.0 | 65.0 |
| 40 | 65.0 | 65.0 | 65.0 | 65.0 | 65.0 | 65.0 | 65.0 | 65.0 | 65.0 | 65.0 | 65.0 |
| A | 80.6 | 91.7 | 92.4 | 90.1 | 88.4 | 86.8 | 84.7 | 83.3 | 82.8 | 81.6 | 82.8 |
| D | 89.9 | 98.8 | 99.9 | 98.6 | 96.2 | 95.0 | 93.7 | 91.5 | 89.7 | 88.5 | 89.7 |
| OASPL | 97.2 | 105.1 | 106.4 | 106.1 | 103.9 | 103.3 | 102.5 | 101.9 | 100.7 | 99.7 | 100.7 |
| PNL | 98.7 | 107.0 | 108.0 | 107.1 | 105.3 | 103.8 | 102.8 | 100.5 | 98.4 | 96.6 | 98.4 |
| PNLT | 98.7 | 107.0 | 108.0 | 107.1 | 105.3 | 103.8 | 102.8 | 100.5 | 98.4 | 96.6 | 98.4 |

LOWER LIMIT OF ANALYSIS SYSTEM= 65.0

TABLE H-VI

NOISE LEVEL FREQUENCY SPECTRA TIME HISTORY

VERTOL CH-47 C

OCTOBER 13, 1976

EVENT 27, 141 KT. FLY BY, MIC. 150 METERS EAST

1/3 OCTAVE FREQUENCY BAND VS TIME (SECONDS)
(DB RE 20 MICRO PA)

| BAND | -11.5 | -10.5 | -9.5 | -8.5 | -7.5 | -6.5 | -5.5 | -4.5 | -1.5 | 0 | -1.5 |
|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 17 | 91.9 | 96.1 | 98.4 | 99.7 | 100.3 | 99.6 | 97.6 | 94.0 | 92.7 | 87.4 | 92.7 |
| 18 | 81.4 | 84.2 | 87.5 | 91.6 | 96.8 | 99.3 | 101.4 | 99.4 | 96.0 | 88.9 | 96.0 |
| 19 | 91.6 | 96.7 | 99.2 | 100.7 | 98.2 | 96.1 | 100.6 | 101.3 | 91.8 | 83.8 | 91.8 |
| 20 | 89.0 | 94.2 | 97.8 | 100.3 | 101.3 | 100.4 | 97.0 | 99.3 | 84.8 | 80.1 | 84.8 |
| 21 | 88.0 | 95.0 | 99.7 | 101.0 | 98.6 | 98.8 | 100.9 | 97.3 | 81.2 | 74.1 | 81.2 |
| 22 | 87.6 | 91.4 | 96.4 | 98.2 | 96.9 | 96.8 | 94.4 | 92.9 | 75.8 | 74.1 | 75.8 |
| 23 | 88.1 | 88.7 | 92.8 | 96.5 | 95.1 | 94.2 | 94.7 | 91.2 | 73.5 | 80.9 | 73.5 |
| 24 | 84.6 | 84.4 | 89.6 | 93.7 | 92.5 | 91.5 | 90.0 | 86.9 | 78.2 | 82.0 | 78.2 |
| 25 | 79.2 | 80.3 | 88.5 | 92.5 | 90.6 | 89.1 | 84.6 | 80.1 | 81.5 | 76.5 | 81.5 |
| 26 | 78.9 | 79.3 | 88.6 | 92.0 | 88.8 | 86.0 | 80.8 | 79.8 | 84.2 | 74.0 | 84.2 |
| 27 | 76.5 | 78.2 | 87.0 | 89.7 | 84.9 | 80.0 | 82.3 | 84.6 | 77.5 | 74.9 | 77.5 |
| 28 | 73.7 | 75.6 | 81.5 | 86.1 | 81.2 | 81.7 | 86.3 | 85.9 | 75.3 | 71.9 | 75.3 |
| 29 | 72.9 | 74.8 | 77.5 | 84.5 | 81.3 | 83.9 | 86.1 | 84.1 | 74.2 | 73.4 | 74.2 |
| 30 | 74.4 | 73.4 | 74.9 | 84.1 | 79.8 | 80.3 | 81.8 | 77.4 | 73.0 | 72.4 | 73.0 |
| 31 | 71.8 | 72.7 | 74.9 | 82.5 | 76.2 | 78.0 | 79.3 | 77.0 | 71.1 | 71.4 | 71.1 |
| 32 | 70.9 | 73.9 | 73.6 | 79.6 | 73.7 | 75.4 | 77.7 | 74.8 | 71.2 | 72.4 | 71.2 |
| 33 | 71.8 | 71.7 | 72.8 | 79.8 | 73.4 | 73.4 | 73.5 | 71.4 | 70.5 | 71.2 | 70.5 |
| 34 | 68.8 | 69.0 | 70.2 | 77.0 | 71.4 | 71.8 | 71.8 | 68.4 | 68.7 | 69.5 | 68.7 |
| 35 | 66.0 | 65.5 | 65.7 | 73.4 | 68.8 | 68.0 | 66.8 | 65.2 | 66.7 | 67.5 | 66.7 |
| 36 | 65.0 | 65.0 | 65.9 | 68.7 | 65.3 | 65.3 | 65.1 | 65.1 | 65.0 | 65.5 | 65.0 |
| 37 | 65.0 | 65.0 | 65.0 | 65.3 | 65.0 | 65.0 | 65.0 | 65.0 | 65.0 | 65.0 | 65.0 |
| 38 | 65.0 | 65.0 | 65.0 | 65.0 | 65.0 | 65.0 | 65.0 | 65.0 | 65.0 | 65.0 | 65.0 |
| 39 | 65.0 | 65.0 | 65.0 | 65.0 | 65.0 | 65.0 | 65.0 | 65.0 | 65.0 | 65.0 | 65.0 |
| 40 | 65.0 | 65.0 | 65.0 | 65.0 | 65.0 | 65.0 | 65.0 | 65.0 | 65.0 | 65.0 | 65.0 |
| A | 85.4 | 87.0 | 92.9 | 95.6 | 92.7 | 92.1 | 92.8 | 90.8 | 85.0 | 82.5 | 85.0 |
| D | 93.1 | 95.3 | 100.1 | 102.0 | 100.4 | 99.5 | 99.9 | 98.1 | 91.7 | 89.5 | 91.7 |
| OASPL | 97.9 | 102.2 | 106.0 | 107.9 | 107.0 | 106.4 | 106.6 | 105.8 | 102.1 | 100.3 | 102.1 |
| PNL | 101.1 | 103.7 | 107.7 | 110.6 | 108.8 | 108.2 | 108.8 | 106.9 | 100.5 | 97.7 | 100.5 |
| PNLT | 101.1 | 103.7 | 107.7 | 110.6 | 108.8 | 108.2 | 108.8 | 106.9 | 100.5 | 97.7 | 100.5 |

LOWER LIMIT OF ANALYSIS SYSTEM= 65.0

TABLE H-VI

NOISE LEVEL FREQUENCY SPECTRA TIME HISTORY

VERTOL CH-47 C

OCTOBER 13, 1976

EVENT 28, 150 KT. FLY BY, MIC. 150 METERS EAST

1/3 OCTAVE FREQUENCY BAND VS TIME (SECONDS)
(DB RE 20 MICRO PA)

| BAND | -9.0 | -8.5 | -8.0 | -7.5 | -7.0 | -6.5 | -6.0 | -5.5 | 0 | -2.5 |
|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 17 | 98.4 | 99.6 | 100.3 | 101.0 | 101.9 | 102.5 | 102.3 | 101.6 | 92.3 | 97.2 |
| 18 | 89.5 | 91.3 | 93.5 | 95.1 | 98.2 | 99.2 | 100.0 | 101.4 | 91.0 | 99.4 |
| 19 | 98.7 | 100.1 | 100.6 | 100.9 | 100.5 | 99.8 | 97.8 | 98.4 | 84.8 | 97.7 |
| 20 | 96.1 | 98.2 | 100.6 | 103.0 | 104.3 | 104.9 | 104.9 | 104.0 | 82.1 | 95.8 |
| 21 | 94.6 | 97.4 | 99.5 | 101.2 | 101.9 | 101.8 | 101.1 | 101.2 | 78.3 | 94.1 |
| 22 | 91.7 | 93.6 | 95.8 | 97.6 | 99.0 | 99.9 | 100.6 | 99.7 | 74.8 | 89.2 |
| 23 | 89.0 | 91.2 | 94.1 | 97.2 | 99.0 | 99.8 | 99.1 | 97.5 | 79.7 | 83.7 |
| 24 | 86.1 | 87.7 | 90.6 | 94.2 | 96.3 | 97.1 | 96.4 | 94.4 | 82.3 | 75.6 |
| 25 | 84.2 | 84.7 | 88.2 | 91.9 | 94.2 | 94.8 | 93.6 | 90.6 | 80.0 | 75.6 |
| 26 | 84.3 | 84.2 | 88.0 | 92.2 | 94.0 | 94.1 | 92.0 | 88.3 | 79.1 | 85.3 |
| 27 | 81.2 | 80.3 | 87.0 | 91.0 | 92.6 | 92.2 | 90.0 | 86.0 | 75.5 | 86.2 |
| 28 | 78.0 | 78.7 | 84.2 | 88.5 | 89.3 | 88.8 | 86.6 | 85.2 | 74.8 | 84.0 |
| 29 | 78.1 | 80.2 | 83.6 | 87.4 | 87.5 | 87.7 | 86.1 | 86.2 | 74.4 | 76.0 |
| 30 | 77.7 | 78.8 | 82.4 | 85.2 | 85.5 | 86.2 | 85.4 | 85.1 | 73.3 | 75.9 |
| 31 | 76.3 | 77.7 | 80.0 | 82.8 | 84.2 | 86.0 | 84.9 | 83.4 | 72.6 | 74.8 |
| 32 | 73.2 | 76.7 | 79.7 | 83.2 | 83.0 | 83.6 | 81.3 | 81.3 | 72.9 | 72.1 |
| 33 | 70.2 | 74.1 | 77.5 | 80.8 | 81.0 | 80.8 | 78.9 | 78.5 | 72.2 | 70.2 |
| 34 | 67.2 | 70.9 | 73.1 | 76.9 | 77.2 | 77.4 | 75.5 | 75.8 | 70.8 | 67.1 |
| 35 | 65.0 | 68.5 | 70.6 | 76.9 | 76.8 | 78.1 | 75.4 | 75.2 | 69.1 | 65.7 |
| 36 | 65.0 | 65.3 | 69.1 | 71.5 | 71.9 | 71.9 | 70.5 | 69.6 | 67.4 | 65.0 |
| 37 | 65.0 | 65.1 | 66.1 | 67.7 | 67.9 | 67.8 | 66.8 | 66.3 | 65.7 | 65.0 |
| 38 | 65.0 | 65.0 | 65.0 | 70.0 | 70.0 | 69.7 | 65.4 | 65.3 | 65.0 | 65.0 |
| 39 | 65.0 | 65.0 | 65.0 | 65.0 | 65.0 | 65.0 | 65.0 | 65.0 | 65.0 | 65.0 |
| 40 | 65.0 | 65.0 | 65.0 | 65.0 | 65.0 | 65.0 | 65.0 | 65.0 | 65.0 | 65.0 |
| A | 88.1 | 89.7 | 92.8 | 97.8 | 99.0 | 99.5 | 97.6 | 96.3 | 84.1 | 88.8 |
| D | 96.2 | 98.0 | 100.4 | 104.1 | 105.4 | 105.8 | 104.6 | 103.5 | 90.9 | 96.2 |
| OASPL | 103.9 | 105.4 | 107.0 | 108.9 | 109.9 | 110.3 | 109.9 | 109.1 | 102.1 | 105.1 |
| PNL | 105.0 | 106.6 | 109.1 | 111.8 | 112.9 | 113.3 | 112.6 | 111.6 | 99.0 | 104.4 |
| PNLT | 105.0 | 106.6 | 109.1 | 112.4 | 113.5 | 114.5 | 112.6 | 111.6 | 99.0 | 104.4 |

LOWER LIMIT OF ANALYSIS SYSTEM= 65.0

TABLE H-VI

NOISE LEVEL FREQUENCY SPECTRA TIME HISTOR.

VERTOL CH-47 C

OCTOBER 13, 1976

EVENT 29, 150 KT. FLY BY, MIC. 150 METERS EAST

1/3 OCTAVE FREQUENCY BAND VS TIME (SECONDS)
(DB RE 20 MICRO PA)

| BAND | -9.5 | -8.5 | -7.5 | -6.5 | -5.5 | -4.5 | -3.5 | -2.5 | -2.0 | 0 | -2.0 |
|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 17 | 94.8 | 99.1 | 101.7 | 102.8 | 102.3 | 100.1 | 95.7 | 97.1 | 96.7 | 90.8 | 96.7 |
| 18 | 81.1 | 91.2 | 96.4 | 99.1 | 101.9 | 103.2 | 99.6 | 99.1 | 99.2 | 90.3 | 99.2 |
| 19 | 91.1 | 98.0 | 99.3 | 97.4 | 95.3 | 101.7 | 101.7 | 97.5 | 96.8 | 84.7 | 96.8 |
| 20 | 92.0 | 98.1 | 103.1 | 105.1 | 104.3 | 101.3 | 101.7 | 97.2 | 91.8 | 83.0 | 91.8 |
| 21 | 92.7 | 98.2 | 101.4 | 100.8 | 99.9 | 101.3 | 98.9 | 95.4 | 86.7 | 78.3 | 86.7 |
| 22 | 89.4 | 95.5 | 98.9 | 99.9 | 100.1 | 97.8 | 95.1 | 89.8 | 82.2 | 74.2 | 82.2 |
| 23 | 84.8 | 94.7 | 99.0 | 99.2 | 96.7 | 95.3 | 91.7 | 84.6 | 77.1 | 79.4 | 77.1 |
| 24 | 81.0 | 92.4 | 96.6 | 96.1 | 94.0 | 91.8 | 87.5 | 76.7 | 72.8 | 82.4 | 72.6 |
| 25 | 76.7 | 90.6 | 94.6 | 94.3 | 92.5 | 88.2 | 79.2 | 75.5 | 80.0 | 80.2 | 80.0 |
| 26 | 74.9 | 89.9 | 94.3 | 93.7 | 90.8 | 85.8 | 83.8 | 84.2 | 86.3 | 79.8 | 86.3 |
| 27 | 73.7 | 88.6 | 92.6 | 91.7 | 88.0 | 83.4 | 89.0 | 84.9 | 84.0 | 75.4 | 84.0 |
| 28 | 72.6 | 85.3 | 90.0 | 88.8 | 85.2 | 84.8 | 88.9 | 81.9 | 77.0 | 74.9 | 77.0 |
| 29 | 73.4 | 83.4 | 87.6 | 86.3 | 82.6 | 87.0 | 85.6 | 73.2 | 75.2 | 74.8 | 75.2 |
| 30 | 71.8 | 84.1 | 85.3 | 82.9 | 81.3 | 86.2 | 82.7 | 74.1 | 71.1 | 73.9 | 71.1 |
| 31 | 70.3 | 82.0 | 82.1 | 82.6 | 81.3 | 82.4 | 80.6 | 70.7 | 69.6 | 73.9 | 69.6 |
| 32 | 68.5 | 82.0 | 81.7 | 79.1 | 77.3 | 77.9 | 78.3 | 70.2 | 69.9 | 73.3 | 69.9 |
| 33 | 66.5 | 80.4 | 80.1 | 76.7 | 74.3 | 77.5 | 75.6 | 68.8 | 69.9 | 72.3 | 69.9 |
| 34 | 65.4 | 79.0 | 79.3 | 76.0 | 71.7 | 73.0 | 72.5 | 67.0 | 68.0 | 70.3 | 68.0 |
| 35 | 65.0 | 79.1 | 78.8 | 71.4 | 69.8 | 70.2 | 67.4 | 65.2 | 67.5 | 69.2 | 67.5 |
| 36 | 65.0 | 75.2 | 74.8 | 70.1 | 69.8 | 69.3 | 65.0 | 65.0 | 65.7 | 67.2 | 65.7 |
| 37 | 65.0 | 72.9 | 72.4 | 65.8 | 66.0 | 66.9 | 65.0 | 65.0 | 65.2 | 65.5 | 65.2 |
| 38 | 65.0 | 71.8 | 71.3 | 65.0 | 65.0 | 65.0 | 65.0 | 65.0 | 65.0 | 65.0 | 65.0 |
| 39 | 65.0 | 66.3 | 66.1 | 65.0 | 65.0 | 65.0 | 65.0 | 65.0 | 65.0 | 65.0 | 65.0 |
| 40 | 65.0 | 65.0 | 65.0 | 65.0 | 65.0 | 65.0 | 65.0 | 65.0 | 65.0 | 65.0 | 65.0 |
| A | 83.7 | 95.0 | 93.7 | 97.5 | 95.6 | 94.9 | 93.6 | 87.6 | 86.5 | 84.5 | 86.5 |
| D | 92.6 | 102.0 | 105.4 | 104.6 | 103.2 | 101.8 | 100.1 | 95.8 | 94.2 | 91.3 | 94.2 |
| OASPL | 99.5 | 106.0 | 109.3 | 109.9 | 109.2 | 108.5 | 107.1 | 104.7 | 104.0 | 102.5 | 104.0 |
| FNL | 101.1 | 109.7 | 112.6 | 112.5 | 111.2 | 110.3 | 109.0 | 104.6 | 102.9 | 99.0 | 102.9 |
| PNLT | 101.1 | 109.7 | 112.6 | 112.5 | 111.2 | 110.3 | 109.0 | 104.6 | 102.9 | 99.0 | 102.9 |

LOWER LIMIT OF ANALYSIS SYSTEM= 65.0

TABLE H-VI

NOISE LEVEL FREQUENCY SPECTRA TIME HISTORY

VERTOL CH-47 C

OCTOBER 13, 1976

EVENT 24, 141 KT. FLY BY, CENTERLINE MIC. (HARD SITE)

1/3 OCTAVE FREQUENCY BAND VS TIME (SECONDS)
(DB RE 20 MICRO PA)

| BAND | -16.5 | -14.0 | -13.0 | -11.5 | -9.0 | -6.5 | -4.0 | -1.5 | 0 | 1.0 | 3.5 |
|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|------|
| 17 | 86.7 | 90.3 | 92.2 | 92.7 | 89.4 | 87.4 | 89.4 | 93.2 | 90.6 | 91.5 | 86.2 |
| 18 | 82.9 | 95.0 | 95.2 | 94.7 | 96.3 | 99.5 | 102.3 | 95.5 | 87.6 | 84.4 | 81.3 |
| 19 | 81.8 | 96.4 | 98.2 | 97.3 | 93.0 | 95.3 | 95.2 | 91.5 | 83.6 | 86.7 | 74.3 |
| 20 | 85.4 | 96.5 | 98.6 | 98.8 | 95.1 | 98.5 | 98.0 | 88.3 | 90.1 | 93.1 | 75.1 |
| 21 | 85.7 | 95.5 | 96.8 | 96.3 | 92.7 | 97.9 | 97.4 | 83.8 | 94.6 | 96.6 | 82.1 |
| 22 | 83.1 | 93.8 | 95.3 | 94.1 | 89.1 | 94.3 | 92.8 | 85.8 | 94.9 | 93.6 | 81.5 |
| 23 | 81.2 | 91.9 | 93.9 | 93.1 | 86.9 | 92.6 | 88.0 | 89.4 | 91.9 | 86.6 | 81.0 |
| 24 | 78.0 | 89.8 | 91.1 | 90.7 | 86.3 | 88.5 | 78.1 | 88.3 | 84.2 | 84.8 | 75.2 |
| 25 | 72.6 | 87.3 | 87.8 | 86.1 | 81.1 | 81.3 | 82.5 | 81.0 | 83.1 | 84.3 | 75.4 |
| 26 | 72.7 | 88.1 | 87.8 | 85.3 | 81.5 | 77.9 | 83.5 | 80.5 | 80.9 | 78.2 | 77.2 |
| 27 | 67.3 | 82.2 | 82.4 | 79.2 | 76.7 | 71.3 | 78.9 | 78.0 | 75.1 | 75.4 | 74.0 |
| 28 | 65.2 | 79.6 | 77.6 | 72.7 | 69.8 | 66.4 | 73.7 | 74.2 | 74.7 | 74.5 | 73.5 |
| 29 | 65.0 | 75.3 | 72.7 | 69.8 | 66.0 | 65.5 | 72.8 | 73.1 | 74.0 | 73.1 | 74.5 |
| 30 | 65.0 | 74.5 | 70.8 | 68.0 | 66.1 | 65.9 | 69.4 | 71.2 | 73.4 | 72.3 | 72.8 |
| 31 | 65.0 | 71.3 | 69.4 | 67.1 | 65.9 | 65.0 | 67.0 | 70.1 | 72.8 | 72.3 | 72.8 |
| 32 | 65.0 | 69.7 | 67.4 | 65.7 | 65.0 | 65.0 | 65.9 | 70.5 | 73.3 | 73.2 | 72.0 |
| 33 | 65.0 | 68.0 | 65.9 | 65.3 | 65.0 | 65.0 | 66.1 | 70.1 | 72.5 | 70.9 | 70.3 |
| 34 | 65.0 | 65.0 | 65.0 | 65.0 | 65.0 | 65.0 | 65.0 | 69.6 | 71.5 | 70.5 | 68.4 |
| 35 | 65.0 | 65.0 | 65.0 | 65.0 | 65.0 | 65.0 | 65.0 | 68.1 | 70.2 | 69.1 | 66.8 |
| 36 | 65.0 | 65.0 | 65.0 | 65.0 | 65.0 | 65.0 | 65.0 | 66.0 | 68.5 | 67.7 | 65.5 |
| 37 | 65.0 | 65.0 | 65.0 | 65.0 | 65.0 | 65.0 | 65.0 | 65.0 | 67.0 | 66.1 | 65.0 |
| 38 | 65.0 | 65.0 | 65.0 | 65.0 | 65.0 | 65.0 | 65.0 | 65.0 | 65.0 | 65.0 | 65.0 |
| 39 | 65.0 | 65.0 | 65.0 | 65.0 | 65.0 | 65.0 | 65.0 | 65.0 | 65.0 | 65.0 | 65.0 |
| 40 | 65.0 | 65.0 | 65.0 | 65.0 | 65.0 | 65.0 | 65.0 | 65.0 | 65.0 | 65.0 | 65.0 |
| A | 78.2 | 89.9 | 90.6 | 89.6 | 85.8 | 88.2 | 87.5 | 86.0 | 89.0 | 88.2 | 82.8 |
| D | 87.6 | 97.8 | 98.8 | 97.9 | 93.2 | 97.6 | 97.3 | 94.9 | 96.7 | 96.2 | 88.8 |
| OASPL | 94.6 | 103.4 | 104.7 | 104.2 | 101.3 | 104.9 | 105.6 | 103.5 | 102.6 | 102.5 | 94.5 |
| PNL | 96.2 | 105.1 | 106.0 | 105.4 | 102.3 | 104.7 | 104.7 | 102.1 | 104.0 | 103.9 | 96.8 |
| PNLT | 96.2 | 105.1 | 106.0 | 105.4 | 102.3 | 104.7 | 104.7 | 102.1 | 104.0 | 103.9 | 96.8 |

LOWER LIMIT OF ANALYSIS SYSTEM= 65.0

TABLE H-VI

NOISE LEVEL FREQUENCY SPECTRA TIME HISTORY

VERTOL CH-47 C

OCTOBER 13, 1976

EVENT 25, 141 KT. FLY BY, CENTERLINE MIC. (HARD SITE)

1/3 OCTAVE FREQUENCY BAND VS TIME (SECONDS)
(DB RE 20 MICRO PA)

| BAND | -14.0 | -11.5 | -9.0 | -6.5 | -4.0 | -1.5 | 0 | 1.0 | 3.5 |
|-------|-------|-------|-------|-------|-------|-------|-------|-------|------|
| 17 | 88.9 | 92.1 | 88.5 | 86.4 | 90.4 | 91.5 | 91.3 | 90.7 | 89.0 |
| 18 | 90.7 | 99.0 | 98.5 | 98.2 | 101.4 | 101.3 | 90.2 | 86.3 | 83.0 |
| 19 | 91.2 | 99.9 | 97.3 | 93.8 | 97.0 | 92.1 | 87.2 | 82.8 | 74.8 |
| 20 | 90.5 | 101.5 | 100.7 | 98.2 | 99.4 | 93.0 | 85.3 | 91.2 | 82.6 |
| 21 | 86.5 | 98.5 | 99.1 | 95.4 | 97.9 | 88.0 | 89.7 | 94.3 | 88.8 |
| 22 | 84.1 | 96.1 | 97.1 | 92.8 | 93.4 | 81.5 | 91.6 | 93.1 | 86.9 |
| 23 | 80.2 | 94.4 | 94.6 | 91.8 | 89.5 | 84.0 | 91.7 | 89.5 | 84.6 |
| 24 | 77.1 | 92.4 | 92.3 | 90.2 | 84.2 | 84.0 | 86.8 | 80.5 | 78.7 |
| 25 | 78.5 | 87.5 | 87.0 | 81.9 | 76.7 | 83.7 | 77.8 | 80.6 | 80.7 |
| 26 | 77.2 | 86.0 | 86.3 | 75.2 | 80.5 | 78.1 | 82.9 | 79.2 | 79.9 |
| 27 | 71.2 | 83.2 | 82.8 | 70.2 | 76.1 | 74.4 | 77.2 | 76.5 | 75.6 |
| 28 | 68.6 | 78.3 | 76.7 | 70.5 | 71.6 | 72.4 | 73.9 | 74.1 | 75.9 |
| 29 | 66.5 | 74.9 | 75.8 | 71.4 | 68.3 | 71.5 | 73.1 | 73.7 | 76.2 |
| 30 | 65.1 | 72.1 | 76.6 | 69.4 | 67.5 | 68.9 | 72.4 | 73.1 | 75.4 |
| 31 | 65.0 | 68.2 | 72.7 | 65.3 | 65.1 | 67.6 | 71.6 | 73.0 | 74.1 |
| 32 | 65.0 | 67.3 | 70.2 | 65.0 | 65.0 | 67.1 | 72.2 | 74.1 | 73.3 |
| 33 | 65.0 | 65.7 | 65.4 | 65.0 | 65.4 | 66.5 | 72.3 | 73.0 | 71.8 |
| 34 | 65.0 | 65.0 | 65.0 | 65.0 | 65.0 | 65.7 | 71.4 | 72.0 | 70.1 |
| 35 | 65.0 | 65.0 | 65.0 | 65.0 | 65.0 | 65.1 | 69.6 | 70.9 | 68.0 |
| 36 | 65.0 | 65.0 | 65.0 | 65.0 | 65.0 | 65.0 | 68.7 | 69.7 | 66.4 |
| 37 | 65.0 | 65.0 | 65.0 | 65.0 | 65.0 | 65.0 | 66.7 | 67.7 | 65.5 |
| 38 | 65.0 | 65.0 | 65.0 | 65.0 | 65.0 | 65.0 | 65.0 | 65.0 | 65.0 |
| 39 | 65.0 | 65.0 | 65.0 | 65.0 | 65.0 | 65.0 | 65.0 | 65.0 | 65.0 |
| 40 | 65.0 | 65.0 | 65.0 | 65.0 | 65.0 | 65.0 | 65.0 | 65.0 | 65.0 |
| A | 80.7 | 91.3 | 91.5 | 87.7 | 87.9 | 84.0 | 87.7 | 87.7 | 85.6 |
| D | 91.1 | 100.7 | 100.1 | 96.4 | 97.6 | 94.5 | 95.9 | 95.4 | 91.9 |
| OASPL | 97.4 | 106.5 | 105.9 | 103.8 | 105.7 | 104.3 | 102.9 | 101.9 | 98.1 |
| PNL | 98.8 | 107.6 | 107.3 | 104.2 | 105.0 | 102.9 | 103.1 | 103.1 | 99.9 |
| PNLT | 98.8 | 107.6 | 107.3 | 104.2 | 105.0 | 102.9 | 103.1 | 103.1 | 99.9 |

LOWER LIMIT OF ANALYSIS SYSTEM= 65.0

TABLE H-VI

NOISE LEVEL FREQUENCY SPECTRA TIME HISTORY

VERTOL CH-47 C

OCTOBER 13, 1976

EVENT 26, 141 KT. FLY BY, CENTERLINE MIC. (HARD SITE)

1/3 OCTAVE FREQUENCY BAND VS TIME (SECONDS)
(DB RE 20 MICRO PA)

| BAND | -14.0 | -12.0 | -10.0 | -8.0 | -6.0 | -4.0 | -2.0 | 0 | 3.0 |
|-------|-------|-------|-------|-------|-------|-------|-------|-------|------|
| 17 | 78.3 | 87.5 | 89.4 | 91.5 | 95.0 | 89.8 | 91.2 | 90.6 | 87.1 |
| 18 | 92.0 | 98.0 | 95.9 | 95.6 | 98.8 | 101.3 | 97.3 | 87.0 | 81.9 |
| 19 | 85.5 | 96.2 | 94.6 | 97.1 | 99.8 | 95.1 | 87.2 | 83.0 | 75.6 |
| 20 | 87.7 | 99.1 | 95.4 | 96.7 | 100.9 | 97.1 | 88.3 | 91.7 | 76.4 |
| 21 | 80.4 | 93.3 | 93.4 | 92.9 | 97.5 | 94.3 | 85.0 | 95.0 | 82.6 |
| 22 | 79.7 | 96.5 | 91.1 | 90.0 | 95.2 | 89.0 | 87.6 | 94.1 | 82.8 |
| 23 | 82.3 | 94.7 | 89.7 | 89.6 | 93.3 | 82.2 | 90.0 | 90.4 | 82.0 |
| 24 | 81.3 | 95.2 | 88.1 | 87.8 | 87.9 | 80.1 | 90.7 | 81.9 | 76.4 |
| 25 | 75.7 | 91.5 | 82.2 | 80.5 | 79.1 | 87.2 | 85.6 | 81.9 | 77.1 |
| 26 | 76.0 | 90.0 | 80.7 | 78.6 | 84.3 | 86.6 | 82.3 | 79.7 | 79.2 |
| 27 | 72.0 | 85.9 | 76.4 | 74.2 | 82.2 | 80.0 | 80.7 | 76.9 | 75.0 |
| 28 | 67.6 | 80.6 | 69.5 | 74.2 | 82.4 | 73.0 | 77.6 | 75.8 | 75.9 |
| 29 | 67.5 | 77.1 | 69.6 | 73.3 | 77.0 | 73.9 | 75.5 | 73.9 | 75.6 |
| 30 | 66.3 | 73.5 | 68.2 | 70.8 | 70.2 | 69.6 | 72.4 | 73.2 | 74.7 |
| 31 | 65.1 | 73.3 | 67.2 | 68.2 | 72.1 | 68.9 | 71.5 | 73.1 | 73.4 |
| 32 | 65.0 | 70.5 | 65.1 | 68.8 | 67.1 | 67.9 | 70.2 | 74.0 | 73.0 |
| 33 | 65.0 | 65.4 | 65.0 | 66.4 | 67.8 | 67.0 | 70.1 | 72.8 | 71.1 |
| 34 | 65.0 | 65.0 | 65.0 | 65.0 | 65.2 | 65.6 | 68.5 | 72.2 | 69.2 |
| 35 | 65.0 | 65.0 | 65.0 | 65.0 | 65.0 | 65.0 | 67.0 | 70.5 | 66.8 |
| 36 | 65.0 | 65.0 | 65.0 | 65.0 | 65.0 | 65.0 | 65.5 | 68.7 | 65.8 |
| 37 | 65.0 | 65.0 | 65.0 | 65.0 | 65.0 | 65.0 | 65.0 | 66.2 | 65.0 |
| 38 | 65.0 | 65.0 | 65.0 | 65.0 | 65.0 | 65.0 | 65.0 | 65.0 | 65.0 |
| 39 | 65.0 | 65.0 | 65.0 | 65.0 | 65.0 | 65.0 | 65.0 | 65.0 | 65.0 |
| 40 | 65.0 | 65.0 | 65.0 | 65.0 | 65.0 | 65.0 | 65.0 | 65.0 | 65.0 |
| A | 79.7 | 92.6 | 86.6 | 87.3 | 90.3 | 87.5 | 87.5 | 88.2 | 84.1 |
| D | 88.2 | 100.8 | 94.5 | 95.5 | 99.2 | 96.2 | 95.9 | 96.1 | 89.6 |
| OASPL | 95.9 | 105.7 | 101.8 | 102.9 | 106.3 | 104.7 | 103.5 | 102.4 | 95.6 |
| PNL | 97.2 | 107.5 | 102.9 | 103.7 | 107.0 | 104.1 | 103.3 | 103.6 | 97.7 |
| PNLT | 97.2 | 107.5 | 102.9 | 103.7 | 108.1 | 104.1 | 103.3 | 103.6 | 97.7 |

LOWER LIMIT OF ANALYSIS SYSTEM= 65.0

TAB: H-VI

NOISE LEVEL FREQUENCY SPECTRA TIME HISTORY

VERTOL CH-47 C

OCTOBER 13, 1976

EVENT 27. 141 KT. FLY BY, CENTERLINE MIC. (HARD SITE)

1/3 OCTAVE FREQUENCY BAND VS TIME (SECONDS)
(DB RE 20 MICRO PA)

| BAND | -11.0 | -9.5 | -8.0 | -6.5 | -5.0 | -3.5 | -2.0 | -.5 | 0 | 2.5 |
|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 17 | 88.0 | 94.1 | 93.8 | 91.3 | 93.3 | 90.3 | 93.9 | 91.5 | 90.9 | 90.9 |
| 18 | 96.3 | 100.1 | 100.8 | 103.0 | 102.9 | 102.5 | 97.9 | 87.4 | 87.6 | 83.4 |
| 19 | 93.1 | 99.7 | 98.7 | 97.9 | 99.7 | 95.3 | 89.4 | 83.6 | 84.4 | 76.6 |
| 20 | 93.1 | 101.1 | 101.0 | 103.7 | 102.7 | 98.6 | 90.6 | 91.7 | 93.7 | 82.9 |
| 21 | 89.2 | 99.1 | 99.6 | 102.8 | 100.4 | 95.9 | 85.9 | 94.4 | 96.3 | 88.8 |
| 22 | 85.9 | 97.9 | 97.5 | 99.6 | 97.4 | 89.2 | 84.3 | 95.3 | 95.9 | 87.6 |
| 23 | 82.9 | 96.7 | 95.7 | 97.8 | 94.2 | 82.3 | 89.6 | 92.8 | 91.8 | 83.9 |
| 24 | 80.9 | 95.0 | 95.2 | 94.3 | 87.9 | 85.0 | 91.5 | 85.1 | 84.2 | 77.6 |
| 25 | 74.9 | 91.6 | 90.7 | 86.6 | 83.6 | 80.3 | 87.2 | 82.7 | 84.8 | 81.0 |
| 26 | 75.6 | 91.4 | 90.1 | 81.3 | 88.4 | 87.6 | 83.6 | 82.5 | 80.7 | 78.9 |
| 27 | 71.7 | 87.2 | 86.6 | 81.7 | 88.3 | 81.8 | 81.7 | 78.3 | 79.0 | 76.8 |
| 28 | 70.3 | 84.2 | 83.6 | 84.7 | 85.2 | 76.5 | 79.9 | 75.8 | 76.2 | 76.5 |
| 29 | 68.4 | 79.8 | 79.5 | 85.8 | 80.1 | 77.3 | 74.4 | 75.3 | 75.2 | 77.1 |
| 30 | 67.8 | 76.2 | 79.3 | 83.6 | 76.1 | 72.5 | 74.1 | 74.7 | 74.7 | 76.0 |
| 31 | 65.5 | 76.2 | 78.8 | 78.9 | 75.8 | 70.8 | 71.3 | 74.4 | 74.8 | 74.7 |
| 32 | 65.0 | 74.6 | 79.1 | 78.1 | 72.5 | 69.9 | 71.8 | 74.4 | 75.0 | 74.4 |
| 33 | 65.0 | 72.4 | 75.9 | 76.0 | 70.4 | 69.0 | 71.9 | 73.3 | 73.5 | 72.3 |
| 34 | 65.0 | 68.9 | 71.4 | 74.6 | 67.3 | 66.8 | 70.7 | 72.7 | 73.0 | 69.7 |
| 35 | 65.0 | 65.6 | 67.0 | 71.5 | 65.0 | 65.0 | 68.1 | 71.0 | 71.2 | 67.8 |
| 36 | 65.0 | 65.0 | 66.1 | 67.3 | 65.0 | 65.0 | 65.9 | 68.9 | 69.4 | 66.7 |
| 37 | 65.0 | 65.0 | 65.0 | 67.0 | 65.0 | 65.0 | 65.0 | 66.7 | 66.7 | 65.3 |
| 38 | 65.0 | 65.0 | 65.0 | 65.0 | 65.0 | 65.0 | 65.0 | 65.0 | 65.0 | 65.0 |
| 39 | 65.0 | 65.0 | 65.0 | 65.0 | 65.0 | 65.0 | 65.0 | 65.0 | 65.0 | 65.0 |
| 40 | 65.0 | 65.0 | 65.0 | 65.0 | 65.0 | 65.0 | 65.0 | 65.0 | 65.0 | 65.0 |
| A | 82.2 | 94.7 | 94.2 | 94.5 | 93.1 | 89.3 | 88.8 | 89.5 | 89.9 | 85.6 |
| D | 92.1 | 102.7 | 101.8 | 103.0 | 101.5 | 97.9 | 96.7 | 97.4 | 97.6 | 91.8 |
| OASPL | 100.4 | 107.7 | 107.5 | 109.2 | 108.4 | 106.1 | 104.8 | 103.5 | 103.3 | 98.2 |
| PNL | 100.5 | 109.1 | 109.2 | 110.6 | 109.0 | 105.5 | 104.2 | 104.7 | 105.0 | 100.1 |
| PNLT | 100.5 | 109.1 | 109.2 | 110.6 | 109.0 | 105.5 | 104.2 | 104.7 | 105.0 | 100.1 |

LOWER LIMIT OF ANALYSIS SYSTEM= 65.0

TABLE H-VI

NOISE LEVEL FREQUENCY SPECTRA TIME HISTORY

VERTOL CH-47 C

OCTOBER 13, 1976

EVENT 12, 6 DEGREE APPROACH, CENTERLINE MIC. (SOFT SITE)

1/3 OCTAVE FREQUENCY BAND VS TIME (SECONDS)
(DB RE 20 MICRO PA)

| BAND | -14.0 | -11.5 | -9.0 | -6.5 | -4.0 | -1.5 | 0 | 1.0 | 3.5 | 6.5 |
|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|------|
| 17 | 89.1 | 89.5 | 92.0 | 89.4 | 89.2 | 87.3 | 84.2 | 87.1 | 87.1 | 91.5 |
| 18 | 84.7 | 84.2 | 88.8 | 91.1 | 84.4 | 84.3 | 81.8 | 80.5 | 92.5 | 87.3 |
| 19 | 33.5 | 88.7 | 89.3 | 84.0 | 75.3 | 78.0 | 86.6 | 86.7 | 81.0 | 83.9 |
| 20 | 87.9 | 87.6 | 88.6 | 86.5 | 77.6 | 92.4 | 94.7 | 96.5 | 88.4 | 82.1 |
| 21 | 83.8 | 84.3 | 81.8 | 73.6 | 86.3 | 96.3 | 100.0 | 98.9 | 92.4 | 75.9 |
| 22 | 78.8 | 79.7 | 74.9 | 83.1 | 90.4 | 96.4 | 96.9 | 97.6 | 91.4 | 76.8 |
| 23 | 77.2 | 71.5 | 80.1 | 87.0 | 94.9 | 92.4 | 92.5 | 91.7 | 89.8 | 82.5 |
| 24 | 70.3 | 77.4 | 87.1 | 90.3 | 92.7 | 89.1 | 95.6 | 96.6 | 83.2 | 84.0 |
| 25 | 78.8 | 81.4 | 88.4 | 87.2 | 82.4 | 92.2 | 96.1 | 95.1 | 88.8 | 81.1 |
| 26 | 82.6 | 83.1 | 85.6 | 79.7 | 88.3 | 89.4 | 93.6 | 93.3 | 85.7 | 75.1 |
| 27 | 79.0 | 78.6 | 75.6 | 78.1 | 84.4 | 86.9 | 88.3 | 87.5 | 84.1 | 77.8 |
| 28 | 75.9 | 71.3 | 79.9 | 77.8 | 84.5 | 84.3 | 85.0 | 82.6 | 81.7 | 75.4 |
| 29 | 70.8 | 76.4 | 76.3 | 76.8 | 83.4 | 81.5 | 83.2 | 79.9 | 79.3 | 74.3 |
| 30 | 71.6 | 69.9 | 77.1 | 73.0 | 80.9 | 79.3 | 79.8 | 77.9 | 76.3 | 71.7 |
| 31 | 68.1 | 71.1 | 73.5 | 71.9 | 78.4 | 76.6 | 76.5 | 75.4 | 74.6 | 71.5 |
| 32 | 66.6 | 68.4 | 72.5 | 70.7 | 77.0 | 75.0 | 75.0 | 74.4 | 76.5 | 71.4 |
| 33 | 65.0 | 67.0 | 70.7 | 69.4 | 73.8 | 72.1 | 71.2 | 70.6 | 70.7 | 66.8 |
| 34 | 65.0 | 65.4 | 69.0 | 67.1 | 72.3 | 69.6 | 69.4 | 68.9 | 69.8 | 65.7 |
| 35 | 65.0 | 65.0 | 67.5 | 65.0 | 68.9 | 67.2 | 67.1 | 66.8 | 68.3 | 65.0 |
| 36 | 65.0 | 65.0 | 65.7 | 65.0 | 66.9 | 65.7 | 66.3 | 65.9 | 67.1 | 65.0 |
| 37 | 65.0 | 65.0 | 65.0 | 65.0 | 65.0 | 65.0 | 65.0 | 65.0 | 65.2 | 65.0 |
| 38 | 65.0 | 65.0 | 65.0 | 65.0 | 65.0 | 65.0 | 65.0 | 65.0 | 65.0 | 65.0 |
| 39 | 65.0 | 65.0 | 65.0 | 65.0 | 65.0 | 65.0 | 65.0 | 65.0 | 65.0 | 65.0 |
| 40 | 65.0 | 65.0 | 65.0 | 65.0 | 65.0 | 65.0 | 65.0 | 65.0 | 65.0 | 65.0 |
| A | 82.8 | 83.8 | 87.4 | 87.8 | 92.1 | 93.2 | 95.8 | 95.2 | 90.1 | 83.6 |
| D | 88.9 | 89.6 | 93.4 | 93.6 | 98.0 | 99.6 | 102.3 | 102.0 | 96.4 | 89.4 |
| OASPL | 95.3 | 95.7 | 98.2 | 98.3 | 102.4 | 103.3 | 105.5 | 105.6 | 101.1 | 95.2 |
| PNL | 98.5 | 99.0 | 102.2 | 102.1 | 105.5 | 106.2 | 108.6 | 108.1 | 103.7 | 98.6 |
| PNLT | 98.5 | 100.9 | 103.5 | 102.1 | 105.5 | 106.2 | 108.6 | 108.1 | 105.0 | 98.6 |

LOWER LIMIT OF ANALYSIS SYSTEM= 65.0

TABLE H-VI

NOISE LEVEL FREQUENCY SPECTRA TIME HISTORY

VERTOL CH-47 C

OCTOBER 13, 1976

EVENT 17, 60 KT. FLY BY, CENTERLINE MIC. (SOFT SITE)

1/3 OCTAVE FREQUENCY BAND VS TIME (SECONDS)
(DB RE 20 MICRO PA)

| BAND | -30.5 | -25.5 | -20.5 | -15.5 | -10.5 | -5.5 | -4.5 | -3.5 | 0 | 4.5 | 7.5 |
|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|------|------|
| 17 | 83.0 | 83.6 | 84.1 | 85.1 | 86.8 | 89.4 | 92.8 | 79.8 | 82.3 | 77.9 | 82.5 |
| 18 | 79.8 | 79.7 | 79.8 | 78.3 | 82.2 | 91.8 | 90.4 | 80.8 | 78.7 | 80.9 | 73.8 |
| 19 | 83.1 | 85.8 | 83.6 | 82.7 | 82.9 | 91.0 | 89.5 | 81.0 | 83.3 | 73.9 | 73.9 |
| 20 | 83.1 | 87.1 | 83.3 | 82.0 | 85.8 | 84.5 | 81.4 | 88.7 | 88.0 | 81.4 | 66.2 |
| 21 | 80.5 | 88.0 | 79.4 | 78.4 | 82.0 | 74.3 | 78.6 | 91.1 | 91.3 | 84.2 | 69.4 |
| 22 | 78.1 | 85.5 | 73.8 | 71.4 | 73.8 | 82.8 | 89.3 | 90.7 | 90.3 | 83.7 | 73.2 |
| 23 | 74.8 | 78.6 | 75.5 | 69.4 | 69.1 | 90.3 | 92.7 | 80.4 | 78.7 | 83.0 | 73.7 |
| 24 | 71.4 | 78.9 | 72.8 | 68.1 | 77.9 | 89.5 | 88.1 | 82.8 | 83.9 | 74.6 | 74.2 |
| 25 | 72.2 | 77.8 | 71.9 | 71.0 | 85.9 | 85.9 | 78.8 | 82.2 | 80.7 | 81.6 | 66.1 |
| 26 | 73.3 | 80.6 | 63.3 | 75.6 | 83.2 | 79.9 | 86.3 | 76.2 | 81.1 | 77.6 | 70.4 |
| 27 | 73.3 | 75.3 | 68.3 | 70.0 | 75.4 | 82.5 | 82.6 | 76.7 | 78.6 | 79.1 | 69.4 |
| 28 | 72.1 | 69.2 | 73.3 | 68.7 | 69.5 | 78.7 | 80.5 | 73.6 | 74.0 | 76.6 | 71.9 |
| 29 | 67.6 | 75.1 | 72.7 | 65.6 | 75.8 | 79.3 | 78.9 | 70.7 | 72.9 | 75.9 | 68.6 |
| 30 | 67.5 | 79.1 | 66.1 | 65.7 | 69.7 | 76.9 | 76.7 | 70.5 | 71.4 | 74.1 | 67.0 |
| 31 | 65.0 | 78.1 | 66.1 | 65.5 | 72.5 | 74.8 | 76.4 | 68.5 | 69.4 | 72.6 | 66.1 |
| 32 | 65.0 | 71.1 | 67.0 | 65.0 | 69.3 | 74.3 | 75.7 | 69.0 | 69.7 | 73.9 | 69.5 |
| 33 | 65.0 | 70.7 | 65.0 | 65.0 | 67.7 | 72.3 | 73.5 | 66.0 | 67.0 | 68.7 | 65.0 |
| 34 | 65.0 | 65.5 | 65.0 | 65.0 | 66.3 | 70.8 | 71.6 | 65.2 | 65.9 | 66.7 | 65.0 |
| 35 | 65.0 | 65.0 | 65.0 | 65.0 | 65.0 | 68.0 | 69.3 | 65.0 | 65.1 | 65.3 | 65.0 |
| 36 | 65.0 | 65.0 | 65.0 | 65.0 | 65.0 | 65.6 | 67.1 | 65.0 | 65.0 | 65.0 | 65.0 |
| 37 | 65.0 | 65.0 | 65.0 | 65.0 | 65.0 | 65.0 | 65.0 | 65.0 | 65.0 | 65.0 | 65.0 |
| 38 | 65.0 | 65.0 | 65.0 | 65.0 | 65.0 | 65.0 | 65.0 | 65.0 | 65.0 | 65.0 | 65.0 |
| 39 | 65.0 | 65.0 | 65.0 | 65.0 | 65.0 | 65.0 | 65.0 | 65.0 | 65.0 | 65.0 | 65.0 |
| 40 | 65.0 | 65.0 | 65.0 | 65.0 | 65.0 | 65.0 | 65.0 | 65.0 | 65.0 | 65.0 | 65.0 |
| A | 76.9 | 85.5 | 78.9 | 76.0 | 84.9 | 88.7 | 89.4 | 84.9 | 85.1 | 84.5 | 77.1 |
| D | 84.4 | 89.5 | 85.1 | 83.0 | 90.0 | 94.2 | 95.7 | 91.8 | 92.1 | 90.2 | 83.1 |
| OASPL | 90.5 | 94.4 | 91.0 | 91.2 | 94.3 | 100.1 | 100.8 | 96.8 | 97.1 | 97.8 | 88.0 |
| PNL | 94.6 | 99.1 | 94.5 | 93.7 | 99.0 | 102.8 | 104.1 | 100.0 | 100.2 | 98.0 | 92.9 |
| PNLT | 94.6 | 99.1 | 94.5 | 93.7 | 101.1 | 102.8 | 104.1 | 100.0 | 100.2 | 99.0 | 94.3 |

LOWER LIMIT OF ANALYSIS SYSTEM= 65.0

TABLE H-VI

NOISE LEVEL FREQUENCY SPECTRA TIME HISTORY

VERTOL CH-47 C

OCTOBER 13, 1976

EVENT 18, 60 KT. FLY BY, CENTERLINE MIC. (SOFT SITE)

1/3 OCTAVE FREQUENCY BAND VS TIME (SECONDS)
(DB RE 20 MICRO PA)

| BAND | -36.5 | -30.5 | -24.5 | -18.5 | -12.5 | -6.5 | -.5 | 0 | 5.5 | 7.5 |
|-------|-------|-------|-------|-------|-------|-------|-------|-------|------|------|
| 17 | 79.5 | 87.5 | 85.2 | 87.7 | 89.0 | 84.1 | 83.4 | 84.3 | 78.6 | 86.9 |
| 18 | 76.4 | 85.7 | 84.3 | 83.7 | 88.3 | 91.9 | 83.9 | 81.4 | 78.9 | 82.0 |
| 19 | 80.5 | 88.7 | 86.9 | 87.9 | 88.8 | 88.0 | 79.6 | 82.3 | 73.0 | 73.3 |
| 20 | 79.8 | 87.9 | 87.7 | 87.9 | 92.1 | 89.1 | 87.3 | 88.2 | 76.0 | 67.7 |
| 21 | 79.3 | 83.0 | 85.1 | 86.9 | 89.5 | 78.9 | 89.0 | 90.4 | 82.1 | 72.6 |
| 22 | 81.3 | 79.7 | 78.0 | 85.3 | 82.3 | 77.1 | 91.7 | 93.4 | 82.6 | 73.6 |
| 23 | 80.5 | 79.6 | 76.8 | 78.7 | 75.3 | 83.4 | 87.0 | 85.4 | 80.2 | 76.1 |
| 24 | 74.5 | 83.5 | 75.8 | 78.2 | 75.9 | 89.1 | 83.8 | 87.7 | 73.3 | 77.9 |
| 25 | 73.6 | 79.4 | 72.3 | 71.5 | 80.0 | 83.2 | 88.3 | 88.8 | 76.0 | 68.3 |
| 26 | 70.4 | 74.3 | 72.9 | 73.7 | 84.3 | 78.8 | 84.0 | 83.5 | 77.7 | 72.9 |
| 27 | 72.7 | 70.0 | 71.4 | 78.3 | 81.2 | 80.5 | 82.7 | 81.4 | 77.5 | 72.1 |
| 28 | 71.6 | 69.3 | 71.5 | 80.6 | 79.7 | 79.7 | 77.8 | 80.4 | 74.2 | 72.6 |
| 29 | 72.0 | 69.1 | 68.3 | 78.2 | 74.3 | 77.5 | 76.8 | 78.6 | 73.9 | 69.9 |
| 30 | 71.0 | 66.3 | 66.3 | 70.7 | 77.3 | 75.2 | 76.3 | 77.2 | 72.5 | 68.1 |
| 31 | 68.2 | 66.5 | 65.7 | 71.2 | 72.2 | 75.4 | 74.4 | 74.5 | 71.1 | 67.4 |
| 32 | 66.0 | 65.4 | 65.2 | 69.6 | 73.3 | 74.1 | 72.7 | 72.8 | 73.8 | 70.3 |
| 33 | 65.0 | 65.0 | 65.0 | 66.8 | 71.8 | 71.8 | 70.8 | 70.3 | 67.9 | 65.3 |
| 34 | 65.0 | 65.0 | 65.0 | 65.2 | 69.7 | 69.4 | 69.1 | 68.9 | 65.7 | 65.0 |
| 35 | 65.0 | 65.0 | 65.0 | 65.0 | 65.7 | 66.6 | 66.5 | 66.2 | 65.0 | 65.0 |
| 36 | 65.0 | 65.0 | 65.0 | 65.0 | 65.0 | 65.2 | 65.7 | 65.5 | 65.0 | 65.0 |
| 37 | 65.0 | 65.0 | 65.0 | 65.0 | 65.0 | 65.0 | 65.0 | 65.0 | 65.0 | 65.0 |
| 38 | 65.0 | 65.0 | 65.0 | 65.0 | 65.0 | 65.0 | 65.0 | 65.0 | 65.0 | 65.0 |
| 39 | 65.0 | 65.0 | 65.0 | 65.0 | 65.0 | 65.0 | 65.0 | 65.0 | 65.0 | 65.0 |
| 40 | 65.0 | 65.0 | 65.0 | 65.0 | 65.0 | 65.0 | 65.0 | 65.0 | 65.0 | 65.0 |
| A | 78.4 | 80.5 | 78.7 | 83.9 | 86.6 | 86.5 | 89.0 | 90.3 | 82.7 | 78.8 |
| D | 85.1 | 88.8 | 86.7 | 89.5 | 92.2 | 92.9 | 95.0 | 95.8 | 88.2 | 84.9 |
| OASPL | 90.0 | 94.7 | 93.5 | 95.0 | 97.4 | 97.9 | 97.8 | 98.9 | 95.6 | 91.3 |
| PNL | 95.1 | 97.7 | 96.7 | 98.6 | 101.2 | 101.9 | 102.4 | 103.1 | 96.7 | 94.1 |
| PNLT | 95.1 | 97.7 | 96.7 | 98.6 | 102.5 | 101.9 | 102.4 | 103.1 | 98.1 | 95.5 |

LOWER LIMIT OF ANALYSIS SYSTEM= 65.0

TABLE H-VI

NOISE LEVEL FREQUENCY SPECTRA TIME HISTORY

VERTOL CH-47 C

OCTOBER 13, 1976

EVENT 20, 9 DEGREE APPROACH, CENTERLINE MIC. (SOFT SITE)

1/3 OCTAVE FREQUENCY BAND VS TIME (SECONDS)
(DB RE 20 MICRO PA)

| BAND | -15.0 | -12.0 | -9.0 | -6.0 | -3.0 | 0 | 3.0 | 6.0 | 7.5 |
|-------|-------|-------|-------|-------|-------|-------|-------|------|------|
| 17 | 87.9 | 88.2 | 90.2 | 89.5 | 80.8 | 76.8 | 85.2 | 38.0 | 89.0 |
| 18 | 82.2 | 83.2 | 85.3 | 86.5 | 75.9 | 82.9 | 85.4 | 84.5 | 85.6 |
| 19 | 83.1 | 84.1 | 83.8 | 79.2 | 79.1 | 86.1 | 81.5 | 82.6 | 82.2 |
| 20 | 77.5 | 79.2 | 80.4 | 79.2 | 79.0 | 92.9 | 94.6 | 78.3 | 77.2 |
| 21 | 71.2 | 72.1 | 71.1 | 75.3 | 90.2 | 99.3 | 93.7 | 81.1 | 78.4 |
| 22 | 76.1 | 73.3 | 75.6 | 86.0 | 93.2 | 96.7 | 94.9 | 82.7 | 73.3 |
| 23 | 72.2 | 74.8 | 83.7 | 89.1 | 94.6 | 92.2 | 89.1 | 83.0 | 76.1 |
| 24 | 75.2 | 84.6 | 88.9 | 91.8 | 90.4 | 94.6 | 86.6 | 83.5 | 79.0 |
| 25 | 80.2 | 84.4 | 87.3 | 86.2 | 88.8 | 95.6 | 89.9 | 81.5 | 80.6 |
| 26 | 83.1 | 84.7 | 83.5 | 80.3 | 88.4 | 81.6 | 84.0 | 78.6 | 77.8 |
| 27 | 76.2 | 78.9 | 75.5 | 80.2 | 83.7 | 88.3 | 83.3 | 78.7 | 74.8 |
| 28 | 66.7 | 75.1 | 76.6 | 77.5 | 82.1 | 85.1 | 80.4 | 76.2 | 75.5 |
| 29 | 69.6 | 76.2 | 71.4 | 78.7 | 81.8 | 82.1 | 78.7 | 74.9 | 72.8 |
| 30 | 66.5 | 72.1 | 70.9 | 73.6 | 76.4 | 80.2 | 75.8 | 72.9 | 71.3 |
| 31 | 66.6 | 69.7 | 68.7 | 71.6 | 74.7 | 77.3 | 74.1 | 71.2 | 69.9 |
| 32 | 65.2 | 67.2 | 67.2 | 70.7 | 72.8 | 74.0 | 75.8 | 71.7 | 71.0 |
| 33 | 65.0 | 65.7 | 66.3 | 68.8 | 70.7 | 71.6 | 70.0 | 67.1 | 65.7 |
| 34 | 65.0 | 65.0 | 65.0 | 66.0 | 68.2 | 69.2 | 69.7 | 66.3 | 65.0 |
| 35 | 65.0 | 65.0 | 65.0 | 65.0 | 66.4 | 66.8 | 69.3 | 65.7 | 65.0 |
| 36 | 65.0 | 65.0 | 65.0 | 65.0 | 65.5 | 65.7 | 68.0 | 65.0 | 65.0 |
| 37 | 65.0 | 65.0 | 65.0 | 65.0 | 65.0 | 65.0 | 66.2 | 65.0 | 65.0 |
| 38 | 65.0 | 65.0 | 65.0 | 65.0 | 65.0 | 65.0 | 65.0 | 65.0 | 65.0 |
| 39 | 65.0 | 65.0 | 65.0 | 65.0 | 65.0 | 65.0 | 65.0 | 65.0 | 65.0 |
| 40 | 65.0 | 65.0 | 65.0 | 65.0 | 65.0 | 65.0 | 65.0 | 65.0 | 65.0 |
| A | 81.6 | 85.1 | 86.6 | 88.4 | 91.2 | 94.6 | 90.8 | 84.2 | 82.0 |
| D | 87.0 | 89.9 | 92.2 | 94.5 | 97.6 | 101.5 | 97.4 | 90.0 | 87.5 |
| OASPL | 93.6 | 95.0 | 97.3 | 99.4 | 101.7 | 104.7 | 102.4 | 95.1 | 93.0 |
| PNL | 97.1 | 99.1 | 100.4 | 102.5 | 104.7 | 108.0 | 104.6 | 98.7 | 96.9 |
| PNLT | 98.1 | 99.1 | 101.5 | 103.5 | 104.7 | 108.0 | 105.9 | 98.7 | 97.9 |

LOWER LIMIT OF ANALYSIS SYSTEM= 65.0

TABLE H-VII

NOISE LEVEL FREQUENCY SPECTRA TIME HISTORY

VERTOL CH-47 C

OCTOBER 13, 1976

EVENT 22, 100 KI. FLY BY, CENTERLINE MIC. (SOFT SITE)

1/3 OCTAVE FREQUENCY BAND VS TIME (SECONDS)
(DB RE 20 MICRO PA)

| BAND | -24.5 | -20.0 | -15.5 | -11.0 | -6.5 | -2.0 | 0 | 2.5 | 7.0 | 8.5 |
|-------|-------|-------|-------|-------|-------|-------|------|------|------|------|
| 17 | 76.8 | 82.7 | 84.5 | 85.6 | 87.6 | 91.8 | 85.4 | 85.9 | 80.1 | 77.4 |
| 18 | 81.3 | 86.5 | 88.3 | 89.6 | 90.2 | 81.9 | 85.5 | 82.6 | 74.7 | 70.8 |
| 19 | 77.8 | 86.7 | 88.2 | 87.2 | 86.1 | 85.6 | 77.1 | 80.0 | 78.1 | 74.5 |
| 20 | 71.6 | 81.4 | 85.8 | 84.3 | 87.6 | 79.5 | 86.1 | 87.9 | 69.5 | 68.9 |
| 21 | 73.7 | 84.1 | 86.1 | 82.8 | 86.8 | 79.0 | 91.4 | 89.8 | 65.6 | 68.1 |
| 22 | 70.7 | 81.6 | 83.1 | 80.9 | 82.5 | 80.4 | 89.8 | 87.4 | 69.4 | 65.0 |
| 23 | 68.1 | 79.1 | 80.9 | 78.1 | 75.2 | 87.5 | 83.4 | 82.2 | 72.9 | 66.1 |
| 24 | 67.0 | 73.6 | 71.7 | 69.9 | 71.0 | 85.9 | 79.4 | 78.0 | 72.7 | 67.6 |
| 25 | 66.1 | 70.0 | 73.9 | 72.2 | 79.3 | 78.3 | 78.0 | 78.5 | 69.6 | 67.2 |
| 26 | 65.4 | 70.8 | 72.5 | 66.8 | 83.0 | 83.8 | 69.2 | 74.2 | 65.6 | 66.3 |
| 27 | 65.4 | 69.9 | 71.7 | 65.0 | 78.4 | 83.7 | 70.4 | 73.9 | 70.4 | 65.0 |
| 28 | 65.0 | 68.4 | 71.2 | 67.5 | 73.0 | 79.5 | 68.9 | 73.3 | 69.1 | 66.2 |
| 29 | 65.0 | 65.7 | 65.1 | 66.6 | 76.5 | 73.7 | 67.4 | 74.3 | 68.0 | 65.8 |
| 30 | 65.0 | 65.0 | 65.6 | 66.0 | 75.8 | 78.1 | 67.3 | 71.8 | 65.1 | 65.0 |
| 31 | 65.0 | 65.0 | 65.2 | 65.0 | 75.6 | 74.4 | 66.8 | 70.0 | 66.8 | 65.6 |
| 32 | 65.0 | 65.0 | 65.0 | 65.0 | 73.7 | 75.4 | 68.1 | 71.7 | 66.5 | 65.5 |
| 33 | 65.0 | 65.0 | 65.0 | 65.0 | 74.2 | 72.3 | 66.9 | 68.2 | 65.0 | 65.0 |
| 34 | 65.0 | 65.0 | 65.0 | 65.0 | 72.1 | 71.9 | 66.3 | 67.0 | 65.0 | 65.0 |
| 35 | 65.0 | 65.0 | 65.0 | 65.0 | 69.0 | 63.7 | 65.7 | 66.3 | 65.0 | 65.0 |
| 36 | 65.0 | 65.0 | 65.0 | 65.0 | 66.8 | 67.3 | 65.2 | 65.5 | 65.0 | 65.0 |
| 37 | 65.0 | 65.0 | 65.0 | 65.0 | 65.0 | 65.3 | 65.0 | 65.0 | 65.0 | 65.0 |
| 38 | 65.0 | 65.0 | 65.0 | 65.0 | 65.0 | 65.0 | 65.0 | 65.0 | 65.0 | 65.0 |
| 39 | 65.0 | 65.0 | 65.0 | 65.0 | 65.0 | 65.0 | 65.0 | 65.0 | 65.0 | 65.0 |
| 40 | 65.0 | 65.0 | 65.0 | 65.0 | 65.0 | 65.0 | 65.0 | 65.0 | 65.0 | 65.0 |
| A | 69.5 | 77.0 | 78.9 | 76.5 | 86.1 | 88.0 | 83.4 | 83.5 | 76.2 | 72.9 |
| D | 79.8 | 86.1 | 87.6 | 86.4 | 91.5 | 93.0 | 91.8 | 91.0 | 82.5 | 80.1 |
| GASPL | 86.5 | 93.1 | 95.2 | 95.4 | 97.1 | 96.7 | 97.1 | 97.0 | 86.4 | 83.7 |
| PNL | 92.1 | 95.5 | 96.8 | 95.7 | 100.2 | 101.2 | 99.2 | 99.3 | 92.6 | 91.5 |
| PNLT | 92.1 | 95.5 | 96.8 | 95.7 | 100.2 | 101.2 | 99.2 | 99.3 | 92.6 | 91.5 |

LOWER LIMIT OF ANALYSIS SYSTEM= 65.0

TABLE H-VI

NOISE LEVEL FREQUENCY SPECTRA TIME HISTORY

VERTOL CH-47 C

OCTOBER 13, 1976

EVENT 23, 100 KI. FLY BY, CENTERLINE MIC. (SOFT SITE)

1/3 OCTAVE FREQUENCY BAND VS TIME (SECONDS)
(DB RE 20 MICRO PA)

| BAND | -33.5 | -25.5 | -19.5 | -12.5 | -5.5 | 0 | 1.5 | 8.5 | 15.5 | 18.0 |
|-------|-------|-------|-------|-------|------|------|------|------|------|------|
| 17 | 67.2 | 72.3 | 80.9 | 83.4 | 88.7 | 85.8 | 87.4 | 76.1 | 66.5 | 66.6 |
| 18 | 71.5 | 76.4 | 85.6 | 87.8 | 92.6 | 85.1 | 80.0 | 70.1 | 70.6 | 68.0 |
| 19 | 69.6 | 74.7 | 83.7 | 86.0 | 87.1 | 77.0 | 83.3 | 74.5 | 66.1 | 65.0 |
| 20 | 67.5 | 69.6 | 78.1 | 83.9 | 88.7 | 85.5 | 89.0 | 69.9 | 67.1 | 65.5 |
| 21 | 65.7 | 71.4 | 81.1 | 85.6 | 84.4 | 89.8 | 90.2 | 67.3 | 66.1 | 65.0 |
| 22 | 63.5 | 68.0 | 77.8 | 81.4 | 76.9 | 87.2 | 87.4 | 65.0 | 65.2 | 65.0 |
| 23 | 65.1 | 67.9 | 74.5 | 78.2 | 69.5 | 80.4 | 79.0 | 65.5 | 65.0 | 65.0 |
| 24 | 63.6 | 65.0 | 69.2 | 68.2 | 74.5 | 75.5 | 80.7 | 67.5 | 65.0 | 65.0 |
| 25 | 63.5 | 65.0 | 65.3 | 65.0 | 76.6 | 75.0 | 77.7 | 67.8 | 65.0 | 65.0 |
| 26 | 63.5 | 65.0 | 65.1 | 65.0 | 79.9 | 71.1 | 73.0 | 67.2 | 65.0 | 65.0 |
| 27 | 63.5 | 65.0 | 65.0 | 65.0 | 74.2 | 70.2 | 69.7 | 65.0 | 65.0 | 65.0 |
| 28 | 63.5 | 65.0 | 65.0 | 65.0 | 67.0 | 68.4 | 69.2 | 65.4 | 65.0 | 65.0 |
| 29 | 63.5 | 65.0 | 65.0 | 65.0 | 66.5 | 68.6 | 71.8 | 65.0 | 65.0 | 65.0 |
| 30 | 63.5 | 65.0 | 65.0 | 65.0 | 65.5 | 68.3 | 68.6 | 65.1 | 65.0 | 65.0 |
| 31 | 63.5 | 65.0 | 65.0 | 65.0 | 65.0 | 67.7 | 69.4 | 66.2 | 65.0 | 65.0 |
| 32 | 63.5 | 65.0 | 65.0 | 65.0 | 65.0 | 69.5 | 70.4 | 65.5 | 65.0 | 65.0 |
| 33 | 63.5 | 65.0 | 65.0 | 65.0 | 65.0 | 68.8 | 68.5 | 65.0 | 65.0 | 65.0 |
| 34 | 63.5 | 65.0 | 65.0 | 65.0 | 65.0 | 67.8 | 67.3 | 65.0 | 65.0 | 65.0 |
| 35 | 63.5 | 65.0 | 65.0 | 65.0 | 65.0 | 66.8 | 66.2 | 65.0 | 65.0 | 65.0 |
| 36 | 63.5 | 65.0 | 65.0 | 65.0 | 65.0 | 66.0 | 66.2 | 65.0 | 65.0 | 65.0 |
| 37 | 63.5 | 65.0 | 65.0 | 65.0 | 65.0 | 65.0 | 65.0 | 65.0 | 65.0 | 65.0 |
| 38 | 63.5 | 65.0 | 65.0 | 65.0 | 65.0 | 65.0 | 65.0 | 65.0 | 65.0 | 65.0 |
| 39 | 63.5 | 65.0 | 65.0 | 65.0 | 65.0 | 65.0 | 65.0 | 65.0 | 65.0 | 65.0 |
| 40 | 63.5 | 65.0 | 65.0 | 65.0 | 65.0 | 65.0 | 65.0 | 65.0 | 65.0 | 65.0 |
| A | 65.2 | 67.5 | 72.5 | 75.4 | 80.2 | 81.6 | 82.9 | 73.1 | 67.7 | 66.0 |
| D | 76.5 | 78.4 | 83.3 | 86.0 | 88.4 | 89.7 | 91.0 | 80.1 | 78.2 | 77.5 |
| GASPL | 78.5 | 82.4 | 91.5 | 94.2 | 97.8 | 95.6 | 96.6 | 83.5 | 77.1 | 75.2 |
| PNL | 89.5 | 91.5 | 93.5 | 95.5 | 97.6 | 98.4 | 99.1 | 91.4 | 90.8 | 90.7 |
| PNLT | 89.5 | 91.5 | 93.5 | 95.5 | 97.6 | 98.4 | 99.1 | 91.4 | 90.8 | 90.7 |

LOWER LIMIT OF ANALYSIS SYSTEM= 65.0

TABLE H-VI

NOISE LEVEL FREQUENCY SPECTRA TIME HISTORY

VERTOL CH-47 C

OCTOBER 13, 1976

EVENT 24, 141 KT. FLY BY, CENTERLINE MIC. (SOFT SITE)

1/3 OCTAVE FREQUENCY BAND VS TIME (SECONDS)
(DB RE 20 MICRO PA)

| BAND | -16.5 | -14.0 | -12.5 | -11.5 | -9.0 | -6.5 | -4.0 | -1.5 | 0 | 1.0 | 3.5 |
|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|------|
| 17 | 85.7 | 89.3 | 91.5 | 90.6 | 85.8 | 85.3 | 90.0 | 93.3 | 90.3 | 90.6 | 84.7 |
| 18 | 86.1 | 95.5 | 96.7 | 96.3 | 96.5 | 99.9 | 102.9 | 92.4 | 87.6 | 83.9 | 80.4 |
| 19 | 81.8 | 96.0 | 97.5 | 96.6 | 90.4 | 92.2 | 94.9 | 92.0 | 83.1 | 86.3 | 74.3 |
| 20 | 83.5 | 96.2 | 98.4 | 98.9 | 94.6 | 96.1 | 97.5 | 86.1 | 90.0 | 92.6 | 71.2 |
| 21 | 83.1 | 94.8 | 96.9 | 97.3 | 93.4 | 96.8 | 96.9 | 83.7 | 94.3 | 95.4 | 78.0 |
| 22 | 83.3 | 92.7 | 95.1 | 95.1 | 90.6 | 93.9 | 89.9 | 87.4 | 93.8 | 92.1 | 78.4 |
| 23 | 81.5 | 92.0 | 94.8 | 93.7 | 87.4 | 92.3 | 85.2 | 89.4 | 90.1 | 85.1 | 78.9 |
| 24 | 78.2 | 89.2 | 92.3 | 91.8 | 85.9 | 85.9 | 78.1 | 87.1 | 84.2 | 85.7 | 74.7 |
| 25 | 74.2 | 85.7 | 87.6 | 87.9 | 80.0 | 78.3 | 81.9 | 79.0 | 84.0 | 84.9 | 74.2 |
| 26 | 73.0 | 84.0 | 87.5 | 87.3 | 78.5 | 75.0 | 82.3 | 81.8 | 79.2 | 78.7 | 77.6 |
| 27 | 69.4 | 79.4 | 82.4 | 80.4 | 72.7 | 67.6 | 77.8 | 77.3 | 75.5 | 74.6 | 74.0 |
| 28 | 66.1 | 76.2 | 76.2 | 73.4 | 66.2 | 67.2 | 70.2 | 74.2 | 74.3 | 74.7 | 73.3 |
| 29 | 65.0 | 73.9 | 72.6 | 69.3 | 66.0 | 67.7 | 72.3 | 72.8 | 73.0 | 73.4 | 73.0 |
| 30 | 65.0 | 72.3 | 70.6 | 68.9 | 66.8 | 66.3 | 67.7 | 71.4 | 72.3 | 71.9 | 70.8 |
| 31 | 65.0 | 69.3 | 67.2 | 69.0 | 66.1 | 65.0 | 66.1 | 70.5 | 71.1 | 71.3 | 70.7 |
| 32 | 65.0 | 67.0 | 65.0 | 63.4 | 65.0 | 65.0 | 65.3 | 70.6 | 72.2 | 72.5 | 69.4 |
| 33 | 65.0 | 66.5 | 65.0 | 65.7 | 65.0 | 65.0 | 66.2 | 70.4 | 71.5 | 70.4 | 67.4 |
| 34 | 65.0 | 65.0 | 65.0 | 65.0 | 65.0 | 65.0 | 65.0 | 69.7 | 70.7 | 70.3 | 66.5 |
| 35 | 65.0 | 65.0 | 65.0 | 65.0 | 65.0 | 65.0 | 65.0 | 67.3 | 69.9 | 69.0 | 65.6 |
| 36 | 65.0 | 65.0 | 65.0 | 65.0 | 65.0 | 65.0 | 65.0 | 66.8 | 68.4 | 67.7 | 65.2 |
| 37 | 65.0 | 65.0 | 65.0 | 65.0 | 65.0 | 65.0 | 65.0 | 65.4 | 66.9 | 66.1 | 65.0 |
| 38 | 65.0 | 65.0 | 65.0 | 65.0 | 65.0 | 65.0 | 65.0 | 65.0 | 65.0 | 65.1 | 65.0 |
| 39 | 65.0 | 65.0 | 65.0 | 65.0 | 65.0 | 65.0 | 65.0 | 65.0 | 65.0 | 65.0 | 65.0 |
| 40 | 65.0 | 65.0 | 65.0 | 65.0 | 65.0 | 65.0 | 65.0 | 65.0 | 65.0 | 65.0 | 65.0 |
| A | 78.3 | 87.9 | 91.0 | 90.5 | 85.5 | 86.9 | 86.6 | 86.3 | 88.2 | 87.8 | 81.2 |
| E | 87.1 | 96.8 | 99.0 | 98.8 | 92.8 | 96.2 | 96.4 | 94.7 | 95.6 | 95.3 | 86.9 |
| OASPL | 94.1 | 102.8 | 104.8 | 104.5 | 100.3 | 103.6 | 105.0 | 102.8 | 101.6 | 101.3 | 92.8 |
| PNL | 96.0 | 104.3 | 106.1 | 105.9 | 101.8 | 103.6 | 104.4 | 101.9 | 103.2 | 103.3 | 95.6 |
| PNLT | 96.0 | 104.3 | 106.1 | 105.9 | 101.8 | 103.6 | 105.5 | 101.9 | 103.2 | 103.3 | 95.6 |

LOWER LIMIT OF ANALYSIS SYSTEM= 65.0

TABLE H-VI

NOISE LEVEL FREQUENCY SPECTRA TIME HISTORY

VERTOL CH-47 C

OCTOBER 13, 1976

EVENT 25, 141 KT. FLY BY, CENTERLINE MIC. (SOFT SITE)

1/3 OCTAVE FREQUENCY BAND VS TIME (SECONDS)
(DB RE 20 MICRO PA)

| BAND | -14.0 | -11.5 | -9.0 | -6.5 | -4.0 | -1.5 | 0 | 1.0 | 3.5 |
|-------|-------|-------|-------|-------|-------|-------|-------|-------|------|
| 17 | 88.0 | 90.7 | 87.7 | 85.3 | 87.3 | 93.6 | 90.6 | 90.4 | 86.7 |
| 18 | 92.4 | 100.2 | 99.4 | 99.5 | 102.0 | 99.8 | 87.5 | 84.9 | 81.6 |
| 19 | 90.0 | 98.5 | 96.1 | 92.8 | 94.1 | 93.8 | 84.9 | 84.4 | 76.9 |
| 20 | 89.8 | 100.3 | 99.0 | 96.9 | 98.0 | 91.0 | 87.1 | 91.2 | 77.2 |
| 21 | 85.3 | 96.3 | 97.7 | 96.8 | 97.1 | 85.1 | 91.5 | 93.7 | 84.2 |
| 22 | 82.9 | 92.2 | 94.8 | 94.1 | 91.1 | 83.1 | 91.7 | 91.0 | 83.3 |
| 23 | 78.9 | 89.2 | 94.0 | 91.4 | 87.0 | 86.2 | 90.3 | 86.0 | 83.4 |
| 24 | 75.1 | 89.8 | 94.5 | 87.2 | 80.0 | 86.5 | 83.9 | 81.1 | 76.8 |
| 25 | 74.1 | 84.8 | 87.4 | 77.5 | 79.2 | 82.3 | 80.2 | 81.7 | 78.7 |
| 26 | 73.3 | 86.1 | 85.7 | 74.9 | 81.6 | 78.7 | 82.2 | 79.1 | 79.7 |
| 27 | 69.8 | 83.0 | 80.3 | 75.7 | 76.2 | 77.2 | 76.0 | 75.9 | 76.1 |
| 28 | 65.2 | 78.3 | 74.9 | 75.6 | 71.5 | 73.6 | 74.1 | 74.3 | 75.4 |
| 29 | 65.0 | 76.2 | 72.1 | 73.7 | 68.4 | 71.9 | 73.5 | 73.5 | 75.5 |
| 30 | 65.0 | 73.0 | 71.0 | 69.0 | 66.8 | 70.1 | 73.1 | 72.1 | 73.3 |
| 31 | 65.0 | 69.3 | 70.1 | 65.0 | 65.2 | 69.3 | 72.2 | 71.4 | 72.1 |
| 32 | 65.0 | 68.5 | 68.5 | 65.0 | 65.0 | 68.7 | 72.2 | 72.7 | 71.1 |
| 33 | 65.0 | 65.7 | 65.1 | 65.0 | 65.0 | 68.7 | 72.3 | 72.0 | 70.0 |
| 34 | 65.0 | 65.0 | 65.0 | 65.0 | 65.0 | 67.4 | 72.1 | 71.8 | 68.8 |
| 35 | 65.0 | 65.0 | 65.0 | 65.0 | 65.0 | 65.8 | 70.8 | 70.2 | 66.6 |
| 36 | 65.0 | 65.0 | 65.0 | 65.0 | 65.0 | 65.6 | 69.4 | 68.9 | 65.9 |
| 37 | 65.0 | 65.0 | 65.0 | 65.0 | 65.0 | 65.0 | 67.6 | 67.5 | 65.0 |
| 38 | 65.0 | 65.0 | 65.0 | 65.0 | 65.0 | 65.0 | 65.1 | 65.1 | 65.0 |
| 39 | 65.0 | 65.0 | 65.0 | 65.0 | 65.0 | 65.0 | 65.0 | 65.0 | 65.0 |
| 40 | 65.0 | 65.0 | 65.0 | 65.0 | 65.0 | 65.0 | 65.0 | 65.0 | 65.0 |
| A | 79.1 | 89.8 | 91.0 | 87.7 | 86.8 | 84.9 | 87.1 | 86.4 | 83.3 |
| D | 89.0 | 98.5 | 99.2 | 96.1 | 95.9 | 94.6 | 95.0 | 94.2 | 89.5 |
| OASPL | 96.9 | 105.1 | 105.1 | 103.8 | 104.7 | 103.5 | 101.3 | 100.8 | 95.3 |
| PNL | 98.0 | 106.4 | 106.3 | 104.0 | 103.9 | 102.7 | 102.6 | 102.5 | 98.1 |
| PNLT | 98.0 | 106.4 | 106.3 | 104.0 | 103.9 | 102.7 | 102.6 | 102.5 | 98.1 |

LOWER LIMIT OF ANALYSIS SYSTEM= 65.0

TABLE H-VI

NOISE LEVEL FREQUENCY SPECTRA TIME HISTOR

VERTOL CH-47 C

OCTOBER 13, 1976

EVENT 26, 141 KT. FLY BY, CENTERLINE MIC. (SOFT SITE)

1/3 OCTAVE FREQUENCY BAND VS TIME (SECONDS)
(DB RE 20 MICRO PA)

| BAND | -13.5 | -11.5 | -9.5 | -7.5 | -5.5 | -3.5 | -1.5 | 0 | .5 | 3.0 |
|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|------|
| 17 | 80.6 | 87.3 | 89.1 | 92.2 | 92.0 | 87.7 | 92.9 | 89.7 | 89.8 | 87.2 |
| 18 | 94.0 | 99.0 | 97.2 | 98.3 | 100.1 | 102.2 | 95.5 | 87.0 | 85.4 | 82.6 |
| 19 | 85.8 | 96.6 | 94.3 | 96.9 | 98.6 | 93.1 | 88.5 | 83.7 | 84.7 | 73.2 |
| 20 | 89.9 | 100.0 | 96.8 | 96.0 | 100.2 | 97.0 | 86.2 | 90.7 | 91.8 | 80.0 |
| 21 | 86.2 | 99.1 | 94.7 | 92.7 | 97.3 | 94.0 | 85.4 | 94.1 | 94.8 | 84.5 |
| 22 | 82.2 | 97.1 | 92.3 | 91.7 | 93.6 | 87.2 | 87.4 | 93.3 | 92.4 | 83.7 |
| 23 | 82.7 | 95.5 | 91.1 | 90.6 | 90.8 | 81.1 | 90.3 | 90.4 | 87.9 | 81.9 |
| 24 | 76.5 | 95.1 | 89.2 | 86.9 | 85.8 | 81.8 | 90.4 | 83.5 | 82.3 | 75.8 |
| 25 | 72.4 | 90.8 | 84.1 | 78.3 | 78.6 | 87.0 | 83.1 | 83.9 | 83.4 | 79.8 |
| 26 | 73.3 | 89.4 | 82.0 | 75.5 | 84.5 | 84.6 | 83.2 | 81.5 | 79.4 | 79.1 |
| 27 | 70.1 | 83.8 | 75.2 | 72.9 | 83.8 | 77.1 | 80.6 | 77.8 | 77.1 | 76.8 |
| 28 | 66.0 | 79.6 | 71.1 | 73.3 | 82.2 | 71.5 | 77.3 | 75.4 | 74.9 | 76.3 |
| 29 | 65.8 | 74.8 | 70.4 | 72.4 | 76.1 | 73.2 | 75.9 | 74.8 | 73.8 | 75.3 |
| 30 | 66.2 | 72.2 | 69.1 | 70.3 | 70.8 | 68.1 | 73.4 | 74.2 | 72.3 | 74.3 |
| 31 | 65.0 | 70.8 | 66.9 | 65.4 | 70.7 | 67.6 | 71.7 | 73.5 | 72.5 | 72.2 |
| 32 | 65.0 | 67.9 | 65.0 | 65.0 | 66.5 | 66.2 | 71.1 | 72.9 | 72.3 | 71.8 |
| 33 | 65.0 | 65.9 | 65.0 | 65.0 | 66.9 | 65.8 | 71.5 | 73.2 | 72.7 | 69.8 |
| 34 | 65.0 | 65.0 | 65.0 | 65.0 | 65.0 | 65.2 | 69.3 | 72.8 | 72.3 | 68.4 |
| 35 | 65.0 | 65.0 | 65.0 | 65.0 | 65.0 | 65.0 | 67.7 | 70.8 | 70.3 | 66.7 |
| 36 | 65.0 | 65.0 | 65.0 | 65.0 | 65.0 | 65.0 | 66.0 | 68.9 | 68.4 | 65.7 |
| 37 | 65.0 | 65.0 | 65.0 | 65.0 | 65.0 | 65.0 | 65.0 | 67.1 | 66.8 | 65.0 |
| 38 | 65.0 | 65.0 | 65.0 | 65.0 | 65.0 | 65.0 | 65.0 | 65.0 | 65.0 | 65.0 |
| 39 | 65.0 | 65.0 | 65.0 | 65.0 | 65.0 | 65.0 | 65.0 | 65.0 | 65.0 | 65.0 |
| 40 | 65.0 | 65.0 | 65.0 | 65.0 | 65.0 | 65.0 | 65.0 | 65.0 | 65.0 | 65.0 |
| A | 79.3 | 92.9 | 87.6 | 86.9 | 89.7 | 86.1 | 88.0 | 88.6 | 87.7 | 83.9 |
| D | 89.0 | 100.9 | 95.8 | 95.1 | 97.9 | 95.7 | 95.6 | 95.8 | 95.0 | 89.8 |
| OASPL | 96.8 | 106.1 | 102.5 | 103.0 | 105.5 | 104.3 | 103.1 | 101.8 | 101.4 | 95.7 |
| PNL | 97.9 | 107.4 | 103.9 | 103.2 | 106.3 | 104.0 | 103.3 | 103.5 | 103.2 | 97.9 |
| PNLT | 97.9 | 107.4 | 103.9 | 103.2 | 106.3 | 105.2 | 103.3 | 103.5 | 103.2 | 97.9 |

LOWER LIMIT OF ANALYSIS SYSTEM= 65.0

TABLE H-VI

NOISE LEVEL FREQUENCY SPECTRA TIME HISTORY

VERTOL CH-47 C

OCTOBER 13, 1976

EVENT 27, 141 KT. FLY BY, CENTERLINE MIC. (SOFT SITE)

1/3 OCTAVE FREQUENCY BAND VS TIME (SECONDS)
(DB RE 20 MICRO PA)

| BAND | -11.0 | -9.5 | -8.0 | -6.5 | -5.0 | -3.5 | -2.0 | -.5 | 0 | 2.5 |
|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 17 | 85.4 | 91.8 | 91.5 | 87.8 | 89.4 | 88.1 | 95.5 | 91.3 | 90.6 | 90.9 |
| 18 | 96.6 | 99.8 | 100.8 | 103.5 | 104.0 | 103.2 | 97.9 | 87.7 | 86.9 | 83.3 |
| 19 | 88.7 | 97.5 | 96.8 | 95.8 | 96.9 | 93.9 | 91.6 | 84.8 | 85.9 | 76.5 |
| 20 | 91.9 | 100.8 | 100.5 | 102.8 | 101.9 | 98.6 | 90.6 | 91.5 | 93.6 | 85.1 |
| 21 | 88.1 | 99.8 | 99.0 | 101.7 | 100.2 | 95.7 | 84.6 | 94.3 | 96.3 | 89.4 |
| 22 | 83.9 | 98.4 | 96.9 | 99.4 | 96.9 | 89.3 | 83.5 | 94.5 | 95.2 | 87.5 |
| 23 | 83.0 | 97.0 | 96.1 | 97.5 | 93.2 | 81.5 | 90.0 | 91.8 | 90.3 | 83.7 |
| 24 | 81.2 | 96.9 | 95.0 | 93.0 | 84.8 | 85.5 | 92.2 | 85.2 | 85.7 | 79.0 |
| 25 | 78.5 | 93.9 | 90.1 | 86.6 | 84.2 | 90.2 | 86.5 | 84.5 | 85.6 | 81.9 |
| 26 | 81.4 | 94.1 | 88.6 | 84.1 | 89.3 | 86.9 | 83.9 | 82.6 | 80.6 | 79.3 |
| 27 | 77.3 | 89.7 | 83.5 | 83.0 | 87.6 | 80.6 | 82.7 | 77.8 | 77.7 | 78.3 |
| 28 | 75.5 | 86.8 | 78.6 | 85.5 | 85.5 | 75.3 | 78.4 | 75.6 | 75.9 | 76.4 |
| 29 | 72.8 | 83.8 | 77.6 | 85.6 | 80.3 | 76.2 | 75.3 | 75.1 | 74.9 | 76.5 |
| 30 | 70.6 | 80.8 | 77.9 | 81.3 | 77.8 | 71.0 | 73.5 | 75.0 | 74.4 | 75.4 |
| 31 | 69.9 | 76.7 | 75.7 | 78.4 | 75.7 | 71.4 | 72.6 | 73.9 | 73.7 | 73.1 |
| 32 | 68.7 | 74.8 | 74.1 | 74.6 | 71.1 | 70.1 | 72.3 | 74.2 | 74.0 | 72.7 |
| 33 | 67.2 | 72.6 | 74.9 | 76.9 | 70.0 | 68.3 | 72.6 | 73.4 | 73.4 | 71.0 |
| 34 | 65.0 | 70.5 | 69.7 | 71.1 | 66.1 | 66.2 | 70.6 | 72.9 | 73.2 | 69.6 |
| 35 | 65.0 | 66.5 | 66.1 | 69.1 | 65.3 | 65.0 | 69.0 | 70.9 | 70.9 | 68.1 |
| 36 | 65.0 | 65.0 | 65.0 | 67.2 | 65.0 | 65.0 | 65.9 | 69.7 | 69.7 | 66.8 |
| 37 | 65.0 | 65.0 | 65.0 | 65.0 | 65.0 | 65.0 | 65.0 | 67.5 | 67.6 | 65.2 |
| 38 | 65.0 | 65.0 | 65.0 | 65.0 | 65.0 | 65.0 | 65.0 | 65.0 | 65.0 | 65.0 |
| 39 | 65.0 | 65.0 | 65.0 | 65.0 | 65.0 | 65.0 | 65.0 | 65.0 | 65.0 | 65.0 |
| 40 | 65.0 | 65.0 | 65.0 | 65.0 | 65.0 | 65.0 | 65.0 | 65.0 | 65.0 | 65.0 |
| A | 83.7 | 96.0 | 93.6 | 93.8 | 91.7 | 89.2 | 89.2 | 89.2 | 89.7 | 85.4 |
| D | 91.5 | 103.3 | 101.3 | 102.4 | 100.5 | 97.8 | 96.6 | 96.7 | 97.1 | 91.6 |
| OASPL | 99.3 | 107.7 | 106.7 | 108.6 | 107.7 | 105.7 | 104.7 | 102.6 | 102.8 | 98.0 |
| PNL | 100.8 | 110.0 | 108.3 | 109.7 | 108.4 | 105.5 | 104.6 | 104.4 | 104.8 | 100.3 |
| PNLT | 100.8 | 110.0 | 109.3 | 111.1 | 108.4 | 106.5 | 104.6 | 104.4 | 104.8 | 100.3 |

LOWER LIMIT OF ANALYSIS SYSTEM= 65.0

TABLE H-VI

NOISE LEVEL FREQUENCY SPECTRA TIME HISTORY

VERTOL CH-47 C

OCTOBER 13, 1976

EVENT 28, 150 KT. FLY BY, CENTERLINE MIC. (SOFT SITE)

1/3 OCTAVE FREQUENCY BAND VS TIME (SECONDS)
(DB RE 20 MICRO PA)

| BAND | -10.5 | -9.0 | -7.5 | -6.0 | -4.5 | -3.0 | -1.5 | 0 | 2.5 |
|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 17 | 88.6 | 91.2 | 92.8 | 94.4 | 89.5 | 89.1 | 92.5 | 93.2 | 89.9 |
| 18 | 95.9 | 102.3 | 103.1 | 100.6 | 103.3 | 105.0 | 103.1 | 89.9 | 85.0 |
| 19 | 93.6 | 98.8 | 100.3 | 100.1 | 96.5 | 96.1 | 92.8 | 86.0 | 78.9 |
| 20 | 94.2 | 101.1 | 103.6 | 101.1 | 101.8 | 102.4 | 96.1 | 91.1 | 86.5 |
| 21 | 92.5 | 100.1 | 102.2 | 98.8 | 100.2 | 100.1 | 91.0 | 93.9 | 89.6 |
| 22 | 90.2 | 97.3 | 100.4 | 96.7 | 97.1 | 95.0 | 85.4 | 93.2 | 88.7 |
| 23 | 86.7 | 95.0 | 98.8 | 94.8 | 93.4 | 89.1 | 88.9 | 92.9 | 86.7 |
| 24 | 85.0 | 92.2 | 97.9 | 91.6 | 87.9 | 85.1 | 91.2 | 88.7 | 81.4 |
| 25 | 78.7 | 88.3 | 94.7 | 85.1 | 80.2 | 89.1 | 89.7 | 86.8 | 84.1 |
| 26 | 75.9 | 86.9 | 93.7 | 83.4 | 87.6 | 90.9 | 84.8 | 87.0 | 83.2 |
| 27 | 74.8 | 82.4 | 88.8 | 82.7 | 85.4 | 86.2 | 84.2 | 82.1 | 80.1 |
| 28 | 71.1 | 81.1 | 85.6 | 83.9 | 84.8 | 78.7 | 80.2 | 79.5 | 78.5 |
| 29 | 72.0 | 77.5 | 84.0 | 83.3 | 80.3 | 74.6 | 77.7 | 78.2 | 78.9 |
| 30 | 70.2 | 76.2 | 81.0 | 78.9 | 75.9 | 73.6 | 75.6 | 77.0 | 77.8 |
| 31 | 69.4 | 76.6 | 79.3 | 74.6 | 76.5 | 69.7 | 72.9 | 75.5 | 75.5 |
| 32 | 66.9 | 74.6 | 76.6 | 76.3 | 73.2 | 68.6 | 72.0 | 76.0 | 74.6 |
| 33 | 65.9 | 71.2 | 72.7 | 72.7 | 71.8 | 67.2 | 71.7 | 75.2 | 72.8 |
| 34 | 65.0 | 66.3 | 72.0 | 69.4 | 68.2 | 65.4 | 70.5 | 74.4 | 71.9 |
| 35 | 65.0 | 65.0 | 67.8 | 65.3 | 65.6 | 65.0 | 68.9 | 73.3 | 70.1 |
| 36 | 65.0 | 65.0 | 65.3 | 65.0 | 65.0 | 65.0 | 66.4 | 71.5 | 68.5 |
| 37 | 65.0 | 65.0 | 65.0 | 65.0 | 65.0 | 65.0 | 65.3 | 69.4 | 66.9 |
| 38 | 65.0 | 65.0 | 65.0 | 65.0 | 65.0 | 65.0 | 65.0 | 66.5 | 65.3 |
| 39 | 65.0 | 65.0 | 65.0 | 65.0 | 65.0 | 65.0 | 65.0 | 65.0 | 65.0 |
| 40 | 65.0 | 65.0 | 65.0 | 65.0 | 65.0 | 65.0 | 65.0 | 65.0 | 65.0 |
| A | 84.6 | 93.0 | 97.6 | 92.5 | 92.3 | 91.7 | 90.1 | 91.1 | 87.4 |
| D | 94.5 | 101.3 | 104.9 | 100.6 | 100.5 | 100.5 | 97.8 | 97.9 | 93.5 |
| OASPL | 100.9 | 107.3 | 109.8 | 107.0 | 107.5 | 107.9 | 106.2 | 104.6 | 99.2 |
| PNL | 102.0 | 108.2 | 111.4 | 108.3 | 108.2 | 108.0 | 106.1 | 105.7 | 101.7 |
| PNLT | 102.0 | 108.2 | 111.4 | 108.3 | 108.2 | 108.0 | 106.1 | 105.7 | 101.7 |

LOWER LIMIT OF ANALYSIS SYSTEM= 65.0

TABLE H-VI

NOISE LEVEL FREQUENCY SPECTRA TIME HISTORY

VERTOL CH-47 C

OCTOBER 13, 1976

EVENT 29, 150 KI. FLY BY, CENTERLINE MIC. (SOFT SITE)

1/3 OCTAVE FREQUENCY BAND VS TIME (SECONDS)
(DB RE 20 MICRO PA)

| BAND | -10.5 | -9.0 | -7.5 | -6.5 | -6.0 | -4.5 | -3.0 | -1.5 | 0 | 2.5 |
|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 17 | 92.3 | 95.3 | 91.4 | 91.1 | 91.4 | 93.9 | 91.1 | 98.6 | 94.5 | 90.9 |
| 18 | 98.4 | 103.3 | 104.6 | 104.3 | 104.2 | 104.8 | 105.4 | 101.3 | 90.5 | 85.8 |
| 19 | 90.7 | 98.1 | 98.4 | 99.5 | 100.4 | 101.5 | 97.9 | 97.1 | 87.1 | 80.2 |
| 20 | 93.7 | 102.5 | 104.7 | 105.5 | 105.4 | 104.7 | 102.8 | 95.7 | 93.2 | 87.4 |
| 21 | 87.2 | 99.5 | 102.4 | 103.0 | 103.3 | 102.3 | 99.7 | 88.5 | 94.4 | 91.5 |
| 22 | 86.9 | 97.2 | 100.5 | 102.1 | 102.1 | 100.3 | 94.6 | 84.4 | 95.1 | 91.2 |
| 23 | 86.0 | 92.9 | 99.3 | 100.6 | 100.6 | 97.2 | 88.4 | 88.6 | 93.7 | 89.6 |
| 24 | 87.0 | 90.3 | 96.7 | 98.9 | 98.7 | 93.2 | 85.7 | 90.7 | 88.2 | 83.0 |
| 25 | 85.8 | 86.1 | 94.0 | 94.7 | 94.2 | 85.4 | 90.0 | 88.4 | 86.4 | 86.3 |
| 26 | 85.3 | 86.8 | 95.2 | 94.4 | 93.4 | 89.8 | 92.3 | 83.6 | 88.2 | 84.6 |
| 27 | 82.5 | 84.1 | 92.2 | 90.0 | 88.3 | 90.6 | 88.0 | 83.2 | 83.0 | 81.5 |
| 28 | 80.4 | 82.3 | 90.3 | 88.1 | 86.8 | 90.4 | 80.9 | 77.9 | 81.4 | 79.7 |
| 29 | 75.5 | 82.5 | 88.4 | 86.3 | 86.7 | 88.5 | 78.8 | 75.8 | 79.5 | 78.1 |
| 30 | 73.5 | 81.2 | 85.9 | 86.6 | 86.5 | 83.6 | 77.3 | 74.2 | 79.0 | 77.4 |
| 31 | 72.7 | 78.5 | 82.9 | 85.4 | 85.7 | 84.8 | 72.8 | 72.6 | 78.2 | 75.7 |
| 32 | 69.7 | 74.8 | 82.5 | 83.9 | 83.7 | 81.2 | 70.5 | 72.6 | 77.6 | 73.9 |
| 33 | 67.7 | 73.9 | 80.4 | 81.9 | 82.2 | 80.5 | 69.0 | 72.5 | 76.4 | 72.7 |
| 34 | 65.9 | 71.2 | 77.0 | 78.3 | 78.8 | 78.2 | 66.5 | 71.3 | 76.2 | 71.6 |
| 35 | 65.0 | 68.0 | 73.8 | 76.2 | 76.1 | 73.3 | 65.2 | 69.4 | 74.3 | 69.7 |
| 36 | 65.0 | 65.9 | 69.3 | 70.8 | 71.0 | 72.4 | 65.0 | 67.4 | 72.6 | 68.5 |
| 37 | 65.0 | 65.3 | 65.2 | 67.2 | 67.3 | 68.5 | 65.0 | 66.8 | 70.1 | 66.3 |
| 38 | 65.0 | 65.0 | 65.0 | 65.0 | 65.0 | 69.9 | 65.0 | 65.0 | 66.5 | 65.2 |
| 39 | 65.0 | 65.0 | 65.0 | 65.0 | 65.0 | 66.0 | 65.0 | 65.0 | 65.0 | 65.0 |
| 40 | 65.0 | 65.0 | 65.0 | 65.0 | 65.0 | 65.0 | 65.0 | 65.0 | 65.0 | 65.0 |
| A | 87.1 | 92.9 | 98.9 | 99.3 | 99.2 | 97.8 | 92.7 | 89.1 | 92.0 | 88.8 |
| D | 94.7 | 101.2 | 105.3 | 106.3 | 106.6 | 104.7 | 101.2 | 97.8 | 99.0 | 95.1 |
| OASPL | 101.9 | 107.9 | 110.2 | 110.9 | 111.1 | 110.3 | 108.5 | 106.6 | 105.0 | 100.3 |
| PNL | 103.2 | 109.2 | 112.9 | 113.5 | 113.4 | 112.4 | 108.8 | 105.5 | 106.7 | 103.1 |
| PNLT | 103.2 | 109.2 | 112.9 | 113.5 | 113.4 | 112.4 | 108.8 | 105.5 | 106.7 | 103.1 |

LOWER LIMIT OF ANALYSIS SYSTEM= 65.0

TABLE H-VI

NOISE LEVEL FREQUENCY SPECTRA TIME HISTORY

VERTOL CH-47 C

OCTOBER 13, 1976

EVENT 30, 126 KT. FLY BY, CENTERLINE MIC. (SOFT SITE)

1/3 OCTAVE FREQUENCY BAND VS TIME (SECONDS)
(DB RE 20 MICRO PA)

| BAND | -12.0 | -10.0 | -8.0 | -6.0 | -4.0 | -2.0 | 0 | 2.0 | 4.0 |
|-------|-------|-------|-------|-------|-------|-------|-------|-------|------|
| 17 | 79.6 | 86.8 | 86.4 | 87.4 | 88.6 | 90.4 | 88.7 | 88.7 | 84.3 |
| 18 | 90.1 | 99.2 | 99.2 | 98.1 | 100.3 | 96.3 | 86.0 | 82.9 | 81.4 |
| 19 | 80.2 | 94.1 | 94.3 | 94.5 | 93.8 | 90.6 | 83.1 | 83.1 | 75.1 |
| 20 | 80.9 | 95.5 | 95.9 | 94.1 | 93.1 | 89.0 | 89.9 | 88.9 | 70.8 |
| 21 | 82.7 | 95.9 | 95.3 | 91.9 | 92.6 | 82.5 | 92.9 | 90.3 | 75.1 |
| 22 | 83.0 | 92.7 | 91.4 | 87.7 | 87.0 | 80.3 | 91.3 | 86.0 | 77.9 |
| 23 | 80.0 | 90.5 | 88.1 | 83.5 | 78.9 | 83.6 | 86.8 | 78.3 | 77.6 |
| 24 | 77.5 | 87.3 | 84.5 | 79.8 | 72.0 | 83.1 | 79.3 | 79.9 | 75.7 |
| 25 | 70.9 | 80.4 | 76.7 | 70.0 | 72.6 | 78.2 | 78.7 | 79.5 | 70.4 |
| 26 | 65.8 | 77.8 | 71.8 | 69.6 | 78.6 | 76.5 | 75.9 | 75.8 | 75.7 |
| 27 | 65.4 | 75.6 | 69.3 | 71.2 | 76.9 | 75.9 | 73.3 | 74.6 | 72.9 |
| 28 | 65.3 | 70.3 | 65.6 | 72.6 | 70.6 | 73.2 | 71.9 | 74.9 | 73.3 |
| 29 | 65.0 | 67.6 | 65.2 | 67.6 | 69.2 | 72.1 | 72.2 | 75.5 | 72.0 |
| 30 | 65.0 | 65.6 | 65.0 | 65.4 | 66.9 | 70.7 | 71.2 | 73.8 | 71.0 |
| 31 | 65.0 | 65.0 | 65.0 | 66.2 | 65.4 | 67.8 | 70.5 | 72.5 | 70.7 |
| 32 | 65.0 | 65.0 | 65.0 | 65.0 | 65.0 | 67.8 | 71.9 | 73.1 | 70.2 |
| 33 | 65.0 | 65.0 | 65.0 | 65.0 | 65.5 | 67.9 | 71.6 | 71.2 | 67.6 |
| 34 | 65.0 | 65.0 | 65.0 | 65.0 | 65.0 | 66.5 | 70.8 | 69.5 | 66.3 |
| 35 | 65.0 | 65.0 | 65.0 | 65.0 | 65.0 | 65.3 | 68.9 | 68.0 | 65.5 |
| 36 | 65.0 | 65.0 | 65.0 | 65.0 | 65.0 | 65.0 | 68.3 | 67.4 | 65.2 |
| 37 | 65.0 | 65.0 | 65.0 | 65.0 | 65.0 | 65.0 | 66.0 | 65.3 | 65.0 |
| 38 | 65.0 | 65.0 | 65.0 | 65.0 | 65.0 | 65.0 | 65.0 | 65.0 | 65.0 |
| 39 | 65.0 | 65.0 | 65.0 | 65.0 | 65.0 | 65.0 | 65.0 | 65.0 | 65.0 |
| 40 | 65.0 | 65.0 | 65.0 | 65.0 | 65.0 | 65.0 | 65.0 | 65.0 | 65.0 |
| A | 76.7 | 86.2 | 84.7 | 83.0 | 83.1 | 83.2 | 85.3 | 84.8 | 80.7 |
| D | 86.3 | 95.5 | 94.8 | 92.0 | 92.6 | 91.0 | 93.4 | 91.5 | 86.1 |
| OASPL | 94.0 | 103.0 | 102.7 | 101.5 | 102.3 | 100.8 | 99.6 | 97.9 | 92.1 |
| PNL | 95.4 | 103.5 | 102.5 | 101.0 | 101.8 | 100.3 | 101.5 | 100.2 | 94.9 |
| PNLT | 95.4 | 103.5 | 102.5 | 102.0 | 101.8 | 100.3 | 101.5 | 100.2 | 94.9 |

LOWER LIMIT OF ANALYSIS SYSTEM= 65.0

TABLE H-VI

NOISE LEVEL FREQUENCY SPECTRA TIME HISTORY

VERTOL CH-47 C

OCTOBER 13, 1976

EVENT 31, 126 KT. FLY BY, CENTERLINE MIC. (SOFT SITE)

1/3 OCTAVE FREQUENCY BAND VS TIME (SECONDS)
(DB RE 20 MICRO PA)

| BAND | -14.0 | -11.5 | -9.0 | -6.5 | -4.0 | -1.5 | 0 | 1.0 | 3.5 | 4.0 |
|-------|-------|-------|-------|-------|-------|-------|-------|-------|------|------|
| 17 | 77.5 | 81.6 | 85.4 | 85.3 | 88.1 | 90.7 | 89.1 | 89.7 | 83.3 | 81.4 |
| 18 | 84.9 | 96.6 | 99.6 | 98.9 | 99.7 | 92.4 | 87.0 | 83.9 | 81.3 | 78.2 |
| 19 | 76.3 | 85.9 | 92.1 | 92.5 | 93.0 | 91.3 | 84.6 | 87.9 | 72.6 | 72.9 |
| 20 | 78.4 | 89.7 | 96.5 | 95.7 | 93.4 | 86.3 | 91.5 | 93.6 | 71.8 | 67.9 |
| 21 | 79.9 | 85.9 | 96.2 | 94.8 | 94.1 | 82.7 | 94.0 | 94.9 | 79.9 | 71.2 |
| 22 | 79.3 | 85.4 | 93.2 | 93.1 | 89.7 | 85.6 | 93.5 | 92.2 | 79.0 | 71.7 |
| 23 | 79.6 | 84.3 | 92.0 | 91.3 | 83.0 | 88.6 | 89.0 | 83.5 | 78.1 | 75.1 |
| 24 | 77.4 | 83.6 | 90.2 | 88.3 | 73.4 | 86.9 | 82.9 | 85.2 | 72.3 | 72.9 |
| 25 | 69.1 | 76.0 | 83.3 | 77.9 | 75.3 | 78.3 | 81.2 | 81.2 | 73.0 | 68.5 |
| 26 | 67.0 | 73.3 | 78.8 | 69.3 | 79.6 | 78.8 | 79.7 | 76.4 | 76.8 | 75.3 |
| 27 | 65.0 | 70.2 | 74.7 | 68.4 | 76.3 | 78.5 | 75.8 | 72.9 | 74.5 | 73.2 |
| 28 | 65.0 | 67.7 | 67.6 | 69.2 | 73.0 | 74.8 | 74.0 | 73.3 | 74.1 | 72.2 |
| 29 | 65.0 | 65.8 | 68.1 | 68.4 | 65.9 | 73.9 | 73.3 | 72.6 | 72.3 | 70.1 |
| 30 | 65.0 | 65.9 | 67.6 | 65.9 | 65.9 | 73.7 | 72.4 | 71.2 | 71.8 | 69.1 |
| 31 | 65.0 | 65.0 | 65.0 | 65.0 | 65.2 | 73.0 | 72.9 | 71.9 | 71.0 | 68.9 |
| 32 | 65.0 | 65.0 | 65.0 | 65.0 | 65.0 | 72.5 | 72.4 | 72.7 | 70.7 | 68.5 |
| 33 | 65.0 | 65.0 | 65.0 | 65.0 | 65.0 | 71.8 | 71.8 | 71.0 | 67.8 | 66.3 |
| 34 | 65.0 | 65.0 | 65.0 | 65.0 | 65.0 | 69.4 | 71.0 | 70.1 | 66.6 | 65.2 |
| 35 | 65.0 | 65.0 | 65.0 | 65.0 | 65.0 | 67.5 | 69.4 | 68.7 | 65.7 | 65.0 |
| 36 | 65.0 | 65.0 | 65.0 | 65.0 | 65.0 | 66.0 | 68.0 | 65.2 | 65.3 | 65.0 |
| 37 | 65.0 | 65.0 | 65.0 | 65.0 | 65.0 | 65.0 | 65.9 | 66.1 | 65.0 | 65.0 |
| 38 | 65.0 | 65.0 | 65.0 | 65.0 | 65.0 | 65.0 | 65.0 | 65.0 | 65.0 | 65.0 |
| 39 | 65.0 | 65.0 | 65.0 | 65.0 | 65.0 | 65.0 | 65.0 | 65.0 | 65.0 | 65.0 |
| 40 | 65.0 | 65.0 | 65.0 | 65.0 | 65.0 | 65.0 | 65.0 | 65.0 | 65.0 | 65.0 |
| A | 75.4 | 81.2 | 87.9 | 86.5 | 84.1 | 85.3 | 87.6 | 87.1 | 81.2 | 79.0 |
| D | 84.2 | 90.2 | 96.3 | 95.2 | 93.4 | 93.2 | 95.1 | 95.0 | 86.8 | 84.7 |
| OASPL | 91.0 | 98.5 | 103.3 | 102.8 | 102.3 | 100.7 | 100.9 | 101.1 | 92.8 | 90.2 |
| PNL | 94.0 | 99.5 | 103.9 | 102.7 | 102.0 | 101.5 | 103.0 | 102.8 | 95.4 | 93.7 |
| PNLT | 94.0 | 99.5 | 103.9 | 102.7 | 102.0 | 101.5 | 103.0 | 102.8 | 95.4 | 93.7 |

LOWER LIMIT OF ANALYSIS SYSTEM= 65.0

TABLE H-VI

NOISE LEVEL FREQUENCY SPECTRA TIME HISTORY

VERTOL CH-47 C

OCTOBER 13, 1976

EVENT 35, 3 DEGREE APPROACH, CENTERLINE MIC. (SOFT SITE)

1/3 OCTAVE FREQUENCY BAND VS TIME (SECONDS)
(DB RE 20 MICRO PA)

| BAND | -37.5 | -31.0 | -24.5 | -18.0 | -11.5 | -5.0 | 0 | 1.0 | 1.5 | 8.0 |
|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|------|
| 17 | 81.2 | 84.1 | 83.9 | 82.8 | 87.0 | 86.6 | 88.6 | 87.5 | 89.5 | 89.2 |
| 18 | 80.9 | 84.4 | 80.2 | 79.2 | 81.5 | 93.3 | 87.9 | 83.6 | 81.9 | 85.9 |
| 19 | 83.5 | 86.5 | 82.7 | 81.6 | 86.3 | 88.8 | 85.6 | 88.0 | 87.9 | 81.8 |
| 20 | 86.6 | 87.0 | 81.5 | 83.8 | 87.2 | 91.2 | 92.7 | 96.3 | 96.2 | 73.2 |
| 21 | 87.0 | 84.9 | 76.8 | 83.0 | 85.9 | 80.3 | 97.3 | 99.5 | 99.2 | 68.3 |
| 22 | 86.6 | 83.7 | 68.9 | 83.8 | 83.7 | 80.9 | 96.0 | 97.7 | 96.8 | 74.0 |
| 23 | 83.9 | 83.8 | 69.8 | 78.8 | 75.6 | 82.3 | 90.9 | 91.4 | 90.4 | 80.8 |
| 24 | 78.7 | 82.5 | 70.5 | 71.9 | 68.5 | 89.9 | 90.0 | 95.3 | 94.9 | 81.6 |
| 25 | 74.2 | 77.7 | 71.7 | 65.1 | 77.9 | 87.0 | 93.5 | 93.4 | 92.1 | 79.3 |
| 26 | 77.5 | 78.0 | 70.4 | 68.5 | 84.3 | 80.5 | 88.2 | 89.5 | 88.7 | 73.3 |
| 27 | 73.3 | 75.1 | 66.8 | 72.0 | 81.7 | 82.6 | 87.8 | 85.0 | 83.8 | 74.5 |
| 28 | 73.0 | 70.2 | 65.1 | 74.0 | 74.8 | 79.9 | 83.4 | 82.3 | 81.7 | 71.2 |
| 29 | 67.1 | 67.9 | 65.0 | 73.2 | 73.4 | 81.1 | 82.4 | 81.7 | 80.8 | 72.6 |
| 30 | 65.1 | 57.3 | 65.0 | 65.8 | 77.4 | 79.3 | 80.8 | 79.0 | 78.0 | 70.5 |
| 31 | 65.0 | 65.2 | 65.0 | 65.7 | 71.9 | 77.7 | 77.8 | 76.9 | 76.1 | 68.7 |
| 32 | 65.0 | 65.0 | 65.0 | 66.2 | 71.5 | 76.2 | 76.0 | 74.9 | 74.6 | 70.1 |
| 33 | 65.0 | 65.0 | 65.0 | 65.0 | 69.5 | 74.1 | 73.4 | 72.5 | 71.8 | 65.9 |
| 34 | 65.0 | 65.0 | 65.0 | 65.0 | 66.7 | 72.0 | 72.4 | 71.6 | 70.7 | 65.2 |
| 35 | 65.0 | 65.0 | 65.0 | 65.0 | 65.0 | 67.9 | 69.4 | 67.9 | 67.7 | 65.0 |
| 36 | 65.0 | 65.0 | 65.0 | 65.0 | 65.0 | 66.7 | 67.7 | 66.4 | 66.3 | 65.0 |
| 37 | 65.0 | 65.0 | 65.0 | 65.0 | 65.0 | 65.0 | 65.0 | 65.0 | 65.0 | 65.0 |
| 38 | 65.0 | 65.0 | 65.0 | 65.0 | 65.0 | 65.0 | 65.0 | 65.0 | 65.0 | 65.0 |
| 39 | 65.0 | 65.0 | 65.0 | 65.0 | 65.0 | 65.0 | 65.0 | 65.0 | 65.0 | 65.0 |
| 40 | 65.0 | 65.0 | 65.0 | 65.0 | 65.0 | 65.0 | 65.0 | 65.0 | 65.0 | 65.0 |
| A | 81.0 | 81.4 | 73.6 | 80.1 | 85.2 | 90.2 | 93.7 | 94.4 | 93.4 | 81.4 |
| D | 88.8 | 88.9 | 82.3 | 86.0 | 90.5 | 95.1 | 99.7 | 100.8 | 100.1 | 87.3 |
| OASPL | 93.8 | 94.2 | 89.8 | 91.4 | 95.0 | 99.5 | 103.2 | 104.6 | 104.1 | 92.5 |
| PNL | 97.6 | 97.8 | 93.3 | 95.6 | 99.7 | 103.5 | 107.1 | 107.6 | 107.2 | 96.5 |
| PNLT | 97.6 | 97.8 | 93.3 | 95.6 | 101.3 | 103.5 | 107.1 | 107.6 | 107.2 | 96.5 |

LOWER LIMIT OF ANALYSIS SYSTEM= 65.0

TABLE H-VII

5 FOOT HOVER TEST

1/3 OCTAVE NOISE LEVEL FREQUENCY SPECTRA

VERTOL CH-47 C

OCTOBER 13, 1976

EVENT 2, 0 DEGREES, MICROPHONE 150 METERS WEST

1/3 OCTAVE BAND VS LEVEL (AVE OVER 19 SECONDS)
(DB RE 20 MICRO PA)

| BAND | ENERGY AVERAGE | MAX | MIN | ARITH. AVERAGE | STD DEV |
|-------|-------------------|------|------|-------------------|------------|
| 14 | 81.9 | 85.3 | 77.8 | 81.5 | 1.8 |
| 15 | 76.5 | 79.4 | 73.5 | 76.2 | 1.6 |
| 16 | 82.1 | 85.1 | 79.0 | 81.8 | 1.7 |
| 17 | 84.6 | 87.5 | 82.2 | 84.4 | 1.3 |
| 18 | 77.2 | 79.9 | 73.1 | 76.8 | 1.9 |
| 19 | 79.9 | 82.9 | 76.1 | 79.6 | 1.9 |
| 20 | 82.1 | 84.7 | 77.6 | 81.8 | 1.6 |
| 21 | 79.9 | 82.7 | 76.7 | 79.6 | 1.5 |
| 22 | 81.0 | 83.5 | 76.9 | 80.7 | 1.7 |
| 23 | 82.2 | 86.7 | 77.4 | 81.6 | 2.3 |
| 24 | 82.7 | 86.5 | 77.8 | 82.1 | 2.3 |
| 25 | 81.8 | 85.7 | 76.6 | 81.1 | 2.6 |
| 26 | 78.6 | 82.3 | 74.0 | 78.0 | 2.3 |
| 27 | 75.6 | 79.0 | 71.3 | 75.2 | 1.8 |
| 28 | 71.5 | 73.8 | 68.3 | 71.3 | 1.3 |
| 29 | 68.4 | 71.0 | 65.5 | 68.2 | 1.4 |
| 30 | 65.9 | 67.8 | 63.7 | 65.7 | 1.1 |
| 31 | 65.2 | 66.9 | 63.2 | 64.9 | 1.4 |
| 32 | 67.8 | 69.3 | 65.8 | 67.7 | 1.0 |
| 33 | 64.9 | 66.9 | 62.5 | 64.7 | 1.2 |
| 34 | 63.1 | 68.4 | 59.6 | 62.5 | 2.1 |
| 35 | 63.1 | 66.6 | 58.9 | 62.3 | 2.6 |
| 36 | 61.1 | 63.2 | 59.2 | 61.0 | 1.0 |
| 37 | 57.7 | 59.5 | 56.5 | 57.6 | .8 |
| 38 | 55.5 | 56.6 | 55.0 | 55.4 | .5 |
| 39 | 55.0 | 55.0 | 55.0 | 55.0 | .0 |
| 40 | 55.0 | 55.0 | 55.0 | 55.0 | .0 |
| DBA | 82.4 | 85.4 | 79.3 | 82.1 | 1.5 |
| DBD | 88.8 | 91.5 | 85.9 | 88.6 | 1.4 |
| OASPL | 92.1 | 94.1 | 89.8 | 91.9 | 1.1 |
| PNL | 96.1 | 98.5 | 93.2 | 95.9 | 1.3 |
| PNLT | 96.6 | 98.6 | 94.0 | 96.4 | 1.3 |

270°
(Microphone Location
Relative to Helicopter)

TABLE H-VII

5 FOOT HOVER TEST

1/3 OCTAVE NOISE LEVEL FREQUENCY SPECTRA

VERTOL CH-47 C

OCTOBER 13, 1976

EVENT 3, 45 DEGREES, MICROPHONE 150 METERS WEST

1/3 OCTAVE BAND VS LEVEL (AVE OVER 19 SECONDS)
(DB RE 20 MICRO PA)

| BAND | ENERGY AVERAGE | MAX | MIN | ARITH. AVERAGE | STD DEV |
|-------|-------------------|-------|------|-------------------|------------|
| 14 | 91.2 | 93.1 | 88.2 | 91.0 | 1.4 |
| 15 | 81.4 | 83.5 | 78.5 | 81.3 | 1.3 |
| 16 | 86.7 | 88.0 | 83.8 | 86.6 | 1.3 |
| 17 | 83.3 | 87.4 | 79.0 | 82.5 | 2.6 |
| 18 | 79.8 | 83.9 | 75.5 | 79.3 | 2.1 |
| 19 | 84.5 | 87.6 | 82.3 | 84.3 | 1.3 |
| 20 | 84.7 | 88.1 | 81.5 | 84.4 | 1.7 |
| 21 | 85.9 | 87.3 | 83.4 | 85.8 | 1.0 |
| 22 | 85.4 | 89.2 | 81.1 | 85.1 | 1.7 |
| 23 | 86.5 | 88.8 | 83.5 | 86.3 | 1.5 |
| 24 | 85.9 | 88.5 | 82.5 | 85.7 | 1.6 |
| 25 | 85.4 | 89.9 | 81.4 | 84.8 | 2.2 |
| 26 | 82.2 | 87.6 | 79.1 | 81.5 | 2.3 |
| 27 | 79.4 | 84.1 | 76.1 | 79.0 | 1.9 |
| 28 | 76.6 | 79.8 | 73.5 | 76.4 | 1.5 |
| 29 | 74.1 | 75.9 | 71.8 | 73.9 | 1.1 |
| 30 | 71.7 | 74.4 | 69.4 | 71.5 | 1.3 |
| 31 | 69.7 | 72.4 | 67.8 | 69.5 | 1.2 |
| 32 | 71.0 | 73.4 | 68.4 | 70.8 | 1.2 |
| 33 | 69.0 | 70.8 | 67.2 | 68.9 | 1.1 |
| 34 | 66.2 | 68.4 | 64.3 | 66.1 | 1.2 |
| 35 | 63.7 | 65.9 | 61.9 | 63.6 | 1.1 |
| 36 | 62.4 | 65.1 | 60.2 | 62.2 | 1.1 |
| 37 | 59.4 | 62.1 | 57.2 | 59.2 | 1.3 |
| 38 | 56.7 | 59.3 | 55.1 | 56.5 | 1.2 |
| 39 | 55.0 | 55.4 | 55.0 | 55.0 | .1 |
| 40 | 55.0 | 55.0 | 55.0 | 55.0 | .0 |
| DBA | 86.4 | 89.6 | 84.3 | 86.2 | 1.3 |
| DBD | 92.6 | 95.2 | 90.4 | 92.4 | 1.2 |
| OASPL | 96.3 | 98.4 | 94.6 | 96.2 | .9 |
| PNL | 99.6 | 102.3 | 97.7 | 99.4 | 1.2 |
| PNLT | 99.6 | 102.3 | 97.7 | 99.4 | 1.2 |

225°
(Microphone Location
Relative to Helicopter)

TABLE H-VII

5 FOOT HOVER TEST

1/3 OCTAVE NOISE LEVEL FREQUENCY SPECTRA

VERTOL CH-47 C

OCTOBER 13, 1976

EVENT 4, 90 DEGREES, MICROPHONE 150 METERS WEST

1/3 OCTAVE BAND VS LEVEL (AVE OVER 19 SECONDS)
(DB RE 20 MICRO PA)

| BAND | ENERGY AVERAGE | MAX | MIN | ARITH. AVERAGE | STD DEV |
|-------|-------------------|-------|------|-------------------|------------|
| 14 | 92.0 | 96.3 | 86.9 | 90.9 | 3.0 |
| 15 | 79.1 | 82.0 | 73.9 | 78.6 | 2.2 |
| 16 | 84.6 | 87.7 | 74.0 | 83.6 | 3.5 |
| 17 | 84.1 | 83.7 | 76.7 | 82.1 | 3.9 |
| 18 | 83.8 | 86.7 | 77.8 | 83.4 | 2.1 |
| 19 | 85.4 | 88.1 | 83.0 | 85.2 | 1.2 |
| 20 | 85.6 | 87.4 | 83.2 | 85.3 | 1.4 |
| 21 | 87.1 | 90.2 | 82.3 | 86.7 | 1.9 |
| 22 | 88.6 | 93.5 | 85.1 | 88.1 | 2.0 |
| 23 | 89.0 | 92.2 | 85.5 | 88.7 | 1.6 |
| 24 | 89.6 | 94.9 | 85.7 | 88.9 | 2.3 |
| 25 | 89.0 | 93.6 | 83.5 | 88.2 | 2.5 |
| 26 | 85.6 | 90.2 | 80.3 | 85.0 | 2.2 |
| 27 | 82.5 | 86.5 | 78.5 | 82.0 | 2.0 |
| 28 | 78.9 | 84.4 | 74.5 | 78.2 | 2.2 |
| 29 | 74.9 | 79.6 | 71.5 | 74.4 | 1.9 |
| 30 | 72.9 | 77.9 | 68.1 | 72.3 | 2.2 |
| 31 | 71.2 | 74.6 | 67.1 | 70.8 | 1.9 |
| 32 | 71.2 | 74.0 | 68.2 | 70.9 | 1.7 |
| 33 | 69.3 | 72.6 | 66.3 | 69.0 | 1.7 |
| 34 | 66.7 | 69.2 | 63.1 | 66.5 | 1.4 |
| 35 | 64.6 | 67.9 | 61.6 | 64.3 | 1.4 |
| 36 | 61.7 | 63.8 | 59.8 | 61.6 | .9 |
| 37 | 59.0 | 60.7 | 57.8 | 58.9 | .7 |
| 38 | 56.1 | 57.0 | 55.2 | 56.1 | .4 |
| 39 | 55.0 | 55.0 | 55.0 | 55.0 | .0 |
| 40 | 55.0 | 55.0 | 55.0 | 55.0 | .0 |
| DBA | 89.0 | 93.4 | 85.2 | 88.6 | 1.9 |
| DBD | 95.3 | 99.5 | 92.2 | 94.8 | 1.8 |
| OASPL | 98.4 | 101.7 | 96.2 | 98.1 | 1.5 |
| PNL | 102.0 | 105.6 | 99.2 | 101.6 | 1.7 |
| PNLT | 102.0 | 105.6 | 99.2 | 101.6 | 1.7 |

180°
(Microphone Location
Relative to Helicopter)

TABLE H-VII

5 FOOT HOVER TEST

1/3 OCTAVE NOISE LEVEL FREQUENCY SPECTRA

VERTOL CH-47 C

OCTOBER 13, 1976

EVENT 5, 135 DEGREES, MICROPHONE 150 METERS WEST

1/3 OCTAVE BAND VS LEVEL (AVE OVER 19 SECONDS)
(DB RE 20 MICRO PA)

| BAND | ENERGY AVERAGE | MAX | MIN | ARITH. AVERAGE | STD DEV |
|-------|-------------------|-------|-------|-------------------|------------|
| 14 | 92.8 | 94.4 | 91.7 | 92.8 | .7 |
| 15 | 85.5 | 87.2 | 84.1 | 85.5 | .8 |
| 16 | 91.1 | 92.6 | 89.4 | 91.0 | .8 |
| 17 | 86.8 | 88.3 | 83.2 | 86.6 | 1.3 |
| 18 | 86.6 | 88.0 | 83.6 | 86.4 | 1.3 |
| 19 | 87.5 | 90.0 | 84.6 | 87.2 | 1.4 |
| 20 | 88.0 | 90.9 | 84.5 | 87.7 | 1.9 |
| 21 | 87.8 | 91.6 | 84.6 | 87.4 | 1.9 |
| 22 | 88.7 | 92.1 | 85.4 | 88.3 | 1.8 |
| 23 | 90.0 | 92.6 | 86.5 | 89.7 | 1.7 |
| 24 | 91.3 | 93.4 | 87.4 | 91.0 | 1.7 |
| 25 | 89.9 | 93.1 | 84.9 | 89.4 | 2.3 |
| 26 | 85.7 | 87.9 | 81.9 | 85.3 | 1.8 |
| 27 | 83.7 | 86.5 | 79.3 | 83.3 | 1.8 |
| 28 | 83.9 | 87.4 | 79.0 | 83.3 | 2.5 |
| 29 | 81.6 | 85.7 | 76.7 | 80.9 | 2.5 |
| 30 | 78.8 | 83.0 | 72.6 | 78.1 | 2.6 |
| 31 | 77.6 | 80.2 | 73.8 | 77.2 | 1.9 |
| 32 | 78.3 | 80.8 | 73.9 | 78.0 | 1.8 |
| 33 | 77.0 | 80.2 | 73.3 | 76.6 | 1.9 |
| 34 | 74.3 | 77.7 | 69.7 | 73.9 | 2.0 |
| 35 | 72.3 | 76.0 | 68.7 | 71.9 | 1.9 |
| 36 | 70.0 | 73.7 | 64.4 | 69.4 | 2.3 |
| 37 | 67.3 | 71.0 | 63.3 | 66.7 | 2.2 |
| 38 | 63.4 | 67.1 | 59.5 | 63.0 | 2.0 |
| 39 | 59.3 | 64.1 | 55.4 | 58.6 | 2.3 |
| 40 | 56.0 | 58.4 | 55.0 | 55.9 | 1.0 |
| DBA | 91.6 | 93.5 | 88.4 | 91.3 | 1.5 |
| DBD | 97.2 | 99.7 | 94.4 | 97.0 | 1.4 |
| OASPL | 100.1 | 101.5 | 98.1 | 100.0 | 1.0 |
| PNL | 105.0 | 106.7 | 101.9 | 104.8 | 1.3 |
| PNLT | 105.1 | 107.7 | 101.9 | 104.9 | 1.4 |

135°
(Microphone Location
Relative to Helicopter)

TABLE H-III

5 FOOT HOVER TEST

1/3 OCTAVE NOISE LEVEL FREQUENCY SPEC RA

VERTOL CH-47 C

OCTOBER 13, 1976

EVENT 6, 180 DEGREES, MICROPHONE 150 METERS WEST

1/3 OCTAVE BAND VS LEVEL (AVE OVER 19 SECONDS)
(DB RE 20 MICRO PA)

| BAND | ENERGY AVERAGE | MAX | MIN | ARITH. AVERAGE | STD DEV |
|-------|-------------------|-------|-------|-------------------|------------|
| 14 | 89.5 | 91.4 | 87.5 | 89.4 | 1.1 |
| 15 | 80.6 | 82.8 | 76.4 | 80.3 | 1.7 |
| 16 | 86.1 | 88.3 | 83.5 | 85.9 | 1.1 |
| 17 | 96.4 | 97.8 | 94.9 | 96.3 | .7 |
| 18 | 87.5 | 90.3 | 82.3 | 86.9 | 2.5 |
| 19 | 89.5 | 92.5 | 85.6 | 89.2 | 1.7 |
| 20 | 90.0 | 91.9 | 87.8 | 89.9 | 1.0 |
| 21 | 86.8 | 88.8 | 82.4 | 86.4 | 1.8 |
| 22 | 87.3 | 90.0 | 82.1 | 86.8 | 2.2 |
| 23 | 88.2 | 92.1 | 81.9 | 87.1 | 3.0 |
| 24 | 89.9 | 94.2 | 85.5 | 89.0 | 2.7 |
| 25 | 88.3 | 92.1 | 84.1 | 87.7 | 2.3 |
| 26 | 83.7 | 87.3 | 80.0 | 83.3 | 1.9 |
| 27 | 81.4 | 84.4 | 75.7 | 80.9 | 2.2 |
| 28 | 78.6 | 83.3 | 74.6 | 78.1 | 2.0 |
| 29 | 74.8 | 80.2 | 71.5 | 74.1 | 2.3 |
| 30 | 71.9 | 75.8 | 67.1 | 71.5 | 2.1 |
| 31 | 70.1 | 74.2 | 66.9 | 69.6 | 2.0 |
| 32 | 69.9 | 74.0 | 66.9 | 69.5 | 1.8 |
| 33 | 67.6 | 70.4 | 65.2 | 67.3 | 1.4 |
| 34 | 64.5 | 66.6 | 62.1 | 64.4 | 1.1 |
| 35 | 62.5 | 64.7 | 60.6 | 62.3 | 1.1 |
| 36 | 60.2 | 62.6 | 58.3 | 60.0 | 1.1 |
| 37 | 57.9 | 60.2 | 56.4 | 57.8 | 1.0 |
| 38 | 55.2 | 56.1 | 55.0 | 55.2 | .3 |
| 39 | 55.0 | 55.0 | 55.0 | 55.0 | .0 |
| 40 | 55.0 | 55.0 | 55.0 | 55.0 | .0 |
| DBA | 88.6 | 92.1 | 84.9 | 88.1 | 2.0 |
| DBD | 95.1 | 98.1 | 92.4 | 94.8 | 1.7 |
| OASPL | 100.0 | 101.5 | 98.8 | 99.9 | .8 |
| PNL | 102.2 | 105.2 | 100.1 | 101.9 | 1.5 |
| PNLT | 102.2 | 105.2 | 100.1 | 101.9 | 1.5 |

90°
(Microphone Location
Relative to Helicopter)

TABLE H-VII

5 FOOT HOVER TEST

1/3 OCTAVE NOISE LEVEL FREQUENCY SPECTRA

VERTOL CH-47 C

OCTOBER 13, 1976

EVENT 7, 225 DEGREES, MICROPHONE 150 METERS WEST

1/3 OCTAVE BAND VS LEVEL (AVE OVER 19 SECONDS)
(DB RE 20 MICRO PA)

| BAND | ENERGY AVERAGE | MAX | MIN | ARITH. AVERAGE | STD DEV |
|-------|-------------------|-------|-------|-------------------|------------|
| 14 | 91.7 | 93.3 | 90.4 | 91.6 | .7 |
| 15 | 81.7 | 83.6 | 79.2 | 81.5 | 1.2 |
| 16 | 87.5 | 88.8 | 85.2 | 87.4 | 1.0 |
| 17 | 89.5 | 91.1 | 88.0 | 89.5 | .9 |
| 18 | 91.4 | 92.7 | 89.8 | 91.3 | .8 |
| 19 | 93.2 | 95.0 | 90.9 | 93.1 | .8 |
| 20 | 93.2 | 95.9 | 90.8 | 93.0 | 1.1 |
| 21 | 92.4 | 94.8 | 90.9 | 92.3 | .9 |
| 22 | 90.0 | 92.8 | 86.4 | 89.8 | 1.5 |
| 23 | 88.8 | 91.7 | 83.5 | 88.5 | 1.8 |
| 24 | 87.9 | 90.5 | 82.8 | 87.6 | 1.7 |
| 25 | 85.9 | 88.9 | 80.4 | 85.5 | 1.9 |
| 26 | 84.6 | 86.9 | 78.5 | 84.3 | 1.9 |
| 27 | 81.7 | 85.2 | 75.0 | 81.2 | 2.3 |
| 28 | 78.4 | 81.6 | 73.6 | 78.0 | 2.0 |
| 29 | 75.6 | 78.0 | 71.3 | 75.3 | 1.6 |
| 30 | 72.0 | 76.6 | 68.5 | 71.6 | 1.8 |
| 31 | 70.6 | 74.5 | 67.8 | 70.3 | 1.5 |
| 32 | 71.6 | 75.8 | 68.9 | 71.3 | 1.5 |
| 33 | 70.4 | 73.3 | 67.2 | 70.3 | 1.2 |
| 34 | 69.8 | 73.2 | 65.4 | 69.4 | 1.9 |
| 35 | 67.9 | 70.0 | 64.8 | 67.7 | 1.4 |
| 36 | 66.3 | 68.9 | 63.8 | 66.1 | 1.4 |
| 37 | 64.9 | 67.5 | 63.0 | 64.7 | 1.3 |
| 38 | 60.7 | 62.4 | 59.1 | 60.6 | .9 |
| 39 | 56.9 | 58.7 | 55.4 | 56.8 | .9 |
| 40 | 55.0 | 55.0 | 55.0 | 55.0 | .0 |
| DBA | 88.7 | 90.8 | 85.0 | 88.5 | 1.3 |
| DBD | 96.0 | 98.4 | 93.8 | 95.9 | 1.0 |
| OASPL | 101.0 | 103.0 | 100.1 | 100.9 | .7 |
| PNL | 103.0 | 105.3 | 101.3 | 102.9 | .9 |
| PNLT | 103.0 | 105.3 | 101.3 | 102.9 | .9 |

45°
(Microphone Location
Relative to Helicopter)

TABLE H-VII

5 FOOT HOVER TEST

1/3 OCTAVE NOISE LEVEL FREQUENCY SPECTRA

VERTOL CH-47 C

OCTOBER 13, 1976

EVENT 8, 270 DEGREES, MICROPHONE 150 METERS WEST

1/3 OCTAVE BAND VS LEVEL (AVE OVER 19 SECONDS)
(DB RE 20 MICRO PA)

| BAND | ENERGY AVERAGE | MAX | MIN | ARITH. AVERAGE | STD DEV |
|-------|-------------------|-------|------|-------------------|------------|
| 14 | 97.2 | 97.9 | 96.4 | 97.2 | .4 |
| 15 | 85.5 | 86.7 | 84.0 | 85.4 | .8 |
| 16 | 90.9 | 92.0 | 89.5 | 90.8 | .7 |
| 17 | 81.3 | 85.0 | 75.0 | 80.4 | 2.8 |
| 18 | 83.7 | 85.7 | 79.8 | 83.5 | 1.2 |
| 19 | 86.1 | 88.0 | 83.2 | 85.9 | 1.1 |
| 20 | 88.4 | 89.9 | 86.2 | 88.3 | .7 |
| 21 | 87.3 | 89.3 | 85.4 | 87.2 | 1.1 |
| 22 | 86.8 | 88.6 | 84.8 | 86.7 | .9 |
| 23 | 87.2 | 90.1 | 81.9 | 86.7 | 2.2 |
| 24 | 88.3 | 92.7 | 80.3 | 87.2 | 3.3 |
| 25 | 87.9 | 93.4 | 79.4 | 86.5 | 3.5 |
| 26 | 84.9 | 90.3 | 77.4 | 83.9 | 3.1 |
| 27 | 82.4 | 87.1 | 77.4 | 81.4 | 2.8 |
| 28 | 80.3 | 84.6 | 74.6 | 79.6 | 2.5 |
| 29 | 77.6 | 81.5 | 71.9 | 77.0 | 2.4 |
| 30 | 75.0 | 79.2 | 69.2 | 74.1 | 2.9 |
| 31 | 73.0 | 76.0 | 68.4 | 72.6 | 2.0 |
| 32 | 73.1 | 76.5 | 70.0 | 72.9 | 1.5 |
| 33 | 71.7 | 75.7 | 68.3 | 71.3 | 1.9 |
| 34 | 68.9 | 72.6 | 65.9 | 68.5 | 1.9 |
| 35 | 67.3 | 72.2 | 63.7 | 66.7 | 2.1 |
| 36 | 65.7 | 69.9 | 62.9 | 65.3 | 1.5 |
| 37 | 64.9 | 68.2 | 62.0 | 64.7 | 1.3 |
| 38 | 60.8 | 63.5 | 58.6 | 60.6 | 1.1 |
| 39 | 56.4 | 58.8 | 55.0 | 56.3 | .9 |
| 40 | 55.0 | 55.0 | 55.0 | 55.0 | .0 |
| DBA | 89.1 | 92.3 | 84.2 | 88.6 | 2.1 |
| DBD | 94.9 | 97.9 | 91.0 | 94.5 | 1.7 |
| OASPL | 99.5 | 101.2 | 97.8 | 99.4 | .9 |
| PNL | 102.1 | 105.2 | 97.9 | 101.7 | 1.8 |
| PNLT | 102.1 | 105.2 | 97.9 | 101.8 | 1.7 |

0°
(Microphone Location
Relative to Helicopter)

TABLE H-VII

5 FOOT HOVER TEST

1/3 OCTAVE NOISE LEVEL FREQUENCY SPECTRA

VERTOL CH-47 C

OCTOBER 13, 1976

EVENT 9, 315 DEGREES, MICROPHONE 150 METERS WEST

1/3 OCTAVE BAND VS LEVEL (AVE OVER 19 SECONDS)
(DB RE 20 MICRO PA)

| BAND | ENERGY AVERAGE | MAX | MIN | ARITH. AVERAGE | STD DEV |
|-------|-------------------|-------|------|-------------------|------------|
| 14 | 84.5 | 86.0 | 81.1 | 84.4 | 1.2 |
| 15 | 81.0 | 82.2 | 79.2 | 80.9 | .9 |
| 16 | 87.4 | 88.4 | 85.4 | 87.3 | .8 |
| 17 | 87.6 | 89.0 | 86.5 | 87.5 | .6 |
| 18 | 82.6 | 85.4 | 79.4 | 82.3 | 1.5 |
| 19 | 85.7 | 88.2 | 82.9 | 85.4 | 1.3 |
| 20 | 84.4 | 86.9 | 81.8 | 84.2 | 1.5 |
| 21 | 84.6 | 87.2 | 81.1 | 84.3 | 1.7 |
| 22 | 83.8 | 87.0 | 80.0 | 83.3 | 2.1 |
| 23 | 84.2 | 86.9 | 81.1 | 83.9 | 1.7 |
| 24 | 85.3 | 87.4 | 81.8 | 85.0 | 1.8 |
| 25 | 84.3 | 87.2 | 80.8 | 84.0 | 1.8 |
| 26 | 81.1 | 83.5 | 77.5 | 80.8 | 1.5 |
| 27 | 78.7 | 81.7 | 74.8 | 78.5 | 1.5 |
| 28 | 74.2 | 76.7 | 70.1 | 73.9 | 1.8 |
| 29 | 68.4 | 70.9 | 64.7 | 68.0 | 1.7 |
| 30 | 64.8 | 67.9 | 61.1 | 64.4 | 1.3 |
| 31 | 64.9 | 68.0 | 60.7 | 64.5 | 2.0 |
| 32 | 67.2 | 70.2 | 63.3 | 66.9 | 1.9 |
| 33 | 65.6 | 68.3 | 61.5 | 65.2 | 1.9 |
| 34 | 62.8 | 64.8 | 59.3 | 62.5 | 1.5 |
| 35 | 61.6 | 63.5 | 58.3 | 61.6 | 1.4 |
| 36 | 63.9 | 65.8 | 61.0 | 63.6 | 1.5 |
| 37 | 60.8 | 62.1 | 58.9 | 60.7 | 1.0 |
| 38 | 58.2 | 59.9 | 56.1 | 58.0 | 1.1 |
| 39 | 55.1 | 55.7 | 55.0 | 55.1 | .2 |
| 40 | 55.0 | 55.0 | 55.0 | 55.0 | .0 |
| DBA | 84.9 | 87.0 | 81.8 | 84.6 | 1.6 |
| DBD | 91.2 | 93.3 | 88.5 | 91.0 | 1.5 |
| OASPL | 95.4 | 97.0 | 93.8 | 95.3 | 1.0 |
| PNL | 98.5 | 100.4 | 95.8 | 98.3 | 1.4 |
| PNLT | 98.9 | 101.0 | 95.8 | 98.7 | 1.6 |

315°
(Microphone Location
Relative to Helicopter)

TABLE H-VII

5 FOOT HOVER TEST

1/3 OCTAVE NOISE LEVEL FREQUENCY SPECTRA

VERTOL CH-47 C

OCTOBER 13, 1976

EVENT 10, 0 DEGREES, MICROPHONE 150 METERS WEST

1/3 OCTAVE BAND VS LEVEL (AVE OVER 19 SECONDS)
(DB RE 20 MICRO PA)

| BAND | ENERGY AVERAGE | MAX | MIN | ARITH. AVERAGE | STD DEV |
|-------|-------------------|------|------|-------------------|------------|
| 14 | 87.3 | 90.6 | 78.1 | 86.0 | 3.8 |
| 15 | 76.7 | 80.8 | 68.8 | 75.7 | 3.2 |
| 16 | 82.7 | 87.1 | 74.3 | 81.5 | 3.5 |
| 17 | 84.1 | 86.7 | 78.5 | 83.6 | 2.2 |
| 18 | 79.8 | 84.5 | 73.6 | 78.4 | 3.3 |
| 19 | 80.9 | 86.0 | 73.5 | 79.3 | 3.7 |
| 20 | 80.9 | 85.9 | 70.8 | 79.3 | 4.2 |
| 21 | 80.7 | 85.7 | 73.4 | 79.3 | 3.7 |
| 22 | 80.7 | 85.3 | 74.4 | 79.7 | 3.1 |
| 23 | 82.0 | 85.7 | 75.8 | 81.2 | 2.7 |
| 24 | 83.4 | 87.5 | 76.6 | 82.5 | 2.8 |
| 25 | 83.2 | 87.2 | 75.2 | 82.2 | 3.2 |
| 26 | 78.5 | 81.4 | 71.6 | 78.0 | 2.4 |
| 27 | 75.3 | 78.6 | 70.1 | 74.8 | 2.1 |
| 28 | 71.3 | 75.1 | 67.3 | 70.7 | 2.3 |
| 29 | 67.7 | 71.2 | 62.8 | 67.0 | 2.6 |
| 30 | 66.4 | 69.7 | 61.1 | 65.8 | 2.5 |
| 31 | 64.9 | 67.2 | 60.8 | 64.4 | 2.0 |
| 32 | 65.6 | 68.2 | 62.5 | 65.3 | 1.7 |
| 33 | 63.5 | 66.6 | 59.6 | 63.1 | 2.0 |
| 34 | 60.6 | 63.8 | 56.5 | 60.2 | 2.0 |
| 35 | 59.0 | 62.1 | 56.2 | 58.6 | 1.8 |
| 36 | 58.6 | 61.0 | 56.1 | 57.3 | 1.4 |
| 37 | 56.0 | 57.9 | 55.0 | 56.0 | .9 |
| 38 | 55.1 | 55.5 | 55.0 | 55.1 | .1 |
| 39 | 55.0 | 55.0 | 55.0 | 55.0 | .0 |
| 40 | 55.0 | 55.0 | 55.0 | 55.0 | .0 |
| DBA | 82.5 | 85.9 | 77.5 | 82.0 | 2.3 |
| DBD | 88.9 | 92.2 | 83.8 | 88.3 | 2.4 |
| OASPL | 92.9 | 95.8 | 88.3 | 92.4 | 2.1 |
| PNL | 96.1 | 99.4 | 91.8 | 95.6 | 2.2 |
| PNLT | 96.1 | 99.4 | 91.8 | 95.6 | 2.2 |

270°
(Microphone location
Relative to Helicopter)

TABLE H-VII

5 FOOT HOVER TEST

1/3 OCTAVE NOISE LEVEL FREQUENCY SPECTRA

VERTOL CH-47 C

OCTOBER 13, 1976

EVENT 2, 0 DEGREES, MICROPHONE 150 METERS EAST

1/3 OCTAVE BAND VS LEVEL (AVE OVER 19 SECONDS)
(DB RE 20 MICRO PA)

| BAND | ENERGY AVERAGE | MAX | MIN | ARITH. AVERAGE | STD DEV |
|-------|-------------------|-------|-------|-------------------|------------|
| 14 | 84.8 | 86.0 | 82.8 | 84.8 | .8 |
| 15 | 75.0 | 77.1 | 73.2 | 75.0 | .9 |
| 16 | 82.5 | 84.4 | 80.8 | 82.4 | .9 |
| 17 | 91.4 | 92.5 | 90.5 | 91.4 | .6 |
| 18 | 93.0 | 93.9 | 92.2 | 93.0 | .4 |
| 19 | 90.3 | 91.5 | 88.6 | 90.2 | .7 |
| 20 | 88.7 | 90.8 | 86.1 | 88.6 | 1.0 |
| 21 | 88.3 | 90.8 | 86.8 | 88.3 | .8 |
| 22 | 89.0 | 91.7 | 87.1 | 88.9 | 1.1 |
| 23 | 88.0 | 89.6 | 85.0 | 87.9 | 1.1 |
| 24 | 86.3 | 88.6 | 82.9 | 86.1 | 1.4 |
| 25 | 85.5 | 87.9 | 82.6 | 85.3 | 1.3 |
| 26 | 83.3 | 86.8 | 81.0 | 83.1 | 1.3 |
| 27 | 80.0 | 82.6 | 76.9 | 79.8 | 1.5 |
| 28 | 78.7 | 81.9 | 73.9 | 78.3 | 1.9 |
| 29 | 75.5 | 78.1 | 72.5 | 75.3 | 1.3 |
| 30 | 72.8 | 74.1 | 70.2 | 72.7 | .9 |
| 31 | 71.0 | 72.1 | 68.7 | 71.0 | .8 |
| 32 | 70.9 | 72.0 | 69.6 | 70.9 | .6 |
| 33 | 68.1 | 70.0 | 65.8 | 68.0 | 1.2 |
| 34 | 67.2 | 70.0 | 64.2 | 66.9 | 1.6 |
| 35 | 65.2 | 67.4 | 61.8 | 65.0 | 1.3 |
| 36 | 62.6 | 64.8 | 59.8 | 62.4 | 1.2 |
| 37 | 60.7 | 62.5 | 58.7 | 60.6 | 1.0 |
| 38 | 57.4 | 59.4 | 55.8 | 57.3 | .9 |
| 39 | 55.1 | 55.4 | 55.0 | 55.1 | .1 |
| 40 | 55.0 | 55.0 | 55.0 | 55.0 | .0 |
| DBA | 87.3 | 89.6 | 85.8 | 87.2 | .9 |
| DBD | 93.8 | 95.9 | 92.7 | 93.8 | .8 |
| OASPL | 98.6 | 99.9 | 97.7 | 98.6 | .5 |
| PNL | 101.5 | 103.1 | 100.2 | 101.4 | .7 |
| PNLT | 101.5 | 103.1 | 100.2 | 101.4 | .7 |

90°
(Microphone Location
Relative to Helicopter)

TABLE H-VII

5 FOOT HOVER TEST

1/3 OCTAVE NOISE LEVEL FREQUENCY SPECTRA

VERTOL CH-47 C

OCTOBER 13, 1976

EVENT 3, 45 DEGREES, MICROPHONE 150 METERS EAST

1/3 OCTAVE BAND VS LEVEL (AVE OVER 19 SECONDS)
(DB RE 20 MICRO PA)

| BAND | ENERGY AVERAGE | MAX | MIN | ARITH. AVERAGE | STD DEV |
|-------|-------------------|-------|------|-------------------|------------|
| 14 | 88.3 | 89.7 | 86.5 | 88.3 | .8 |
| 15 | 77.3 | 78.8 | 75.0 | 77.2 | 1.0 |
| 16 | 83.5 | 85.6 | 80.7 | 83.3 | 1.3 |
| 17 | 85.9 | 90.0 | 81.7 | 85.5 | 1.9 |
| 18 | 87.0 | 88.9 | 85.3 | 86.9 | 1.0 |
| 19 | 90.4 | 92.2 | 88.5 | 90.3 | .9 |
| 20 | 89.3 | 91.2 | 87.1 | 89.2 | 1.2 |
| 21 | 91.1 | 93.5 | 86.7 | 90.6 | 2.1 |
| 22 | 38.7 | 92.5 | 84.1 | 88.2 | 2.1 |
| 23 | 87.9 | 91.8 | 83.3 | 87.2 | 2.4 |
| 24 | 87.4 | 90.9 | 82.5 | 86.8 | 2.3 |
| 25 | 85.8 | 90.8 | 81.1 | 85.1 | 2.2 |
| 26 | 84.3 | 89.0 | 80.9 | 83.7 | 2.1 |
| 27 | 81.1 | 84.0 | 77.9 | 80.8 | 1.5 |
| 28 | 78.5 | 82.6 | 75.6 | 78.1 | 1.7 |
| 29 | 76.3 | 81.1 | 71.2 | 75.7 | 2.2 |
| 30 | 72.7 | 78.7 | 66.7 | 71.5 | 3.1 |
| 31 | 72.0 | 78.6 | 64.9 | 70.4 | 3.7 |
| 32 | 72.2 | 77.5 | 65.0 | 71.1 | 3.3 |
| 33 | 69.6 | 74.8 | 62.7 | 68.6 | 2.9 |
| 34 | 69.9 | 75.1 | 62.5 | 68.8 | 3.2 |
| 35 | 66.6 | 69.7 | 60.2 | 65.8 | 2.8 |
| 36 | 65.8 | 71.7 | 60.1 | 64.7 | 3.0 |
| 37 | 63.4 | 66.0 | 58.5 | 62.9 | 2.3 |
| 38 | 59.4 | 62.4 | 55.2 | 58.8 | 2.2 |
| 39 | 55.6 | 57.1 | 55.0 | 55.5 | .6 |
| 40 | 55.0 | 55.0 | 55.0 | 55.0 | .0 |
| DBA | 87.8 | 91.7 | 84.4 | 87.4 | 1.8 |
| DBD | 94.5 | 98.1 | 91.0 | 94.1 | 1.8 |
| OASPL | 98.4 | 101.0 | 95.7 | 98.1 | 1.5 |
| PNL | 101.9 | 105.4 | 98.2 | 101.5 | 2.0 |
| PNLT | 102.2 | 106.7 | 98.2 | 101.6 | 2.2 |

45°
(Microphone Location
Relative to Helicopter)

TABLE H-VIII

5 FOOT HOVER TEST

1/3 OCTAVE NOISE LEVEL FREQUENCY SPECTRA

VERTOL CH-47 C

OCTOBER 13, 1976

EVENT 4, 90 DEGREES, MICROPHONE 150 METERS EAST

1/3 OCTAVE BAND VS LEVEL (AVE OVER 19 SECONDS)
(DB RE 20 MICRO PA)

| BAND | ENERGY AVERAGE | MAX | MIN | ARITH. AVERAGE | STD DEV |
|-------|-------------------|-------|------|-------------------|------------|
| 14 | 92.4 | 93.8 | 91.3 | 92.4 | .8 |
| 15 | 83.0 | 85.4 | 73.4 | 81.5 | 4.3 |
| 16 | 89.4 | 91.8 | 77.1 | 87.6 | 5.1 |
| 17 | 84.0 | 87.7 | 75.0 | 82.3 | 4.3 |
| 18 | 81.0 | 85.3 | 74.3 | 80.2 | 2.6 |
| 19 | 84.4 | 87.3 | 81.3 | 84.1 | 1.7 |
| 20 | 85.6 | 88.3 | 83.4 | 85.3 | 1.5 |
| 21 | 85.4 | 88.9 | 80.9 | 84.8 | 2.5 |
| 22 | 87.2 | 89.9 | 82.0 | 86.6 | 2.4 |
| 23 | 88.5 | 92.3 | 81.7 | 87.5 | 3.2 |
| 24 | 88.5 | 91.9 | 81.8 | 87.8 | 2.8 |
| 25 | 86.8 | 89.7 | 78.2 | 86.0 | 2.9 |
| 26 | 85.5 | 89.1 | 76.1 | 84.6 | 3.2 |
| 27 | 80.0 | 84.3 | 71.4 | 79.2 | 3.1 |
| 28 | 74.6 | 76.8 | 68.5 | 74.1 | 2.1 |
| 29 | 73.2 | 76.4 | 66.9 | 72.5 | 2.7 |
| 30 | 71.3 | 75.7 | 63.8 | 70.5 | 2.8 |
| 31 | 69.4 | 72.5 | 62.9 | 68.7 | 2.6 |
| 32 | 68.8 | 71.1 | 63.9 | 68.4 | 1.8 |
| 33 | 64.9 | 67.5 | 59.8 | 64.5 | 2.3 |
| 34 | 63.8 | 66.7 | 58.9 | 63.3 | 2.2 |
| 35 | 62.1 | 64.3 | 57.6 | 61.6 | 2.2 |
| 36 | 61.5 | 64.0 | 57.7 | 61.1 | 1.9 |
| 37 | 62.4 | 66.1 | 56.9 | 61.5 | 3.0 |
| 38 | 58.3 | 61.2 | 55.1 | 57.9 | 1.9 |
| 39 | 55.2 | 56.3 | 55.0 | 55.2 | .4 |
| 40 | 55.0 | 55.0 | 55.0 | 55.0 | .0 |
| DBA | 87.5 | 90.4 | 80.5 | 87.0 | 2.5 |
| DBD | 93.8 | 96.6 | 87.9 | 93.3 | 2.3 |
| OASPL | 97.4 | 99.7 | 94.7 | 97.1 | 1.3 |
| PNL | 100.6 | 102.9 | 95.3 | 100.2 | 2.0 |
| PNLT | 100.9 | 104.0 | 95.6 | 100.5 | 1.9 |

0°
(Microphone Location
Relative to Helicopter)

TABLE H-III

5 FOOT HOVER TEST

1/3 OCTAVE NOISE LEVEL FREQUENCY SPECTRA

VERTOL CH-47 C

OCTOBER 13, 1976

EVENT 5, 135 DEGREES, MICROPHONE 150 METERS EAST

1/3 OCTAVE BAND VS LEVEL (AVE OVER 19 SECONDS)
(DB RE 20 MICRO PA)

| BAND | ENERGY AVERAGE | MAX | MIN | ARITH. AVERAGE | STD DEV |
|-------|-------------------|-------|------|-------------------|------------|
| 14 | 84.6 | 87.8 | 79.7 | 84.3 | 1.8 |
| 15 | 81.6 | 83.4 | 79.2 | 81.5 | 1.0 |
| 16 | 88.6 | 90.0 | 86.9 | 88.5 | .8 |
| 17 | 85.2 | 87.7 | 83.0 | 85.1 | 1.2 |
| 18 | 82.5 | 88.2 | 77.7 | 81.5 | 2.7 |
| 19 | 82.8 | 85.1 | 79.1 | 82.5 | 1.8 |
| 20 | 83.2 | 87.4 | 78.2 | 82.8 | 1.9 |
| 21 | 83.7 | 86.1 | 81.1 | 83.5 | 1.3 |
| 22 | 83.0 | 85.1 | 78.1 | 82.7 | 1.8 |
| 23 | 85.0 | 89.6 | 81.0 | 84.5 | 2.0 |
| 24 | 85.5 | 88.6 | 82.1 | 85.1 | 1.9 |
| 25 | 84.5 | 87.4 | 81.1 | 84.1 | 1.8 |
| 26 | 82.3 | 85.6 | 78.6 | 81.9 | 1.8 |
| 27 | 77.7 | 81.3 | 75.1 | 77.4 | 1.7 |
| 28 | 74.6 | 78.5 | 71.5 | 74.2 | 1.8 |
| 29 | 71.1 | 73.0 | 68.7 | 70.8 | 1.4 |
| 30 | 69.0 | 71.9 | 66.1 | 68.8 | 1.5 |
| 31 | 67.3 | 69.9 | 64.2 | 67.1 | 1.4 |
| 32 | 67.8 | 70.7 | 65.5 | 67.5 | 1.4 |
| 33 | 64.8 | 69.4 | 61.2 | 64.2 | 2.1 |
| 34 | 63.5 | 66.6 | 60.2 | 63.1 | 1.8 |
| 35 | 62.2 | 64.8 | 59.5 | 62.0 | 1.6 |
| 36 | 64.8 | 67.2 | 62.0 | 64.5 | 1.6 |
| 37 | 60.9 | 63.4 | 58.8 | 60.7 | 1.3 |
| 38 | 58.1 | 60.4 | 56.4 | 58.0 | 1.1 |
| 39 | 55.1 | 55.7 | 55.0 | 55.1 | .2 |
| 40 | 55.0 | 55.0 | 55.0 | 55.0 | .0 |
| DBA | 85.0 | 87.6 | 82.6 | 84.7 | 1.5 |
| DBD | 91.2 | 93.6 | 88.8 | 91.0 | 1.3 |
| OASPL | 94.6 | 96.5 | 93.2 | 94.6 | .8 |
| PNL | 98.6 | 100.8 | 96.6 | 98.4 | 1.2 |
| PNLT | 99.4 | 102.3 | 96.7 | 99.2 | 1.4 |

315°
(Microphone Location
Relative to Helicopter)

TABLE H-VII

5 FOOT HOVER TEST

1/3 OCTAVE NOISE LEVEL FREQUENCY SPECTRA

VERTOL CH-47 C

OCTOBER 13, 1976

EVENT 6, 180 DEGREES, MICROPHONE 150 METERS EAST

1/3 OCTAVE BAND VS LEVEL (AVE OVER 19 SECONDS)
(DB RE 20 MICRO PA)

| BAND | ENERGY AVERAGE | MAX | MIN | ARITH. AVERAGE | STD DEV |
|-------|-------------------|------|------|-------------------|------------|
| 14 | 92.3 | 93.9 | 91.3 | 92.2 | .6 |
| 15 | 83.0 | 84.3 | 80.9 | 83.0 | .7 |
| 16 | 89.3 | 90.7 | 87.7 | 89.3 | .7 |
| 17 | 83.4 | 86.9 | 78.0 | 82.7 | 2.6 |
| 18 | 85.9 | 89.5 | 80.6 | 85.2 | 2.5 |
| 19 | 86.4 | 90.4 | 82.6 | 85.7 | 2.4 |
| 20 | 85.7 | 89.6 | 80.5 | 85.1 | 2.4 |
| 21 | 84.8 | 87.4 | 82.0 | 84.5 | 1.7 |
| 22 | 82.4 | 83.9 | 80.0 | 82.3 | 1.0 |
| 23 | 83.2 | 85.6 | 78.8 | 82.9 | 1.5 |
| 24 | 83.6 | 85.6 | 80.6 | 83.3 | 1.8 |
| 25 | 81.9 | 84.8 | 77.8 | 81.4 | 2.0 |
| 26 | 80.6 | 84.2 | 76.2 | 80.0 | 2.3 |
| 27 | 77.6 | 80.7 | 73.5 | 77.2 | 2.0 |
| 28 | 75.7 | 79.1 | 70.8 | 75.3 | 2.0 |
| 29 | 72.7 | 75.9 | 69.1 | 72.4 | 1.6 |
| 30 | 70.1 | 72.4 | 67.3 | 69.8 | 1.5 |
| 31 | 67.9 | 70.0 | 65.5 | 67.7 | 1.3 |
| 32 | 69.0 | 70.8 | 66.7 | 68.9 | 1.2 |
| 33 | 65.1 | 66.6 | 63.0 | 65.0 | 1.1 |
| 34 | 64.0 | 65.7 | 61.7 | 63.9 | 1.0 |
| 35 | 61.5 | 63.5 | 59.3 | 61.4 | .9 |
| 36 | 61.3 | 63.2 | 59.5 | 61.2 | .8 |
| 37 | 58.2 | 59.6 | 56.5 | 58.1 | .8 |
| 38 | 55.7 | 56.5 | 55.0 | 55.7 | .4 |
| 39 | 55.0 | 55.0 | 55.0 | 55.0 | .0 |
| 40 | 55.0 | 55.0 | 55.0 | 55.0 | .0 |
| DBA | 84.0 | 86.3 | 81.2 | 83.8 | 1.3 |
| DBD | 90.4 | 91.8 | 88.1 | 90.3 | .9 |
| OASPL | 95.7 | 96.9 | 94.2 | 95.6 | .7 |
| PNL | 97.9 | 99.7 | 95.3 | 97.8 | .9 |
| PNLT | 98.1 | 99.9 | 96.4 | 98.0 | .9 |

270°
(Microphone Location
Relative to Helicopter)

TABLE H-VII

5 FOOT HOVER TEST

1/3 OCTAVE NOISE LEVEL FREQUENCY SPECTRA

VERTOL CH-47 C

OCTOBER 13 1976

EVENT 7, 225 DEGREES, MICROPHONE 150 METERS EAST

1/3 OCTAVE BAND VS LEVEL (AVE OVER 19 SECONDS)
(DB RE 20 MICRO PA)

| BAND | ENERGY AVERAGE | MAX | MIN | ARITH. AVERAGE | STD DEV |
|-------|-------------------|-------|------|-------------------|------------|
| 14 | 92.2 | 93.3 | 91.3 | 92.2 | .5 |
| 15 | 78.9 | 80.4 | 76.2 | 78.8 | 1.3 |
| 16 | 85.5 | 87.0 | 82.3 | 85.3 | 1.5 |
| 17 | 78.6 | 84.0 | 73.1 | 77.8 | 2.6 |
| 18 | 81.9 | 83.9 | 79.3 | 81.8 | 1.0 |
| 19 | 87.6 | 89.8 | 85.7 | 87.5 | 1.1 |
| 20 | 84.4 | 86.3 | 81.6 | 84.2 | 1.3 |
| 21 | 86.5 | 88.2 | 84.9 | 86.4 | .8 |
| 22 | 85.5 | 87.8 | 82.6 | 85.4 | 1.3 |
| 23 | 86.8 | 88.9 | 83.2 | 86.5 | 1.5 |
| 24 | 87.4 | 90.1 | 84.1 | 87.2 | 1.4 |
| 25 | 85.9 | 89.7 | 81.6 | 85.6 | 1.6 |
| 26 | 84.5 | 87.6 | 80.8 | 84.2 | 1.4 |
| 27 | 80.6 | 83.2 | 77.6 | 80.4 | 1.4 |
| 28 | 78.9 | 81.5 | 76.5 | 78.8 | 1.0 |
| 29 | 76.7 | 78.0 | 75.2 | 76.6 | .9 |
| 30 | 72.9 | 74.9 | 70.8 | 72.8 | 1.1 |
| 31 | 70.4 | 72.3 | 67.0 | 70.2 | 1.2 |
| 32 | 70.8 | 72.5 | 65.0 | 70.5 | 1.6 |
| 33 | 68.4 | 70.5 | 62.8 | 68.2 | 1.6 |
| 34 | 66.7 | 67.8 | 62.6 | 66.5 | 1.1 |
| 35 | 62.9 | 64.5 | 59.8 | 62.8 | 1.0 |
| 36 | 61.1 | 62.2 | 58.8 | 61.1 | .8 |
| 37 | 57.8 | 58.6 | 55.7 | 57.8 | .6 |
| 38 | 55.3 | 55.7 | 55.0 | 55.3 | .2 |
| 39 | 55.0 | 55.0 | 55.0 | 55.0 | .0 |
| 40 | 55.0 | 55.0 | 55.0 | 55.0 | .0 |
| DBA | 87.3 | 89.6 | 85.1 | 87.2 | 1.0 |
| DBD | 93.2 | 95.6 | 91.0 | 93.1 | 1.0 |
| OASPL | 96.7 | 98.3 | 95.0 | 96.6 | .7 |
| PNL | 100.4 | 102.5 | 98.0 | 100.3 | .9 |
| PNLT | 100.4 | 102.5 | 98.0 | 100.3 | .9 |

225°
(Microphone Location
Relative to Helicopter)

TABLE II-VII

5 FOOT HOVER TEST

1/3 OCTAVE NOISE LEVEL FREQUENCY SPECTRA

VERTOL CH-47 C

OCTOBER 13, 1976

EVENT 8, 270 DEGREES, MICROPHONE 150 METERS EAST

1/3 OCTAVE BAND VS LEVEL (AVE OVER 19 SECONDS)
(DB RE 20 MICRO PA)

| BAND | ENERGY AVERAGE | MAX | MIN | ARITH. AVERAGE | STD DEV |
|-------|-------------------|-------|------|-------------------|------------|
| 14 | 90.3 | 91.3 | 87.7 | 90.1 | 1.2 |
| 15 | 82.3 | 84.3 | 80.9 | 82.1 | 1.0 |
| 16 | 88.9 | 91.1 | 87.5 | 88.8 | .9 |
| 17 | 78.2 | 81.8 | 74.3 | 77.7 | 2.1 |
| 18 | 84.5 | 87.7 | 81.7 | 84.2 | 1.5 |
| 19 | 83.7 | 88.0 | 78.9 | 83.1 | 2.2 |
| 20 | 84.2 | 85.8 | 80.2 | 83.9 | 1.6 |
| 21 | 84.2 | 86.3 | 81.4 | 84.0 | 1.3 |
| 22 | 83.7 | 85.7 | 81.3 | 83.5 | 1.4 |
| 23 | 85.7 | 88.4 | 81.9 | 85.2 | 2.0 |
| 24 | 86.2 | 89.3 | 82.7 | 85.8 | 1.8 |
| 25 | 85.5 | 88.8 | 80.5 | 85.0 | 2.0 |
| 26 | 83.1 | 87.0 | 79.3 | 82.7 | 1.8 |
| 27 | 79.9 | 83.3 | 77.0 | 79.6 | 1.6 |
| 28 | 77.2 | 80.5 | 74.2 | 76.8 | 1.7 |
| 29 | 74.7 | 77.3 | 71.3 | 74.2 | 1.9 |
| 30 | 70.9 | 74.8 | 66.6 | 70.4 | 2.0 |
| 31 | 68.2 | 72.2 | 62.9 | 67.8 | 2.0 |
| 32 | 67.9 | 71.9 | 64.1 | 67.4 | 2.0 |
| 33 | 64.8 | 68.2 | 60.7 | 64.3 | 2.1 |
| 34 | 63.4 | 66.4 | 59.2 | 63.0 | 1.9 |
| 35 | 60.6 | 63.3 | 57.0 | 60.3 | 1.7 |
| 36 | 58.5 | 61.4 | 56.0 | 58.3 | 1.3 |
| 37 | 56.0 | 57.0 | 55.0 | 55.9 | .7 |
| 38 | 55.0 | 55.2 | 55.0 | 55.0 | .1 |
| 39 | 55.0 | 55.0 | 55.0 | 55.0 | .0 |
| 40 | 55.0 | 55.0 | 55.0 | 55.0 | .0 |
| DBA | 86.0 | 88.7 | 83.3 | 85.8 | 1.5 |
| DBD | 91.9 | 94.5 | 89.7 | 91.7 | 1.3 |
| OASPL | 95.6 | 97.7 | 94.1 | 95.5 | 1.1 |
| PNL | 99.0 | 101.5 | 97.1 | 98.8 | 1.2 |
| PNLT | 99.0 | 101.5 | 97.1 | 98.8 | 1.2 |

180°
(Microphone Location
Relative to Helicopter)

TABLE H-VII

5 FOOT HOVER TEST

1/3 OCTAVE NOISE LEVEL FREQUENCY SPECTRA

VERIOL CH-47 C

OCTOBER 13, 1976

EVENT 9, 315 DEGREES, MICROPHONE 150 METERS EAST

1/3 OCTAVE BAND VS LEVEL (AVE OVER 19 SECONDS)
(DB RE 20 MICRO PA)

| BAND | ENERGY AVERAGE | MAX | MIN | ARITH. AVERAGE | STD DEV |
|-------|-------------------|-------|------|-------------------|------------|
| 14 | 89.8 | 90.8 | 88.0 | 89.7 | .7 |
| 15 | 81.2 | 82.6 | 78.9 | 81.1 | .8 |
| 16 | 88.0 | 89.1 | 86.2 | 88.0 | .8 |
| 17 | 80.0 | 82.7 | 75.5 | 79.7 | 1.8 |
| 18 | 82.8 | 86.7 | 76.8 | 82.2 | 2.4 |
| 19 | 86.4 | 89.7 | 80.3 | 86.1 | 1.9 |
| 20 | 86.8 | 89.9 | 82.2 | 86.4 | 1.8 |
| 21 | 87.0 | 89.9 | 82.5 | 86.6 | 2.1 |
| 22 | 87.2 | 90.7 | 82.8 | 86.7 | 2.1 |
| 23 | 86.9 | 90.6 | 83.3 | 86.5 | 1.8 |
| 24 | 86.4 | 89.3 | 82.6 | 85.9 | 2.1 |
| 25 | 84.5 | 89.0 | 78.8 | 83.7 | 2.7 |
| 26 | 83.5 | 88.5 | 77.8 | 82.5 | 2.9 |
| 27 | 80.5 | 84.3 | 75.2 | 79.8 | 2.6 |
| 28 | 79.5 | 83.0 | 73.6 | 78.6 | 2.9 |
| 29 | 77.6 | 82.6 | 72.5 | 76.8 | 2.6 |
| 30 | 75.6 | 79.0 | 70.6 | 75.0 | 2.4 |
| 31 | 74.0 | 77.0 | 70.3 | 73.5 | 2.0 |
| 32 | 72.3 | 74.8 | 69.1 | 72.1 | 1.5 |
| 33 | 69.7 | 72.5 | 66.3 | 69.4 | 1.6 |
| 34 | 68.7 | 71.4 | 65.6 | 68.4 | 1.6 |
| 35 | 65.1 | 67.5 | 61.9 | 64.8 | 1.4 |
| 36 | 63.0 | 64.6 | 60.2 | 62.8 | 1.4 |
| 37 | 60.4 | 63.2 | 58.0 | 60.2 | 1.4 |
| 38 | 56.4 | 59.0 | 55.2 | 56.3 | 1.0 |
| 39 | 55.0 | 55.0 | 55.0 | 55.0 | .0 |
| 40 | 55.0 | 55.0 | 55.0 | 55.0 | .0 |
| DBA | 87.5 | 90.2 | 83.6 | 87.1 | 2.0 |
| DBD | 93.2 | 95.8 | 89.7 | 92.9 | 1.7 |
| OASPL | 96.7 | 99.1 | 94.6 | 96.5 | 1.3 |
| PNL | 100.7 | 103.3 | 97.5 | 100.4 | 1.7 |
| PNLT | 100.8 | 103.3 | 97.5 | 100.5 | 1.7 |

*135°
(Microphone Location
Relative to Helicopter)*

TABLE H-VII

5 FOOT HOVER TEST

1/3 OCTAVE NOISE LEVEL FREQUENCY SPECTRA

VERTOL CH-47 C

OCTOBER 13, 1976

EVENT 10, 0 DEGREES, MICROPHONE 150 METERS EAST

1/3 OCTAVE BAND VS LEVEL (AVE OVER 19 SECONDS)
(DB RE 20 MICRO PA)

| BAND | ENERGY AVERAGE | MAX | MIN | ARITH. AVERAGE | STD DEV |
|-------|-------------------|-------|-------|-------------------|------------|
| 14 | 87.5 | 89.1 | 84.5 | 87.4 | 1.1 |
| 15 | 74.4 | 76.6 | 70.8 | 74.2 | 1.4 |
| 16 | 83.1 | 85.1 | 80.9 | 82.9 | 1.3 |
| 17 | 95.1 | 96.6 | 91.5 | 94.9 | 1.6 |
| 18 | 92.3 | 94.7 | 87.6 | 91.9 | 1.8 |
| 19 | 90.4 | 92.2 | 88.2 | 90.3 | 1.0 |
| 20 | 90.4 | 92.6 | 86.2 | 90.1 | 1.8 |
| 21 | 90.1 | 91.8 | 86.8 | 89.9 | 1.4 |
| 22 | 89.4 | 91.7 | 84.4 | 89.0 | 1.9 |
| 23 | 90.8 | 93.2 | 86.3 | 90.4 | 2.1 |
| 24 | 90.2 | 93.6 | 85.4 | 89.4 | 2.7 |
| 25 | 88.3 | 91.8 | 83.0 | 87.6 | 2.5 |
| 26 | 85.5 | 88.5 | 81.3 | 85.1 | 1.9 |
| 27 | 82.3 | 86.1 | 78.8 | 81.8 | 2.0 |
| 28 | 81.5 | 84.1 | 78.5 | 81.1 | 1.8 |
| 29 | 79.2 | 81.9 | 76.6 | 78.9 | 1.5 |
| 30 | 76.3 | 79.3 | 73.4 | 75.9 | 1.8 |
| 31 | 73.8 | 76.2 | 70.8 | 73.6 | 1.3 |
| 32 | 73.2 | 75.1 | 69.8 | 73.0 | 1.3 |
| 33 | 70.8 | 72.8 | 67.0 | 70.5 | 1.6 |
| 34 | 69.6 | 72.9 | 65.7 | 69.2 | 1.8 |
| 35 | 67.1 | 69.3 | 63.1 | 66.8 | 1.6 |
| 36 | 65.0 | 67.5 | 61.6 | 64.7 | 1.5 |
| 37 | 62.8 | 64.8 | 60.5 | 62.6 | 1.2 |
| 38 | 59.1 | 60.8 | 55.9 | 58.9 | 1.3 |
| 39 | 55.5 | 56.6 | 55.0 | 55.4 | .5 |
| 40 | 55.0 | 55.0 | 55.0 | 55.0 | .0 |
| DBA | 90.0 | 92.3 | 87.0 | 89.7 | 1.7 |
| DBD | 96.2 | 98.3 | 93.5 | 95.9 | 1.6 |
| OASPL | 100.4 | 102.0 | 98.3 | 100.3 | 1.2 |
| PNL | 103.9 | 106.0 | 100.9 | 103.7 | 1.4 |
| PNLT | 103.9 | 106.0 | 100.9 | 103.7 | 1.4 |

90°
(Microphone Location
Relative to Helicopter)

TABLE H-VII

500 FOOT HOVER TEST

1/3 OCTAVE NOISE LEVEL FREQUENCY SPECTRA

VERTOL CH-47 C

OCTOBER 13, 1976

EVENT 15, 180 DEGREES, MICROPHONE 150 METERS WEST

1/3 OCTAVE BAND VS LEVEL (AVE OVER 19 SECONDS)
(DB RE 20 MICRO PA)

| BAND | ENERGY AVERAGE | MAX | MIN | ARITH. AVERAGE | STD DEV |
|-------|-------------------|-------|-------|-------------------|------------|
| 14 | 87.3 | 90.4 | 83.7 | 86.8 | 2.2 |
| 15 | 79.7 | 81.5 | 77.2 | 79.6 | 1.3 |
| 16 | 85.3 | 87.0 | 82.8 | 85.2 | 1.2 |
| 17 | 90.7 | 91.8 | 88.1 | 90.6 | 1.0 |
| 18 | 87.9 | 90.0 | 83.6 | 87.3 | 2.5 |
| 19 | 90.6 | 92.3 | 88.0 | 90.4 | 1.6 |
| 20 | 85.5 | 87.1 | 83.2 | 85.2 | 1.4 |
| 21 | 80.3 | 82.5 | 77.3 | 80.2 | 1.2 |
| 22 | 89.8 | 91.4 | 86.7 | 89.6 | 1.5 |
| 23 | 95.1 | 97.2 | 91.5 | 94.8 | 1.7 |
| 24 | 96.0 | 98.7 | 92.0 | 95.7 | 1.8 |
| 25 | 90.3 | 93.6 | 85.9 | 89.8 | 2.1 |
| 26 | 88.7 | 91.4 | 82.8 | 88.1 | 2.5 |
| 27 | 91.5 | 95.3 | 85.4 | 90.7 | 2.8 |
| 28 | 85.6 | 88.8 | 77.9 | 84.6 | 3.1 |
| 29 | 85.7 | 89.7 | 79.8 | 84.9 | 2.8 |
| 30 | 84.4 | 88.5 | 77.1 | 83.5 | 2.8 |
| 31 | 81.7 | 84.8 | 74.8 | 80.9 | 2.8 |
| 32 | 80.2 | 83.3 | 74.3 | 79.6 | 2.5 |
| 33 | 78.5 | 82.1 | 70.6 | 77.7 | 2.8 |
| 34 | 75.8 | 79.2 | 67.6 | 75.2 | 2.5 |
| 35 | 74.3 | 77.4 | 65.8 | 73.5 | 2.8 |
| 36 | 72.4 | 75.9 | 63.4 | 71.4 | 3.2 |
| 37 | 69.3 | 73.8 | 61.5 | 68.0 | 3.5 |
| 38 | 65.7 | 71.4 | 56.8 | 63.7 | 4.1 |
| 39 | 62.0 | 67.6 | 55.0 | 60.1 | 4.1 |
| 40 | 58.7 | 64.6 | 55.0 | 57.6 | 2.9 |
| DBA | 95.1 | 97.9 | 90.0 | 94.6 | 2.1 |
| DBD | 100.2 | 102.8 | 95.7 | 99.9 | 1.9 |
| OASPL | 102.3 | 104.5 | 98.7 | 101.9 | 1.8 |
| PNL | 108.2 | 111.1 | 103.3 | 107.8 | 2.1 |
| PNLT | 108.2 | 111.1 | 103.3 | 107.8 | 2.1 |

90°
(Microphone Location
Relative to Helicopter)

TABLE H-VII

500 FOOT HOVER TEST

1/3 OCTAVE NOISE LEVEL FREQUENCY SPECTRA

VERTOL CH-47 C

OCTOBER 13, 1976

EVENT 15, 180 DEGREES, MICROPHONE 150 METERS EAST

1/3 OCTAVE BAND VS LEVEL (AVE OVER 19 SECONDS)
(DB RE 20 MICRO PA)

| BAND | ENERGY AVERAGE | MAX | MIN | ARITH. AVERAGE | STD DEV |
|-------|-------------------|-------|------|-------------------|------------|
| 14 | 61.3 | 65.1 | 72.6 | 60.2 | 3.3 |
| 15 | 80.3 | 82.5 | 77.6 | 80.1 | 1.6 |
| 16 | 86.9 | 88.7 | 85.0 | 86.8 | 1.2 |
| 17 | 77.5 | 80.2 | 72.9 | 77.1 | 1.7 |
| 18 | 83.6 | 86.2 | 81.4 | 83.4 | 1.3 |
| 19 | 80.1 | 81.9 | 77.0 | 79.9 | 1.4 |
| 20 | 73.1 | 76.3 | 69.7 | 72.8 | 1.7 |
| 21 | 73.0 | 75.2 | 71.1 | 72.9 | 1.0 |
| 22 | 81.0 | 85.3 | 78.4 | 80.6 | 1.7 |
| 23 | 85.5 | 90.5 | 82.3 | 85.0 | 2.0 |
| 24 | 86.2 | 92.1 | 81.0 | 85.5 | 2.3 |
| 25 | 80.1 | 86.0 | 72.8 | 79.2 | 2.9 |
| 26 | 81.3 | 86.6 | 77.2 | 80.8 | 1.9 |
| 27 | 82.1 | 86.9 | 75.6 | 81.6 | 2.3 |
| 28 | 80.1 | 82.9 | 74.6 | 79.7 | 2.1 |
| 29 | 78.8 | 81.2 | 73.3 | 78.5 | 1.9 |
| 30 | 77.3 | 78.9 | 71.8 | 77.0 | 1.8 |
| 31 | 75.6 | 77.6 | 70.6 | 75.3 | 1.8 |
| 32 | 73.6 | 75.1 | 71.3 | 73.4 | 1.0 |
| 33 | 70.3 | 71.8 | 67.8 | 70.2 | 1.0 |
| 34 | 67.5 | 68.9 | 66.4 | 67.5 | .6 |
| 35 | 63.7 | 65.1 | 62.2 | 63.7 | .8 |
| 36 | 61.9 | 63.9 | 59.9 | 61.7 | 1.2 |
| 37 | 58.3 | 60.0 | 56.6 | 58.2 | .9 |
| 38 | 55.1 | 55.7 | 55.0 | 55.1 | .2 |
| 39 | 55.0 | 55.0 | 55.0 | 55.0 | .0 |
| 40 | 55.0 | 55.0 | 55.0 | 55.0 | .0 |
| DBA | 87.2 | 91.3 | 82.5 | 86.8 | 1.7 |
| DBD | 91.6 | 95.7 | 88.1 | 91.3 | 1.5 |
| OASPL | 93.6 | 97.4 | 90.8 | 93.3 | 1.4 |
| PNL | 99.0 | 103.0 | 95.9 | 98.8 | 1.4 |
| PNLT | 99.0 | 103.0 | 95.9 | 98.8 | 1.4 |

270°
(Microphone Location
Relative to Helicopter)

TABLE H-VII

500 FOOT HOVER TEST

1/3 OCTAVE NOISE LEVEL FREQUENCY SPECTRA

VERTOL CH-47 C

OCTOBER 13, 1976

EVENT 15, 0 DEGREES, CENTERLINE MICROPHONE (HARD SITE)

1/3 OCTAVE BAND VS LEVEL (AVE OVER 19 SECONDS)
(DB RE 20 MICRO PA)

| BAND | ENERGY AVERAGE | MAX | MIN | ARITH. AVERAGE | STD DEV |
|-------|-------------------|-------|------|-------------------|------------|
| 14 | 98.0 | 98.8 | 96.2 | 98.0 | .9 |
| 15 | 79.7 | 81.0 | 78.2 | 79.6 | .7 |
| 16 | 84.2 | 86.1 | 82.5 | 84.1 | .9 |
| 17 | 77.7 | 81.7 | 69.9 | 76.9 | 2.8 |
| 18 | 78.8 | 81.1 | 75.9 | 78.6 | 1.5 |
| 19 | 71.9 | 74.1 | 67.9 | 71.4 | 2.0 |
| 20 | 82.5 | 85.2 | 75.0 | 81.7 | 2.9 |
| 21 | 83.5 | 86.6 | 76.4 | 82.9 | 2.5 |
| 22 | 83.2 | 86.5 | 78.9 | 82.7 | 2.1 |
| 23 | 80.1 | 84.5 | 76.5 | 79.6 | 1.9 |
| 24 | 77.8 | 82.0 | 73.5 | 77.3 | 2.2 |
| 25 | 80.8 | 83.7 | 76.8 | 80.5 | 1.7 |
| 26 | 77.0 | 79.3 | 73.6 | 76.7 | 1.6 |
| 27 | 77.8 | 80.6 | 73.7 | 77.5 | 1.7 |
| 28 | 76.8 | 79.4 | 72.0 | 76.5 | 1.7 |
| 29 | 75.5 | 78.1 | 70.5 | 75.2 | 1.8 |
| 30 | 74.1 | 77.0 | 70.6 | 73.8 | 1.5 |
| 31 | 71.8 | 72.9 | 69.0 | 71.6 | 1.3 |
| 32 | 72.5 | 76.3 | 69.7 | 72.1 | 1.9 |
| 33 | 69.2 | 70.2 | 67.0 | 69.1 | 1.0 |
| 34 | 68.3 | 69.6 | 66.6 | 68.2 | .9 |
| 35 | 65.9 | 66.9 | 65.0 | 65.8 | .7 |
| 36 | 65.1 | 65.2 | 65.0 | 65.1 | .2 |
| 37 | 65.0 | 65.0 | 65.0 | 65.0 | .0 |
| 38 | 65.0 | 65.0 | 65.0 | 65.0 | .0 |
| 39 | 65.0 | 65.0 | 65.0 | 65.0 | .0 |
| 40 | 65.0 | 65.0 | 65.0 | 65.0 | .0 |
| DBA | 83.8 | 85.5 | 80.0 | 83.6 | 1.3 |
| DBD | 90.0 | 92.1 | 86.8 | 89.8 | 1.2 |
| OASPL | 96.8 | 97.9 | 94.8 | 96.7 | .9 |
| PNL | 97.6 | 99.3 | 94.7 | 97.4 | 1.1 |
| PNLT | 97.8 | 100.4 | 94.7 | 97.6 | 1.4 |

Helicopter Located
Directly Overhead

TABLE H-III

500 FOOT HOVER TEST

1/3 OCTAVE NOISE LEVEL FREQUENCY SPECTRA

VERTOL CH-47 C

OCTOBER 13, 1976

EVENT 15, 0 DEGREES, CENTERLINE MICROPHONE (SOFT SITE)

1/3 OCTAVE BAND VS LEVEL (AVE OVER 19 SECONDS)
(DB RE 20 MICRO PA)

| BAND | ENERGY AVERAGE | MAX | MIN | ARITH. AVERAGE | STD DEV |
|-------|-------------------|-------|------|-------------------|------------|
| 14 | 97.9 | 98.7 | 95.9 | 97.8 | 1.0 |
| 15 | 79.8 | 81.1 | 78.1 | 79.7 | .9 |
| 16 | 83.5 | 85.4 | 82.0 | 83.4 | 1.0 |
| 17 | 79.0 | 82.2 | 72.4 | 78.4 | 2.6 |
| 18 | 80.0 | 83.3 | 76.1 | 79.6 | 1.8 |
| 19 | 70.9 | 73.8 | 65.2 | 70.0 | 2.8 |
| 20 | 81.1 | 84.2 | 74.3 | 80.1 | 3.1 |
| 21 | 83.7 | 88.1 | 78.4 | 82.9 | 2.7 |
| 22 | 82.8 | 86.6 | 79.1 | 82.4 | 1.9 |
| 23 | 80.4 | 84.8 | 76.8 | 79.9 | 2.0 |
| 24 | 78.3 | 83.0 | 72.1 | 77.5 | 2.7 |
| 25 | 81.5 | 85.7 | 76.0 | 81.0 | 2.1 |
| 26 | 77.2 | 79.3 | 73.2 | 76.9 | 1.7 |
| 27 | 78.3 | 80.9 | 74.9 | 78.1 | 1.4 |
| 28 | 77.3 | 79.4 | 72.8 | 77.1 | 1.7 |
| 29 | 75.6 | 77.5 | 71.0 | 75.3 | 1.8 |
| 30 | 74.2 | 76.1 | 70.1 | 73.9 | 1.6 |
| 31 | 71.6 | 72.6 | 68.4 | 71.4 | 1.3 |
| 32 | 72.4 | 74.8 | 63.9 | 72.0 | 1.7 |
| 33 | 68.3 | 69.8 | 66.3 | 68.2 | 1.0 |
| 34 | 66.7 | 68.3 | 65.1 | 66.5 | 1.0 |
| 35 | 65.2 | 65.5 | 65.0 | 65.2 | .4 |
| 36 | 65.0 | 65.0 | 65.0 | 65.0 | .1 |
| 37 | 65.0 | 65.0 | 65.0 | 65.0 | .0 |
| 38 | 65.0 | 65.0 | 65.0 | 65.0 | .0 |
| 39 | 65.0 | 65.0 | 65.0 | 65.0 | .0 |
| 40 | 65.0 | 65.0 | 65.0 | 65.0 | .0 |
| DBA | 84.0 | 86.4 | 80.8 | 83.8 | 1.5 |
| DBD | 89.4 | 92.1 | 86.7 | 89.2 | 1.4 |
| OASPL | 96.1 | 97.6 | 94.0 | 95.9 | 1.1 |
| PNL | 97.6 | 100.4 | 95.0 | 97.4 | 1.3 |
| PNLT | 98.0 | 101.4 | 95.2 | 97.8 | 1.5 |

(Helicopter Located
Directly Overhead)

TABLE H-VIII
 Helicopter Noise Level Data
 VERTOL CH-47C OCTOBER 13, 1976

MAX RMS Noise Level - dBA re 20 μ Pa

| HELICOPTER OPERATION | RUN NUMBER | MICROPHONE OFFSET TO THE WEST 150 M | | MICROPHONE OFFSET TO THE EAST 150 M | |
|-------------------------|---------------|---|---------|---|----------------|
| | | CENTER LINE | | CENTER LINE | |
| 5 FT. HOVER 0° | 2 10 | 86.5 85.5 (270°) | | | 91.0 (90°) |
| 5 FT. HOVER 45° | 3 | 89.3 (225°) | | | 92.0 (45°) |
| 5 FT. HOVER 90° | 4 | 93.0 (180°) | | | 99.0 (0°) |
| 5 FT. HOVER 135° | 5 | 94.5 (135°) | | | 90.8 (315°) |
| 5 FT HOVER 180° | 6 | 93.0 (90°) | NO DATA | NO DATA | 86.0 (270°) |
| 5 FT HOVER 225° | 7 | 93.5 (45°) | NO DATA | NO DATA | 89.3 (225°) |
| 5 FT HOVER 270° | 8 | 92.3 (0°) | NO DATA | NO DATA | 93.0 (180°) |
| 5 FT. HOVER 315° | 9 | 88.3 (315°) | | | 92.0 (135°) |
| 500 FT HOVER | 15 | 97.5 | | | — |
| 500 FT HOVER | 16 | 89.8 | | | 88.8 |

TABLE H-VIII
Helicopter Noise Level Data
VERTOL CH 47C

OCTOBER 13, 1976

max RMS Noise Level - dBA @ 20 m Pa

| HELICOPTER OPERATION | RUN NUMBER | MICROPHONE OFFSET TO THE WEST 150M | | MICROPHONE OFFSET TO THE EAST 150M | |
|----------------------|------------|------------------------------------|--------------|------------------------------------|-----------------------|
| | | OVER Existing Surface | OVER Plywood | OVER Existing Surface | OVER Existing Surface |
| | | | | | |
| 3° GLIDE SLOPE | 32 | 89.0 | 92.8 | 92.5 | 88.5 |
| | 34 | 88.3 | 99.0 | 99.0 | 85.5 |
| | 35 | 89.5 | 96.5 | 95.0 | 85.0 |
| 6° GLIDE SLOPE | 12 | 90.8 | 97.3 | 96.8 | 88.3 |
| | 13 | 86.3 | 98.0 | 99.0 | 88.0 |
| | 14 | 87.8 | 97.0 | 96.0 | 87.3 |
| 9° GLIDE SLOPE | 19 | 85.5 | 96.0 | 95.8 | 88.3 |
| | 20 | 88.8 | 96.0 | 95.8 | 85.0 |
| | 21 | 90.0 | 96.8 | 96.5 | 85.3 |
| 60 KT LEVEL FLYOVER | 17 | 86.0 | 90.0 | 90.3 | 87.5 |
| | 18 | 86.3 | 91.0 | 91.5 | 86.0 |
| 100KT LEVEL FLYOVER | 22 | 84.0 | 88.3 | 89.8 | 87.3 |
| | 23 | 81.3 | 84.8 | 83.6 | 80.0 |
| 126 KT LEVEL FLYOVER | 30 | 85.5 | 89.5 | 90.3 | 87.0 |
| | 31 | 87.9 | 89.8 | 88.0 | 90.0 |

TABLE H-VIII
Helicopter Noise Level Data

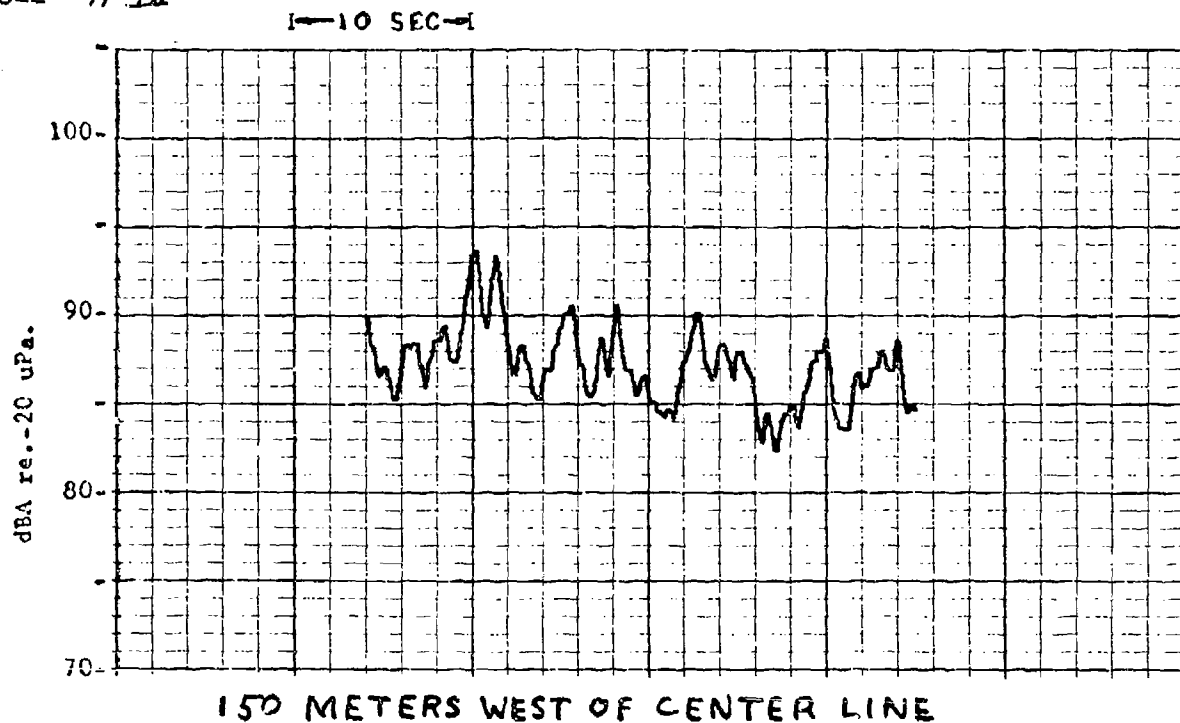
VERTOL CH 47 C

OCTOBER 13, 1976

max. RMS Noise Level - dBA re 20 μ Pa

| HELICOPTER OPERATION | RUN NUMBER | MICROPHONE OFFSET TO THE WEST | | MICROPHONE OFFSET TO THE EAST | |
|----------------------------|------------|-------------------------------|--------------|-------------------------------|-----------------------|
| | | 150M | CENTER LINE | CENTER LINE | 150M |
| | | OVER Existing Surface | OVER Plywood | OVER Existing Surface | OVER Existing Surface |
| 141 KT LEVEL FLYOVER | 24 | 90.0 | 91.3 | 91.5 | 90.0 |
| | 25 | 94.0 | 95.3 | 93.5 | 91.5 |
| | 26 | 92.3 | 94.9 | 94.0 | 95.0 |
| | 27 | 94.5 | 96.3 | 97.8 | 97.5 |
| 150 KT LEVEL FLYOVER | 28 | 97.8 | 99.3 | 98.0 | 99.0 |
| | 29 | 98.0 | 98.5 | 99.3 | 98.5 |
| LEVEL FLYOVER | | | | | |
| LEVEL FLYOVER | | | | | |
| LEVEL FLYOVER | | | | | |
| LEVEL FLYOVER | | | | | |

TABLE H-IX



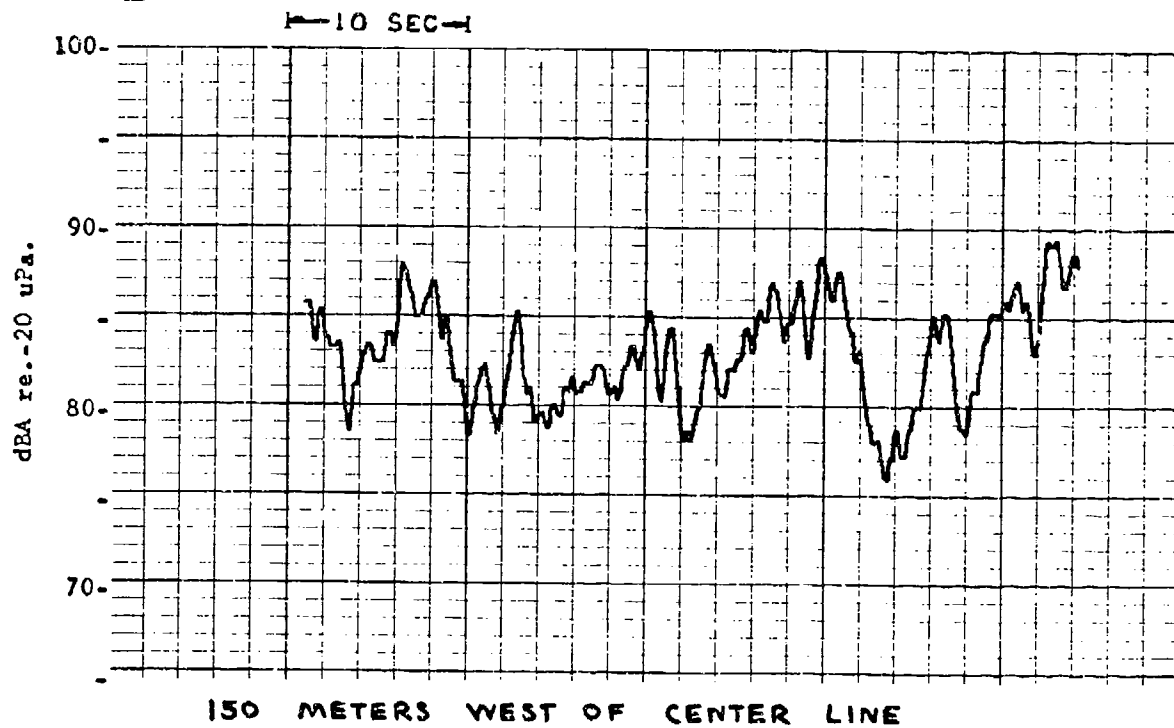
NO DATA

75 METERS WEST OF CENTER LINE

NOISE LEVEL TIME HISTORIES
VERTOL CH-47C HELICOPTER
90° HOVER 5 FT.

RUN 4

TABLE H-IX



NO DATA

75 METERS WEST OF CENTER LINE

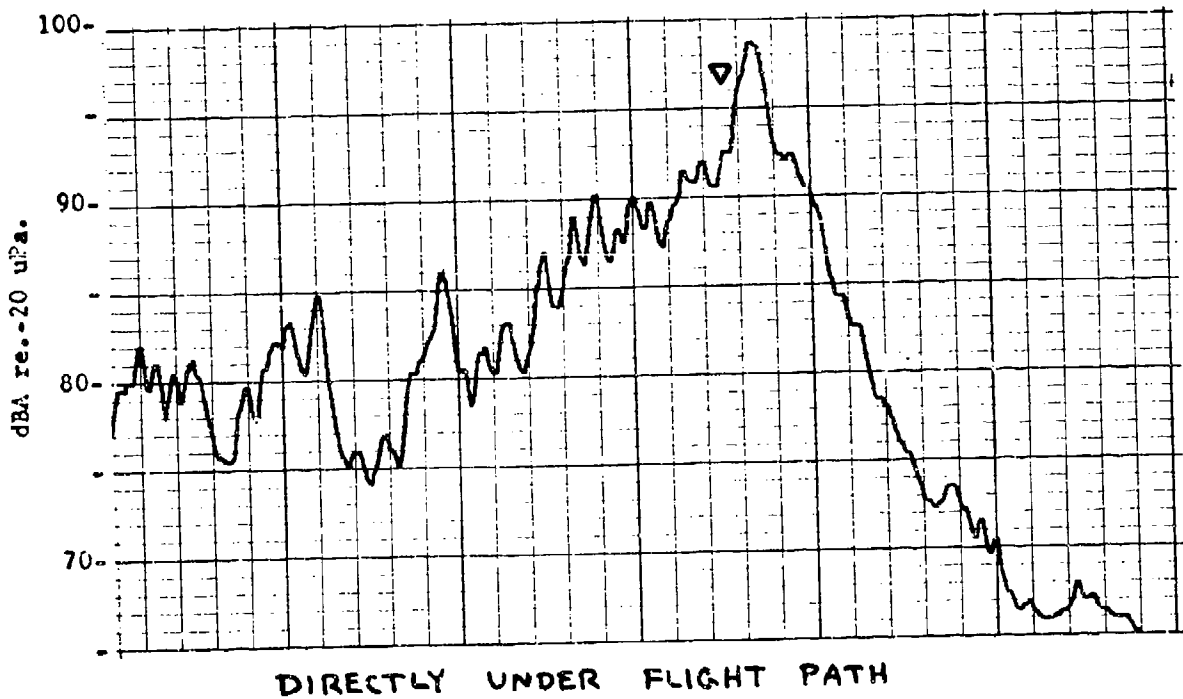
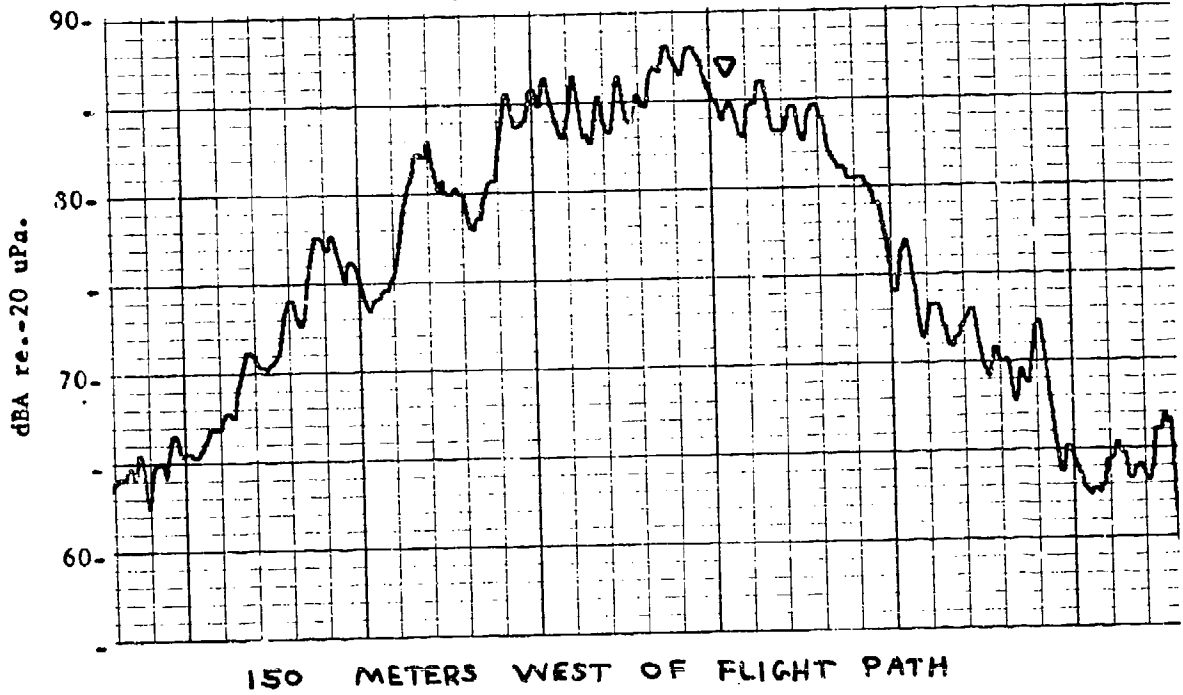
NOISE LEVEL TIME HISTORIES
VERTOL CH-47C HELICOPTER
180° HOVER - 5 FT.

RUN 6

TABLE H-IX

▽ = CENTER CROSSING

← 10 SEC →



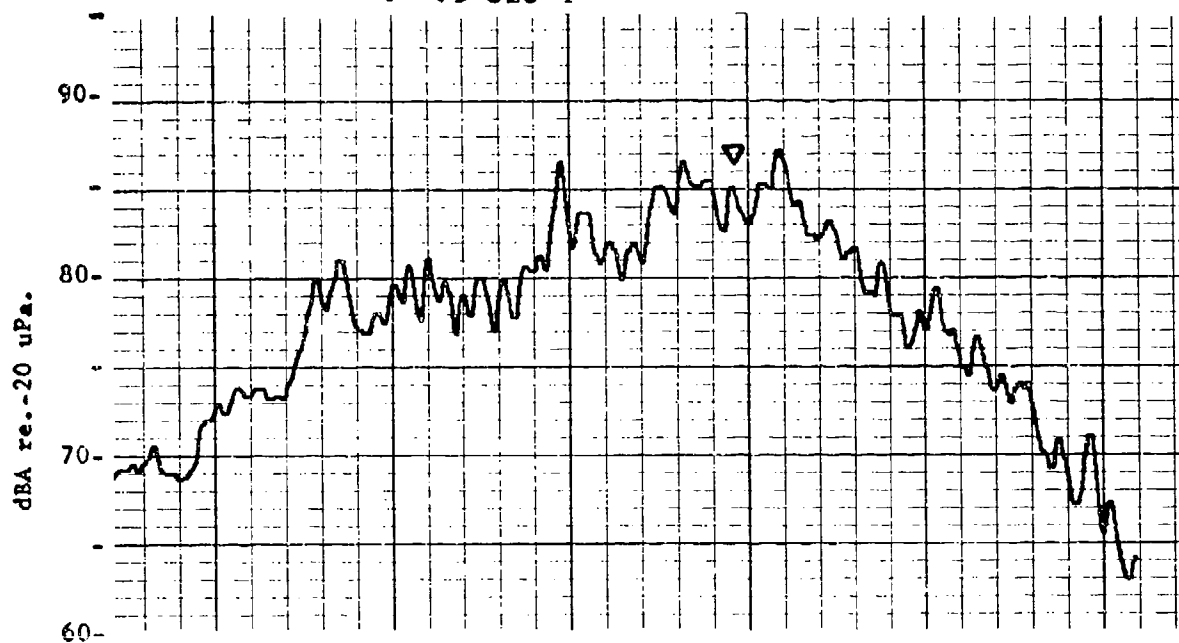
NOISE LEVEL TIME HISTORIES
VERTOL CH-47C HELICOPTER
3° APPROACH

RUN 34

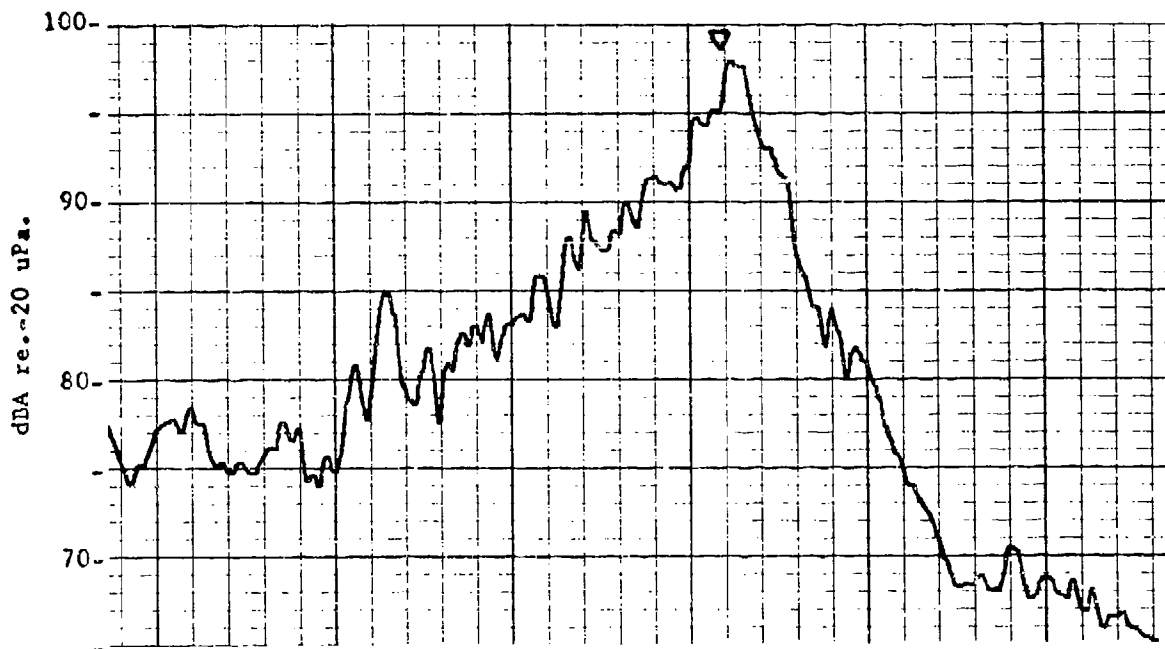
TABLE H-IX

▽ = CENTER CROSSING

← 10 SEC →



150 METERS WEST OF FLIGHT PATH



DIRECTLY UNDER FLIGHT PATH

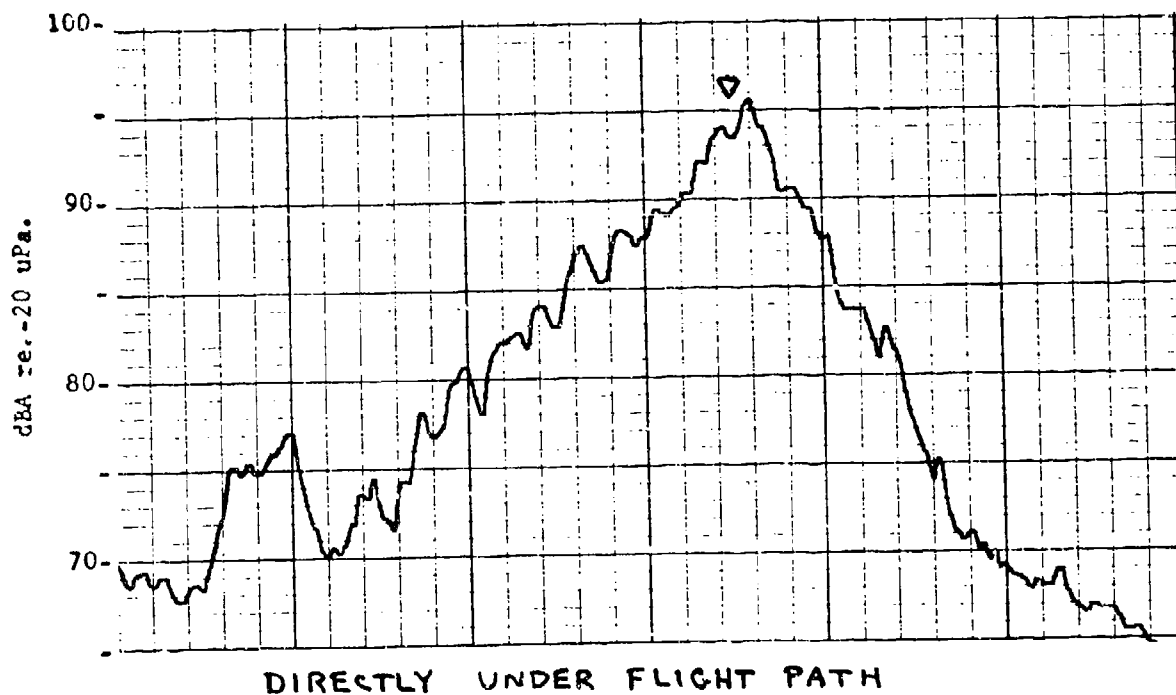
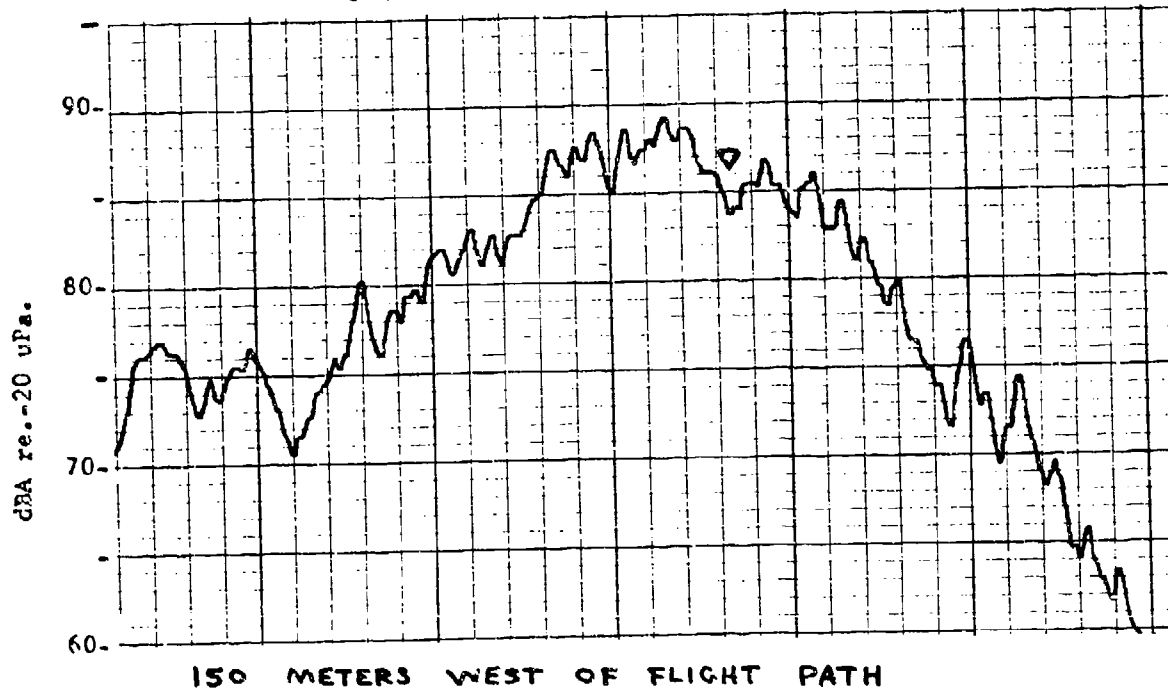
NOISE LEVEL TIME HISTORIES
VERTOL CH-47C HELICOPTER
6° APPROACH

RUN 13

TABLE H-IX

▽ = CENTER CROSSING

← 10 SEC →



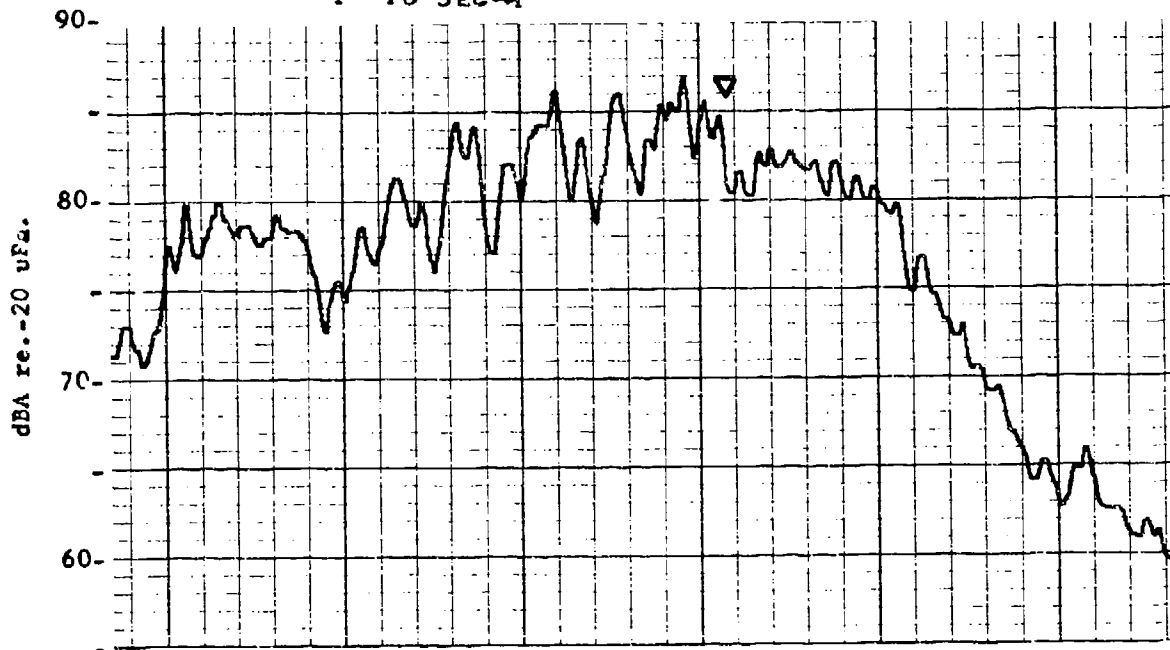
NOISE LEVEL TIME HISTORIES
VERTOL CH-47C HELICOPTER
9° APPROACH

RUN 20

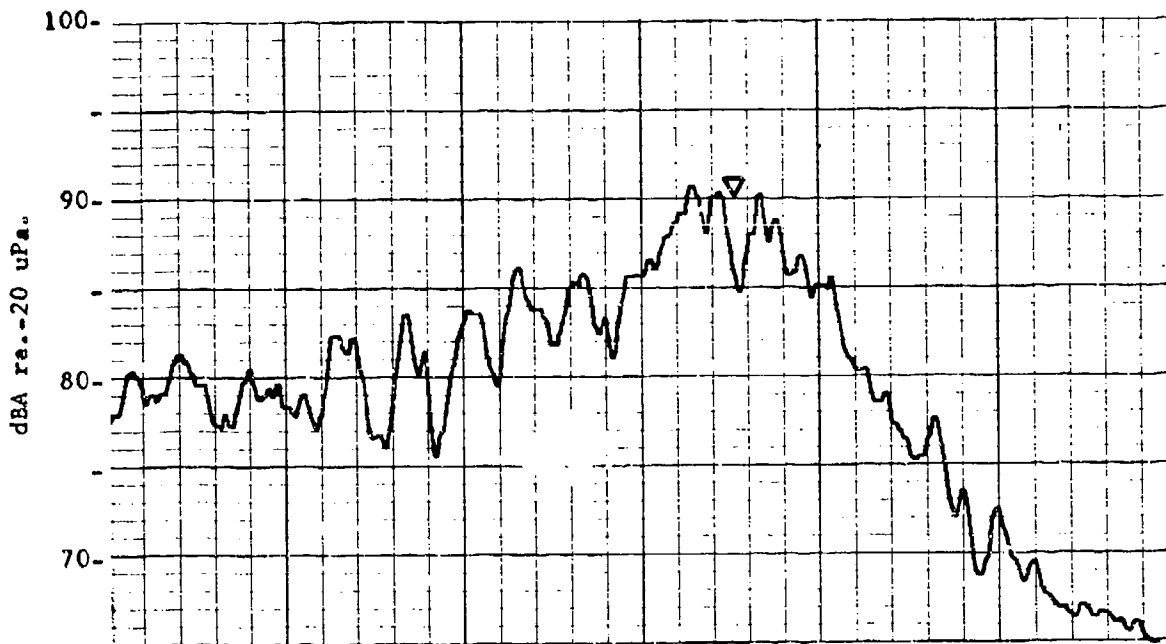
TABLE H-IX

▽ = CENTER CROSSING

←10 SEC→



150 METERS WEST OF FLIGHT PATH



DIRECTLY UNDER FLIGHT PATH

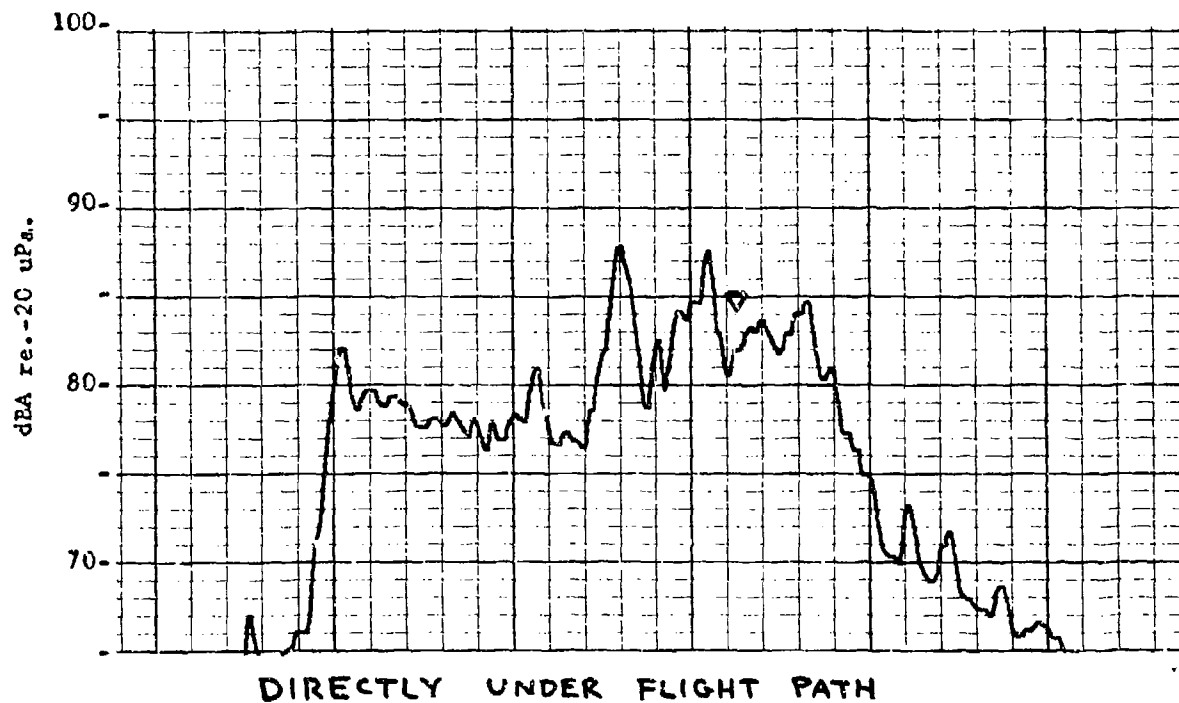
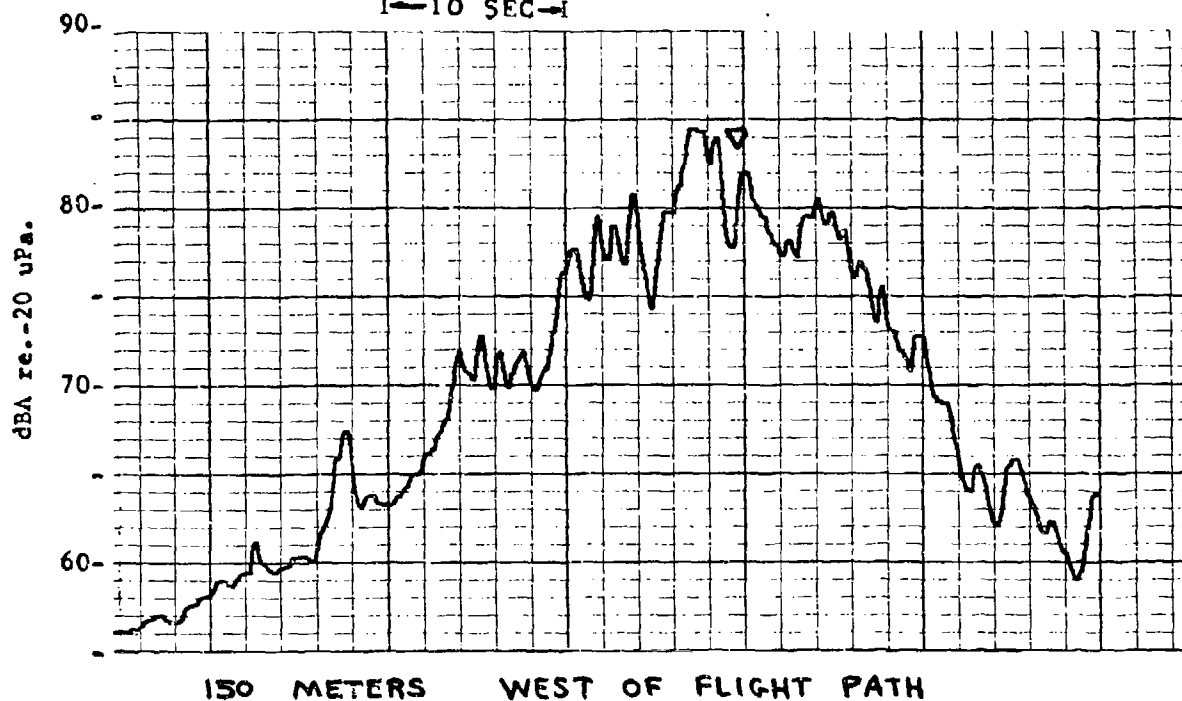
NOISE LEVEL TIME HISTORIES
VERTOL CH-47C HELICOPTER
LEVEL FLYOVER - 60 KTS

RUN 18

TABLE H-IX

▽ = CENTER CROSSING

← 10 SEC →

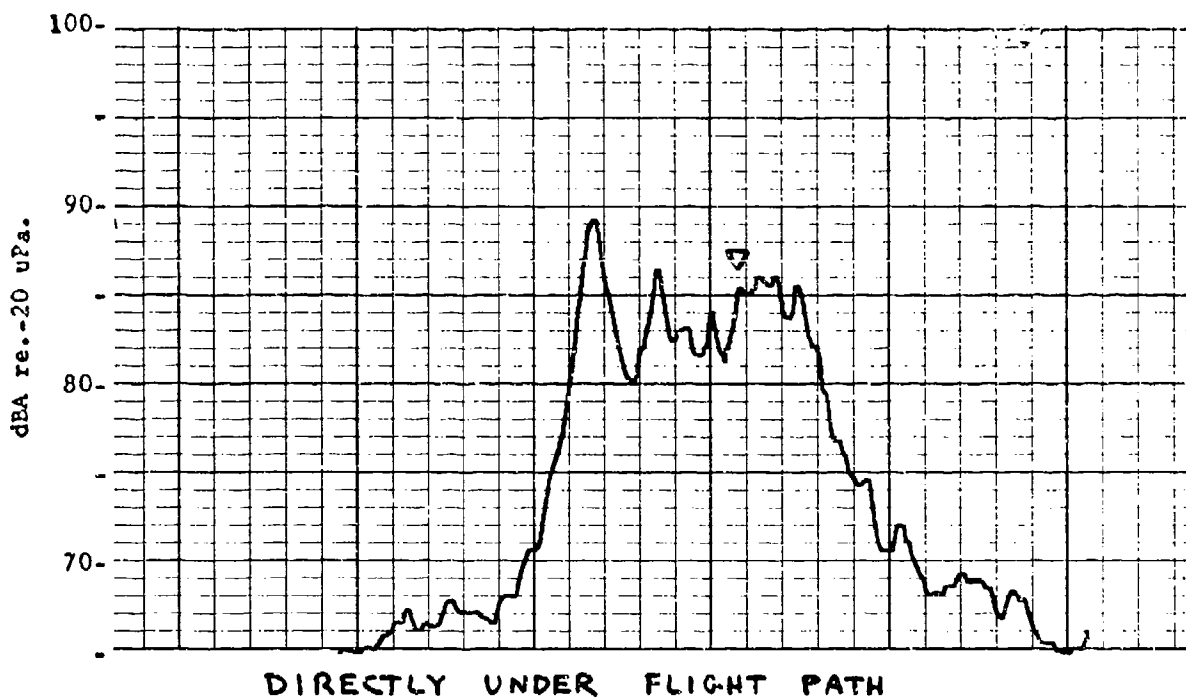
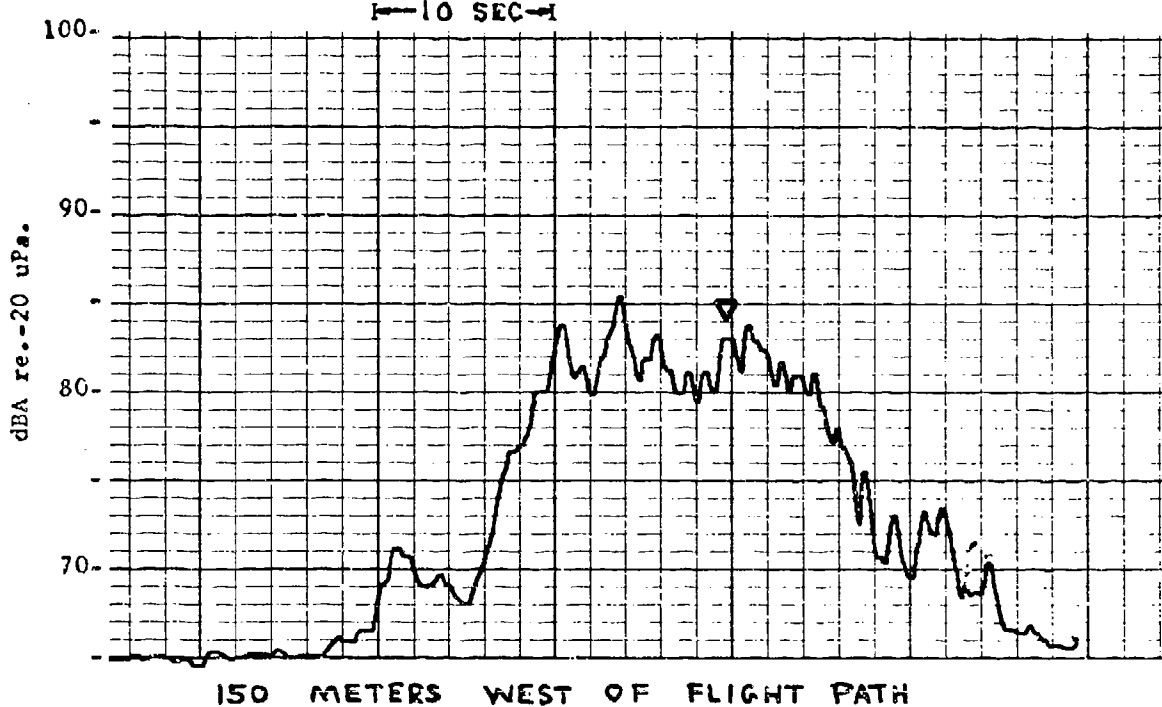


NOISE LEVEL TIME HISTORIES
VERTOL CH-47C HELICOPTER
LEVEL FLYOVER - 100 KTS

RUN 22

TABLE H-IX

▽ = CENTER CROSSING



NOISE LEVEL TIME HISTORIES
VERTOL CH-47C HELICOPTER
LEVEL FLYOVER - 126 KTS

RUN 30

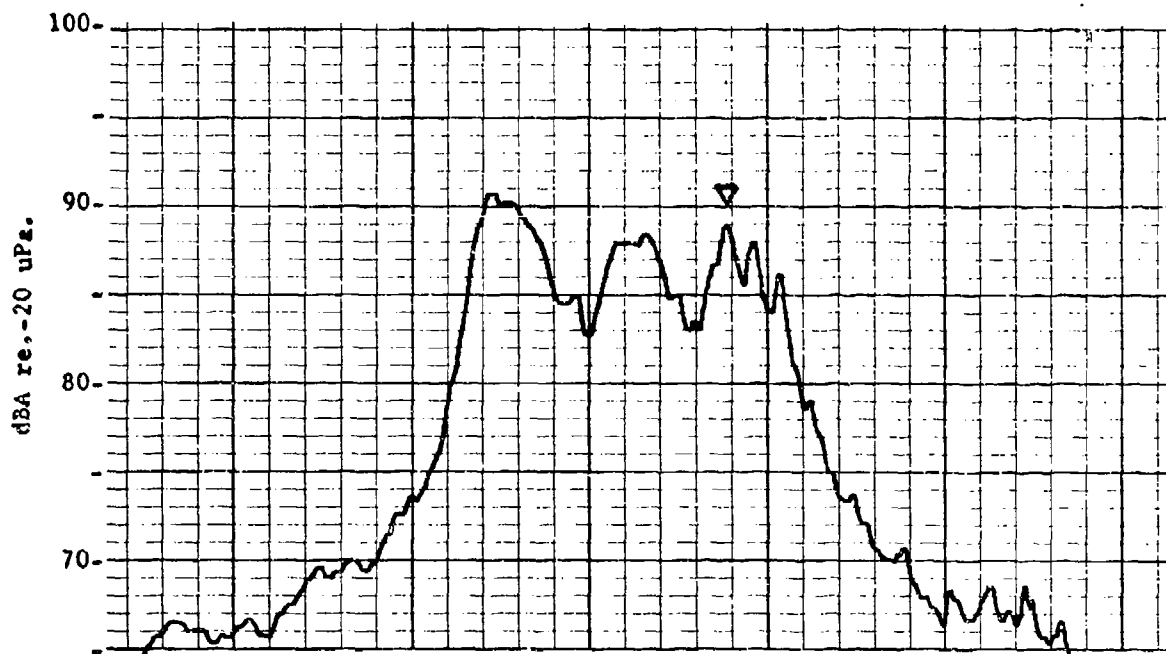
TABLE H-IX

← 10 SEC →

▽ = CENTER CROSSING



150 METERS WEST OF FLIGHT PATH



DIRECTLY UNDER FLIGHT PATH

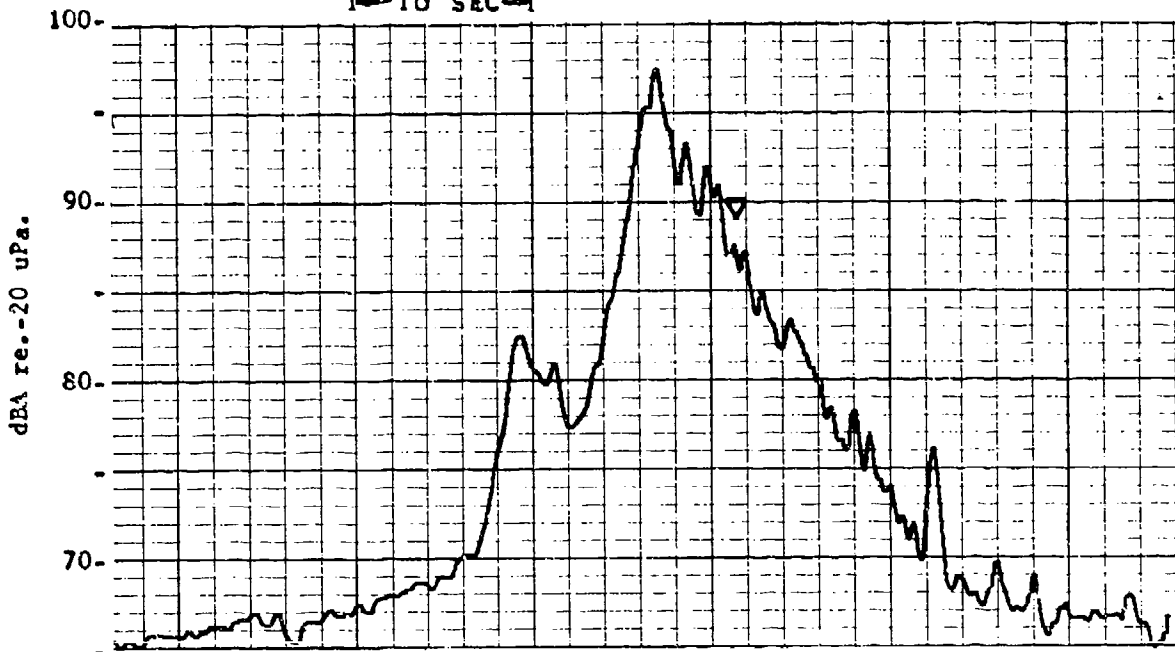
NOISE LEVEL TIME HISTORIES
 VERTOL CH-47C HELICOPTER
 LEVEL FLYOVER - 141 KTS

RUN 24

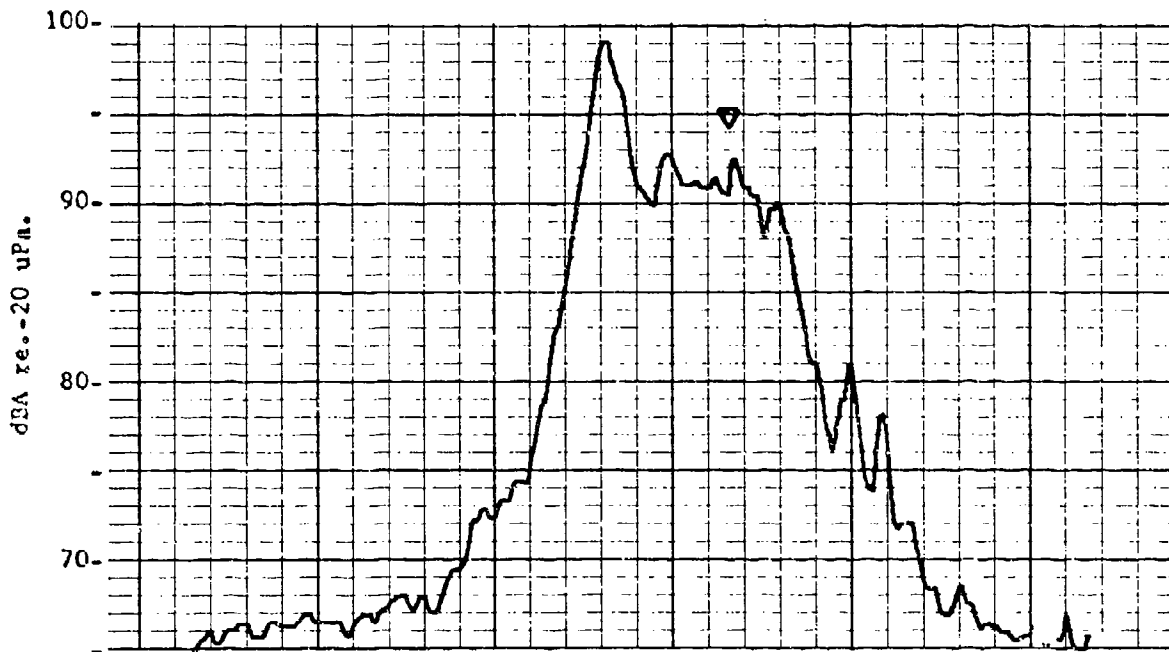
TABLE H-IX

▽ = CENTER CROSSING

← 10 SEC →



150 METERS WEST OF FLIGHT PATH



DIRECTLY UNDER FLIGHT PATH

NOISE LEVEL TIME HISTORIES
VERTOL CH-47C HELICOPTER
LEVEL FLYOVER - 150 KTS

RUN 28

SUPPLEMENTARY

INFORMATION

ARXO 562

| | | | | | |
|--|--|--|--|--|-----------|
| 1. Report No. FAA-RD-77-57, II | | 2. Government Accession No. | | 3. Recipient's Catalog No. | |
| 4. Title and Subtitle Helicopter Noise Measurements DATA REPORT -- Volume II Helicopter Models: Bell 212 (UH-1N), Sikorsky S-61 (SH-3A), Sikorsky S-64 "Skycrane" (CH-54B), Boeing Vertol "Chinook" (CH-47C) | | | | 5. Report Date April 1977 | |
| | | | | 6. Performing Organization Code ARD-550 | |
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| | | | | 14. Sponsoring Agency Code | |
| 15. Supplementary Notes Refer to the main text in Volume I which describes the test program and data presentation format. | | | | | |
| 16. Abstract <p>This data report contains the measured noise levels obtained from an FAA helicopter Noise Test Program. The purpose of this test program was to provide a data base for a possible helicopter noise certification rule. The noise data presented in this two volume report is primarily intended as a means to disseminate the available information. Only the measured data is presented in this report. All FAA/DOT data analysis and comparisons will be presented in a later report which is scheduled for distribution in July, 1977.</p> <p>The eight helicopters tested during this Helicopter Noise Test Program constituted a wide range of gross weights and included participation from several helicopter manufacturers. The helicopter models used in this test program were the Hughes 300C, Hughes 500C, Bell 47-G, Bell 206-L, Bell 212 (UH-1N), Sikorsky S-61 (SH-3A), Sikorsky S-64 "Skycrane" (CH-54B), and Boeing Vertol "Chinook" CH-47C. Volume I contains the measured noise levels obtained from the first four helicopters while Volume II contains the data from the remaining four.</p> <p>The test procedure for each helicopter consisted of obtaining noise data during hover, level flyover, and approach conditions. The data presented in this report consists of time histories, 1/3-octave band spectra, EPNL, PNL, dBA, dBD and OASPL noise levels.</p> | | | | | |
| 17. Key Words Helicopter Noise Levels; Hover; Level Flyover; Approach; Glide Slope; Time Histories; EPNL, PNL, dBA, dBD and OASPL. | | | 18. Distribution Statement This document is available to the public through the National Technical Information Service Springfield, Virginia 22151 | | |
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