NASA CONTRACTOR REPORT 191483

# VARIABILITY OF MEASURED SONIC BOOM SIGNATURES

# VOLUME II - DATA REPORT

K. R. ELMER
M. C. JOSHI

MCDONNELL DOUGLAS AEROSPACE - TRANSPORT AIRCRAFT
MCDONNELL DOUGLAS CORPORATION
LONG BEACH, CA 90846

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Space Administration

**Langley Research Center**
Hampton, Virginia 23681-0001

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# APPENDIX A

## Extended Database

## Augmented BOOMFILE Database (Noise Metrics)

| FILE NAME | Time (Hours) | Pmax (PSF) | Pmin (PSF) | ESEL (dB) | ASEL (dB) | CSEL (dB) | PLDB (dB) | Sideline (Feet) | Altitude (Feet) | Mach # | Aircraft |
|---|---|---|---|---|---|---|---|---|---|---|---|
| P00 841 800 | 8.68 | 3.491 | -3.235 | 123.700 | 98.600 | 114.000 | 113.600 | 0.0 | 16000.0 | 1.20 | F4 |
| P00 748 803 | 7.80 | 2.682 | -2.008 | 122.100 | 91.200 | 110.400 | 107.200 | 1387.0 | 29200.0 | 1.24 | F4 |
| P00 758 803 | 7.97 | 2.929 | -2.722 | 123.400 | 96.100 | 112.100 | 110.900 | 3751.0 | 29300.0 | 1.29 | F4 |
| P001029 803 | 10.48 | 13.335 | -3.232 | 128.300 | 109.800 | 120.500 | 124.400 | -3358.0 | 14400.0 | 1.10 | F4 |
| P001043 803 | 10.72 | 1.764 | -1.536 | 120.200 | 87.400 | 106.400 | 103.200 | 4754.0 | 44400.0 | 1.37 | F4 |
| P001238 803 | 12.63 | 0.726 | -0.597 | 112.100 | 77.900 | 97.400 | 90.800 | 3717.0 | 21200.0 | 1.05 | T38 |
| P00 719 804 | 7.32 | 0.493 | -0.453 | 106.900 | 71.700 | 95.200 | 86.500 | -597.0 | 41400.0 | 1.17 | AT38 |
| P00 730 804 | 7.50 | 0.529 | -0.672 | 110.200 | 72.800 | 95.900 | 88.400 | 1033.0 | 32300.0 | 1.12 | AT38 |
| P00 736 804 | 7.60 | 0.613 | -0.646 | 109.300 | 73.900 | 98.000 | 89.500 | 7079.0 | 16700.0 | 1.15 | AT38 |
| P00 756 804 | 7.93 | 1.489 | -1.095 | 115.600 | 86.900 | 104.800 | 102.400 | 8703.0 | 41400.0 | 1.38 | F15 |
| P00 756 804 | 7.93 | 0.207 | -0.218 | 106.500 | 75.200 | 89.600 | 85.500 | 8703.0 | 41400.0 | 1.38 | F15 |
| P00 8 4 804 | 8.07 | 1.905 | -1.496 | 118.900 | 88.800 | 107.200 | 103.900 | 2928.0 | 29700.0 | 1.20 | F15 |
| P00 810 804 | 8.17 | 3.507 | -3.260 | 125.100 | 98.400 | 114.000 | 113.400 | 3679.0 | 12500.0 | 1.10 | F15 |
| P00 914 804 | 9.23 | 0.747 | -0.817 | 111.100 | 79.500 | 100.100 | 94.100 | -2003.0 | 30300.0 | 1.20 | AT38 |
| P00 923 804 | 9.38 | 1.160 | -0.597 | 110.800 | 79.200 | 101.600 | 95.400 | -2403.0 | 14000.0 | 1.10 | AT38 |
| P00 952 804 | 9.87 | 0.482 | -0.399 | 106.500 | 74.700 | 94.200 | 88.500 | 0.0 | 0.0 | 0.00 | |
| P001046 804 | 10.77 | 5.851 | -3.044 | 124.100 | 103.500 | 116.900 | 118.600 | 4288.0 | 15200.0 | 1.13 | F15 |
| P0011 2 804 | 11.03 | 2.168 | -1.571 | 118.700 | 89.900 | 108.300 | 105.500 | -2853.0 | 31000.0 | 1.28 | F15 |
| P001111 804 | 11.18 | 0.982 | -0.808 | 113.800 | 80.500 | 99.500 | 95.300 | 17103.0 | 45000.0 | 1.42 | F15 |
| P001134 804 | 11.57 | 1.924 | -0.972 | 114.800 | 88.600 | 106.700 | 103.900 | 905.0 | 45500.0 | 1.40 | F15 |
| P001139 804 | 11.65 | 1.593 | -1.071 | 115.400 | 82.500 | 105.000 | 99.400 | 0.0 | 0.0 | 0.00 | |
| P00 820 805 | 8.33 | 0.895 | -0.545 | 111.400 | 78.600 | 100.400 | 94.300 | 0.0 | 0.0 | 0.00 | |
| P00 820 805 | 8.33 | 0.754 | -0.648 | 112.800 | 76.700 | 99.800 | 92.800 | 0.0 | 0.0 | 0.00 | |
| P00 9 6 805 | 9.10 | 1.081 | -0.925 | 113.900 | 78.100 | 101.900 | 94.200 | -10561.0 | 29500.0 | 1.25 | F16 |
| P00 9 6 805 | 9.10 | 0.705 | -0.491 | 107.900 | 76.200 | 99.600 | 92.000 | -10561.0 | 29500.0 | 1.25 | F16 |
| P00 926 805 | 9.43 | 1.205 | -0.958 | 116.200 | 88.100 | 103.100 | 101.600 | 4226.0 | 64800.0 | 2.50 | SR71 |
| P00 933 805 | 9.55 | 0.879 | -0.871 | 113.000 | 79.200 | 100.400 | 94.500 | -2606.0 | 46700.0 | 1.43 | F16 |
| P00 944 805 | 9.73 | 2.809 | -2.448 | 120.900 | 92.900 | 111.900 | 108.800 | -5091.0 | 19300.0 | 1.17 | F16 |
| P001055 805 | 10.92 | 0.827 | -0.698 | 114.500 | 80.900 | 97.800 | 93.200 | 0.0 | 73000.0 | 3.00 | SR71 |
| P0011 8 805 | 11.13 | 2.262 | -1.773 | 120.700 | 92.800 | 107.400 | 107.300 | -2986.0 | 32400.0 | 1.23 | SR71 |
| P001144 805 | 11.73 | 5.628 | -3.328 | 124.600 | 96.700 | 116.700 | 114.500 | -2119.0 | 14400.0 | 1.13 | F16 |
| P001154 805 | 11.90 | 3.772 | -3.552 | 124.400 | 95.300 | 114.700 | 112.000 | 3264.0 | 13800.0 | 1.12 | F16 |
| P0012 4 805 | 12.07 | 1.900 | -1.388 | 116.700 | 91.400 | 108.300 | 106.600 | 1993.0 | 30000.0 | 1.25 | F16 |
| P001235 805 | 12.58 | 1.330 | -0.980 | 115.900 | 88.000 | 104.600 | 102.500 | 9995.0 | 52000.0 | 1.70 | SR71 |
| P00 744 806 | 7.73 | 1.943 | -1.757 | 118.800 | 91.600 | 108.400 | 106.300 | 667.0 | 30000.0 | 1.30 | F18 |
| P00 757 806 | 7.95 | 1.454 | -1.170 | 116.400 | 88.200 | 105.500 | 103.100 | -2466.0 | 44700.0 | 1.40 | F18 |
| P00 810 806 | 8.17 | 3.848 | -3.009 | 123.900 | 98.000 | 114.400 | 113.700 | -8330.0 | 14200.0 | 1.10 | F18 |
| P001022 806 | 10.37 | 1.849 | -1.849 | 119.300 | 94.200 | 108.800 | 108.200 | -98.0 | 30000.0 | 1.30 | F18 |
| P001030 806 | 10.50 | 0.719 | -0.674 | 111.200 | 76.500 | 98.700 | 92.600 | 0.0 | 0.0 | 0.00 | |
| P001034 806 | 10.57 | 1.221 | -0.963 | 114.800 | 87.200 | 103.800 | 101.300 | 983.0 | 45000.0 | 1.43 | F18 |
| P001043 806 | 10.72 | 4.024 | -3.589 | 125.200 | 98.500 | 115.000 | 114.300 | 9977.0 | 16500.0 | 1.27 | F14 |
| P001048 806 | 10.80 | 5.912 | -4.153 | 126.200 | 105.600 | 118.000 | 120.200 | 0.0 | 13000.0 | 1.10 | F18 |
| P001148 806 | 11.80 | 8.358 | -5.339 | 128.700 | 107.600 | 120.500 | 122.800 | -158.0 | 14000.0 | 1.20 | F111D |
| P0012 4 806 | 12.07 | 1.473 | -1.132 | 117.000 | 83.700 | 103.800 | 99.100 | 56.0 | 45000.0 | 1.40 | F111D |
| P00 817 807 | 8.28 | 1.971 | -1.442 | 117.900 | 85.600 | 106.600 | 102.000 | 0.0 | 0.0 | 0.00 | |
| P0010 2 807 | 10.03 | 0.982 | -1.158 | 115.400 | 83.900 | 102.300 | 98.300 | 0.0 | 0.0 | 0.00 | |
| P001050 807 | 10.83 | 2.300 | -1.964 | 121.000 | 97.700 | 109.400 | 111.000 | -7803.0 | 29900.0 | 1.25 | F111D |
| P01 841 800 | 8.68 | 3.216 | -3.230 | 123.500 | 98.000 | 113.800 | 113.400 | 0.0 | 16000.0 | 1.20 | F4 |
| P01 748 803 | 7.80 | 2.246 | -2.159 | 121.500 | 91.800 | 109.100 | 106.800 | 1287.0 | 29200.0 | 1.24 | F4 |
| P01 758 803 | 7.97 | 3.143 | -2.657 | 123.200 | 96.100 | 112.500 | 111.500 | 3651.0 | 29300.0 | 1.29 | F4 |

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| P011029 803 | 10.48 | 4.862 | -3.873 | 126.300 | 98.800 | 115.100 | 115.200 | -3458.0 | 14400.0 | 1.10 | F4 |
| P011043 803 | 10.72 | 1.762 | -1.520 | 119.800 | 87.200 | 105.900 | 102.400 | 4654.0 | 44400.0 | 1.37 | F4 |
| P01 719 804 | 7.32 | 0.467 | -0.451 | 106.600 | 71.700 | 94.800 | 86.300 | -697.0 | 41400.0 | 1.17 | AT38 |
| P01 730 804 | 7.50 | 0.496 | -0.627 | 109.800 | 73.400 | 95.100 | 88.000 | 933.0 | 32300.0 | 1.12 | AT38 |
| P01 736 804 | 7.60 | 0.578 | -0.620 | 109.000 | 73.900 | 97.300 | 88.500 | 6979.0 | 16700.0 | 1.15 | AT38 |
| P01 756 804 | 7.93 | 1.369 | -1.024 | 115.200 | 86.200 | 104.100 | 101.100 | 8603.0 | 41400.0 | 1.38 | F15 |
| P01 756 804 | 7.93 | 0.193 | -0.218 | 106.300 | 76.400 | 89.300 | 86.400 | 8603.0 | 41400.0 | 1.38 | F15 |
| P01 8 4 804 | 8.07 | 1.889 | -1.423 | 118.600 | 85.600 | 106.200 | 101.700 | 2828.0 | 29700.0 | 1.20 | F15 |
| P01 810 804 | 8.17 | 3.277 | -3.169 | 124.700 | 96.200 | 113.100 | 111.600 | 3579.0 | 12500.0 | 1.10 | F15 |
| P01 914 804 | 9.23 | 0.695 | -0.799 | 110.900 | 79.700 | 99.700 | 94.000 | -2103.0 | 30300.0 | 1.20 | AT38 |
| P01 923 804 | 9.38 | 1.097 | -0.590 | 110.600 | 78.900 | 101.200 | 94.600 | -2503.0 | 14000.0 | 1.10 | AT38 |
| P01 952 804 | 9.87 | 0.472 | -0.411 | 106.600 | 72.100 | 93.500 | 86.500 | 0.0 | 0.0 | 0.00 | |
| P011046 804 | 10.77 | 8.055 | -3.056 | 124.200 | 107.500 | 117.900 | 121.700 | 4188.0 | 15200.0 | 1.13 | F15 |
| P0111 2 804 | 11.03 | 1.903 | -1.489 | 118.300 | 89.700 | 107.700 | 105.200 | -2953.0 | 31000.0 | 1.28 | F15 |
| P011111 804 | 11.18 | 1.017 | -0.834 | 113.800 | 79.800 | 100.800 | 95.700 | 17003.0 | 45000.0 | 1.42 | F15 |
| P011134 804 | 11.57 | 1.548 | -0.914 | 114.300 | 82.800 | 105.100 | 99.500 | 805.0 | 45500.0 | 1.40 | F15 |
| P011139 804 | 11.65 | 1.426 | -1.062 | 115.600 | 82.000 | 104.700 | 98.500 | 0.0 | 0.0 | 0.00 | |
| P01 820 805 | 8.33 | 0.810 | -0.531 | 111.100 | 78.200 | 100.000 | 94.000 | 0.0 | 0.0 | 0.00 | |
| P01 820 805 | 8.33 | 0.712 | -0.639 | 112.500 | 77.800 | 99.400 | 93.200 | 0.0 | 0.0 | 0.00 | |
| P01 9 6 805 | 9.10 | 0.998 | -0.874 | 113.600 | 77.700 | 100.300 | 92.400 | -10661.0 | 29500.0 | 1.25 | F16 |
| P01 9 6 805 | 9.10 | 0.674 | -0.503 | 108.000 | 77.700 | 99.100 | 92.800 | -10661.0 | 29500.0 | 1.25 | F16 |
| P01 926 805 | 9.43 | 1.212 | -0.975 | 116.300 | 85.800 | 103.400 | 100.200 | 4126.0 | 64800.0 | 2.50 | SR71 |
| P01 933 805 | 9.55 | 0.961 | -0.864 | 113.000 | 84.700 | 101.800 | 98.700 | -2706.0 | 46700.0 | 1.43 | F16 |
| P01 944 805 | 9.73 | 2.626 | -2.325 | 120.600 | 90.900 | 110.800 | 107.300 | -5191.0 | 19300.0 | 1.17 | F16 |
| P011055 805 | 10.92 | 0.778 | -0.705 | 114.300 | 80.500 | 97.400 | 92.600 | 0.0 | 73000.0 | 3.00 | SR71 |
| P0111 8 805 | 11.13 | 1.863 | -1.752 | 120.700 | 91.500 | 106.800 | 105.800 | -3086.0 | 32400.0 | 1.23 | SR71 |
| P011144 805 | 11.73 | 5.297 | -3.110 | 124.100 | 98.700 | 115.800 | 115.000 | -2219.0 | 14400.0 | 1.13 | F16 |
| P011154 805 | 11.90 | 3.819 | -3.528 | 124.000 | 102.500 | 114.200 | 116.500 | 3164.0 | 13800.0 | 1.12 | F16 |
| P0112 4 805 | 12.07 | 2.398 | -1.341 | 116.700 | 91.600 | 109.700 | 108.300 | 1893.0 | 30000.0 | 1.25 | F16 |
| P011235 805 | 12.58 | 1.275 | -0.977 | 115.600 | 85.800 | 103.600 | 100.800 | 9895.0 | 52000.0 | 1.70 | SR71 |
| P01 744 806 | 7.73 | 1.945 | -1.759 | 118.700 | 93.700 | 108.400 | 107.200 | 567.0 | 30000.0 | 1.30 | F18 |
| P01 757 806 | 7.95 | 1.414 | -1.170 | 116.300 | 88.100 | 105.500 | 102.900 | -2566.0 | 44700.0 | 1.40 | F18 |
| P01 810 806 | 8.17 | 3.577 | -2.995 | 123.800 | 96.300 | 113.500 | 111.700 | -8430.0 | 14200.0 | 1.10 | F18 |
| P011022 806 | 10.37 | 1.788 | -1.830 | 119.000 | 93.900 | 108.500 | 107.700 | -198.0 | 30000.0 | 1.30 | F18 |
| P011030 806 | 10.50 | 0.716 | -0.700 | 111.600 | 75.700 | 98.600 | 91.600 | 0.0 | 0.0 | 0.00 | |
| P011034 806 | 10.57 | 1.344 | -0.937 | 114.400 | 88.100 | 103.500 | 102.100 | 883.0 | 45000.0 | 1.43 | F18 |
| P011043 806 | 10.72 | 3.986 | -3.538 | 124.900 | 97.800 | 114.600 | 113.800 | 9877.0 | 16500.0 | 1.27 | F14 |
| P011048 806 | 10.80 | 6.591 | -4.050 | 126.100 | 105.700 | 117.500 | 120.300 | 0.0 | 13000.0 | 1.10 | F18 |
| P011148 806 | 11.80 | 9.856 | -5.431 | 129.000 | 108.400 | 122.300 | 124.100 | -258.0 | 14000.0 | 1.20 | F111D |
| P011152 806 | 11.87 | 0.218 | -0.221 | 103.400 | 75.300 | 89.600 | 85.800 | 0.0 | 0.0 | 0.00 | |
| P0112 4 806 | 12.07 | 1.710 | -1.090 | 117.000 | 83.500 | 104.000 | 99.200 | -44.0 | 45000.0 | 1.40 | F111D |
| P01 817 807 | 8.28 | 1.731 | -1.452 | 117.900 | 88.200 | 106.400 | 102.700 | 0.0 | 0.0 | 0.00 | |
| P01 817 807 | 8.28 | 0.155 | -0.136 | 99.500 | 71.700 | 81.900 | 81.500 | 0.0 | 0.0 | 0.00 | |
| P0110 2 807 | 10.03 | 1.137 | -1.207 | 115.700 | 85.100 | 103.200 | 99.500 | 0.0 | 0.0 | 0.00 | |
| P011050 807 | 10.83 | 2.147 | -1.931 | 120.900 | 96.000 | 109.400 | 110.300 | -7903.0 | 29900.0 | 1.25 | F111D |
| P48 719 804 | 7.32 | 0.359 | -0.301 | 104.200 | 70.500 | 92.900 | 84.900 | -62901.0 | 41400.0 | 1.17 | AT38 |
| P48 757 804 | 7.95 | 0.174 | -0.204 | 102.100 | 71.400 | 85.100 | 81.600 | 0.0 | 0.0 | 0.00 | |
| P48 8 4 804 | 8.07 | 0.451 | -0.341 | 107.800 | 72.600 | 94.500 | 87.000 | -59376.0 | 29700.0 | 1.20 | F15 |
| P48 914 804 | 9.23 | 0.188 | -0.160 | 97.900 | 70.900 | 86.400 | 81.800 | -64307.0 | 30300.0 | 1.20 | AT38 |
| P48 952 804 | 9.87 | 0.639 | -0.437 | 108.200 | 77.100 | 97.900 | 92.500 | 0.0 | 0.0 | 0.00 | |
| P4811 2 804 | 11.03 | 0.933 | -0.646 | 112.100 | 76.000 | 99.100 | 90.900 | -65157.0 | 31000.0 | 1.28 | F15 |
| P481134 804 | 11.57 | 0.655 | -0.456 | 110.700 | 75.100 | 95.300 | 88.500 | -61399.0 | 45500.0 | 1.40 | F15 |
| P48 820 805 | 8.33 | 0.735 | -0.615 | 111.200 | 76.300 | 99.300 | 91.900 | 0.0 | 0.0 | 0.00 | |
| P48 9 6 805 | 9.10 | 1.123 | -0.883 | 114.100 | 77.700 | 102.000 | 94.500 | -72865.0 | 29500.0 | 1.25 | F16 |
| P48 9 6 805 | 9.10 | 0.738 | -0.810 | 110.400 | 82.000 | 100.100 | 96.500 | -72865.0 | 29500.0 | 1.25 | F16 |
| P48 926 805 | 9.43 | 0.695 | -0.597 | 112.000 | 78.400 | 97.400 | 92.200 | -58078.0 | 64800.0 | 2.50 | SR71 |
| P48 934 805 | 9.57 | 0.261 | -0.190 | 101.600 | 69.700 | 87.000 | 80.800 | 0.0 | 0.0 | 0.00 | |
| P48 953 805 | 9.88 | 0.381 | -0.493 | 109.000 | 73.800 | 94.300 | 88.300 | 0.0 | 0.0 | 0.00 | |
| P481055 805 | 10.92 | 0.679 | -0.472 | 111.800 | 77.300 | 97.500 | 92.400 | 0.0 | 73000.0 | 3.00 | SR71 |
| P48 829 806 | 8.48 | 0.684 | -0.420 | 112.600 | 76.500 | 97.400 | 90.500 | -80084.0 | 31500.0 | 1.20 | F14 |

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| P48 845 806 | 8.75 | 1.839 | -1.860 | 122.100 | 87.900 | 107.600 | 103.400 | 0.0 | 0.0 | 0.00 | |
| P481023 806 | 10.38 | 0.568 | -0.472 | 109.300 | 75.200 | 95.900 | 89.400 | 0.0 | 0.0 | 0.00 | |
| P481030 806 | 10.50 | 0.745 | -0.651 | 111.000 | 79.100 | 99.400 | 94.000 | 0.0 | 0.0 | 0.00 | |
| P481152 806 | 11.87 | 0.392 | -0.256 | 105.600 | 74.100 | 92.400 | 86.300 | 0.0 | 0.0 | 0.00 | |
| P48 745 807 | 7.75 | 2.013 | -1.811 | 121.000 | 88.700 | 108.400 | 104.800 | 0.0 | 0.0 | 0.00 | |
| P481050 807 | 10.83 | 0.902 | -0.707 | 114.400 | 76.300 | 96.300 | 88.800 | -70107.0 | 29900.0 | 1.25 | F111D |
| P50 841 800 | 8.68 | 0.721 | -0.714 | 114.900 | 79.200 | 97.600 | 91.300 | 0.0 | 16000.0 | 1.20 | F4 |
| P50 930 800 | 9.50 | 0.587 | -0.552 | 109.600 | 71.000 | 95.300 | 84.100 | 0.0 | 0.0 | 0.00 | |
| P50 758 803 | 7.97 | 0.928 | -0.439 | 109.800 | 79.200 | 101.100 | 95.400 | -47993.0 | 29300.0 | 1.29 | F4 |
| P50 719 804 | 7.32 | 0.277 | -0.240 | 102.400 | 71.500 | 89.900 | 82.700 | -52341.0 | 41400.0 | 1.17 | AT38 |
| P50 756 804 | 7.93 | 0.345 | -0.190 | 104.200 | 73.900 | 92.300 | 87.900 | -43041.0 | 41400.0 | 1.38 | F15 |
| P50 8 4 804 | 8.07 | 0.265 | -0.197 | 103.300 | 73.500 | 89.200 | 84.600 | -48816.0 | 29700.0 | 1.20 | F15 |
| P50 914 804 | 9.23 | 0.221 | -0.179 | 100.000 | 69.700 | 87.500 | 81.500 | -53747.0 | 30300.0 | 1.20 | AT38 |
| P50 923 804 | 9.38 | 0.352 | -0.265 | 102.500 | 69.700 | 90.700 | 83.400 | -54147.0 | 14000.0 | 1.10 | AT38 |
| P50 952 804 | 9.87 | 0.644 | -0.620 | 109.800 | 77.300 | 98.500 | 92.700 | 0.0 | 0.0 | 0.00 | |
| P501046 804 | 10.77 | 0.181 | -0.124 | 100.500 | 71.300 | 85.700 | 81.900 | -47456.0 | 15200.0 | 1.13 | F15 |
| P5011 2 804 | 11.03 | 0.667 | -0.587 | 111.500 | 74.800 | 94.300 | 88.800 | -54597.0 | 31000.0 | 1.28 | F15 |
| P50 820 805 | 8.33 | 0.637 | -0.599 | 110.900 | 78.200 | 98.500 | 93.200 | 0.0 | 0.0 | 0.00 | |
| P50 9 6 805 | 9.10 | 1.071 | -1.156 | 115.300 | 82.600 | 102.800 | 98.200 | -62305.0 | 29500.0 | 1.25 | F16 |
| P50 9 6 805 | 9.10 | 0.921 | -0.897 | 111.700 | 80.500 | 101.900 | 96.700 | -62305.0 | 29500.0 | 1.25 | F16 |
| P50 926 805 | 9.43 | 1.055 | -0.667 | 113.400 | 85.000 | 101.200 | 98.300 | -47518.0 | 64800.0 | 2.50 | SR71 |
| P50 934 805 | 9.57 | 0.275 | -0.214 | 103.400 | 71.600 | 87.800 | 82.400 | 0.0 | 0.0 | 0.00 | |
| P501055 805 | 10.92 | 0.803 | -0.465 | 111.900 | 79.600 | 98.800 | 94.500 | 0.0 | 73000.0 | 3.00 | SR71 |
| P5011 8 805 | 11.13 | 3.098 | -1.362 | 119.800 | 96.100 | 111.200 | 111.300 | -54730.0 | 32400.0 | 1.23 | SR71 |
| P5012 5 805 | 12.08 | 0.348 | -0.510 | 109.700 | 75.600 | 93.700 | 87.500 | 0.0 | 0.0 | 0.00 | |
| P50 829 806 | 8.48 | 0.564 | -0.411 | 111.200 | 77.200 | 97.500 | 92.200 | -69524.0 | 31500.0 | 1.20 | F14 |
| P501023 806 | 10.38 | 0.956 | -0.836 | 113.900 | 76.800 | 100.100 | 92.600 | 0.0 | 0.0 | 0.00 | |
| P501030 806 | 10.50 | 0.836 | -0.888 | 113.600 | 81.600 | 100.000 | 95.500 | 0.0 | 0.0 | 0.00 | |
| P501034 806 | 10.57 | 1.513 | -0.620 | 115.900 | 80.800 | 101.900 | 96.500 | -50761.0 | 45000.0 | 1.43 | F18 |
| P501152 806 | 11.87 | 0.862 | -0.573 | 111.500 | 74.500 | 99.600 | 89.600 | 0.0 | 0.0 | 0.00 | |
| P50 745 807 | 7.75 | 1.675 | -1.473 | 119.300 | 83.200 | 106.100 | 99.200 | 0.0 | 0.0 | 0.00 | |
| P501050 807 | 10.83 | 1.400 | -1.210 | 117.400 | 81.500 | 103.900 | 97.400 | -59547.0 | 29900.0 | 1.25 | F111D |
| P52 841 800 | 8.68 | 1.485 | -1.703 | 120.100 | 82.900 | 105.000 | 98.700 | 0.0 | 16000.0 | 1.20 | F4 |
| P52 758 803 | 7.97 | 0.803 | -0.801 | 113.600 | 81.200 | 98.700 | 94.500 | -37433.0 | 29300.0 | 1.29 | F4 |
| P521134 803 | 11.57 | 1.442 | -1.597 | 119.400 | 84.400 | 104.300 | 99.600 | 0.0 | 0.0 | 0.00 | |
| P52 719 804 | 7.32 | 0.298 | -0.254 | 102.300 | 69.400 | 90.900 | 82.900 | -41781.0 | 41400.0 | 1.17 | AT38 |
| P52 730 804 | 7.50 | 0.625 | -0.484 | 108.100 | 74.900 | 97.200 | 90.600 | -40151.0 | 32300.0 | 1.12 | AT38 |
| P52 736 804 | 7.60 | 0.132 | -0.085 | 93.500 | 67.900 | 83.000 | 79.100 | -34105.0 | 16700.0 | 1.15 | AT38 |
| P52 756 804 | 7.93 | 0.120 | -0.070 | 95.100 | 68.800 | 80.900 | 79.000 | -32481.0 | 41400.0 | 1 38 | F15 |
| P52 756 804 | 7.93 | 2.553 | -1.313 | 119.900 | 88.000 | 108.300 | 103.600 | -32481.0 | 41400.0 | 1.38 | F15 |
| P52 8 4 804 | 8.07 | 0.970 | -0.841 | 115.800 | 80.000 | 101.700 | 96.000 | -38256.0 | 29700.0 | 1.20 | F15 |
| P52 914 804 | 9.23 | 0.486 | -0.404 | 105.900 | 74.200 | 95.900 | 90.100 | -43187.0 | 30300.0 | 1.20 | AT38 |
| P52 923 804 | 9.38 | 0.265 | -0.244 | 102.100 | 71.100 | 89.400 | 82.000 | -43587.0 | 14000.0 | 1.10 | AT38 |
| P52 952 804 | 9.87 | 0.545 | -0.559 | 109.800 | 75.900 | 95.800 | 88.600 | 0.0 | 0.0 | 0.00 | |
| P521046 804 | 10.77 | 0.453 | -0.338 | 108.700 | 75.000 | 90.300 | 86.400 | -36896.0 | 15200.0 | 1.13 | F15 |
| P5211 2 804 | 11.03 | 0.925 | -0.883 | 114.100 | 82.200 | 100.400 | 96.100 | -44037.0 | 31000.0 | 1.28 | F15 |
| P521111 804 | 11.18 | 0.211 | -0.197 | 102.200 | 70.300 | 84.800 | 80.400 | -24081.0 | 45000.0 | 1.42 | F15 |
| P521134 804 | 11.57 | 0.754 | -0.583 | 111.500 | 74.800 | 96.700 | 88.700 | -40279.0 | 45500.0 | 1.40 | F15 |
| P52 820 805 | 8.33 | 0.634 | -0.564 | 110.300 | 85.200 | 98.200 | 97.200 | 0.0 | 0.0 | 0.00 | |
| P52 9 6 805 | 9.10 | 1.330 | -1.085 | 115.300 | 86.600 | 105.100 | 101.600 | -51745.0 | 29500.0 | 1.25 | F16 |
| P52 9 6 805 | 9.10 | 0.813 | -0.902 | 111.700 | 82.400 | 101.100 | 97.400 | -51745.0 | 29500.0 | 1.25 | F16 |
| P52 926 805 | 9.43 | 0.794 | -0.752 | 113.900 | 81.600 | 99.200 | 95.100 | -36958.0 | 64800.0 | 2.50 | SR71 |
| P52 934 805 | 9.57 | 0.822 | -0.651 | 112.500 | 76.400 | 97.800 | 90.500 | 0.0 | 0.0 | 0.00 | |
| P52 945 805 | 9.75 | 0.521 | -0.470 | 110.000 | 78.000 | 93.000 | 89.600 | 0.0 | 0.0 | 0.00 | |
| P521055 805 | 10.92 | 0.949 | -0.547 | 113.800 | 82.400 | 99.400 | 96.700 | 0.0 | 73000.0 | 3.00 | SR71 |
| P5211 8 805 | 11.13 | 1.928 | -1.301 | 117.600 | 88.200 | 106.500 | 103.900 | -44170.0 | 32400.0 | 1.23 | SR71 |
| P5212 4 805 | 12.07 | 0.996 | -0.888 | 115.300 | 79.100 | 101.400 | 94.600 | -39191.0 | 30000.0 | 1.25 | F16 |
| P521236 805 | 12.60 | 1.233 | -0.813 | 114.400 | 83.100 | 102.300 | 99.200 | 0.0 | 0.0 | 0.00 | |
| P52 757 806 | 7.95 | 0.491 | -0.498 | 110.500 | 78.400 | 93.800 | 89.300 | -43650.0 | 44700.0 | 1.40 | F18 |
| P52 829 806 | 8.48 | 0.893 | -0.559 | 115.100 | 83.300 | 102.100 | 98.000 | -58964.0 | 31500.0 | 1.20 | F14 |

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| P521022 | 806 | 10.37 | 1.762 | -1.184 | 116.800 | 83.400 | 104.000 | 99.200 | -41282.0 | 30000.0 | 1.30 | F18 |
| P521030 | 806 | 10.50 | 0.782 | -0.937 | 114.000 | 78.200 | 98.600 | 92.600 | 0.0 | 0.0 | 0.00 | |
| P521034 | 806 | 10.57 | 1.268 | -0.904 | 116.000 | 82.200 | 102.800 | 97.100 | -40201.0 | 45000.0 | 1.43 | F18 |
| P521148 | 806 | 11.80 | 0.700 | -0.529 | 112.500 | 79.300 | 99.100 | 92.900 | -41342.0 | 14000.0 | 1.20 | F111D |
| P521152 | 806 | 11.87 | 0.949 | -0.540 | 111.700 | 75.900 | 100.600 | 91.900 | 0.0 | 0.0 | 0.00 | |
| P521050 | 807 | 10.83 | 2.147 | -1.421 | 118.900 | 86.400 | 108.100 | 103.400 | -48987.0 | 29900.0 | 1.25 | F111D |
| P54 841 | 800 | 8.68 | 2.011 | -2.095 | 120.100 | 87.900 | 108.200 | 103.400 | 0.0 | 16000.0 | 1.20 | F4 |
| P54 930 | 800 | 9.50 | 0.660 | -0.540 | 110.800 | 77.400 | 94.600 | 88.300 | 0.0 | 0.0 | 0.00 | |
| P54 748 | 803 | 7.80 | 1.771 | -1.541 | 121.700 | 84.500 | 106.400 | 100.900 | -29237.0 | 29200.0 | 1.24 | F4 |
| P54 758 | 803 | 7.97 | 1.083 | -0.761 | 114.500 | 79.000 | 100.500 | 93.500 | -26873.0 | 29300.0 | 1.29 | F4 |
| P54 8 8 | 803 | 8.13 | 0.338 | -0.357 | 108.100 | 77.200 | 92.000 | 87.700 | 0.0 | 13000.0 | 1.10 | F4 |
| P541030 | 803 | 10.50 | 1.132 | -0.761 | 116.300 | 80.800 | 101.700 | 95.800 | 0.0 | 0.0 | 0.00 | |
| P541043 | 803 | 10.72 | 0.303 | -0.209 | 108.000 | 76.000 | 87.900 | 85.900 | -25870.0 | 44400.0 | 1.37 | F4 |
| P54 719 | 804 | 7.32 | 0.364 | -0.247 | 102.900 | 68.900 | 92.300 | 84.700 | -31221.0 | 41400.0 | 1.17 | AT38 |
| P54 730 | 804 | 7.50 | 0.329 | -0.265 | 105.300 | 76.800 | 93.100 | 88.600 | -29591.0 | 32300.0 | 1.12 | AT38 |
| P54 810 | 804 | 8.17 | 0.958 | -0.759 | 116.200 | 78.400 | 100.500 | 93.200 | -26945.0 | 12500.0 | 1.10 | F15 |
| P54 914 | 804 | 9.23 | 0.587 | -0.460 | 106.600 | 73.300 | 97.700 | 90.100 | -32627.0 | 30300.0 | 1.20 | AT38 |
| P54 923 | 804 | 9.38 | 0.327 | -0.310 | 103.800 | 70.200 | 91.100 | 82.600 | -33027.0 | 14000.0 | 1.10 | AT38 |
| P54 952 | 804 | 9.87 | 0.987 | -0.874 | 115.000 | 80.000 | 101.600 | 95.800 | 0.0 | 0.0 | 0.00 | |
| P541046 | 804 | 10.77 | 1.008 | -0.780 | 113.700 | 78.200 | 99.100 | 93.200 | -26336.0 | 15200.0 | 1.13 | F15 |
| P5411 2 | 804 | 11.03 | 1.036 | -0.975 | 115.000 | 77.700 | 99.700 | 92.800 | -33477.0 | 31000.0 | 1.28 | F15 |
| P541111 | 804 | 11.18 | 0.364 | -0.308 | 108.600 | 73.000 | 91.400 | 84.500 | -13521.0 | 45000.0 | 1.42 | F15 |
| P541134 | 804 | 11.57 | 1.142 | -0.853 | 113.900 | 78.000 | 101.200 | 94.100 | -29719.0 | 45500.0 | 1.40 | F15 |
| P541140 | 804 | 11.67 | 0.594 | -0.575 | 109.400 | 77.000 | 99.900 | 92.500 | 0.0 | 0.0 | 0.00 | |
| P54 820 | 805 | 8.33 | 0.634 | -0.669 | 111.400 | 79.500 | 97.500 | 94.100 | 0.0 | 0.0 | 0.00 | |
| P54 9 6 | 805 | 9.10 | 1.353 | -1.156 | 115.000 | 83.400 | 103.100 | 98.800 | -41185.0 | 29500.0 | 1.25 | F16 |
| P54 9 6 | 805 | 9.10 | 0.897 | -1.019 | 112.900 | 82.400 | 101.700 | 97.300 | -41185.0 | 29500.0 | 1.25 | F16 |
| P54 926 | 805 | 9.43 | 0.944 | -0.726 | 114.300 | 79.500 | 100.200 | 94.800 | -26398.0 | 64800.0 | 2.50 | SR71 |
| P54 933 | 805 | 9.55 | 0.921 | -0.782 | 113.200 | 79.500 | 99.600 | 94.500 | -33230.0 | 46700.0 | 1.43 | F16 |
| P54 944 | 805 | 9.73 | 3.333 | -1.651 | 119.600 | 90.000 | 110.900 | 107.700 | -35715.0 | 19300.0 | 1.17 | F16 |
| P541055 | 805 | 10.92 | 0.766 | -0.557 | 112.700 | 77.800 | 99.000 | 93.100 | 0.0 | 73000.0 | 3.00 | SR71 |
| P5411 8 | 805 | 11.13 | 2.058 | -1.456 | 119.200 | 91.200 | 108.100 | 106.500 | -33610.0 | 32400.0 | 1.23 | SR71 |
| P541144 | 805 | 11.73 | 1.153 | -1.125 | 115.400 | 80.000 | 103.000 | 96.500 | -32743.0 | 14400.0 | 1.13 | F16 |
| P5412 4 | 805 | 12.07 | 1.090 | -1.076 | 115.100 | 81.500 | 101.800 | 96.800 | -28631.0 | 30000.0 | 1.25 | F16 |
| P541236 | 805 | 12.60 | 0.759 | -0.630 | 112.800 | 75.100 | 96.800 | 88.500 | 0.0 | 0.0 | 0.00 | |
| P54 757 | 806 | 7.95 | 1.386 | -1.012 | 115.200 | 89.000 | 104.300 | 102.900 | -33090.0 | 44700.0 | 1.40 | F18 |
| P54 810 | 806 | 8.17 | 1.701 | -1.896 | 120.400 | 83.200 | 106.000 | 99.900 | -38954.0 | 14200.0 | 1.10 | F18 |
| P54 828 | 806 | 8.47 | 0.240 | -0.294 | 106.500 | 74.800 | 89.000 | 85.300 | 0.0 | 0.0 | 0.00 | |
| P54 829 | 806 | 8.48 | 1.050 | -0.613 | 114.800 | 80.700 | 101.600 | 96.300 | -48404.0 | 31500.0 | 1.20 | F14 |
| P541022 | 806 | 10.37 | 1.534 | -1.226 | 116.800 | 85.200 | 103.900 | 98.800 | -30722.0 | 30000.0 | 1.30 | F18 |
| P541030 | 806 | 10.50 | 1.029 | -0.827 | 113.300 | 81.300 | 102.500 | 96.300 | 0.0 | 0.0 | 0.00 | |
| P541034 | 806 | 10.57 | 0.949 | -0.787 | 112.900 | 78.100 | 99.500 | 93.400 | -29641.0 | 45000.0 | 1.43 | F18 |
| P541043 | 806 | 10.72 | 1.207 | -0.733 | 114.800 | 79.600 | 100.300 | 95.400 | -20647.0 | 16500.0 | 1.27 | F14 |
| P541048 | 806 | 10.80 | 0.940 | -0.958 | 116.100 | 80.100 | 101.300 | 95.400 | 0.0 | 13000.0 | 1.10 | F18 |
| P541148 | 806 | 11.80 | 2.419 | -1.992 | 122.000 | 85.300 | 107.700 | 102.400 | -30782.0 | 14000.0 | 1.20 | F111D |
| P541152 | 806 | 11.87 | 0.341 | -0.294 | 105.900 | 73.000 | 91.100 | 85.800 | 0.0 | 0.0 | 0.00 | |
| P5412 4 | 806 | 12.07 | 1.557 | -0.984 | 116.100 | 84.000 | 104.400 | 100.200 | -30568.0 | 45000.0 | 1.40 | F111D |
| P5412 4 | 806 | 12.07 | 0.902 | -0.742 | 114.600 | 77.500 | 100.000 | 93.200 | -30568.0 | 45000.0 | 1.40 | F111D |
| P5410 2 | 807 | 10.03 | 0.200 | -0.432 | 108.300 | 73.400 | 88.300 | 84.400 | 0.0 | 0.0 | 0.00 | |
| P541050 | 807 | 10.83 | 1.630 | -1.724 | 120.200 | 86.500 | 105.100 | 100.900 | -38427.0 | 29900.0 | 1.25 | F111D |
| P56 841 | 800 | 8.68 | 2.699 | -2.877 | 122.900 | 92.900 | 110.700 | 108.100 | 0.0 | 16000.0 | 1.20 | F4 |
| P56 930 | 800 | 9.50 | 1.576 | -1.416 | 116.300 | 83.400 | 106.000 | 99.500 | 0.0 | 0.0 | 0.00 | |
| P56 748 | 803 | 7.80 | 1.257 | -1.078 | 116.300 | 87.700 | 104.400 | 101.800 | -18677.0 | 29200.0 | 1.24 | F4 |
| P56 758 | 803 | 7.97 | 1.630 | -1.059 | 116.100 | 90.400 | 106.000 | 104.700 | -16313.0 | 29300.0 | 1.29 | F4 |
| P56 8 8 | 803 | 8.13 | 0.308 | -0.432 | 109.000 | 73.200 | 93.200 | 87.700 | 0.0 | 13000.0 | 1.10 | F4 |
| P561012 | 803 | 10.20 | 0.709 | -0.817 | 114.300 | 79.000 | 99.000 | 94.400 | -33924.0 | 13000.0 | 1.10 | T38 |
| P561030 | 803 | 10.50 | 1.997 | -2.323 | 122.900 | 85.600 | 106.800 | 101.600 | 0.0 | 0.0 | 0.00 | |
| P561043 | 803 | 10.72 | 0.834 | -0.740 | 115.200 | 77.500 | 97.000 | 90.900 | -15310.0 | 44400.0 | 1.37 | F4 |
| P561134 | 803 | 11.57 | 1.456 | -0.871 | 115.400 | 83.500 | 105.300 | 100.900 | 0.0 | 0.0 | 0.00 | |
| P56 719 | 804 | 7.32 | 0.298 | -0.322 | 104.000 | 69.700 | 91.000 | 83.800 | -20661.0 | 41400.0 | 1.17 | AT38 |

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| P56 730 804 | 7.50 | 0.329 | -0.310 | 103.100 | 69.500 | 92.500 | 83.600 | -19031.0 | 32300.0 | 1.12 | AT38 |
| P56 730 804 | 7.50 | 0.132 | -0.120 | 97.700 | 69.400 | 86.600 | 81.100 | -19031.0 | 32300.0 | 1.12 | AT38 |
| P56 736 804 | 7.60 | 0.280 | -0.247 | 103.800 | 73.800 | 91.200 | 85.600 | -12985.0 | 16700.0 | 1.15 | AT38 |
| P56 756 804 | 7.93 | 1.186 | -0.900 | 115.200 | 87.500 | 103.100 | 101.100 | -11361.0 | 41400.0 | 1.38 | F15 |
| P56 8 4 804 | 8.07 | 1.442 | -1.120 | 115.700 | 86.300 | 105.400 | 101.800 | -17136.0 | 29700.0 | 1.20 | F15 |
| P56 810 804 | 8.17 | 1.562 | -1.113 | 118.200 | 88.500 | 105.800 | 103.400 | -16385.0 | 12500.0 | 1.10 | F15 |
| P56 914 804 | 9.23 | 1.423 | -0.947 | 113.100 | 83.900 | 105.400 | 100.900 | -22067.0 | 30300.0 | 1.20 | AT38 |
| P56 923 804 | 9.38 | 0.369 | -0.341 | 105.600 | 73.400 | 91.900 | 85.000 | -22467.0 | 14000.0 | 1.10 | AT38 |
| P56 952 804 | 9.87 | 0.507 | -0.472 | 109.500 | 78.500 | 96.900 | 91.800 | 0.0 | 0.0 | 0.00 | |
| P561046 804 | 10.77 | 2.323 | -1.527 | 118.600 | 88.600 | 107.900 | 103.800 | -15776.0 | 15200.0 | 1.13 | F15 |
| P5611 2 804 | 11.03 | 1.914 | -1.322 | 116.900 | 89.000 | 106.300 | 104.600 | -22917.0 | 31000.0 | 1.28 | F15 |
| P561111 804 | 11.18 | 0.167 | -0.103 | 99.100 | 70.000 | 83.100 | 80.300 | -2961.0 | 45000.0 | 1.42 | F15 |
| P561111 804 | 11.18 | 1.473 | -0.803 | 114.800 | 83.900 | 104.600 | 99.800 | -2961.0 | 45000.0 | 1.42 | F15 |
| P561134 804 | 11.57 | 1.261 | -1.001 | 115.300 | 80.100 | 101.800 | 94.900 | -19159.0 | 45500.0 | 1.40 | F15 |
| P561139 804 | 11.65 | 0.482 | -0.371 | 109.700 | 77.100 | 98.300 | 91.200 | 0.0 | 0.0 | 0.00 | |
| P56 9 6 805 | 9.10 | 1.527 | -1.431 | 116.700 | 88.800 | 105.100 | 102.400 | -30625.0 | 29500.0 | 1.25 | F16 |
| P56 9 6 805 | 9.10 | 0.601 | -0.740 | 111.000 | 76.100 | 98.000 | 92.100 | -30625.0 | 29500.0 | 1.25 | F16 |
| P56 926 805 | 9.43 | 1.062 | -0.839 | 115.400 | 83.800 | 102.200 | 98.500 | -15838.0 | 64800.0 | 2.50 | SR71 |
| P56 933 805 | 9.55 | 0.839 | -0.731 | 111.400 | 77.200 | 99.300 | 93.100 | -22670.0 | 46700.0 | 1.43 | F16 |
| P56 944 805 | 9.73 | 2.636 | -2.180 | 121.200 | 87.400 | 108.400 | 103.600 | -25155.0 | 19300.0 | 1.17 | F16 |
| P561055 805 | 10.92 | 0.817 | -0.672 | 114.300 | 78.300 | 98.900 | 93.000 | 0.0 | 73000.0 | 3.00 | SR71 |
| P5611 8 805 | 11.13 | 2.163 | -1.710 | 120.900 | 90.100 | 108.400 | 105.900 | -23050.0 | 32400.0 | 1.23 | SR71 |
| P561144 805 | 11.73 | 2.725 | -2.394 | 122.200 | 88.500 | 109.800 | 105.400 | -22183.0 | 14400.0 | 1.13 | F16 |
| P561154 805 | 11.90 | 1.111 | -0.940 | 116.400 | 77.900 | 100.000 | 93.000 | -16800.0 | 13800.0 | 1.12 | F16 |
| P5612 4 805 | 12.07 | 1.365 | -1.132 | 115.000 | 86.900 | 104.600 | 102.000 | -18071.0 | 30000.0 | 1.25 | F16 |
| P561235 805 | 12.58 | 1.111 | -0.972 | 116.400 | 79.400 | 100.200 | 93.800 | -10069.0 | 52000.0 | 1.70 | SR71 |
| P56 744 806 | 7.73 | 4.545 | -3.716 | 127.400 | 97.800 | 115.500 | 113.700 | -19397.0 | 30000.0 | 1.30 | F18 |
| P56 757 806 | 7.95 | 1.144 | -1.156 | 116.200 | 86.100 | 103.500 | 100.300 | -22530.0 | 44700.0 | 1.40 | F18 |
| P56 810 806 | 8.17 | 3.636 | -2.988 | 123.700 | 98.800 | 113.800 | 113.800 | -28394.0 | 14200.0 | 1.10 | F18 |
| P56 828 806 | 8.47 | 1.137 | -0.653 | 115.800 | 87.400 | 104.000 | 101.600 | 0.0 | 0.0 | 0.00 | |
| P561022 806 | 10.37 | 1.661 | -1.414 | 117.500 | 93.800 | 106.600 | 106.900 | -20162.0 | 30000.0 | 1.30 | F18 |
| P561030 806 | 10.50 | 0.707 | -0.700 | 111.800 | 78.300 | 98.000 | 92.100 | 0.0 | 0.0 | 0.00 | |
| P561034 806 | 10.57 | 0.778 | -0.827 | 113.400 | 76.700 | 98.300 | 91.500 | -19081.0 | 45000.0 | 1.43 | F18 |
| P561043 806 | 10.72 | 1.409 | -1.513 | 119.800 | 83.800 | 104.200 | 99.500 | -10087.0 | 16500.0 | 1.27 | F14 |
| P561048 806 | 10.80 | 2.196 | -1.813 | 121.500 | 84.600 | 106.800 | 101.000 | 0.0 | 13000.0 | 1.10 | F18 |
| P5612 4 806 | 12.07 | 1.550 | -0.907 | 117.100 | 85.600 | 105.700 | 101.900 | -20008.0 | 45000.0 | 1.40 | F111D |
| P56 817 807 | 8.28 | 2.349 | -1.637 | 120.600 | 85.300 | 106.600 | 100.200 | 0.0 | 0.0 | 0.00 | |
| P5610 2 807 | 10.03 | 1.983 | -1.485 | 120.100 | 91.500 | 108.500 | 106.000 | 0.0 | 0.0 | 0.00 | |
| P561050 807 | 10.83 | 2.194 | -1.924 | 120.700 | 91.700 | 109.000 | 106.900 | -27867.0 | 29900.0 | 1.25 | F111D |
| P58 841 800 | 8.68 | 3.676 | -3.902 | 125.100 | 95.400 | 114.300 | 112.000 | 0.0 | 16000.0 | 1.20 | F4 |
| P58 748 803 | 7.80 | 2.579 | -2.020 | 120.900 | 94.900 | 110.200 | 109.400 | -8117.0 | 29200.0 | 1.24 | F4 |
| P58 758 803 | 7.97 | 2.257 | -1.870 | 120.100 | 91.700 | 109.400 | 107.100 | -5753.0 | 29300.0 | 1.29 | F4 |
| P58 8 8 803 | 8.13 | 0.465 | -0.334 | 107.300 | 71.800 | 92.400 | 85.100 | 0.0 | 13000.0 | 1.10 | F4 |
| P581012 803 | 10.20 | 0.587 | -0.890 | 113.700 | 77.300 | 98.000 | 92.100 | -23364.0 | 13000.0 | 1.10 | T38 |
| P581029 803 | 10.48 | 3.871 | -3.453 | 125.600 | 95.300 | 114.000 | 111.800 | -12862.0 | 14400.0 | 1.10 | F4 |
| P581043 803 | 10.72 | 1.529 | -0.956 | 118.300 | 82.000 | 105.100 | 98.800 | -4750.0 | 44400.0 | 1.37 | F4 |
| P581134 803 | 11.57 | 2.067 | -1.353 | 119.300 | 85.300 | 107.600 | 102.700 | 0.0 | 0.0 | 0.00 | |
| P581238 803 | 12.63 | 0.284 | -0.157 | 103.200 | 74.300 | 90.100 | 85.400 | -5787.0 | 21200.0 | 1.05 | T38 |
| P58 719 804 | 7.32 | 0.479 | -0.439 | 106.600 | 70.200 | 94.100 | 85.500 | -10101.0 | 41400.0 | 1.17 | AT38 |
| P58 730 804 | 7.50 | 0.345 | -0.291 | 104.200 | 71.300 | 92.300 | 85.100 | -8471.0 | 32300.0 | 1.12 | AT38 |
| P58 730 804 | 7.50 | 0.108 | -0.117 | 97.100 | 72.600 | 86.000 | 82.500 | -8471.0 | 32300.0 | 1.12 | AT38 |
| P58 736 804 | 7.60 | 0.536 | -0.477 | 108.300 | 76.600 | 98.100 | 91.800 | -2425.0 | 16700.0 | 1.15 | AT38 |
| P58 756 804 | 7.93 | 1.132 | -0.874 | 114.800 | 77.000 | 101.000 | 92.900 | -801.0 | 41400.0 | 1.38 | F15 |
| P58 8 4 804 | 8.07 | 1.889 | -1.426 | 118.000 | 90.900 | 107.600 | 104.900 | -6576.0 | 29700.0 | 1.20 | F15 |
| P58 810 804 | 8.17 | 2.166 | -2.163 | 122.100 | 88.400 | 107.000 | 101.900 | -5825.0 | 12500.0 | 1.10 | F15 |
| P58 914 804 | 9.23 | 0.752 | -0.747 | 110.100 | 79.000 | 99.500 | 95.000 | -11507.0 | 30300.0 | 1.20 | AT38 |
| P58 923 804 | 9.38 | 0.566 | -0.519 | 109.100 | 75.000 | 96.700 | 89.100 | -11907.0 | 14000.0 | 1.10 | AT38 |
| P58 952 804 | 9.87 | 0.601 | -0.435 | 106.900 | 80.100 | 97.000 | 93.900 | 0.0 | 0.0 | 0.00 | |
| P581046 804 | 10.77 | 2.845 | -2.431 | 122.300 | 90.300 | 111.100 | 106.800 | -5216.0 | 15200.0 | 1.13 | F15 |
| P5811 2 804 | 11.03 | 2.053 | -1.391 | 117.400 | 86.100 | 107.000 | 102.200 | -12357.0 | 31000.0 | 1.28 | F15 |

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|---|---|---|---|---|---|---|---|---|---|---|---|
| P581111 804 | 11.18 | 1.290 | -1.081 | 116.000 | 84.200 | 102.500 | 97.800 | 7599.0 | 45000.0 | 1.42 | F15 |
| P581134 804 | 11.57 | 1.226 | -0.886 | 113.800 | 84.400 | 102.700 | 99.200 | -8599.0 | 45500.0 | 1.40 | F15 |
| P581139 804 | 11.65 | 0.646 | -0.564 | 110.600 | 75.800 | 98.600 | 90.700 | 0.0 | 0.0 | 0.00 | |
| P58 820 805 | 8.33 | 0.813 | -0.655 | 115.100 | 85.500 | 104.400 | 101.100 | 0.0 | 0.0 | 0.00 | |
| P58 9 6 805 | 9.10 | 1.851 | -1.494 | 116.900 | 89.200 | 107.400 | 104.700 | -20065.0 | 29500.0 | 1.25 | F16 |
| P58 9 6 805 | 9.10 | 0.705 | -0.714 | 110.500 | 75.300 | 98.800 | 90.800 | -20065.0 | 29500.0 | 1.25 | F16 |
| P58 926 805 | 9.43 | 1.513 | -1.015 | 117.100 | 85.800 | 104.800 | 100.900 | -5278.0 | 64800.0 | 2.50 | SR71 |
| P58 933 805 | 9.55 | 1.001 | -0.923 | 113.500 | 82.700 | 101.700 | 97.600 | -12110.0 | 46700.0 | 1.43 | F16 |
| P58 944 805 | 9.73 | 3.641 | -2.640 | 121.400 | 100.700 | 113.400 | 114.600 | -14595.0 | 19300.0 | 1.17 | F16 |
| P581055 805 | 10.92 | 0.904 | -0.658 | 114.000 | 79.200 | 100.100 | 94.400 | 0.0 | 73000.0 | 3.00 | SR71 |
| P5811 8 805 | 11.13 | 2.638 | -1.884 | 122.200 | 88.200 | 108.900 | 104.800 | -12490.0 | 32400.0 | 1.23 | SR71 |
| P581144 805 | 11.73 | 4.447 | -3.573 | 124.700 | 102.100 | 116.700 | 117.400 | -11623.0 | 14400.0 | 1.13 | F16 |
| P581154 805 | 11.90 | 2.828 | -2.241 | 121.800 | 90.000 | 111.100 | 107.000 | -6240.0 | 13800.0 | 1.12 | F16 |
| P5812 4 805 | 12.07 | 1.517 | -1.461 | 116.800 | 86.500 | 105.100 | 101.000 | -7511.0 | 30000.0 | 1.25 | F16 |
| P581235 805 | 12.58 | 1.560 | -1.095 | 117.200 | 86.100 | 105.300 | 101.900 | 491.0 | 52000.0 | 1.70 | SR71 |
| P58 744 806 | 7.73 | 1.910 | -1.708 | 118.500 | 92.200 | 108.700 | 106.500 | -8837.0 | 30000.0 | 1.30 | F18 |
| P58 757 806 | 7.95 | 1.231 | -1.092 | 115.500 | 81.500 | 103.600 | 98.100 | -11970.0 | 44700.0 | 1.40 | F18 |
| P58 810 806 | 8.17 | 4.771 | -4.118 | 126.500 | 99.900 | 116.500 | 115.700 | -17834.0 | 14200.0 | 1.10 | F18 |
| P58 829 806 | 8.48 | 0.752 | -0.740 | 113.400 | 77.100 | 98.100 | 92.100 | -27284.0 | 31500.0 | 1.20 | F14 |
| P581022 806 | 10.37 | 1.781 | -1.811 | 119.000 | 89.300 | 107.500 | 103.900 | -9602.0 | 30000.0 | 1.30 | F18 |
| P581030 806 | 10.50 | 0.824 | -0.759 | 112.100 | 77.000 | 99.300 | 92.100 | 0.0 | 0.0 | 0.00 | |
| P581034 806 | 10.57 | 1.034 | -0.886 | 114.000 | 86.700 | 102.500 | 100.000 | -8521.0 | 45000.0 | 1.43 | F18 |
| P581043 806 | 10.72 | 3.007 | -2.206 | 121.600 | 95.900 | 111.800 | 111.000 | 473.0 | 16500.0 | 1.27 | F14 |
| P581048 806 | 10.80 | 3.347 | -3.077 | 124.300 | 92.500 | 112.000 | 108.600 | 0.0 | 13000.0 | 1.10 | F18 |
| P581148 806 | 11.80 | 5.102 | -4.050 | 127.200 | 101.800 | 117.300 | 117.300 | -9662.0 | 14000.0 | 1.20 | F111D |
| P5812 4 806 | 12.07 | 1.421 | -1.165 | 116.900 | 82.200 | 103.900 | 98.400 | -9448.0 | 45000.0 | 1.40 | F111D |
| P58 817 807 | 8.28 | 1.743 | -1.494 | 118.600 | 89.300 | 106.400 | 103.900 | 0.0 | 0.0 | 0.00 | |
| P5810 2 807 | 10.03 | 1.496 | -1.287 | 118.500 | 85.000 | 106.700 | 101.200 | 0.0 | 0.0 | 0.00 | |
| P581050 807 | 10.83 | 2.800 | -2.384 | 122.400 | 91.400 | 110.500 | 106.400 | -17307.0 | 29900.0 | 1.25 | F111D |
| P59 841 800 | 8.68 | 2.821 | -3.328 | 123.500 | 96.400 | 112.200 | 111.700 | 0.0 | 16000.0 | 1.20 | F4 |
| P59 930 800 | 9.50 | 1.174 | -1.301 | 114.300 | 87.600 | 105.700 | 102.800 | 0.0 | 0.0 | 0.00 | |
| P59 748 803 | 7.80 | 2.062 | -2.065 | 121.100 | 89.900 | 107.600 | 104.400 | -2837.0 | 29200.0 | 1.24 | F4 |
| P59 758 803 | 7.97 | 2.739 | -2.476 | 122.500 | 94.700 | 111.700 | 110.200 | -473.0 | 29300.0 | 1.29 | F4 |
| P591030 803 | 10.50 | 7.326 | -3.883 | 127.500 | 106.500 | 118.900 | 121.500 | 0.0 | 0.0 | 0.00 | |
| P591043 803 | 10.72 | 1.287 | -0.778 | 116.900 | 82.300 | 101.600 | 96.900 | 530.0 | 44400.0 | 1.37 | F4 |
| P591238 803 | 12.63 | 0.510 | -0.449 | 109.900 | 78.800 | 99.300 | 91.400 | -507.0 | 21200.0 | 1.05 | T38 |
| P59 719 804 | 7.32 | 0.552 | -0.446 | 106.700 | 76.300 | 97.300 | 91.900 | -4821.0 | 41400.0 | 1.17 | AT38 |
| P59 730 804 | 7.50 | 0.742 | -0.630 | 109.200 | 77.300 | 99.600 | 93.400 | -3191.0 | 32300.0 | 1.12 | AT38 |
| P59 736 804 | 7.60 | 0.723 | -0.625 | 109.100 | 78.300 | 99.600 | 94.200 | 2855.0 | 16700.0 | 1.15 | AT38 |
| P59 756 804 | 7.93 | 0.954 | -0.874 | 114.200 | 82.200 | 100.500 | 96.000 | 4479.0 | 41400.0 | 1.38 | F15 |
| P59 8 4 804 | 8.07 | 1.738 | -1.470 | 118.600 | 90.500 | 106.800 | 105.000 | -1296.0 | 29700.0 | 1.20 | F15 |
| P59 810 804 | 8.17 | 3.601 | -2.915 | 124.400 | 95.400 | 113.300 | 111.700 | -545.0 | 12500.0 | 1.10 | F15 |
| P59 914 804 | 9.23 | 0.855 | -0.841 | 111.200 | 84.600 | 101.400 | 98.900 | -6227.0 | 30300.0 | 1.20 | AT38 |
| P59 923 804 | 9.38 | 1.156 | -0.618 | 111.100 | 80.700 | 102.600 | 97.100 | -6627.0 | 14000.0 | 1.10 | AT38 |
| P59 952 804 | 9.87 | 0.442 | -0.376 | 108.100 | 77.500 | 95.000 | 89.900 | 0.0 | 0.0 | 0.00 | |
| P591046 804 | 10.77 | 3.561 | -2.950 | 123.600 | 98.600 | 112.900 | 113.600 | 64.0 | 15200.0 | 1.13 | F15 |
| P5911 2 804 | 11.03 | 1.520 | -1.268 | 116.900 | 86.400 | 105.200 | 101.300 | -7077.0 | 31000.0 | 1.28 | F15 |
| P591111 804 | 11.18 | 1.910 | -0.876 | 118.100 | 81.400 | 104.300 | 97.700 | 12879.0 | 45000.0 | 1.42 | F15 |
| P591134 804 | 11.57 | 1.076 | -0.785 | 113.100 | 83.500 | 102.000 | 98.300 | -3319.0 | 45500.0 | 1.40 | F15 |
| P59 820 805 | 8.33 | 0.500 | -0.470 | 109.800 | 73.500 | 94.000 | 86.700 | 0.0 | 0.0 | 0.00 | |
| P59 820 805 | 8.33 | 0.608 | -0.583 | 111.700 | 80.000 | 99.800 | 95.000 | 0.0 | 0.0 | 0.00 | |
| P59 9 6 805 | 9.10 | 1.405 | -1.275 | 115.300 | 86.300 | 105.500 | 101.500 | -14785.0 | 29500.0 | 1.25 | F16 |
| P59 9 6 805 | 9.10 | 0.329 | -0.308 | 105.200 | 76.400 | 91.500 | 87.400 | -14785.0 | 29500.0 | 1.25 | F16 |
| P59 926 805 | 9.43 | 1.130 | -0.949 | 116.500 | 84.300 | 102.700 | 99.200 | 2.0 | 64800.0 | 2.50 | SR71 |
| P59 933 805 | 9.55 | 0.961 | -0.890 | 113.500 | 80.000 | 100.900 | 94.700 | -6830.0 | 46700.0 | 1.43 | F16 |
| P59 944 805 | 9.73 | 2.194 | -2.241 | 120.000 | 90.500 | 109.100 | 105.500 | -9315.0 | 19300.0 | 1.17 | F16 |
| P591055 805 | 10.92 | 0.895 | -0.674 | 114.700 | 82.700 | 99.500 | 96.400 | 0.0 | 73000.0 | 3.00 | SR71 |
| P5911 8 805 | 11.13 | 2.986 | -1.701 | 121.100 | 92.100 | 110.100 | 108.600 | -7210.0 | 32400.0 | 1.23 | SR71 |
| P591144 805 | 11.73 | 3.223 | -3.331 | 124.000 | 94.000 | 111.500 | 110.000 | -6343.0 | 14400.0 | 1.13 | F16 |
| P5912 4 805 | 12.07 | 1.313 | -1.127 | 115.300 | 85.000 | 103.500 | 100.700 | -2231.0 | 30000.0 | 1.25 | F16 |

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|---|---|---|---|---|---|---|---|---|---|---|---|---|
| P591235 | 805 | 12.58 | 1.405 | -0.944 | 116.500 | 82.100 | 102.600 | 96.900 | 5771.0 | 52000.0 | 1.70 | SR71 |
| P59 744 | 806 | 7.73 | 1.926 | -1.802 | 119.100 | 94.600 | 108.400 | 107.900 | -3557.0 | 30000.0 | 1.30 | F18 |
| P59 757 | 806 | 7.95 | 1.186 | -1.127 | 116.100 | 81.200 | 102.800 | 96.400 | -6690.0 | 44700.0 | 1.40 | F18 |
| P59 810 | 806 | 8.17 | 4.111 | -3.584 | 125.100 | 100.400 | 114.600 | 115.200 | -12554.0 | 14200.0 | 1.10 | F18 |
| P59 828 | 806 | 8.47 | 0.120 | -0.068 | 97.100 | 74.500 | 81.900 | 83.000 | 0.0 | 0.0 | 0.00 | |
| P591022 | 806 | 10.37 | 2.161 | -1.809 | 119.400 | 90.800 | 108.500 | 104.900 | -4322.0 | 30000.0 | 1.30 | F18 |
| P591030 | 806 | 10.50 | 0.768 | -0.620 | 111.500 | 90.700 | 99.300 | 100.800 | 0.0 | 0.0 | 0.00 | |
| P591034 | 806 | 10.57 | 1.266 | -0.888 | 114.700 | 85.200 | 102.100 | 97.700 | -3241.0 | 45000.0 | 1.43 | F18 |
| P591043 | 806 | 10.72 | 6.807 | -4.324 | 127.200 | 100.600 | 118.100 | 117.800 | 5753.0 | 16500.0 | 1.27 | F14 |
| P591048 | 806 | 10.80 | 3.380 | -3.204 | 124.600 | 93.700 | 112.400 | 109.800 | 0.0 | 13000.0 | 1.10 | F18 |
| P591148 | 806 | 11.80 | 6.288 | -5.367 | 128.600 | 100.600 | 117.900 | 117.100 | -4382.0 | 14000.0 | 1.20 | F111D |
| P59 817 | 807 | 8.28 | 1.327 | -1.416 | 117.600 | 83.600 | 103.600 | 99.100 | 0.0 | 0.0 | 0.00 | |
| P5910 2 | 807 | 10.03 | 1.259 | -1.273 | 116.500 | 87.700 | 104.300 | 101.900 | 0.0 | 0.0 | 0.00 | |
| P591050 | 807 | 10.83 | 2.981 | -2.084 | 121.600 | 91.500 | 110.500 | 108.200 | -12027.0 | 29900.0 | 1.25 | F111D |
| P61 841 | 800 | 8.68 | 2.826 | -2.838 | 122.700 | 96.400 | 111.800 | 110.300 | 0.0 | 16000.0 | 1.20 | F4 |
| P61 930 | 800 | 9.50 | 1.005 | -1.200 | 113.800 | 89.000 | 103.600 | 101.600 | 0.0 | 0.0 | 0.00 | |
| P61 748 | 803 | 7.80 | 2.271 | -2.055 | 121.000 | 95.300 | 109.200 | 109.400 | 7723.0 | 29200.0 | 1.24 | F4 |
| P61 758 | 803 | 7.97 | 2.868 | -2.673 | 123.100 | 95.700 | 111.700 | 110.300 | 10087.0 | 29300.0 | 1.29 | F4 |
| P61 8 8 | 803 | 8.13 | 0.294 | -0.357 | 107.100 | 71.900 | 88.900 | 84.400 | 0.0 | 13000.0 | 1.10 | F4 |
| P611012 | 803 | 10.20 | 0.237 | -0.233 | 103.600 | 72.500 | 84.600 | 82.100 | -7524.0 | 13000.0 | 1.10 | T38 |
| P611030 | 803 | 10.50 | 3.352 | -3.519 | 125.900 | 95.800 | 112.600 | 111.800 | 0.0 | 0.0 | 0.00 | |
| P611043 | 803 | 10.72 | 3.763 | -2.281 | 123.900 | 91.600 | 110.400 | 108.000 | 11090.0 | 44400.0 | 1.37 | F4 |
| P611238 | 803 | 12.63 | 0.479 | -0.327 | 107.600 | 78.000 | 97.200 | 90.800 | 10053.0 | 21200.0 | 1.05 | T38 |
| P61 719 | 804 | 7.32 | 0.507 | -0.437 | 106.300 | 74.500 | 96.300 | 90.100 | 5739.0 | 41400.0 | 1.17 | AT38 |
| P61 730 | 804 | 7.50 | 0.451 | -0.381 | 107.700 | 72.500 | 94.600 | 86.600 | 7369.0 | 32300.0 | 1.12 | AT38 |
| P61 736 | 804 | 7.60 | 0.770 | -0.752 | 110.900 | 80.000 | 100.700 | 95.900 | 13415.0 | 16700.0 | 1.15 | AT38 |
| P61 756 | 804 | 7.93 | 1.409 | -1.031 | 115.700 | 86.100 | 104.500 | 100.900 | 15039.0 | 41400.0 | 1.38 | F15 |
| P61 756 | 804 | 7.93 | 0.329 | -0.284 | 107.400 | 73.100 | 89.400 | 83.700 | 15039.0 | 41400.0 | 1.38 | F15 |
| P61 8 4 | 804 | 8.07 | 1.604 | -1.315 | 118.500 | 81.700 | 104.300 | 97.600 | 9264.0 | 29700.0 | 1.20 | F15 |
| P61 810 | 804 | 8.17 | 3.493 | -3.072 | 124.300 | 97.300 | 113.600 | 112.700 | 10015.0 | 12500.0 | 1.10 | F15 |
| P61 914 | 804 | 9.23 | 0.742 | -0.893 | 112.000 | 75.400 | 99.400 | 90.900 | 4333.0 | 30300.0 | 1.20 | AT38 |
| P61 923 | 804 | 9.38 | 0.787 | -0.646 | 110.400 | 79.100 | 100.500 | 93.800 | 3933.0 | 14000.0 | 1.10 | AT38 |
| P61 952 | 804 | 9.87 | 0.366 | -0.338 | 105.200 | 71.100 | 91.300 | 84.700 | 0.0 | 0.0 | 0.00 | |
| P611046 | 804 | 10.77 | 3.516 | -3.354 | 124.400 | 97.000 | 114.100 | 112.900 | 10624.0 | 15200.0 | 1.13 | F15 |
| P6111 2 | 804 | 11.03 | 2.741 | -1.435 | 117.900 | 90.800 | 108.800 | 105.900 | 3483.0 | 31000.0 | 1.28 | F15 |
| P611111 | 804 | 11.18 | 0.935 | -0.902 | 114.100 | 77.400 | 99.900 | 93.000 | 23439.0 | 45000.0 | 1.42 | F15 |
| P611134 | 804 | 11.57 | 2.152 | -1.001 | 115.200 | 93.800 | 107.000 | 107.500 | 7241.0 | 45500.0 | 1.40 | F15 |
| P61 820 | 805 | 8.33 | 0.524 | -0.550 | 111.900 | 76.000 | 97.300 | 89.600 | 0.0 | 0.0 | 0.00 | |
| P61 9 6 | 805 | 9.10 | 1.325 | -1.334 | 116.300 | 85.400 | 104.900 | 100.600 | -4225.0 | 29500.0 | 1.25 | F16 |
| P61 926 | 805 | 9.43 | 1.381 | -1.003 | 116.600 | 86.500 | 104.100 | 101.400 | 10562.0 | 64800.0 | 2.50 | SR71 |
| P61 933 | 805 | 9.55 | 1.435 | -1.038 | 114.400 | 83.800 | 104.300 | 99.800 | 3730.0 | 46700.0 | 1.43 | F16 |
| P61 944 | 805 | 9.73 | 2.422 | -1.759 | 118.900 | 90.600 | 109.000 | 106.900 | 1245.0 | 19300.0 | 1.17 | F16 |
| P611055 | 805 | 10.92 | 0.902 | -0.693 | 114.300 | 81.100 | 100.100 | 95.600 | 0.0 | 73000.0 | 3.00 | SR71 |
| P6111 8 | 805 | 11.13 | 2.751 | -1.860 | 121.000 | 92.800 | 110.800 | 108.300 | 3350.0 | 32400.0 | 1.23 | SR71 |
| P611144 | 805 | 11.73 | 2.039 | -2.156 | 120.500 | 87.400 | 107.500 | 103.200 | 4217.0 | 14400.0 | 1.13 | F16 |
| P611154 | 805 | 11.90 | 2.657 | -3.190 | 123.000 | 95.500 | 111.100 | 110.500 | 9600.0 | 13800.0 | 1.12 | F16 |
| P6112 4 | 805 | 12.07 | 1.456 | -1.327 | 116.300 | 88.200 | 105.700 | 102.900 | 8329.0 | 30000.0 | 1.25 | F16 |
| P611235 | 805 | 12.58 | 1.468 | -1.144 | 117.300 | 84.100 | 105.500 | 100.100 | 16331.0 | 52000.0 | 1.70 | SR71 |
| P61 744 | 806 | 7.73 | 1.630 | -1.701 | 118.400 | 90.500 | 106.800 | 104.500 | 7003.0 | 30000.0 | 1.30 | F18 |
| P61 757 | 806 | 7.95 | 1.062 | -1.069 | 115.100 | 83.900 | 102.500 | 98.800 | 3870.0 | 44700.0 | 1.40 | F18 |
| P61 810 | 806 | 8.17 | 2.236 | -2.431 | 122.100 | 93.100 | 108.900 | 106.700 | -1994.0 | 14200.0 | 1.10 | F18 |
| P611022 | 806 | 10.37 | 2.603 | -1.959 | 119.800 | 94.600 | 110.800 | 109.700 | 6238.0 | 30000.0 | 1.30 | F18 |
| P611030 | 806 | 10.50 | 0.606 | -0.583 | 110.400 | 72.700 | 94.500 | 86.300 | 0.0 | 0.0 | 0.00 | |
| P611034 | 806 | 10.57 | 0.806 | -0.817 | 112.900 | 83.300 | 99.600 | 96.900 | 7319.0 | 45000.0 | 1.43 | F18 |
| P611043 | 806 | 10.72 | 5.128 | -67.283 | 130.500 | 127.400 | 128.300 | 136.900 | 16313.0 | 16500.0 | 1.27 | F14 |
| P611048 | 806 | 10.80 | 4.191 | -3.984 | 126.000 | 104.500 | 115.700 | 117.900 | 0.0 | 13000.0 | 1.10 | F18 |
| P611148 | 806 | 11.80 | 5.677 | -4.343 | 126.600 | 103.100 | 116.800 | 118.200 | 6178.0 | 14000.0 | 1.20 | F111D |
| P611152 | 806 | 11.87 | 0.291 | -0.244 | 104.800 | 76.000 | 89.500 | 86.600 | 0.0 | 0.0 | 0.00 | |
| P6112 4 | 806 | 12.07 | 2.074 | -1.313 | 118.300 | 86.100 | 107.100 | 102.100 | 6392.0 | 45000.0 | 1.40 | F111D |
| P61 817 | 807 | 8.28 | 2.032 | -1.748 | 119.300 | 91.400 | 108.300 | 106.400 | 0.0 | 0.0 | 0.00 | |

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|---|---|---|---|---|---|---|---|---|---|---|---|
| P6110 2 807 | 10.03 | 1.473 | -1.416 | 119.200 | 87.000 | 106.200 | 101.200 | 0.0 | 0.0 | 0.00 | |
| P611050 807 | 10.83 | 2.692 | -1.785 | 119.800 | 94.500 | 108.500 | 109.300 | -1467.0 | 29900.0 | 1.25 | F111D |
| P611115 807 | 11.25 | 1.726 | -1.712 | 121.000 | 85.400 | 105.700 | 100.700 | 0.0 | 0.0 | 0.00 | |
| P62 841 800 | 8.68 | 2.300 | -2.203 | 120.700 | 96.100 | 110.200 | 110.300 | 0.0 | 16000.0 | 1.20 | F4 |
| P62 748 803 | 7.80 | 1.961 | -1.748 | 119.400 | 93.200 | 108.600 | 107.600 | 13003.0 | 29200.0 | 1.24 | F4 |
| P62 758 803 | 7.97 | 2.847 | -2.574 | 122.800 | 97.200 | 111.700 | 111.400 | 15367.0 | 29300.0 | 1.29 | F4 |
| P62 8 8 803 | 8.13 | 0.280 | -0.322 | 106.000 | 70.800 | 90.000 | 81.900 | 0.0 | 13000.0 | 1.10 | F4 |
| P621012 803 | 10.20 | 0.251 | -0.251 | 104.900 | 72.900 | 86.600 | 82.900 | -2244.0 | 13000.0 | 1.10 | T38 |
| P621030 803 | 10.50 | 2.744 | -2.614 | 124.100 | 93.500 | 110.200 | 109.100 | 0.0 | 0.0 | 0.00 | |
| P621238 803 | 12.63 | 0.775 | -0.759 | 113.000 | 76.300 | 100.200 | 91.700 | 15333.0 | 21200.0 | 1.05 | T38 |
| P62 719 804 | 7.32 | 0.453 | -0.432 | 106.100 | 69.800 | 94.500 | 85.200 | 11019.0 | 41400.0 | 1.17 | AT38 |
| P62 730 804 | 7.50 | 0.388 | -0.357 | 105.400 | 70.600 | 91.900 | 84.000 | 12649.0 | 32300.0 | 1.12 | AT38 |
| P62 736 804 | 7.60 | 0.949 | -0.747 | 112.300 | 75.900 | 102.000 | 93.000 | 18695.0 | 16700.0 | 1.15 | AT38 |
| P62 756 804 | 7.93 | 1.536 | -1.059 | 115.800 | 88.700 | 104.700 | 103.000 | 20319.0 | 41400.0 | 1.38 | F15 |
| P62 756 804 | 7.93 | 0.773 | -0.444 | 110.600 | 76.200 | 97.400 | 91.000 | 20319.0 | 41400.0 | 1.38 | F15 |
| P62 8 4 804 | 8.07 | 2.229 | -1.524 | 118.600 | 91.900 | 108.800 | 106.900 | 14544.0 | 29700.0 | 1.20 | F15 |
| P62 810 804 | 8.17 | 3.561 | -3.195 | 125.000 | 97.300 | 113.200 | 112.700 | 15295.0 | 12500.0 | 1.10 | F15 |
| P62 914 804 | 9.23 | 1.003 | -0.848 | 111.800 | 87.600 | 103.200 | 101.500 | 9613.0 | 30300.0 | 1.20 | AT38 |
| P62 923 804 | 9.38 | 0.489 | -0.442 | 106.800 | 73.500 | 95.700 | 88.000 | 9213.0 | 14000.0 | 1.10 | AT38 |
| P62 952 804 | 9.87 | 0.554 | -0.406 | 106.300 | 73.500 | 96.000 | 89.700 | 0.0 | 0.0 | 0.00 | |
| P621046 804 | 10.77 | 4.517 | -3.138 | 123.900 | 101.900 | 114.300 | 116.800 | 15904.0 | 15200.0 | 1.13 | F15 |
| P6211 2 804 | 11.03 | 2.084 | -1.463 | 118.100 | 86.200 | 107.900 | 103.400 | 8763.0 | 31000.0 | 1.28 | F15 |
| P621111 804 | 11.18 | 0.930 | -0.869 | 113.800 | 80.900 | 100.100 | 95.000 | 28719.0 | 45000.0 | 1.42 | F15 |
| P621134 804 | 11.57 | 1.135 | -0.907 | 113.900 | 80.600 | 102.100 | 95.900 | 12521.0 | 45500.0 | 1.40 | F15 |
| P62 820 805 | 8.33 | 0.604 | -0.512 | 111.500 | 76.200 | 98.900 | 91.900 | 0.0 | 0.0 | 0.00 | |
| P62 9 6 805 | 9.10 | 1.137 | -0.963 | 114.400 | 84.400 | 103.600 | 100.100 | 1055.0 | 29500.0 | 1.25 | F16 |
| P62 9 6 805 | 9.10 | 0.721 | -0.482 | 109.400 | 77.200 | 98.800 | 91.800 | 1055.0 | 29500.0 | 1.25 | F16 |
| P62 926 805 | 9.43 | 1.088 | -0.916 | 116.000 | 83.200 | 101.800 | 96.900 | 15842.0 | 64800.0 | 2.50 | SR71 |
| P62 933 805 | 9.55 | 0.991 | -0.980 | 114.400 | 83.700 | 101.500 | 97.600 | 9010.0 | 46700.0 | 1.43 | F16 |
| P62 944 805 | 9.73 | 4.693 | -2.325 | 122.600 | 95.800 | 112.900 | 111.000 | 6525.0 | 19300.0 | 1.17 | F16 |
| P621055 805 | 10.92 | 0.740 | -0.695 | 114.300 | 75.800 | 96.900 | 90.000 | 0.0 | 73000.0 | 3.00 | SR71 |
| P6211 8 805 | 11.13 | 4.160 | -2.267 | 123.800 | 100.700 | 115.100 | 115.600 | 8630.0 | 32400.0 | 1.23 | SR71 |
| P621144 805 | 11.73 | 5.191 | -1.738 | 120.300 | 97.400 | 114.100 | 113.600 | 9497.0 | 14400.0 | 1.13 | F16 |
| P621154 805 | 11.90 | 1.823 | -1.851 | 120.300 | 89.100 | 107.500 | 104.400 | 14880.0 | 13800.0 | 1.12 | F16 |
| P6212 4 805 | 12.07 | 1.943 | -1.656 | 118.000 | 86.500 | 107.400 | 102.800 | 13609.0 | 30000.0 | 1.25 | F16 |
| P621235 805 | 12.58 | 1.318 | -1.092 | 117.000 | 81.200 | 104.000 | 97.300 | 21611.0 | 52000.0 | 1.70 | SR71 |
| P62 744 806 | 7.73 | 1.635 | -1.628 | 118.200 | 91.600 | 107.000 | 105.500 | 12283.0 | 30000.0 | 1.30 | F18 |
| P62 757 806 | 7.95 | 1.088 | -1.008 | 114.600 | 85.900 | 102.900 | 100.200 | 9150.0 | 44700.0 | 1.40 | F18 |
| P62 810 806 | 8.17 | 1.917 | -1.938 | 120.800 | 87.600 | 107.100 | 102.300 | 3286.0 | 14200.0 | 1.10 | F18 |
| P621022 806 | 10.37 | 2.610 | -1.574 | 118.400 | 92.000 | 109.800 | 107.300 | 11518.0 | 30000.0 | 1.30 | F18 |
| P621030 806 | 10.50 | 0.510 | -0.500 | 108.900 | 74.100 | 94.000 | 88.100 | 0.0 | 0.0 | 0.00 | |
| P621034 806 | 10.57 | 0.947 | -0.820 | 113.200 | 86.600 | 101.600 | 100.500 | 12599.0 | 45000.0 | 1.43 | F18 |
| P621043 806 | 10.72 | 6.319 | -4.310 | 126.700 | 103.900 | 118.600 | 119.400 | 21593.0 | 16500.0 | 1.27 | F14 |
| P621048 806 | 10.80 | 2.941 | -3.211 | 124.500 | 92.600 | 111.700 | 108.900 | 0.0 | 13000.0 | 1.10 | F18 |
| P621148 806 | 11.80 | 3.629 | -4.195 | 126.900 | 94.200 | 112.300 | 109.900 | 11458.0 | 14000.0 | 1.20 | F111D |
| P621152 806 | 11.87 | 0.216 | -0.209 | 102.700 | 73.900 | 88.500 | 85.100 | 0.0 | 0.0 | 0.00 | |
| P6212 4 806 | 12.07 | 1.973 | -1.327 | 118.900 | 85.600 | 106.300 | 102.000 | 11672.0 | 45000.0 | 1.40 | F111D |
| P62 816 807 | 8.27 | 3.197 | -1.846 | 120.200 | 99.000 | 112.100 | 112.800 | 0.0 | 0.0 | 0.00 | |
| P6210 3 807 | 10.05 | 1.264 | -1.174 | 119.600 | 84.100 | 105.500 | 99.800 | 0.0 | 0.0 | 0.00 | |
| P621050 807 | 10.83 | 2.596 | -1.957 | 121.700 | 95.700 | 110.300 | 110.700 | 3813.0 | 29900.0 | 1.25 | F111D |
| P621115 807 | 11.25 | 2.476 | -1.369 | 119.800 | 87.700 | 109.400 | 104.000 | 0.0 | 0.0 | 0.00 | |
| P64 841 800 | 8.68 | 1.640 | -1.762 | 119.400 | 83.200 | 107.100 | 100.600 | 0.0 | 16000.0 | 1.20 | F4 |
| P64 931 800 | 9.52 | 0.925 | -0.980 | 113.000 | 83.800 | 102.000 | 98.400 | 0.0 | 0.0 | 0.00 | |
| P64 748 803 | 7.80 | 1.029 | -1.019 | 117.200 | 83.500 | 103.300 | 97.900 | 23563.0 | 29200.0 | 1.24 | F4 |
| P64 758 803 | 7.97 | 1.445 | -1.306 | 117.300 | 84.600 | 105.100 | 100.400 | 25927.0 | 29300.0 | 1.29 | F4 |
| P641030 803 | 10.50 | 1.184 | -1.132 | 117.600 | 79.500 | 99.700 | 93.200 | 0.0 | 0.0 | 0.00 | |
| P64 719 804 | 7.32 | 0.345 | -0.322 | 103.400 | 73.800 | 92.800 | 88.300 | 21579.0 | 41400.0 | 1.17 | AT38 |
| P64 730 804 | 7.50 | 0.383 | -0.315 | 103.400 | 71.400 | 94.200 | 87.400 | 23209.0 | 32300.0 | 1.12 | AT38 |
| P64 736 804 | 7.60 | 0.688 | -0.543 | 108.400 | 75.700 | 99.200 | 92.700 | 29255.0 | 16700.0 | 1.15 | AT38 |
| P64 756 804 | 7.93 | 1.374 | -1.034 | 115.300 | 89.000 | 104.500 | 102.700 | 30879.0 | 41400.0 | 1.38 | F15 |

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| P64 8 4 804 | 8.07 | 1.297 | -1.092 | 115.800 | 86.900 | 104.100 | 101.300 | 25104.0 | 29700.0 | 1.20 | F15 |
| P64 810 804 | 8.17 | 2.535 | -2.086 | 122.100 | 87.500 | 108.900 | 103.000 | 25855.0 | 12500.0 | 1.10 | F15 |
| P64 914 804 | 9.23 | 0.423 | -0.310 | 103.900 | 73.700 | 93.600 | 86.900 | 20173.0 | 30300.0 | 1.20 | AT38 |
| P64 923 804 | 9.38 | 0.190 | -0.176 | 99.500 | 69.400 | 86.500 | 81.400 | 19773.0 | 14000.0 | 1.10 | AT38 |
| P64 952 804 | 9.87 | 0.319 | -0.334 | 104.500 | 69.500 | 91.500 | 83.800 | 0.0 | 0.0 | 0.00 | |
| P641046 804 | 10.77 | 3.096 | -2.055 | 120.600 | 91.500 | 111.000 | 108.800 | 26464.0 | 15200.0 | 1.13 | F15 |
| P6411 2 804 | 11.03 | 1.360 | -1.076 | 115.400 | 86.800 | 104.400 | 101.900 | 19323.0 | 31000.0 | 1.28 | F15 |
| P641111 804 | 11.18 | 0.879 | -0.820 | 113.200 | 80.000 | 100.000 | 94.800 | 39279.0 | 45000.0 | 1.42 | F15 |
| P641134 804 | 11.57 | 0.890 | -0.775 | 112.900 | 76.300 | 99.300 | 91.400 | 23081.0 | 45500.0 | 1.40 | F15 |
| P64 9 6 805 | 9.10 | 0.672 | -0.632 | 112.000 | 85.500 | 97.500 | 96.000 | 11615.0 | 29500.0 | 1.25 | F16 |
| P64 9 7 805 | 9.12 | 0.348 | -0.171 | 104.800 | 73.900 | 90.500 | 83.600 | 0.0 | 0.0 | 0.00 | |
| P64 926 805 | 9.43 | 0.963 | -0.883 | 115.400 | 81.700 | 100.800 | 96.000 | 26402.0 | 64800.0 | 2.50 | SR71 |
| P64 933 805 | 9.55 | 1.275 | -0.817 | 113.200 | 83.600 | 103.000 | 99.100 | 19570.0 | 46700.0 | 1.43 | F16 |
| P64 944 805 | 9.73 | 1.640 | -1.231 | 116.300 | 90.400 | 105.700 | 103.300 | 17085.0 | 19300.0 | 1.17 | F16 |
| P641055 805 | 10.92 | 0.886 | -0.695 | 114.200 | 79.500 | 99.400 | 94.800 | 0.0 | 73000.0 | 3.00 | SR71 |
| P6411 8 805 | 11.13 | 2.751 | -1.553 | 120.200 | 89.500 | 110.300 | 106.800 | 19190.0 | 32400.0 | 1.23 | SR71 |
| P641144 805 | 11.73 | 1.304 | -1.271 | 117.300 | 81.400 | 104.100 | 98.500 | 20057.0 | 14400.0 | 1.13 | F16 |
| P641154 805 | 11.90 | 2.060 | -1.438 | 119.300 | 85.600 | 109.200 | 102.900 | 25440.0 | 13800.0 | 1.12 | F16 |
| P6412 4 805 | 12.07 | 1.226 | -1.050 | 114.300 | 86.400 | 103.400 | 100.200 | 24169.0 | 30000.0 | 1.25 | F16 |
| P641235 805 | 12.58 | 1.036 | -0.987 | 115.700 | 81.900 | 102.200 | 97.500 | 32171.0 | 52000.0 | 1.70 | SR71 |
| P64 744 806 | 7.73 | 1.355 | -1.228 | 115.800 | 90.400 | 105.300 | 103.700 | 22843.0 | 30000.0 | 1.30 | F18 |
| P64 757 806 | 7.95 | 0.972 | -0.871 | 113.700 | 81.200 | 101.800 | 96.800 | 19710.0 | 44700.0 | 1.40 | F18 |
| P64 810 806 | 8.17 | 1.048 | -0.742 | 114.500 | 77.700 | 99.800 | 93.200 | 13846.0 | 14200.0 | 1.10 | F18 |
| P641022 806 | 10.37 | 1.442 | -1.024 | 115.200 | 85.300 | 103.800 | 100.900 | 22078.0 | 30000.0 | 1.30 | F18 |
| P641030 806 | 10.50 | 0.918 | -0.590 | 114.200 | 78.900 | 100.100 | 94.200 | 0.0 | 0.0 | 0.00 | |
| P641034 806 | 10.57 | 0.916 | -0.794 | 112.700 | 83.000 | 99.700 | 96.900 | 23159.0 | 45000.0 | 1.43 | F18 |
| P641043 806 | 10.72 | 3.888 | -2.762 | 124.000 | 91.900 | 112.400 | 108.700 | 32153.0 | 16500.0 | 1.27 | F14 |
| P641048 806 | 10.80 | 1.658 | -2.213 | 121.200 | 84.300 | 106.500 | 100.800 | 0.0 | 13000.0 | 1.10 | F18 |
| P641148 806 | 11.80 | 2.859 | -2.661 | 122.900 | 93.000 | 111.500 | 108.900 | 22018.0 | 14000.0 | 1.20 | F111D |
| P641152 806 | 11.87 | 0.221 | -0.204 | 102.600 | 72.900 | 85.900 | 82.800 | 0.0 | 0.0 | 0.00 | |
| P6412 4 806 | 12.07 | 0.982 | -0.723 | 113.600 | 81.700 | 100.800 | 96.700 | 22232.0 | 45000.0 | 1.40 | F111D |
| P64 816 807 | 8.27 | 2.387 | -1.806 | 119.900 | 89.500 | 109.100 | 105.300 | 0.0 | 0.0 | 0.00 | |
| P64 816 807 | 8.27 | 0.202 | -0.146 | 101.700 | 78.100 | 86.000 | 87.000 | 0.0 | 0.0 | 0.00 | |
| P641050 807 | 10.83 | 2.011 | -1.506 | 119.600 | 92.000 | 106.900 | 104.900 | 14373.0 | 29900.0 | 1.25 | F111D |
| P641115 807 | 11.25 | 2.997 | -1.475 | 120.400 | 95.400 | 111.000 | 110.100 | 0.0 | 0.0 | 0.00 | |
| P66 758 803 | 7.97 | 0.942 | -0.709 | 114.500 | 79.800 | 101.400 | 94.800 | 36487.0 | 29300.0 | 1.29 | F4 |
| P66 8 8 803 | 8.13 | 0.345 | -0.291 | 110.000 | 78.900 | 92.600 | 89.200 | 0.0 | 13000.0 | 1.10 | F4 |
| P661043 803 | 10.72 | 0.167 | -0.181 | 106.300 | 78.500 | 85.900 | 87.800 | 37490.0 | 44400.0 | 1.37 | F4 |
| P66 719 804 | 7.32 | 0.312 | -0.261 | 102.500 | 69.300 | 91.800 | 84.400 | 32139.0 | 41400.0 | 1.17 | AT38 |
| P66 730 804 | 7.50 | 0.272 | -0.233 | 103.000 | 73.400 | 91.000 | 84.600 | 33769.0 | 32300.0 | 1.12 | AT38 |
| P66 736 804 | 7.60 | 0.439 | -0.331 | 104.700 | 72.900 | 94.500 | 87.300 | 39815.0 | 16700.0 | 1.15 | AT38 |
| P66 756 804 | 7.93 | 0.853 | -0.796 | 113.600 | 80.800 | 99.500 | 95.500 | 41439.0 | 41400.0 | 1.38 | F15 |
| P66 8 4 804 | 8.07 | 1.788 | -1.179 | 116.300 | 91.200 | 106.600 | 105.600 | 35664.0 | 29700.0 | 1.20 | F15 |
| P66 810 804 | 8.17 | 1.017 | -1.001 | 116.000 | 79.500 | 98.700 | 92.600 | 36415.0 | 12500.0 | 1.10 | F15 |
| P66 914 804 | 9.23 | 0.423 | -0.420 | 106.700 | 76.400 | 94.700 | 89.700 | 30733.0 | 30300.0 | 1.20 | AT38 |
| P66 923 804 | 9.38 | 0.418 | -0.303 | 106.600 | 78.200 | 92.500 | 88.500 | 30333.0 | 14000.0 | 1.10 | AT38 |
| P66 953 804 | 9.88 | 0.230 | -0.211 | 105.700 | 78.500 | 88.300 | 87.700 | 0.0 | 0.0 | 0.00 | |
| P661046 804 | 10.77 | 2.161 | -1.950 | 121.300 | 88.500 | 108.300 | 105.400 | 37024.0 | 15200.0 | 1.13 | F15 |
| P6611 2 804 | 11.03 | 1.203 | -1.001 | 116.100 | 81.000 | 101.700 | 96.100 | 29883.0 | 31000.0 | 1.28 | F15 |
| P661111 804 | 11.18 | 1.024 | -0.796 | 114.100 | 81.900 | 99.300 | 94.600 | 49839.0 | 45000.0 | 1.42 | F15 |
| P66 820 805 | 8.33 | 0.716 | -0.766 | 113.800 | 74.000 | 98.900 | 89.100 | 0.0 | 0.0 | 0.00 | |
| P66 9 6 805 | 9.10 | 0.911 | -0.742 | 112.100 | 80.100 | 101.000 | 94.000 | 22175.0 | 29500.0 | 1.25 | F16 |
| P66 926 805 | 9.43 | 0.921 | -0.796 | 115.000 | 83.900 | 100.600 | 97.900 | 36962.0 | 64800.0 | 2.50 | SR71 |
| P66 934 805 | 9.57 | 0.921 | -0.618 | 111.600 | 83.200 | 100.600 | 97.900 | 0.0 | 0.0 | 0.00 | |
| P66 945 805 | 9.75 | 1.048 | -0.749 | 112.200 | 82.400 | 102.000 | 98.100 | 0.0 | 0.0 | 0.00 | |
| P661055 805 | 10.92 | 0.853 | -0.644 | 114.300 | 83.300 | 99.500 | 96.300 | 0.0 | 73000.0 | 3.00 | SR71 |
| P6611 8 805 | 11.13 | 1.917 | -1.186 | 117.900 | 84.200 | 107.000 | 101.000 | 29750.0 | 32400.0 | 1.23 | SR71 |
| P661144 805 | 11.73 | 0.444 | -0.268 | 109.900 | 78.300 | 94.800 | 89.400 | 30617.0 | 14400.0 | 1.13 | F16 |
| P6612 4 805 | 12.07 | 2.145 | -1.254 | 118.000 | 85.900 | 105.800 | 101.400 | 34729.0 | 30000.0 | 1.25 | F16 |
| P661235 805 | 12.58 | 1.358 | -1.024 | 116.900 | 89.400 | 105.000 | 103.900 | 42731.0 | 52000.0 | 1.70 | SR71 |

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| P661416 | 805 | 14.27 | 0.963 | -0.829 | 115.100 | 84.500 | 100.800 | 98.700 | 0.0 | 0.0 | 0.00 | |
| P66 744 | 806 | 7.73 | 1.210 | -1.059 | 114.600 | 84.300 | 104.100 | 99.600 | 33403.0 | 30000.0 | 1.30 | F18 |
| P66 757 | 806 | 7.95 | 0.930 | -0.681 | 111.700 | 82.800 | 100.800 | 97.400 | 30270.0 | 44700.0 | 1.40 | F18 |
| P66 810 | 806 | 8.17 | 0.864 | -0.402 | 111.600 | 80.200 | 100.100 | 94.600 | 24406.0 | 14200.0 | 1.10 | F18 |
| P661022 | 806 | 10.37 | 1.341 | -1.045 | 115.800 | 85.700 | 103.200 | 100.000 | 32638.0 | 30000.0 | 1.30 | F18 |
| P661034 | 806 | 10.57 | 0.937 | -0.792 | 114.200 | 80.000 | 100.200 | 93.800 | 33719.0 | 45000.0 | 1.43 | F18 |
| P661043 | 806 | 10.72 | 2.560 | -1.785 | 119.400 | 94.200 | 110.500 | 109.600 | 42713.0 | 16500.0 | 1.27 | F14 |
| P661148 | 806 | 11.80 | 1.402 | -0.982 | 117.600 | 80.900 | 103.700 | 96.800 | 32578.0 | 14000.0 | 1.20 | F111D |
| P6612 4 | 806 | 12.07 | 1.240 | -0.813 | 114.800 | 82.000 | 101.300 | 96.200 | 32792.0 | 45000.0 | 1.40 | F111D |
| P6612 4 | 806 | 12.07 | 1.045 | -0.949 | 117.600 | 79.500 | 97.600 | 92.400 | 32792.0 | 45000.0 | 1.40 | F111D |
| P66 816 | 807 | 8.27 | 2.401 | -1.520 | 120.500 | 88.200 | 108.500 | 103.900 | 0.0 | 0.0 | 0.00 | |
| P661050 | 807 | 10.83 | 1.548 | -1.224 | 118.000 | 86.100 | 104.800 | 100.800 | 24933.0 | 29900.0 | 1.25 | F111D |
| P661115 | 807 | 11.25 | 1.527 | -1.116 | 118.400 | 85.800 | 105.700 | 101.400 | 0.0 | 0.0 | 0.00 | |
| P661119 | 807 | 11.32 | 0.174 | -0.052 | 104.000 | 78.400 | 83.000 | 86.800 | 0.0 | 0.0 | 0.00 | |

## Augmented BOOMFILE Database (Rise Times)

| FILE NAME | Time (Hrs) | Pmax (PSF) | Pmin (PSF) | t50 (ms) | t75 (ms) | t90 (ms) | t100 (ms) | Sideline (Feet) | Altitude (Feet) | Mach # | Aircraft |
|---|---|---|---|---|---|---|---|---|---|---|---|
| P00 841 800 | 8.68 | 3.491 | -3.235 | 0.500 | 0.625 | 1.375 | 2.125 | 0.0 | 16000.0 | 1.20 | F4 |
| P00 748 803 | 7.80 | 2.682 | -2.008 | 0.625 | 1.125 | 1.875 | 4.125 | 1387.0 | 29200.0 | 1.24 | F4 |
| P00 758 803 | 7.97 | 2.929 | -2.722 | 0.250 | 0.375 | 1.125 | 4.875 | 3751.0 | 29300.0 | 1.29 | F4 |
| P001029 803 | 10.48 | 13.335 | -3.232 | 6.875 | 7.000 | 6.750 | 7.625 | -3358.0 | 14400.0 | 1.10 | F4 |
| P001043 803 | 10.72 | 1.764 | -1.536 | 1.250 | 1.750 | 11.750 | 13.000 | 4754.0 | 44400.0 | 1.37 | F4 |
| P001238 803 | 12.63 | 0.726 | -0.597 | 9.250 | 15.875 | 17.750 | 21.625 | 3717.0 | 21200.0 | 1.05 | T38 |
| P00 719 804 | 7.32 | 0.493 | -0.453 | 2.500 | 3.750 | 5.500 | 7.750 | -597.0 | 41400.0 | 1.17 | AT38 |
| P00 730 804 | 7.50 | 0.529 | -0.672 | 2.125 | 4.875 | 6.750 | 11.500 | 1033.0 | 32300.0 | 1.12 | AT38 |
| P00 736 804 | 7.60 | 0.613 | -0.646 | 2.000 | 4.250 | 8.250 | 11.000 | 7079.0 | 16700.0 | 1.15 | AT38 |
| P00 756 804 | 7.93 | 1.489 | -1.095 | 0.500 | 1.125 | 1.375 | 2.250 | 8703.0 | 41400.0 | 1.38 | F15 |
| P00 756 804 | 7.93 | 0.207 | -0.218 | 3.875 | 9.625 | 13.750 | 24.000 | 8703.0 | 41400.0 | 1.38 | F15 |
| P00 8 4 804 | 8.07 | 1.905 | -1.496 | 0.875 | 1.125 | 1.125 | 5.250 | 2928.0 | 29700.0 | 1.20 | F15 |
| P00 810 804 | 8.17 | 3.507 | -3.260 | 0.250 | 0.750 | 1.250 | 1.375 | 3679.0 | 12500.0 | 1.10 | F15 |
| P00 914 804 | 9.23 | 0.747 | -0.817 | 0.500 | 1.750 | 3.750 | 6.250 | -2003.0 | 30300.0 | 1.20 | AT38 |
| P00 923 804 | 9.38 | 1.160 | -0.597 | 5.875 | 8.000 | 8.125 | 9.375 | -2403.0 | 14000.0 | 1.10 | AT38 |
| P00 952 804 | 9.87 | 0.482 | -0.399 | 0.875 | 2.625 | 7.125 | 10.250 | 0.0 | 0.0 | 0.00 | |
| P001046 804 | 10.77 | 5.851 | -3.044 | 0.250 | 0.375 | 0.750 | 0.875 | 4288.0 | 15200.0 | 1.13 | F15 |
| P0011 2 804 | 11.03 | 2.168 | -1.571 | 1.875 | 2.500 | 2.250 | 3.125 | -2853.0 | 31000.0 | 1.28 | F15 |
| P001111 804 | 11.18 | 0.982 | -0.808 | 1.625 | 5.125 | 9.250 | 18.250 | 17103.0 | 45000.0 | 1.42 | F15 |
| P001134 804 | 11.57 | 1.924 | -0.972 | 1.375 | 1.625 | 1.625 | 2.500 | 905.0 | 45500.0 | 1.40 | F15 |
| P001139 804 | 11.65 | 1.593 | -1.071 | 7.125 | 19.500 | 19.375 | 23.625 | 0.0 | 0.0 | 0.00 | |
| P00 820 805 | 8.33 | 0.895 | -0.545 | 2.250 | 2.625 | 3.000 | 4.500 | 0.0 | 0.0 | 0.00 | |
| P00 820 805 | 8.33 | 0.754 | -0.648 | 2.500 | 3.500 | 4.250 | 5.750 | 0.0 | 0.0 | 0.00 | |
| P00 9 6 805 | 9.10 | 1.081 | -0.925 | 2.250 | 3.875 | 5.500 | 10.500 | -10561.0 | 29500.0 | 1.25 | F16 |
| P00 9 6 805 | 9.10 | 0.705 | -0.491 | 1.625 | 2.500 | 5.000 | 7.500 | -10561.0 | 29500.0 | 1.25 | F16 |
| P00 926 805 | 9.43 | 1.205 | -0.958 | 0.250 | 0.750 | 1.375 | 1.500 | 4226.0 | 64800.0 | 2.50 | SR71 |
| P00 933 805 | 9.55 | 0.879 | -0.871 | 1.000 | 1.750 | 6.000 | 8.000 | -2606.0 | 46700.0 | 1.43 | F16 |
| P00 944 805 | 9.73 | 2.809 | -2.448 | 0.625 | 1.250 | 5.000 | 6.625 | -5091.0 | 19300.0 | 1.17 | F16 |
| P001055 805 | 10.92 | 0.827 | -0.698 | 1.500 | 3.875 | 8.375 | 20.500 | 0.0 | 73000.0 | 3.00 | SR71 |
| P0011 8 805 | 11.13 | 2.262 | -1.773 | 0.375 | 3.250 | 3.625 | 4.000 | -2986.0 | 32400.0 | 1.23 | SR71 |
| P001144 805 | 11.73 | 5.628 | -3.328 | 3.625 | 4.000 | 4.125 | 5.000 | -2119.0 | 14400.0 | 1.13 | F16 |
| P001154 805 | 11.90 | 3.772 | -3.552 | 1.000 | 2.000 | 4.500 | 7.375 | 3264.0 | 13800.0 | 1.12 | F16 |
| P0012 4 805 | 12.07 | 1.900 | -1.388 | 0.500 | 1.125 | 2.375 | 2.875 | 1993.0 | 30000.0 | 1.25 | F16 |
| P001235 805 | 12.58 | 1.330 | -0.980 | 0.625 | 1.000 | 1.000 | 1.250 | 9995.0 | 52000.0 | 1.70 | SR71 |
| P00 744 806 | 7.73 | 1.943 | -1.757 | 0.250 | 0.625 | 1.250 | 2.125 | 667.0 | 30000.0 | 1.30 | F18 |
| P00 757 806 | 7.95 | 1.454 | -1.170 | 0.375 | 0.750 | 1.375 | 2.250 | -2466.0 | 44700.0 | 1.40 | F18 |
| P00 810 806 | 8.17 | 3.848 | -3.009 | 0.250 | 0.625 | 1.750 | 3.625 | -8330.0 | 14200.0 | 1.10 | F18 |
| P001022 806 | 10.37 | 1.849 | -1.849 | 0.250 | 0.375 | 0.625 | 1.250 | -98.0 | 30000.0 | 1.30 | F18 |
| P001030 806 | 10.50 | 0.719 | -0.674 | 1.125 | 2.625 | 3.750 | 6.125 | 0.0 | 0.0 | 0.00 | |
| P001034 806 | 10.57 | 1.221 | -0.963 | 0.375 | 0.500 | 0.875 | 3.375 | 983.0 | 45000.0 | 1.43 | F18 |
| P001043 806 | 10.72 | 4.024 | -3.589 | 0.375 | 0.750 | 1.500 | 5.125 | 9977.0 | 16500.0 | 1.27 | F14 |
| P001048 806 | 10.80 | 5.912 | -4.153 | 0.125 | 0.250 | 0.375 | 3.250 | 0.0 | 13000.0 | 1.10 | F18 |
| P001148 806 | 11.80 | 8.358 | -5.339 | 0.250 | 0.500 | 0.750 | 1.250 | -158.0 | 14000.0 | 1.20 | F111D |
| P0012 4 806 | 12.07 | 1.473 | -1.132 | 1.750 | 7.875 | 9.875 | 11.375 | 56.0 | 45000.0 | 1.40 | F111D |
| P00 817 807 | 8.28 | 1.971 | -1.442 | 2.500 | 3.875 | 5.375 | 6.125 | 0.0 | 0.0 | 0.00 | |
| P0010 2 807 | 10.03 | 0.982 | -1.158 | 0.500 | 1.000 | 3.125 | 5.250 | 0.0 | 0.0 | 0.00 | |
| P001050 807 | 10.83 | 2.300 | -1.964 | 0.250 | 0.375 | 0.500 | 0.625 | -7803.0 | 29900.0 | 1.25 | F111D |
| P01 841 800 | 8.68 | 3.216 | -3.230 | 0.125 | 0.625 | 0.750 | 2.250 | 0.0 | 16000.0 | 1.20 | F4 |
| P01 748 803 | 7.80 | 2.246 | -2.159 | 0.250 | 0.750 | 1.875 | 3.000 | 1287.0 | 29200.0 | 1.24 | F4 |
| [illegible] 803 | 7.97 | 3.143 | -2.657 | 0.250 | 0.750 | 1.000 | 2.625 | 3651.0 | 29300.0 | 1.29 | F4 |

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| P011029 | 803 | 10.48 | 4.862 | -3.873 | 0.750 | 1.250 | 1.500 | 1.750 | -3458.0 | 14400.0 | 1.10 | F4 |
| P011043 | 803 | 10.72 | 1.762 | -1.520 | 1.125 | 9.125 | 9.750 | 10.625 | 4654.0 | 44400.0 | 1.37 | F4 |
| P01 719 | 804 | 7.32 | 0.467 | -0.451 | 2.125 | 3.500 | 5.750 | 9.625 | -697.0 | 41400.0 | 1.17 | AT38 |
| P01 730 | 804 | 7.50 | 0.496 | -0.627 | 2.500 | 5.750 | 7.500 | 11.875 | 933.0 | 32300.0 | 1.12 | AT38 |
| P01 736 | 804 | 7.60 | 0.578 | -0.620 | 2.375 | 4.750 | 8.250 | 11.875 | 6979.0 | 16700.0 | 1.15 | AT38 |
| P01 756 | 804 | 7.93 | 1.369 | -1.024 | 0.500 | 0.875 | 1.375 | 2.625 | 8603.0 | 41400.0 | 1.38 | F15 |
| P01 756 | 804 | 7.93 | 0.193 | -0.218 | 3.875 | 9.250 | 12.375 | 14.875 | 8603.0 | 41400.0 | 1.38 | F15 |
| P01 8 4 | 804 | 8.07 | 1.889 | -1.423 | 1.125 | 1.750 | 1.875 | 3.125 | 2828.0 | 29700.0 | 1.20 | F15 |
| P01 810 | 804 | 8.17 | 3.277 | -3.169 | 0.250 | 0.875 | 1.875 | 7.125 | 3579.0 | 12500.0 | 1.10 | F15 |
| P01 914 | 804 | 9.23 | 0.695 | -0.799 | 0.500 | 1.750 | 3.500 | 6.250 | -2103.0 | 30300.0 | 1.20 | AT38 |
| P01 923 | 804 | 9.38 | 1.097 | -0.590 | 5.250 | 7.750 | 8.000 | 9.250 | -2503.0 | 14000.0 | 1.10 | AT38 |
| P01 952 | 804 | 9.87 | 0.472 | -0.411 | 2.000 | 5.125 | 9.750 | 12.250 | 0.0 | 0.0 | 0.00 | |
| P011046 | 804 | 10.77 | 8.055 | -3.056 | 0.250 | 0.375 | 0.750 | 0.875 | 4188.0 | 15200.0 | 1.13 | F15 |
| P0111 2 | 804 | 11.03 | 1.903 | -1.489 | 1.375 | 1.625 | 1.500 | 2.375 | -2953.0 | 31000.0 | 1.28 | F15 |
| P011111 | 804 | 11.18 | 1.017 | -0.834 | 1.750 | 3.000 | 3.375 | 4.125 | 17003.0 | 45000.0 | 1.42 | F15 |
| P011134 | 804 | 11.57 | 1.548 | -0.914 | 1.750 | 2.750 | 3.625 | 4.500 | 805.0 | 45500.0 | 1.40 | F15 |
| P011139 | 804 | 11.65 | 1.426 | -1.062 | 10.875 | 21.625 | 21.750 | 24.250 | 0.0 | 0.0 | 0.00 | |
| P01 820 | 805 | 8.33 | 0.810 | -0.531 | 2.000 | 2.500 | 2.750 | 3.875 | 0.0 | 0.0 | 0.00 | |
| P01 820 | 805 | 8.33 | 0.712 | -0.639 | 2.375 | 3.000 | 3.500 | 5.875 | 0.0 | 0.0 | 0.00 | |
| P01 9 6 | 805 | 9.10 | 0.998 | -0.874 | 2.750 | 6.000 | 8.500 | 13.375 | -10661.0 | 29500.0 | 1.25 | F16 |
| P01 9 6 | 805 | 9.10 | 0.674 | -0.503 | 1.125 | 2.125 | 6.375 | 7.750 | -10661.0 | 29500.0 | 1.25 | F16 |
| P01 926 | 805 | 9.43 | 1.212 | -0.975 | 0.250 | 1.250 | 2.875 | 4.375 | 4126.0 | 64800.0 | 2.50 | SR71 |
| P01 933 | 805 | 9.55 | 0.961 | -0.864 | 0.250 | 0.750 | 3.125 | 6.125 | -2706.0 | 46700.0 | 1.43 | F16 |
| P01 944 | 805 | 9.73 | 2.626 | -2.325 | 1.125 | 2.000 | 6.000 | 7.250 | -5191.0 | 19300.0 | 1.17 | F16 |
| P011055 | 805 | 10.92 | 0.778 | -0.705 | 1.125 | 5.375 | 8.750 | 11.500 | 0.0 | 73000.0 | 3.00 | SR71 |
| P0111 8 | 805 | 11.13 | 1.863 | -1.752 | 0.375 | 1.000 | 4.125 | 5.500 | -3086.0 | 32400.0 | 1.23 | SR71 |
| P011144 | 805 | 11.73 | 5.297 | -3.110 | 4.000 | 4.125 | 3.500 | 4.750 | -2219.0 | 14400.0 | 1.13 | F16 |
| P011154 | 805 | 11.90 | 3.819 | -3.528 | 0.125 | 0.250 | 0.750 | 0.875 | 3164.0 | 13800.0 | 1.12 | F16 |
| P0112 4 | 805 | 12.07 | 2.398 | -1.341 | 1.250 | 2.250 | 2.125 | 2.875 | 1893.0 | 30000.0 | 1.25 | F16 |
| P011235 | 805 | 12.58 | 1.275 | -0.977 | 0.625 | 1.125 | 1.875 | 2.750 | 9895.0 | 52000.0 | 1.70 | SR71 |
| P01 744 | 806 | 7.73 | 1.945 | -1.759 | 0.250 | 0.375 | 0.875 | 2.375 | 567.0 | 30000.0 | 1.30 | F18 |
| P01 757 | 806 | 7.95 | 1.414 | -1.170 | 0.250 | 0.875 | 1.625 | 2.125 | -2566.0 | 44700.0 | 1.40 | F18 |
| P01 810 | 806 | 8.17 | 3.577 | -2.995 | 0.375 | 1.625 | 2.625 | 3.375 | -8430.0 | 14200.0 | 1.10 | F18 |
| P011022 | 806 | 10.37 | 1.788 | -1.830 | 0.125 | 0.250 | 0.750 | 5.875 | -198.0 | 30000.0 | 1.30 | F18 |
| P011030 | 806 | 10.50 | 0.716 | -0.700 | 1.500 | 2.500 | 3.875 | 5.250 | 0.0 | 0.0 | 0.00 | |
| P011034 | 806 | 10.57 | 1.344 | -0.937 | 0.375 | 0.625 | 0.750 | 1.375 | 883.0 | 45000.0 | 1.43 | F18 |
| P011043 | 806 | 10.72 | 3.986 | -3.538 | 0.375 | 0.875 | 2.000 | 4.000 | 9877.0 | 16500.0 | 1.27 | F14 |
| P011048 | 806 | 10.80 | 6.591 | -4.050 | 0.250 | 0.375 | 0.750 | 0.875 | 0.0 | 13000.0 | 1.10 | F18 |
| P011148 | 806 | 11.80 | 9.856 | -5.431 | 0.250 | 0.375 | 0.875 | 1.375 | -258.0 | 14000.0 | 1.20 | F111D |
| P011152 | 806 | 11.87 | 0.218 | -0.221 | 3.125 | 10.125 | 13.000 | 16.250 | 0.0 | 0.0 | 0.00 | |
| P0112 4 | 806 | 12.07 | 1.710 | -1.090 | 3.000 | 9.875 | 11.125 | 13.000 | -44.0 | 45000.0 | 1.40 | F111D |
| P01 817 | 807 | 8.28 | 1.731 | -1.452 | 1.250 | 2.125 | 3.125 | 3.750 | 0.0 | 0.0 | 0.00 | |
| P0110 2 | 807 | 10.03 | 1.137 | -1.207 | 0.875 | 1.125 | 5.250 | 7.875 | 0.0 | 0.0 | 0.00 | |
| P011050 | 807 | 10.83 | 2.147 | -1.931 | 0.250 | 0.375 | 0.500 | 0.625 | -7903.0 | 29900.0 | 1.25 | F111D |
| P489999 | 803 | 100.65 | 1.745 | -1.898 | 2.000 | 3.500 | 12.250 | 15.125 | 0.0 | 0.0 | 0.00 | |
| P48 719 | 804 | 7.32 | 0.359 | -0.301 | 1.375 | 3.000 | 4.625 | 6.625 | -62901.0 | 41400.0 | 1.17 | AT38 |
| P48 757 | 804 | 7.95 | 0.174 | -0.204 | 4.375 | 7.625 | 14.250 | 31.875 | 0.0 | 0.0 | 0.00 | |
| P48 8 4 | 804 | 8.07 | 0.451 | -0.341 | 2.750 | 4.250 | 6.750 | 8.500 | -59376.0 | 29700.0 | 1.20 | F15 |
| P48 914 | 804 | 9.23 | 0.188 | -0.160 | 2.500 | 5.375 | 7.000 | 8.625 | -64307.0 | 30300.0 | 1.20 | AT38 |
| P48 952 | 804 | 9.87 | 0.639 | -0.437 | 1.000 | 1.375 | 1.750 | 3.500 | 0.0 | 0.0 | 0.00 | |
| P4811 2 | 804 | 11.03 | 0.933 | -0.646 | 4.875 | 7.625 | 8.125 | 11.875 | -65157.0 | 31000.0 | 1.28 | F15 |
| P481134 | 804 | 11.57 | 0.655 | -0.456 | 11.625 | 13.750 | 14.250 | 25.625 | -61399.0 | 45500.0 | 1.40 | F15 |
| P48 820 | 805 | 8.33 | 0.735 | -0.615 | 1.125 | 2.625 | 4.000 | 8.750 | 0.0 | 0.0 | 0.00 | |
| P48 9 6 | 805 | 9.10 | 1.123 | -0.883 | 2.625 | 3.750 | 6.500 | 8.375 | -72865.0 | 29500.0 | 1.25 | F16 |
| P48 9 6 | 805 | 9.10 | 0.738 | -0.810 | 0.250 | 1.000 | 1.875 | 3.125 | -72865.0 | 29500.0 | 1.25 | F16 |
| P48 926 | 805 | 9.43 | 0.695 | -0.597 | 1.125 | 2.625 | 3.500 | 6.000 | -58078.0 | 64800.0 | 2.50 | SR71 |
| P48 934 | 805 | 9.57 | 0.261 | -0.190 | 7.875 | 12.000 | 14.500 | 17.250 | 0.0 | 0.0 | 0.00 | |
| P48 953 | 805 | 9.88 | 0.381 | -0.493 | 2.250 | 3.875 | 5.000 | 6.375 | 0.0 | 0.0 | 0.00 | |
| P481055 | 805 | 10.92 | 0.679 | -0.472 | 0.875 | 1.875 | 2.250 | 8.625 | 0.0 | 73000.0 | 3.00 | SR71 |
| P48 829 | 806 | 8.48 | 0.684 | -0.420 | 2.500 | 4.750 | 14.875 | 17.750 | -80084.0 | 31500.0 | 1.20 | F14 |

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| P48 845 806 | 8.75 | 1.839 | -1.860 | 0.750 | 1.500 | 2.250 | 3.750 | 0.0 | 0.0 | 0.00 | |
| P481023 806 | 10.38 | 0.568 | -0.472 | 8.125 | 10.750 | 11.625 | 13.500 | 0.0 | 0.0 | 0.00 | |
| P481030 806 | 10.50 | 0.745 | -0.651 | 1.250 | 2.125 | 2.500 | 8.250 | 0.0 | 0.0 | 0.00 | |
| P481152 806 | 11.87 | 0.392 | -0.256 | 7.625 | 10.500 | 13.250 | 15.125 | 0.0 | 0.0 | 0.00 | |
| P48 745 807 | 7.75 | 2.013 | -1.811 | 0.625 | 1.125 | 2.375 | 10.875 | 0.0 | 0.0 | 0.00 | |
| P481050 807 | 10.83 | 0.902 | -0.707 | 18.625 | 33.125 | 36.500 | 46.250 | -70107.0 | 29900.0 | 1.25 | F111D |
| P50 841 800 | 8.68 | 0.721 | -0.714 | 37.000 | 42.500 | 37.625 | 58.875 | 0.0 | 16000.0 | 1.20 | F4 |
| P50 930 800 | 9.50 | 0.587 | -0.552 | 8.375 | 13.875 | 17.625 | 23.000 | 0.0 | 0.0 | 0.00 | |
| P50 758 803 | 7.97 | 0.928 | -0.439 | 2.250 | 3.125 | 3.000 | 4.250 | -47993.0 | 29300.0 | 1.29 | F4 |
| P50 719 804 | 7.32 | 0.277 | -0.240 | 2.500 | 5.375 | 7.375 | 14.625 | -52341.0 | 41400.0 | 1.17 | AT38 |
| P50 756 804 | 7.93 | 0.345 | -0.190 | 1.125 | 2.125 | 3.250 | 4.000 | -43041.0 | 41400.0 | 1.38 | F15 |
| P50 8 4 804 | 8.07 | 0.265 | -0.197 | 1.500 | 3.000 | 4.500 | 15.125 | -48816.0 | 29700.0 | 1.20 | F15 |
| P50 914 804 | 9.23 | 0.221 | -0.179 | 2.000 | 5.750 | 7.375 | 8.500 | -53747.0 | 30300.0 | 1.20 | AT38 |
| P50 923 804 | 9.38 | 0.352 | -0.265 | 5.875 | 7.875 | 9.375 | 9.625 | -54147.0 | 14000.0 | 1.10 | AT38 |
| P50 952 804 | 9.87 | 0.644 | -0.620 | 0.750 | 1.500 | 1.750 | 6.750 | 0.0 | 0.0 | 0.00 | |
| P501046 804 | 10.77 | 0.181 | -0.124 | 7.000 | 15.375 | 25.625 | 31.625 | -47456.0 | 15200.0 | 1.13 | F15 |
| P5011 2 804 | 11.03 | 0.667 | -0.587 | 5.500 | 14.000 | 22.000 | 25.000 | -54597.0 | 31000.0 | 1.28 | F15 |
| P50 820 805 | 8.33 | 0.637 | -0.599 | 0.625 | 1.250 | 1.875 | 5.375 | 0.0 | 0.0 | 0.00 | |
| P50 9 6 805 | 9.10 | 1.071 | -1.156 | 0.750 | 1.375 | 2.500 | 4.125 | -62305.0 | 29500.0 | 1.25 | F16 |
| P50 9 6 805 | 9.10 | 0.921 | -0.897 | 1.000 | 1.875 | 2.750 | 3.625 | -62305.0 | 29500.0 | 1.25 | F16 |
| P50 926 805 | 9.43 | 1.055 | -0.667 | 0.250 | 0.500 | 2.875 | 4.750 | -47518.0 | 64800.0 | 2.50 | SR71 |
| P50 934 805 | 9.57 | 0.275 | -0.214 | 4.375 | 7.375 | 13.875 | 17.625 | 0.0 | 0.0 | 0.00 | |
| P501055 805 | 10.92 | 0.803 | -0.465 | 0.750 | 1.125 | 1.750 | 2.375 | 0.0 | 73000.0 | 3.00 | SR71 |
| P5011 8 805 | 11.13 | 3.098 | -1.362 | 4.750 | 4.875 | 2.875 | 5.500 | -54730.0 | 32400.0 | 1.23 | SR71 |
| P5012 5 805 | 12.08 | 0.348 | -0.510 | 10.500 | 15.875 | 36.375 | 39.000 | 0.0 | 0.0 | 0.00 | |
| P50 829 806 | 8.48 | 0.564 | -0.411 | 1.125 | 2.250 | 3.000 | 6.125 | -69524.0 | 31500.0 | 1.20 | F14 |
| P501023 806 | 10.38 | 0.956 | -0.836 | 3.250 | 5.125 | 7.500 | 9.500 | 0.0 | 0.0 | 0.00 | |
| P501030 806 | 10.50 | 0.836 | -0.888 | 2.000 | 2.250 | 6.000 | 8.500 | 0.0 | 0.0 | 0.00 | |
| P501034 806 | 10.57 | 1.513 | -0.620 | 9.750 | 13.625 | 13.750 | 14.875 | -50761.0 | 45000.0 | 1.43 | F18 |
| P501152 806 | 11.87 | 0.862 | -0.573 | 8.125 | 10.875 | 11.000 | 14.625 | 0.0 | 0.0 | 0.00 | |
| P50 745 807 | 7.75 | 1.675 | -1.473 | 3.000 | 4.625 | 4.875 | 12.250 | 0.0 | 0.0 | 0.00 | |
| P501050 807 | 10.83 | 1.400 | -1.210 | 3.250 | 5.875 | 7.375 | 13.500 | -59547.0 | 29900.0 | 1.25 | F111D |
| P52 841 800 | 8.68 | 1.485 | -1.703 | 2.125 | 5.250 | 8.000 | 11.000 | 0.0 | 16000.0 | 1.20 | F4 |
| P52 758 803 | 7.97 | 0.803 | -0.801 | 0.625 | 4.125 | 10.875 | 15.125 | -37433.0 | 29300.0 | 1.29 | F4 |
| P521134 803 | 11.57 | 1.442 | -1.597 | 1.375 | 2.500 | 3.375 | 9.000 | 0.0 | 0.0 | 0.00 | |
| P52 719 804 | 7.32 | 0.298 | -0.254 | 1.625 | 3.250 | 6.375 | 10.375 | -41781.0 | 41400.0 | 1.17 | AT38 |
| P52 730 804 | 7.50 | 0.625 | -0.484 | 7.875 | 8.875 | 5.000 | 11.000 | -40151.0 | 32300.0 | 1.12 | AT38 |
| P52 736 804 | 7.60 | 0.132 | -0.085 | 1.500 | 4.125 | 6.750 | 7.875 | -34105.0 | 16700.0 | 1.15 | AT38 |
| P52 756 804 | 7.93 | 0.120 | -0.070 | 0.500 | 3.875 | 8.125 | 14.750 | -32481.0 | 41400.0 | 1.38 | F15 |
| P52 756 804 | 7.93 | 2.553 | -1.313 | 4.875 | 5.500 | 5.625 | 6.375 | -32481.0 | 41400.0 | 1.38 | F15 |
| P52 8 4 804 | 8.07 | 0.970 | -0.841 | 1.375 | 2.000 | 2.875 | 35.500 | -38256.0 | 29700.0 | 1.20 | F15 |
| P52 914 804 | 9.23 | 0.486 | -0.404 | 1.000 | 1.750 | 2.375 | 3.250 | -43187.0 | 30300.0 | 1.20 | AT38 |
| P52 923 804 | 9.38 | 0.265 | -0.244 | 4.125 | 6.000 | 7.750 | 8.375 | -43587.0 | 14000.0 | 1.10 | AT38 |
| P52 952 804 | 9.87 | 0.545 | -0.559 | 2.375 | 4.250 | 7.500 | 9.375 | 0.0 | 0.0 | 0.00 | |
| P521046 804 | 10.77 | 0.453 | -0.338 | 24.250 | 33.625 | 38.750 | 41.625 | -36896.0 | 15200.0 | 1.13 | F15 |
| P5211 2 804 | 11.03 | 0.925 | -0.883 | 0.750 | 3.375 | 6.250 | 16.250 | -44037.0 | 31000.0 | 1.28 | F15 |
| P521111 804 | 11.18 | 0.211 | -0.197 | 13.000 | 21.125 | 50.375 | 32.250 | -24081.0 | 45000.0 | 1.42 | F15 |
| P521134 804 | 11.57 | 0.754 | -0.583 | 4.875 | 7.375 | 8.750 | 13.875 | -40279.0 | 45500.0 | 1.40 | F15 |
| P52 820 805 | 8.33 | 0.634 | -0.564 | 0.125 | 0.250 | 0.375 | 0.875 | 0.0 | 0.0 | 0.00 | |
| P52 9 6 805 | 9.10 | 1.330 | -1.085 | 1.250 | 1.375 | 2.500 | 7.750 | -51745.0 | 29500.0 | 1.25 | F16 |
| P52 9 6 805 | 9.10 | 0.813 | -0.902 | 0.500 | 1.125 | 1.375 | 4.125 | -51745.0 | 29500.0 | 1.25 | F16 |
| P52 926 805 | 9.43 | 0.794 | -0.752 | 0.375 | 1.625 | 2.375 | 5.625 | -36958.0 | 64800.0 | 2.50 | SR71 |
| P52 934 805 | 9.57 | 0.822 | -0.651 | 4.000 | 9.250 | 11.000 | 35.375 | 0.0 | 0.0 | 0.00 | |
| P52 945 805 | 9.75 | 0.521 | -0.470 | 9.750 | 20.250 | 27.000 | 31.500 | 0.0 | 0.0 | 0.00 | |
| P521055 805 | 10.92 | 0.949 | -0.547 | 1.000 | 1.250 | 1.875 | 2.125 | 0.0 | 73000.0 | 3.00 | SR71 |
| P5211 8 805 | 11.13 | 1.928 | -1.301 | 1.750 | 2.000 | 1.750 | 3.000 | -44170.0 | 32400.0 | 1.23 | SR71 |
| P5212 4 805 | 12.07 | 0.996 | -0.888 | 6.750 | 8.625 | 12.750 | 17.750 | -39191.0 | 30000.0 | 1.25 | F16 |
| P521236 805 | 12.60 | 1.233 | -0.813 | 1.875 | 24.625 | 25.000 | 26.375 | 0.0 | 0.0 | 0.00 | |
| P52 757 806 | 7.95 | 0.491 | -0.498 | 3.875 | 7.375 | 27.125 | 30.375 | -43650.0 | 44700.0 | 1.40 | F18 |
| P52 829 806 | 8.48 | 0.893 | -0.559 | 0.375 | 1.250 | 1.500 | 1.875 | -58964.0 | 31500.0 | 1.20 | F14 |

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|---|---|---|---|---|---|---|---|---|---|---|---|
| P521022 806 | 10.37 | 1.762 | -1.184 | 8.000 | 14.375 | 15.500 | 16.375 | -41282.0 | 30000.0 | 1.30 | F18 |
| P521030 806 | 10.50 | 0.782 | -0.937 | 2.250 | 4.375 | 12.875 | 23.250 | 0.0 | 0.0 | 0.00 | |
| P521034 806 | 10.57 | 1.268 | -0.904 | 2.625 | 6.250 | 6.250 | 8.250 | -40201.0 | 45000.0 | 1.43 | F18 |
| P521148 806 | 11.80 | 0.700 | -0.529 | 9.750 | 13.875 | 16.500 | 21.875 | -41342.0 | 14000.0 | 1.20 | F111D |
| P521152 806 | 11.87 | 0.949 | -0.540 | 14.250 | 20.125 | 17.875 | 24.875 | 0.0 | 0.0 | 0.00 | |
| P521050 807 | 10.83 | 2.147 | -1.421 | 3.125 | 4.500 | 4.000 | 7.250 | -48987.0 | 29900.0 | 1.25 | F111D |
| P54 841 800 | 8.68 | 2.011 | -2.095 | 1.000 | 2.875 | 4.875 | 7.750 | 0.0 | 16000.0 | 1.20 | F4 |
| P54 930 800 | 9.50 | 0.660 | -0.540 | 7.250 | 12.875 | 18.875 | 27.625 | 0.0 | 0.0 | 0.00 | |
| P54 748 803 | 7.80 | 1.771 | -1.541 | 15.375 | 17.375 | 7.500 | 23.125 | -29237.0 | 29200.0 | 1.24 | F4 |
| P54 758 803 | 7.97 | 1.083 | -0.761 | 2.625 | 8.000 | 9.875 | 14.125 | -26873.0 | 29300.0 | 1.29 | F4 |
| P54 8 8 803 | 8.13 | 0.338 | -0.357 | 7.375 | 11.000 | 64.125 | 21.750 | 0.0 | 13000.0 | 1.10 | F4 |
| P541030 803 | 10.50 | 1.132 | -0.761 | 523.750 | 528.250 | 77.875 | 533.625 | 0.0 | 0.0 | 0.00 | |
| P541043 803 | 10.72 | 0.303 | -0.209 | 220.125 | 234.125 | 514.125 | 243.500 | -25870.0 | 44400.0 | 1.37 | F4 |
| P54 719 804 | 7.32 | 0.364 | -0.247 | 1.875 | 3.125 | 4.000 | 6.125 | -31221.0 | 41400.0 | 1.17 | AT38 |
| P54 730 804 | 7.50 | 0.329 | -0.265 | 1.375 | 2.125 | 3.125 | 5.000 | -29591.0 | 32300.0 | 1.12 | AT38 |
| P54 810 804 | 8.17 | 0.958 | -0.759 | 3.625 | 7.875 | 18.125 | 25.375 | -26945.0 | 12500.0 | 1.10 | F15 |
| P54 914 804 | 9.23 | 0.587 | -0.460 | 2.250 | 3.375 | 4.000 | 6.125 | -32627.0 | 30300.0 | 1.20 | AT38 |
| P54 923 804 | 9.38 | 0.327 | -0.310 | 5.125 | 7.625 | 9.500 | 10.750 | -33027.0 | 14000.0 | 1.10 | AT38 |
| P54 952 804 | 9.87 | 0.987 | -0.874 | 4.625 | 9.125 | 10.000 | 14.125 | 0.0 | 0.0 | 0.00 | |
| P541046 804 | 10.77 | 1.008 | -0.780 | 10.875 | 15.625 | 14.750 | 17.375 | -26336.0 | 15200.0 | 1.13 | F15 |
| P5411 2 804 | 11.03 | 1.036 | -0.975 | 2.875 | 8.000 | 14.000 | 17.750 | -33477.0 | 31000.0 | 1.28 | F15 |
| P541111 804 | 11.18 | 0.364 | -0.308 | 5.750 | 9.875 | 18.625 | 35.625 | -13521.0 | 45000.0 | 1.42 | F15 |
| P541134 804 | 11.57 | 1.142 | -0.853 | 2.125 | 4.250 | 7.375 | 8.500 | -29719.0 | 45500.0 | 1.40 | F15 |
| P541140 804 | 11.67 | 0.594 | -0.575 | 23.625 | 26.500 | 25.625 | 31.250 | 0.0 | 0.0 | 0.00 | |
| P54 820 805 | 8.33 | 0.634 | -0.669 | 0.500 | 1.000 | 1.625 | 2.000 | 0.0 | 0.0 | 0.00 | |
| P54 9 6 805 | 9.10 | 1.353 | -1.156 | 3.000 | 4.125 | 4.500 | 4.875 | -41185.0 | 29500.0 | 1.25 | F16 |
| P54 9 6 805 | 9.10 | 0.897 | -1.019 | 0.500 | 1.625 | 2.375 | 4.500 | -41185.0 | 29500.0 | 1.25 | F16 |
| P54 926 805 | 9.43 | 0.944 | -0.726 | 1.250 | 1.750 | 2.250 | 10.125 | -26398.0 | 64800.0 | 2.50 | SR71 |
| P54 933 805 | 9.55 | 0.921 | -0.782 | 1.375 | 2.875 | 9.000 | 11.500 | -33230.0 | 46700.0 | 1.43 | F16 |
| P54 944 805 | 9.73 | 3.333 | -1.651 | 9.875 | 10.750 | 10.125 | 12.875 | -35715.0 | 19300.0 | 1.17 | F16 |
| P541055 805 | 10.92 | 0.766 | -0.557 | 1.000 | 1.750 | 3.125 | 7.125 | 0.0 | 73000.0 | 3.00 | SR71 |
| P5411 8 805 | 11.13 | 2.058 | -1.456 | 1.250 | 1.500 | 1.250 | 1.750 | -33610.0 | 32400.0 | 1.23 | SR71 |
| P541144 805 | 11.73 | 1.153 | -1.125 | 5.250 | 6.625 | 6.125 | 17.000 | -32743.0 | 14400.0 | 1.13 | F16 |
| P5412 4 805 | 12.07 | 1.090 | -1.076 | 2.875 | 11.875 | 15.250 | 17.375 | -28631.0 | 30000.0 | 1.25 | F16 |
| P541236 805 | 12.60 | 0.759 | -0.630 | 6.375 | 9.625 | 12.625 | 15.875 | 0.0 | 0.0 | 0.00 | |
| P54 757 806 | 7.95 | 1.386 | -1.012 | 0.125 | 0.750 | 1.250 | 1.375 | -33090.0 | 44700.0 | 1.40 | F18 |
| P54 810 806 | 8.17 | 1.701 | -1.896 | 1.500 | 2.250 | 3.125 | 4.625 | -38954.0 | 14200.0 | 1.10 | F18 |
| P54 828 806 | 8.47 | 0.240 | -0.294 | 13.625 | 36.125 | 44.750 | 42.500 | 0.0 | 0.0 | 0.00 | |
| P54 829 806 | 8.48 | 1.050 | -0.613 | 2.000 | 3.500 | 4.500 | 4.750 | -48404.0 | 31500.0 | 1.20 | F14 |
| P541022 806 | 10.37 | 1.534 | -1.226 | 1.500 | 9.625 | 12.375 | 14.000 | -30722.0 | 30000.0 | 1.30 | F18 |
| P541030 806 | 10.50 | 1.029 | -0.827 | 2.000 | 2.375 | 5.250 | 7.875 | 0.0 | 0.0 | 0.00 | |
| P541034 806 | 10.57 | 0.949 | -0.787 | 2.500 | 9.000 | 9.500 | 12.125 | -29641.0 | 45000.0 | 1.43 | F18 |
| P541043 806 | 10.72 | 1.207 | -0.733 | 15.750 | 18.250 | 15.750 | 21.250 | -20647.0 | 16500.0 | 1.27 | F14 |
| P541048 806 | 10.80 | 0.940 | -0.958 | 23.625 | 47.750 | 60.125 | 72.250 | 0.0 | 13000.0 | 1.10 | F18 |
| P541148 806 | 11.80 | 2.419 | -1.992 | 12.000 | 23.250 | 20.125 | 27.250 | -30782.0 | 14000.0 | 1.20 | F111D |
| P541152 806 | 11.87 | 0.341 | -0.294 | 6.750 | 10.750 | 30.625 | 32.875 | 0.0 | 0.0 | 0.00 | |
| P5412 4 806 | 12.07 | 1.557 | -0.984 | 5.125 | 5.750 | 4.250 | 6.500 | -30568.0 | 45000.0 | 1.40 | F111D |
| P5412 4 806 | 12.07 | 0.902 | -0.742 | 6.250 | 24.250 | 24.125 | 28.125 | -30568.0 | 45000.0 | 1.40 | F111D |
| P5410 2 807 | 10.03 | 0.200 | -0.432 | 12.875 | 20.375 | 247.125 | 32.500 | 0.0 | 0.0 | 0.00 | |
| P541050 807 | 10.83 | 1.630 | -1.724 | 0.625 | 3.250 | 8.625 | 11.375 | -38427.0 | 29900.0 | 1.25 | F111D |
| P56 841 800 | 8.68 | 2.699 | -2.877 | 0.375 | 2.375 | 3.375 | 4.125 | 0.0 | 16000.0 | 1.20 | F4 |
| P56 748 803 | 7.80 | 1.257 | -1.078 | 0.250 | 0.750 | 1.375 | 16.000 | -18677.0 | 29200.0 | 1.24 | F4 |
| P56 758 803 | 7.97 | 1.630 | -1.059 | 0.250 | 0.500 | 1.625 | 2.000 | -16313.0 | 29300.0 | 1.29 | F4 |
| P56 8 8 803 | 8.13 | 0.308 | -0.432 | 6.250 | 7.250 | 9.375 | 8.625 | 0.0 | 13000.0 | 1.10 | F4 |
| P561012 803 | 10.20 | 0.709 | -0.817 | 13.250 | 31.500 | 33.250 | 37.625 | -33924.0 | 13000.0 | 1.10 | T38 |
| P561030 803 | 10.50 | 1.997 | -2.323 | 3.250 | 4.750 | 5.125 | 13.000 | 0.0 | 0.0 | 0.00 | |
| P561043 803 | 10.72 | 0.834 | -0.740 | 9.375 | 12.375 | 13.875 | 16.125 | -15310.0 | 44400.0 | 1.37 | F4 |
| P561134 803 | 11.57 | 1.456 | -0.871 | 3.125 | 3.750 | 3.250 | 5.375 | 0.0 | 0.0 | 0.00 | |
| P56 719 804 | 7.32 | 0.298 | -0.322 | 1.375 | 3.250 | 5.000 | 7.875 | -20661.0 | 41400.0 | 1.17 | AT38 |

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|---|---|---|---|---|---|---|---|---|---|---|---|
| P56 730 804 | 7.50 | 0.329 | -0.310 | 1.750 | 3.750 | 5.500 | 7.000 | -19031.0 | 32300.0 | 1.12 | AT38 |
| P56 730 804 | 7.50 | 0.132 | -0.120 | 1.250 | 3.500 | 6.000 | 7.500 | -19031.0 | 32300.0 | 1.12 | AT38 |
| P56 736 804 | 7.60 | 0.280 | -0.247 | 1.375 | 3.750 | 10.375 | 11.750 | -12985.0 | 16700.0 | 1.15 | AT38 |
| P56 756 804 | 7.93 | 1.186 | -0.900 | 0.125 | 0.625 | 1.250 | 7.375 | -11361.0 | 41400.0 | 1.38 | F15 |
| P56 8 4 804 | 8.07 | 1.442 | -1.120 | 0.375 | 1.375 | 1.875 | 3.750 | -17136.0 | 29700.0 | 1.20 | F15 |
| P56 810 804 | 8.17 | 1.562 | -1.113 | 0.500 | 0.875 | 1.125 | 2.125 | -16385.0 | 12500.0 | 1.10 | F15 |
| P56 914 804 | 9.23 | 1.423 | -0.947 | 2.125 | 3.000 | 3.000 | 4.500 | -22067.0 | 30300.0 | 1.20 | AT38 |
| P56 923 804 | 9.38 | 0.369 | -0.341 | 4.125 | 5.500 | 6.875 | 9.000 | -22467.0 | 14000.0 | 1.10 | AT38 |
| P56 952 804 | 9.87 | 0.507 | -0.472 | 0.625 | 1.625 | 4.500 | 7.875 | 0.0 | 0.0 | 0.00 | |
| P561046 804 | 10.77 | 2.323 | -1.527 | 3.750 | 5.125 | 4.000 | 5.750 | -15776.0 | 15200.0 | 1.13 | F15 |
| P5611 2 804 | 11.03 | 1.914 | -1.322 | 0.875 | 1.625 | 2.250 | 2.625 | -22917.0 | 31000.0 | 1.28 | F15 |
| P561111 804 | 11.18 | 0.167 | -0.103 | 5.000 | 10.375 | 17.750 | 18.250 | -2961.0 | 45000.0 | 1.42 | F15 |
| P561111 804 | 11.18 | 1.473 | -0.803 | 2.875 | 3.375 | 3.125 | 4.750 | -2961.0 | 45000.0 | 1.42 | F15 |
| P561134 804 | 11.57 | 1.261 | -1.001 | 3.000 | 5.000 | 10.500 | 11.375 | -19159.0 | 45500.0 | 1.40 | F15 |
| P561139 804 | 11.65 | 0.482 | -0.371 | 3.000 | 5.250 | 8.125 | 10.375 | 0.0 | 0.0 | 0.00 | |
| P56 9 6 805 | 9.10 | 1.527 | -1.431 | 0.250 | 1.875 | 5.125 | 6.750 | -30625.0 | 29500.0 | 1.25 | F16 |
| P56 9 6 805 | 9.10 | 0.601 | -0.740 | 1.750 | 2.750 | 3.375 | 4.000 | -30625.0 | 29500.0 | 1.25 | F16 |
| P56 926 805 | 9.43 | 1.062 | -0.839 | 0.500 | 1.250 | 1.750 | 2.500 | -15838.0 | 64800.0 | 2.50 | SR71 |
| P56 933 805 | 9.55 | 0.839 | -0.731 | 1.250 | 3.375 | 4.625 | 6.625 | -22670.0 | 46700.0 | 1.43 | F16 |
| P56 944 805 | 9.73 | 2.636 | -2.180 | 3.750 | 6.000 | 6.000 | 6.750 | -25155.0 | 19300.0 | 1.17 | F16 |
| P561055 805 | 10.92 | 0.817 | -0.672 | 0.750 | 2.375 | 3.875 | 16.000 | 0.0 | 73000.0 | 3.00 | SR71 |
| P5611 8 805 | 11.13 | 2.163 | -1.710 | 0.750 | 1.375 | 1.750 | 2.500 | -23050.0 | 32400.0 | 1.23 | SR71 |
| P561144 805 | 11.73 | 2.725 | -2.394 | 5.500 | 6.250 | 5.500 | 8.625 | -22183.0 | 14400.0 | 1.13 | F16 |
| P561154 805 | 11.90 | 1.111 | -0.940 | 10.625 | 26.250 | 27.750 | 32.250 | -16800.0 | 13800.0 | 1.12 | F16 |
| P5612 4 805 | 12.07 | 1.365 | -1.132 | 0.875 | 1.125 | 1.375 | 3.750 | -18071.0 | 30000.0 | 1.25 | F16 |
| P561235 805 | 12.58 | 1.111 | -0.972 | 3.500 | 7.125 | 9.375 | 10.750 | -10069.0 | 52000.0 | 1.70 | SR71 |
| P56 744 806 | 7.73 | 4.545 | -3.716 | 5.250 | 49.625 | 47.750 | 50.500 | -19397.0 | 30000.0 | 1.30 | F18 |
| P56 757 806 | 7.95 | 1.144 | -1.156 | 0.250 | 0.750 | 1.750 | 7.000 | -22530.0 | 44700.0 | 1.40 | F18 |
| P56 810 806 | 8.17 | 3.636 | -2.988 | 0.250 | 0.750 | 1.250 | 1.750 | -28394.0 | 14200.0 | 1.10 | F18 |
| P56 828 806 | 8.47 | 1.137 | -0.653 | 0.125 | 0.625 | 1.500 | 4.625 | 0.0 | 0.0 | 0.00 | |
| P561022 806 | 10.37 | 1.661 | -1.414 | 0.125 | 0.250 | 0.375 | 0.500 | -20162.0 | 30000.0 | 1.30 | F18 |
| P561030 806 | 10.50 | 0.707 | -0.700 | 4.375 | 5.875 | 6.625 | 7.250 | 0.0 | 0.0 | 0.00 | |
| P561034 806 | 10.57 | 0.778 | -0.827 | 1.625 | 3.125 | 7.750 | 18.250 | -19081.0 | 45000.0 | 1.43 | F18 |
| P561043 806 | 10.72 | 1.409 | -1.513 | 117.000 | 118.750 | 5.875 | 135.125 | -10087.0 | 16500.0 | 1.27 | F14 |
| P561048 806 | 10.80 | 2.196 | -1.813 | 10.000 | 11.125 | 21.625 | 32.875 | 0.0 | 13000.0 | 1.10 | F18 |
| P5612 4 806 | 12.07 | 1.550 | -0.907 | 2.250 | 3.250 | 3.000 | 4.375 | -20008.0 | 45000.0 | 1.40 | F111D |
| P56 817 807 | 8.28 | 2.349 | -1.637 | 7.625 | 9.625 | 13.250 | 15.375 | 0.0 | 0.0 | 0.00 | |
| P5610 2 807 | 10.03 | 1.983 | -1.485 | 0.250 | 1.125 | 1.625 | 5.375 | 0.0 | 0.0 | 0.00 | |
| P561050 807 | 10.83 | 2.194 | -1.924 | 0.500 | 1.125 | 1.625 | 8.500 | -27867.0 | 29900.0 | 1.25 | F111D |
| P58 841 800 | 8.68 | 3.676 | -3.902 | 0.375 | 1.375 | 2.250 | 4.875 | 0.0 | 16000.0 | 1.20 | F4 |
| P58 748 803 | 7.80 | 2.579 | -2.020 | 0.250 | 0.750 | 1.375 | 2.250 | -8117.0 | 29200.0 | 1.24 | F4 |
| P58 758 803 | 7.97 | 2.257 | -1.870 | 0.250 | 1.250 | 2.250 | 3.250 | -5753.0 | 29300.0 | 1.29 | F4 |
| P58 8 8 803 | 8.13 | 0.465 | -0.334 | 38.375 | 43.125 | 45.500 | 45.750 | 0.0 | 13000.0 | 1.10 | F4 |
| P581012 803 | 10.20 | 0.587 | -0.890 | 41.875 | 50.375 | 50.500 | 61.750 | -23364.0 | 13000.0 | 1.10 | T38 |
| P581029 803 | 10.48 | 3.871 | -3.453 | 0.750 | 1.250 | 3.375 | 7.750 | -12862.0 | 14400.0 | 1.10 | F4 |
| P581043 803 | 10.72 | 1.529 | -0.956 | 2.625 | 4.875 | 15.750 | 19.250 | -4750.0 | 44400.0 | 1.37 | F4 |
| P581134 803 | 11.57 | 2.067 | -1.353 | 5.625 | 8.250 | 5.500 | 10.000 | 0.0 | 0.0 | 0.00 | |
| P581238 803 | 12.63 | 0.284 | -0.157 | 9.000 | 14.000 | 19.125 | 22.375 | -5787.0 | 21200.0 | 1.05 | T38 |
| P58 719 804 | 7.32 | 0.479 | -0.439 | 2.250 | 5.000 | 10.500 | 13.625 | -10101.0 | 41400.0 | 1.17 | AT38 |
| P58 730 804 | 7.50 | 0.345 | -0.291 | 2.000 | 3.500 | 8.000 | 13.125 | -8471.0 | 32300.0 | 1.12 | AT38 |
| P58 730 804 | 7.50 | 0.108 | -0.117 | 0.125 | 3.500 | 5.000 | 6.500 | -8471.0 | 32300.0 | 1.12 | AT38 |
| P58 736 804 | 7.60 | 0.536 | -0.477 | 1.000 | 1.875 | 2.875 | 5.750 | -2425.0 | 16700.0 | 1.15 | AT38 |
| P58 756 804 | 7.93 | 1.132 | -0.874 | 1.875 | 3.875 | 7.250 | 10.625 | -801.0 | 41400.0 | 1.38 | F15 |
| P58 8 4 804 | 8.07 | 1.889 | -1.426 | 0.250 | 1.750 | 3.000 | 3.750 | -6576.0 | 29700.0 | 1.20 | F15 |
| P58 810 804 | 8.17 | 2.166 | -2.163 | 1.750 | 5.250 | 8.000 | 11.875 | -5825.0 | 12500.0 | 1.10 | F15 |
| P58 914 804 | 9.23 | 0.752 | -0.747 | 1.000 | 1.750 | 2.625 | 3.500 | -11507.0 | 30300.0 | 1.20 | AT38 |
| P58 923 804 | 9.38 | 0.566 | -0.519 | 2.500 | 3.875 | 5.000 | 8.125 | -11907.0 | 14000.0 | 1.10 | AT38 |
| P58 952 804 | 9.87 | 0.601 | -0.435 | 0.375 | 1.000 | 1.375 | 1.750 | 0.0 | 0.0 | 0.00 | |
| P581046 804 | 10.77 | 2.845 | -2.431 | 1.125 | 1.875 | 3.375 | 8.000 | -5216.0 | 15200.0 | 1.13 | F15 |
| P5811 2 804 | 11.03 | 2.053 | -1.391 | 1.375 | 3.375 | 5.500 | 6.750 | -12357.0 | 31000.0 | 1.28 | F15 |

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|---|---|---|---|---|---|---|---|---|---|---|---|
| P581111 804 | 11.18 | 1.290 | -1.081 | 0.625 | 2.750 | 3.000 | 15.750 | 7599.0 | 45000.0 | 1.42 | F15 |
| P581134 804 | 11.57 | 1.226 | -0.886 | 0.500 | 1.625 | 2.750 | 3.500 | -8599.0 | 45500.0 | 1.40 | F15 |
| P581139 804 | 11.65 | 0.646 | -0.564 | 2.500 | 6.875 | 8.500 | 10.625 | 0.0 | 0.0 | 0.00 | |
| P58 820 805 | 8.33 | 0.813 | -0.655 | 2.500 | 3.125 | 3.500 | 4.375 | 0.0 | 0.0 | 0.00 | |
| P58 9 6 805 | 9.10 | 1.851 | -1.494 | 0.500 | 1.125 | 2.000 | 2.750 | -20065.0 | 29500.0 | 1.25 | F16 |
| P58 9 6 805 | 9.10 | 0.705 | -0.714 | 2.375 | 6.625 | 8.250 | 10.000 | -20065.0 | 29500.0 | 1.25 | F16 |
| P58 926 805 | 9.43 | 1.513 | -1.015 | 0.500 | 2.000 | 3.250 | 4.625 | -5278.0 | 64800.0 | 2.50 | SR71 |
| P58 933 805 | 9.55 | 1.001 | -0.923 | 0.625 | 1.500 | 2.375 | 7.625 | -12110.0 | 46700.0 | 1.43 | F16 |
| P58 944 805 | 9.73 | 3.641 | -2.640 | 0.125 | 0.250 | 0.875 | 1.000 | -14595.0 | 19300.0 | 1.17 | F16 |
| P581055 805 | 10.92 | 0.904 | -0.658 | 1.625 | 2.375 | 2.750 | 3.750 | 0.0 | 73000.0 | 3.00 | SR71 |
| P5811 8 805 | 11.13 | 2.638 | -1.884 | 2.500 | 3.250 | 10.125 | 11.875 | -12490.0 | 32400.0 | 1.23 | SR71 |
| P581144 805 | 11.73 | 4.447 | -3.573 | 0.250 | 0.375 | 0.875 | 6.875 | -11623.0 | 14400.0 | 1.13 | F16 |
| P581154 805 | 11.90 | 2.828 | -2.241 | 4.250 | 5.125 | 14.875 | 17.750 | -6240.0 | 13800.0 | 1.12 | F16 |
| P5812 4 805 | 12.07 | 1.517 | -1.461 | 0.750 | 3.625 | 4.625 | 12.625 | -7511.0 | 30000.0 | 1.25 | F16 |
| P581235 805 | 12.58 | 1.560 | -1.095 | 0.750 | 1.375 | 1.750 | 2.000 | 491.0 | 52000.0 | 1.70 | SR71 |
| P58 744 806 | 7.73 | 1.910 | -1.708 | 0.125 | 0.750 | 1.250 | 3.500 | -8837.0 | 30000.0 | 1.30 | F18 |
| P58 757 806 | 7.95 | 1.231 | -1.092 | 1.125 | 1.875 | 2.625 | 3.875 | -11970.0 | 44700.0 | 1.40 | F18 |
| P58 810 806 | 8.17 | 4.771 | -4.118 | 0.250 | 0.875 | 2.375 | 3.875 | -17834.0 | 14200.0 | 1.10 | F18 |
| P58 829 806 | 8.48 | 0.752 | -0.740 | 31.500 | 33.250 | 29.750 | 43.250 | -27284.0 | 31500.0 | 1.20 | F14 |
| P581022 806 | 10.37 | 1.781 | -1.811 | 0.375 | 1.750 | 2.625 | 8.000 | -9602.0 | 30000.0 | 1.30 | F18 |
| P581030 806 | 10.50 | 0.824 | -0.759 | 1.500 | 5.625 | 7.750 | 12.125 | 0.0 | 0.0 | 0.00 | |
| P581034 806 | 10.57 | 1.034 | -0.886 | 0.250 | 0.375 | 1.500 | 2.500 | -8521.0 | 45000.0 | 1.43 | F18 |
| P581043 806 | 10.72 | 3.007 | -2.206 | 0.750 | 0.875 | 1.000 | 2.750 | 473.0 | 16500.0 | 1.27 | F14 |
| P581048 806 | 10.80 | 3.347 | -3.077 | 5.250 | 6.125 | 5.250 | 6.625 | 0.0 | 13000.0 | 1.10 | F18 |
| P581148 806 | 11.80 | 5.102 | -4.050 | 0.250 | 0.750 | 1.250 | 13.625 | -9662.0 | 14000.0 | 1.20 | F111D |
| P5812 4 806 | 12.07 | 1.421 | -1.165 | 1.250 | 2.500 | 6.250 | 8.000 | -9448.0 | 45000.0 | 1.40 | F111D |
| P58 817 807 | 8.28 | 1.743 | -1.494 | 1.000 | 1.375 | 2.500 | 6.500 | 0.0 | 0.0 | 0.00 | |
| P5810 2 807 | 10.03 | 1.496 | -1.287 | 1.750 | 2.500 | 3.250 | 3.875 | 0.0 | 0.0 | 0.00 | |
| P581050 807 | 10.83 | 2.800 | -2.384 | 0.875 | 3.875 | 5.625 | 10.500 | -17307.0 | 29900.0 | 1.25 | F111D |
| P59 841 800 | 8.68 | 2.821 | -3.328 | 0.250 | 0.375 | 1.250 | 6.625 | 0.0 | 16000.0 | 1.20 | F4 |
| P59 930 800 | 9.50 | 1.174 | -1.301 | 0.625 | 1.000 | 1.500 | 2.750 | 0.0 | 0.0 | 0.00 | |
| P59 748 803 | 7.80 | 2.062 | -2.065 | 0.500 | 2.000 | 6.625 | 12.750 | -2837.0 | 29200.0 | 1.24 | F4 |
| P59 758 803 | 7.97 | 2.739 | -2.476 | 0.250 | 0.750 | 1.000 | 1.375 | -473.0 | 29300.0 | 1.29 | F4 |
| P591030 803 | 10.50 | 7.326 | -3.883 | 0.500 | 0.625 | 1.000 | 1.125 | 0.0 | 0.0 | 0.00 | |
| P591043 803 | 10.72 | 1.287 | -0.778 | 1.625 | 7.000 | 8.500 | 11.500 | 530.0 | 44400.0 | 1.37 | F4 |
| P591238 803 | 12.63 | 0.510 | -0.449 | 8.625 | 12.500 | 14.875 | 16.750 | -507.0 | 21200.0 | 1.05 | T38 |
| P59 719 804 | 7.32 | 0.552 | -0.446 | 1.250 | 2.125 | 3.000 | 4.500 | -4821.0 | 41400.0 | 1.17 | AT38 |
| P59 730 804 | 7.50 | 0.742 | -0.630 | 1.875 | 2.625 | 3.125 | 4.000 | -3191.0 | 32300.0 | 1.12 | AT38 |
| P59 736 804 | 7.60 | 0.723 | -0.625 | 0.875 | 2.125 | 3.375 | 4.375 | 2855.0 | 16700.0 | 1.15 | AT38 |
| P59 756 804 | 7.93 | 0.954 | -0.874 | 0.375 | 1.500 | 3.250 | 6.750 | 4479.0 | 41400.0 | 1.38 | F15 |
| P59 8 4 804 | 8.07 | 1.738 | -1.470 | 0.250 | 0.750 | 1.375 | 3.750 | -1296.0 | 29700.0 | 1.20 | F15 |
| P59 810 804 | 8.17 | 3.601 | -2.915 | 0.750 | 0.875 | 1.875 | 2.875 | -545.0 | 12500.0 | 1.10 | F15 |
| P59 914 804 | 9.23 | 0.855 | -0.841 | 0.500 | 0.875 | 1.000 | 2.000 | -6227.0 | 30300.0 | 1.20 | AT38 |
| P59 923 804 | 9.38 | 1.156 | -0.618 | 5.500 | 6.125 | 5.125 | 7.625 | -6627.0 | 14000.0 | 1.10 | AT38 |
| P59 952 804 | 9.87 | 0.442 | -0.376 | 2.875 | 4.750 | 5.875 | 7.750 | 0.0 | 0.0 | 0.00 | |
| P591046 804 | 10.77 | 3.561 | -2.950 | 0.500 | 0.750 | 1.000 | 1.125 | 64.0 | 15200.0 | 1.13 | F15 |
| P5911 2 804 | 11.03 | 1.520 | -1.268 | 0.875 | 1.750 | 2.125 | 4.750 | -7077.0 | 31000.0 | 1.28 | F15 |
| P591111 804 | 11.18 | 0.996 | -0.808 | 1.375 | 7.125 | 12.625 | 14.750 | 12879.0 | 45000.0 | 1.42 | F15 |
| P591134 804 | 11.57 | 1.076 | -0.785 | 1.125 | 1.750 | 1.875 | 3.125 | -3319.0 | 45500.0 | 1.40 | F15 |
| P59 820 805 | 8.33 | 0.500 | -0.470 | 1.875 | 10.875 | 15.875 | 21.000 | 0.0 | 0.0 | 0.00 | |
| P59 820 805 | 8.33 | 0.608 | -0.583 | 0.750 | 1.750 | 2.875 | 6.125 | 0.0 | 0.0 | 0.00 | |
| P59 9 6 805 | 9.10 | 1.405 | -1.275 | 0.500 | 1.625 | 2.000 | 3.250 | -14785.0 | 29500.0 | 1.25 | F16 |
| P59 9 6 805 | 9.10 | 0.329 | -0.308 | 2.125 | 4.375 | 9.000 | 13.500 | -14785.0 | 29500.0 | 1.25 | F16 |
| P59 926 805 | 9.43 | 1.130 | -0.949 | 0.750 | 1.250 | 2.375 | 3.625 | 2.0 | 64800.0 | 2.50 | SR71 |
| P59 933 805 | 9.55 | 0.961 | -0.890 | 1.250 | 2.750 | 6.250 | 13.125 | -6830.0 | 46700.0 | 1.43 | F16 |
| P59 944 805 | 9.73 | 2.194 | -2.241 | 0.625 | 3.000 | 4.875 | 6.000 | -9315.0 | 19300.0 | 1.17 | F16 |
| P591055 805 | 10.92 | 0.895 | -0.674 | 1.125 | 1.875 | 5.250 | 6.375 | 0.0 | 73000.0 | 3.00 | SR71 |
| P5911 8 805 | 11.13 | 2.986 | -1.701 | 1.875 | 2.375 | 2.375 | 3.125 | -7210.0 | 32400.0 | 1.23 | SR71 |
| P591144 805 | 11.73 | 3.223 | -3.331 | 2.875 | 4.250 | 3.625 | 23.750 | -6343.0 | 14400.0 | 1.13 | F16 |
| P5912 4 805 | 12.07 | 1.313 | -1.127 | 1.750 | 3.625 | 3.375 | 4.625 | -2231.0 | 30000.0 | 1.25 | F16 |

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|---|---|---|---|---|---|---|---|---|---|---|---|
| P591235 805 | 12.58 | 1.405 | -0.944 | 2.375 | 8.375 | 11.250 | 13.000 | 5771.0 | 52000.0 | 1.70 | SR71 |
| P59 744 806 | 7.73 | 1.926 | -1.802 | 0.125 | 0.250 | 1.125 | 1.375 | -3557.0 | 30000.0 | 1.30 | F18 |
| P59 757 806 | 7.95 | 1.186 | -1.127 | 0.875 | 2.750 | 5.875 | 12.000 | -6690.0 | 44700.0 | 1.40 | F18 |
| P59 810 806 | 8.17 | 4.111 | -3.584 | 0.250 | 0.375 | 1.250 | 1.500 | -12554.0 | 14200.0 | 1.10 | F18 |
| P59 828 806 | 8.47 | 0.120 | -0.068 | 1.125 | 7.500 | 10.625 | 13.000 | 0.0 | 0.0 | 0.00 | |
| P591022 806 | 10.37 | 2.161 | -1.809 | 1.500 | 5.000 | 5.750 | 11.250 | -4322.0 | 30000.0 | 1.30 | F18 |
| P591030 806 | 10.50 | 0.768 | -0.620 | 3.750 | 6.000 | 6.625 | 11.750 | 0.0 | 0.0 | 0.00 | |
| P591034 806 | 10.57 | 1.266 | -0.888 | 2.375 | 5.875 | 6.875 | 7.750 | -3241.0 | 45000.0 | 1.43 | F18 |
| P591043 806 | 10.72 | 6.807 | -4.324 | 0.750 | 1.500 | 1.500 | 2.375 | 5753.0 | 16500.0 | 1.27 | F14 |
| P591048 806 | 10.80 | 3.380 | -3.204 | 1.625 | 2.625 | 3.000 | 5.250 | 0.0 | 13000.0 | 1.10 | F18 |
| P591148 806 | 11.80 | 6.288 | -5.367 | 1.125 | 1.375 | 2.125 | 3.125 | -4382.0 | 14000.0 | 1.20 | F111D |
| P59 817 807 | 8.28 | 1.327 | -1.416 | 1.250 | 2.000 | 2.750 | 14.000 | 0.0 | 0.0 | 0.00 | |
| P5910 2 807 | 10.03 | 1.259 | -1.273 | 0.250 | 1.000 | 1.500 | 2.250 | 0.0 | 0.0 | 0.00 | |
| P591050 807 | 10.83 | 2.981 | -2.084 | 2.125 | 3.250 | 3.375 | 5.250 | -12027.0 | 29900.0 | 1.25 | F111D |
| P61 841 800 | 8.68 | 2.826 | -2.838 | 0.250 | 0.375 | 2.500 | 4.250 | 0.0 | 16000.0 | 1.20 | F4 |
| P61 930 800 | 9.50 | 1.005 | -1.200 | 1.000 | 1.625 | 4.250 | 5.375 | 0.0 | 0.0 | 0.00 | |
| P61 748 803 | 7.80 | 2.271 | -2.055 | 0.125 | 0.250 | 0.750 | 1.250 | 7723.0 | 29200.0 | 1.24 | F4 |
| P61 758 803 | 7.97 | 2.868 | -2.673 | 0.250 | 0.375 | 1.500 | 2.375 | 10087.0 | 29300.0 | 1.29 | F4 |
| P61 8 8 803 | 8.13 | 0.294 | -0.357 | 10.625 | 13.375 | 17.375 | 29.875 | 0.0 | 13000.0 | 1.10 | F4 |
| P611012 803 | 10.20 | 0.237 | -0.233 | 22.750 | 32.125 | 53.875 | 45.500 | -7524.0 | 13000.0 | 1.10 | T38 |
| P611030 803 | 10.50 | 3.352 | -3.519 | 0.625 | 0.875 | 1.375 | 2.375 | 0.0 | 0.0 | 0.00 | |
| P611043 803 | 10.72 | 3.763 | -2.281 | 3.125 | 27.625 | 28.625 | 30.000 | 11090.0 | 44400.0 | 1.37 | F4 |
| P611238 803 | 12.63 | 0.479 | -0.327 | 7.000 | 9.500 | 11.750 | 14.000 | 10053.0 | 21200.0 | 1.05 | T38 |
| P61 719 804 | 7.32 | 0.507 | -0.437 | 1.125 | 2.125 | 3.375 | 4.625 | 5739.0 | 41400.0 | 1.17 | AT38 |
| P61 730 804 | 7.50 | 0.451 | -0.381 | 1.875 | 4.125 | 5.625 | 8.875 | 7369.0 | 32300.0 | 1.12 | AT38 |
| P61 736 804 | 7.60 | 0.770 | -0.752 | 0.875 | 1.750 | 2.375 | 10.750 | 13415.0 | 16700.0 | 1.15 | AT38 |
| P61 756 804 | 7.93 | 1.409 | -1.031 | 0.375 | 1.125 | 1.500 | 4.125 | 15039.0 | 41400.0 | 1.38 | F15 |
| P61 756 804 | 7.93 | 0.329 | -0.284 | 12.125 | 22.125 | 24.375 | 27.875 | 15039.0 | 41400.0 | 1.38 | F15 |
| P61 8 4 804 | 8.07 | 1.604 | -1.315 | 4.000 | 4.750 | 5.500 | 8.875 | 9264.0 | 29700.0 | 1.20 | F15 |
| P61 810 804 | 8.17 | 3.493 | -3.072 | 0.250 | 0.750 | 1.625 | 4.625 | 10015.0 | 12500.0 | 1.10 | F15 |
| P61 914 804 | 9.23 | 0.742 | -0.893 | 2.000 | 3.625 | 5.375 | 13.750 | 4333.0 | 30300.0 | 1.20 | AT38 |
| P61 923 804 | 9.38 | 0.787 | -0.646 | 2.125 | 5.750 | 6.375 | 7.375 | 3933.0 | 14000.0 | 1.10 | AT38 |
| P61 952 804 | 9.87 | 0.366 | -0.338 | 1.625 | 6.375 | 9.250 | 12.250 | 0.0 | 0.0 | 0.00 | |
| P611046 804 | 10.77 | 3.516 | -3.354 | 0.375 | 0.625 | 1.000 | 7.000 | 10624.0 | 15200.0 | 1.13 | F15 |
| P6111 2 804 | 11.03 | 2.741 | -1.435 | 2.625 | 3.000 | 3.125 | 4.125 | 3483.0 | 31000.0 | 1.28 | F15 |
| P611111 804 | 11.18 | 0.935 | -0.902 | 1.625 | 3.250 | 7.750 | 13.000 | 23439.0 | 45000.0 | 1.42 | F15 |
| P611134 804 | 11.57 | 2.152 | -1.001 | 0.375 | 0.500 | 0.625 | 1.000 | 7241.0 | 45500.0 | 1.40 | F15 |
| P61 820 805 | 8.33 | 0.524 | -0.550 | 2.250 | 5.500 | 7.625 | 9.500 | 0.0 | 0.0 | 0.00 | |
| P61 9 6 805 | 9.10 | 1.325 | -1.334 | 0.625 | 1.125 | 1.625 | 5.500 | -4225.0 | 29500.0 | 1.25 | F16 |
| P61 926 805 | 9.43 | 1.381 | -1.003 | 1.125 | 1.375 | 1.625 | 2.375 | 10562.0 | 64800.0 | 2.50 | SR71 |
| P61 933 805 | 9.55 | 1.435 | -1.038 | 1.500 | 2.125 | 2.625 | 3.500 | 3730.0 | 46700.0 | 1.43 | F16 |
| P61 944 805 | 9.73 | 2.422 | -1.759 | 0.875 | 1.500 | 2.625 | 2.875 | 1245.0 | 19300.0 | 1.17 | F16 |
| P611055 805 | 10.92 | 0.902 | -0.693 | 0.875 | 1.375 | 3.625 | 4.625 | 0.0 | 73000.0 | 3.00 | SR71 |
| P6111 8 805 | 11.13 | 2.751 | -1.860 | 0.875 | 2.625 | 3.125 | 4.375 | 3350.0 | 32400.0 | 1.23 | SR71 |
| P611144 805 | 11.73 | 2.039 | -2.156 | 4.125 | 6.750 | 18.875 | 20.875 | 4217.0 | 14400.0 | 1.13 | F16 |
| P611154 805 | 11.90 | 2.657 | -3.190 | 0.250 | 1.250 | 6.875 | 8.000 | 9600.0 | 13800.0 | 1.12 | F16 |
| P6112 4 805 | 12.07 | 1.456 | -1.327 | 0.500 | 0.875 | 1.250 | 10.875 | 8329.0 | 30000.0 | 1.25 | F16 |
| P611235 805 | 12.58 | 1.468 | -1.144 | 1.000 | 2.250 | 3.000 | 7.500 | 16331.0 | 52000.0 | 1.70 | SR71 |
| P61 744 806 | 7.73 | 1.630 | -1.701 | 0.250 | 0.750 | 1.375 | 5.875 | 7003.0 | 30000.0 | 1.30 | F18 |
| P61 757 806 | 7.95 | 1.062 | -1.069 | 0.250 | 1.125 | 1.750 | 2.750 | 3870.0 | 44700.0 | 1.40 | F18 |
| P61 810 806 | 8.17 | 2.236 | -2.431 | 0.250 | 1.250 | 5.125 | 11.750 | -1994.0 | 14200.0 | 1.10 | F18 |
| P611022 806 | 10.37 | 2.603 | -1.959 | 0.500 | 1.375 | 4.750 | 5.125 | 6238.0 | 30000.0 | 1.30 | F18 |
| P611030 806 | 10.50 | 0.606 | -0.583 | 3.750 | 9.125 | 12.750 | 18.375 | 0.0 | 0.0 | 0.00 | |
| P611034 806 | 10.57 | 0.806 | -0.817 | 0.375 | 0.625 | 3.375 | 5.375 | 7319.0 | 45000.0 | 1.43 | F18 |
| P611043 806 | 10.72 | 5.128 | -67.283 | 1.125 | 2.375 | 4.625 | 7.000 | 16313.0 | 16500.0 | 1.27 | F14 |
| P611048 806 | 10.80 | 4.191 | -3.984 | 0.250 | 1.250 | 1.625 | 3.125 | 0.0 | 13000.0 | 1.10 | F18 |
| P611148 806 | 11.80 | 5.677 | -4.343 | 0.250 | 0.375 | 0.875 | 1.375 | 6178.0 | 14000.0 | 1.20 | F111D |
| P611152 806 | 11.87 | 0.291 | -0.244 | 5.875 | 9.250 | 20.375 | 23.250 | 0.0 | 0.0 | 0.00 | |
| P6112 4 806 | 12.07 | 2.074 | -1.313 | 1.500 | 5.625 | 7.500 | 8.500 | 6392.0 | 45000.0 | 1.40 | F111D |
| P61 817 807 | 8.28 | 2.032 | -1.748 | 0.625 | 0.875 | 1.000 | 1.875 | 0.0 | 0.0 | 0.00 | |

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|---|---|---|---|---|---|---|---|---|---|---|---|
| P6110 2 807 | 10.03 | 1.473 | -1.416 | 0.500 | 3.250 | 4.875 | 10.625 | 0.0 | 0.0 | 0.00 | |
| P611050 807 | 10.83 | 2.692 | -1.785 | 1.000 | 1.250 | 1.250 | 1.500 | -1467.0 | 29900.0 | 1.25 | F111D |
| P611115 807 | 11.25 | 1.726 | -1.712 | 2.750 | 6.000 | 12.125 | 12.625 | 0.0 | 0.0 | 0.00 | |
| P62 841 800 | 8.68 | 2.300 | -2.203 | 0.125 | 0.250 | 0.750 | 1.000 | 0.0 | 16000.0 | 1.20 | F4 |
| P62 748 803 | 7.80 | 1.961 | -1.748 | 0.125 | 0.375 | 0.750 | 2.125 | 13003.0 | 29200.0 | 1.24 | F4 |
| P62 758 803 | 7.97 | 2.847 | -2.574 | 0.125 | 0.250 | 1.250 | 2.250 | 15367.0 | 29300.0 | 1.29 | F4 |
| P62 8 8 803 | 8.13 | 0.280 | -0.322 | 10.750 | 15.375 | 21.875 | 22.500 | 0.0 | 13000.0 | 1.10 | F4 |
| P621012 803 | 10.20 | 0.251 | -0.251 | 32.750 | 43.000 | 56.875 | 47.500 | -2244.0 | 13000.0 | 1.10 | T38 |
| P621030 803 | 10.50 | 2.744 | -2.614 | 1.375 | 2.000 | 2.375 | 3.625 | 0.0 | 0.0 | 0.00 | |
| P621238 803 | 12.63 | 0.775 | -0.759 | 23.125 | 25.250 | 23.750 | 29.125 | 15333.0 | 21200.0 | 1.05 | T38 |
| P62 719 804 | 7.32 | 0.453 | -0.432 | 2.375 | 4.125 | 5.750 | 8.750 | 11019.0 | 41400.0 | 1.17 | AT38 |
| P62 730 804 | 7.50 | 0.388 | -0.357 | 3.000 | 6.875 | 14.000 | 17.000 | 12649.0 | 32300.0 | 1.12 | AT38 |
| P62 736 804 | 7.60 | 0.949 | -0.747 | 1.875 | 3.750 | 6.125 | 11.125 | 18695.0 | 16700.0 | 1.15 | AT38 |
| P62 756 804 | 7.93 | 1.536 | -1.059 | 0.250 | 0.750 | 1.375 | 2.125 | 20319.0 | 41400.0 | 1.38 | F15 |
| P62 756 804 | 7.93 | 0.773 | -0.444 | 4.000 | 5.375 | 5.375 | 8.000 | 20319.0 | 41400.0 | 1.38 | F15 |
| P62 8 4 804 | 8.07 | 2.229 | -1.524 | 0.375 | 0.750 | 1.250 | 2.250 | 14544.0 | 29700.0 | 1.20 | F15 |
| P62 810 804 | 8.17 | 3.561 | -3.195 | 0.375 | 0.500 | 1.250 | 2.375 | 15295.0 | 12500.0 | 1.10 | F15 |
| P62 914 804 | 9.23 | 1.003 | -0.848 | 0.500 | 0.750 | 2.000 | 2.250 | 9613.0 | 30300.0 | 1.20 | AT38 |
| P62 923 804 | 9.38 | 0.489 | -0.442 | 2.250 | 4.250 | 5.500 | 8.375 | 9213.0 | 14000.0 | 1.10 | AT38 |
| P62 952 804 | 9.87 | 0.554 | -0.406 | 1.625 | 2.750 | 3.375 | 3.875 | 0.0 | 0.0 | 0.00 | |
| P621046 804 | 10.77 | 4.517 | -3.138 | 0.250 | 0.375 | 0.875 | 1.000 | 15904.0 | 15200.0 | 1.13 | F15 |
| P6211 2 804 | 11.03 | 2.084 | -1.463 | 1.625 | 2.250 | 3.375 | 4.000 | 8763.0 | 31000.0 | 1.28 | F15 |
| P621111 804 | 11.18 | 0.930 | -0.869 | 0.500 | 2.375 | 5.000 | 6.625 | 28719.0 | 45000.0 | 1.42 | F15 |
| P621134 804 | 11.57 | 1.135 | -0.907 | 1.125 | 2.125 | 5.500 | 6.875 | 12521.0 | 45500.0 | 1.40 | F15 |
| P62 820 805 | 8.33 | 0.604 | -0.512 | 2.250 | 3.375 | 4.125 | 11.375 | 0.0 | 0.0 | 0.00 | |
| P62 9 6 805 | 9.10 | 1.137 | -0.963 | 0.500 | 1.000 | 1.375 | 3.375 | 1055.0 | 29500.0 | 1.25 | F16 |
| P62 9 6 805 | 9.10 | 0.721 | -0.482 | 2.500 | 5.625 | 6.250 | 7.500 | 1055.0 | 29500.0 | 1.25 | F16 |
| P62 926 805 | 9.43 | 1.088 | -0.916 | 1.000 | 2.250 | 5.375 | 8.750 | 15842.0 | 64800.0 | 2.50 | SR71 |
| P62 933 805 | 9.55 | 0.991 | -0.980 | 0.750 | 1.000 | 2.750 | 3.625 | 9010.0 | 46700.0 | 1.43 | F16 |
| P62 944 805 | 9.73 | 4.693 | -2.325 | 5.750 | 9.875 | 10.125 | 10.250 | 6525.0 | 19300.0 | 1.17 | F16 |
| P621055 805 | 10.92 | 0.740 | -0.695 | 1.625 | 5.375 | 8.375 | 12.875 | 0.0 | 73000.0 | 3.00 | SR71 |
| P6211 8 805 | 11.13 | 4.160 | -2.267 | 0.250 | 0.375 | 0.875 | 3.500 | 8630.0 | 32400.0 | 1.23 | SR71 |
| P621144 805 | 11.73 | 5.191 | -1.738 | 8.000 | 9.500 | 5.000 | 9.750 | 9497.0 | 14400.0 | 1.13 | F16 |
| P621154 805 | 11.90 | 1.823 | -1.851 | 0.625 | 12.625 | 19.000 | 22.000 | 14880.0 | 13800.0 | 1.12 | F16 |
| P6212 4 805 | 12.07 | 1.943 | -1.656 | 1.750 | 2.750 | 3.625 | 9.750 | 13609.0 | 30000.0 | 1.25 | F16 |
| P621235 805 | 12.58 | 1.318 | -1.092 | 1.375 | 3.000 | 5.000 | 7.000 | 21611.0 | 52000.0 | 1.70 | SR71 |
| P62 744 806 | 7.73 | 1.635 | -1.628 | 0.250 | 0.375 | 1.250 | 5.500 | 12283.0 | 30000.0 | 1.30 | F18 |
| P62 757 806 | 7.95 | 1.088 | -1.008 | 0.250 | 0.625 | 0.875 | 1.375 | 9150.0 | 44700.0 | 1.40 | F18 |
| P62 810 806 | 8.17 | 1.917 | -1.938 | 0.875 | 3.125 | 7.875 | 11.750 | 3286.0 | 14200.0 | 1.10 | F18 |
| P621022 806 | 10.37 | 2.610 | -1.574 | 0.375 | 1.375 | 4.500 | 5.625 | 11518.0 | 30000.0 | 1.30 | F18 |
| P621030 806 | 10.50 | 0.510 | -0.500 | 2.125 | 4.000 | 17.500 | 19.375 | 0.0 | 0.0 | 0.00 | |
| P621034 806 | 10.57 | 0.947 | -0.820 | 0.500 | 0.625 | 0.750 | 7.500 | 12599.0 | 45000.0 | 1.43 | F18 |
| P621043 806 | 10.72 | 6.319 | -4.310 | 0.250 | 0.375 | 1.125 | 1.750 | 21593.0 | 16500.0 | 1.27 | F14 |
| P621048 806 | 10.80 | 2.941 | -3.211 | 3.250 | 3.500 | 4.500 | 7.125 | 0.0 | 13000.0 | 1.10 | F18 |
| P621148 806 | 11.80 | 3.629 | -4.195 | 2.125 | 5.375 | 11.500 | 25.750 | 11458.0 | 14000.0 | 1.20 | F111D |
| P621152 806 | 11.87 | 0.216 | -0.209 | 14.500 | 20.500 | 23.375 | 24.125 | 0.0 | 0.0 | 0.00 | |
| P6212 4 806 | 12.07 | 1.973 | -1.327 | 3.625 | 5.000 | 5.500 | 7.125 | 11672.0 | 45000.0 | 1.40 | F111D |
| P62 816 807 | 8.27 | 3.197 | -1.846 | 0.250 | 0.375 | 0.500 | 1.500 | 0.0 | 0.0 | 0.00 | |
| P6210 3 807 | 10.05 | 1.264 | -1.174 | 1.125 | 3.250 | 6.000 | 14.000 | 0.0 | 0.0 | 0.00 | |
| P621050 807 | 10.83 | 2.596 | -1.957 | 0.625 | 0.750 | 1.125 | 1.375 | 3813.0 | 29900.0 | 1.25 | F111D |
| P621115 807 | 11.25 | 2.476 | -1.369 | 4.375 | 6.875 | 8.250 | 9.875 | 0.0 | 0.0 | 0.00 | |
| P64 841 800 | 8.68 | 1.640 | -1.762 | 2.125 | 3.125 | 3.875 | 13.750 | 0.0 | 16000.0 | 1.20 | F4 |
| P64 931 800 | 9.52 | 0.925 | -0.980 | 0.625 | 0.875 | 1.500 | 4.875 | 0.0 | 0.0 | 0.00 | |
| P64 748 803 | 7.80 | 1.029 | -1.019 | 0.625 | 2.375 | 5.750 | 25.125 | 23563.0 | 29200.0 | 1.24 | F4 |
| P64 758 803 | 7.97 | 1.445 | -1.306 | 0.750 | 1.375 | 1.875 | 3.625 | 25927.0 | 29300.0 | 1.29 | F4 |
| P641030 803 | 10.50 | 1.184 | -1.132 | 10.250 | 16.875 | 17.875 | 30.000 | 0.0 | 0.0 | 0.00 | |
| P64 719 804 | 7.32 | 0.345 | -0.322 | 0.500 | 1.000 | 1.625 | 3.000 | 21579.0 | 41400.0 | 1.17 | AT38 |
| P64 730 804 | 7.50 | 0.383 | -0.315 | 1.250 | 2.500 | 3.875 | 5.625 | 23209.0 | 32300.0 | 1.12 | AT38 |
| P64 736 804 | 7.60 | 0.688 | -0.543 | 1.625 | 2.250 | 3.125 | 5.000 | 29255.0 | 16700.0 | 1.15 | AT38 |
| P64 756 804 | 7.93 | 1.374 | -1.034 | 0.125 | 0.750 | 1.125 | 2.250 | 30879.0 | 41400.0 | 1.38 | F15 |

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| P64 8 4 | 804 | 8.07 | 1.297 | -1.092 | 0.250 | 0.750 | 1.250 | 2.375 | 25104.0 | 29700.0 | 1.20 | F15 |
| P64 810 | 804 | 8.17 | 2.535 | -2.086 | 1.625 | 4.375 | 6.500 | 9.750 | 25855.0 | 12500.0 | 1.10 | F15 |
| P64 914 | 804 | 9.23 | 0.423 | -0.310 | 4.500 | 6.750 | 8.625 | 10.500 | 20173.0 | 30300.0 | 1.20 | AT38 |
| P64 923 | 804 | 9.38 | 0.190 | -0.176 | 1.375 | 3.125 | 10.250 | 19.625 | 19773.0 | 14000.0 | 1.10 | AT38 |
| P64 952 | 804 | 9.87 | 0.319 | -0.334 | 1.625 | 3.000 | 9.000 | 11.750 | 0.0 | 0.0 | 0.00 | |
| P641046 | 804 | 10.77 | 3.096 | -2.055 | 1.750 | 2.250 | 2.625 | 3.000 | 26464.0 | 15200.0 | 1.13 | F15 |
| P6411 2 | 804 | 11.03 | 1.360 | -1.076 | 1.000 | 1.500 | 2.375 | 5.125 | 19323.0 | 31000.0 | 1.28 | F15 |
| P641111 | 804 | 11.18 | 0.879 | -0.820 | 0.625 | 2.000 | 4.000 | 11.375 | 39279.0 | 45000.0 | 1.42 | F15 |
| P641134 | 804 | 11.57 | 0.890 | -0.775 | 2.375 | 4.500 | 7.750 | 10.000 | 23081.0 | 45500.0 | 1.40 | F15 |
| P64 9 6 | 805 | 9.10 | 0.672 | -0.632 | 3.500 | 6.375 | 8.250 | 10.375 | 11615.0 | 29500.0 | 1.25 | F16 |
| P64 9 7 | 805 | 9.12 | 0.348 | -0.171 | 12.500 | 16.000 | 23.125 | 24.125 | 0.0 | 0.0 | 0.00 | |
| P64 926 | 805 | 9.43 | 0.963 | -0.883 | 0.625 | 1.500 | 3.875 | 5.375 | 26402.0 | 64800.0 | 2.50 | SR71 |
| P64 933 | 805 | 9.55 | 1.275 | -0.817 | 1.125 | 2.000 | 2.375 | 2.625 | 19570.0 | 46700.0 | 1.43 | F16 |
| P64 944 | 805 | 9.73 | 1.640 | -1.231 | 9.625 | 10.125 | 11.500 | 15.625 | 17085.0 | 19300.0 | 1.17 | F16 |
| P641055 | 805 | 10.92 | 0.886 | -0.695 | 1.500 | 2.000 | 2.750 | 3.750 | 0.0 | 73000.0 | 3.00 | SR71 |
| P6411 8 | 805 | 11.13 | 2.751 | -1.553 | 2.625 | 3.625 | 3.750 | 4.875 | 19190.0 | 32400.0 | 1.23 | SR71 |
| P641144 | 805 | 11.73 | 1.304 | -1.271 | 7.375 | 8.500 | 6.250 | 10.375 | 20057.0 | 14400.0 | 1.13 | F16 |
| P641154 | 805 | 11.90 | 2.060 | -1.438 | 12.500 | 28.500 | 23.875 | 33.000 | 25440.0 | 13800.0 | 1.12 | F16 |
| P6412 4 | 805 | 12.07 | 1.226 | -1.050 | 1.250 | 4.875 | 5.875 | 8.750 | 24169.0 | 30000.0 | 1.25 | F16 |
| P641235 | 805 | 12.58 | 1.036 | -0.987 | 0.875 | 1.875 | 3.125 | 12.625 | 32171.0 | 52000.0 | 1.70 | SR71 |
| P64 744 | 806 | 7.73 | 1.355 | -1.228 | 0.250 | 0.375 | 0.875 | 2.750 | 22843.0 | 30000.0 | 1.30 | F18 |
| P64 757 | 806 | 7.95 | 0.972 | -0.871 | 0.625 | 1.250 | 1.875 | 2.625 | 19710.0 | 44700.0 | 1.40 | F18 |
| P64 810 | 806 | 8.17 | 1.048 | -0.742 | 11.875 | 26.500 | 28.125 | 30.750 | 13846.0 | 14200.0 | 1.10 | F18 |
| P641022 | 806 | 10.37 | 1.442 | -1.024 | 0.875 | 1.875 | 2.750 | 4.000 | 22078.0 | 30000.0 | 1.30 | F18 |
| P641030 | 806 | 10.50 | 0.918 | -0.590 | 7.125 | 8.625 | 8.375 | 10.375 | 0.0 | 0.0 | 0.00 | |
| P641034 | 806 | 10.57 | 0.916 | -0.794 | 1.500 | 1.625 | 1.750 | 1.875 | 23159.0 | 45000.0 | 1.43 | F18 |
| P641043 | 806 | 10.72 | 3.888 | -2.762 | 2.250 | 6.125 | 7.125 | 8.750 | 32153.0 | 16500.0 | 1.27 | F14 |
| P641048 | 806 | 10.80 | 1.658 | -2.213 | 1.875 | 2.875 | 3.125 | 24.875 | 0.0 | 13000.0 | 1.10 | F18 |
| P641148 | 806 | 11.80 | 2.859 | -2.661 | 1.375 | 2.625 | 2.500 | 4.625 | 22018.0 | 14000.0 | 1.20 | F111D |
| P641152 | 806 | 11.87 | 0.221 | -0.204 | 6.000 | 11.125 | 14.875 | 17.875 | 0.0 | 0.0 | 0.00 | |
| P6412 4 | 806 | 12.07 | 0.982 | -0.723 | 1.000 | 1.625 | 4.625 | 9.750 | 22232.0 | 45000.0 | 1.40 | F111D |
| P64 816 | 807 | 8.27 | 2.387 | -1.806 | 0.750 | 1.375 | 2.750 | 3.375 | 0.0 | 0.0 | 0.00 | |
| P64 816 | 807 | 8.27 | 0.202 | -0.146 | 8.125 | 14.750 | 17.500 | 19.125 | 0.0 | 0.0 | 0.00 | |
| P641050 | 807 | 10.83 | 2.011 | -1.506 | 4.375 | 6.500 | 6.750 | 7.875 | 14373.0 | 29900.0 | 1.25 | F111D |
| P641115 | 807 | 11.25 | 2.997 | -1.475 | 0.500 | 3.000 | 4.375 | 5.375 | 0.0 | 0.0 | 0.00 | |
| P66 758 | 803 | 7.97 | 0.942 | -0.709 | 1.375 | 2.375 | 3.500 | 12.000 | 36487.0 | 29300.0 | 1.29 | F4 |
| P66 8 8 | 803 | 8.13 | 0.345 | -0.291 | 8.750 | 22.375 | 30.375 | 32.875 | 0.0 | 13000.0 | 1.10 | F4 |
| P661043 | 803 | 10.72 | 0.167 | -0.181 | 54.000 | 77.000 | 185.000 | 29.375 | 37490.0 | 44400.0 | 1.37 | F4 |
| P66 719 | 804 | 7.32 | 0.312 | -0.261 | 1.375 | 2.625 | 3.750 | 12.375 | 32139.0 | 41400.0 | 1.17 | AT38 |
| P66 730 | 804 | 7.50 | 0.272 | -0.233 | 4.125 | 7.125 | 12.875 | 16.375 | 33769.0 | 32300.0 | 1.12 | AT38 |
| P66 736 | 804 | 7.60 | 0.439 | -0.331 | 3.000 | 5.000 | 6.500 | 8.875 | 39815.0 | 16700.0 | 1.15 | AT38 |
| P66 756 | 804 | 7.93 | 0.853 | -0.796 | 0.500 | 1.125 | 2.250 | 3.500 | 41439.0 | 41400.0 | 1.38 | F15 |
| P66 8 4 | 804 | 8.07 | 1.788 | -1.179 | 0.250 | 0.625 | 1.125 | 1.750 | 35664.0 | 29700.0 | 1.20 | F15 |
| P66 810 | 804 | 8.17 | 1.017 | -1.001 | 7.625 | 10.625 | 11.750 | 12.875 | 36415.0 | 12500.0 | 1.10 | F15 |
| P66 914 | 804 | 9.23 | 0.423 | -0.420 | 2.125 | 3.625 | 4.875 | 6.000 | 30733.0 | 30300.0 | 1.20 | AT38 |
| P66 923 | 804 | 9.38 | 0.418 | -0.303 | 4.125 | 11.875 | 15.125 | 19.375 | 30333.0 | 14000.0 | 1.10 | AT38 |
| P66 953 | 804 | 9.88 | 0.230 | -0.211 | 2.875 | 5.125 | 877.875 | 12.625 | 0.0 | 0.0 | 0.00 | |
| P661046 | 804 | 10.77 | 2.161 | -1.950 | 2.000 | 2.875 | 2.750 | 4.375 | 37024.0 | 15200.0 | 1.13 | F15 |
| P6611 2 | 804 | 11.03 | 1.203 | -1.001 | 5.750 | 6.875 | 6.875 | 26.500 | 29883.0 | 31000.0 | 1.28 | F15 |
| P661111 | 804 | 11.18 | 1.024 | -0.796 | 1.375 | 9.125 | 10.375 | 18.500 | 49839.0 | 45000.0 | 1.42 | F15 |
| P66 820 | 805 | 8.33 | 0.716 | -0.766 | 4.875 | 7.125 | 8.125 | 10.875 | 0.0 | 0.0 | 0.00 | |
| P66 9 6 | 805 | 9.10 | 0.911 | -0.742 | 4.000 | 6.375 | 7.500 | 8.750 | 22175.0 | 29500.0 | 1.25 | F16 |
| P66 926 | 805 | 9.43 | 0.921 | -0.796 | 0.625 | 0.875 | 1.250 | 8.625 | 36962.0 | 64800.0 | 2.50 | SR71 |
| P66 934 | 805 | 9.57 | 0.921 | -0.618 | 1.000 | 1.375 | 1.625 | 3.125 | 0.0 | 0.0 | 0.00 | |
| P66 945 | 805 | 9.75 | 1.048 | -0.749 | 3.250 | 4.000 | 3.375 | 5.375 | 0.0 | 0.0 | 0.00 | |
| P661055 | 805 | 10.92 | 0.853 | -0.644 | 0.750 | 1.500 | 2.375 | 8.000 | 0.0 | 73000.0 | 3.00 | SR71 |
| P6611 8 | 805 | 11.13 | 1.917 | -1.186 | 3.875 | 5.125 | 6.000 | 8.250 | 29750.0 | 32400.0 | 1.23 | SR71 |
| P661144 | 805 | 11.73 | 0.444 | -0.268 | 22.250 | 30.125 | 55.625 | 46.250 | 30617.0 | 14400.0 | 1.13 | F16 |
| P6612 4 | 805 | 12.07 | 2.145 | -1.254 | 10.875 | 12.500 | 11.000 | 13.625 | 34729.0 | 30000.0 | 1.25 | F16 |
| P661235 | 805 | 12.58 | 1.358 | -1.024 | 1.375 | 1.500 | 4.000 | 4.250 | 42731.0 | 52000.0 | 1.70 | SR71 |

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| P661416 805 | 14.27 | 0.963 | -0.829 | 1.250 | 1.875 | 1.750 | 11.250 | 0.0 | 0.0 | 0.00 | |
| P66 744 806 | 7.73 | 1.210 | -1.059 | 0.500 | 1.250 | 2.000 | 3.125 | 33403.0 | 30000.0 | 1.30 | F18 |
| P66 757 806 | 7.95 | 0.930 | -0.681 | 0.750 | 1.500 | 1.750 | 2.750 | 30270.0 | 44700.0 | 1.40 | F18 |
| P66 810 806 | 8.17 | 0.864 | -0.402 | 90.875 | 93.375 | 89.750 | 96.125 | 24406.0 | 14200.0 | 1.10 | F18 |
| P661022 806 | 10.37 | 1.341 | -1.045 | 1.625 | 2.250 | 10.875 | 15.500 | 32638.0 | 30000.0 | 1.30 | F18 |
| P661034 806 | 10.57 | 0.937 | -0.792 | 3.625 | 5.500 | 5.875 | 8.250 | 33719.0 | 45000.0 | 1.43 | F18 |
| P661043 806 | 10.72 | 2.560 | -1.785 | 0.625 | 0.875 | 1.250 | 5.375 | 42713.0 | 16500.0 | 1.27 | F14 |
| P661148 806 | 11.80 | 1.402 | -0.982 | 8.875 | 11.000 | 9.375 | 13.250 | 32578.0 | 14000.0 | 1.20 | F111D |
| P6612 4 806 | 12.07 | 1.240 | -0.813 | 7.875 | 8.750 | 9.000 | 14.250 | 32792.0 | 45000.0 | 1.40 | F111D |
| P6612 4 806 | 12.07 | 1.045 | -0.949 | 21.375 | 37.875 | 34.625 | 44.750 | 32792.0 | 45000.0 | 1.40 | F111D |
| P66 816 807 | 8.27 | 2.401 | -1.520 | 6.000 | 34.000 | 35.875 | 36.750 | 0.0 | 0.0 | 0.00 | |
| P661050 807 | 10.83 | 1.548 | -1.224 | 1.625 | 2.500 | 13.875 | 15.875 | 24933.0 | 29900.0 | 1.25 | F111D |
| P661115 807 | 11.25 | 1.527 | -1.116 | 3.250 | 3.750 | 3.000 | 12.250 | 0.0 | 0.0 | 0.00 | |
| P661119 807 | 11.32 | 0.174 | -0.052 | 12.000 | 19.750 | 1871.750 | 30.875 | 0.0 | 0.0 | 0.00 | |
| P00 0 0 0 | 0.00 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.0 | 0.0 | 0.00 | |
| P00 0 0 0 | 0.00 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.0 | 0.0 | 0.00 | |
| P00 0 0 0 | 0.00 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.0 | 0.0 | 0.00 | |
| P00 0 0 0 | 0.00 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.0 | 0.0 | 0 00 | |
| P00 0 0 0 | 0.00 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.0 | 0.0 | 0.00 | |
| P00 0 0 0 | 0.00 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.0 | 0.0 | 0.00 | |
| P00 0 0 0 | 0.00 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.0 | 0.0 | 0.00 | |
| P00 0 0 0 | 0.00 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.0 | 0.0 | 0.00 | |
| P00 0 0 0 | 0.00 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.0 | 0.0 | 0.00 | |
| P00 0 0 0 | 0.00 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.0 | 0.0 | 0.00 | |
| P00 0 0 0 | 0.00 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.0 | 0.0 | 0.00 | |
| P10 0 0 0 | 0.00 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.0 | 0.0 | 0.00 | |
| P00 0 0 0 | 0.00 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.0 | 0.0 | 0.00 | |
| P00 0 0 0 | 0.00 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.0 | 0.0 | 0.00 | |
| P00 0 0 0 | 0.00 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.0 | 0.0 | 0.00 | |
| P00 0 0 0 | 0.00 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.0 | 0.0 | 0.00 | |
| P00 0 0 0 | 0.00 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.0 | 0.0 | 0.00 | |
| P1638 4 0 | 38.07 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.0 | 0.0 | 0.00 | |
| P00 0 0 0 | 0.00 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.0 | 0.0 | 0.00 | |
| P00 0 0 0 | 0.00 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.0 | 0.0 | 0.00 | |
| P00 0 0 0 | 0.00 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.0 | 0.0 | 0.00 | |
| P00 0 0 0 | 0.00 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.0 | 0.0 | 0.00 | |
| P00 0 0 0 | 0.00 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.0 | 0.0 | 0.00 | |
| P00 0 0 0 | 0.00 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.0 | 0.0 | 0.00 | |

## Augmented XB-70 Database (Noise Metrics)

| FILE NAME | Time (hrs) | Pmax (PSF) | Pmin (PSF) | ESEL (dB) | ASEL (dB) | CSEL (dB) | PLDB (dB) | Sideline (Feet) | DFBR (Feet) | Altitude (Feet) | Mach # |
|---|---|---|---|---|---|---|---|---|---|---|---|
| R01M02.XY | 11.23 | 1.600 | -1.189 | 119.400 | 85.600 | 104.900 | 100.600 | 21349.6 | 38871.3 | 50500.0 | 1.83 |
| R01M03.XY | 11.23 | 1.750 | -1.317 | 120.300 | 87.200 | 106.200 | 102.500 | 21349.6 | 38871.3 | 50500.0 | 1.83 |
| R01M04.XY | 11.23 | 1.710 | -1.443 | 120.600 | 84.900 | 105.900 | 100.700 | 21349.6 | 38871.3 | 50500.0 | 1.83 |
| R01M06.XY | 11.23 | 2.100 | -1.649 | 122.000 | 85.500 | 107.400 | 101.900 | 21349.6 | 38871.3 | 50500.0 | 1.83 |
| R01M07.XY | 11.23 | 1.200 | -1.036 | 117.800 | 82.500 | 103.000 | 97.800 | 21349.6 | 38871.3 | 50500.0 | 1.83 |
| R01M08.XY | 11.23 | 1.790 | -1.265 | 120.300 | 85.900 | 105.600 | 101.000 | 21349.6 | 38871.3 | 50500.0 | 1.83 |
| R02M01.XY | 12.22 | 3.550 | -2.665 | 125.900 | 94.800 | 112.300 | 109.900 | 0.0 | 34988.7 | 48000.0 | 1.80 |
| R02M02.XY | 12.22 | 3.700 | -2.773 | 126.300 | 95.300 | 113.400 | 111.600 | 0.0 | 34988.7 | 48000.0 | 1.80 |
| R02M03.XY | 12.22 | 3.050 | -2.051 | 124.000 | 96.500 | 112.000 | 111.400 | 0.0 | 34988.7 | 48000.0 | 1.80 |
| R02M04.XY | 12.22 | 4.150 | -3.321 | 127.000 | 92.000 | 115.000 | 110.100 | 0.0 | 34988.7 | 48000.0 | 1.80 |
| R02M05.XY | 12.22 | 4.250 | -2.621 | 125.900 | 94.400 | 113.200 | 110.200 | 0.0 | 34988.7 | 48000.0 | 1.80 |
| R02M07.XY | 12.22 | 3.480 | -2.871 | 126.500 | 95.500 | 113.000 | 111.400 | 0.0 | 34988.7 | 48000.0 | 1.80 |
| R03M01.XY | 8.00 | 1.470 | -1.127 | 120.800 | 85.500 | 103.200 | 99.500 | 37535.6 | 33313.7 | 66000.0 | 2.60 |
| R03M02.XY | 8.00 | 1.630 | -1.087 | 121.100 | 87.800 | 103.900 | 101.400 | 37535.6 | 33313.7 | 66000.0 | 2.60 |
| R03M03.XY | 8.00 | 1.690 | -1.188 | 121.000 | 86.200 | 103.800 | 100.000 | 37535.6 | 33313.7 | 66000.0 | 2.60 |
| R03M05.XY | 8.01 | 1.250 | -0.841 | 117.900 | 83.300 | 102.500 | 98.600 | 3636.3 | 28950.3 | 66000.0 | 2.60 |
| R03M06.XY | 8.01 | 1.750 | -1.148 | 120.700 | 87.900 | 105.400 | 102.500 | 3636.3 | 28950.3 | 66000.0 | 2.60 |
| R03M07.XY | 8.01 | 1.700 | -1.183 | 120.900 | 83.600 | 104.600 | 99.500 | 3636.3 | 28950.3 | 66000.0 | 2.60 |
| R04M01.XY | 7.53 | 2.850 | -2.306 | 126.000 | 95.100 | 110.900 | 109.500 | 5791.6 | 58107.0 | 32000.0 | 1.23 |
| R04M03.XY | 7.53 | 3.150 | -2.637 | 126.100 | 98.900 | 112.700 | 113.600 | 5791.6 | 58107.0 | 32000.0 | 1.23 |
| R04M04.XY | 7.53 | 2.750 | -2.080 | 125.100 | 95.500 | 110.500 | 109.800 | 5791.6 | 58107.0 | 32000.0 | 1.23 |
| R04M05.XY | 7.53 | 2.050 | -2.093 | 124.000 | 90.900 | 107.500 | 104.800 | 5791.6 | 58107.0 | 32000.0 | 1.23 |
| R04M07.XY | 7.53 | 2.370 | -2.250 | 124.700 | 87.500 | 107.900 | 102.900 | 5791.6 | 58107.0 | 32000.0 | 1.23 |
| R04M08.XY | 7.53 | 2.300 | -2.038 | 124.300 | 86.700 | 108.100 | 102.600 | 5791.6 | 58107.0 | 32000.0 | 1.23 |
| R05M05.XY | 7.67 | 2.150 | -1.936 | 123.900 | 85.700 | 108.200 | 103.000 | 29667.2 | 64346.6 | 42300.0 | 1.38 |
| R05M07.XY | 7.67 | 2.180 | -2.094 | 124.200 | 94.500 | 109.500 | 108.600 | 29667.2 | 64346.6 | 42300.0 | 1.38 |
| R05M08.XY | 7.67 | 2.000 | -2.034 | 123.800 | 92.100 | 108.200 | 106.300 | 29667.2 | 64346.6 | 42300.0 | 1.38 |
| R06M01.XY | 13.50 | 0.320 | -0.058 | 108.700 | 71.400 | 83.600 | 82.000 | 74248.0 | 109088.3 | 46000.0 | 1.40 |
| R06M02.XY | 13.50 | 0.300 | -0.139 | 107.500 | 71.100 | 84.500 | 82.100 | 74248.0 | 109088.3 | 46000.0 | 1.40 |
| R07M01.XY | 11.98 | 2.130 | -1.967 | 123.200 | 85.500 | 106.400 | 100.400 | 42784.5 | 70516.5 | 42500.0 | 1.42 |
| R07M03.XY | 11.98 | 2.150 | -1.881 | 123.400 | 83.100 | 106.500 | 99.200 | 42784.5 | 70516.5 | 42500.0 | 1.42 |
| R07M04.XY | 11.98 | 2.080 | -1.919 | 123.300 | 86.800 | 106.000 | 102.100 | 42784.5 | 70516.5 | 42500.0 | 1.42 |
| R07M05.XY | 11.99 | 1.330 | -1.082 | 120.100 | 81.900 | 100.800 | 95.900 | 15315.4 | 51959.1 | 42500.0 | 1.42 |
| R07M07.XY | 11.99 | 1.420 | -1.174 | 120.300 | 84.000 | 100.900 | 97.300 | 15315.4 | 51959.1 | 42500.0 | 1.42 |
| R07M08.XY | 11.99 | 1.270 | -1.034 | 120.300 | 78.300 | 98.300 | 93.600 | 15315.4 | 51959.1 | 42500.0 | 1.42 |
| R08M05.XY | 12.42 | 2.810 | -2.658 | 125.600 | 96.500 | 111.200 | 111.000 | 9761.6 | 36090.2 | 33800.0 | 1.50 |
| R08M07.XY | 12.42 | 3.050 | -2.632 | 126.200 | 92.400 | 110.200 | 107.100 | 9761.6 | 36090.2 | 33800.0 | 1.50 |
| R08M08.XY | 12.42 | 3.280 | -2.711 | 126.200 | 97.200 | 112.000 | 111.400 | 9761.6 | 36090.2 | 33800.0 | 1.50 |
| R09M05.XY | 12.33 | 2.590 | -2.263 | 127.100 | 86.100 | 105.000 | 101.500 | 4129.4 | 43559.4 | 33000.0 | 1.35 |
| R09M07.XY | 12.33 | 2.410 | -2.166 | 125.800 | 86.900 | 105.700 | 102.200 | 4129.4 | 43559.4 | 33000.0 | 1.35 |
| R09M08.XY | 12.33 | 2.440 | -2.018 | 125.700 | 90.700 | 105.800 | 104.700 | 4129.4 | 43559.4 | 33000.0 | 1.35 |
| R10M05.XY | 12.72 | 2.990 | -2.678 | 126.200 | 92.800 | 111.200 | 109.000 | 4376.0 | 35616.1 | 31000.0 | 1.42 |
| R10M07.XY | 12.72 | 3.900 | -3.396 | 127.600 | 98.700 | 113.700 | 113.600 | 4376.0 | 35616.1 | 31000.0 | 1.42 |
| R10M08.XY | 12.72 | 4.270 | -3.196 | 127.700 | 99.600 | 114.600 | 114.800 | 4376.0 | 35616.1 | 31000.0 | 1.42 |
| R11M05.XY | 13.53 | 2.650 | -2.502 | 125.300 | 93.200 | 109.400 | 107.900 | 679.7 | 34421.8 | 34000.0 | 1.51 |
| R11M07.XY | 13.53 | 3.900 | -2.497 | 125.600 | 101.100 | 112.800 | 115.300 | 679.7 | 34421.8 | 34000.0 | 1.51 |
| R11M08.XY | 13.53 | 4.100 | -2.467 | 125.400 | 102.200 | 113.100 | 116.200 | 679.7 | 34421.8 | 34000.0 | 1.51 |
| R12M05.XY | 9.60 | 3.140 | -2.261 | 125.100 | 91.000 | 110.500 | 107.200 | 13179.9 | 33015.1 | 41000.0 | 1.76 |
| R12M07.XY | 9.60 | 3.130 | -2.140 | 125.100 | 89.000 | 110.200 | 106.100 | 13179.9 | 33015.1 | 41000.0 | 1.76 |
| R12M08.XY | 9.60 | 3.360 | -2.145 | 125.300 | 92.000 | 110.500 | 107.600 | 13179.9 | 33015.1 | 41000.0 | 1.76 |

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|---|---|---|---|---|---|---|---|---|---|---|---|
| R13M01.XY | 10.45 | 0.299 | -0.222 | 108.000 | 72.800 | 89.300 | 85.100 | 61258.5 | 95298.9 | 50000.0 | 1.40 |
| R13M02.XY | 10.45 | 0.312 | -0.251 | 107.900 | 76.300 | 91.200 | 88.100 | 61258.5 | 95298.9 | 50000.0 | 1.40 |
| R13M03.XY | 10.45 | 0.299 | -0.190 | 107.000 | 75.000 | 90.700 | 86.800 | 61258.5 | 95298.9 | 50000.0 | 1.40 |
| R13M04.XY | 10.45 | 0.317 | -0.280 | 108.800 | 76.700 | 91.800 | 88.700 | 61258.5 | 95298.9 | 50000.0 | 1.40 |
| R13M05.XY | 10.45 | 0.259 | -0.136 | 105.600 | 71.600 | 87.500 | 83.900 | 61258.5 | 95298.9 | 50000.0 | 1.40 |
| R13M07.XY | 10.45 | 0.222 | -0.189 | 104.800 | 74.900 | 89.300 | 86.600 | 61258.5 | 95298.9 | 50000.0 | 1.40 |
| R14M05.XY | 12.92 | 2.100 | -1.551 | 122.100 | 90.500 | 106.500 | 104.200 | 34303.9 | 44502.1 | 50500.0 | 1.80 |
| R14M07.XY | 12.92 | 1.950 | -1.428 | 121.200 | 91.500 | 106.400 | 104.900 | 34303.9 | 44502.1 | 50500.0 | 1.80 |
| R15M05.XY | 11.08 | 1.000 | -0.920 | 117.700 | 80.100 | 99.900 | 95.300 | 32663.3 | 36965.6 | 41500.0 | 1.87 |
| R15M07.XY | 11.08 | 1.000 | -0.868 | 117.400 | 75.200 | 98.700 | 91.400 | 32663.3 | 36965.6 | 41500.0 | 1.87 |
| R15M08.XY | 11.08 | 1.000 | -0.803 | 116.400 | 82.200 | 99.700 | 96.400 | 32663.3 | 36965.6 | 41500.0 | 1.87 |
| R16M01.XY | 13.63 | 2.970 | -2.665 | 125.500 | 99.300 | 112.100 | 113.700 | 12614.5 | 38626.7 | 41500.0 | 1.61 |
| R16M02.XY | 13.63 | 2.530 | -2.507 | 124.900 | 89.500 | 108.700 | 104.500 | 12614.5 | 38626.7 | 41500.0 | 1.61 |
| R16M03.XY | 13.63 | 2.750 | -2.689 | 125.500 | 94.900 | 110.900 | 109.900 | 12614.5 | 38626.7 | 41500.0 | 1.61 |
| R16M04.XY | 13.63 | 2.800 | -2.687 | 125.600 | 95.600 | 110.800 | 110.000 | 12614.5 | 38626.7 | 41500.0 | 1.61 |
| R16M05.XY | 13.63 | 3.030 | -2.840 | 126.100 | 95.500 | 111.300 | 110.000 | 12614.5 | 38626.7 | 41500.0 | 1.61 |
| R16M07.XY | 13.63 | 2.470 | -2.735 | 125.400 | 90.300 | 109.600 | 106.200 | 12614.5 | 38626.7 | 41500.0 | 1.61 |
| R17M01.XY | 10.17 | 1.270 | -0.878 | 118.500 | 80.800 | 101.400 | 96.100 | 62130.1 | 58816.5 | 53000.0 | 1.82 |
| R17M02.XY | 10.17 | 1.200 | -0.770 | 117.900 | 79.900 | 101.300 | 95.600 | 62130.1 | 58816.5 | 53000.0 | 1.82 |
| R17M03.XY | 10.17 | 1.350 | -0.759 | 118.200 | 85.800 | 102.300 | 99.600 | 62130.1 | 58816.5 | 53000.0 | 1.82 |
| R17M04.XY | 10.17 | 1.400 | -0.718 | 118.100 | 82.100 | 102.200 | 97.800 | 62130.1 | 58816.5 | 53000.0 | 1.82 |
| R17M05.XY | 10.17 | 1.240 | -0.832 | 118.300 | 79.400 | 101.000 | 94.600 | 62130.1 | 58816.5 | 53000.0 | 1.82 |
| R17M07.XY | 10.17 | 1.250 | -0.788 | 117.900 | 84.100 | 101.500 | 98.100 | 62130.1 | 58816.5 | 53000.0 | 1.82 |
| R18M01.XY | 10.50 | 1.800 | -1.141 | 121.400 | 90.000 | 105.200 | 103.600 | 30107.7 | 34212.1 | 60000.0 | 2.31 |
| R18M02.XY | 10.50 | 1.940 | -1.085 | 122.200 | 90.500 | 106.100 | 105.000 | 30107.7 | 34212.1 | 60000.0 | 2.31 |
| R18M03.XY | 10.50 | 2.350 | -1.339 | 123.500 | 94.400 | 107.900 | 107.700 | 30107.7 | 34212.1 | 60000.0 | 2.31 |
| R18M04.XY | 10.50 | 2.250 | -1.417 | 123.400 | 87.400 | 107.000 | 102.600 | 30107.7 | 34212.1 | 60000.0 | 2.31 |
| R18M05.XY | 10.50 | 1.740 | -1.054 | 121.100 | 84.700 | 104.100 | 99.700 | 30107.7 | 34212.1 | 60000.0 | 2.31 |
| R18M07.XY | 10.50 | 1.750 | -1.036 | 120.700 | 88.200 | 105.300 | 102.400 | 30107.7 | 34212.1 | 60000.0 | 2.31 |
| R19M01.XY | 10.67 | 1.880 | -1.318 | 121.300 | 86.000 | 105.600 | 101.200 | 36435.2 | 47650.3 | 54000.0 | 1.79 |
| R19M02.XY | 10.67 | 1.870 | -1.201 | 121.100 | 85.200 | 105.100 | 99.800 | 36435.2 | 47650.3 | 54000.0 | 1.79 |
| R19M03.XY | 10.67 | 1.800 | -1.250 | 120.900 | 88.200 | 104.900 | 102.300 | 36435.2 | 47650.3 | 54000.0 | 1.79 |
| R19M04.XY | 10.67 | 1.875 | -1.415 | 121.800 | 89.300 | 106.200 | 103.400 | 36435.2 | 47650.3 | 54000.0 | 1.79 |
| R19M05.XY | 10.67 | 1.720 | -1.199 | 120.700 | 89.200 | 104.700 | 102.400 | 36435.2 | 47650.3 | 54000.0 | 1.79 |
| R19M07.XY | 10.67 | 1.850 | -1.235 | 120.800 | 89.300 | 105.400 | 102.800 | 36435.2 | 47650.3 | 54000.0 | 1.79 |
| R20M01.XY | 10.50 | 1.940 | -1.797 | 123.400 | 87.300 | 106.900 | 102.700 | 0.0 | 30380.0 | 65500.0 | 2.48 |
| R20M02.XY | 10.50 | 1.970 | -1.833 | 123.700 | 92.700 | 107.300 | 106.200 | 0.0 | 30380.0 | 65500.0 | 2.48 |
| R20M03.XY | 10.50 | 1.900 | -1.692 | 123.400 | 90.500 | 106.300 | 104.500 | 0.0 | 30380.0 | 65500.0 | 2.48 |
| R20M04.XY | 10.50 | 1.990 | -1.976 | 124.100 | 86.000 | 107.600 | 102.400 | 0.0 | 30380.0 | 65500.0 | 2.48 |
| R20M05.XY | 10.50 | 1.650 | -1.594 | 122.600 | 85.000 | 105.400 | 100.200 | 0.0 | 30380.0 | 65500.0 | 2.48 |
| R20M07.XY | 10.50 | 1.800 | -1.589 | 122.600 | 87.700 | 106.600 | 103.600 | 0.0 | 30380.0 | 65500.0 | 2.48 |
| R211M05.X | 13.25 | 3.150 | -2.405 | 126.500 | 97.100 | 110.800 | 111.700 | 14098.4 | 31779.2 | 30500.0 | 1.55 |
| R211M07.X | 13.25 | 3.580 | -2.866 | 126.900 | 95.500 | 111.300 | 110.700 | 14098.4 | 31779.2 | 30500.0 | 1.55 |
| R211M08.X | 13.25 | 3.190 | -2.602 | 126.800 | 90.600 | 109.200 | 106.300 | 14098.4 | 31779.2 | 30500.0 | 1.55 |
| R212M05.X | 14.00 | 3.180 | -3.633 | 128.300 | 96.100 | 111.700 | 111.100 | 44863.5 | 109830.6 | 38000.0 | 1.25 |
| R212M07.X | 14.00 | 3.010 | -4.038 | 128.400 | 95.300 | 112.200 | 110.400 | 44863.5 | 109830.6 | 38000.0 | 1.25 |
| R212M08.X | 14.00 | 2.810 | -3.404 | 127.600 | 89.300 | 109.400 | 105.000 | 44863.5 | 109830.6 | 38000.0 | 1.25 |
| R22M01.XY | 9.30 | 1.550 | -0.862 | 118.300 | 86.200 | 103.000 | 100.500 | 8382.3 | 39292.3 | 37000.0 | 1.50 |
| R22M03.XY | 9.30 | 1.750 | -1.155 | 121.000 | 87.800 | 105.600 | 102.300 | 8382.3 | 39292.3 | 37000.0 | 1.50 |
| R22M04.XY | 9.30 | 1.840 | -1.319 | 121.900 | 86.100 | 105.800 | 101.200 | 8382.3 | 39292.3 | 37000.0 | 1.50 |
| R22M05.XY | 10.47 | 3.000 | -3.038 | 126.700 | 97.600 | 111.400 | 111.800 | 31396.4 | 29518.4 | 70000.0 | 2.90 |
| R22M07.XY | 10.47 | 3.070 | -2.681 | 126.200 | 95.300 | 111.400 | 110.100 | 31396.4 | 29518.4 | 70000.0 | 2.90 |
| R22M08.XY | 10.47 | 2.950 | -2.603 | 126.700 | 93.600 | 110.800 | 108.500 | 31396.4 | 29518.4 | 70000.0 | 2.90 |
| R23M01.XY | 14.45 | 2.310 | -1.461 | 122.000 | 88.200 | 108.300 | 103.900 | 10303.2 | 26985.1 | 70000.0 | 2.92 |
| R23M02.XY | 14.45 | 2.390 | -1.425 | 122.100 | 87.800 | 108.400 | 103.900 | 10303.2 | 26985.1 | 70000.0 | 2.92 |
| R23M03.XY | 14.45 | 2.400 | -1.350 | 122.000 | 86.800 | 108.200 | 103.300 | 10303.2 | 26985.1 | 70000.0 | 2.92 |
| R23M04.XY | 14.45 | 2.220 | -1.284 | 121.200 | 92.900 | 108.300 | 106.600 | 10303.2 | 26985.1 | 70000.0 | 2.92 |
| R24M07.XY | 10.33 | 1.260 | -1.089 | 119.400 | 84.300 | 102.600 | 98.600 | 42966.2 | 31445.0 | 69800.0 | 2.91 |
| R25M01.XY | 7.83 | 2.030 | -1.219 | 121.800 | 79.500 | 103.400 | 95.100 | 41697.9 | 45253.1 | 44900.0 | 1.80 |
| R25M02.XY | 7.83 | 2.010 | -1.368 | 122.200 | 87.100 | 104.900 | 101.500 | 41697.9 | 45253.1 | 44900.0 | 1.80 |

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|---|---|---|---|---|---|---|---|---|---|---|---|
| R25M03.XY | 7.83 | 2.200 | -1.321 | 122.700 | 89.100 | 105.600 | 102.900 | 41697.9 | 45253.1 | 44900.0 | 1.80 |
| R25M05.XY | 7.83 | 2.060 | -1.236 | 122.100 | 82.900 | 104.200 | 98.300 | 41697.9 | 45253.1 | 44900.0 | 1.80 |
| R25M07.XY | 7.83 | 2.000 | -1.119 | 121.500 | 78.300 | 102.900 | 94.200 | 41697.9 | 45253.1 | 44900.0 | 1.80 |
| R25M08.XY | 7.83 | 1.970 | -1.287 | 121.600 | 81.100 | 103.200 | 96.000 | 41697.9 | 45253.1 | 44900.0 | 1.80 |
| R26M01.XY | 10.30 | 1.920 | -1.343 | 122.200 | 86.200 | 105.800 | 101.000 | 12345.6 | 39728.2 | 66000.0 | 2.05 |
| R26M02.XY | 10.30 | 2.100 | -1.898 | 124.000 | 93.100 | 108.000 | 106.600 | 12345.6 | 39728.2 | 66000.0 | 2.05 |
| R26M03.XY | 10.30 | 2.140 | -1.720 | 123.900 | 87.700 | 107.400 | 103.300 | 12345.6 | 39728.2 | 66000.0 | 2.05 |
| R26M04.XY | 10.30 | 2.140 | -2.176 | 124.700 | 86.100 | 107.500 | 101.800 | 12345.6 | 39728.2 | 66000.0 | 2.05 |
| R26M05.XY | 10.30 | 1.850 | -1.580 | 122.700 | 86.500 | 106.200 | 101.500 | 12345.6 | 39728.2 | 66000.0 | 2.05 |
| R26M07.XY | 10.30 | 1.800 | -1.639 | 123.000 | 89.300 | 106.300 | 103.400 | 12345.6 | 39728.2 | 66000.0 | 2.05 |
| R27M01.XY | 11.88 | 2.650 | -1.143 | 121.600 | 86.700 | 106.300 | 101.400 | 4336.5 | 33788.5 | 45100.0 | 1.78 |
| R27M02.XY | 11.88 | 4.100 | -1.156 | 121.800 | 92.100 | 110.400 | 108.500 | 4336.5 | 33788.5 | 45100.0 | 1.78 |
| R27M03.XY | 11.88 | 3.300 | -1.087 | 121.400 | 89.800 | 108.700 | 105.900 | 4336.5 | 33788.5 | 45100.0 | 1.78 |
| R27M04.XY | 11.88 | 3.850 | -1.032 | 122.100 | 89.200 | 109.800 | 106.100 | 4336.5 | 33788.5 | 45100.0 | 1.78 |
| R27M05.XY | 11.88 | 2.650 | -1.041 | 120.800 | 86.300 | 106.700 | 102.000 | 4336.5 | 33788.5 | 45100.0 | 1.78 |
| R27M07.XY | 11.88 | 3.150 | -0.975 | 120.800 | 90.000 | 108.900 | 105.800 | 4336.5 | 33788.5 | 45100.0 | 1.78 |
| R28M02.XY | 11.67 | 3.500 | -2.203 | 126.000 | 87.700 | 109.800 | 103.500 | 20803.9 | 35615.2 | 41000.0 | 1.75 |
| R28M03.XY | 11.67 | 2.900 | -2.228 | 125.800 | 88.500 | 107.800 | 104.000 | 20803.9 | 35615.2 | 41000.0 | 1.75 |
| R28M04.XY | 11.67 | 3.350 | -2.396 | 126.200 | 87.000 | 110.100 | 104.200 | 20803.9 | 35615.2 | 41000.0 | 1.75 |
| R28M05.XY | 11.68 | 3.250 | -2.446 | 126.500 | 93.600 | 110.100 | 109.300 | 1617.5 | 30478.8 | 42000.0 | 1.82 |
| R28M07.XY | 11.68 | 3.500 | -2.534 | 126.900 | 93.000 | 111.000 | 108.700 | 1617.5 | 30478.8 | 42000.0 | 1.82 |
| R28M08.XY | 11.68 | 4.100 | -2.565 | 127.300 | 92.100 | 111.600 | 107.700 | 1617.5 | 30478.8 | 42000.0 | 1.82 |
| R28M09.XY | 11.68 | 3.500 | -2.647 | 127.300 | 90.400 | 109.200 | 106.200 | 1617.5 | 30478.8 | 42000.0 | 1.82 |
| R28M11.XY | 11.68 | 3.950 | -2.688 | 127.200 | 88.700 | 110.600 | 105.100 | 1617.5 | 30478.8 | 42000.0 | 1.82 |
| R28M12.XY | 11.68 | 3.250 | -2.586 | 126.700 | 90.800 | 109.500 | 106.900 | 1617.5 | 30478.8 | 42000.0 | 1.82 |
| R29M02.XY | 15.53 | 3.980 | -3.218 | 129.200 | 92.700 | 111.000 | 108.600 | 6830.5 | 107588.3 | 41000.0 | 1.17 |
| R29M03.XY | 15.53 | 3.860 | -3.113 | 129.300 | 92.700 | 109.200 | 106.900 | 6830.5 | 107588.3 | 41000.0 | 1.17 |
| R29M04.XY | 15.53 | 3.710 | -3.395 | 129.200 | 93.900 | 111.800 | 109.400 | 6830.5 | 107588.3 | 41000.0 | 1.17 |
| R29M05.XY | 15.54 | 3.350 | -2.816 | 127.100 | 88.500 | 110.300 | 105.500 | 11649.8 | 110456.8 | 40000.0 | 1.17 |
| R29M07.XY | 15.54 | 3.250 | -3.015 | 127.500 | 89.200 | 111.200 | 106.500 | 11649.8 | 110456.8 | 40000.0 | 1.17 |
| R29M08.XY | 15.54 | 3.140 | -2.951 | 127.300 | 93.200 | 110.800 | 108.000 | 11649.8 | 110456.8 | 40000.0 | 1.17 |
| R29M09.XY | 15.54 | 2.940 | -2.613 | 126.700 | 88.500 | 110.300 | 105.400 | 11649.8 | 110456.8 | 40000.0 | 1.17 |
| R29M11.XY | 15.54 | 2.850 | -2.945 | 127.200 | 93.300 | 111.300 | 109.000 | 11649.8 | 110456.8 | 40000.0 | 1.17 |
| R29M12.XY | 15.54 | 3.570 | -3.186 | 128.000 | 89.000 | 111.000 | 106.400 | 11649.8 | 110456.8 | 40000.0 | 1.17 |
| R30M02.XY | 10.50 | 1.840 | -1.546 | 122.400 | 83.500 | 104.500 | 99.000 | 3765.7 | 29191.4 | 68500.0 | 2.66 |
| R30M03.XY | 10.50 | 1.730 | -1.411 | 122.000 | 85.400 | 105.200 | 100.400 | 3765.7 | 29191.4 | 68500.0 | 2.66 |
| R30M04.XY | 10.50 | 1.890 | -1.545 | 122.300 | 84.900 | 106.200 | 100.700 | 3765.7 | 29191.4 | 68500.0 | 2.66 |
| R30M05.XY | 10.51 | 1.580 | -1.172 | 120.800 | 82.400 | 103.400 | 98.000 | 18175.1 | 30479.4 | 69300.0 | 2.66 |
| R30M06.XY | 10.51 | 1.640 | -1.167 | 121.100 | 80.300 | 103.800 | 97.000 | 18175.1 | 30479.4 | 69300.0 | 2.66 |
| R30M07.XY | 10.51 | 1.750 | -1.313 | 121.800 | 84.200 | 104.600 | 99.100 | 18175.1 | 30479.4 | 69300.0 | 2.66 |
| R30M08.XY | 10.51 | 1.870 | -1.358 | 122.500 | 81.400 | 104.800 | 97.600 | 18175.1 | 30479.4 | 69300.0 | 2.66 |
| R30M09.XY | 10.51 | 1.700 | -1.334 | 122.100 | 82.300 | 104.000 | 98.000 | 18175.1 | 30479.4 | 69300.0 | 2.66 |
| R30M10.XY | 10.51 | 1.780 | -1.463 | 122.600 | 81.400 | 104.500 | 98.000 | 18175.1 | 30479.4 | 69300.0 | 2.66 |
| R31M02.XY | 10.25 | 1.830 | -1.375 | 121.800 | 90.900 | 105.300 | 104.600 | 44358.2 | 32813.6 | 66000.0 | 2.74 |
| R31M03.XY | 10.25 | 2.020 | -1.226 | 121.200 | 84.200 | 106.200 | 100.800 | 44358.2 | 32813.6 | 66000.0 | 2.74 |
| R31M04.XY | 10.25 | 1.740 | -1.272 | 121.400 | 83.500 | 104.300 | 98.400 | 44358.2 | 32813.6 | 66000.0 | 2.74 |
| R31M05.XY | 10.26 | 1.520 | -1.148 | 120.200 | 83.700 | 104.000 | 99.400 | 32738.2 | 30366.6 | 66000.0 | 2.74 |
| R31M06.XY | 10.26 | 1.530 | -1.151 | 120.300 | 83.400 | 103.500 | 98.300 | 32738.2 | 30366.6 | 66000.0 | 2.74 |
| R31M07.XY | 10.26 | 1.650 | -1.192 | 120.700 | 83.200 | 104.100 | 99.000 | 32738.2 | 30366.6 | 66000.0 | 2.74 |
| R31M08.XY | 10.26 | 1.670 | -1.259 | 120.900 | 86.500 | 104.600 | 101.300 | 32738.2 | 30366.6 | 66000.0 | 2.74 |
| R32M02.XY | 12.17 | 1.910 | -1.535 | 122.500 | 84.300 | 105.600 | 100.300 | 9039.8 | 27905.4 | 70300.0 | 2.84 |
| R32M03.XY | 12.17 | 2.250 | -1.605 | 122.700 | 85.700 | 107.000 | 101.400 | 9039.8 | 27905.4 | 70300.0 | 2.84 |
| R32M04.XY | 12.17 | 2.230 | -1.589 | 122.900 | 94.000 | 107.700 | 108.000 | 9039.8 | 27905.4 | 70300.0 | 2.84 |
| R32M05.XY | 12.18 | 1.750 | -1.506 | 122.300 | 84.900 | 105.200 | 100.400 | 3855.9 | 27717.3 | 70300.0 | 2.84 |
| R32M06.XY | 12.18 | 1.670 | -1.813 | 123.200 | 84.200 | 105.200 | 99.900 | 3855.9 | 27717.3 | 70300.0 | 2.84 |
| R32M07.XY | 12.18 | 1.810 | -1.429 | 121.800 | 81.300 | 104.300 | 97.500 | 3855.9 | 27717.3 | 70300.0 | 2.84 |
| R32M08.XY | 12.18 | 1.910 | -1.273 | 122.000 | 78.400 | 104.200 | 95.400 | 3855.9 | 27717.3 | 70300.0 | 2.84 |
| R32M09.XY | 12.18 | 1.660 | -1.358 | 122.300 | 87.000 | 104.400 | 101.200 | 3855.9 | 27717.3 | 70300.0 | 2.84 |
| R32M10.XY | 12.18 | 1.630 | -1.534 | 122.600 | 85.400 | 104.500 | 100.300 | 3855.9 | 27717.3 | 70300.0 | 2.84 |
| R33M02.XY | 10.88 | 2.900 | -2.553 | 125.600 | 89.700 | 110.600 | 106.300 | 30342.2 | 43183.1 | 51000.0 | 1.80 |

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| R33M03.XY | 10.88 | 3.150 | -2.501 | 125.900 | 89.400 | 110.900 | 106.800 | 30342.2 | 43183.1 | 51000.0 | 1.80 |
| R33M04.XY | 10.88 | 2.850 | -2.512 | 125.800 | 92.400 | 110.200 | 107.000 | 30342.2 | 43183.1 | 51000.0 | 1.80 |
| R33M05.XY | 10.89 | 1.565 | -1.214 | 120.400 | 86.500 | 104.300 | 101.000 | 1933.7 | 37020.1 | 51000.0 | 1.80 |
| R33M06.XY | 10.89 | 2.050 | -1.509 | 122.500 | 86.800 | 106.500 | 102.700 | 1933.7 | 37020.1 | 51000.0 | 1.80 |
| R33M07.XY | 10.89 | 2.100 | -1.558 | 122.700 | 86.400 | 106.900 | 102.100 | 1933.7 | 37020.1 | 51000.0 | 1.80 |
| R33M08.XY | 10.89 | 2.150 | -1.499 | 122.600 | 87.700 | 107.200 | 103.100 | 1933.7 | 37020.1 | 51000.0 | 1.80 |
| R33M09.XY | 10.89 | 1.774 | -1.217 | 120.500 | 81.800 | 105.000 | 97.400 | 1933.7 | 37020.1 | 51000.0 | 1.80 |
| R33M10.XY | 10.89 | 2.100 | -1.468 | 121.700 | 85.600 | 107.000 | 101.500 | 1933.7 | 37020.1 | 51000.0 | 1.80 |
| R341M02.X | 11.62 | 3.100 | -2.865 | 126.600 | 90.900 | 110.400 | 107.000 | 45073.2 | 59818.1 | 44000.0 | 1.56 |
| R341M03.X | 11.62 | 3.250 | -2.812 | 126.600 | 85.700 | 107.000 | 101.100 | 45073.2 | 59818.1 | 44000.0 | 1.56 |
| R341M04.X | 11.62 | 2.650 | -2.583 | 125.500 | 85.700 | 106.700 | 101.000 | 45073.2 | 59818.1 | 44000.0 | 1.56 |
| R341M05.X | 11.63 | 1.550 | -1.135 | 119.500 | 79.500 | 102.100 | 94.600 | 12424.4 | 42893.0 | 44000.0 | 1.56 |
| R341M06.X | 11.63 | 1.970 | -0.967 | 119.400 | 83.000 | 101.500 | 97.100 | 12424.4 | 42893.0 | 44000.0 | 1.56 |
| R341M07.X | 11.63 | 2.100 | -1.105 | 120.500 | 80.500 | 101.800 | 95.100 | 12424.4 | 42893.0 | 44000.0 | 1.56 |
| R341M08.X | 11.63 | 1.950 | -1.112 | 119.800 | 81.800 | 102.800 | 96.400 | 12424.4 | 42893.0 | 44000.0 | 1.56 |
| R341M09.X | 11.63 | 2.000 | -1.250 | 120.500 | 80.200 | 102.800 | 95.700 | 12424.4 | 42893.0 | 44000.0 | 1.56 |
| R341M11.X | 11.63 | 2.000 | -1.029 | 119.900 | 79.600 | 101.700 | 95.100 | 12424.4 | 42893.0 | 44000.0 | 1.56 |
| R342M02.X | 11.87 | 1.650 | -1.082 | 121.000 | 76.200 | 98.500 | 91.800 | 49614.0 | 83739.4 | 36400.0 | 1.36 |
| R342M03.X | 11.87 | 1.600 | -1.236 | 121.600 | 78.900 | 99.300 | 95.100 | 49614.0 | 83739.4 | 36400.0 | 1.36 |
| R342M04.X | 11.87 | 1.550 | -0.955 | 120.200 | 75.400 | 97.300 | 90.600 | 49614.0 | 83739.4 | 36400.0 | 1.36 |
| R342M05.X | 11.88 | 1.400 | -0.792 | 117.500 | 78.700 | 100.300 | 93.600 | 46177.4 | 79606.8 | 36400.0 | 1.36 |
| R342M06.X | 11.88 | 1.200 | -0.814 | 118.100 | 76.900 | 97.300 | 89.700 | 46177.4 | 79606.8 | 36400.0 | 1.36 |
| R342M07.X | 11.88 | 1.300 | -0.958 | 118.800 | 78.000 | 98.100 | 90.400 | 46177.4 | 79606.8 | 36400.0 | 1.36 |
| R342M08.X | 11.88 | 1.350 | -0.915 | 118.200 | 77.100 | 98.700 | 90.500 | 46177.4 | 79606.8 | 36400.0 | 1.36 |
| R342M09.X | 11.88 | 1.450 | -0.914 | 118.800 | 77.300 | 99.200 | 92.300 | 46177.4 | 79606.8 | 36400.0 | 1.36 |
| R342M11.X | 11.88 | 1.150 | -0.811 | 117.800 | 74.300 | 97.400 | 88.200 | 46177.4 | 79606.8 | 36400.0 | 1.36 |
| R35M05.XY | 11.63 | 2.900 | -2.457 | 126.600 | 84.200 | 107.700 | 100.400 | 3011.4 | 48586.6 | 52000.0 | 1.55 |
| R35M06.XY | 11.63 | 2.800 | -2.423 | 126.500 | 83.200 | 105.100 | 99.200 | 3011.4 | 48586.6 | 52000.0 | 1.55 |
| R35M07.XY | 11.63 | 2.900 | -2.407 | 126.600 | 83.600 | 104.900 | 98.700 | 3011.4 | 48586.6 | 52000.0 | 1.55 |
| R35M08.XY | 11.63 | 2.620 | -1.893 | 124.700 | 82.700 | 106.000 | 98.900 | 3011.4 | 48586.6 | 52000.0 | 1.55 |
| R35M09.XY | 11.63 | 3.200 | -2.530 | 127.100 | 85.700 | 108.800 | 102.700 | 3011.4 | 48586.6 | 52000.0 | 1.55 |
| R35M10.XY | 11.63 | 2.750 | -2.439 | 126.300 | 82.200 | 105.200 | 98.700 | 3011.4 | 48586.6 | 52000.0 | 1.55 |
| R35M11.XY | 11.63 | 2.750 | -2.431 | 126.400 | 81.100 | 104.300 | 96.400 | 3011.4 | 48586.6 | 52000.0 | 1.55 |
| R35M12.XY | 11.63 | 2.800 | -2.348 | 125.900 | 82.600 | 107.000 | 99.400 | 3011.4 | 48586.6 | 52000.0 | 1.55 |
| R36M05.XY | 16.77 | 1.900 | -1.507 | 123.000 | 81.600 | 102.000 | 96.800 | 29468.5 | 32027.1 | 53000.0 | 2.26 |
| R36M06.XY | 16.77 | 1.900 | -1.661 | 123.000 | 86.000 | 104.800 | 101.300 | 29468.5 | 32027.1 | 53000.0 | 2.26 |
| R36M07.XY | 16.77 | 1.600 | -1.469 | 121.900 | 82.100 | 102.300 | 97.000 | 29468.5 | 32027.1 | 53000.0 | 2.26 |
| R36M08.XY | 16.77 | 1.950 | -1.842 | 123.600 | 81.600 | 104.300 | 97.900 | 29468.5 | 32027.1 | 53000.0 | 2.26 |
| R36M09.XY | 16.77 | 1.500 | -1.310 | 121.100 | 80.400 | 99.900 | 94.200 | 29468.5 | 32027.1 | 53000.0 | 2.26 |
| R36M11.XY | 16.77 | 1.200 | -1.136 | 119.300 | 84.200 | 100.800 | 97.800 | 29468.5 | 32027.1 | 53000.0 | 2.26 |
| R372M02.X | 12.92 | 2.450 | -1.983 | 124.800 | 84.900 | 104.200 | 99.300 | 70589.5 | 51856.5 | 64000.0 | 2.20 |
| R372M03.X | 12.92 | 2.850 | -2.176 | 125.200 | 86.800 | 108.000 | 103.100 | 70589.5 | 51856.5 | 64000.0 | 2.20 |
| R372M04.X | 12.92 | 2.550 | -1.945 | 124.400 | 84.300 | 104.900 | 99.000 | 70589.5 | 51856.5 | 64000.0 | 2.20 |
| R372M05.X | 12.93 | 1.120 | -0.675 | 116.400 | 78.400 | 99.900 | 94.600 | 14429.3 | 35416.2 | 64000.0 | 2.20 |
| R372M07.X | 12.93 | 0.960 | -0.667 | 116.100 | 76.900 | 98.800 | 92.200 | 14429.3 | 35416.2 | 64000.0 | 2.20 |
| R372M08.X | 12.93 | 0.880 | -0.634 | 115.500 | 76.000 | 97.500 | 91.300 | 14429.3 | 35416.2 | 64000.0 | 2.20 |
| R372M11.X | 12.93 | 1.190 | -0.631 | 116.600 | 77.500 | 98.400 | 92.300 | 14429.3 | 35416.2 | 64000.0 | 2.20 |
| R372M12.X | 12.93 | 0.970 | -0.603 | 116.300 | 75.500 | 94.900 | 89.700 | 14429.3 | 35416.2 | 64000.0 | 2.20 |
| R38M14.XY | 10.32 | 2.310 | -2.314 | 124.900 | 88.400 | 108.000 | 104.300 | 3744.8 | 64628.0 | 44300.0 | 1.30 |
| R38M15.XY | 10.32 | 2.120 | -2.243 | 124.400 | 97.800 | 108.900 | 111.500 | 3744.8 | 64628.0 | 44300.0 | 1.30 |
| R38M16.XY | 10.32 | 2.250 | -2.300 | 124.800 | 91.600 | 108.300 | 106.800 | 3744.8 | 64628.0 | 44300.0 | 1.30 |
| R39M02.XY | 12.67 | 2.570 | -1.584 | 121.500 | 100.300 | 112.500 | 114.600 | 25729.4 | 86275.2 | 39800.0 | 1.24 |
| R39M03.XY | 12.67 | 1.660 | -1.828 | 122.100 | 88.500 | 106.200 | 103.300 | 25729.4 | 86275.2 | 39800.0 | 1.24 |
| R39M04.XY | 12.67 | 3.070 | -1.793 | 122.600 | 98.700 | 112.900 | 113.800 | 25729.4 | 86275.2 | 39800.0 | 1.24 |
| R39M05.XY | 12.67 | 2.530 | -1.415 | 120.600 | 94.900 | 108.900 | 109.600 | 25729.4 | 86275.2 | 39800.0 | 1.24 |
| R39M06.XY | 12.67 | 1.790 | -2.066 | 122.800 | 89.200 | 107.200 | 104.400 | 25729.4 | 86275.2 | 39800.0 | 1.24 |
| R39M07.XY | 12.67 | 1.840 | -1.835 | 122.200 | 90.900 | 107.900 | 104.900 | 25729.4 | 86275.2 | 39800.0 | 1.24 |
| R39M08.XY | 12.67 | 2.020 | -1.853 | 122.700 | 89.500 | 108.400 | 104.700 | 25729.4 | 86275.2 | 39800.0 | 1.24 |
| R40M01.XY | 0.00 | 2.100 | -1.818 | 123.800 | 87.200 | 105.000 | 101.800 | 6000.0 | 0.0 | 52900.0 | 1.81 |
| R40M02.XY | 0.00 | 2.130 | -1.931 | 124.200 | 85.000 | 105.500 | 100.500 | 6000.0 | 0.0 | 52900.0 | 1.81 |

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| R40M03.XY | 0.00 | 2.260 | -1.989 | 124.400 | 86.200 | 106.400 | 102.000 | 6000.0 | 0.0 | 52900.0 | 1.81 |
| R40M05.XY | 0.00 | 2.220 | -1.883 | 123.900 | 89.100 | 107.200 | 104.300 | 6000.0 | 0.0 | 52900.0 | 1.81 |
| R40M06.XY | 0.00 | 2.350 | -2.148 | 124.600 | 87.400 | 107.700 | 103.100 | 6000.0 | 0.0 | 52900.0 | 1.81 |
| R40M07.XY | 0.00 | 2.170 | -1.300 | 122.200 | 86.800 | 106.000 | 101.900 | 6000.0 | 0.0 | 52900.0 | 1.81 |
| R40M08.XY | 0.00 | 2.820 | -2.268 | 125.200 | 91.500 | 109.800 | 107.600 | 6000.0 | 0.0 | 52900.0 | 1.81 |
| R40M09.XY | 0.00 | 3.120 | -2.040 | 124.600 | 93.800 | 110.400 | 109.000 | 6000.0 | 0.0 | 52900.0 | 1.81 |
| R40M10.XY | 0.00 | 3.000 | -2.160 | 125.200 | 90.400 | 109.900 | 106.000 | 6000.0 | 0.0 | 52900.0 | 1.81 |
| R40M11.XY | 0.00 | 2.980 | -2.199 | 125.300 | 91.200 | 109.700 | 106.500 | 6000.0 | 0.0 | 52900.0 | 1.81 |
| R40M12.XY | 0.00 | 2.800 | -2.070 | 125.000 | 91.100 | 108.900 | 105.300 | 6000.0 | 0.0 | 52900.0 | 1.81 |
| R40M13.XY | 0.00 | 2.750 | -1.915 | 125.100 | 90.900 | 108.600 | 106.100 | 6000.0 | 0.0 | 52900.0 | 1.81 |
| R40M14.XY | 0.00 | 2.650 | -2.407 | 125.800 | 88.000 | 107.900 | 102.700 | 6000.0 | 0.0 | 52900.0 | 1.81 |
| R40M15.XY | 0.00 | 2.350 | -2.113 | 125.000 | 93.300 | 108.500 | 107.500 | 6000.0 | 0.0 | 52900.0 | 1.81 |
| R40M16.XY | 0.00 | 2.900 | -2.070 | 125.400 | 89.000 | 108.500 | 104.200 | 6000.0 | 0.0 | 52900.0 | 1.81 |
| R41M01.XY | 0.01 | 1.700 | -1.446 | 121.700 | 91.000 | 106.100 | 105.400 | 70.0 | 0.0 | 72000.0 | 2.83 |
| R41M02.XY | 0.01 | 1.750 | -1.650 | 122.300 | 89.100 | 105.900 | 103.700 | 70.0 | 0.0 | 72000.0 | 2.83 |
| R41M03.XY | 0.01 | 1.890 | -1.626 | 122.900 | 90.200 | 106.000 | 104.100 | 70.0 | 0.0 | 72000.0 | 2.83 |
| R41M04.XY | 0.01 | 1.770 | -1.532 | 122.300 | 89.800 | 105.500 | 103.600 | 70.0 | 0.0 | 72000.0 | 2.83 |
| R41M05.XY | 0.01 | 1.620 | -1.482 | 121.700 | 83.400 | 104.100 | 99.200 | 70.0 | 0.0 | 72000.0 | 2.83 |
| R41M06.XY | 0.01 | 1.620 | -1.627 | 122.300 | 86.300 | 105.000 | 101.100 | 70.0 | 0.0 | 72000.0 | 2.83 |
| R41M07.XY | 0.01 | 1.870 | -1.562 | 123.000 | 84.800 | 104.900 | 99.800 | 70.0 | 0.0 | 72000.0 | 2.83 |
| R41M08.XY | 0.01 | 1.770 | -1.448 | 122.200 | 90.000 | 104.800 | 103.600 | 70.0 | 0.0 | 72000.0 | 2.83 |
| R41M09.XY | 0.01 | 1.650 | -1.505 | 122.200 | 84.900 | 103.700 | 99.300 | 70.0 | 0.0 | 72000.0 | 2.83 |
| R41M10.XY | 0.01 | 1.650 | -1.548 | 122.600 | 87.400 | 104.900 | 101.600 | 70.0 | 0.0 | 72000.0 | 2.83 |
| R41M11.XY | 0.01 | 1.670 | -1.505 | 122.700 | 83.200 | 104.000 | 97.700 | 70.0 | 0.0 | 72000.0 | 2.83 |
| R41M12.XY | 0.01 | 1.660 | -1.566 | 122.700 | 88.500 | 104.600 | 102.300 | 70.0 | 0.0 | 72000.0 | 2.83 |
| R41M13.XY | 0.01 | 1.700 | -1.450 | 122.100 | 89.600 | 105.700 | 103.700 | 70.0 | 0.0 | 72000.0 | 2.83 |
| R41M14.XY | 0.01 | 2.050 | -1.579 | 122.500 | 92.500 | 108.300 | 107.100 | 70.0 | 0.0 | 72000.0 | 2.83 |
| R41M15.XY | 0.01 | 2.100 | -1.474 | 122.300 | 89.700 | 107.700 | 104.600 | 70.0 | 0.0 | 72000.0 | 2.83 |
| R41M16.XY | 0.01 | 1.900 | -1.405 | 122.200 | 87.100 | 105.800 | 102.300 | 70.0 | 0.0 | 72000.0 | 2.83 |

## Augmented XB-70 Database (Rise Times)

| FILE NAME | Time (Hrs) | Pmax (PSF) | Pmin (PSF) | t50 (ms) | t75 (ms) | t90 (ms) | t100 (ms) | Sideline (Feet) | DFBR (Feet) | Altitude (Feet) | Mach # |
|---|---|---|---|---|---|---|---|---|---|---|---|
| R01M02.XY | 11.23 | 1.600 | -1.189 | 1.125 | 1.875 | 4.500 | 6.000 | 21349.6 | 38871.3 | 50500.0 | 1.83 |
| R01M03.XY | 11.23 | 1.750 | -1.317 | 1.000 | 1.125 | 3.000 | 4.625 | 21349.6 | 38871.3 | 50500.0 | 1.83 |
| R01M04.XY | 11.23 | 1.710 | -1.443 | 1.500 | 2.125 | 4.750 | 7.625 | 21349.6 | 38871.3 | 50500.0 | 1.83 |
| R01M06.XY | 11.23 | 2.100 | -1.649 | 2.000 | 3.625 | 5.125 | 8.875 | 21349.6 | 38871.3 | 50500.0 | 1.83 |
| R01M07.XY | 11.23 | 1.200 | -1.036 | 2.875 | 4.250 | 4.875 | 20.625 | 21349.6 | 38871.3 | 50500.0 | 1.83 |
| R01M08.XY | 11.23 | 1.790 | -1.265 | 1.500 | 2.875 | 4.375 | 6.375 | 21349.6 | 38871.3 | 50500.0 | 1.83 |
| R02M01.XY | 12.22 | 3.550 | -2.665 | 2.750 | 6.750 | 7.375 | 8.375 | 0.0 | 34988.7 | 48000.0 | 1.80 |
| R02M02.XY | 12.22 | 3.700 | -2.773 | 2.000 | 4.875 | 5.375 | 7.000 | 0.0 | 34988.7 | 48000.0 | 1.80 |
| R02M03.XY | 12.22 | 3.050 | -2.051 | 1.875 | 2.250 | 6.000 | 10.875 | 0.0 | 34988.7 | 48000.0 | 1.80 |
| R02M04.XY | 12.22 | 4.150 | -3.321 | 3.625 | 5.000 | 8.000 | 9.875 | 0.0 | 34988.7 | 48000.0 | 1.80 |
| R02M05.XY | 12.22 | 4.250 | -2.621 | 3.375 | 9.250 | 10.375 | 12.875 | 0.0 | 34988.7 | 48000.0 | 1.80 |
| R02M07.XY | 12.22 | 3.480 | -2.871 | 3.125 | 3.875 | 1.625 | 4.625 | 0.0 | 34988.7 | 48000.0 | 1.80 |
| R03M01.XY | 8.00 | 1.470 | -1.127 | 0.750 | 2.375 | 5.125 | 7.500 | 37535.6 | 33313.7 | 66000.0 | 2.60 |
| R03M02.XY | 8.00 | 1.630 | -1.087 | 0.500 | 2.000 | 5.750 | 7.750 | 37535.6 | 33313.7 | 66000.0 | 2.60 |
| R03M03.XY | 8.00 | 1.690 | -1.188 | 0.500 | 4.500 | 7.000 | 10.500 | 37535.6 | 33313.7 | 66000.0 | 2.60 |
| R03M05.XY | 8.01 | 1.250 | -0.841 | 1.250 | 1.750 | 2.750 | 4.500 | 3636.3 | 28950.3 | 66000.0 | 2.60 |
| R03M06.XY | 8.01 | 1.750 | -1.148 | 1.125 | 1.250 | 3.125 | 5.750 | 3636.3 | 28950.3 | 66000.0 | 2.60 |
| R03M07.XY | 8.01 | 1.700 | -1.183 | 1.625 | 2.875 | 4.500 | 8.250 | 3636.3 | 28950.3 | 66000.0 | 2.60 |
| R04M01.XY | 7.53 | 2.850 | -2.306 | 0.625 | 2.125 | 26.250 | 62.250 | 5791.6 | 58107.0 | 32000.0 | 1.23 |
| R04M03.XY | 7.53 | 3.150 | -2.637 | 0.375 | 0.500 | 55.375 | 55.875 | 5791.6 | 58107.0 | 32000.0 | 1.23 |
| R04M04.XY | 7.53 | 2.750 | -2.080 | 0.250 | 3.375 | 27.125 | 59.500 | 5791.6 | 58107.0 | 32000.0 | 1.23 |
| R04M05.XY | 7.53 | 2.050 | -2.093 | 0.500 | 4.500 | 30.875 | 65.250 | 5791.6 | 58107.0 | 32000.0 | 1.23 |
| R04M07.XY | 7.53 | 2.370 | -2.250 | 3.125 | 7.750 | 61.500 | 67.500 | 5791.6 | 58107.0 | 32000.0 | 1.23 |
| R04M08.XY | 7.53 | 2.300 | -2.038 | 3.250 | 4.625 | 59.875 | 62.375 | 5791.6 | 58107.0 | 32000.0 | 1.23 |
| R05M05.XY | 7.67 | 2.150 | -1.936 | 1.875 | 2.875 | 3.000 | 4.875 | 29667.2 | 64346.6 | 42300.0 | 1.38 |
| R05M07.XY | 7.67 | 2.180 | -2.094 | 0.375 | 0.500 | 1.000 | 2.750 | 29667.2 | 64346.6 | 42300.0 | 1.38 |
| R05M08.XY | 7.67 | 2.000 | -2.034 | 0.500 | 0.750 | 2.375 | 38.500 | 29667.2 | 64346.6 | 42300.0 | 1.38 |
| R06M01.XY | 13.50 | 0.320 | -0.058 | 31.125 | 42.625 | 41.875 | 55.375 | 74248.0 | 109088.3 | 46000.0 | 1.40 |
| R06M02.XY | 13.50 | 0.300 | -0.139 | 30.375 | 43.500 | 51.000 | 114.375 | 74248.0 | 109088.3 | 46000.0 | 1.40 |
| R07M01.XY | 11.98 | 2.130 | -1.967 | 5.625 | 9.625 | 10.375 | 13.375 | 42784.5 | 70516.5 | 42500.0 | 1.42 |
| R07M03.XY | 11.98 | 2.150 | -1.881 | 4.625 | 5.750 | 9.000 | 15.375 | 42784.5 | 70516.5 | 42500.0 | 1.42 |
| R07M04.XY | 11.98 | 2.080 | -1.919 | 5.375 | 7.500 | 28.375 | 33.750 | 42784.5 | 70516.5 | 42500.0 | 1.42 |
| R07M05.XY | 11.99 | 1.330 | -1.082 | 10.375 | 44.875 | 74.750 | 83.250 | 15315.4 | 51959.1 | 42500.0 | 1.42 |
| R07M07.XY | 11.99 | 1.420 | -1.174 | 19.875 | 22.750 | 64.000 | 71.125 | 15315.4 | 51959.1 | 42500.0 | 1.42 |
| R07M08.XY | 11.99 | 1.270 | -1.034 | 11.375 | 27.125 | 41.875 | 72.000 | 15315.4 | 51959.1 | 42500.0 | 1.42 |
| R08M05.XY | 12.42 | 2.810 | -2.658 | 2.500 | 2.750 | 1.500 | 40.875 | 9761.6 | 36090.2 | 33800.0 | 1.50 |
| R08M07.XY | 12.42 | 3.050 | -2.632 | 1.750 | 4.000 | 8.125 | 15.625 | 9761.6 | 36090.2 | 33800.0 | 1.50 |
| R08M08.XY | 12.42 | 3.280 | -2.711 | 1.875 | 2.375 | 2.625 | 5.750 | 9761.6 | 36090.2 | 33800.0 | 1.50 |
| R09M05.XY | 12.33 | 2.590 | -2.263 | 10.500 | 21.125 | 49.375 | 60.000 | 4129.4 | 43559.4 | 33000.0 | 1.35 |
| R09M07.XY | 12.33 | 2.410 | -2.166 | 10.125 | 45.000 | 46.500 | 57.625 | 4129.4 | 43559.4 | 33000.0 | 1.35 |
| R09M08.XY | 12.33 | 2.440 | -2.018 | 11.250 | 22.000 | 42.750 | 63.000 | 4129.4 | 43559.4 | 33000.0 | 1.35 |
| R10M05.XY | 12.72 | 2.990 | -2.678 | 4.250 | 4.875 | 2.750 | 10.875 | 4376.0 | 35616.1 | 31000.0 | 1.42 |
| R10M07.XY | 12.72 | 3.900 | -3.396 | 2.250 | 2.500 | 1.500 | 7.375 | 4376.0 | 35616.1 | 31000.0 | 1.42 |
| R10M08.XY | 12.72 | 4.270 | -3.196 | 0.500 | 0.625 | 0.750 | 1.375 | 4376.0 | 35616.1 | 31000.0 | 1.42 |
| R11M05.XY | 13.53 | 2.650 | -2.502 | 1.250 | 1.625 | 5.375 | 7.250 | 679.7 | 34421.8 | 34000.0 | 1.51 |
| R11M07.XY | 13.53 | 3.900 | -2.497 | 1.250 | 1.750 | 1.250 | 2.000 | 679.7 | 34421.8 | 34000.0 | 1.51 |
| R11M08.XY | 13.53 | 4.100 | -2.467 | 0.750 | 0.875 | 0.625 | 1.125 | 679.7 | 34421.8 | 34000.0 | 1.51 |
| R12M05.XY | 9.60 | 3.140 | -2.261 | 2.625 | 3.500 | 2.750 | 8.125 | 13179.9 | 33015.1 | 41000.0 | 1.76 |
| R12M07.XY | 9.60 | 3.130 | -2.140 | 1.875 | 2.625 | 3.125 | 7.125 | 13179.9 | 33015.1 | 41000.0 | 1.76 |
| R12M08.XY | 9.60 | 3.360 | -2.145 | 1.000 | 1.500 | 6.125 | 12.000 | 13179.9 | 33015.1 | 41000.0 | 1.76 |

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|---|---|---|---|---|---|---|---|---|---|---|---|
| R13M01.XY | 10.45 | 0.299 | -0.222 | 9.625 | 74.500 | 86.250 | 93.000 | 61258.5 | 95298.9 | 50000.0 | 1.40 |
| R13M02.XY | 10.45 | 0.312 | -0.251 | 12.875 | 19.375 | 80.000 | 90.125 | 61258.5 | 95298.9 | 50000.0 | 1.40 |
| R13M03.XY | 10.45 | 0.299 | -0.190 | 11.125 | 15.125 | 80.875 | 92.750 | 61258.5 | 95298.9 | 50000.0 | 1.40 |
| R13M04.XY | 10.45 | 0.317 | -0.280 | 19.000 | 64.875 | 88.875 | 95.250 | 61258.5 | 95298.9 | 50000.0 | 1.40 |
| R13M05.XY | 10.45 | 0.259 | -0.136 | 30.875 | 75.500 | 96.375 | 116.000 | 61258.5 | 95298.9 | 50000.0 | 1.40 |
| R13M07.XY | 10.45 | 0.222 | -0.189 | 7.125 | 15.250 | 75.250 | 82.375 | 61258.5 | 95298.9 | 50000.0 | 1.40 |
| R14M05.XY | 12.92 | 2.100 | -1.551 | 5.250 | 5.375 | 4.500 | 9.125 | 34303.9 | 44502.1 | 50500.0 | 1.80 |
| R14M07.XY | 12.92 | 1.950 | -1.428 | 0.500 | 2.125 | 2.000 | 2.500 | 34303.9 | 44502.1 | 50500.0 | 1.80 |
| R15M05.XY | 11.08 | 1.000 | -0.920 | 2.500 | 3.125 | 3.625 | 31.375 | 32663.3 | 36965.6 | 41500.0 | 1.87 |
| R15M07.XY | 11.08 | 1.000 | -0.868 | 2.750 | 5.000 | 11.375 | 18.375 | 32663.3 | 36965.6 | 41500.0 | 1.87 |
| R15M08.XY | 11.08 | 1.000 | -0.803 | 2.750 | 3.875 | 3.000 | 4.625 | 32663.3 | 36965.6 | 41500.0 | 1.87 |
| R16M01.XY | 13.63 | 2.970 | -2.665 | 0.750 | 0.875 | 0.875 | 1.375 | 12614.5 | 38626.7 | 41500.0 | 1.61 |
| R16M02.XY | 13.63 | 2.530 | -2.507 | 2.125 | 5.500 | 7.625 | 32.625 | 12614.5 | 38626.7 | 41500.0 | 1.61 |
| R16M03.XY | 13.63 | 2.750 | -2.689 | 2.500 | 3.250 | 4.500 | 34.250 | 12614.5 | 38626.7 | 41500.0 | 1.61 |
| R16M04.XY | 13.63 | 2.800 | -2.687 | 3.500 | 4.250 | 2.250 | 34.250 | 12614.5 | 38626.7 | 41500.0 | 1.61 |
| R16M05.XY | 13.63 | 3.030 | -2.840 | 8.125 | 11.125 | 6.375 | 37.125 | 12614.5 | 38626.7 | 41500.0 | 1.61 |
| R16M07.XY | 13.63 | 2.470 | -2.735 | 2.875 | 3.500 | 11.250 | 31.125 | 12614.5 | 38626.7 | 41500.0 | 1.61 |
| R17M01.XY | 10.17 | 1.270 | -0.878 | 5.375 | 6.125 | 5.625 | 11.125 | 62130.1 | 58816.5 | 53000.0 | 1.82 |
| R17M02.XY | 10.17 | 1.200 | -0.770 | 2.125 | 2.875 | 3.625 | 9.000 | 62130.1 | 58816.5 | 53000.0 | 1.82 |
| R17M03.XY | 10.17 | 1.350 | -0.759 | 3.500 | 3.625 | 2.000 | 16.125 | 62130.1 | 58816.5 | 53000.0 | 1.82 |
| R17M04.XY | 10.17 | 1.400 | -0.718 | 2.625 | 4.375 | 4.375 | 7.375 | 62130.1 | 58816.5 | 53000.0 | 1.82 |
| R17M05.XY | 10.17 | 1.240 | -0.832 | 4.875 | 5.500 | 5.500 | 12.000 | 62130.1 | 58816.5 | 53000.0 | 1.82 |
| R17M07.XY | 10.17 | 1.250 | -0.788 | 2.875 | 4.500 | 3.250 | 7.250 | 62130.1 | 58816.5 | 53000.0 | 1.82 |
| R18M01.XY | 10.50 | 1.800 | -1.141 | 0.500 | 0.625 | 5.375 | 15.250 | 30107.7 | 34212.1 | 60000.0 | 2.31 |
| R18M02.XY | 10.50 | 1.940 | -1.085 | 1.250 | 1.375 | 1.250 | 8.625 | 30107.7 | 34212.1 | 60000.0 | 2.31 |
| R18M03.XY | 10.50 | 2.350 | -1.339 | 0.125 | 0.250 | 0.750 | 6.375 | 30107.7 | 34212.1 | 60000.0 | 2.31 |
| R18M04.XY | 10.50 | 2.250 | -1.417 | 1.625 | 3.750 | 5.000 | 7.375 | 30107.7 | 34212.1 | 60000.0 | 2.31 |
| R18M05.XY | 10.50 | 1.740 | -1.054 | 0.875 | 3.125 | 8.875 | 10.375 | 30107.7 | 34212.1 | 60000.0 | 2.31 |
| R18M07.XY | 10.50 | 1.750 | -1.036 | 2.000 | 2.750 | 2.250 | 7.125 | 30107.7 | 34212.1 | 60000.0 | 2.31 |
| R19M01.XY | 10.67 | 1.880 | -1.318 | 1.500 | 2.125 | 5.375 | 6.500 | 36435.2 | 47650.3 | 54000.0 | 1.79 |
| R19M02.XY | 10.67 | 1.870 | -1.201 | 1.375 | 4.000 | 5.500 | 9.750 | 36435.2 | 47650.3 | 54000.0 | 1.79 |
| R19M03.XY | 10.67 | 1.800 | -1.250 | 0.875 | 2.500 | 7.000 | 9.125 | 36435.2 | 47650.3 | 54000.0 | 1.79 |
| R19M04.XY | 10.67 | 1.875 | -1.415 | 1.000 | 2.375 | 5.375 | 14.750 | 36435.2 | 47650.3 | 54000.0 | 1.79 |
| R19M05.XY | 10.67 | 1.720 | -1.199 | 0.125 | 1.125 | 4.625 | 14.875 | 36435.2 | 47650.3 | 54000.0 | 1.79 |
| R19M07.XY | 10.67 | 1.850 | -1.235 | 0.500 | 3.875 | 3.875 | 6.875 | 36435.2 | 47650.3 | 54000.0 | 1.79 |
| R20M01.XY | 10.50 | 1.940 | -1.797 | 1.875 | 4.250 | 5.500 | 7.750 | 0.0 | 30380.0 | 65500.0 | 2.48 |
| R20M02.XY | 10.50 | 1.970 | -1.833 | 0.125 | 1.250 | 4.625 | 16.750 | 0.0 | 30380.0 | 65500.0 | 2.48 |
| R20M03.XY | 10.50 | 1.900 | -1.692 | 0.250 | 1.375 | 6.125 | 16.750 | 0.0 | 30380.0 | 65500.0 | 2.48 |
| R20M04.XY | 10.50 | 1.990 | -1.976 | 2.875 | 4.500 | 4.125 | 10.375 | 0.0 | 30380.0 | 65500.0 | 2.48 |
| R20M05.XY | 10.50 | 1.650 | -1.594 | 3.375 | 4.875 | 4.500 | 11.125 | 0.0 | 30380.0 | 65500.0 | 2.48 |
| R20M07.XY | 10.50 | 1.800 | -1.589 | 1.250 | 1.750 | 1.750 | 11.875 | 0.0 | 30380.0 | 65500.0 | 2.48 |
| R211M05.X | 13.25 | 3.150 | -2.405 | 0.625 | 0.750 | 0.375 | 2.125 | 14098.4 | 31779.2 | 30500.0 | 1.55 |
| R211M07.X | 13.25 | 3.580 | -2.866 | 1.500 | 2.125 | 1.875 | 28.000 | 14098.4 | 31779.2 | 30500.0 | 1.55 |
| R211M08.X | 13.25 | 3.190 | -2.602 | 2.750 | 7.125 | 10.750 | 36.250 | 14098.4 | 31779.2 | 30500.0 | 1.55 |
| R212M05.X | 14.00 | 3.180 | -3.633 | 4.125 | 4.250 | 62.500 | 64.000 | 44863.5 | 109830.6 | 38000.0 | 1.25 |
| R212M07.X | 14.00 | 3.010 | -4.038 | 2.500 | 4.250 | 65.125 | 67.500 | 44863.5 | 109830.6 | 38000.0 | 1.25 |
| R212M08.X | 14.00 | 2.810 | -3.404 | 5.750 | 44.250 | 62.500 | 68.750 | 44863.5 | 109830.6 | 38000.0 | 1.25 |
| R22M01.XY | 9.30 | 1.550 | -0.862 | 2.500 | 3.625 | 3.125 | 4.875 | 8382.3 | 39292.3 | 37000.0 | 1.50 |
| R22M03.XY | 9.30 | 1.750 | -1.155 | 4.375 | 6.875 | 5.125 | 11.625 | 8382.3 | 39292.3 | 37000.0 | 1.50 |
| R22M04.XY | 9.30 | 1.840 | -1.319 | 7.125 | 8.125 | 4.625 | 12.000 | 8382.3 | 39292.3 | 37000.0 | 1.50 |
| R22M05.XY | 10.47 | 3.000 | -3.038 | 1.625 | 2.125 | 5.250 | 10.750 | 31396.4 | 29518.4 | 70000.0 | 2.90 |
| R22M07.XY | 10.47 | 3.070 | -2.681 | 0.375 | 1.125 | 4.375 | 5.250 | 31396.4 | 29518.4 | 70000.0 | 2.90 |
| R22M08.XY | 10.47 | 2.950 | -2.603 | 1.375 | 1.625 | 4.875 | 6.500 | 31396.4 | 29518.4 | 70000.0 | 2.90 |
| R23M01.XY | 14.45 | 2.310 | -1.461 | 8.375 | 8.875 | 6.000 | 13.500 | 10303.2 | 26985.1 | 70000.0 | 2.92 |
| R23M02.XY | 14.45 | 2.390 | -1.425 | 7.500 | 8.875 | 7.250 | 11.875 | 10303.2 | 26985.1 | 70000.0 | 2.92 |
| R23M03.XY | 14.45 | 2.400 | -1.350 | 10.000 | 10.625 | 8.250 | 12.625 | 10303.2 | 26985.1 | 70000.0 | 2.92 |
| R23M04.XY | 14.45 | 2.220 | -1.284 | 9.125 | 9.250 | 5.125 | 9.625 | 10303.2 | 26985.1 | 70000.0 | 2.92 |
| R24M07.XY | 10.33 | 1.260 | -1.089 | 2.250 | 3.375 | 4.375 | 8.250 | 42966.2 | 31445.0 | 69800.0 | 2.91 |
| R25M01.XY | 7.83 | 2.030 | -1.219 | 5.750 | 9.500 | 15.625 | 32.375 | 41697.9 | 45253.1 | 44900.0 | 1.80 |
| R25M02.XY | 7.83 | 2.010 | -1.368 | 2.125 | 5.625 | 5.375 | 33.625 | 41697.9 | 45253.1 | 44900.0 | 1.80 |

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|---|---|---|---|---|---|---|---|---|---|---|---|
| R25M03.XY | 7.83 | 2.200 | -1.321 | 0.750 | 5.125 | 6.250 | 7.125 | 41697.9 | 45253.1 | 44900.0 | 1.80 |
| R25M05.XY | 7.83 | 2.060 | -1.236 | 3.000 | 6.375 | 7.000 | 25.125 | 41697.9 | 45253.1 | 44900.0 | 1.80 |
| R25M07.XY | 7.83 | 2.000 | -1.119 | 6.500 | 9.250 | 17.125 | 32.125 | 41697.9 | 45253.1 | 44900.0 | 1.80 |
| R25M08.XY | 7.83 | 1.970 | -1.287 | 5.750 | 7.875 | 16.375 | 21.250 | 41697.9 | 45253.1 | 44900.0 | 1.80 |
| R26M01.XY | 10.30 | 1.920 | -1.343 | 2.375 | 4.000 | 6.375 | 8.375 | 12345.6 | 39728.2 | 66000.0 | 2.05 |
| R26M02.XY | 10.30 | 2.100 | -1.898 | 0.500 | 0.875 | 4.000 | 7.375 | 12345.6 | 39728.2 | 66000.0 | 2.05 |
| R26M03.XY | 10.30 | 2.140 | -1.720 | 1.750 | 2.750 | 5.750 | 9.125 | 12345.6 | 39728.2 | 66000.0 | 2.05 |
| R26M04.XY | 10.30 | 2.140 | -2.176 | 1.875 | 3.625 | 6.750 | 10.500 | 12345.6 | 39728.2 | 66000.0 | 2.05 |
| R26M05.XY | 10.30 | 1.850 | -1.580 | 1.625 | 3.125 | 5.625 | 7.750 | 12345.6 | 39728.2 | 66000.0 | 2.05 |
| R26M07.XY | 10.30 | 1.800 | -1.639 | 1.125 | 2.000 | 4.500 | 6.625 | 12345.6 | 39728.2 | 66000.0 | 2.05 |
| R27M01.XY | 11.88 | 2.650 | -1.143 | 6.875 | 11.000 | 14.875 | 20.375 | 4336.5 | 33788.5 | 45100.0 | 1.78 |
| R27M02.XY | 11.88 | 4.100 | -1.156 | 14.250 | 15.000 | 14.750 | 16.875 | 4336.5 | 33788.5 | 45100.0 | 1.78 |
| R27M03.XY | 11.88 | 3.300 | -1.087 | 10.750 | 13.750 | 14.875 | 16.250 | 4336.5 | 33788.5 | 45100.0 | 1.78 |
| R27M04.XY | 11.88 | 3.850 | -1.032 | 9.500 | 15.125 | 13.875 | 16.875 | 4336.5 | 33788.5 | 45100.0 | 1.78 |
| R27M05.XY | 11.88 | 2.650 | -1.041 | 6.125 | 11.625 | 13.875 | 19.125 | 4336.5 | 33788.5 | 45100.0 | 1.78 |
| R27M07.XY | 11.88 | 3.150 | -0.975 | 13.250 | 13.500 | 9.500 | 16.500 | 4336.5 | 33788.5 | 45100.0 | 1.78 |
| R28M02.XY | 11.67 | 3.500 | -2.203 | 5.250 | 9.750 | 10.125 | 13.875 | 20803.9 | 35615.2 | 41000.0 | 1.75 |
| R28M03.XY | 11.67 | 2.900 | -2.228 | 2.625 | 6.125 | 22.875 | 38.250 | 20803.9 | 35615.2 | 41000.0 | 1.75 |
| R28M04.XY | 11.67 | 3.350 | -2.396 | 5.375 | 7.250 | 10.875 | 14.625 | 20803.9 | 35615.2 | 41000.0 | 1.75 |
| R28M05.XY | 11.68 | 3.250 | -2.446 | 2.500 | 2.625 | 5.750 | 28.125 | 1617.5 | 30478.8 | 42000.0 | 1.82 |
| R28M07.XY | 11.68 | 3.500 | -2.534 | 3.375 | 4.125 | 6.500 | 17.875 | 1617.5 | 30478.8 | 42000.0 | 1.82 |
| R28M08.XY | 11.68 | 4.100 | -2.565 | 2.625 | 6.125 | 10.750 | 17.500 | 1617.5 | 30478.8 | 42000.0 | 1.82 |
| R28M09.XY | 11.68 | 3.500 | -2.647 | 10.750 | 21.125 | 23.000 | 38.125 | 1617.5 | 30478.8 | 42000.0 | 1.82 |
| R28M11.XY | 11.68 | 3.950 | -2.688 | 2.500 | 8.500 | 13.500 | 19.500 | 1617.5 | 30478.8 | 42000.0 | 1.82 |
| R28M12.XY | 11.68 | 3.250 | -2.586 | 4.375 | 6.125 | 26.250 | 33.875 | 1617.5 | 30478.8 | 42000.0 | 1.82 |
| R29M02.XY | 15.53 | 3.980 | -3.218 | 6.000 | 60.750 | 100.500 | 111.750 | 6830.5 | 107588.3 | 41000.0 | 1.17 |
| R29M03.XY | 15.53 | 3.860 | -3.113 | 41.250 | 95.625 | 101.000 | 109.875 | 6830.5 | 107588.3 | 41000.0 | 1.17 |
| R29M04.XY | 15.53 | 3.710 | -3.395 | 3.875 | 57.250 | 98.500 | 106.875 | 6830.5 | 107588.3 | 41000.0 | 1.17 |
| R29M05.XY | 15.54 | 3.350 | -2.816 | 5.500 | 31.000 | 53.625 | 59.625 | 11649.8 | 110456.8 | 40000.0 | 1.17 |
| R29M07.XY | 15.54 | 3.250 | -3.015 | 6.625 | 10.500 | 11.875 | 65.250 | 11649.8 | 110456.8 | 40000.0 | 1.17 |
| R29M08.XY | 15.54 | 3.140 | -2.951 | 4.625 | 5.000 | 49.250 | 53.250 | 11649.8 | 110456.8 | 40000.0 | 1.17 |
| R29M09.XY | 15.54 | 2.940 | -2.613 | 3.625 | 7.625 | 9.875 | 57.125 | 11649.8 | 110456.8 | 40000.0 | 1.17 |
| R29M11.XY | 15.54 | 2.850 | -2.945 | 3.750 | 5.125 | 3.500 | 50.500 | 11649.8 | 110456.8 | 40000.0 | 1.17 |
| R29M12.XY | 15.54 | 3.570 | -3.186 | 6.750 | 29.375 | 49.250 | 54.250 | 11649.8 | 110456.8 | 40000.0 | 1.17 |
| R30M02.XY | 10.50 | 1.840 | -1.546 | 2.500 | 6.125 | 6.500 | 12.125 | 3765.7 | 29191.4 | 68500.0 | 2.66 |
| R30M03.XY | 10.50 | 1.730 | -1.411 | 1.125 | 2.750 | 4.500 | 23.625 | 3765.7 | 29191.4 | 68500.0 | 2.66 |
| R30M04.XY | 10.50 | 1.890 | -1.545 | 1.750 | 2.500 | 4.250 | 7.500 | 3765.7 | 29191.4 | 68500.0 | 2.66 |
| R30M05.XY | 10.51 | 1.580 | -1.172 | 2.000 | 5.000 | 5.250 | 6.500 | 18175.1 | 30479.4 | 69300.0 | 2.66 |
| R30M06.XY | 10.51 | 1.640 | -1.167 | 3.250 | 4.500 | 5.250 | 9.500 | 18175.1 | 30479.4 | 69300.0 | 2.66 |
| R30M07.XY | 10.51 | 1.750 | -1.313 | 1.375 | 3.375 | 4.125 | 5.625 | 18175.1 | 30479.4 | 69300.0 | 2.66 |
| R30M08.XY | 10.51 | 1.870 | -1.358 | 2.625 | 3.375 | 5.375 | 11.125 | 18175.1 | 30479.4 | 69300.0 | 2.66 |
| R30M09.XY | 10.51 | 1.700 | -1.334 | 2.750 | 4.750 | 5.250 | 9.875 | 18175.1 | 30479.4 | 69300.0 | 2.66 |
| R30M10.XY | 10.51 | 1.780 | -1.463 | 2.125 | 3.875 | 4.750 | 27.000 | 18175.1 | 30479.4 | 69300.0 | 2.66 |
| R31M02.XY | 10.25 | 1.830 | -1.375 | 0.250 | 0.750 | 4.625 | 15.750 | 44358.2 | 32813.6 | 66000.0 | 2.74 |
| R31M03.XY | 10.25 | 2.020 | -1.226 | 1.750 | 4.500 | 5.750 | 7.750 | 44358.2 | 32813.6 | 66000.0 | 2.74 |
| R31M04.XY | 10.25 | 1.740 | -1.272 | 2.500 | 6.250 | 7.500 | 13.250 | 44358.2 | 32813.6 | 66000.0 | 2.74 |
| R31M05.XY | 10.26 | 1.520 | -1.148 | 1.500 | 2.625 | 4.500 | 16.000 | 32738.2 | 30366.6 | 66000.0 | 2.74 |
| R31M06.XY | 10.26 | 1.530 | -1.151 | 2.375 | 3.500 | 7.750 | 25.375 | 32738.2 | 30366.6 | 66000.0 | 2.74 |
| R31M07.XY | 10.26 | 1.650 | -1.192 | 1.875 | 3.125 | 8.250 | 22.875 | 32738.2 | 30366.6 | 66000.0 | 2.74 |
| R31M08.XY | 10.26 | 1.670 | -1.259 | 1.250 | 1.875 | 6.750 | 10.625 | 32738.2 | 30366.6 | 66000.0 | 2.74 |
| R32M02.XY | 12.17 | 1.910 | -1.535 | 2.875 | 4.875 | 4.875 | 15.625 | 9039.8 | 27905.4 | 70300.0 | 2.84 |
| R32M03.XY | 12.17 | 2.250 | -1.605 | 2.125 | 5.125 | 10.500 | 12.875 | 9039.8 | 27905.4 | 70300.0 | 2.84 |
| R32M04.XY | 12.17 | 2.230 | -1.589 | 0.750 | 0.875 | 0.625 | 1.250 | 9039.8 | 27905.4 | 70300.0 | 2.84 |
| R32M05.XY | 12.18 | 1.750 | -1.506 | 3.000 | 3.750 | 5.125 | 9.625 | 3855.9 | 27717.3 | 70300.0 | 2.84 |
| R32M06.XY | 12.18 | 1.670 | -1.813 | 4.625 | 5.375 | 4.125 | 9.500 | 3855.9 | 27717.3 | 70300.0 | 2.84 |
| R32M07.XY | 12.18 | 1.810 | -1.429 | 3.250 | 5.500 | 11.875 | 17.125 | 3855.9 | 27717.3 | 70300.0 | 2.84 |
| R32M08.XY | 12.18 | 1.910 | -1.273 | 4.500 | 7.500 | 9.625 | 20.250 | 3855.9 | 27717.3 | 70300.0 | 2.84 |
| R32M09.XY | 12.18 | 1.660 | -1.358 | 0.750 | 2.625 | 9.250 | 27.250 | 3855.9 | 27717.3 | 70300.0 | 2.84 |
| R32M10.XY | 12.18 | 1.630 | -1.534 | 1.250 | 2.500 | 6.625 | 25.500 | 3855.9 | 27717.3 | 70300.0 | 2.84 |
| R33M02.XY | 10.88 | 2.900 | -2.553 | 3.375 | 5.000 | 3.750 | 13.625 | 30342.2 | 43183.1 | 51000.0 | 1.80 |

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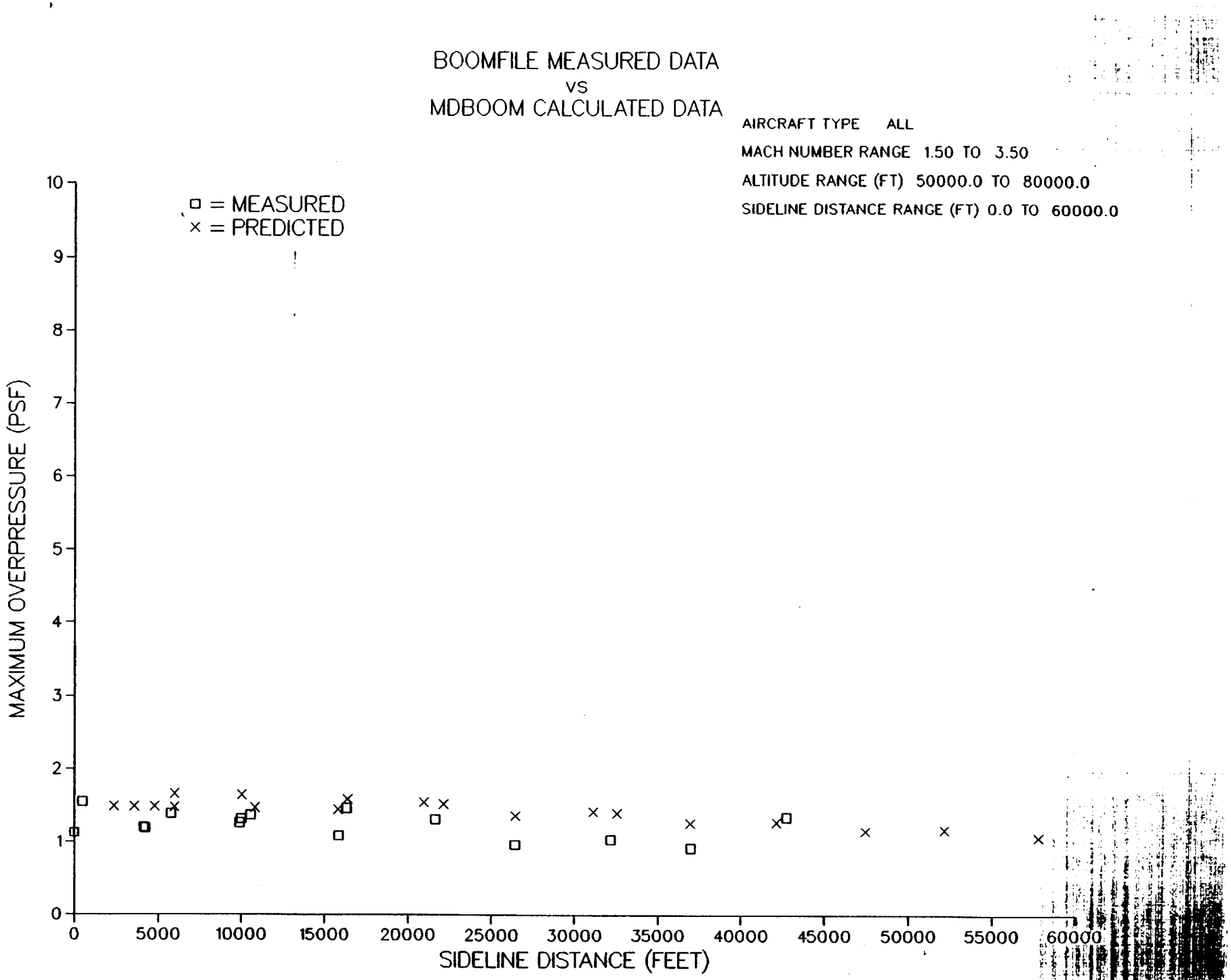
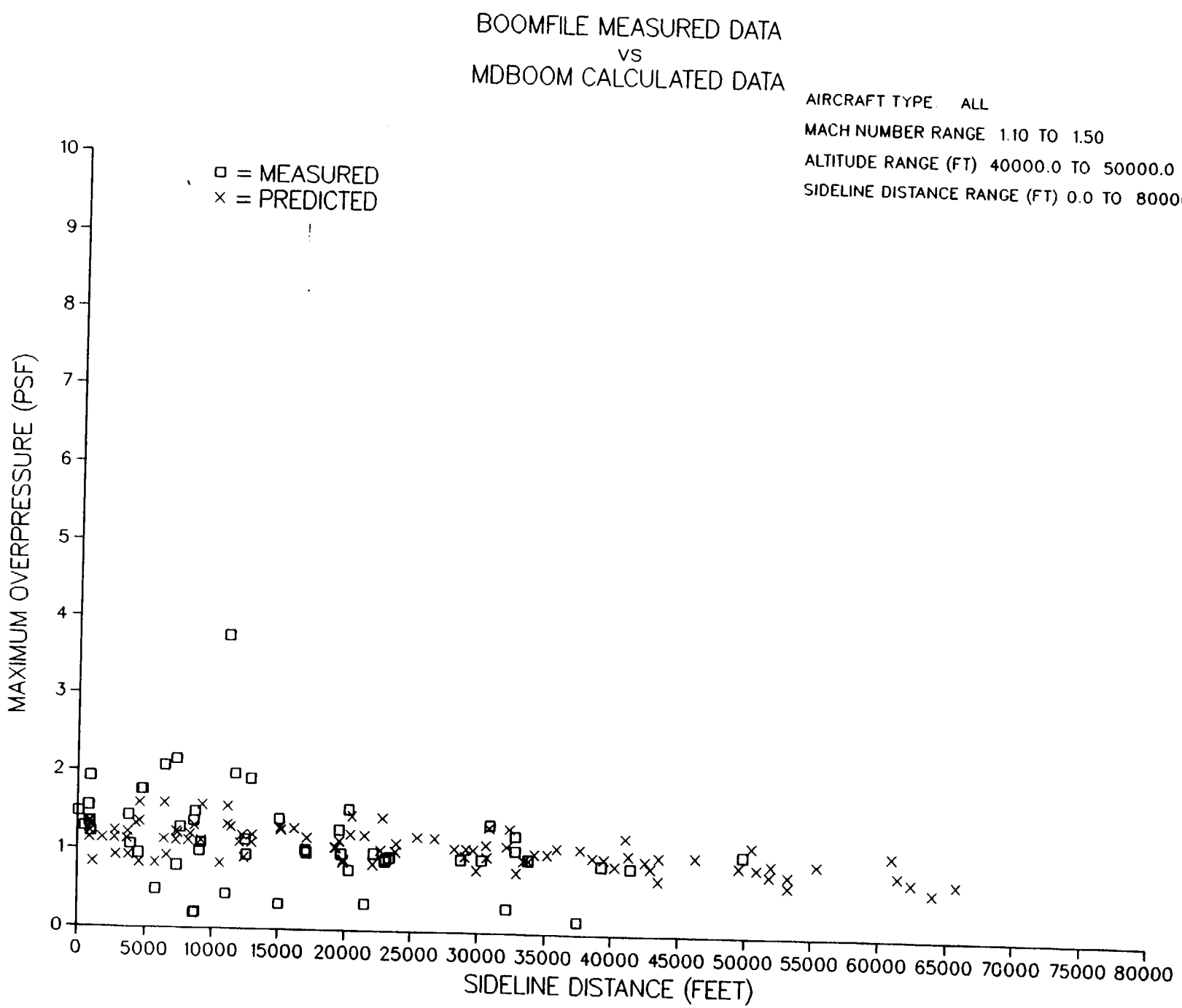
|---|---|---|---|---|---|---|---|---|---|---|---|
| R33M03.XY | 10.88 | 3.150 | -2.501 | 3.125 | 4.500 | 4.500 | 6.625 | 30342.2 | 43183.1 | 51000.0 | 1.80 |
| R33M04.XY | 10.88 | 2.850 | -2.512 | 3.125 | 4.625 | 5.000 | 8.500 | 30342.2 | 43183.1 | 51000.0 | 1.80 |
| R33M05.XY | 10.89 | 1.565 | -1.214 | 1.125 | 2.250 | 3.750 | 11.375 | 1933.7 | 37020.1 | 51000.0 | 1.80 |
| R33M06.XY | 10.89 | 2.050 | -1.509 | 1.750 | 3.000 | 3.125 | 4.875 | 1933.7 | 37020.1 | 51000.0 | 1.80 |
| R33M07.XY | 10.89 | 2.100 | -1.558 | 8.250 | 8.625 | 9.500 | 20.750 | 1933.7 | 37020.1 | 51000.0 | 1.80 |
| R33M08.XY | 10.89 | 2.150 | -1.499 | 0.875 | 2.375 | 2.625 | 13.875 | 1933.7 | 37020.1 | 51000.0 | 1.80 |
| R33M09.XY | 10.89 | 1.774 | -1.217 | 2.750 | 6.000 | 8.375 | 10.750 | 1933.7 | 37020.1 | 51000.0 | 1.80 |
| R33M10.XY | 10.89 | 2.100 | -1.468 | 3.250 | 4.625 | 4.750 | 8.000 | 1933.7 | 37020.1 | 51000.0 | 1.80 |
| R341M02.X | 11.62 | 3.100 | -2.865 | 3.375 | 6.375 | 6.625 | 8.125 | 45073.2 | 59818.1 | 44000.0 | 1.56 |
| R341M03.X | 11.62 | 3.250 | -2.812 | 7.250 | 19.750 | 26.250 | 32.000 | 45073.2 | 59818.1 | 44000.0 | 1.56 |
| R341M04.X | 11.62 | 2.650 | -2.583 | 5.375 | 10.750 | 26.250 | 45.125 | 45073.2 | 59818.1 | 44000.0 | 1.56 |
| R341M05.X | 11.63 | 1.550 | -1.135 | 8.250 | 11.875 | 14.750 | 19.125 | 12424.4 | 42893.0 | 44000.0 | 1.56 |
| R341M06.X | 11.63 | 1.970 | -0.967 | 16.500 | 23.750 | 22.875 | 28.375 | 12424.4 | 42893.0 | 44000.0 | 1.56 |
| R341M07.X | 11.63 | 2.100 | -1.105 | 15.625 | 24.625 | 24.375 | 29.750 | 12424.4 | 42893.0 | 44000.0 | 1.56 |
| R341M08.X | 11.63 | 1.950 | -1.112 | 14.375 | 19.375 | 18.750 | 23.000 | 12424.4 | 42893.0 | 44000.0 | 1.56 |
| R341M09.X | 11.63 | 2.000 | -1.250 | 14.125 | 21.250 | 20.750 | 26.750 | 12424.4 | 42893.0 | 44000.0 | 1.56 |
| R341M11.X | 11.63 | 2.000 | -1.029 | 15.500 | 25.500 | 25.000 | 31.250 | 12424.4 | 42893.0 | 44000.0 | 1.56 |
| R342M02.X | 11.87 | 1.650 | -1.082 | 30.000 | 51.500 | 76.500 | 88.750 | 49614.0 | 83739.4 | 36400.0 | 1.36 |
| R342M03.X | 11.87 | 1.600 | -1.236 | 25.625 | 51.875 | 73.125 | 81.375 | 49614.0 | 83739.4 | 36400.0 | 1.36 |
| R342M04.X | 11.87 | 1.550 | -0.955 | 31.500 | 52.500 | 83.750 | 88.750 | 49614.0 | 83739.4 | 36400.0 | 1.36 |
| R342M05.X | 11.88 | 1.400 | -0.792 | 15.625 | 19.000 | 34.000 | 36.000 | 46177.4 | 79606.8 | 36400.0 | 1.36 |
| R342M06.X | 11.88 | 1.200 | -0.814 | 12.750 | 19.625 | 25.125 | 33.625 | 46177.4 | 79606.8 | 36400.0 | 1.36 |
| R342M07.X | 11.88 | 1.300 | -0.958 | 11.000 | 18.500 | 24.625 | 45.750 | 46177.4 | 79606.8 | 36400.0 | 1.36 |
| R342M08.X | 11.88 | 1.350 | -0.915 | 14.625 | 25.750 | 28.750 | 43.750 | 46177.4 | 79606.8 | 36400.0 | 1.36 |
| R342M09.X | 11.88 | 1.450 | -0.914 | 15.875 | 23.000 | 36.375 | 49.750 | 46177.4 | 79606.8 | 36400.0 | 1.36 |
| R342M11.X | 11.88 | 1.150 | -0.811 | 16.250 | 24.250 | 26.250 | 53.250 | 46177.4 | 79606.8 | 36400.0 | 1.36 |
| R35M05.XY | 11.63 | 2.900 | -2.457 | 6.375 | 8.750 | 12.625 | 30.000 | 3011.4 | 48586.6 | 52000.0 | 1.55 |
| R35M06.XY | 11.63 | 2.800 | -2.423 | 8.750 | 18.125 | 34.375 | 56.625 | 3011.4 | 48586.6 | 52000.0 | 1.55 |
| R35M07.XY | 11.63 | 2.900 | -2.407 | 7.625 | 25.375 | 42.750 | 49.125 | 3011.4 | 48586.6 | 52000.0 | 1.55 |
| R35M08.XY | 11.63 | 2.620 | -1.893 | 7.250 | 13.125 | 22.125 | 26.625 | 3011.4 | 48586.6 | 52000.0 | 1.55 |
| R35M09.XY | 11.63 | 3.200 | -2.530 | 6.500 | 11.250 | 11.750 | 16.250 | 3011.4 | 48586.6 | 52000.0 | 1.55 |
| R35M10.XY | 11.63 | 2.750 | -2.439 | 9.125 | 19.625 | 32.500 | 55.000 | 3011.4 | 48586.6 | 52000.0 | 1.55 |
| R35M11.XY | 11.63 | 2.750 | -2.431 | 11.125 | 26.125 | 40.500 | 50.625 | 3011.4 | 48586.6 | 52000.0 | 1.55 |
| R35M12.XY | 11.63 | 2.800 | -2.348 | 6.750 | 12.500 | 21.375 | 27.000 | 3011.4 | 48586.6 | 52000.0 | 1.55 |
| R36M05.XY | 16.77 | 1.900 | -1.507 | 7.500 | 10.750 | 21.000 | 34.000 | 29468.5 | 32027.1 | 53000.0 | 2.26 |
| R36M06.XY | 16.77 | 1.900 | -1.661 | 4.000 | 4.625 | 4.750 | 47.875 | 29468.5 | 32027.1 | 53000.0 | 2.26 |
| R36M07.XY | 16.77 | 1.600 | -1.469 | 5.500 | 8.625 | 35.375 | 45.250 | 29468.5 | 32027.1 | 53000.0 | 2.26 |
| R36M08.XY | 16.77 | 1.950 | -1.842 | 6.250 | 8.625 | 31.750 | 47.250 | 29468.5 | 32027.1 | 53000.0 | 2.26 |
| R36M09.XY | 16.77 | 1.500 | -1.310 | 8.125 | 10.875 | 24.125 | 29.875 | 29468.5 | 32027.1 | 53000.0 | 2.26 |
| R36M11.XY | 16.77 | 1.200 | -1.136 | 5.625 | 5.875 | 4.375 | 48.750 | 29468.5 | 32027.1 | 53000.0 | 2.26 |
| R372M02.X | 12.92 | 2.450 | -1.983 | 9.375 | 18.750 | 30.000 | 35.500 | 70589.5 | 51856.5 | 64000.0 | 2.20 |
| R372M03.X | 12.92 | 2.850 | -2.176 | 4.000 | 7.875 | 7.250 | 9.625 | 70589.5 | 51856.5 | 64000.0 | 2.20 |
| R372M04.X | 12.92 | 2.550 | -1.945 | 7.625 | 20.625 | 24.750 | 30.875 | 70589.5 | 51856.5 | 64000.0 | 2.20 |
| R372M05.X | 12.93 | 1.120 | -0.675 | 4.375 | 6.625 | 7.375 | 9.250 | 14429.3 | 35416.2 | 64000.0 | 2.20 |
| R372M07.X | 12.93 | 0.960 | -0.667 | 8.625 | 9.500 | 10.125 | 44.750 | 14429.3 | 35416.2 | 64000.0 | 2.20 |
| R372M08.X | 12.93 | 0.880 | -0.634 | 8.500 | 10.375 | 9.250 | 24.875 | 14429.3 | 35416.2 | 64000.0 | 2.20 |
| R372M11.X | 12.93 | 1.190 | -0.631 | 11.250 | 13.750 | 31.125 | 41.625 | 14429.3 | 35416.2 | 64000.0 | 2.20 |
| R372M12.X | 12.93 | 0.970 | -0.603 | 12.000 | 19.750 | 27.250 | 34.375 | 14429.3 | 35416.2 | 64000.0 | 2.20 |
| R38M14.XY | 10.32 | 2.310 | -2.314 | 2.750 | 21.375 | 31.375 | 38.875 | 3744.8 | 64628.0 | 44300.0 | 1.30 |
| R38M15.XY | 10.32 | 2.120 | -2.243 | 0.500 | 21.000 | 29.500 | 37.625 | 3744.8 | 64628.0 | 44300.0 | 1.30 |
| R38M16.XY | 10.32 | 2.250 | -2.300 | 0.750 | 18.500 | 28.750 | 38.750 | 3744.8 | 64628.0 | 44300.0 | 1.30 |
| R39M02.XY | 12.67 | 2.570 | -1.584 | 0.125 | 0.250 | 0.375 | 0.500 | 25729.4 | 86275.2 | 39800.0 | 1.24 |
| R39M03.XY | 12.67 | 1.660 | -1.828 | 3.125 | 9.500 | 12.875 | 22.375 | 25729.4 | 86275.2 | 39800.0 | 1.24 |
| R39M04.XY | 12.67 | 3.070 | -1.793 | 0.375 | 0.500 | 0.625 | 1.375 | 25729.4 | 86275.2 | 39800.0 | 1.24 |
| R39M05.XY | 12.67 | 2.530 | -1.415 | 0.750 | 1.250 | 1.375 | 1.875 | 25729.4 | 86275.2 | 39800.0 | 1.24 |
| R39M06.XY | 12.67 | 1.790 | -2.066 | 1.250 | 8.000 | 12.625 | 20.250 | 25729.4 | 86275.2 | 39800.0 | 1.24 |
| R39M07.XY | 12.67 | 1.840 | -1.835 | 1.500 | 9.000 | 11.500 | 21.750 | 25729.4 | 86275.2 | 39800.0 | 1.24 |
| R39M08.XY | 12.67 | 2.020 | -1.853 | 1.000 | 7.000 | 11.125 | 20.125 | 25729.4 | 86275.2 | 39800.0 | 1.24 |
| R40M01.XY | 0.00 | 2.100 | -1.818 | 1.750 | 7.750 | 9.875 | 35.375 | 6000.0 | 0.0 | 52900.0 | 1.81 |
| R40M02.XY | 0.00 | 2.130 | -1.931 | 3.000 | 5.250 | 8.375 | 44.500 | 6000.0 | 0.0 | 52900.0 | 1.81 |

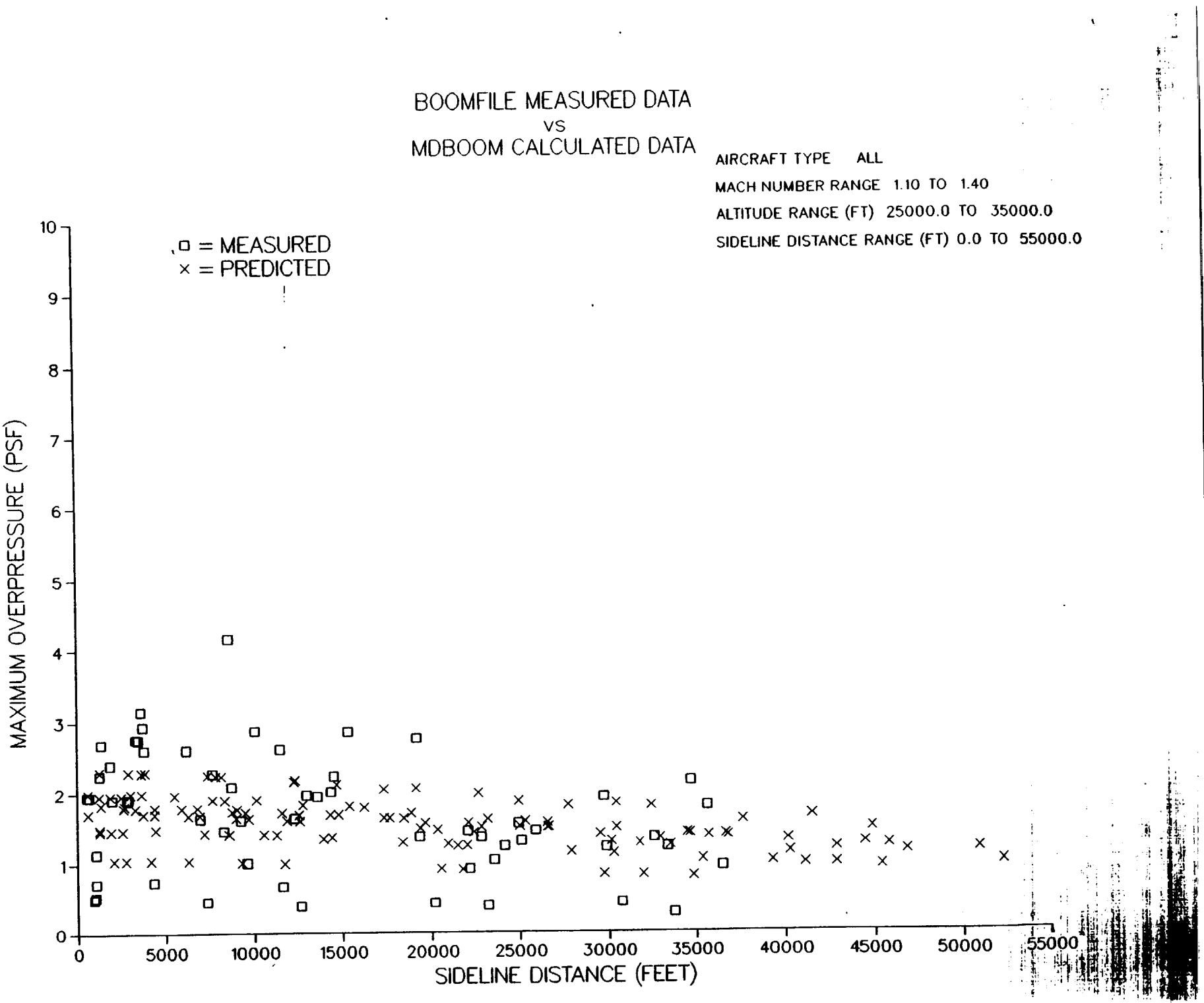
| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| R40M03.XY | 0.00 | 2.260 | -1.989 | 2.875 | 5.000 | 10.750 | 20.375 | 6000.0 | 0.0 | 52900.0 | 1.81 |
| R40M05.XY | 0.00 | 2.220 | -1.883 | 1.125 | 2.500 | 6.125 | 15.625 | 6000.0 | 0.0 | 52900.0 | 1.81 |
| R40M06.XY | 0.00 | 2.350 | -2.148 | 2.750 | 5.000 | 6.375 | 24.875 | 6000.0 | 0.0 | 52900.0 | 1.81 |
| R40M07.XY | 0.00 | 2.170 | -1.300 | 3.125 | 4.375 | 6.500 | 9.125 | 6000.0 | 0.0 | 52900.0 | 1.81 |
| R40M08.XY | 0.00 | 2.820 | -2.268 | 2.125 | 2.750 | 2.750 | 4.375 | 6000.0 | 0.0 | 52900.0 | 1.81 |
| R40M09.XY | 0.00 | 3.120 | -2.040 | 1.000 | 1.250 | 1.875 | 2.875 | 6000.0 | 0.0 | 52900.0 | 1.81 |
| R40M10.XY | 0.00 | 3.000 | -2.160 | 2.125 | 5.375 | 5.500 | 8.500 | 6000.0 | 0.0 | 52900.0 | 1.81 |
| R40M11.XY | 0.00 | 2.980 | -2.199 | 2.875 | 5.875 | 5.625 | 9.250 | 6000.0 | 0.0 | 52900.0 | 1.81 |
| R40M12.XY | 0.00 | 2.800 | -2.070 | 1.750 | 4.750 | 6.125 | 10.000 | 6000.0 | 0.0 | 52900.0 | 1.81 |
| R40M13.XY | 0.00 | 2.750 | -1.915 | 0.750 | 1.875 | 5.500 | 9.125 | 6000.0 | 0.0 | 52900.0 | 1.81 |
| R40M14.XY | 0.00 | 2.650 | -2.407 | 2.875 | 5.000 | 8.000 | 15.500 | 6000.0 | 0.0 | 52900.0 | 1.81 |
| R40M15.XY | 0.00 | 2.350 | -2.113 | 0.625 | 0.875 | 0.875 | 24.375 | 6000.0 | 0.0 | 52900.0 | 1.81 |
| R40M16.XY | 0.00 | 2.900 | -2.070 | 3.125 | 6.625 | 7.625 | 9.750 | 6000.0 | 0.0 | 52900.0 | 1.81 |
| R41M01.XY | 0.01 | 1.700 | -1.446 | 0.875 | 1.125 | 1.250 | 6.500 | 70.0 | 0.0 | 72000.0 | 2.83 |
| R41M02.XY | 0.01 | 1.750 | -1.650 | 0.875 | 1.250 | 1.875 | 22.625 | 70.0 | 0.0 | 72000.0 | 2.83 |
| R41M03.XY | 0.01 | 1.890 | -1.626 | 0.500 | 0.625 | 4.250 | 28.625 | 70.0 | 0.0 | 72000.0 | 2.83 |
| R41M04.XY | 0.01 | 1.770 | -1.532 | 0.375 | 1.375 | 4.750 | 18.500 | 70.0 | 0.0 | 72000.0 | 2.83 |
| R41M05.XY | 0.01 | 1.620 | -1.482 | 2.625 | 4.500 | 8.000 | 25.000 | 70.0 | 0.0 | 72000.0 | 2.83 |
| R41M06.XY | 0.01 | 1.620 | -1.627 | 1.125 | 1.875 | 3.375 | 18.875 | 70.0 | 0.0 | 72000.0 | 2.83 |
| R41M07.XY | 0.01 | 1.870 | -1.562 | 1.500 | 5.000 | 6.375 | 27.875 | 70.0 | 0.0 | 72000.0 | 2.83 |
| R41M08.XY | 0.01 | 1.770 | -1.448 | 0.500 | 0.750 | 7.250 | 12.500 | 70.0 | 0.0 | 72000.0 | 2.83 |
| R41M09.XY | 0.01 | 1.650 | -1.505 | 3.125 | 4.500 | 8.125 | 19.125 | 70.0 | 0.0 | 72000.0 | 2.83 |
| R41M10.XY | 0.01 | 1.650 | -1.548 | 0.625 | 1.125 | 5.125 | 7.500 | 70.0 | 0.0 | 72000.0 | 2.83 |
| R41M11.XY | 0.01 | 1.670 | -1.505 | 3.125 | 6.000 | 7.375 | 34.875 | 70.0 | 0.0 | 72000.0 | 2.83 |
| R41M12.XY | 0.01 | 1.660 | -1.566 | 0.750 | 1.000 | 6.125 | 31.000 | 70.0 | 0.0 | 72000.0 | 2.83 |
| R41M13.XY | 0.01 | 1.700 | -1.450 | 0.875 | 1.125 | 4.375 | 6.750 | 70.0 | 0.0 | 72000.0 | 2.83 |
| R41M14.XY | 0.01 | 2.050 | -1.579 | 0.250 | 0.625 | 0.875 | 7.000 | 70.0 | 0.0 | 72000.0 | 2.83 |
| R41M15.XY | 0.01 | 2.100 | -1.474 | 0.625 | 1.125 | 3.750 | 6.875 | 70.0 | 0.0 | 72000.0 | 2.83 |
| R41M16.XY | 0.01 | 1.900 | -1.405 | 2.250 | 3.250 | 5.750 | 8.500 | 70.0 | 0.0 | 72000.0 | 2.83 |

# APPENDIX B

## BOOMFILE and XB-70 Plots


BOOMFILE MEASURED DATA
VS
MDBOOM CALCULATED DATA
AIRCRAFT TYPE ALL
MACH NUMBER RANGE 1.50 TO 3.50
ALTITUDE RANGE (FT) 50000.0 TO 80000.0
SIDELINE DISTANCE RANGE (FT) 0.0 TO 60000.0
□ = MEASURED
× = PREDICTED
MAXIMUM OVERPRESSURE (PSF)
SIDELINE DISTANCE (FEET)
0
1
2
3
4
5
6
7
8
9
10
0
5000
10000
15000
20000
25000
30000
35000
40000
45000
50000
55000
60000


BOOMFILE MEASURED DATA
VS
MDBOOM CALCULATED DATA
AIRCRAFT TYPE ALL
MACH NUMBER RANGE 1.10 TO 1.50
ALTITUDE RANGE (FT) 40000.0 TO 50000.0
SIDELINE DISTANCE RANGE (FT) 0.0 TO 80000.0
□ = MEASURED
× = PREDICTED
MAXIMUM OVERPRESSURE (PSF)
0
1
2
3
4
5
6
7
8
9
10
0 5000 10000 15000 20000 25000 30000 35000 40000 45000 50000 55000 60000 65000 70000 75000 80000
SIDELINE DISTANCE (FEET)



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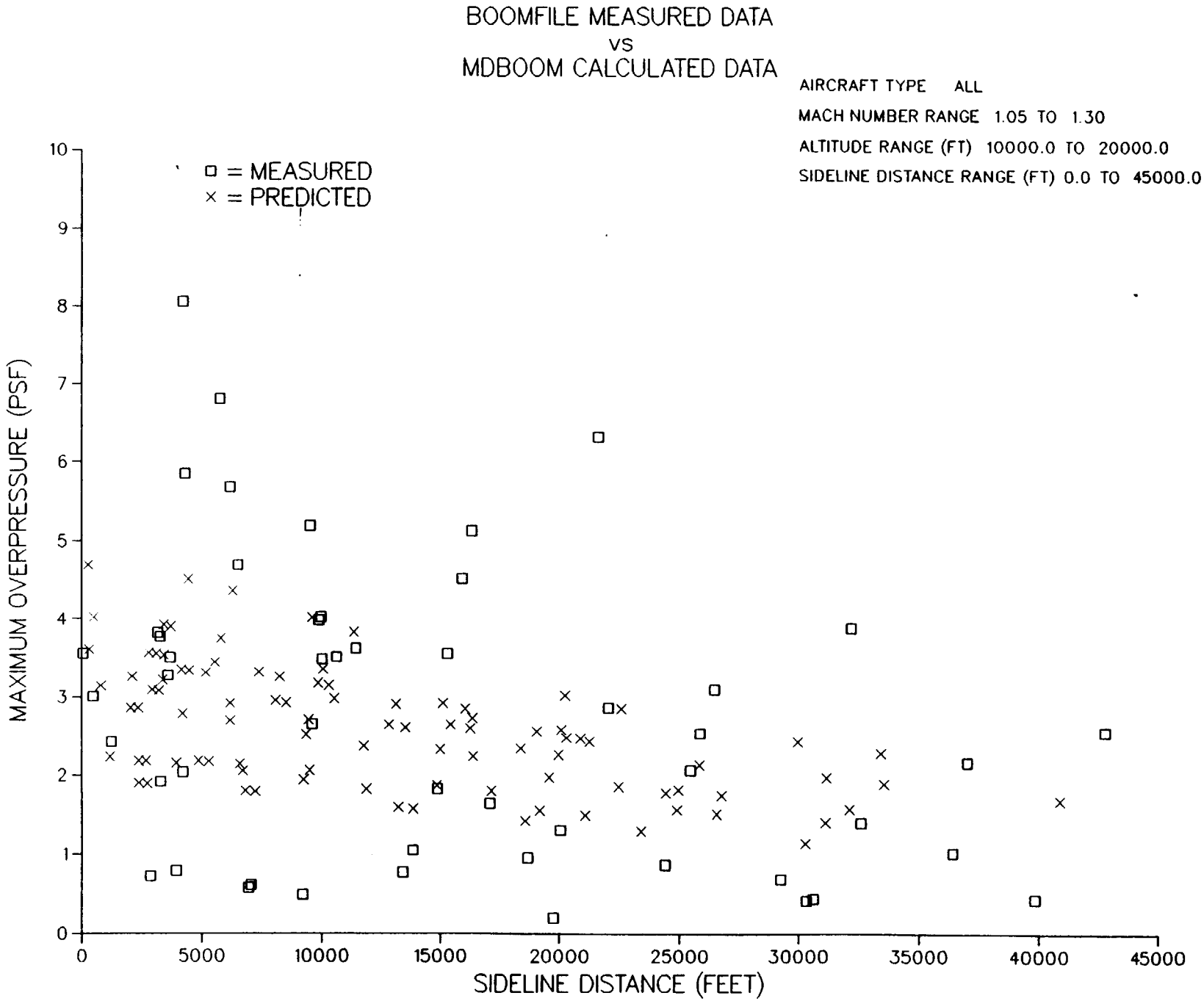
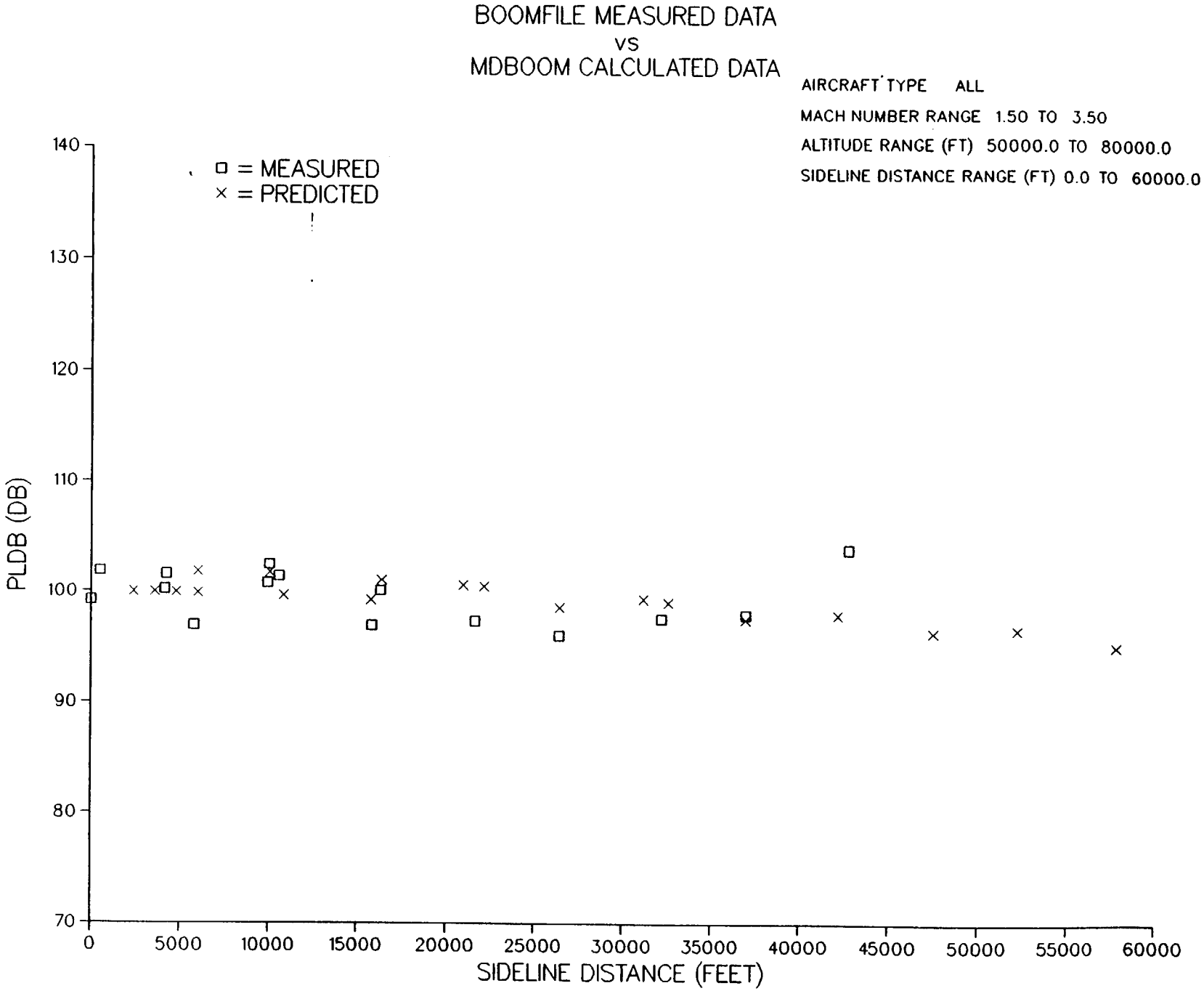
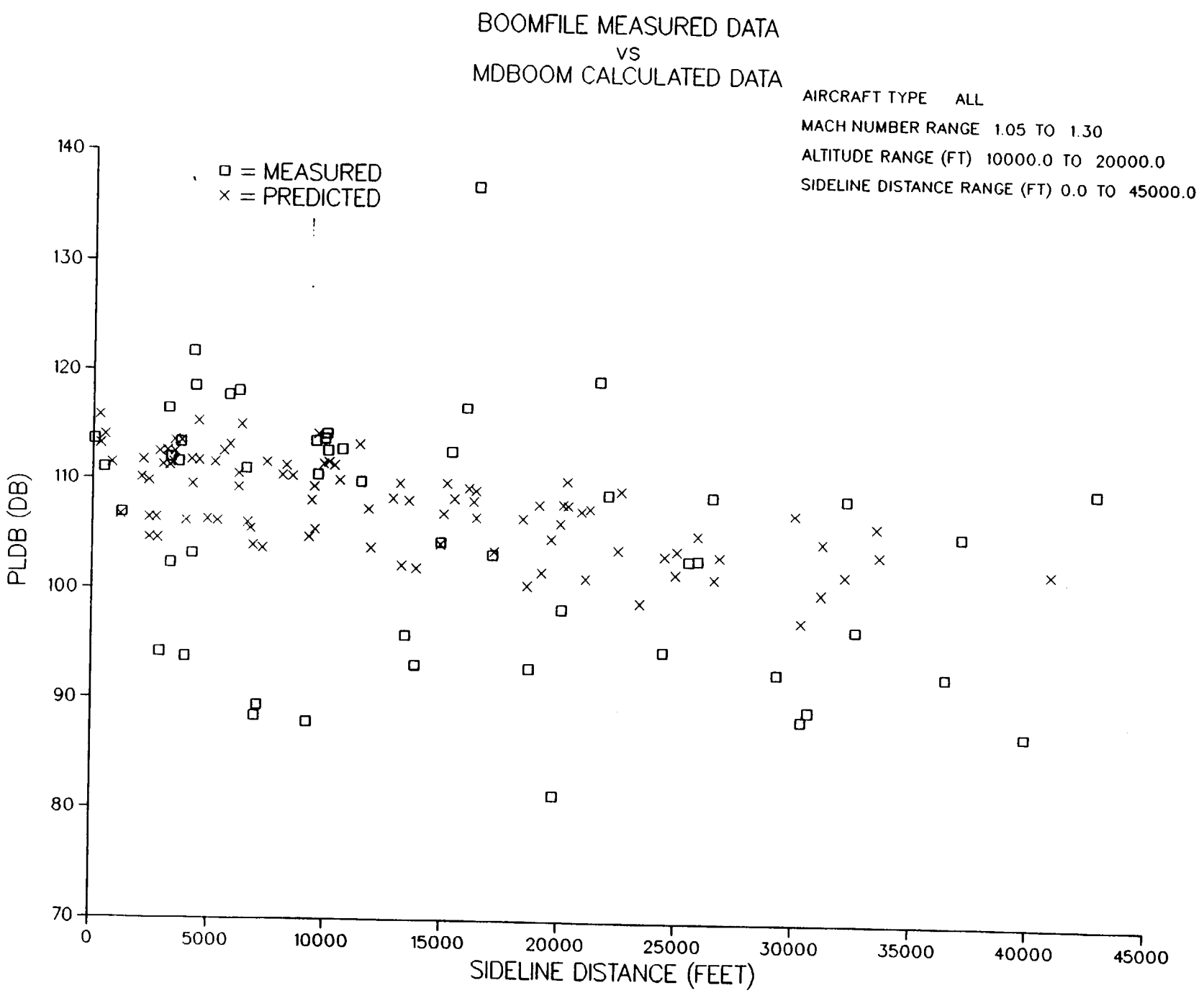
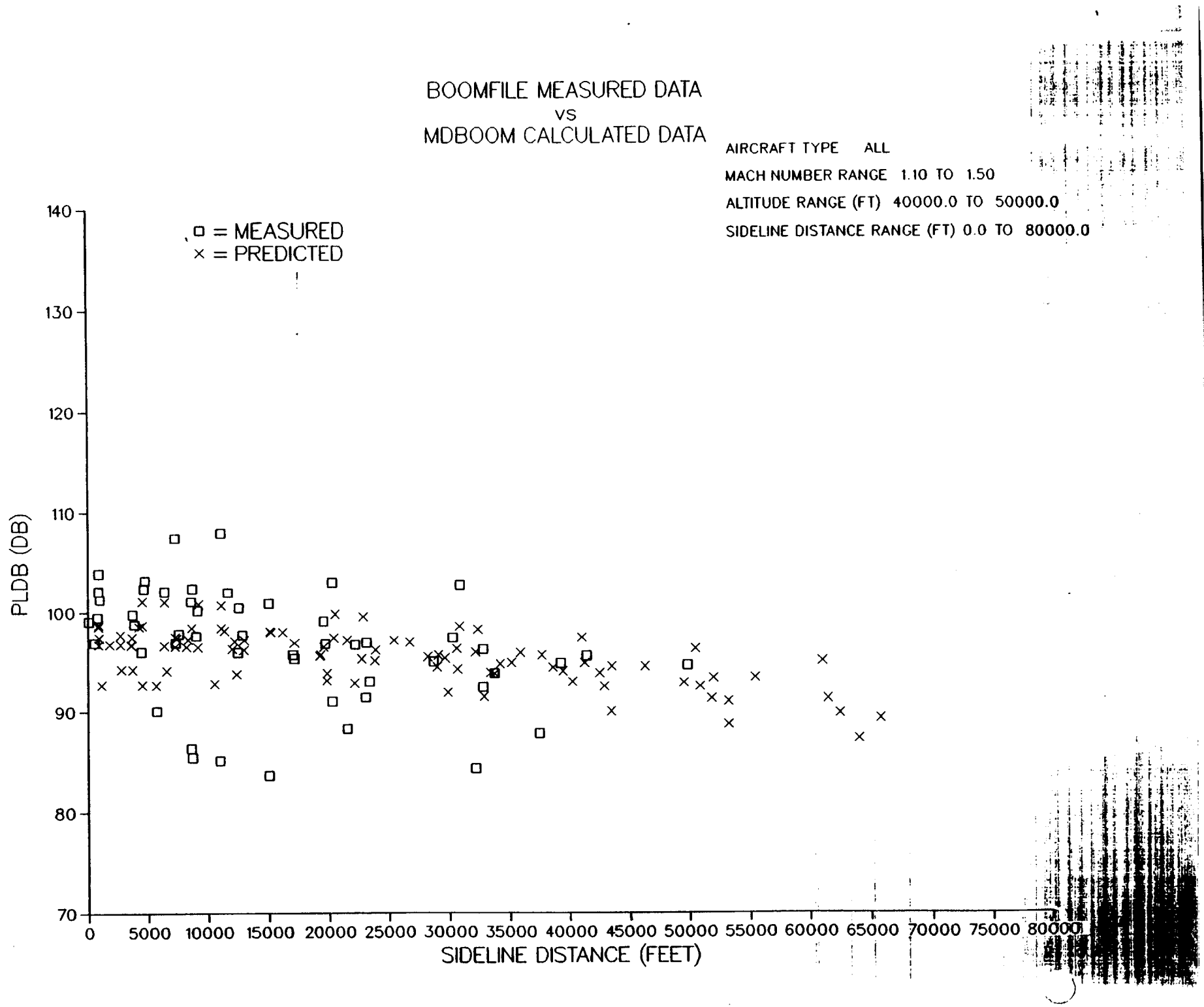
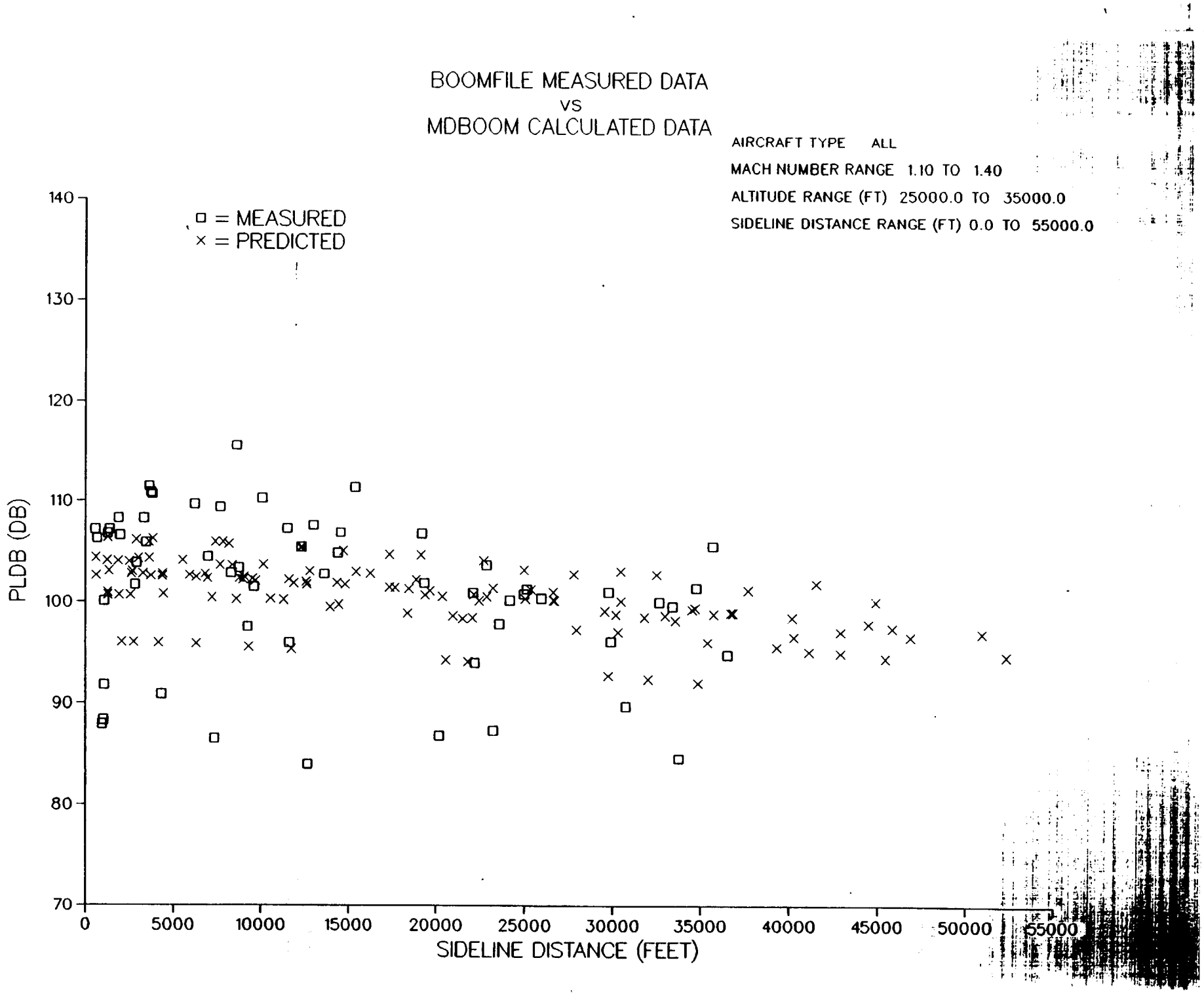

BOOMFILE MEASURED DATA
VS
MDBOOM CALCULATED DATA
AIRCRAFT TYPE ALL
MACH NUMBER RANGE 1.05 TO 1.30
ALTITUDE RANGE (FT) 10000.0 TO 20000.0
SIDELINE DISTANCE RANGE (FT) 0.0 TO 45000.0
□ = MEASURED
× = PREDICTED
MAXIMUM OVERPRESSURE (PSF)
SIDELINE DISTANCE (FEET)
0
1
2
3
4
5
6
7
8
9
10
0
5000
10000
15000
20000
25000
30000
35000
40000
45000


BOOMFILE MEASURED DATA
VS
MDBOOM CALCULATED DATA
AIRCRAFT TYPE ALL
MACH NUMBER RANGE 1.50 TO 3.50
ALTITUDE RANGE (FT) 50000.0 TO 80000.0
SIDELINE DISTANCE RANGE (FT) 0.0 TO 60000.0
□ = MEASURED
× = PREDICTED
PLDB (DB)
140
130
120
110
100
90
80
70
0
5000
10000
15000
20000
25000
30000
35000
40000
45000
50000
55000
60000
SIDELINE DISTANCE (FEET)


BOOMFILE MEASURED DATA
VS
MDBOOM CALCULATED DATA
AIRCRAFT TYPE ALL
MACH NUMBER RANGE 1.05 TO 1.30
ALTITUDE RANGE (FT) 10000.0 TO 20000.0
SIDELINE DISTANCE RANGE (FT) 0.0 TO 45000.0
□ = MEASURED
× = PREDICTED
PLDB (DB)
140
130
120
110
100
90
80
70
0
5000
10000
15000
20000
25000
30000
35000
40000
45000
SIDELINE DISTANCE (FEET)


BOOMFILE MEASURED DATA
VS
MDBOOM CALCULATED DATA
AIRCRAFT TYPE ALL
MACH NUMBER RANGE 1.10 TO 1.50
ALTITUDE RANGE (FT) 40000.0 TO 50000.0
SIDELINE DISTANCE RANGE (FT) 0.0 TO 80000.0
□ = MEASURED
× = PREDICTED
PLDB (DB)
140
130
120
110
100
90
80
70
0
5000
10000
15000
20000
25000
30000
35000
40000
45000
50000
55000
60000
65000
70000
75000
80000
SIDELINE DISTANCE (FEET)



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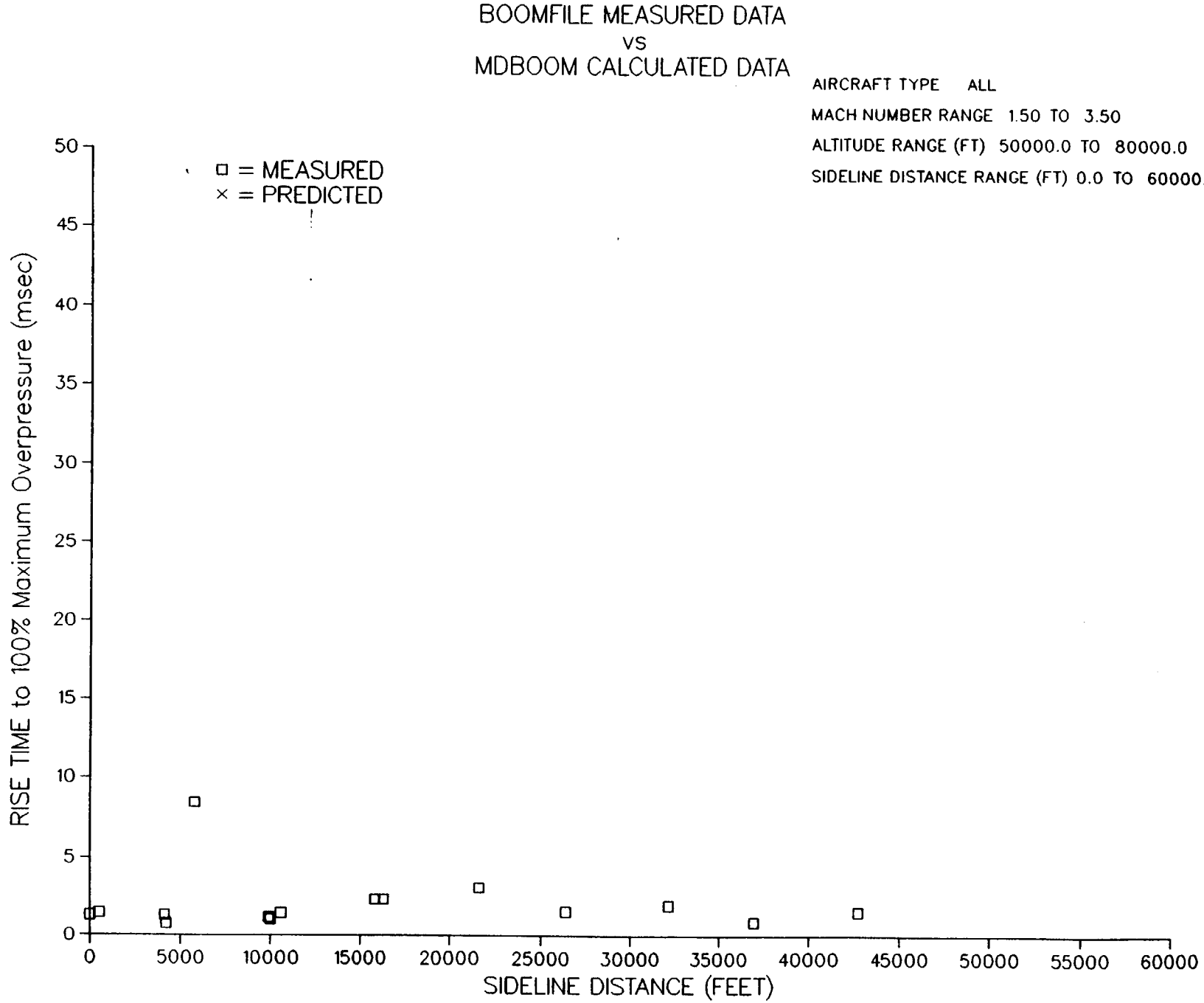
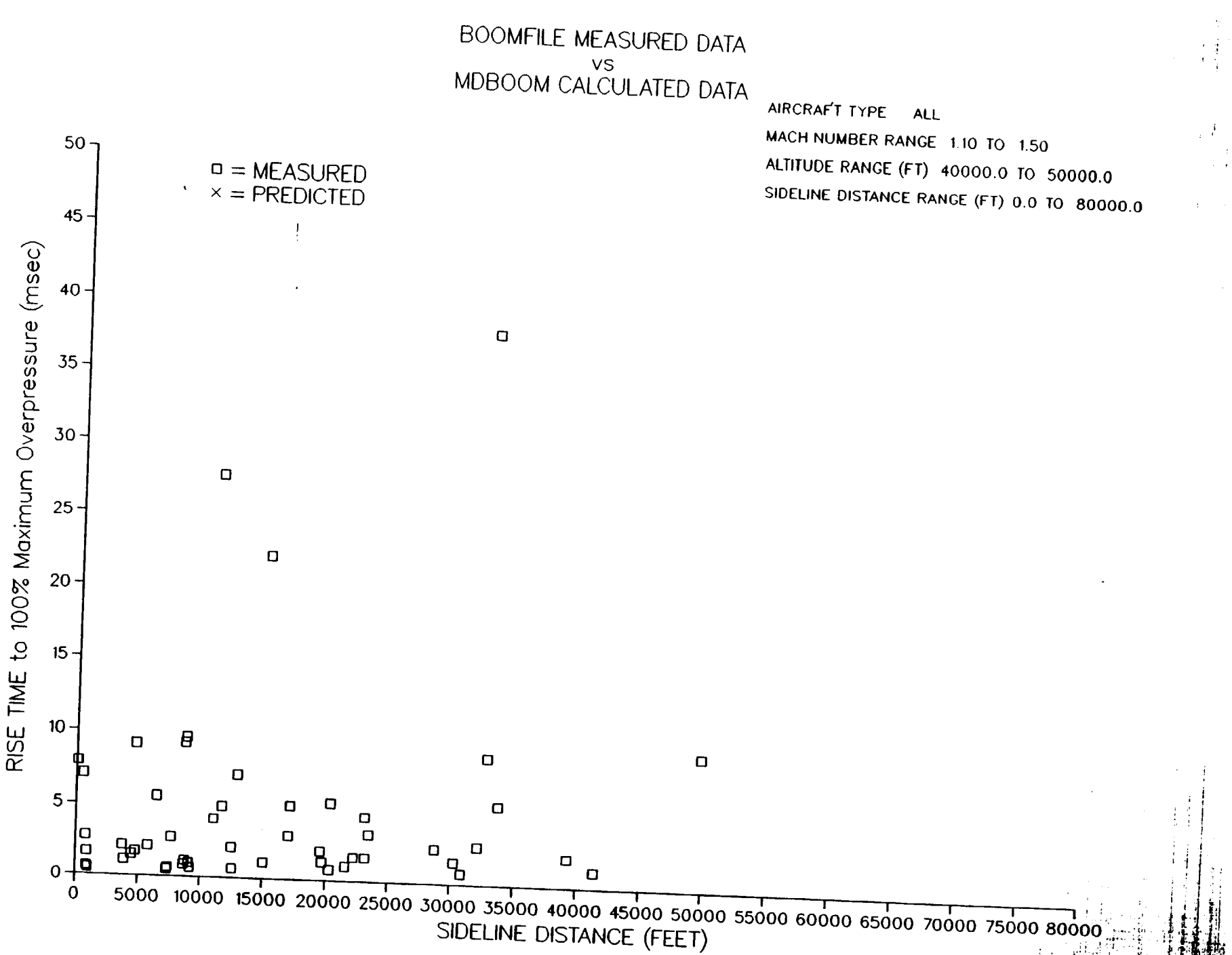
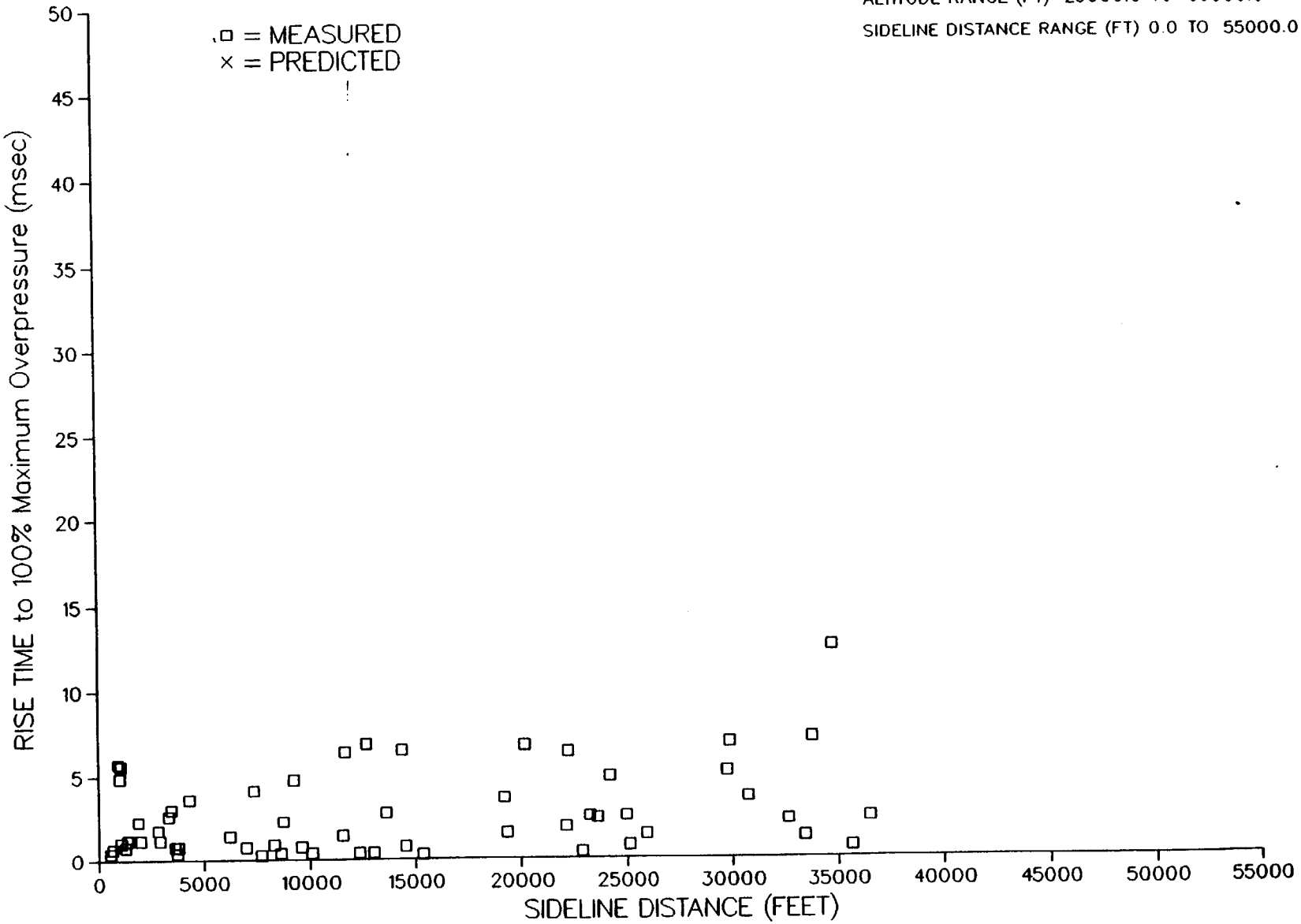
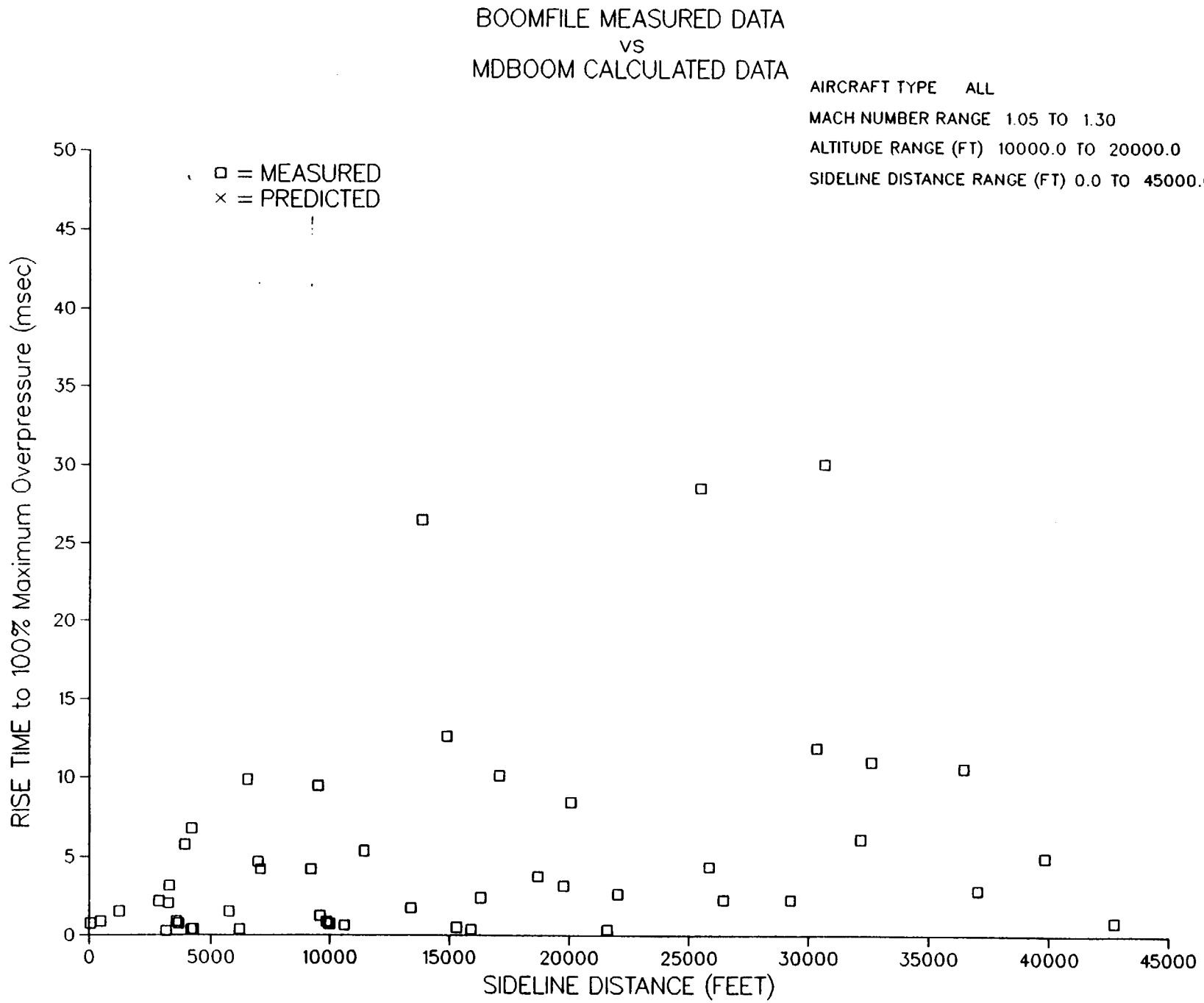
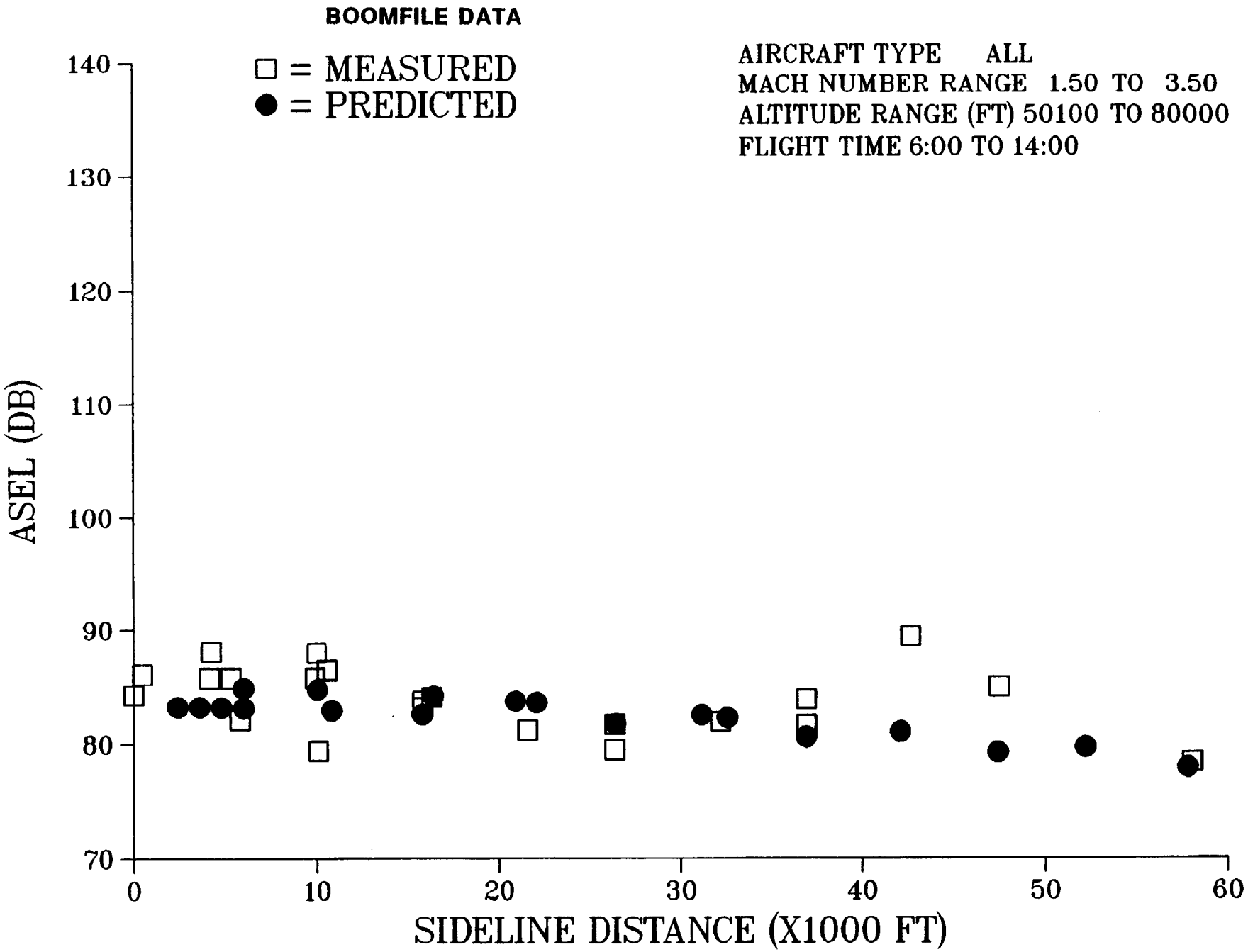
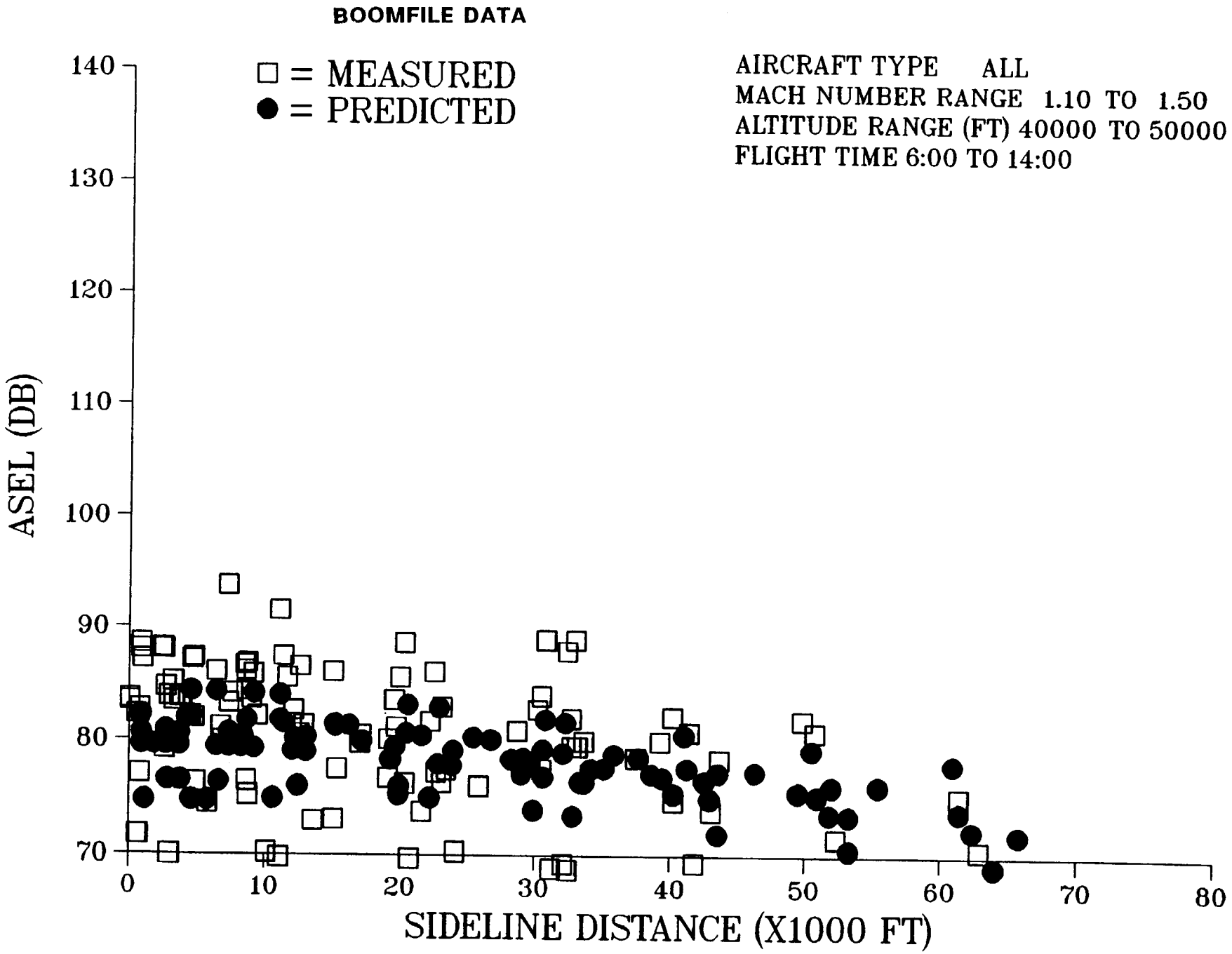

BOOMFILE MEASURED DATA
VS
MDBOOM CALCULATED DATA
AIRCRAFT TYPE ALL
MACH NUMBER RANGE 1.50 TO 3.50
ALTITUDE RANGE (FT) 50000.0 TO 80000.0
SIDELINE DISTANCE RANGE (FT) 0.0 TO 60000.0
□ = MEASURED
× = PREDICTED
RISE TIME to 100% Maximum Overpressure (msec)
SIDELINE DISTANCE (FEET)
0
5
10
15
20
25
30
35
40
45
50
0
5000
10000
15000
20000
25000
30000
35000
40000
45000
50000
55000
60000

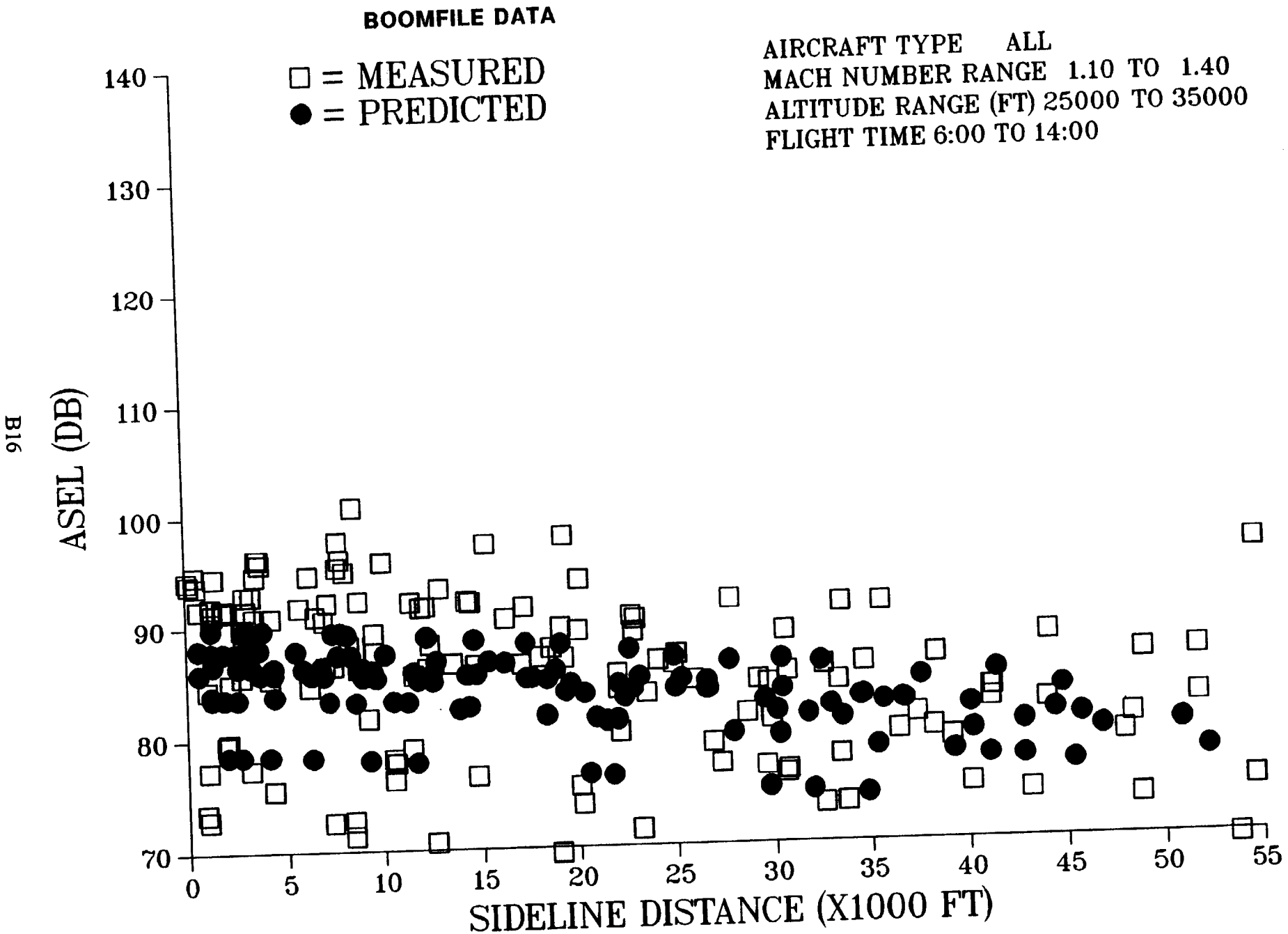

BOOMFILE MEASURED DATA
VS
MDBOOM CALCULATED DATA
AIRCRAFT TYPE ALL
MACH NUMBER RANGE 1.10 TO 1.50
ALTITUDE RANGE (FT) 40000.0 TO 50000.0
SIDELINE DISTANCE RANGE (FT) 0.0 TO 80000.0
□ = MEASURED
× = PREDICTED
RISE TIME to 100% Maximum Overpressure (msec)
0
5
10
15
20
25
30
35
40
45
50
0 5000 10000 15000 20000 25000 30000 35000 40000 45000 50000 55000 60000 65000 70000 75000 80000
SIDELINE DISTANCE (FEET)

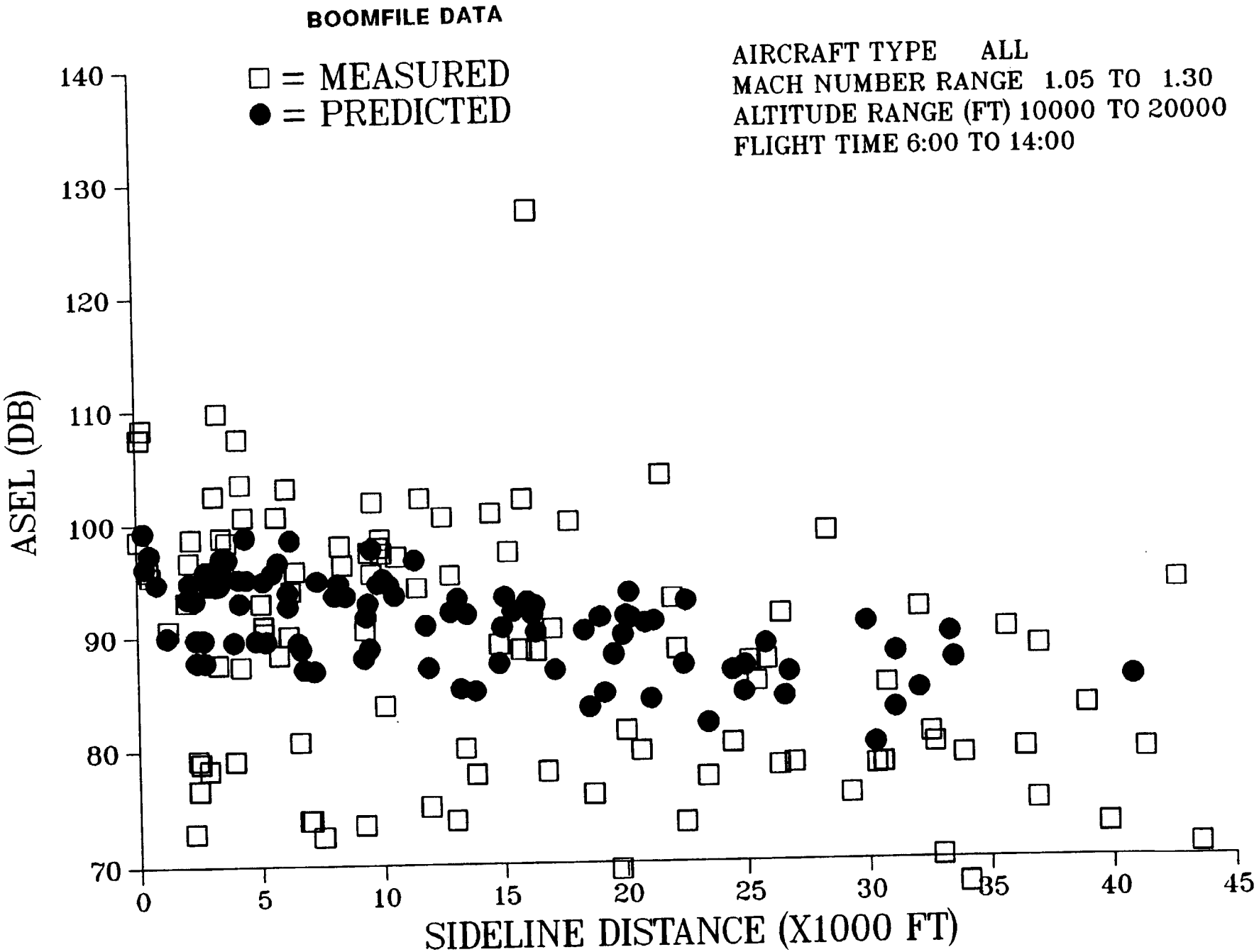

BOOMFILE MEASURED DATA
VS
MDBOOM CALCULATED DATA
AIRCRAFT TYPE ALL
MACH NUMBER RANGE 1.10 TO 1.40
ALTITUDE RANGE (FT) 25000.0 TO 35000.0
SIDELINE DISTANCE RANGE (FT) 0.0 TO 55000.0
□ = MEASURED
× = PREDICTED
RISE TIME to 100% Maximum Overpressure (msec)
SIDELINE DISTANCE (FEET)
0
5
10
15
20
25
30
35
40
45
50
0
5000
10000
15000
20000
25000
30000
35000
40000
45000
50000
55000

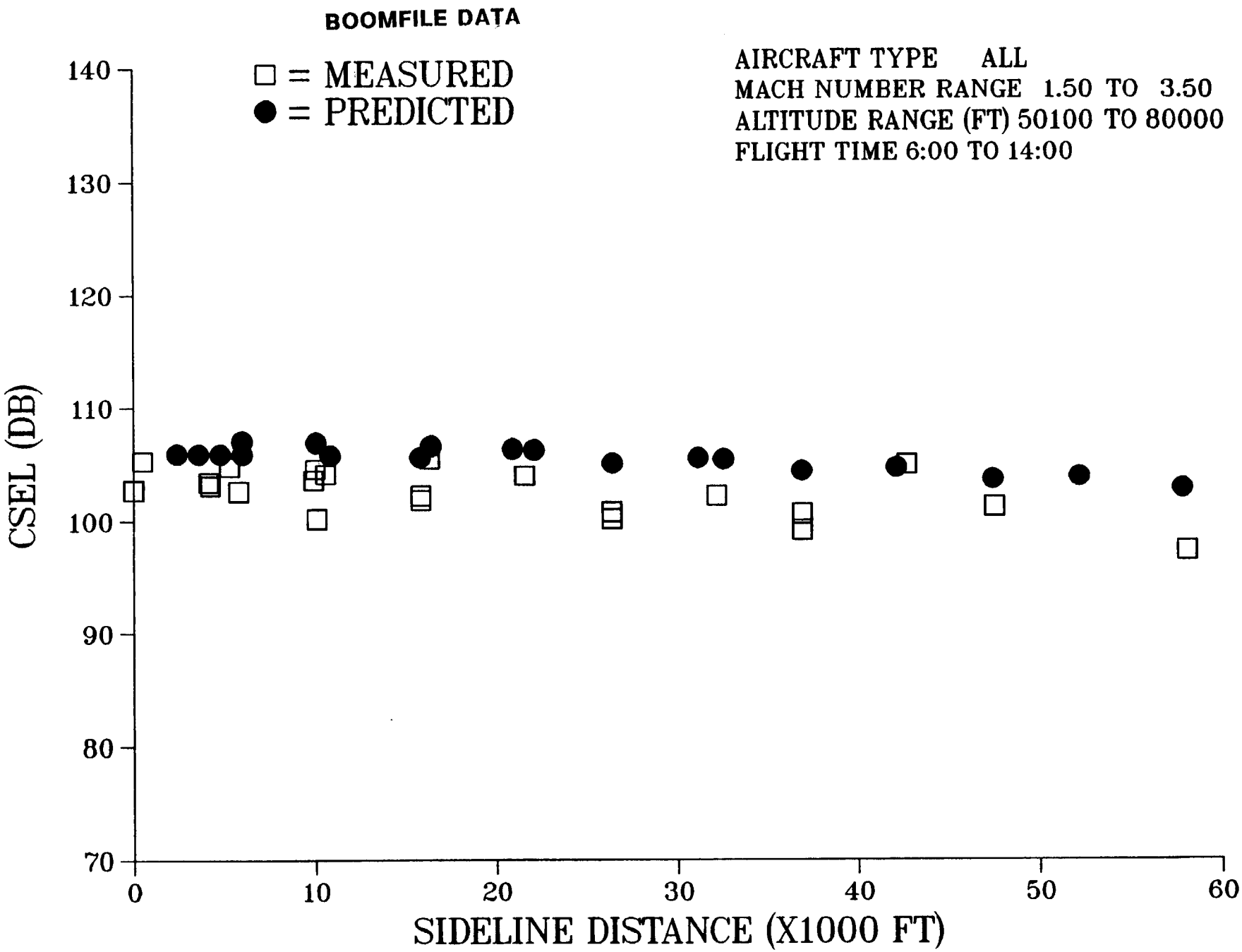

BOOMFILE MEASURED DATA
VS
MDBOOM CALCULATED DATA
AIRCRAFT TYPE ALL
MACH NUMBER RANGE 1.05 TO 1.30
ALTITUDE RANGE (FT) 10000.0 TO 20000.0
SIDELINE DISTANCE RANGE (FT) 0.0 TO 45000.0
□ = MEASURED
× = PREDICTED
RISE TIME to 100% Maximum Overpressure (msec)
SIDELINE DISTANCE (FEET)
0
5
10
15
20
25
30
35
40
45
50
0
5000
10000
15000
20000
25000
30000
35000
40000
45000

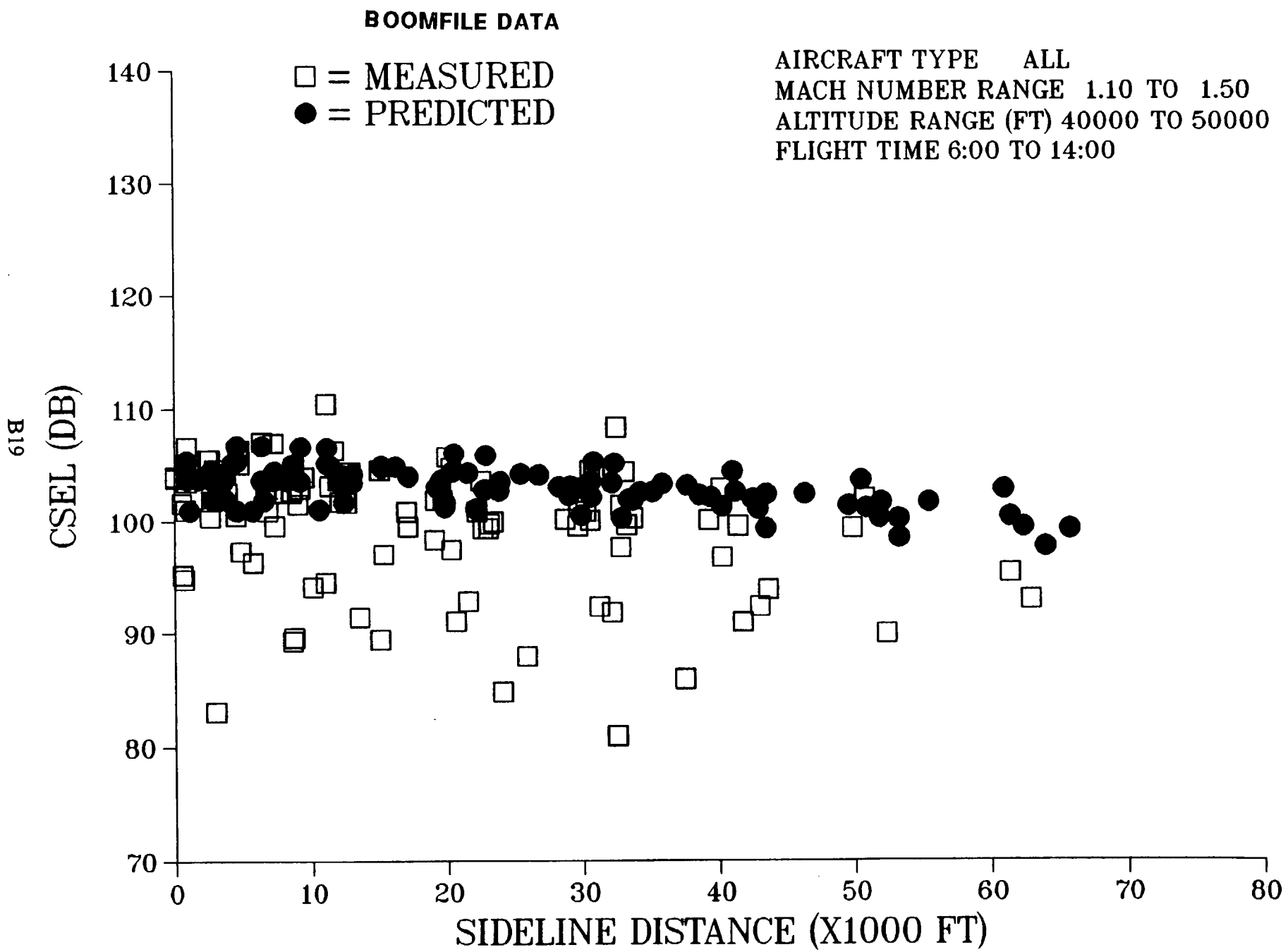

BOOMFILE DATA
□ = MEASURED
● = PREDICTED
AIRCRAFT TYPE ALL
MACH NUMBER RANGE 1.50 TO 3.50
ALTITUDE RANGE (FT) 50100 TO 80000
FLIGHT TIME 6:00 TO 14:00
ASEL (DB)
140
130
120
110
100
90
80
70
0
10
20
30
40
50
60
SIDELINE DISTANCE (X1000 FT)

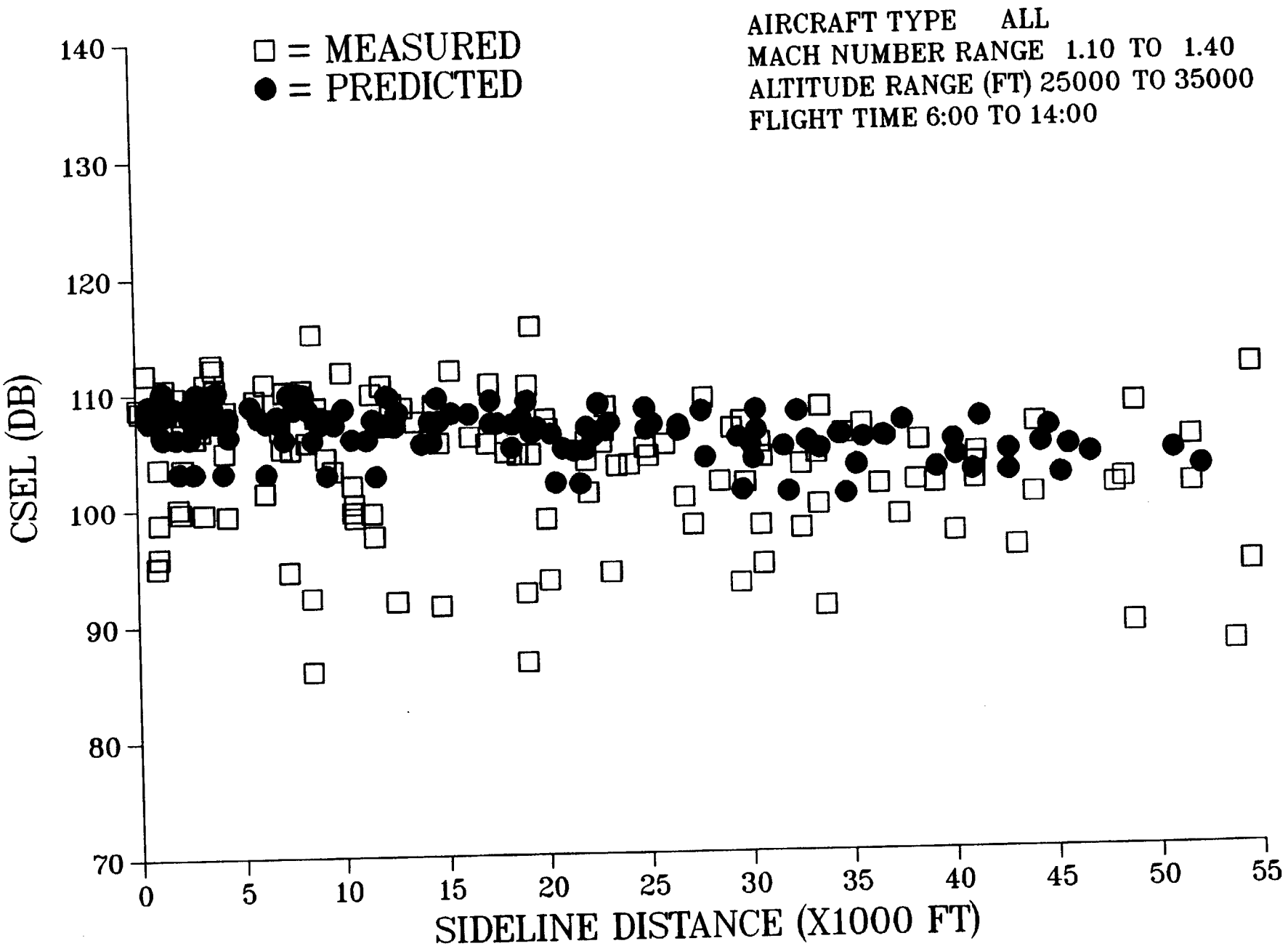

BOOMFILE DATA
□ = MEASURED
● = PREDICTED
AIRCRAFT TYPE ALL
MACH NUMBER RANGE 1.10 TO 1.50
ALTITUDE RANGE (FT) 40000 TO 50000
FLIGHT TIME 6:00 TO 14:00
ASEL (DB)
140
130
120
110
100
90
80
70
0
10
20
30
40
50
60
70
80
SIDELINE DISTANCE (X1000 FT)

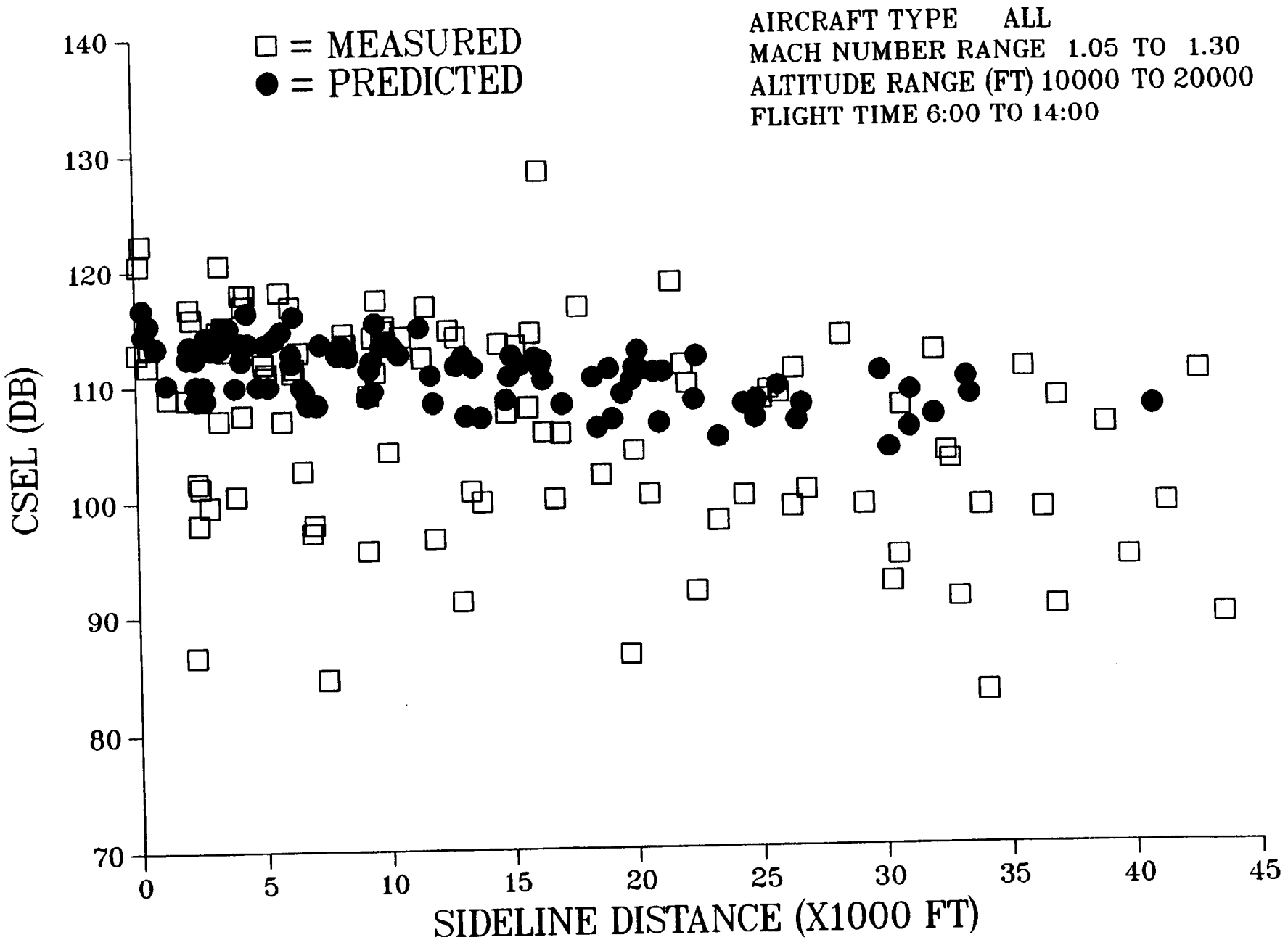

BOOMFILE DATA
□ = MEASURED
● = PREDICTED
AIRCRAFT TYPE ALL
MACH NUMBER RANGE 1.10 TO 1.40
ALTITUDE RANGE (FT) 25000 TO 35000
FLIGHT TIME 6:00 TO 14:00
ASEL (DB)
140
130
120
110
100
90
80
70
0
5
10
15
20
25
30
35
40
45
50
55
SIDELINE DISTANCE (X1000 FT)

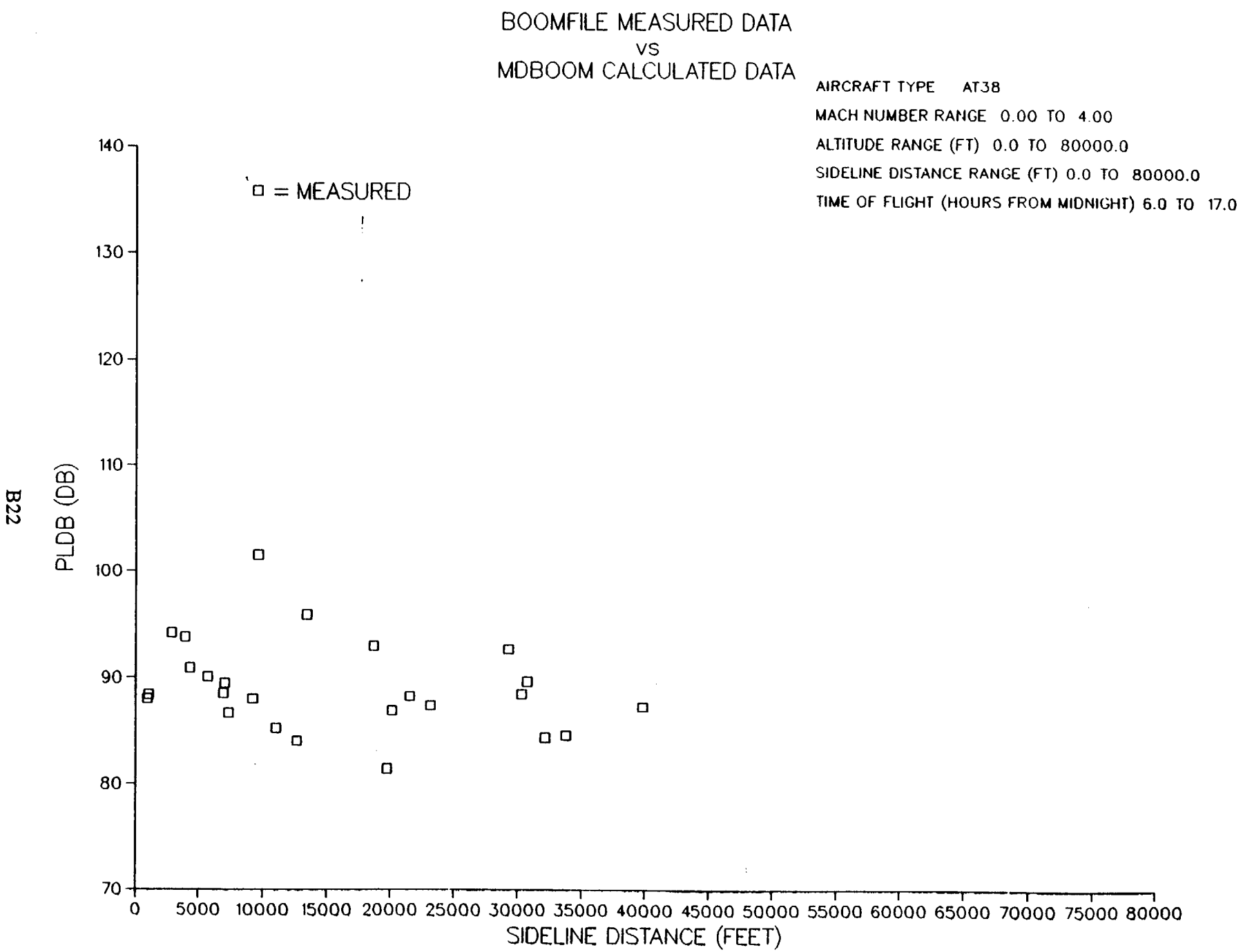

BOOMFILE DATA
□ = MEASURED
● = PREDICTED
AIRCRAFT TYPE ALL
MACH NUMBER RANGE 1.05 TO 1.30
ALTITUDE RANGE (FT) 10000 TO 20000
FLIGHT TIME 6:00 TO 14:00
ASEL (DB)
140
130
120
110
100
90
80
70
0
5
10
15
20
25
30
35
40
45
SIDELINE DISTANCE (X1000 FT)

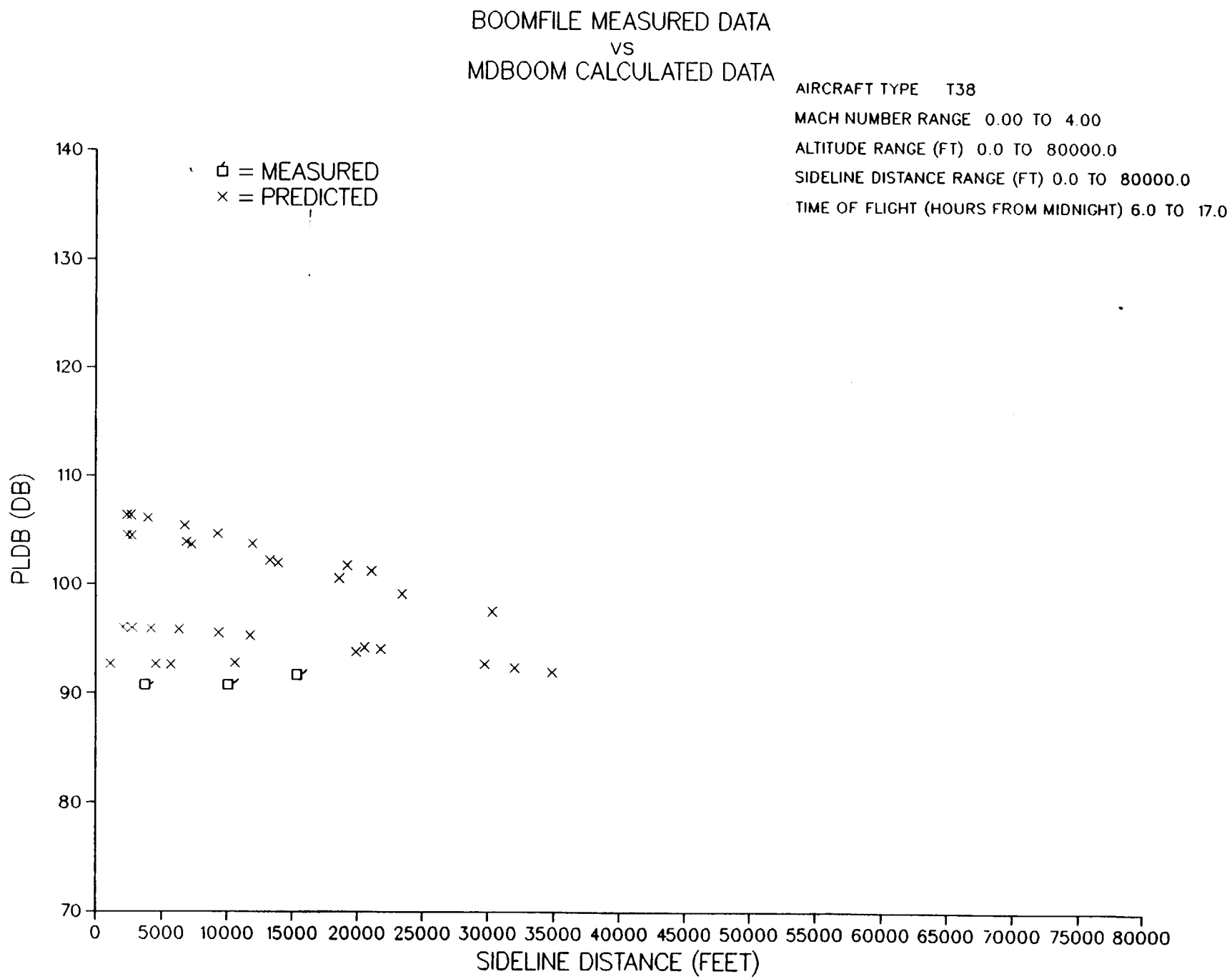

BOOMFILE DATA
□ = MEASURED
● = PREDICTED
AIRCRAFT TYPE ALL
MACH NUMBER RANGE 1.50 TO 3.50
ALTITUDE RANGE (FT) 50100 TO 80000
FLIGHT TIME 6:00 TO 14:00
CSEL (DB)
140
130
120
110
100
90
80
70
0
10
20
30
40
50
60
SIDELINE DISTANCE (X1000 FT)

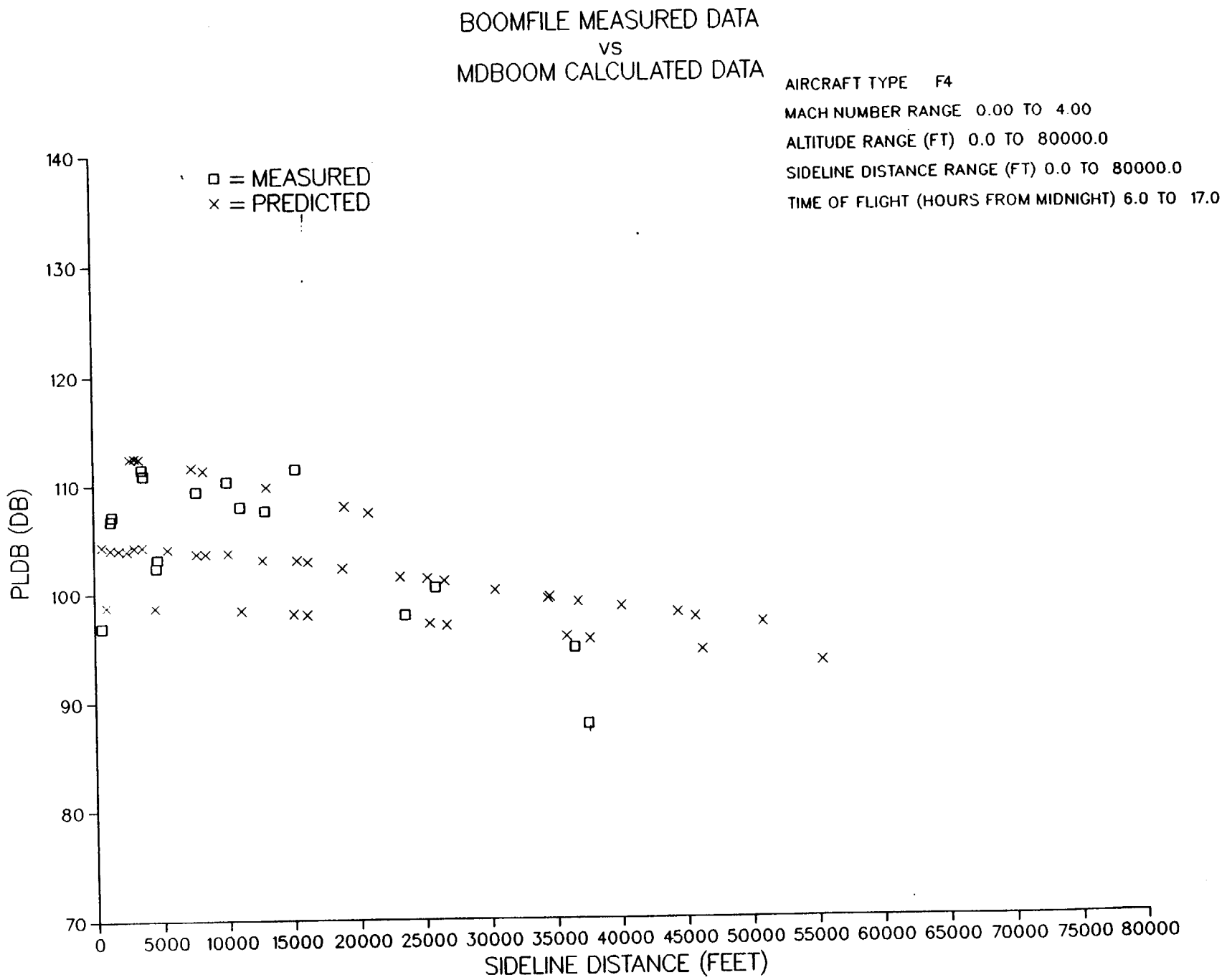

BOOMFILE DATA
□ = MEASURED
● = PREDICTED
AIRCRAFT TYPE ALL
MACH NUMBER RANGE 1.10 TO 1.50
ALTITUDE RANGE (FT) 40000 TO 50000
FLIGHT TIME 6:00 TO 14:00
CSEL (DB)
140
130
120
110
100
90
80
70
0
10
20
30
40
50
60
70
80
SIDELINE DISTANCE (X1000 FT)

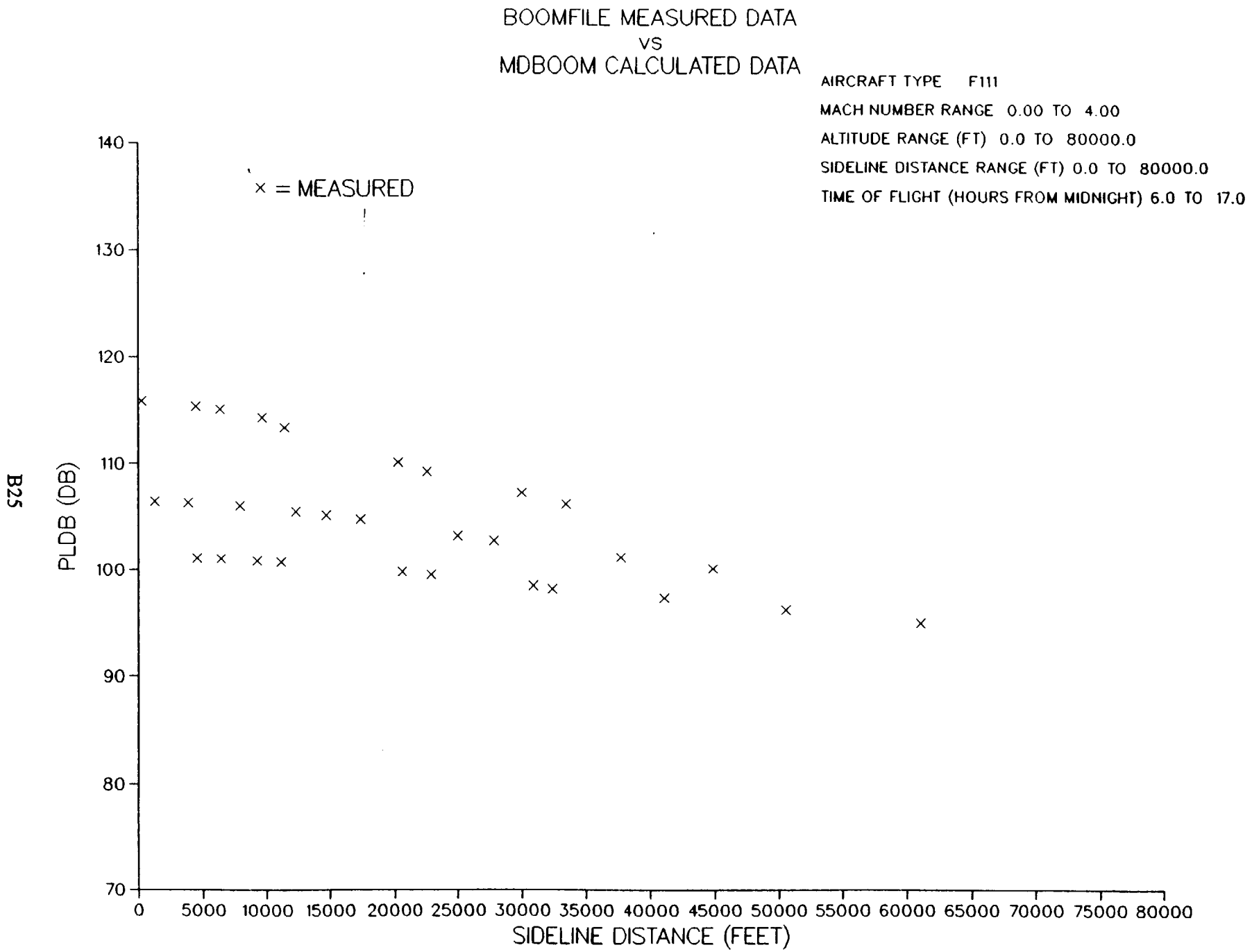

□ = MEASURED
● = PREDICTED
AIRCRAFT TYPE ALL
MACH NUMBER RANGE 1.10 TO 1.40
ALTITUDE RANGE (FT) 25000 TO 35000
FLIGHT TIME 6:00 TO 14:00
CSEL (DB)
140
130
120
110
100
90
80
70
0
5
10
15
20
25
30
35
40
45
50
55
SIDELINE DISTANCE (X1000 FT)

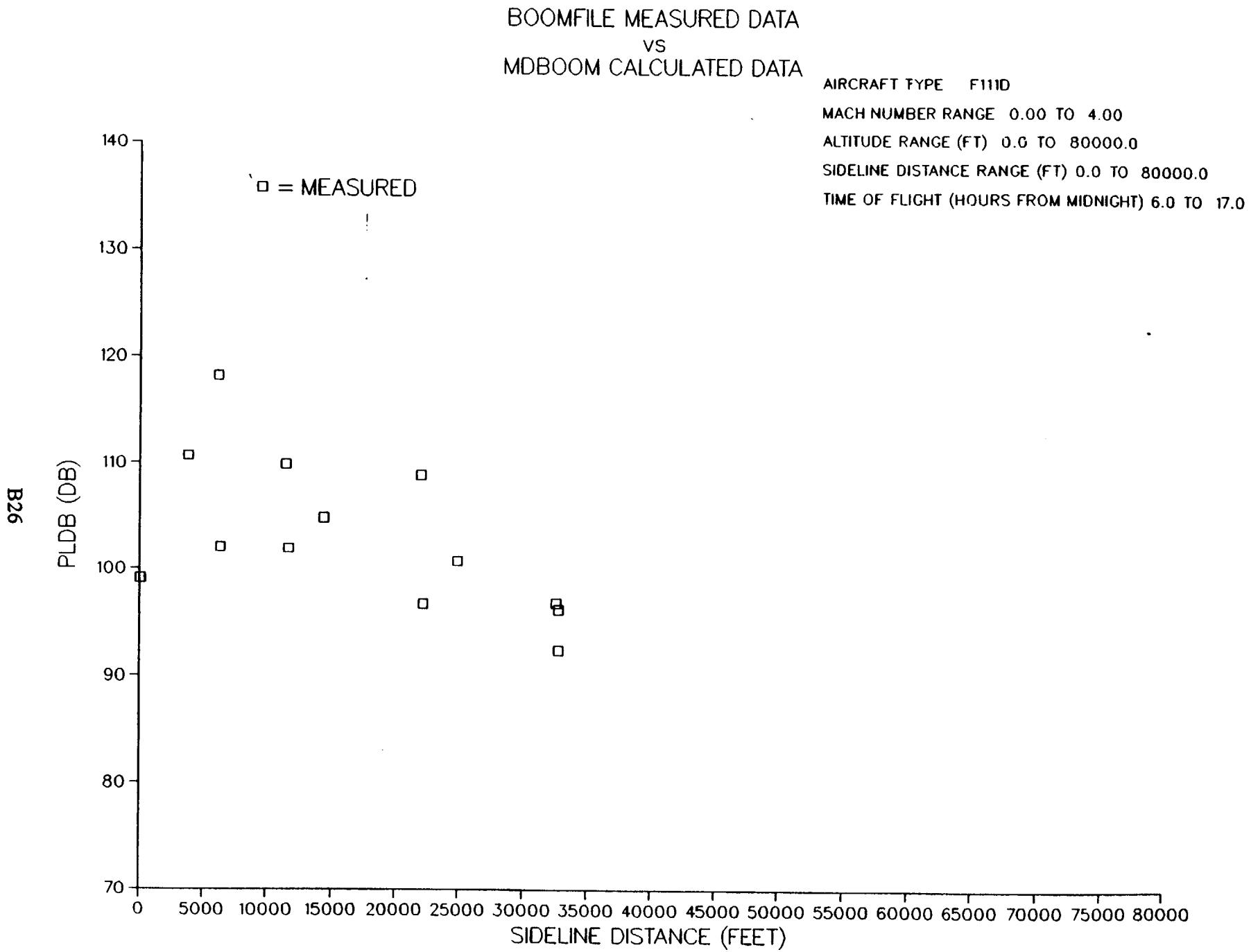

□ = MEASURED
● = PREDICTED
AIRCRAFT TYPE ALL
MACH NUMBER RANGE 1.05 TO 1.30
ALTITUDE RANGE (FT) 10000 TO 20000
FLIGHT TIME 6:00 TO 14:00
CSEL (DB)
140
130
120
110
100
90
80
70
0
5
10
15
20
25
30
35
40
45
SIDELINE DISTANCE (X1000 FT)

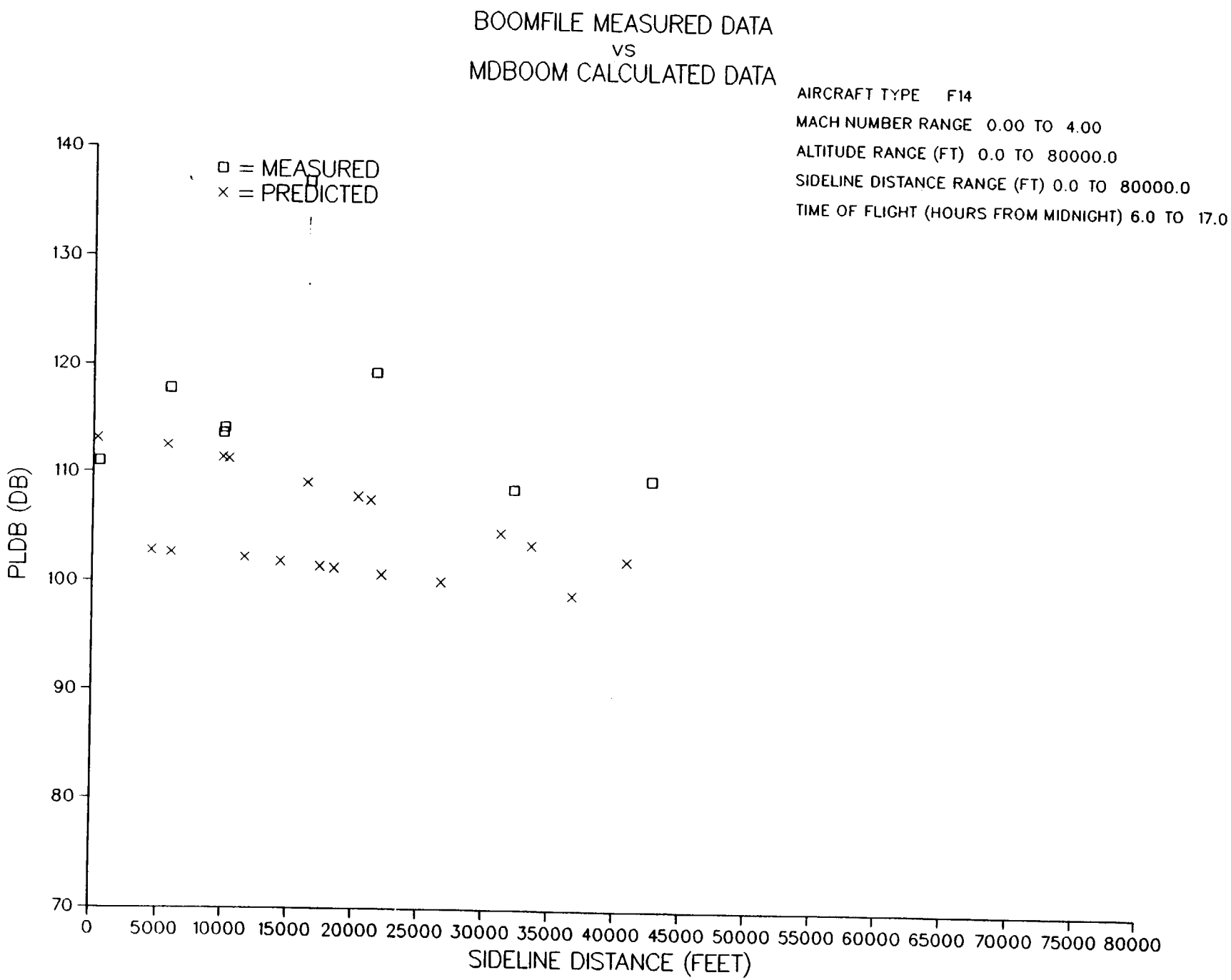

BOOMFILE MEASURED DATA
VS
MDBOOM CALCULATED DATA
AIRCRAFT TYPE AT38
MACH NUMBER RANGE 0.00 TO 4.00
ALTITUDE RANGE (FT) 0.0 TO 80000.0
SIDELINE DISTANCE RANGE (FT) 0.0 TO 80000.0
TIME OF FLIGHT (HOURS FROM MIDNIGHT) 6.0 TO 17.0
□ = MEASURED
PLDB (DB)
140
130
120
110
100
90
80
70
0
5000
10000
15000
20000
25000
30000
35000
40000
45000
50000
55000
60000
65000
70000
75000
80000
SIDELINE DISTANCE (FEET)

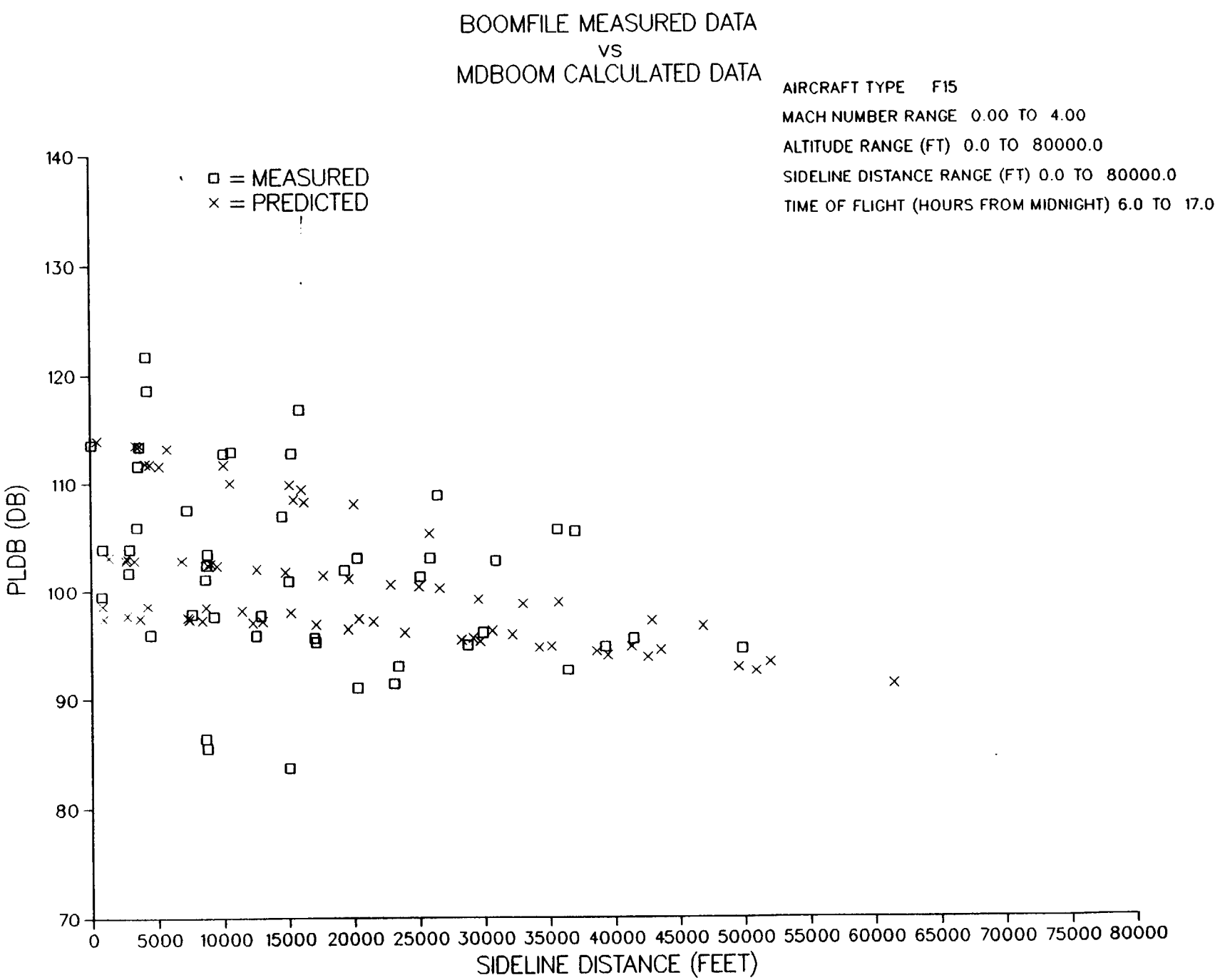

BOOMFILE MEASURED DATA
VS
MDBOOM CALCULATED DATA
AIRCRAFT TYPE T38
MACH NUMBER RANGE 0.00 TO 4.00
ALTITUDE RANGE (FT) 0.0 TO 80000.0
SIDELINE DISTANCE RANGE (FT) 0.0 TO 80000.0
TIME OF FLIGHT (HOURS FROM MIDNIGHT) 6.0 TO 17.0
□ = MEASURED
× = PREDICTED
PLDB (DB)
140
130
120
110
100
90
80
70
0
5000
10000
15000
20000
25000
30000
35000
40000
45000
50000
55000
60000
65000
70000
75000
80000
SIDELINE DISTANCE (FEET)

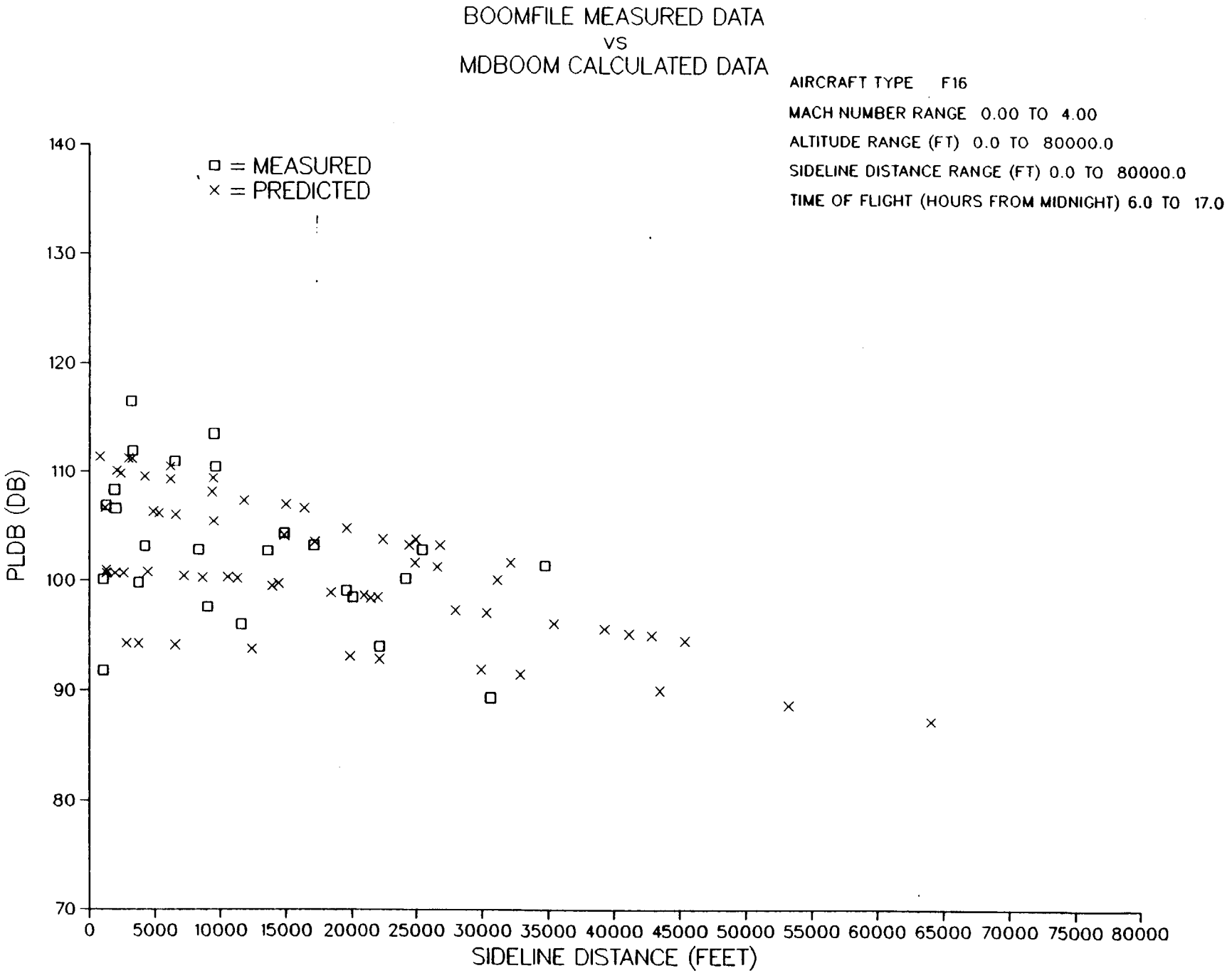

BOOMFILE MEASURED DATA
VS
MDBOOM CALCULATED DATA
AIRCRAFT TYPE F4
MACH NUMBER RANGE 0.00 TO 4.00
ALTITUDE RANGE (FT) 0.0 TO 80000.0
SIDELINE DISTANCE RANGE (FT) 0.0 TO 80000.0
TIME OF FLIGHT (HOURS FROM MIDNIGHT) 6.0 TO 17.0
□ = MEASURED
× = PREDICTED
PLDB (DB)
140
130
120
110
100
90
80
70
0
5000
10000
15000
20000
25000
30000
35000
40000
45000
50000
55000
60000
65000
70000
75000
80000
SIDELINE DISTANCE (FEET)

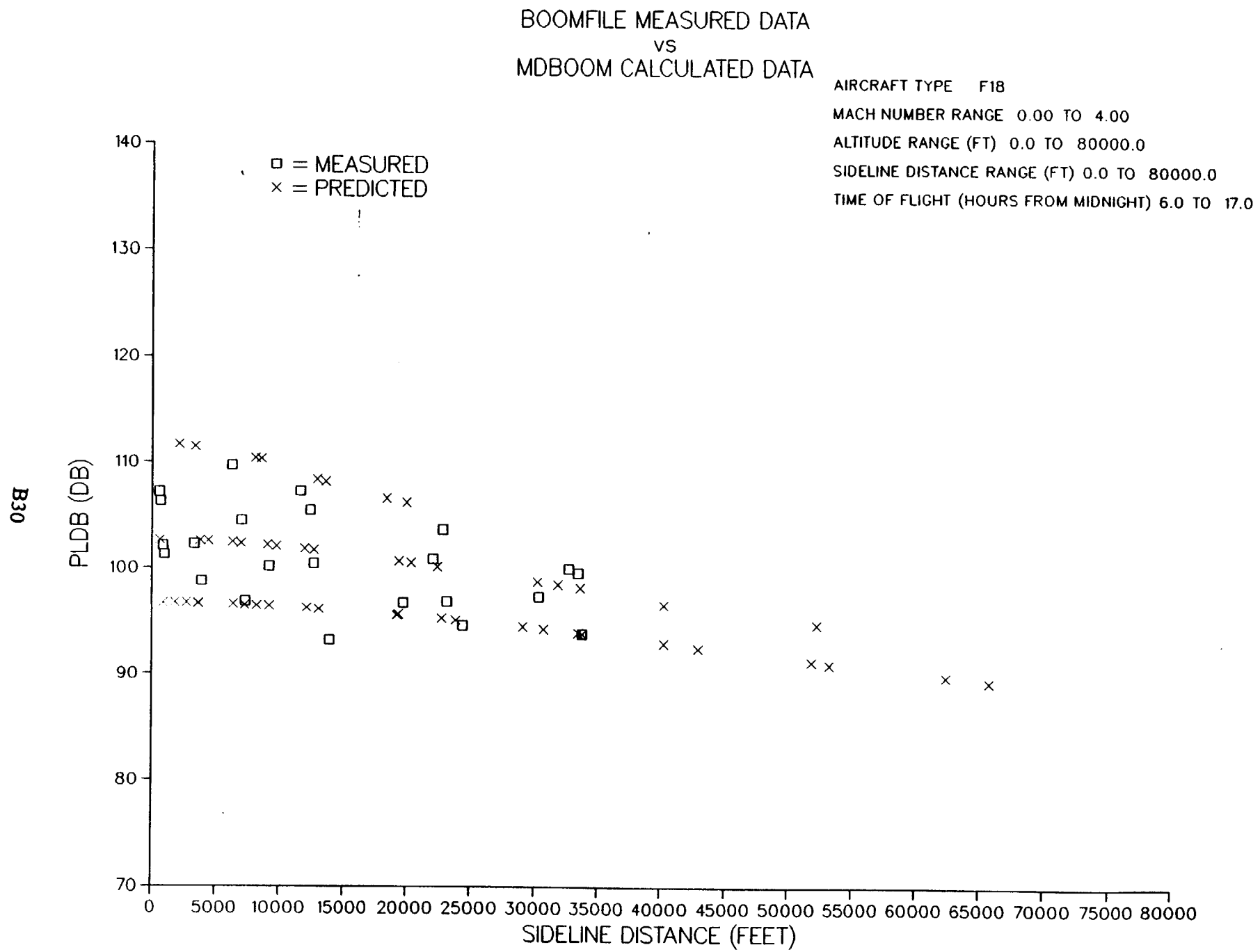

BOOMFILE MEASURED DATA
VS
MDBOOM CALCULATED DATA
AIRCRAFT TYPE F111
MACH NUMBER RANGE 0.00 TO 4.00
ALTITUDE RANGE (FT) 0.0 TO 80000.0
SIDELINE DISTANCE RANGE (FT) 0.0 TO 80000.0
TIME OF FLIGHT (HOURS FROM MIDNIGHT) 6.0 TO 17.0
× = MEASURED
PLDB (DB)
140
130
120
110
100
90
80
70
0
5000
10000
15000
20000
25000
30000
35000
40000
45000
50000
55000
60000
65000
70000
75000
80000
SIDELINE DISTANCE (FEET)

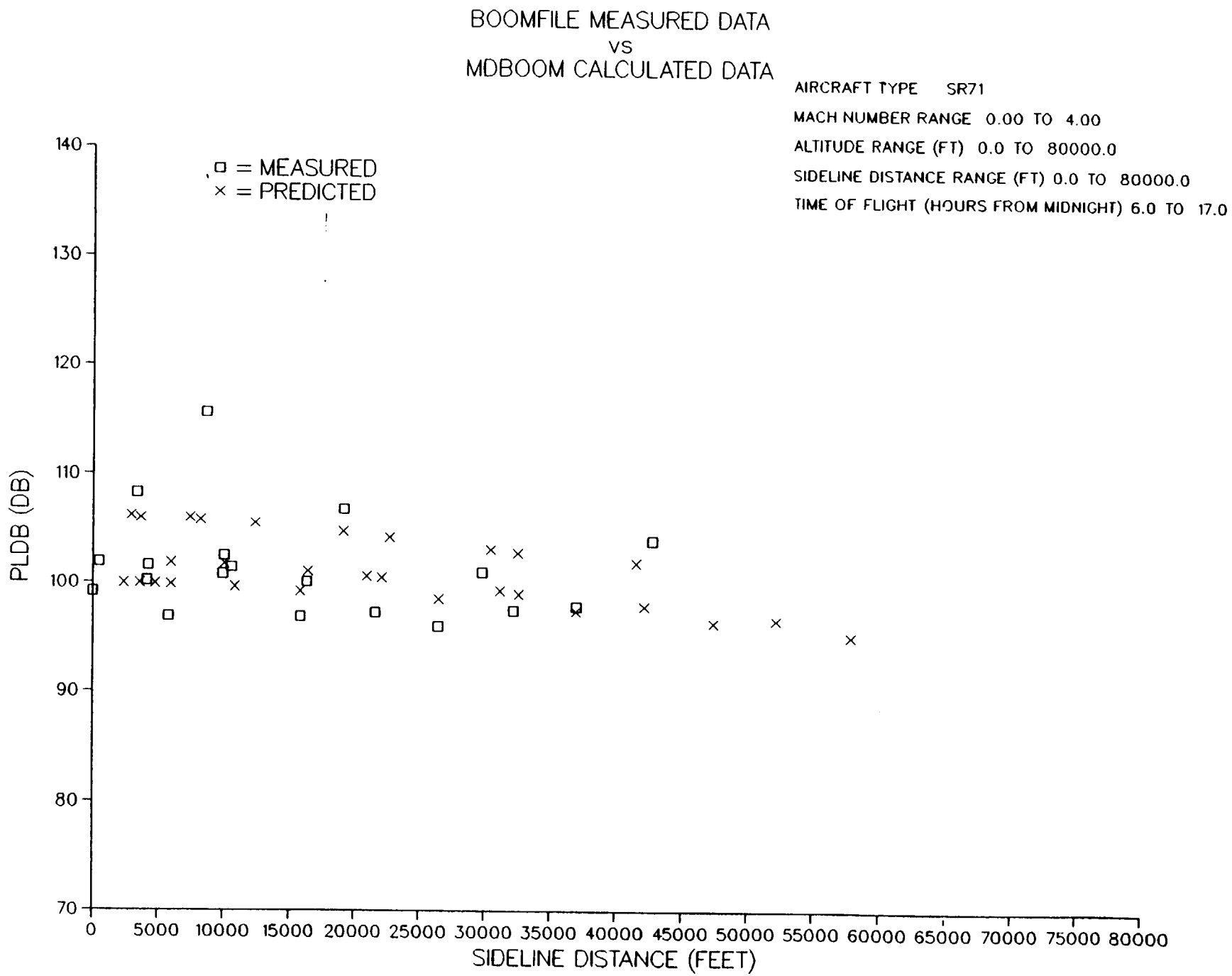

BOOMFILE MEASURED DATA
VS
MDBOOM CALCULATED DATA
AIRCRAFT TYPE F111D
MACH NUMBER RANGE 0.00 TO 4.00
ALTITUDE RANGE (FT) 0.0 TO 80000.0
SIDELINE DISTANCE RANGE (FT) 0.0 TO 80000.0
TIME OF FLIGHT (HOURS FROM MIDNIGHT) 6.0 TO 17.0
□ = MEASURED
PLDB (DB)
140
130
120
110
100
90
80
70
0
5000
10000
15000
20000
25000
30000
35000
40000
45000
50000
55000
60000
65000
70000
75000
80000
SIDELINE DISTANCE (FEET)

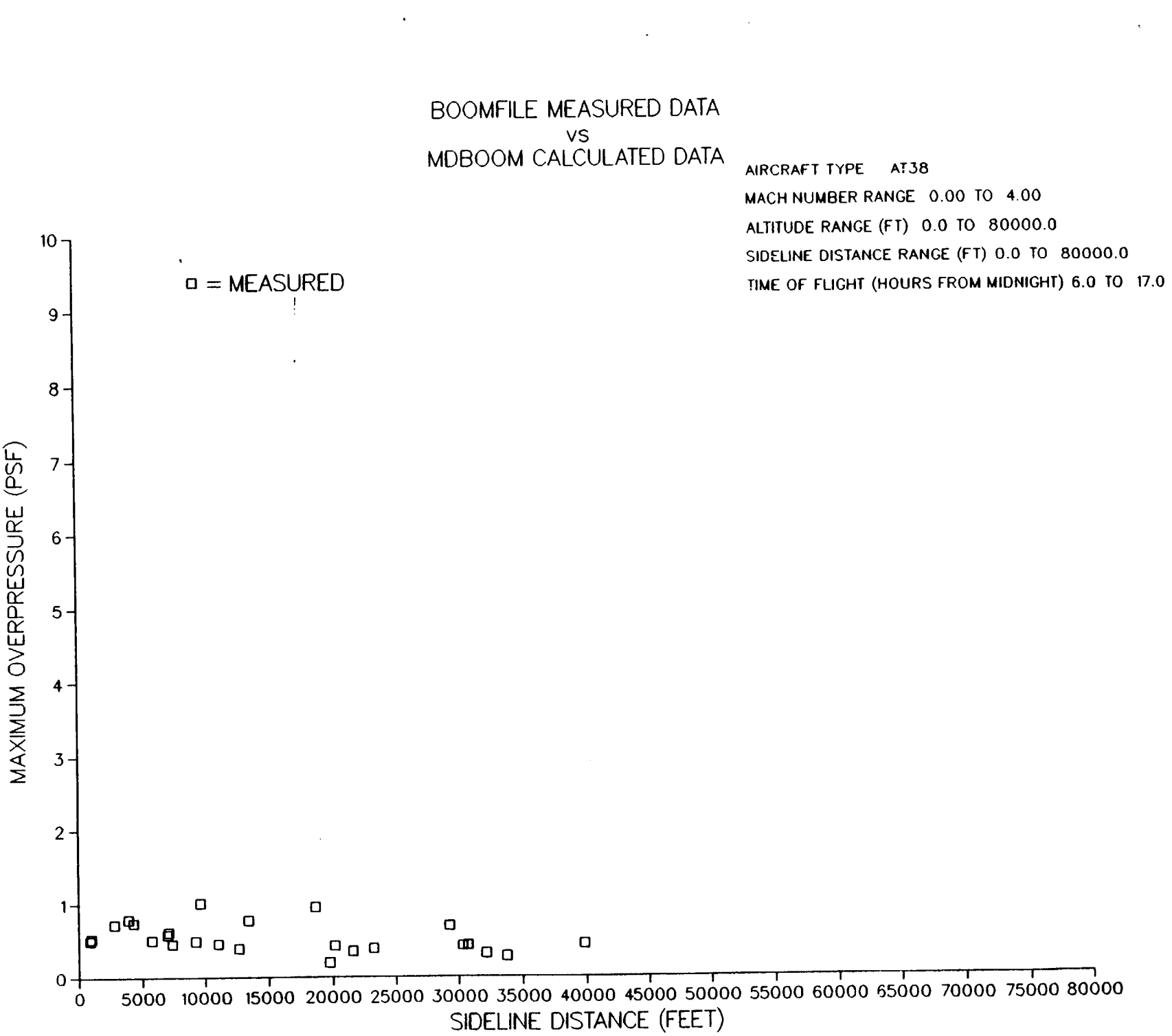

BOOMFILE MEASURED DATA
VS
MDBOOM CALCULATED DATA
AIRCRAFT TYPE F14
MACH NUMBER RANGE 0.00 TO 4.00
ALTITUDE RANGE (FT) 0.0 TO 80000.0
SIDELINE DISTANCE RANGE (FT) 0.0 TO 80000.0
TIME OF FLIGHT (HOURS FROM MIDNIGHT) 6.0 TO 17.0
□ = MEASURED
× = PREDICTED
PLDB (DB)
140
130
120
110
100
90
80
70
0
5000
10000
15000
20000
25000
30000
35000
40000
45000
50000
55000
60000
65000
70000
75000
80000
SIDELINE DISTANCE (FEET)

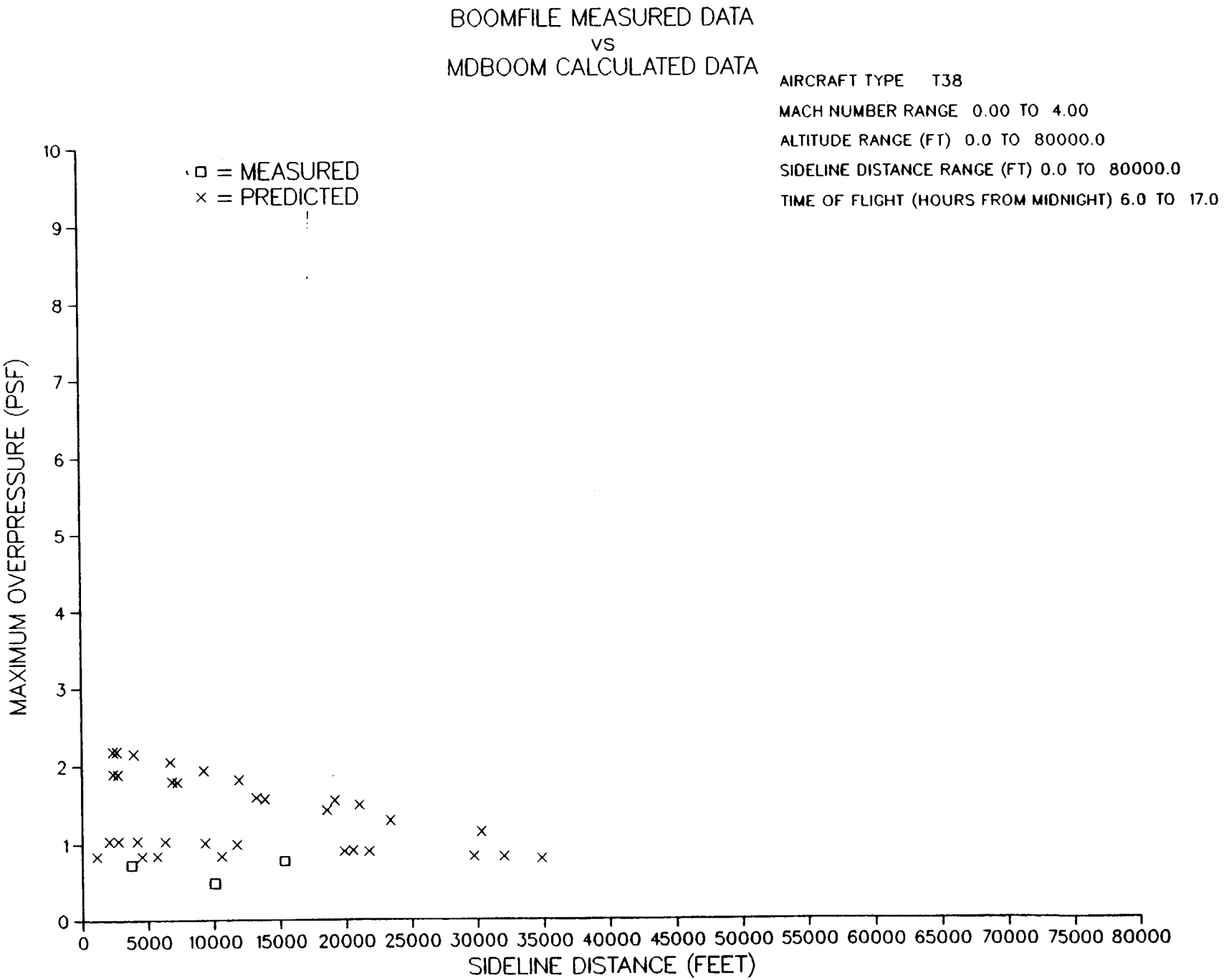

BOOMFILE MEASURED DATA
VS
MDBOOM CALCULATED DATA
AIRCRAFT TYPE F15
MACH NUMBER RANGE 0.00 TO 4.00
ALTITUDE RANGE (FT) 0.0 TO 80000.0
SIDELINE DISTANCE RANGE (FT) 0.0 TO 80000.0
TIME OF FLIGHT (HOURS FROM MIDNIGHT) 6.0 TO 17.0
□ = MEASURED
× = PREDICTED
PLDB (DB)
140
130
120
110
100
90
80
70
0
5000
10000
15000
20000
25000
30000
35000
40000
45000
50000
55000
60000
65000
70000
75000
80000
SIDELINE DISTANCE (FEET)

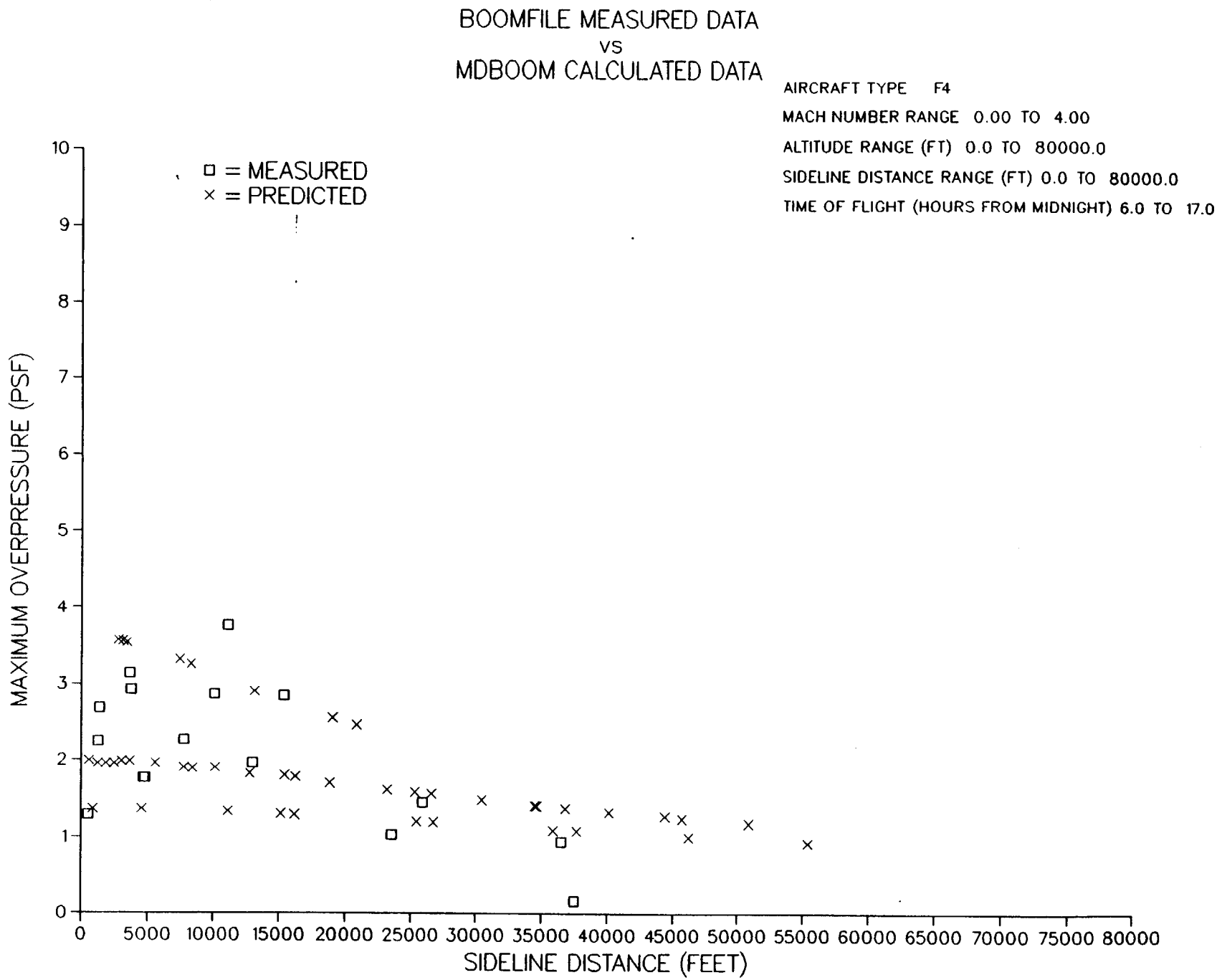

BOOMFILE MEASURED DATA
VS
MDBOOM CALCULATED DATA
AIRCRAFT TYPE F16
MACH NUMBER RANGE 0.00 TO 4.00
ALTITUDE RANGE (FT) 0.0 TO 80000.0
SIDELINE DISTANCE RANGE (FT) 0.0 TO 80000.0
TIME OF FLIGHT (HOURS FROM MIDNIGHT) 6.0 TO 17.0
□ = MEASURED
× = PREDICTED
PLDB (DB)
140
130
120
110
100
90
80
70
0 5000 10000 15000 20000 25000 30000 35000 40000 45000 50000 55000 60000 65000 70000 75000 80000
SIDELINE DISTANCE (FEET)

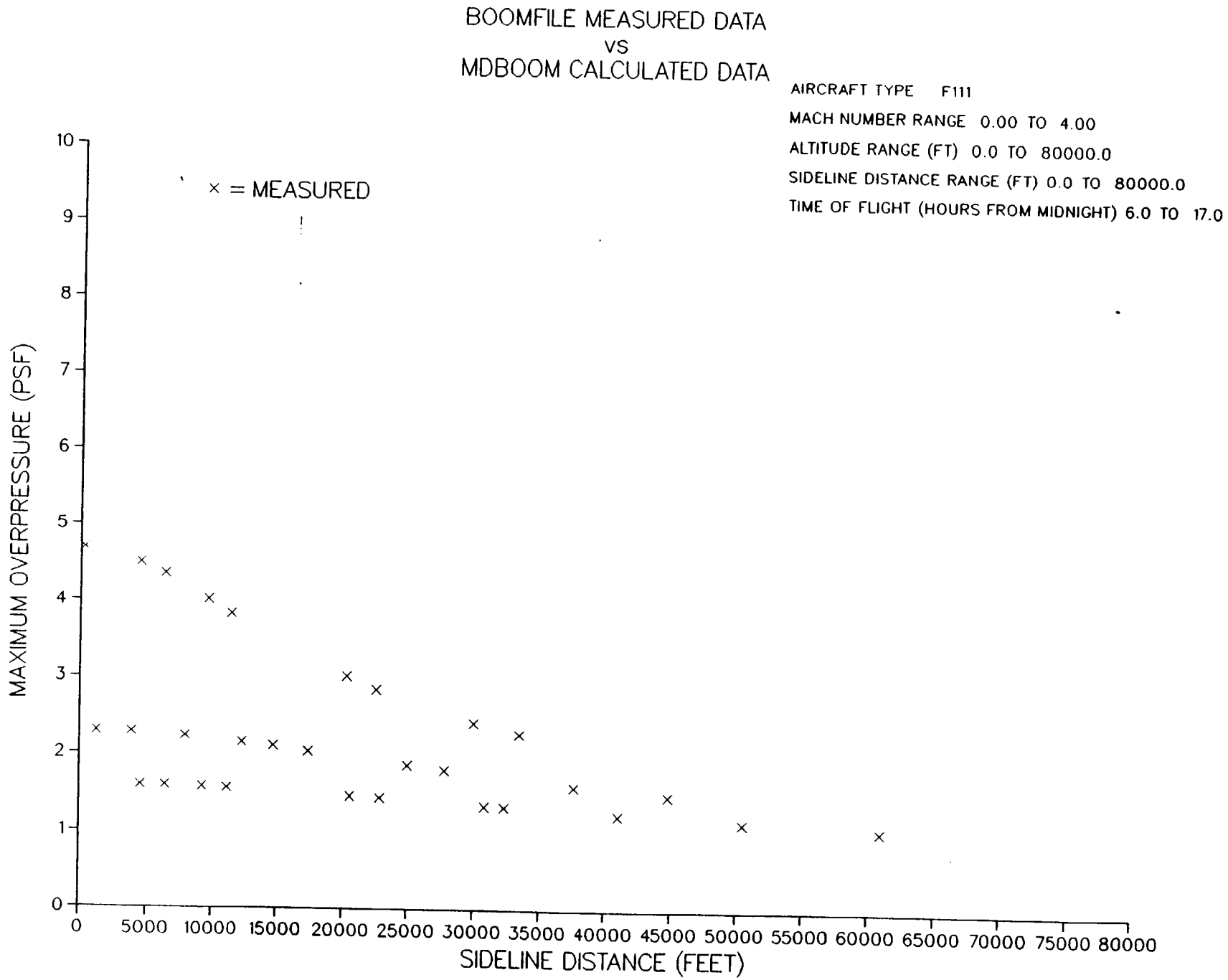

BOOMFILE MEASURED DATA
VS
MDBOOM CALCULATED DATA
AIRCRAFT TYPE F18
MACH NUMBER RANGE 0.00 TO 4.00
ALTITUDE RANGE (FT) 0.0 TO 80000.0
SIDELINE DISTANCE RANGE (FT) 0.0 TO 80000.0
TIME OF FLIGHT (HOURS FROM MIDNIGHT) 6.0 TO 17.0
□ = MEASURED
× = PREDICTED
PLDB (DB)
140
130
120
110
100
90
80
70
0
5000
10000
15000
20000
25000
30000
35000
40000
45000
50000
55000
60000
65000
70000
75000
80000
SIDELINE DISTANCE (FEET)

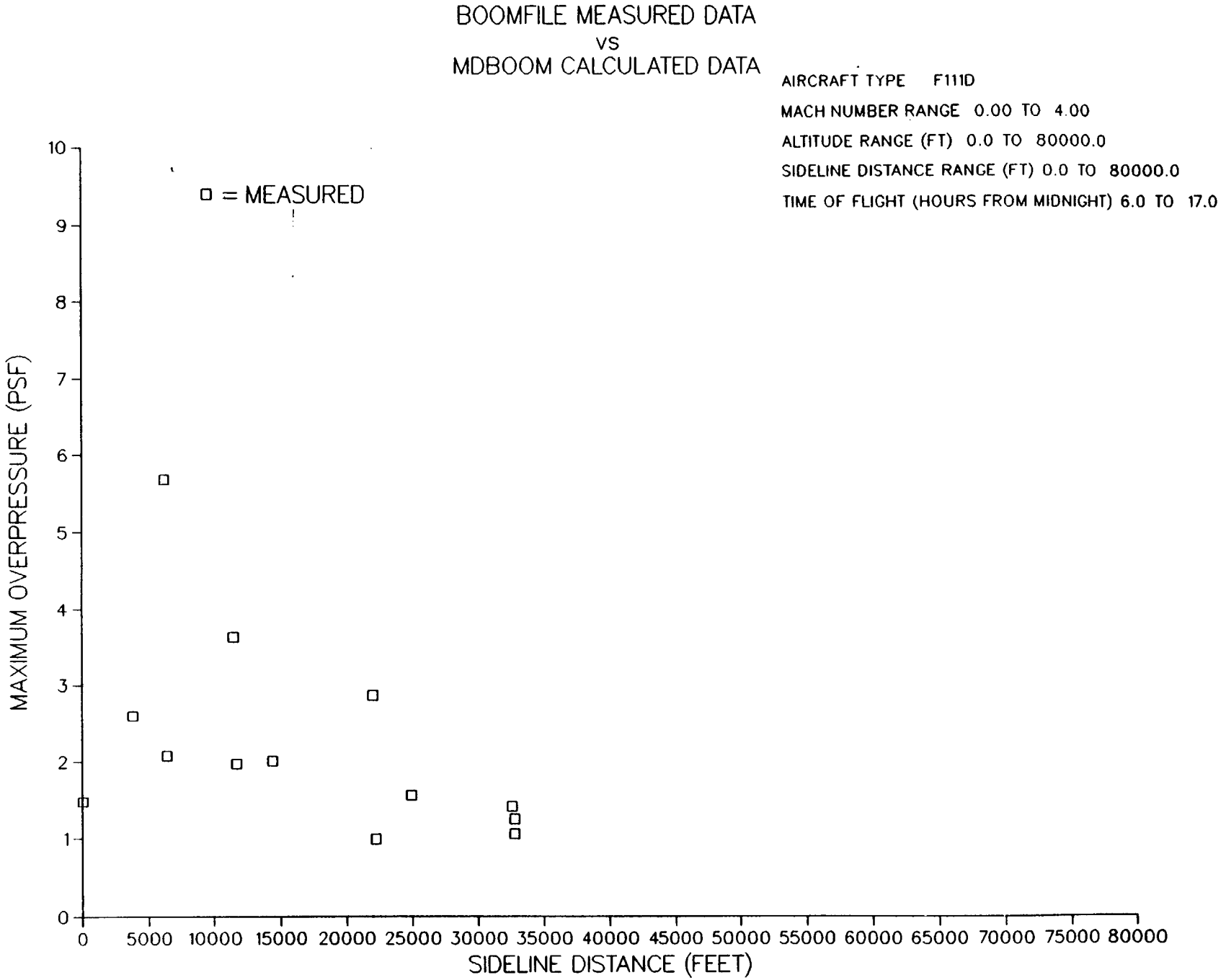

BOOMFILE MEASURED DATA
VS
MDBOOM CALCULATED DATA
AIRCRAFT TYPE SR71
MACH NUMBER RANGE 0.00 TO 4.00
ALTITUDE RANGE (FT) 0.0 TO 80000.0
SIDELINE DISTANCE RANGE (FT) 0.0 TO 80000.0
TIME OF FLIGHT (HOURS FROM MIDNIGHT) 6.0 TO 17.0
□ = MEASURED
× = PREDICTED
PLDB (DB)
140
130
120
110
100
90
80
70
0
5000
10000
15000
20000
25000
30000
35000
40000
45000
50000
55000
60000
65000
70000
75000
80000
SIDELINE DISTANCE (FEET)

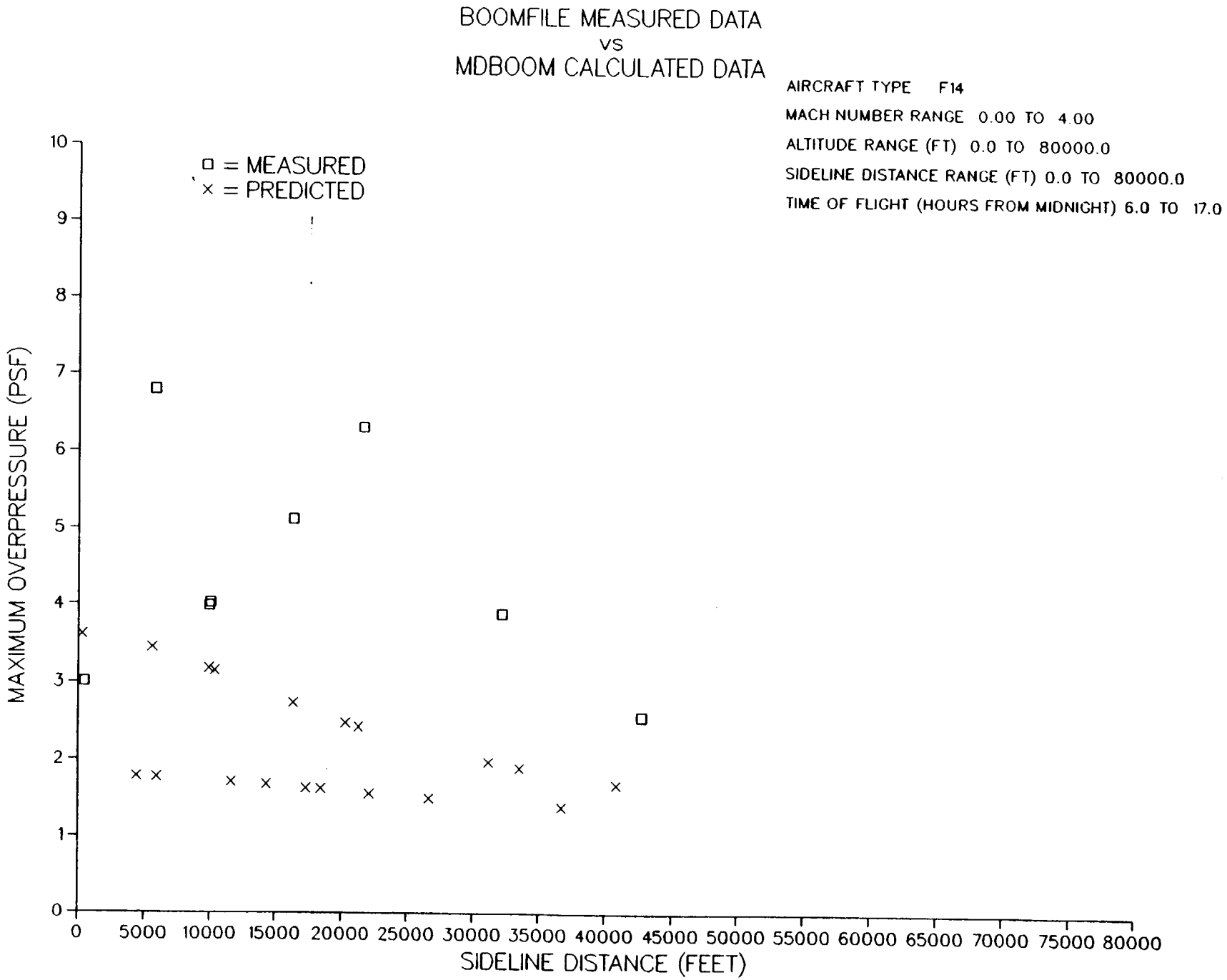

BOOMFILE MEASURED DATA
VS
MDBOOM CALCULATED DATA
AIRCRAFT TYPE AT38
MACH NUMBER RANGE 0.00 TO 4.00
ALTITUDE RANGE (FT) 0.0 TO 80000.0
SIDELINE DISTANCE RANGE (FT) 0.0 TO 80000.0
TIME OF FLIGHT (HOURS FROM MIDNIGHT) 6.0 TO 17.0
□ = MEASURED
MAXIMUM OVERPRESSURE (PSF)
0
1
2
3
4
5
6
7
8
9
10
0 5000 10000 15000 20000 25000 30000 35000 40000 45000 50000 55000 60000 65000 70000 75000 80000
SIDELINE DISTANCE (FEET)


BOOMFILE MEASURED DATA
VS
MDBOOM CALCULATED DATA
AIRCRAFT TYPE T38
MACH NUMBER RANGE 0.00 TO 4.00
ALTITUDE RANGE (FT) 0.0 TO 80000.0
SIDELINE DISTANCE RANGE (FT) 0.0 TO 80000.0
TIME OF FLIGHT (HOURS FROM MIDNIGHT) 6.0 TO 17.0
□ = MEASURED
× = PREDICTED
MAXIMUM OVERPRESSURE (PSF)
SIDELINE DISTANCE (FEET)
0
1
2
3
4
5
6
7
8
9
10
0 5000 10000 15000 20000 25000 30000 35000 40000 45000 50000 55000 60000 65000 70000 75000 80000


BOOMFILE MEASURED DATA
VS
MDBOOM CALCULATED DATA
AIRCRAFT TYPE F4
MACH NUMBER RANGE 0.00 TO 4.00
ALTITUDE RANGE (FT) 0.0 TO 80000.0
SIDELINE DISTANCE RANGE (FT) 0.0 TO 80000.0
TIME OF FLIGHT (HOURS FROM MIDNIGHT) 6.0 TO 17.0
□ = MEASURED
× = PREDICTED
MAXIMUM OVERPRESSURE (PSF)
SIDELINE DISTANCE (FEET)
0
1
2
3
4
5
6
7
8
9
10
0 5000 10000 15000 20000 25000 30000 35000 40000 45000 50000 55000 60000 65000 70000 75000 80000


BOOMFILE MEASURED DATA
VS
MDBOOM CALCULATED DATA
AIRCRAFT TYPE F111
MACH NUMBER RANGE 0.00 TO 4.00
ALTITUDE RANGE (FT) 0.0 TO 80000.0
SIDELINE DISTANCE RANGE (FT) 0.0 TO 80000.0
TIME OF FLIGHT (HOURS FROM MIDNIGHT) 6.0 TO 17.0
× = MEASURED
MAXIMUM OVERPRESSURE (PSF)
0
1
2
3
4
5
6
7
8
9
10
0 5000 10000 15000 20000 25000 30000 35000 40000 45000 50000 55000 60000 65000 70000 75000 80000
SIDELINE DISTANCE (FEET)


BOOMFILE MEASURED DATA
VS
MDBOOM CALCULATED DATA
AIRCRAFT TYPE F111D
MACH NUMBER RANGE 0.00 TO 4.00
ALTITUDE RANGE (FT) 0.0 TO 80000.0
SIDELINE DISTANCE RANGE (FT) 0.0 TO 80000.0
TIME OF FLIGHT (HOURS FROM MIDNIGHT) 6.0 TO 17.0
□ = MEASURED
MAXIMUM OVERPRESSURE (PSF)
0
1
2
3
4
5
6
7
8
9
10
0
5000
10000
15000
20000
25000
30000
35000
40000
45000
50000
55000
60000
65000
70000
75000
80000
SIDELINE DISTANCE (FEET)


BOOMFILE MEASURED DATA
VS
MDBOOM CALCULATED DATA
AIRCRAFT TYPE F14
MACH NUMBER RANGE 0.00 TO 4.00
ALTITUDE RANGE (FT) 0.0 TO 80000.0
SIDELINE DISTANCE RANGE (FT) 0.0 TO 80000.0
TIME OF FLIGHT (HOURS FROM MIDNIGHT) 6.0 TO 17.0
□ = MEASURED
× = PREDICTED
MAXIMUM OVERPRESSURE (PSF)
0
1
2
3
4
5
6
7
8
9
10
0
5000
10000
15000
20000
25000
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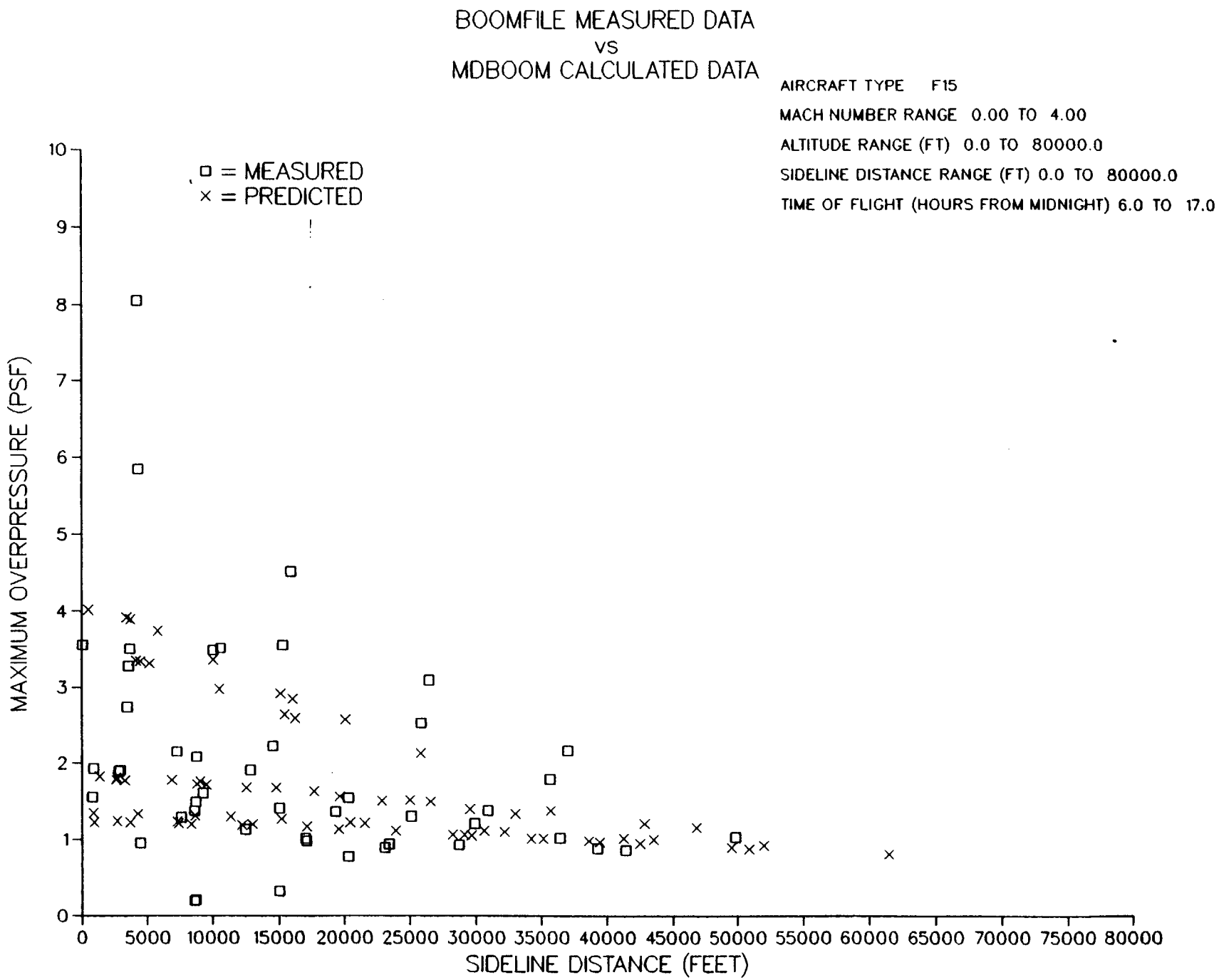
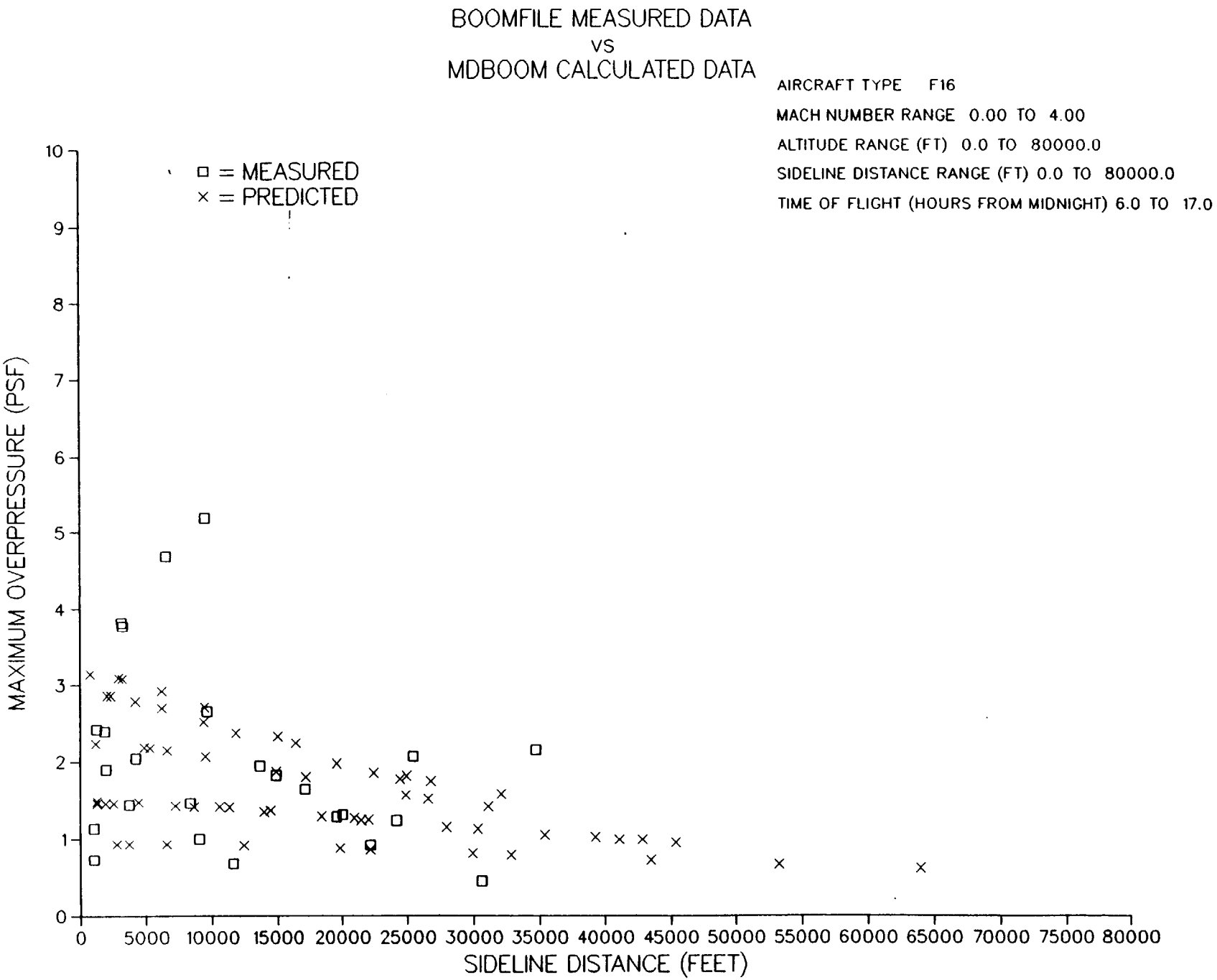
60000
65000
70000
75000
80000
SIDELINE DISTANCE (FEET)


BOOMFILE MEASURED DATA
VS
MDBOOM CALCULATED DATA
AIRCRAFT TYPE F15
MACH NUMBER RANGE 0.00 TO 4.00
ALTITUDE RANGE (FT) 0.0 TO 80000.0
SIDELINE DISTANCE RANGE (FT) 0.0 TO 80000.0
TIME OF FLIGHT (HOURS FROM MIDNIGHT) 6.0 TO 17.0
□ = MEASURED
× = PREDICTED
MAXIMUM OVERPRESSURE (PSF)
SIDELINE DISTANCE (FEET)
0 1 2 3 4 5 6 7 8 9 10
0 5000 10000 15000 20000 25000 30000 35000 40000 45000 50000 55000 60000 65000 70000 75000 80000


BOOMFILE MEASURED DATA
VS
MDBOOM CALCULATED DATA
AIRCRAFT TYPE F16
MACH NUMBER RANGE 0.00 TO 4.00
ALTITUDE RANGE (FT) 0.0 TO 80000.0
SIDELINE DISTANCE RANGE (FT) 0.0 TO 80000.0
TIME OF FLIGHT (HOURS FROM MIDNIGHT) 6.0 TO 17.0
□ = MEASURED
× = PREDICTED
MAXIMUM OVERPRESSURE (PSF)
SIDELINE DISTANCE (FEET)
0
1
2
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4
5
6
7
8
9
10
0
5000
10000
15000
20000
25000
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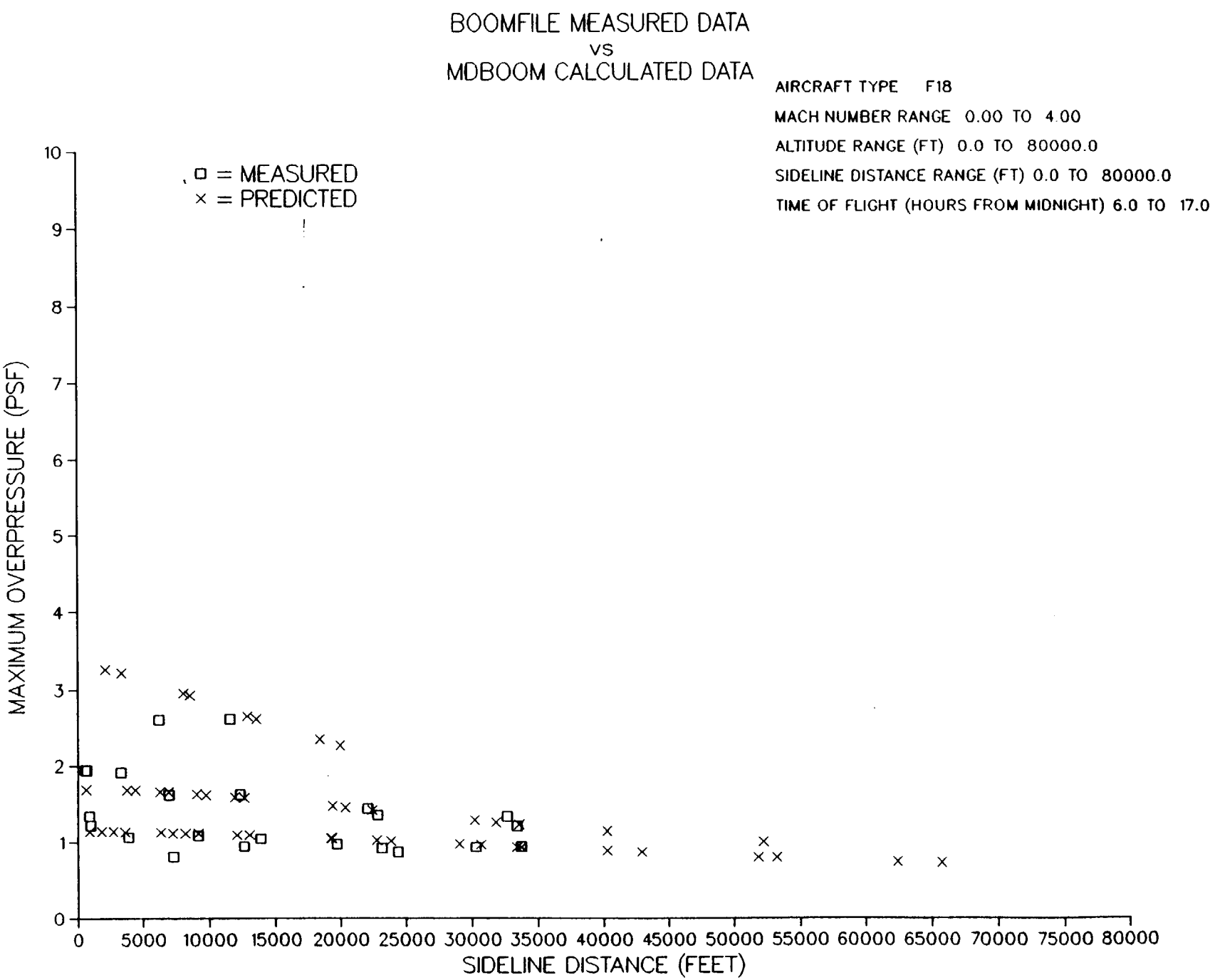
70000
75000
80000


BOOMFILE MEASURED DATA
VS
MDBOOM CALCULATED DATA
AIRCRAFT TYPE F18
MACH NUMBER RANGE 0.00 TO 4.00
ALTITUDE RANGE (FT) 0.0 TO 80000.0
SIDELINE DISTANCE RANGE (FT) 0.0 TO 80000.0
TIME OF FLIGHT (HOURS FROM MIDNIGHT) 6.0 TO 17.0
□ = MEASURED
× = PREDICTED
MAXIMUM OVERPRESSURE (PSF)
0
1
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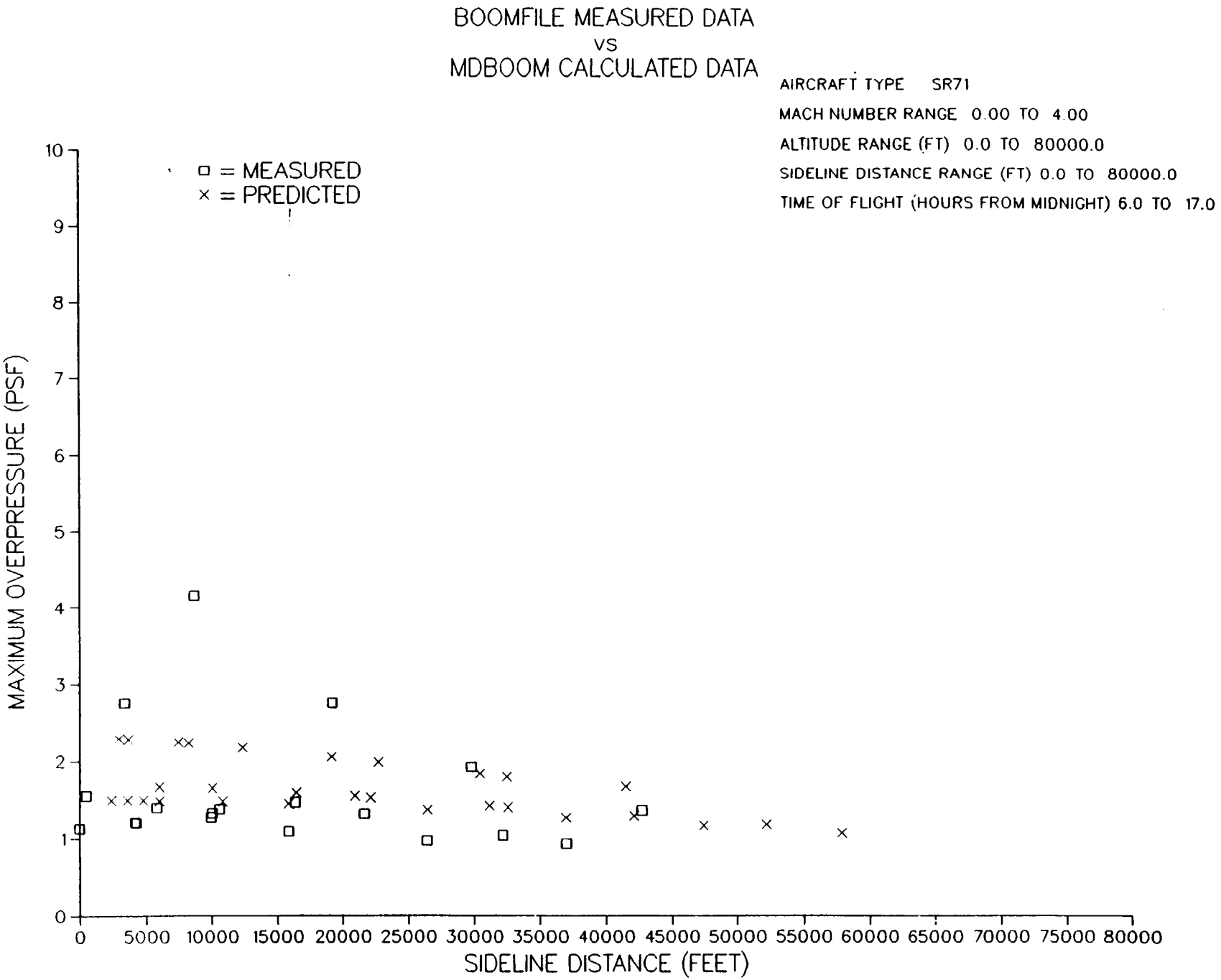
0 5000 10000 15000 20000 25000 30000 35000 40000 45000 50000 55000 60000 65000 70000 75000 80000
SIDELINE DISTANCE (FEET)


BOOMFILE MEASURED DATA
VS
MDBOOM CALCULATED DATA
AIRCRAFT TYPE SR71
MACH NUMBER RANGE 0.00 TO 4.00
ALTITUDE RANGE (FT) 0.0 TO 80000.0
SIDELINE DISTANCE RANGE (FT) 0.0 TO 80000.0
TIME OF FLIGHT (HOURS FROM MIDNIGHT) 6.0 TO 17.0
□ = MEASURED
× = PREDICTED
MAXIMUM OVERPRESSURE (PSF)
0
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10000
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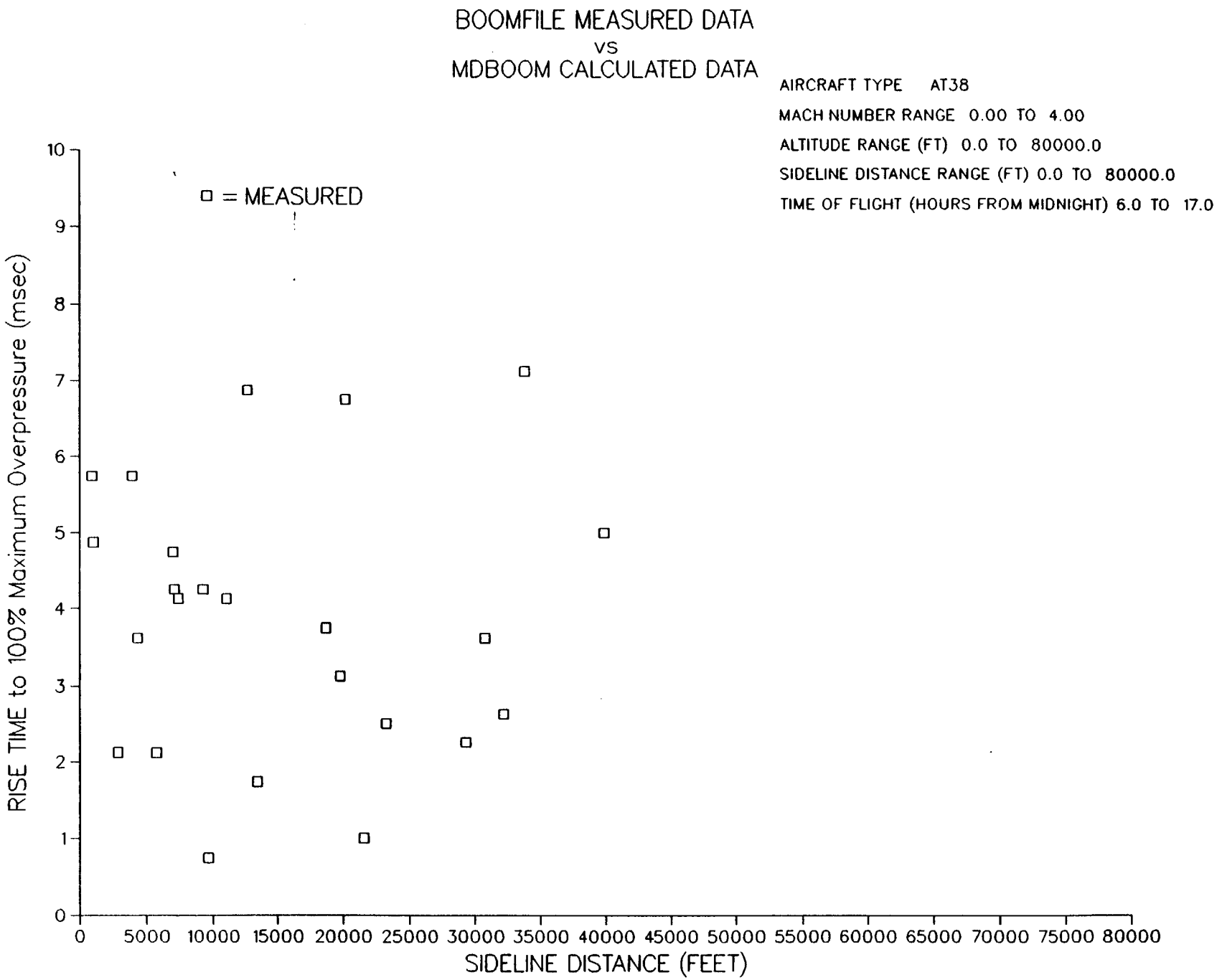
80000
SIDELINE DISTANCE (FEET)


BOOMFILE MEASURED DATA
VS
MDBOOM CALCULATED DATA
AIRCRAFT TYPE AT38
MACH NUMBER RANGE 0.00 TO 4.00
ALTITUDE RANGE (FT) 0.0 TO 80000.0
SIDELINE DISTANCE RANGE (FT) 0.0 TO 80000.0
TIME OF FLIGHT (HOURS FROM MIDNIGHT) 6.0 TO 17.0
□ = MEASURED
RISE TIME to 100% Maximum Overpressure (msec)
0
1
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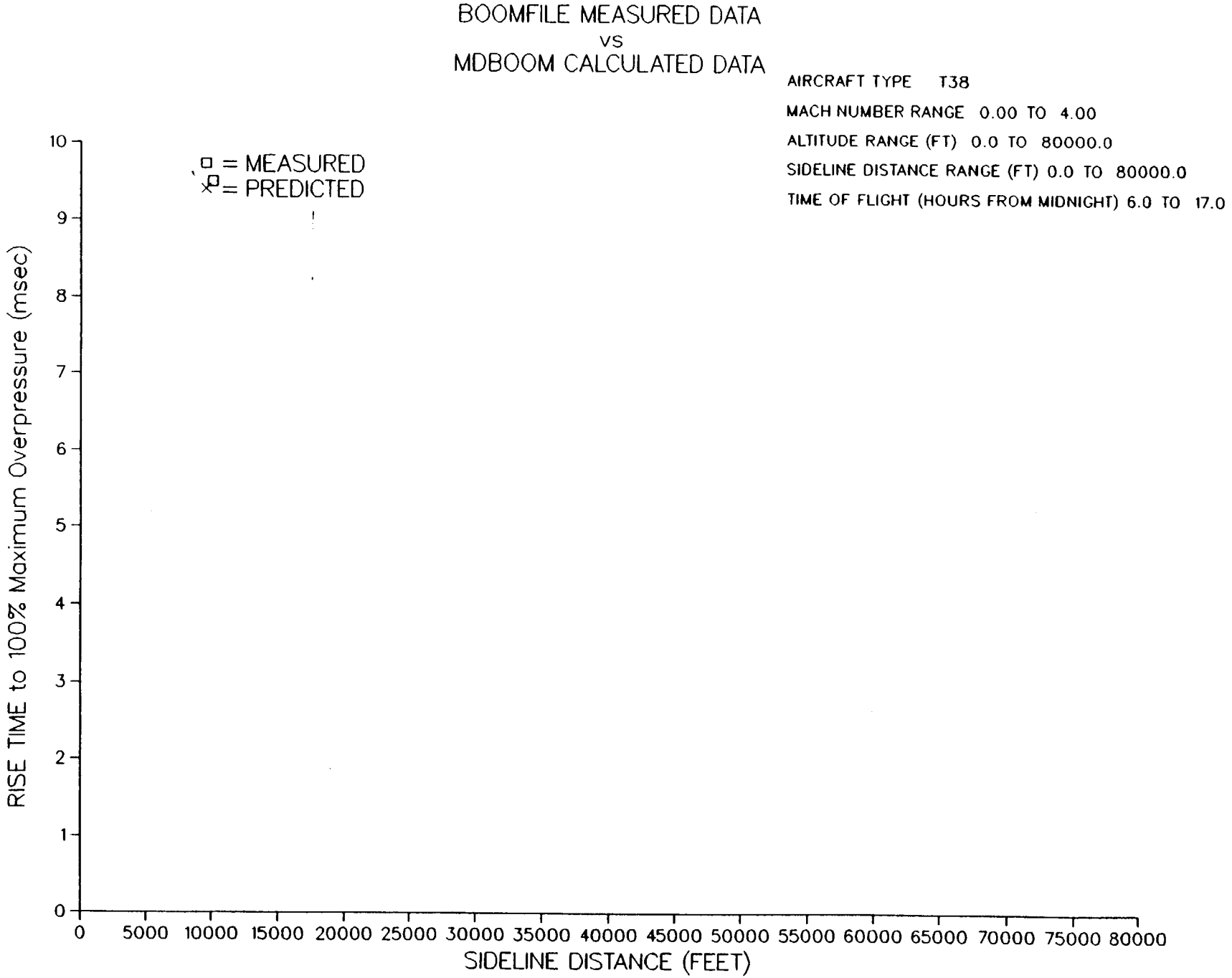
0 5000 10000 15000 20000 25000 30000 35000 40000 45000 50000 55000 60000 65000 70000 75000 80000
SIDELINE DISTANCE (FEET)


BOOMFILE MEASURED DATA
VS
MDBOOM CALCULATED DATA
AIRCRAFT TYPE T38
MACH NUMBER RANGE 0.00 TO 4.00
ALTITUDE RANGE (FT) 0.0 TO 80000.0
SIDELINE DISTANCE RANGE (FT) 0.0 TO 80000.0
TIME OF FLIGHT (HOURS FROM MIDNIGHT) 6.0 TO 17.0
□ = MEASURED
× = PREDICTED
RISE TIME to 100% Maximum Overpressure (msec)
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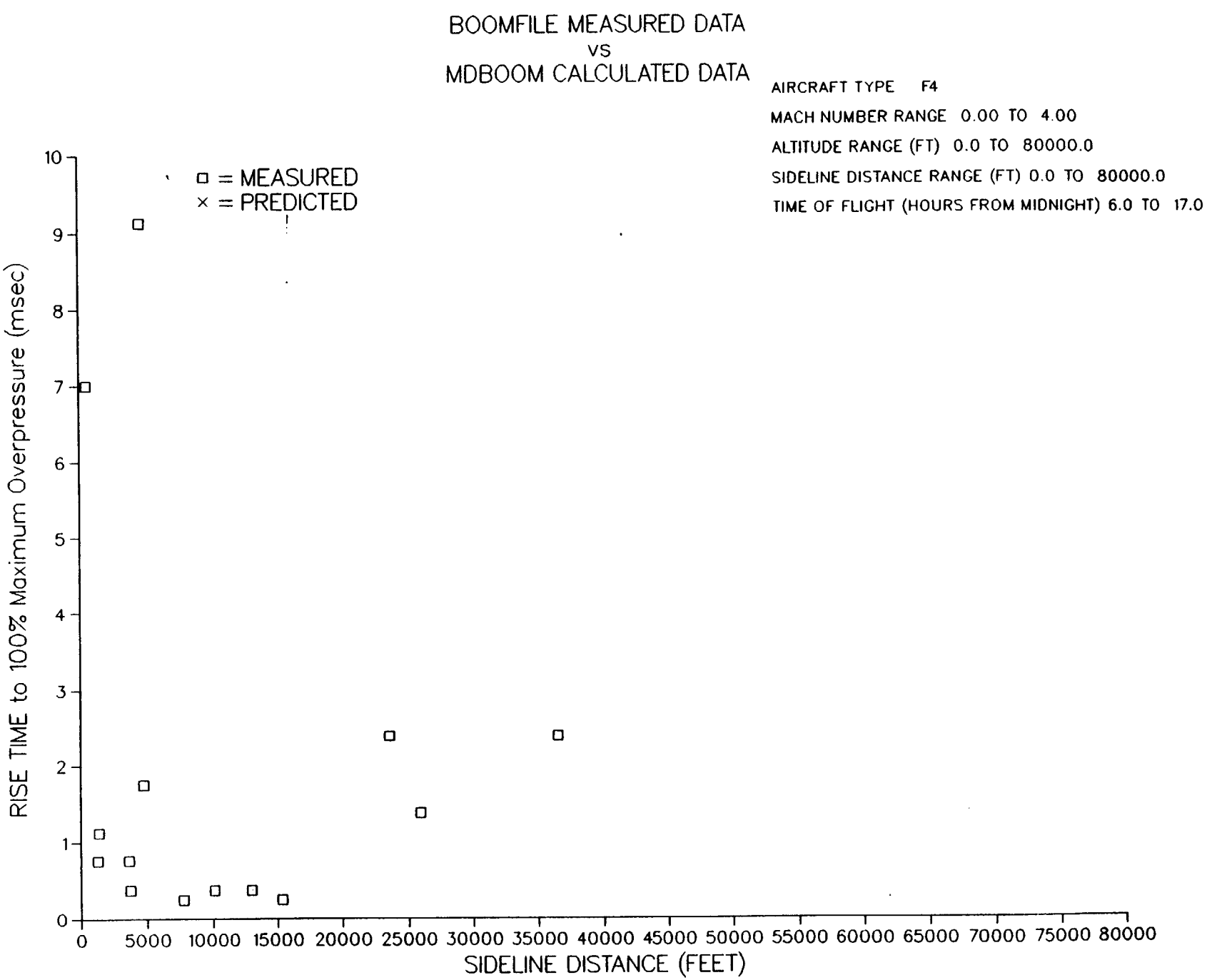
0 5000 10000 15000 20000 25000 30000 35000 40000 45000 50000 55000 60000 65000 70000 75000 80000
SIDELINE DISTANCE (FEET)


BOOMFILE MEASURED DATA
VS
MDBOOM CALCULATED DATA
AIRCRAFT TYPE F4
MACH NUMBER RANGE 0.00 TO 4.00
ALTITUDE RANGE (FT) 0.0 TO 80000.0
SIDELINE DISTANCE RANGE (FT) 0.0 TO 80000.0
TIME OF FLIGHT (HOURS FROM MIDNIGHT) 6.0 TO 17.0
□ = MEASURED
× = PREDICTED
RISE TIME to 100% Maximum Overpressure (msec)
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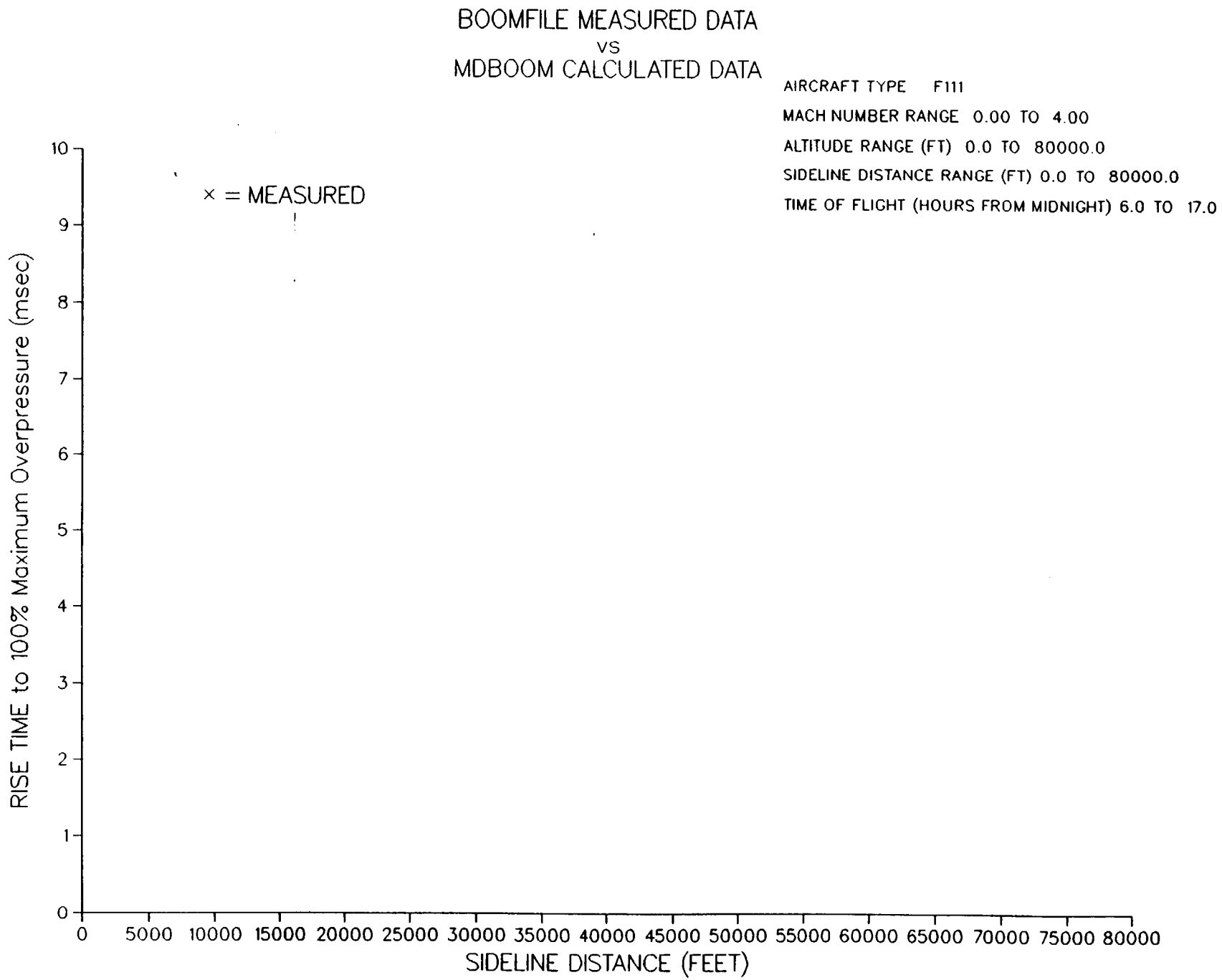
60000
65000
70000
75000
80000
SIDELINE DISTANCE (FEET)


BOOMFILE MEASURED DATA
VS
MDBOOM CALCULATED DATA
AIRCRAFT TYPE F111
MACH NUMBER RANGE 0.00 TO 4.00
ALTITUDE RANGE (FT) 0.0 TO 80000.0
SIDELINE DISTANCE RANGE (FT) 0.0 TO 80000.0
TIME OF FLIGHT (HOURS FROM MIDNIGHT) 6.0 TO 17.0
× = MEASURED
RISE TIME to 100% Maximum Overpressure (msec)
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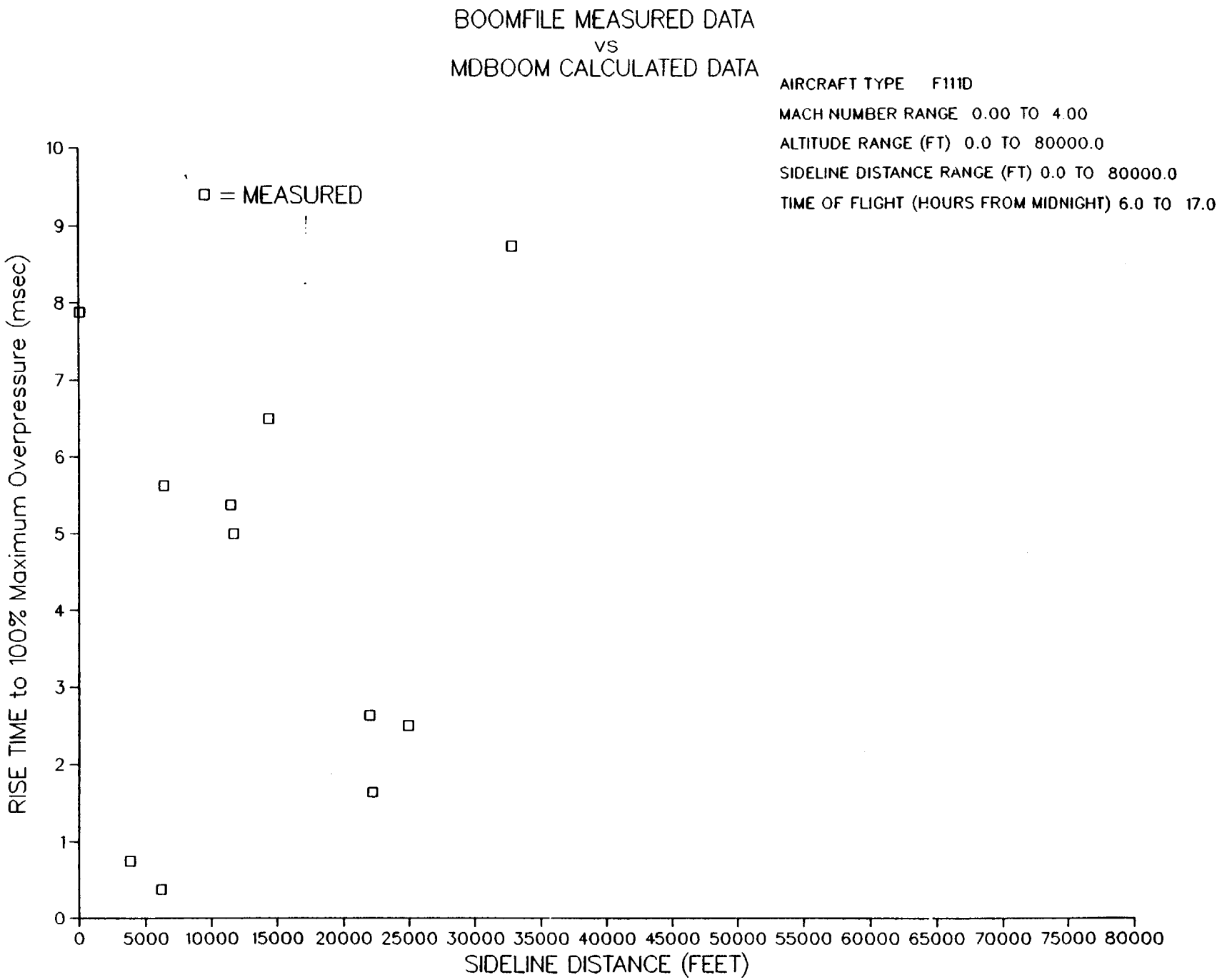
SIDELINE DISTANCE (FEET)


BOOMFILE MEASURED DATA
VS
MDBOOM CALCULATED DATA
AIRCRAFT TYPE F111D
MACH NUMBER RANGE 0.00 TO 4.00
ALTITUDE RANGE (FT) 0.0 TO 80000.0
SIDELINE DISTANCE RANGE (FT) 0.0 TO 80000.0
TIME OF FLIGHT (HOURS FROM MIDNIGHT) 6.0 TO 17.0
□ = MEASURED
RISE TIME to 100% Maximum Overpressure (msec)
0
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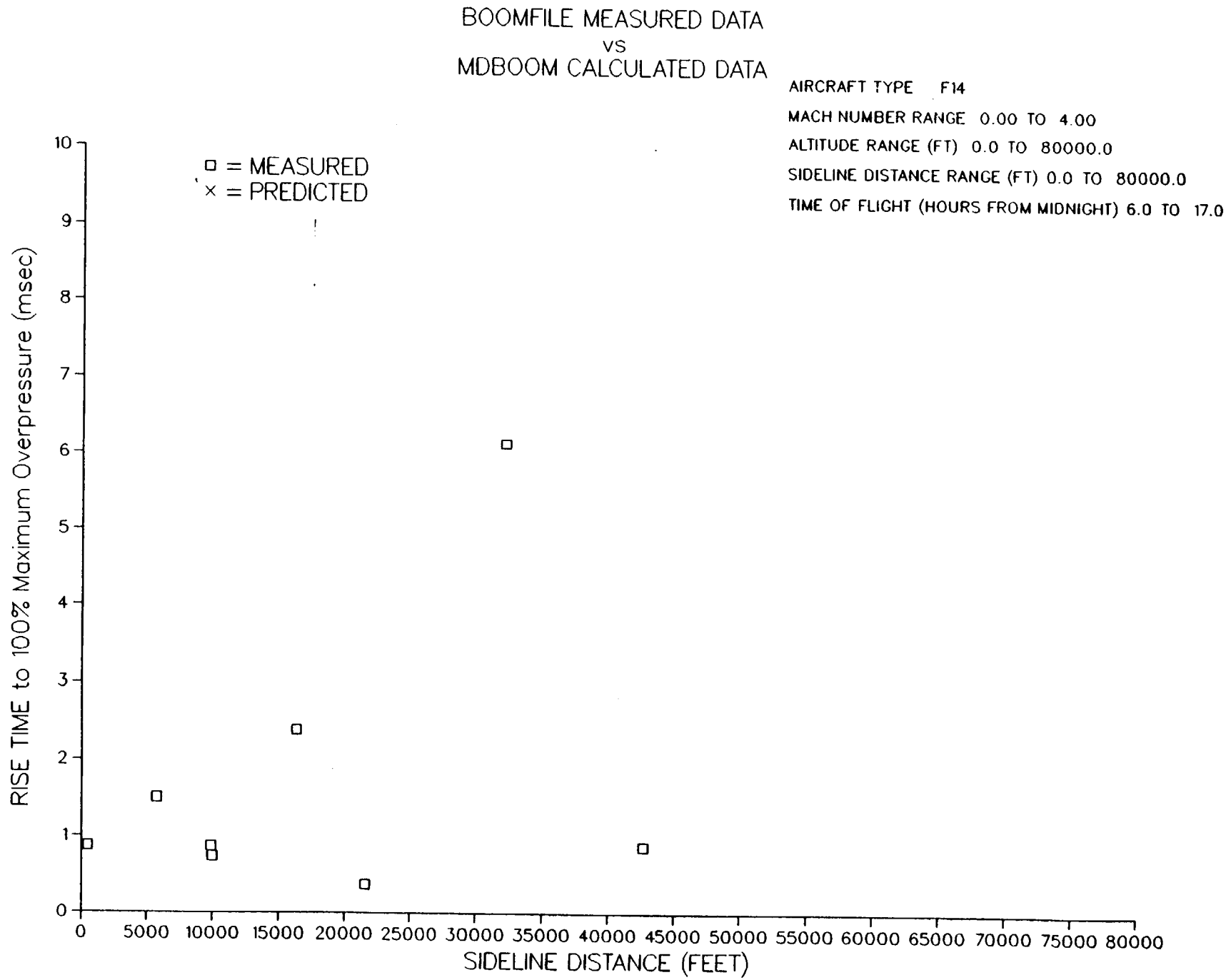
65000
70000
75000
80000
SIDELINE DISTANCE (FEET)


BOOMFILE MEASURED DATA
VS
MDBOOM CALCULATED DATA
AIRCRAFT TYPE F14
MACH NUMBER RANGE 0.00 TO 4.00
ALTITUDE RANGE (FT) 0.0 TO 80000.0
SIDELINE DISTANCE RANGE (FT) 0.0 TO 80000.0
TIME OF FLIGHT (HOURS FROM MIDNIGHT) 6.0 TO 17.0
□ = MEASURED
× = PREDICTED
RISE TIME to 100% Maximum Overpressure (msec)
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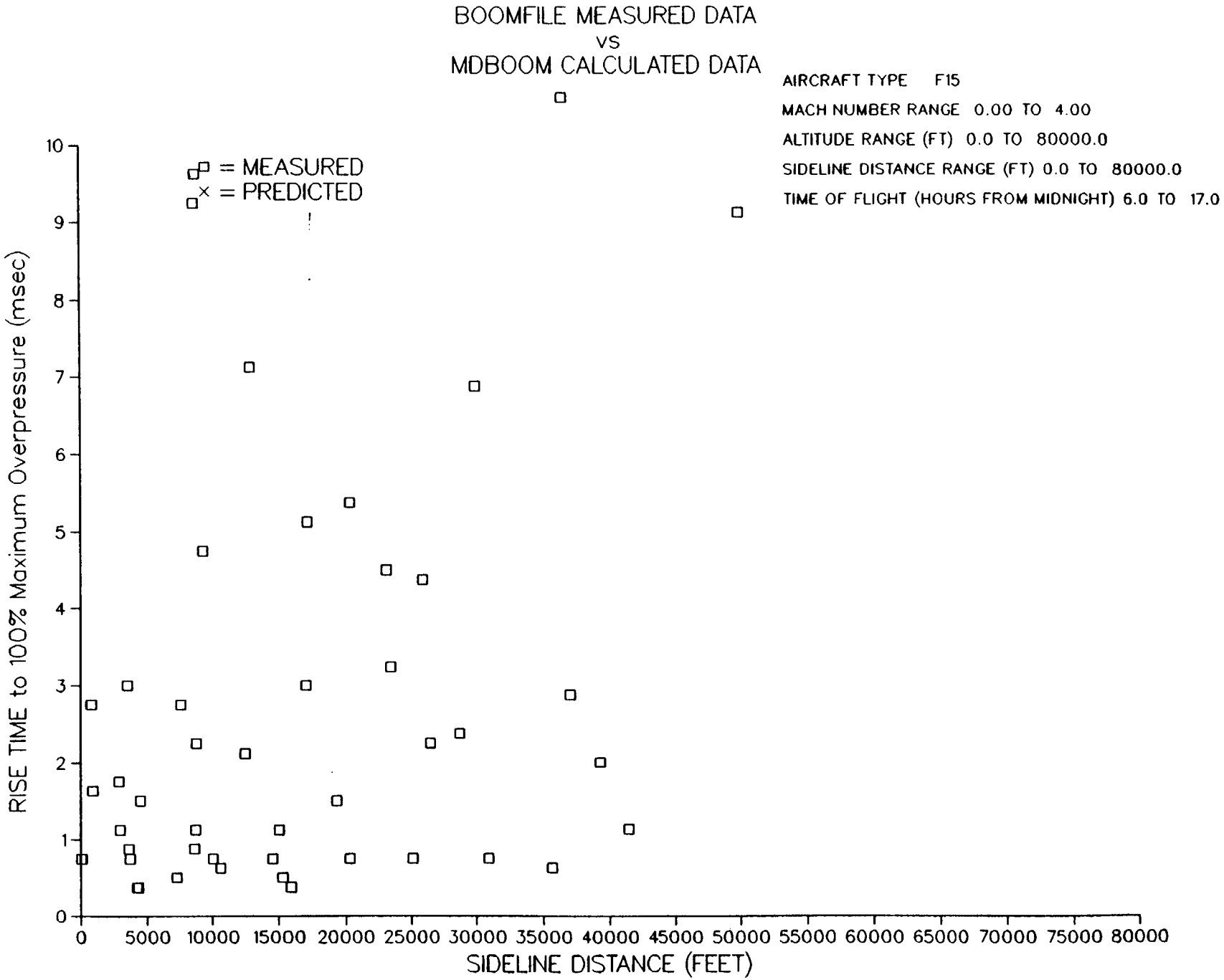
75000
80000
SIDELINE DISTANCE (FEET)


BOOMFILE MEASURED DATA
VS
MDBOOM CALCULATED DATA
AIRCRAFT TYPE F15
MACH NUMBER RANGE 0.00 TO 4.00
ALTITUDE RANGE (FT) 0.0 TO 80000.0
SIDELINE DISTANCE RANGE (FT) 0.0 TO 80000.0
TIME OF FLIGHT (HOURS FROM MIDNIGHT) 6.0 TO 17.0
□ = MEASURED
× = PREDICTED
RISE TIME to 100% Maximum Overpressure (msec)
0
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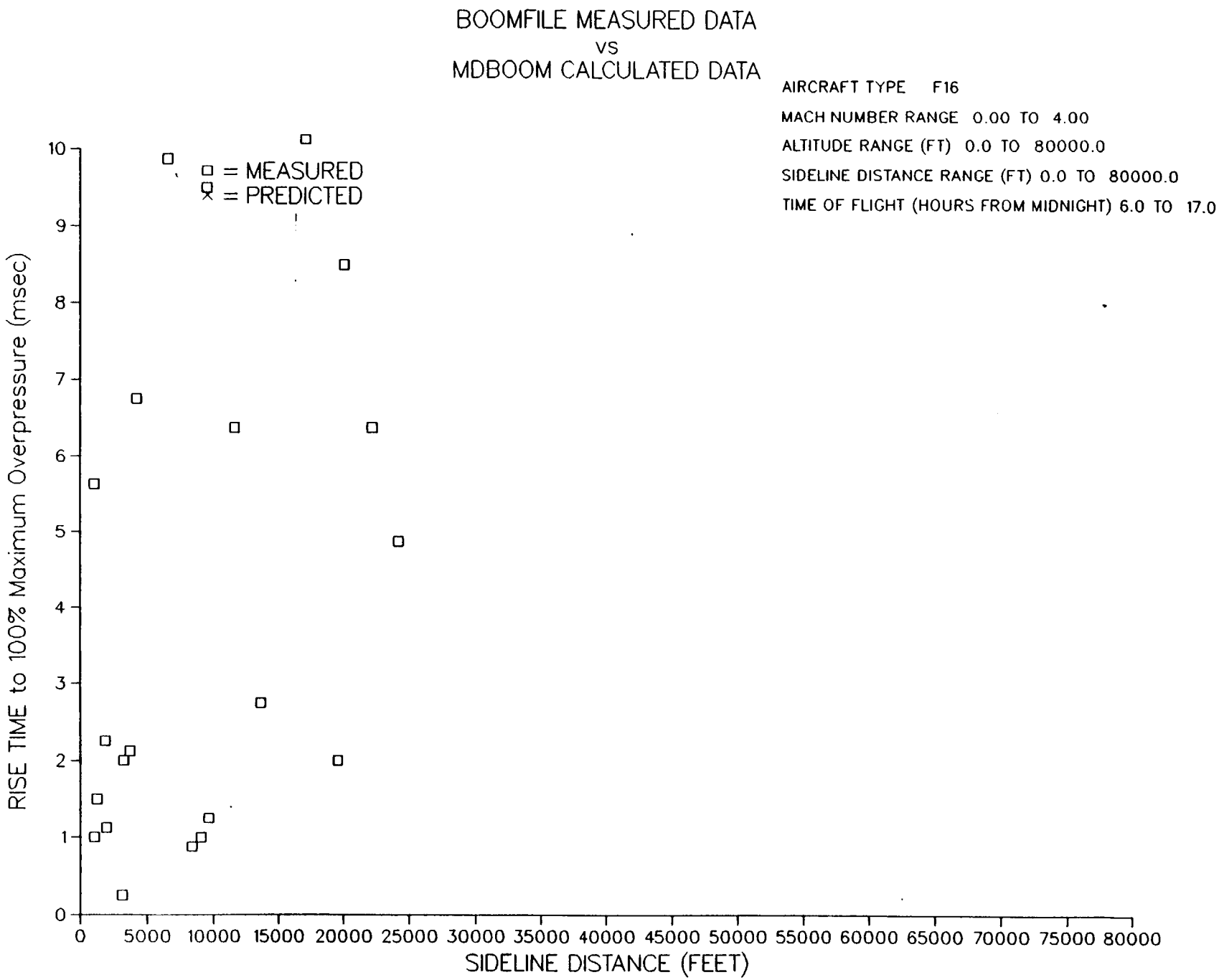
9
10
0 5000 10000 15000 20000 25000 30000 35000 40000 45000 50000 55000 60000 65000 70000 75000 80000
SIDELINE DISTANCE (FEET)


BOOMFILE MEASURED DATA
VS
MDBOOM CALCULATED DATA
AIRCRAFT TYPE F16
MACH NUMBER RANGE 0.00 TO 4.00
ALTITUDE RANGE (FT) 0.0 TO 80000.0
SIDELINE DISTANCE RANGE (FT) 0.0 TO 80000.0
TIME OF FLIGHT (HOURS FROM MIDNIGHT) 6.0 TO 17.0
□ = MEASURED
X = PREDICTED
RISE TIME to 100% Maximum Overpressure (msec)
0
1
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7
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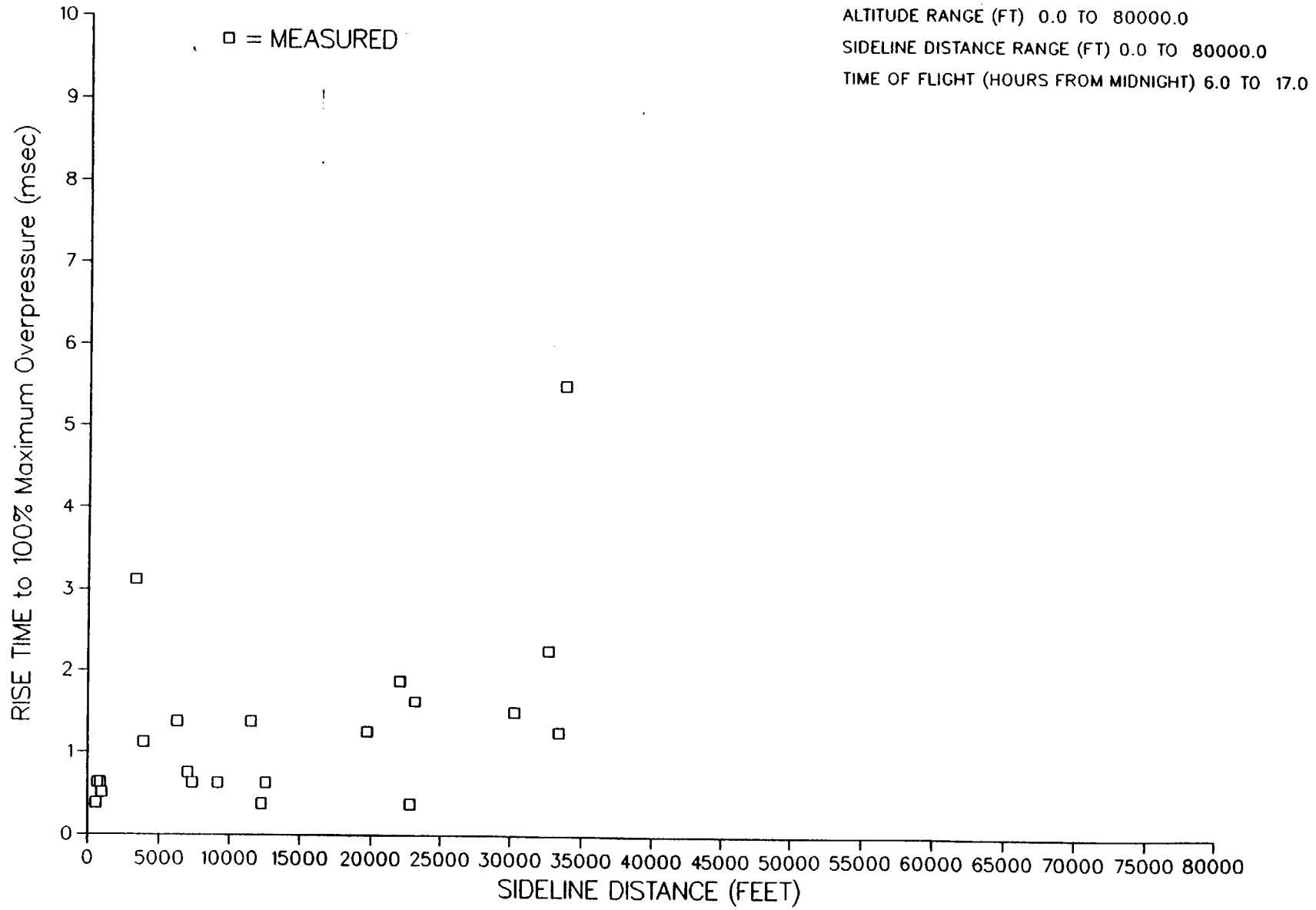
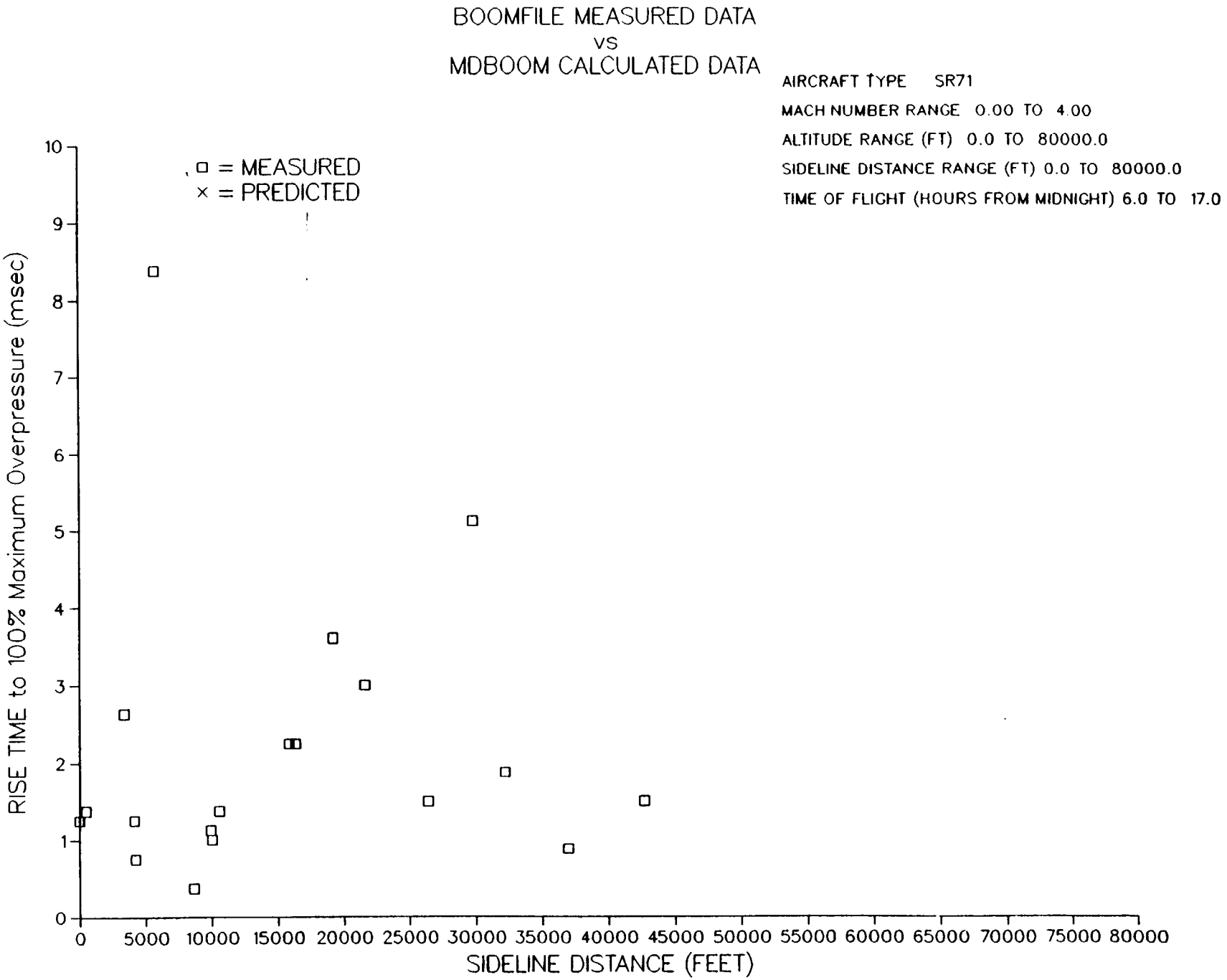
9
10
0 5000 10000 15000 20000 25000 30000 35000 40000 45000 50000 55000 60000 65000 70000 75000 80000
SIDELINE DISTANCE (FEET)

# BOOMFILE MEASURED DATA

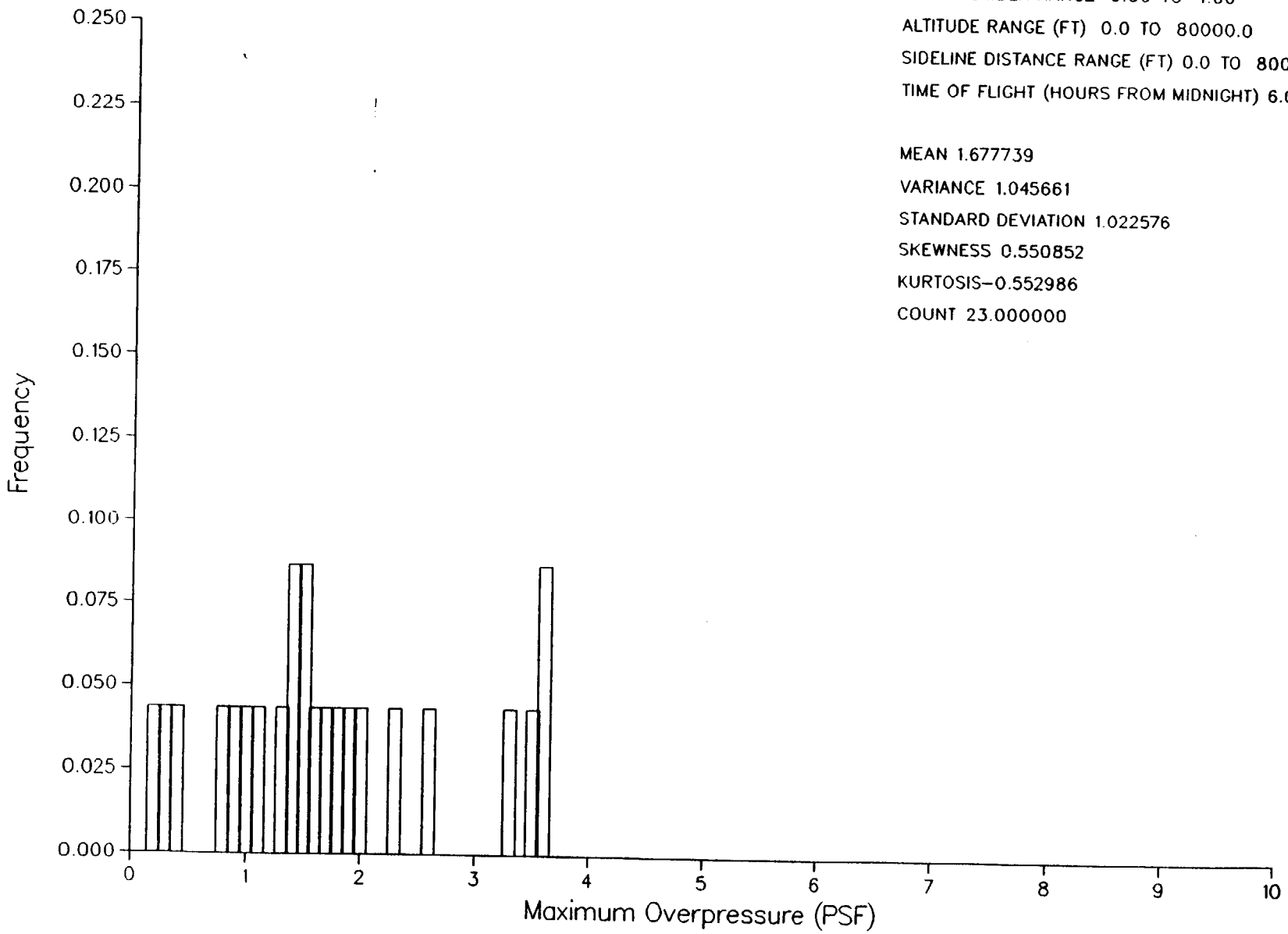



BOOMFILE MEASURED DATA
VS
MDBOOM CALCULATED DATA
AIRCRAFT TYPE SR71
MACH NUMBER RANGE 0.00 TO 4.00
ALTITUDE RANGE (FT) 0.0 TO 80000.0
SIDELINE DISTANCE RANGE (FT) 0.0 TO 80000.0
TIME OF FLIGHT (HOURS FROM MIDNIGHT) 6.0 TO 17.0
□ = MEASURED
× = PREDICTED
RISE TIME to 100% Maximum Overpressure (msec)
0
1
2
3
4
5
6
7
8
9
10
0
5000
10000
15000
20000
25000
30000
35000
40000
45000
50000
55000
60000
65000
70000
75000
80000
SIDELINE DISTANCE (FEET)

# BOOMFILE MEASURED DATA

AIRCRAFT TYPE F15
MACH NUMBER RANGE 0.00 TO 4.00
ALTITUDE RANGE (FT) 0.0 TO 80000.0
SIDELINE DISTANCE RANGE (FT) 0.0 TO 80000.0
TIME OF FLIGHT (HOURS FROM MIDNIGHT) 6.0 TO 9.0

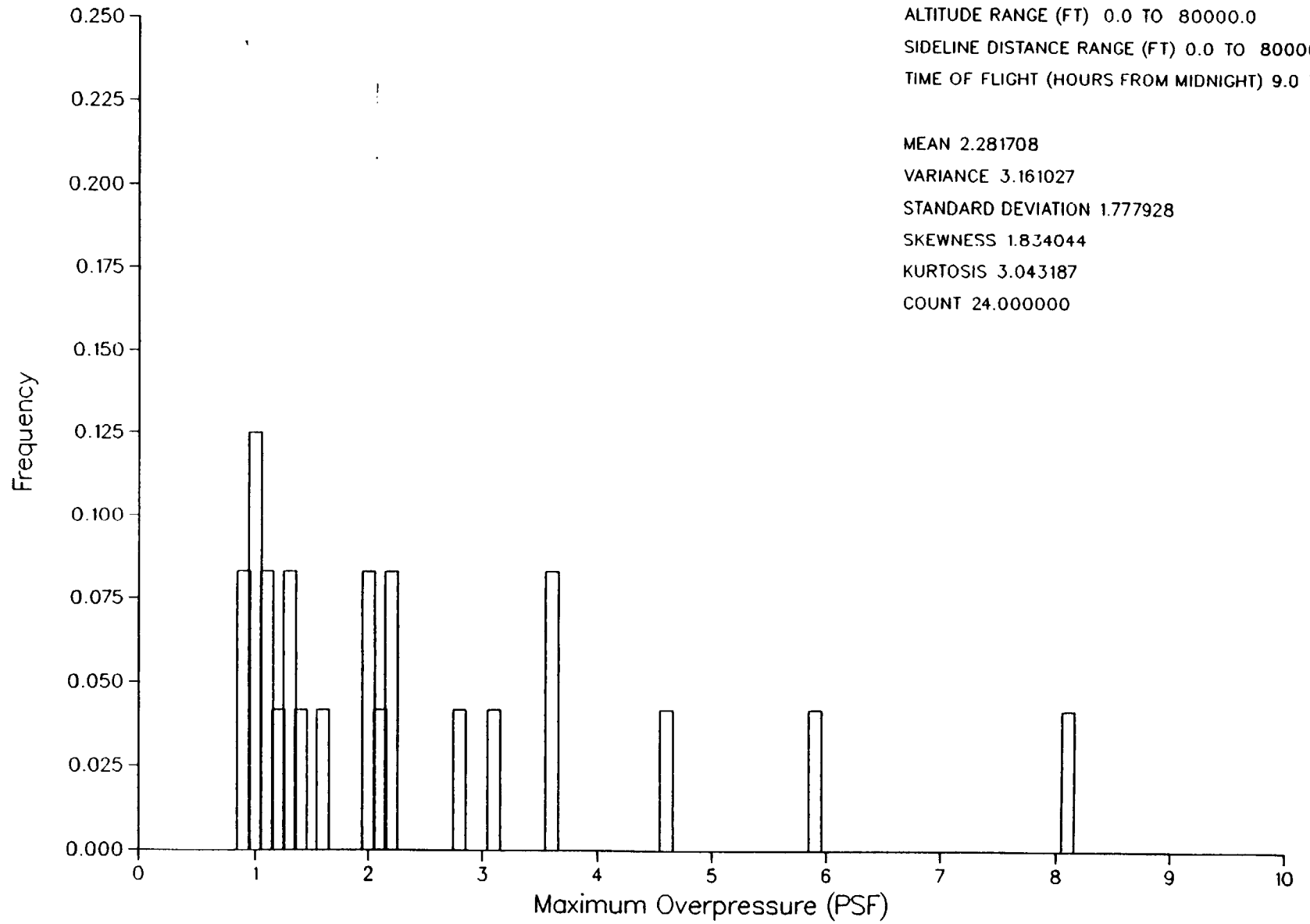
MEAN 1.677739
VARIANCE 1.045661
STANDARD DEVIATION 1.022576
SKEWNESS 0.550852
KURTOSIS-0.552986
COUNT 23.000000



# BOOMFILE MEASURED DATA

AIRCRAFT TYPE F15
MACH NUMBER RANGE 0.00 TO 4.00
ALTITUDE RANGE (FT) 0.0 TO 80000.0
SIDELINE DISTANCE RANGE (FT) 0.0 TO 80000.0
TIME OF FLIGHT (HOURS FROM MIDNIGHT) 9.0 TO 17.0

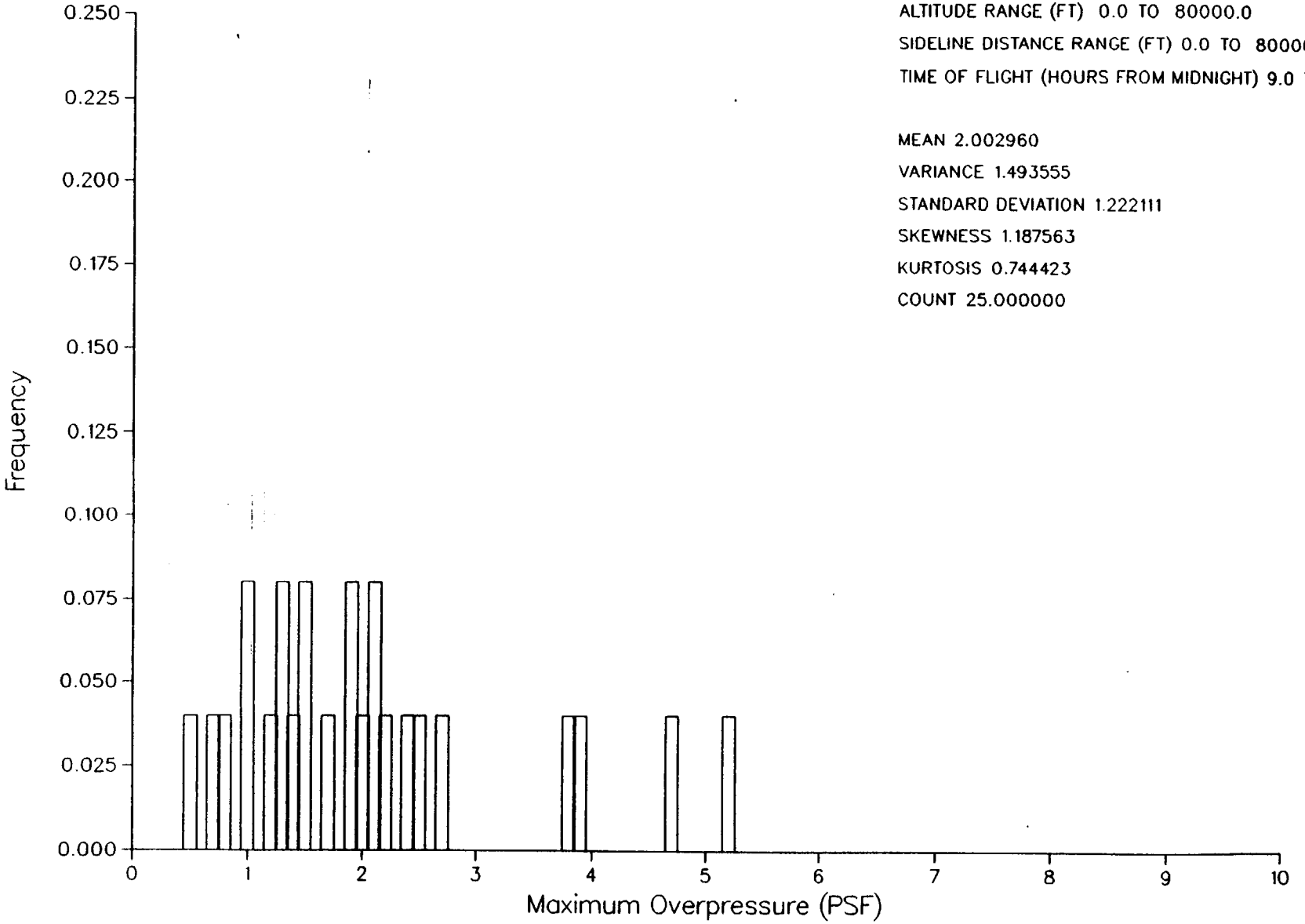
MEAN 2.281708
VARIANCE 3.161027
STANDARD DEVIATION 1.777928
SKEWNESS 1.834044
KURTOSIS 3.043187
COUNT 24.000000



# BOOMFILE MEASURED DATA

AIRCRAFT TYPE F16
MACH NUMBER RANGE 0.00 TO 4.00
ALTITUDE RANGE (FT) 0.0 TO 80000.0
SIDELINE DISTANCE RANGE (FT) 0.0 TO 80000.0
TIME OF FLIGHT (HOURS FROM MIDNIGHT) 9.0 TO 17.0

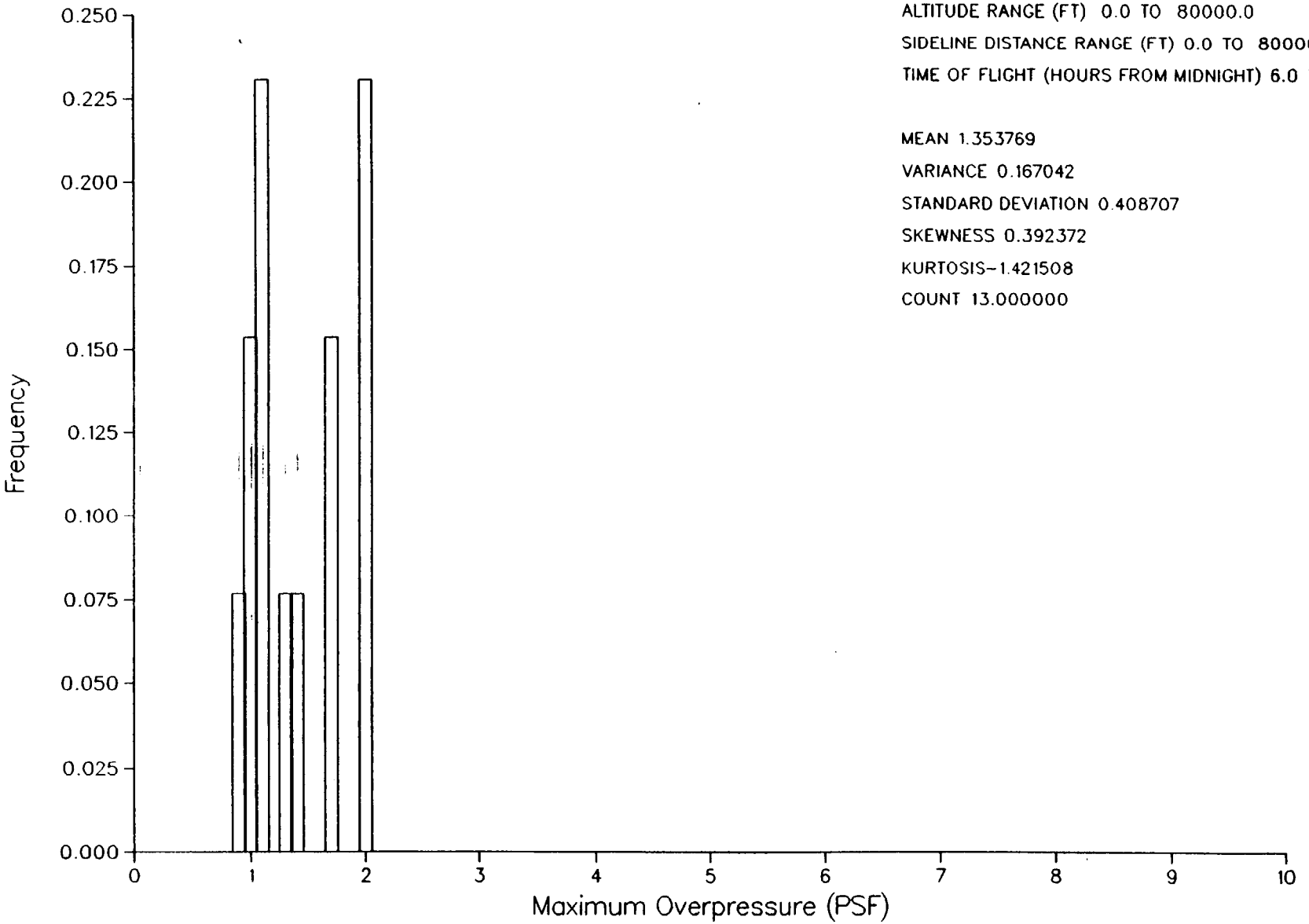
MEAN 2.002960
VARIANCE 1.493555
STANDARD DEVIATION 1.222111
SKEWNESS 1.187563
KURTOSIS 0.744423
COUNT 25.000000



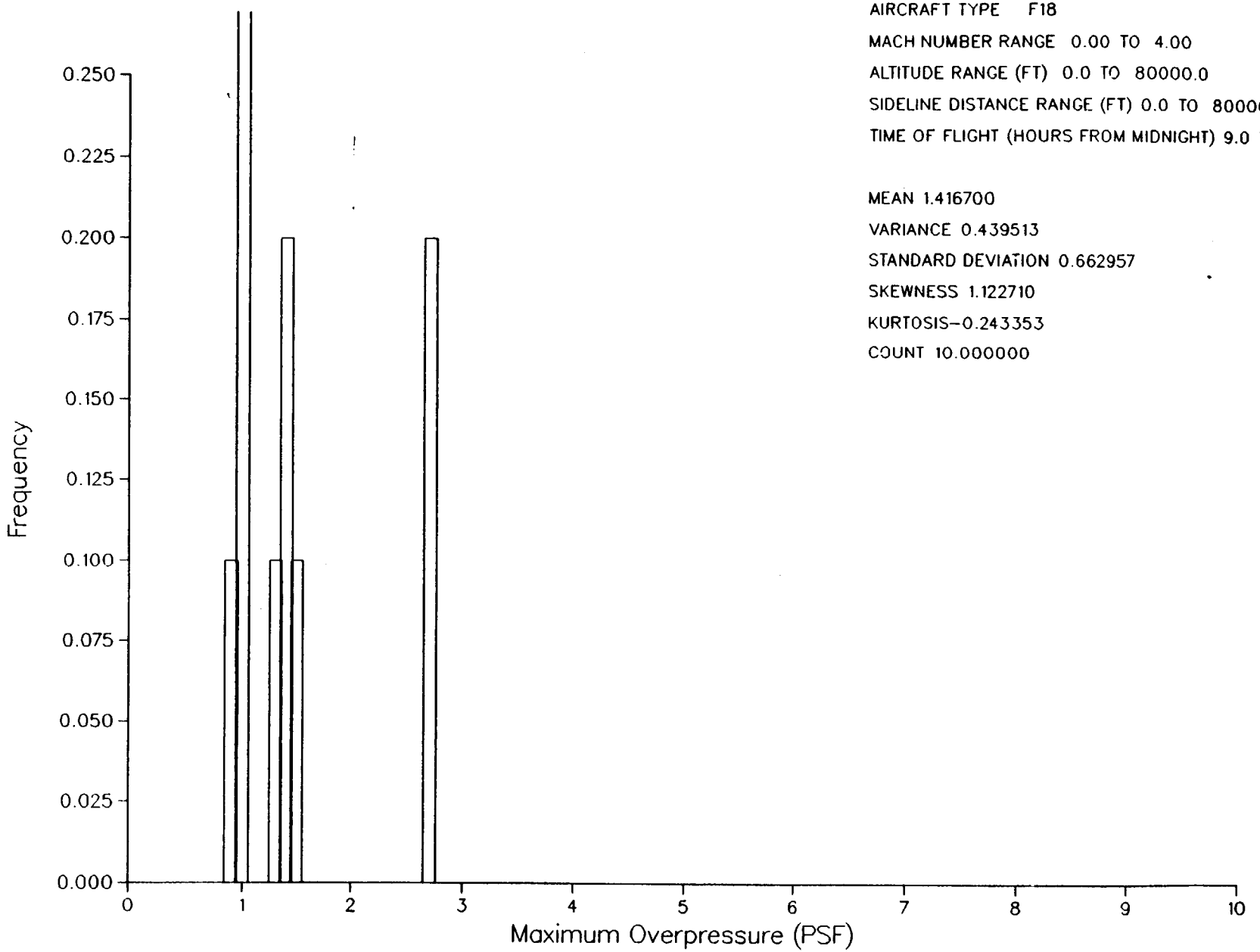
# BOOMFILE MEASURED DATA

AIRCRAFT TYPE F18
MACH NUMBER RANGE 0.00 TO 4.00
ALTITUDE RANGE (FT) 0.0 TO 80000.0
SIDELINE DISTANCE RANGE (FT) 0.0 TO 80000.0
TIME OF FLIGHT (HOURS FROM MIDNIGHT) 6.0 TO 9.0

MEAN 1.353769
VARIANCE 0.167042
STANDARD DEVIATION 0.408707
SKEWNESS 0.392372
KURTOSIS-1.421508
COUNT 13.000000



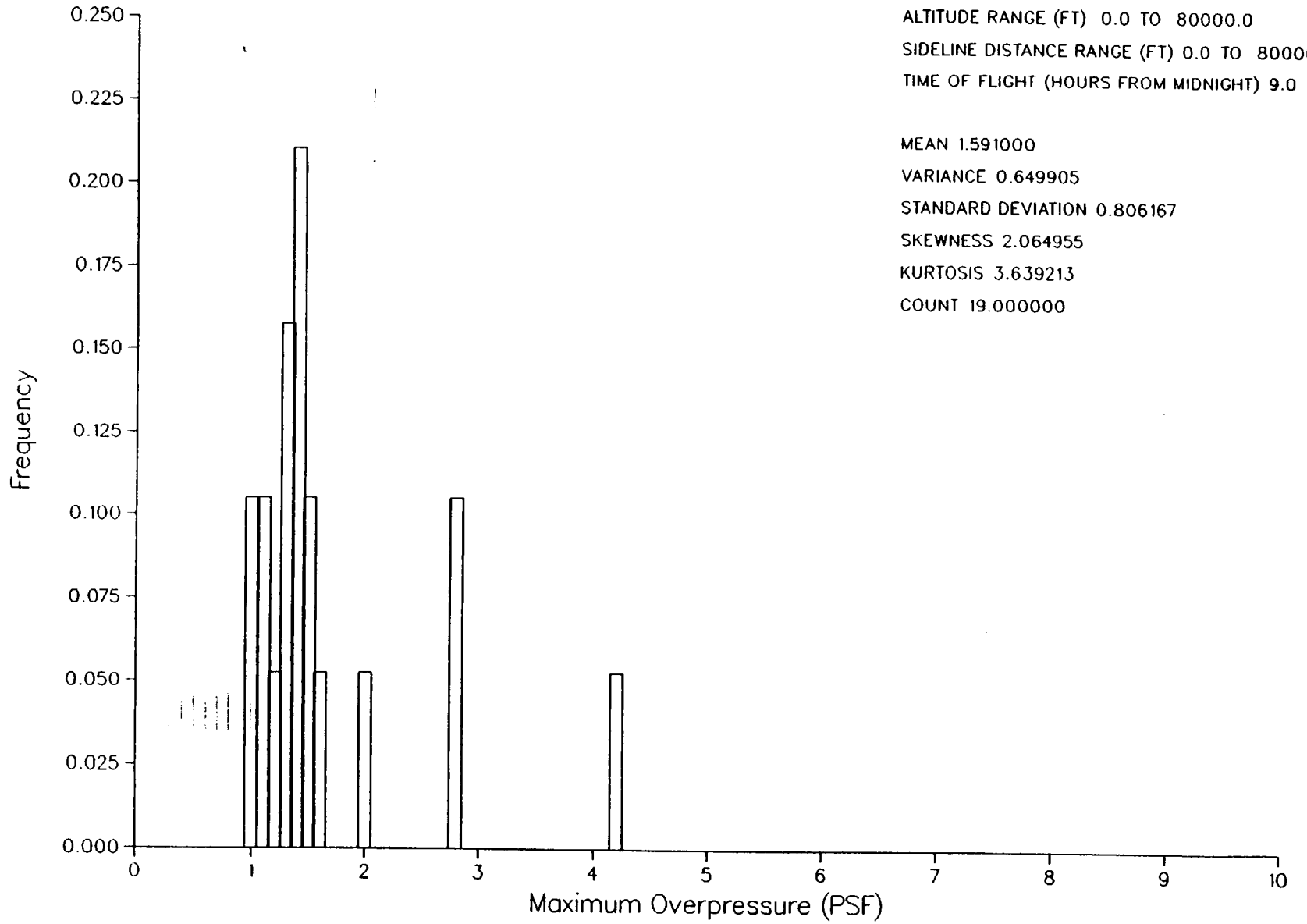
# BOOMFILE MEASURED DATA



# BOOMFILE MEASURED DATA

AIRCRAFT TYPE SR71
MACH NUMBER RANGE 0.00 TO 4.00
ALTITUDE RANGE (FT) 0.0 TO 80000.0
SIDELINE DISTANCE RANGE (FT) 0.0 TO 80000.0
TIME OF FLIGHT (HOURS FROM MIDNIGHT) 9.0 TO 17.0

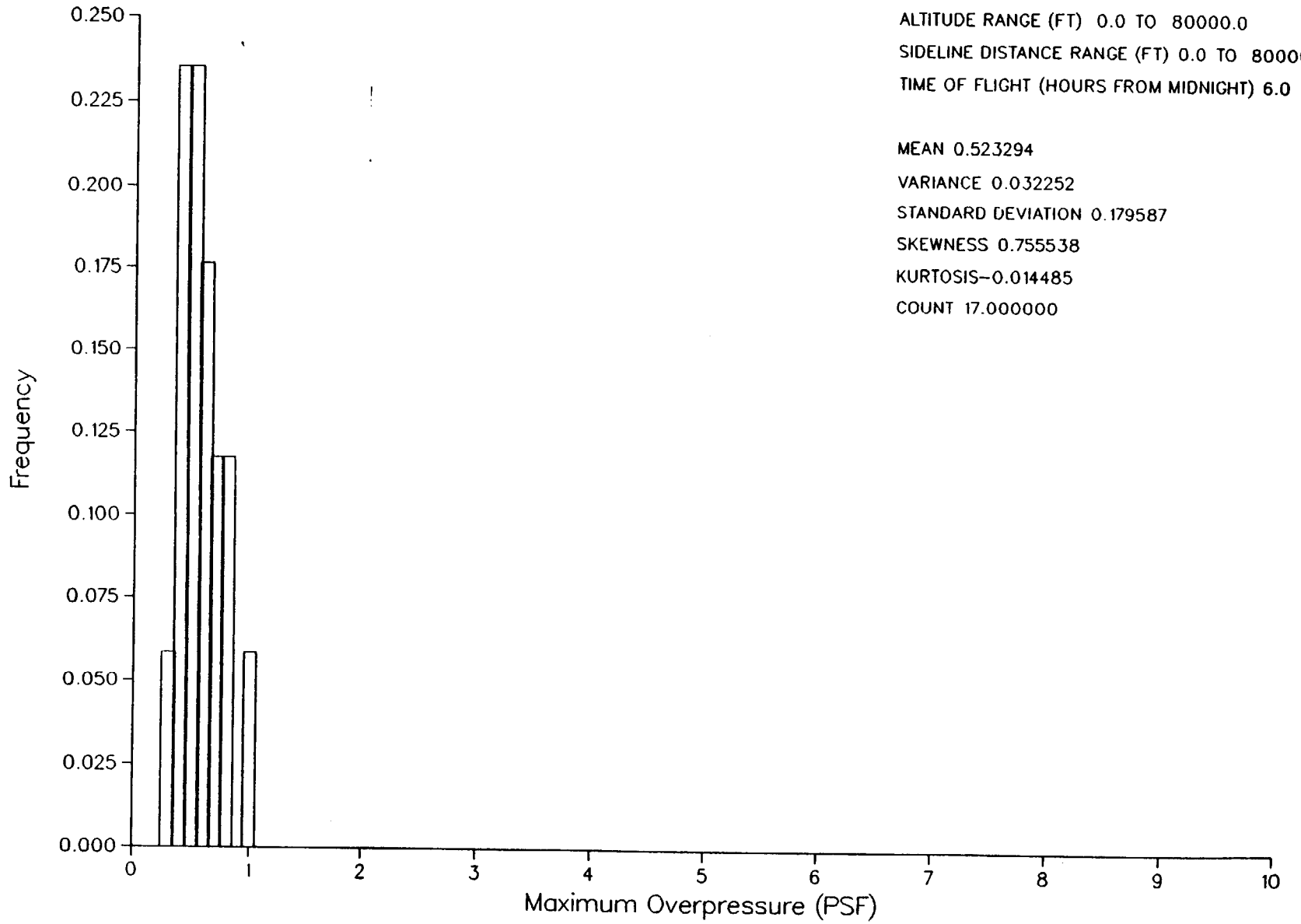
MEAN 1.591000
VARIANCE 0.649905
STANDARD DEVIATION 0.806167
SKEWNESS 2.064955
KURTOSIS 3.639213
COUNT 19.000000



# BOOMFILE MEASURED DATA

AIRCRAFT TYPE AT38
MACH NUMBER RANGE 0.00 TO 4.00
ALTITUDE RANGE (FT) 0.0 TO 80000.0
SIDELINE DISTANCE RANGE (FT) 0.0 TO 80000.0
TIME OF FLIGHT (HOURS FROM MIDNIGHT) 6.0 TO 9.0

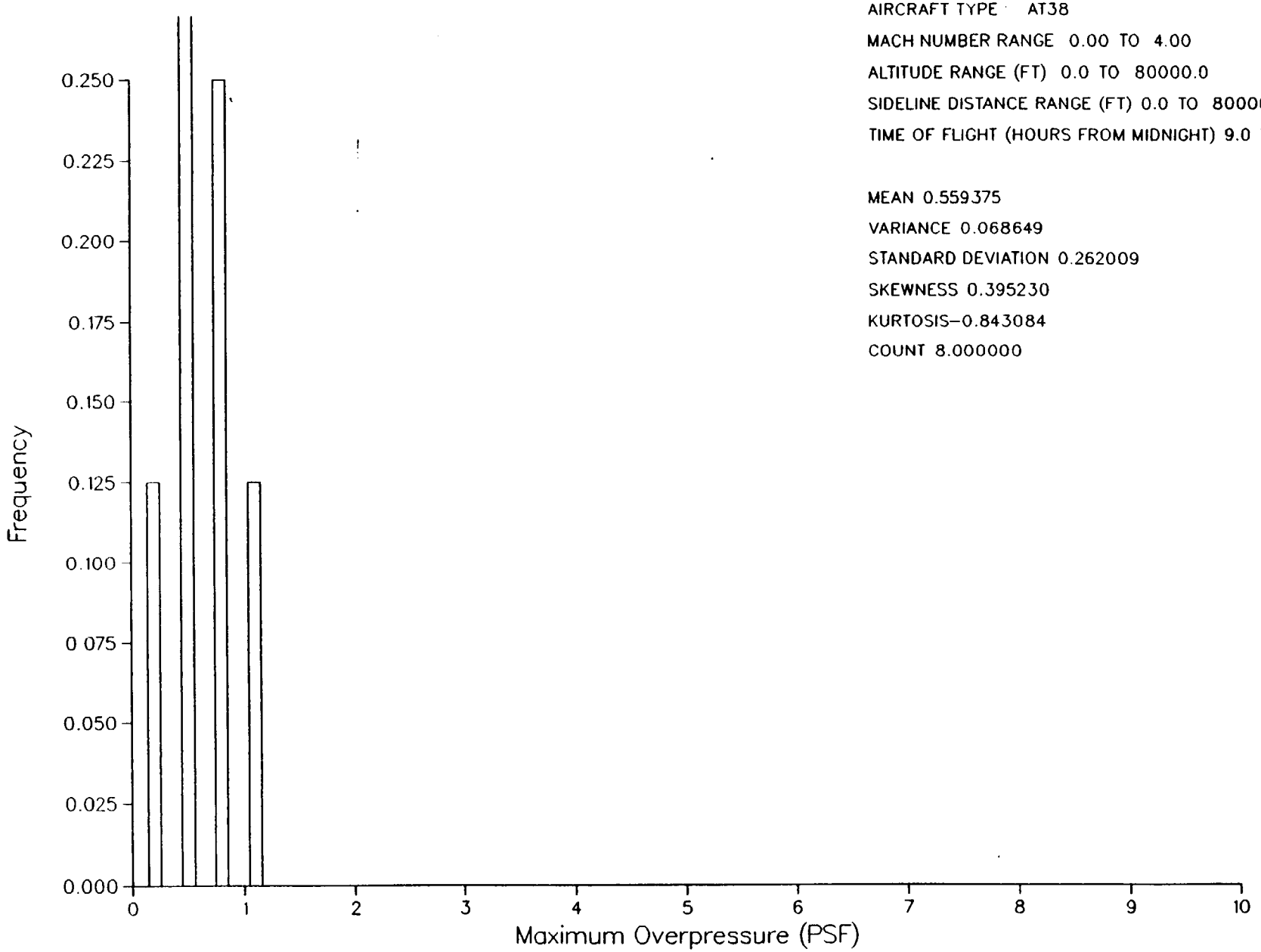
MEAN 0.523294
VARIANCE 0.032252
STANDARD DEVIATION 0.179587
SKEWNESS 0.755538
KURTOSIS-0.014485
COUNT 17.000000



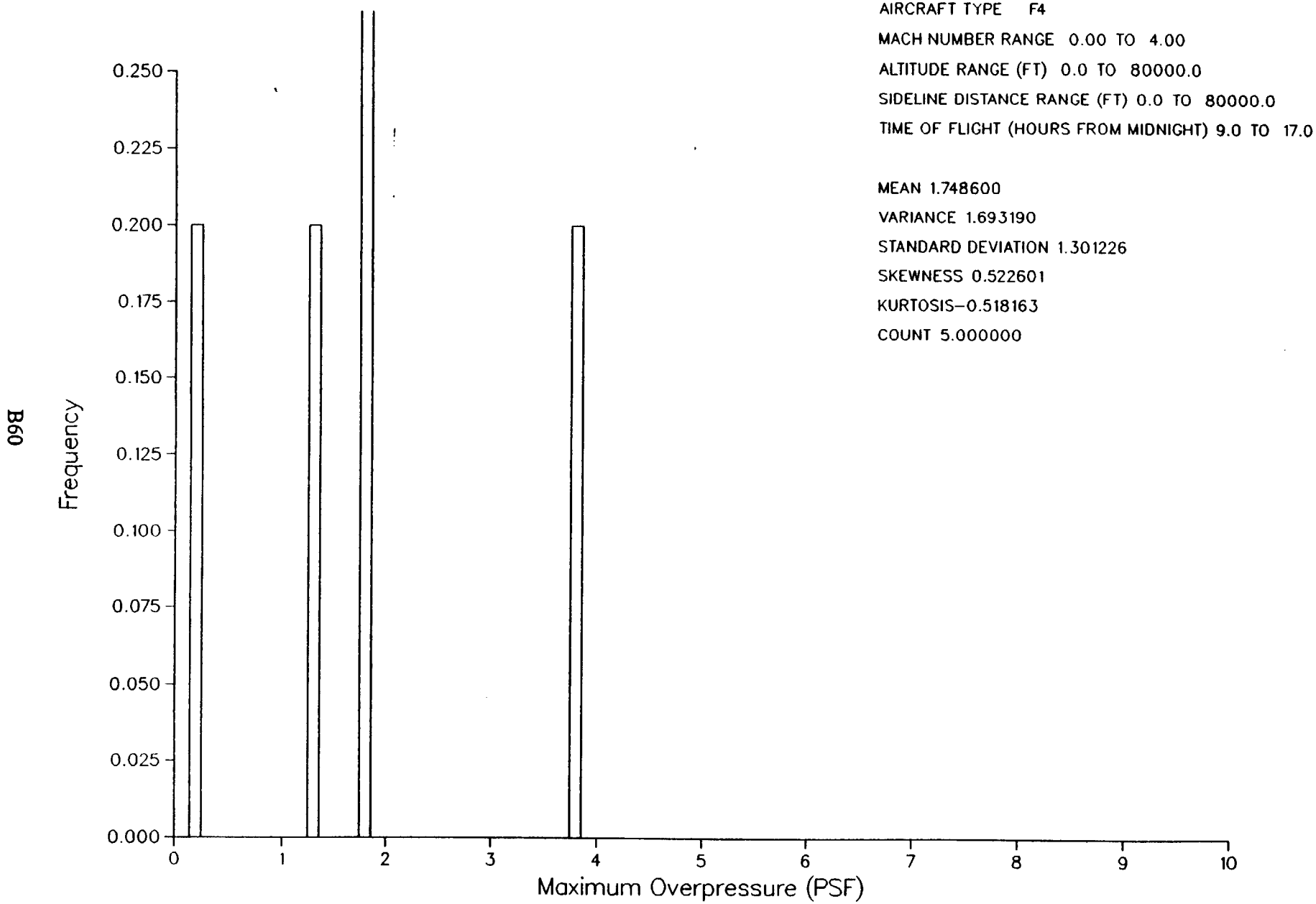
# BOOMFILE MEASURED DATA

AIRCRAFT TYPE AT38
MACH NUMBER RANGE 0.00 TO 4.00
ALTITUDE RANGE (FT) 0.0 TO 80000.0
SIDELINE DISTANCE RANGE (FT) 0.0 TO 80000.0
TIME OF FLIGHT (HOURS FROM MIDNIGHT) 9.0 TO 17.0

MEAN 0.559375
VARIANCE 0.068649
STANDARD DEVIATION 0.262009
SKEWNESS 0.395230
KURTOSIS-0.843084
COUNT 8.000000



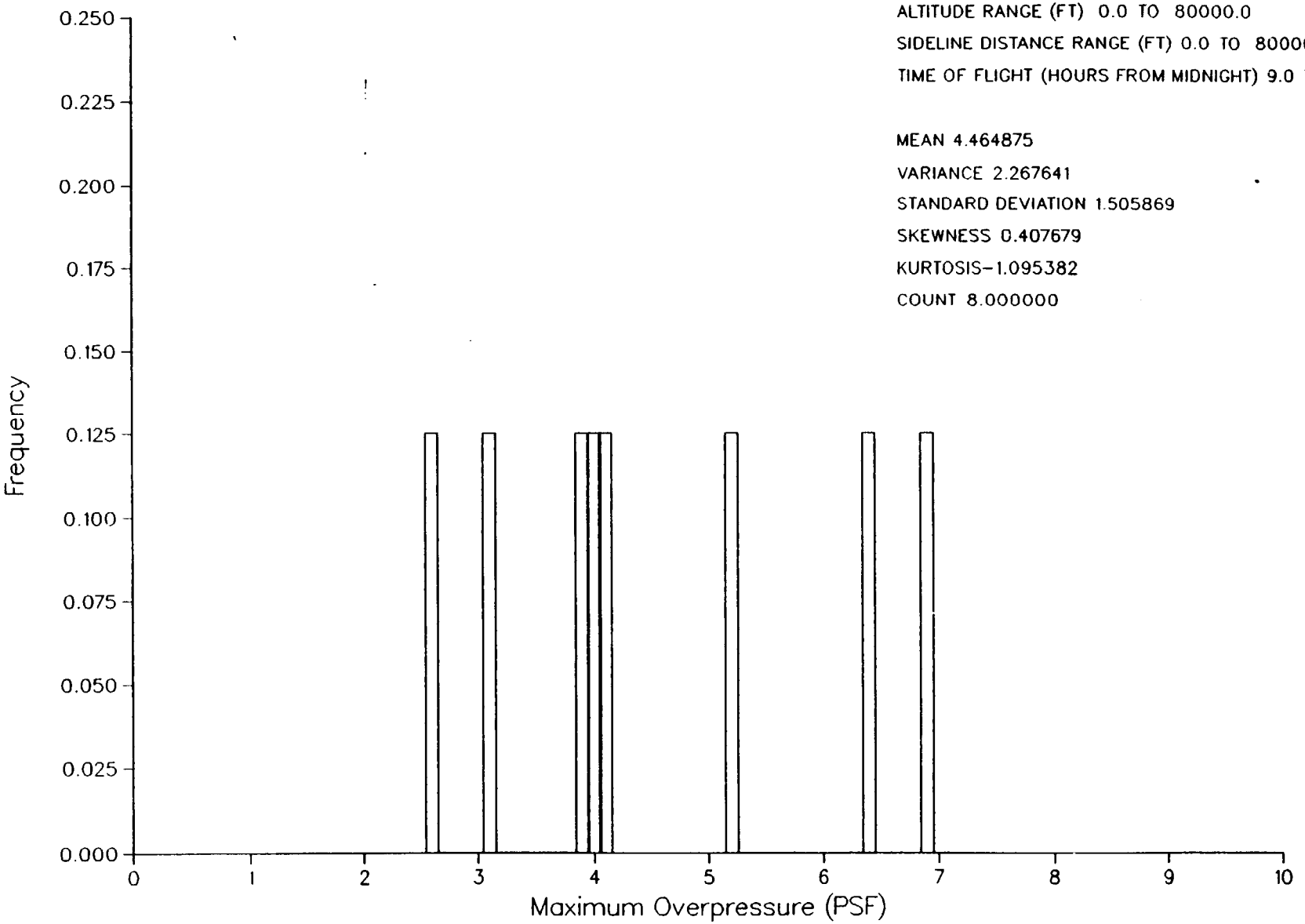
# BOOMFILE MEASURED DATA

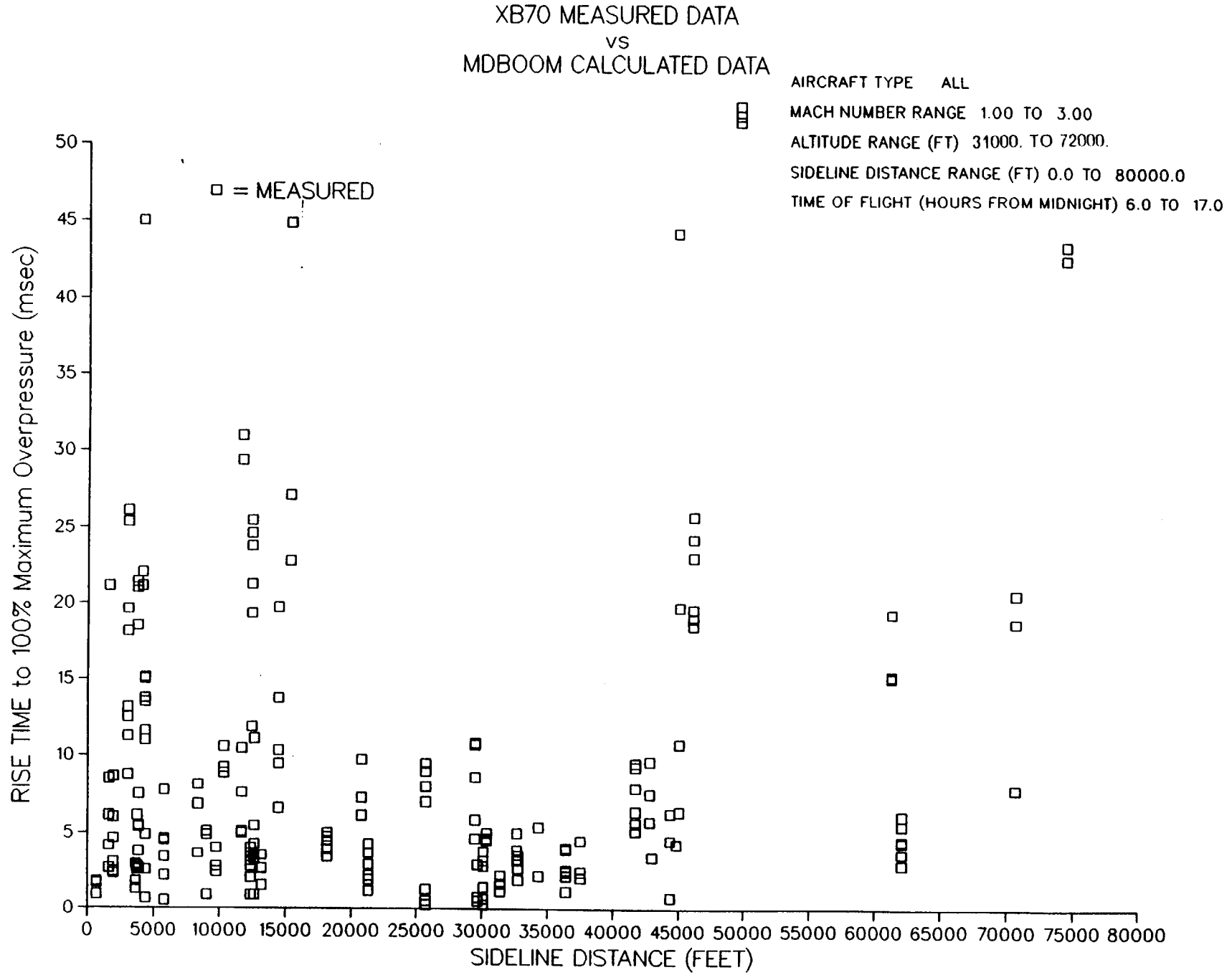


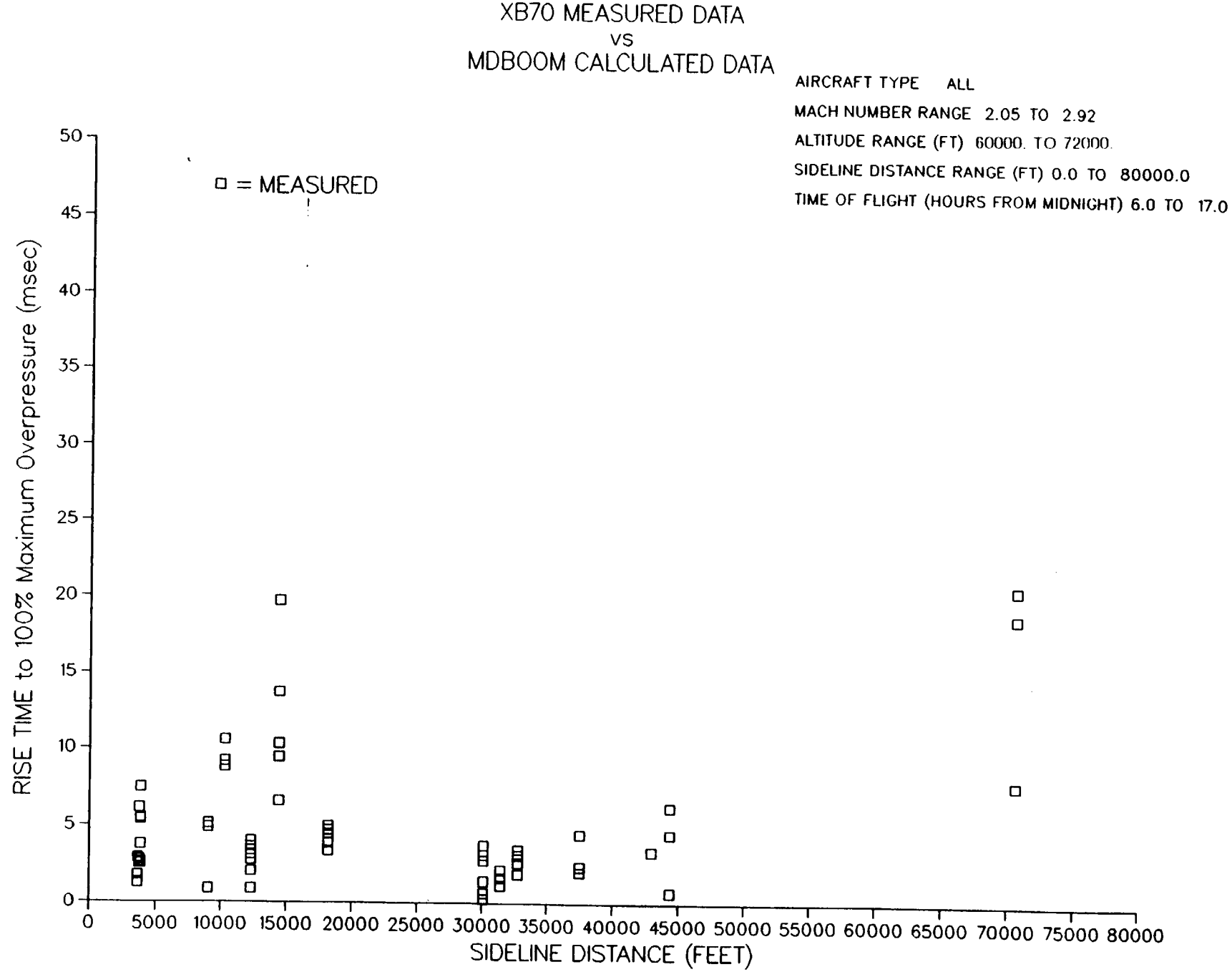
# BOOMFILE MEASURED DATA

AIRCRAFT TYPE F14
MACH NUMBER RANGE 0.00 TO 4.00
ALTITUDE RANGE (FT) 0.0 TO 80000.0
SIDELINE DISTANCE RANGE (FT) 0.0 TO 80000.0
TIME OF FLIGHT (HOURS FROM MIDNIGHT) 9.0 TO 17.0

MEAN 4.464875
VARIANCE 2.267641
STANDARD DEVIATION 1.505869
SKEWNESS 0.407679
KURTOSIS-1.095382
COUNT 8.000000

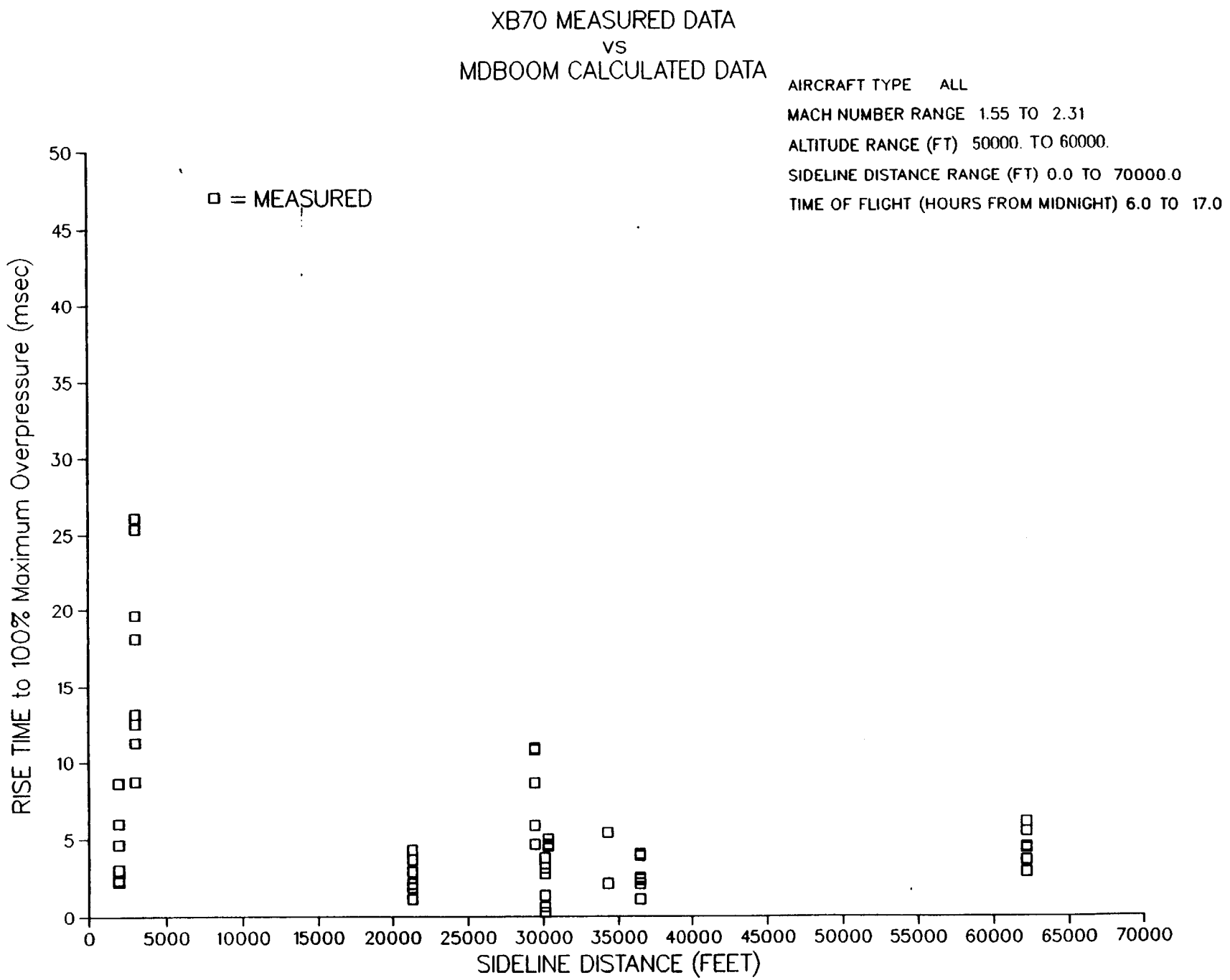


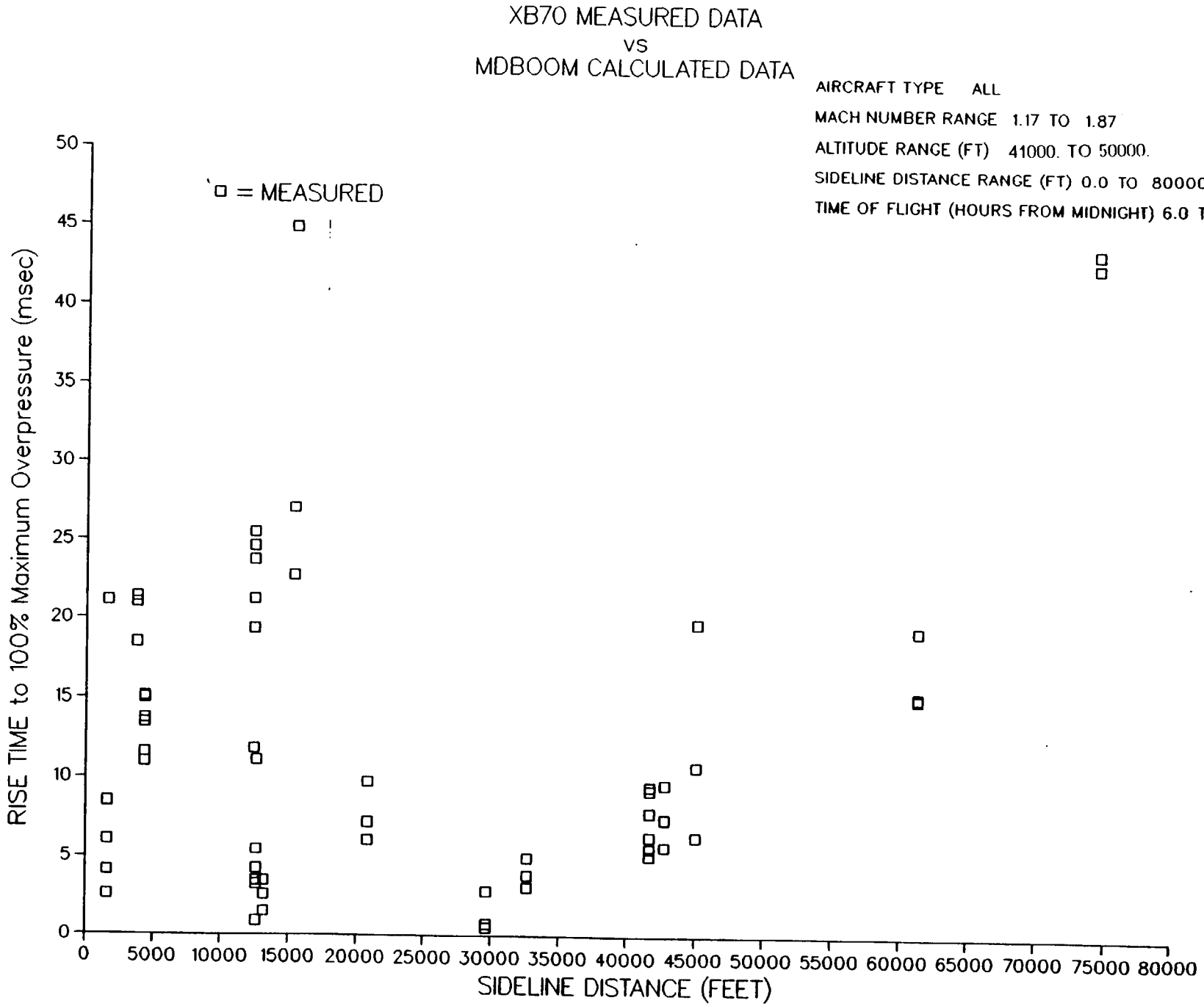

XB70 MEASURED DATA
VS
MDBOOM CALCULATED DATA
AIRCRAFT TYPE ALL
MACH NUMBER RANGE 1.00 TO 3.00
ALTITUDE RANGE (FT) 31000. TO 72000.
SIDELINE DISTANCE RANGE (FT) 0.0 TO 80000.0
TIME OF FLIGHT (HOURS FROM MIDNIGHT) 6.0 TO 17.0
□ = MEASURED
RISE TIME to 100% Maximum Overpressure (msec)
0
5
10
15
20
25
30
35
40
45
50
0
5000
10000
15000
20000
25000
30000
35000
40000
45000
50000
55000
60000
65000
70000
75000
80000
SIDELINE DISTANCE (FEET)

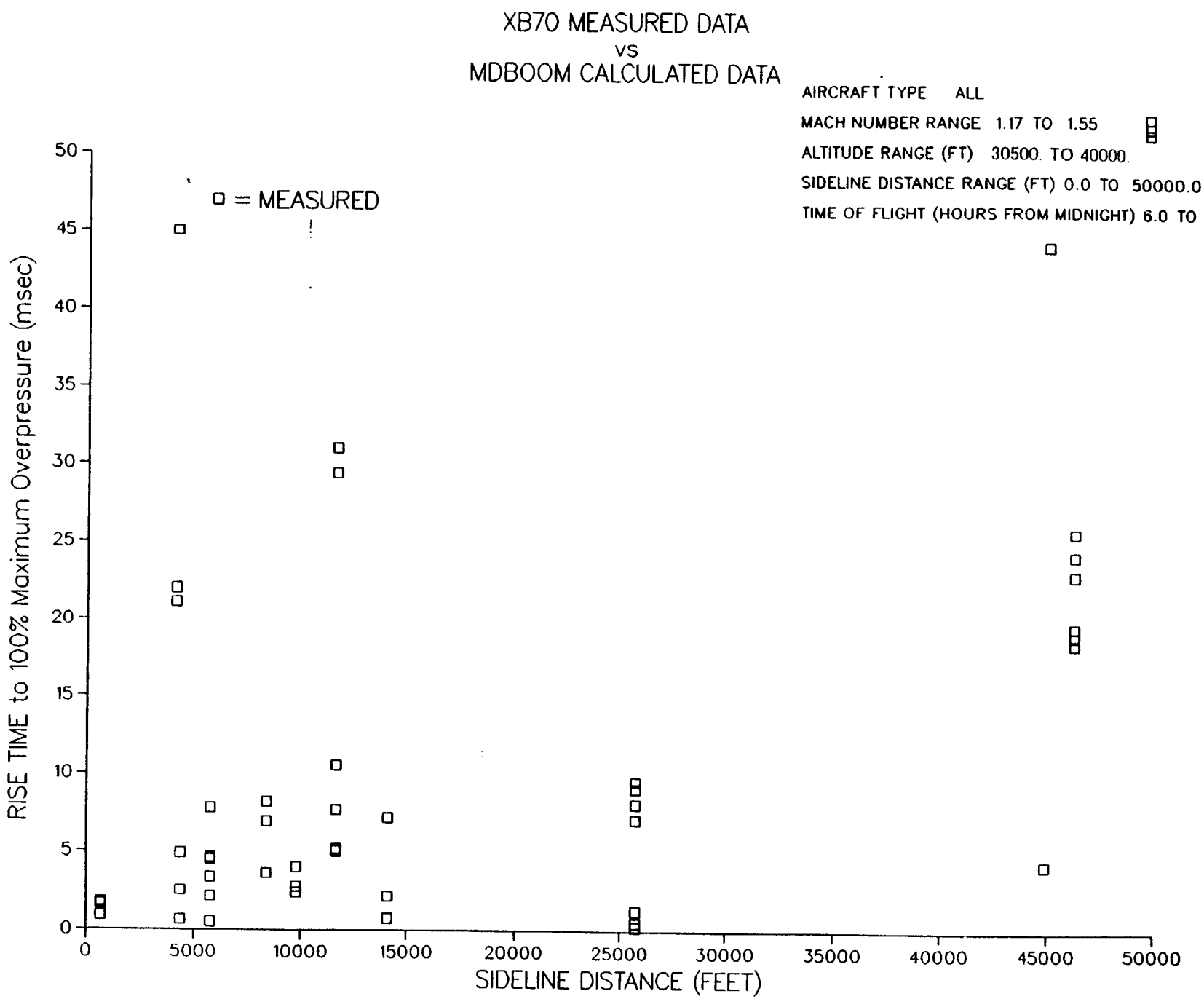

XB70 MEASURED DATA
VS
MDBOOM CALCULATED DATA
AIRCRAFT TYPE ALL
MACH NUMBER RANGE 2.05 TO 2.92
ALTITUDE RANGE (FT) 60000. TO 72000.
SIDELINE DISTANCE RANGE (FT) 0.0 TO 80000.0
TIME OF FLIGHT (HOURS FROM MIDNIGHT) 6.0 TO 17.0
□ = MEASURED
RISE TIME to 100% Maximum Overpressure (msec)
0
5
10
15
20
25
30
35
40
45
50
0
5000
10000
15000
20000
25000
30000
35000
40000
45000
50000
55000
60000
65000
70000
75000
80000
SIDELINE DISTANCE (FEET)

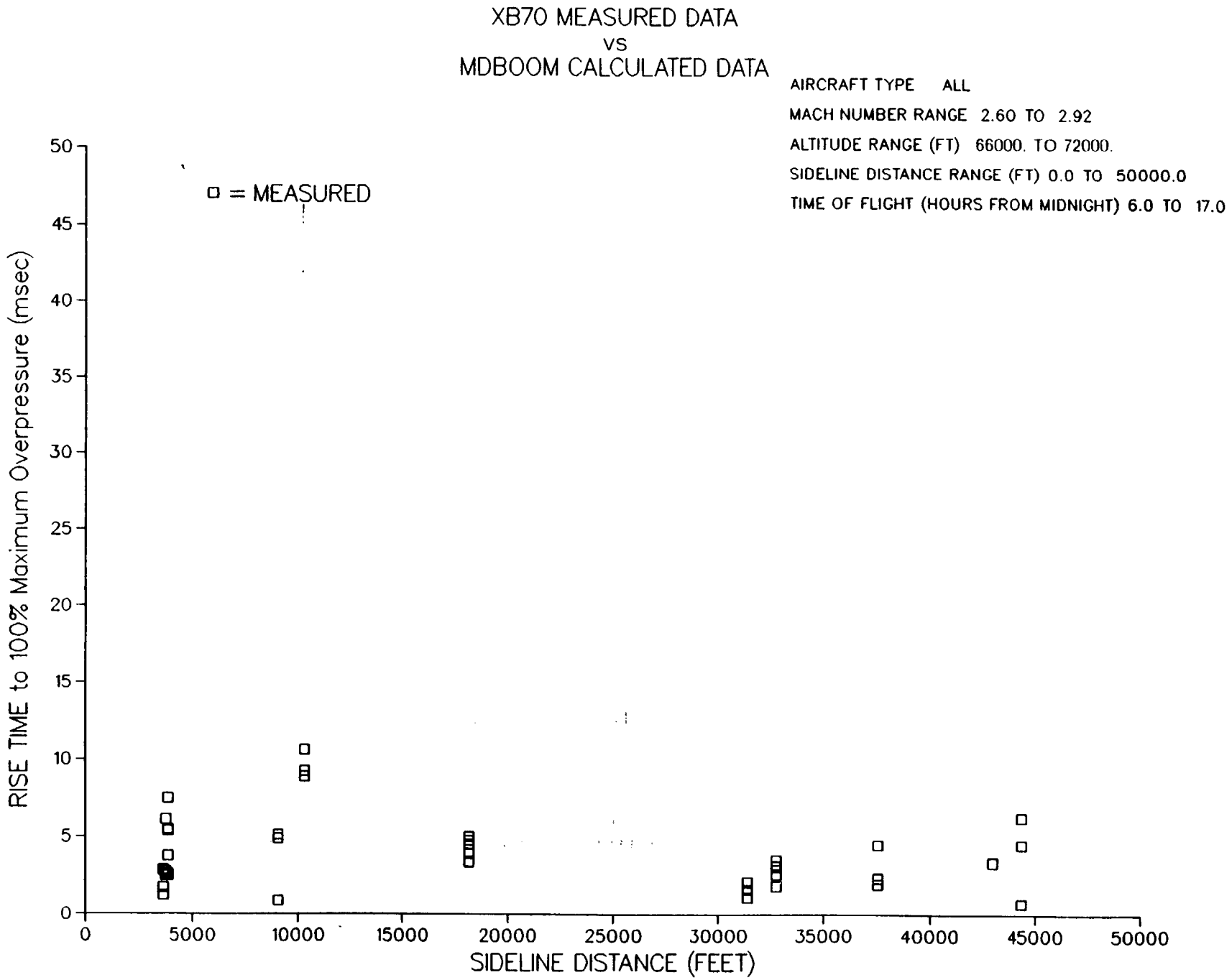
C-2

B63

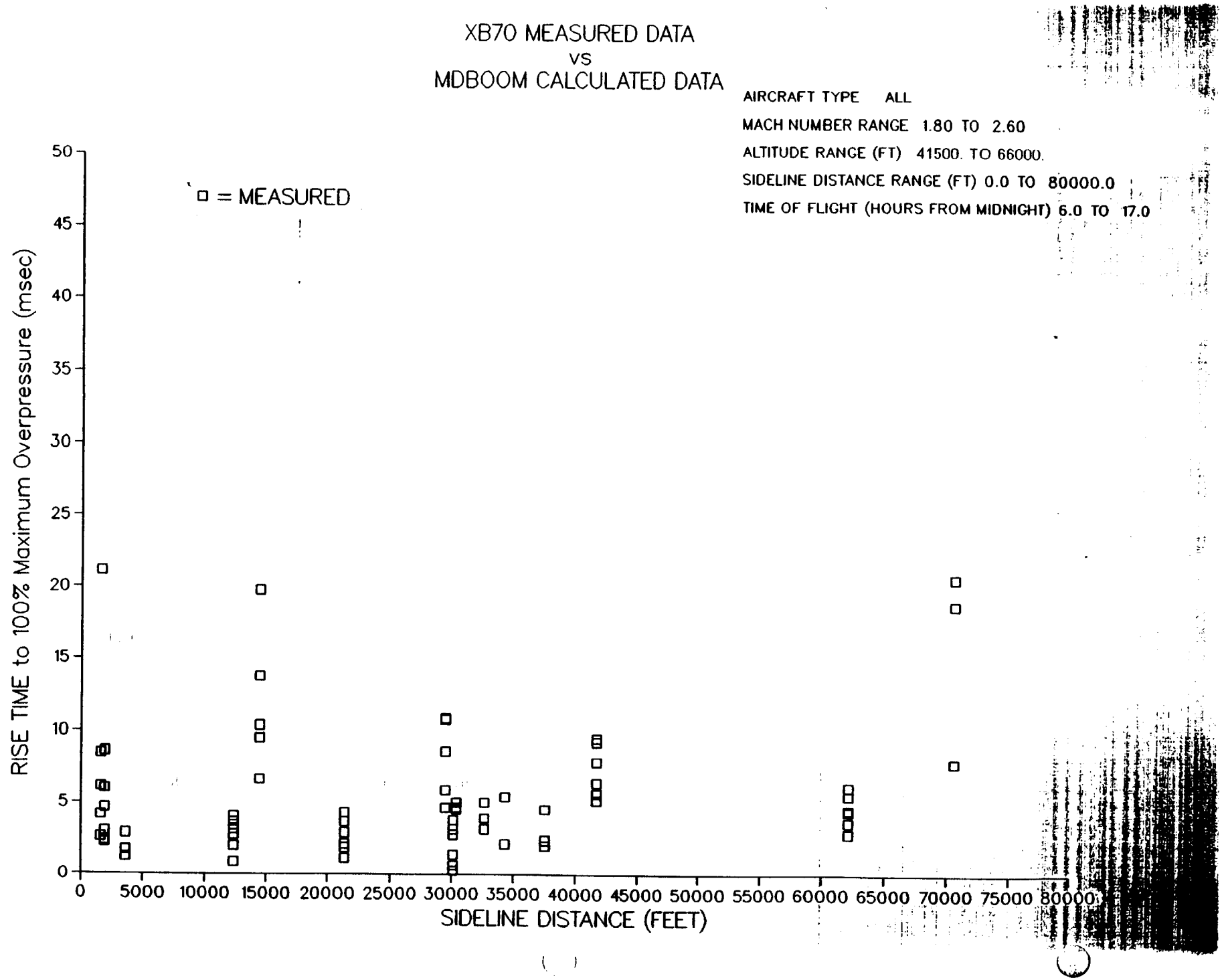

XB70 MEASURED DATA
VS
MDBOOM CALCULATED DATA
AIRCRAFT TYPE ALL
MACH NUMBER RANGE 1.55 TO 2.31
ALTITUDE RANGE (FT) 50000. TO 60000.
SIDELINE DISTANCE RANGE (FT) 0.0 TO 70000.0
TIME OF FLIGHT (HOURS FROM MIDNIGHT) 6.0 TO 17.0
□ = MEASURED
RISE TIME to 100% Maximum Overpressure (msec)
0
5
10
15
20
25
30
35
40
45
50
0
5000
10000
15000
20000
25000
30000
35000
40000
45000
50000
55000
60000
65000
70000
SIDELINE DISTANCE (FEET)


XB70 MEASURED DATA
VS
MDBOOM CALCULATED DATA
AIRCRAFT TYPE ALL
MACH NUMBER RANGE 1.17 TO 1.87
ALTITUDE RANGE (FT) 41000. TO 50000.
SIDELINE DISTANCE RANGE (FT) 0.0 TO 80000.0
TIME OF FLIGHT (HOURS FROM MIDNIGHT) 6.0 TO 17.0
□ = MEASURED
RISE TIME to 100% Maximum Overpressure (msec)
0
5
10
15
20
25
30
35
40
45
50
0 5000 10000 15000 20000 25000 30000 35000 40000 45000 50000 55000 60000 65000 70000 75000 80000
SIDELINE DISTANCE (FEET)


XB70 MEASURED DATA
VS
MDBOOM CALCULATED DATA
AIRCRAFT TYPE ALL
MACH NUMBER RANGE 1.17 TO 1.55
ALTITUDE RANGE (FT) 30500. TO 40000.
SIDELINE DISTANCE RANGE (FT) 0.0 TO 50000.0
TIME OF FLIGHT (HOURS FROM MIDNIGHT) 6.0 TO 17.0
□ = MEASURED
RISE TIME to 100% Maximum Overpressure (msec)
0
5
10
15
20
25
30
35
40
45
50
0
5000
10000
15000
20000
25000
30000
35000
40000
45000
50000
SIDELINE DISTANCE (FEET)


XB70 MEASURED DATA
VS
MDBOOM CALCULATED DATA
AIRCRAFT TYPE ALL
MACH NUMBER RANGE 2.60 TO 2.92
ALTITUDE RANGE (FT) 66000. TO 72000.
SIDELINE DISTANCE RANGE (FT) 0.0 TO 50000.0
TIME OF FLIGHT (HOURS FROM MIDNIGHT) 6.0 TO 17.0
□ = MEASURED
RISE TIME to 100% Maximum Overpressure (msec)
SIDELINE DISTANCE (FEET)
0
5
10
15
20
25
30
35
40
45
50
0
5000
10000
15000
20000
25000
30000
35000
40000
45000
50000

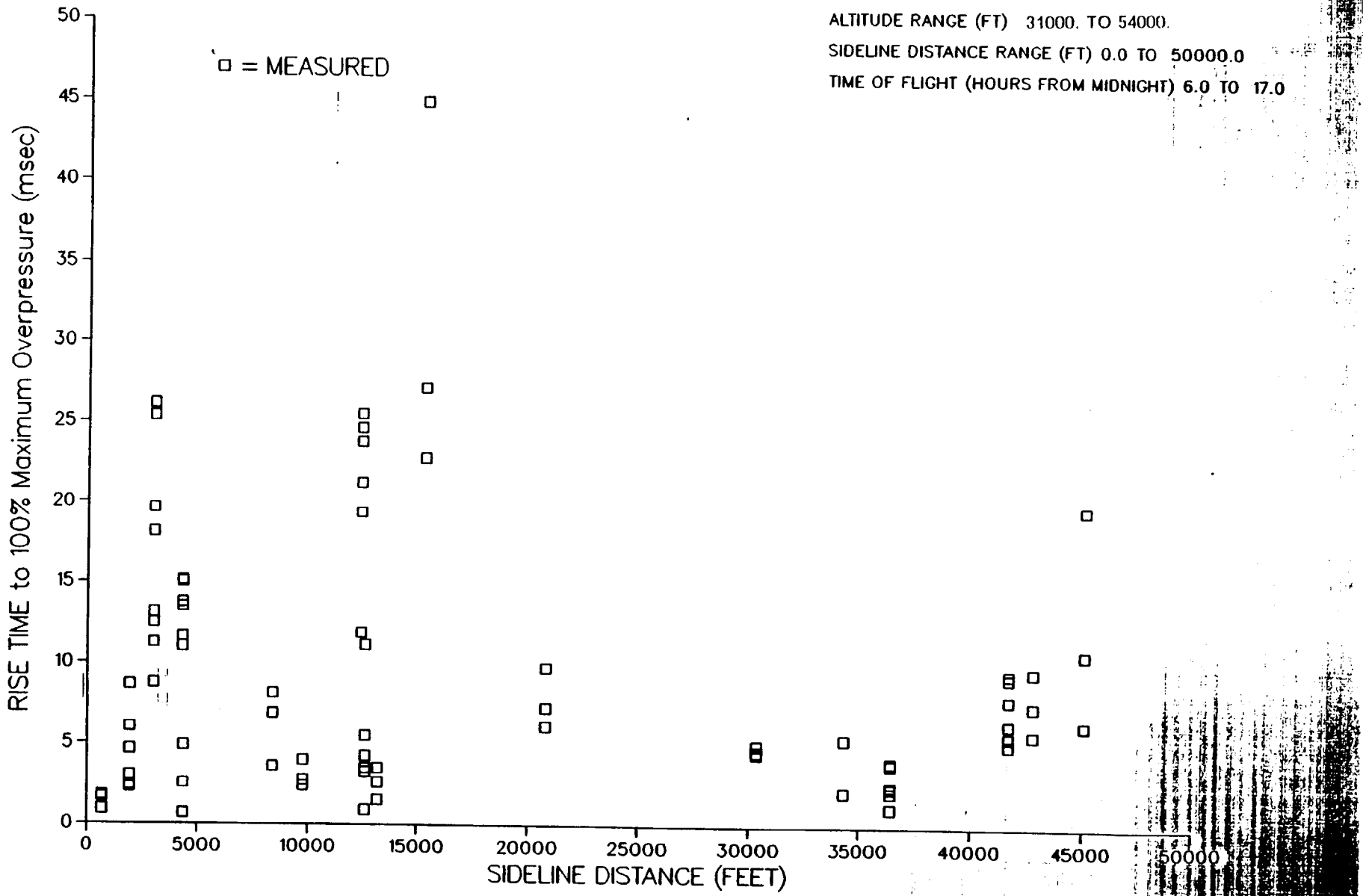
ORIGINAL PAGE IS
OF POOR QUALITY

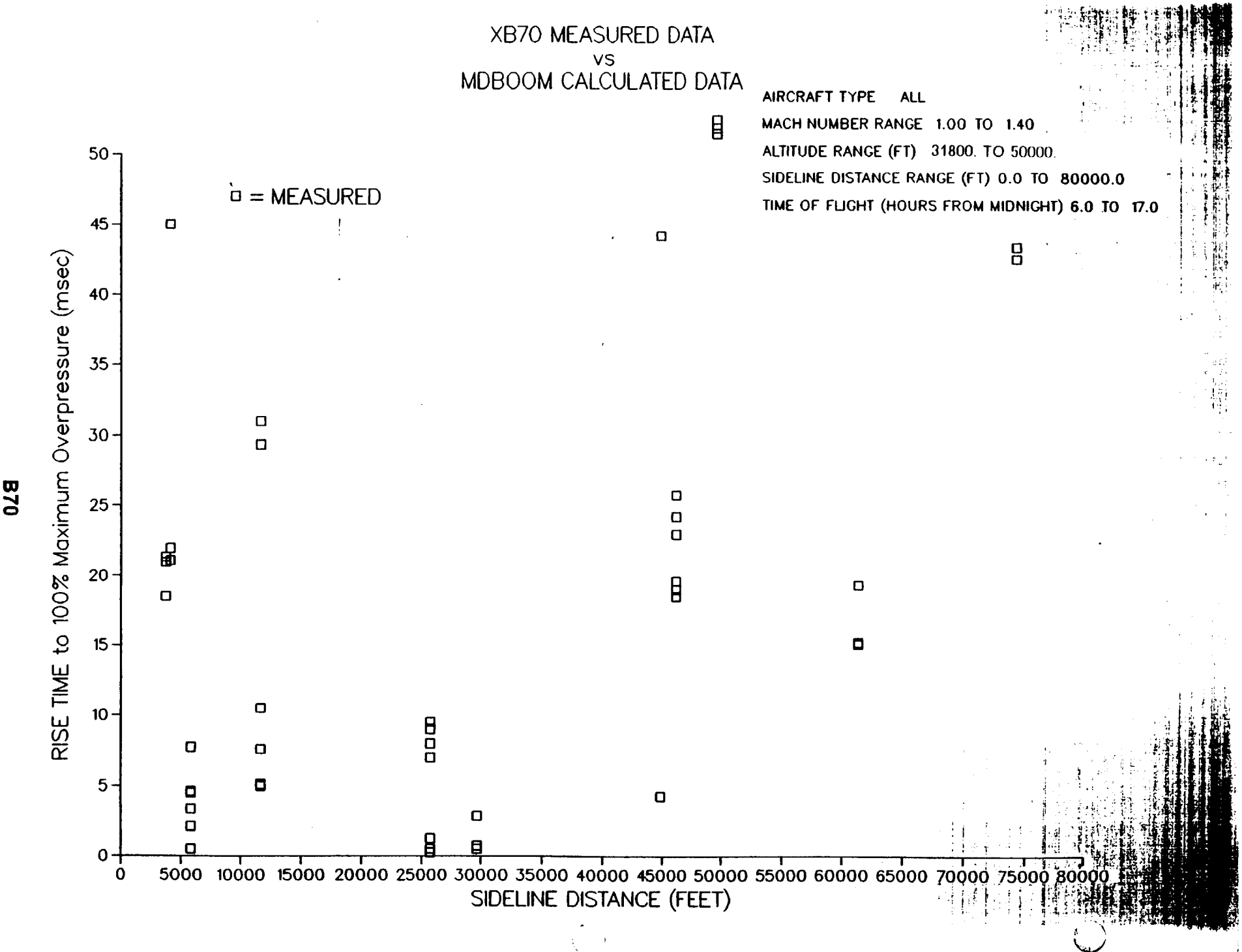


ORIGINAL PAGE IS
OF POOR QUALITY

# XB70 MEASURED DATA
vs
MDBOOM CALCULATED DATA

AIRCRAFT TYPE ALL
MACH NUMBER RANGE 1.40 TO 1.80
ALTITUDE RANGE (FT) 31000. TO 54000.
SIDELINE DISTANCE RANGE (FT) 0.0 TO 50000.0
TIME OF FLIGHT (HOURS FROM MIDNIGHT) 6.0 TO 17.0

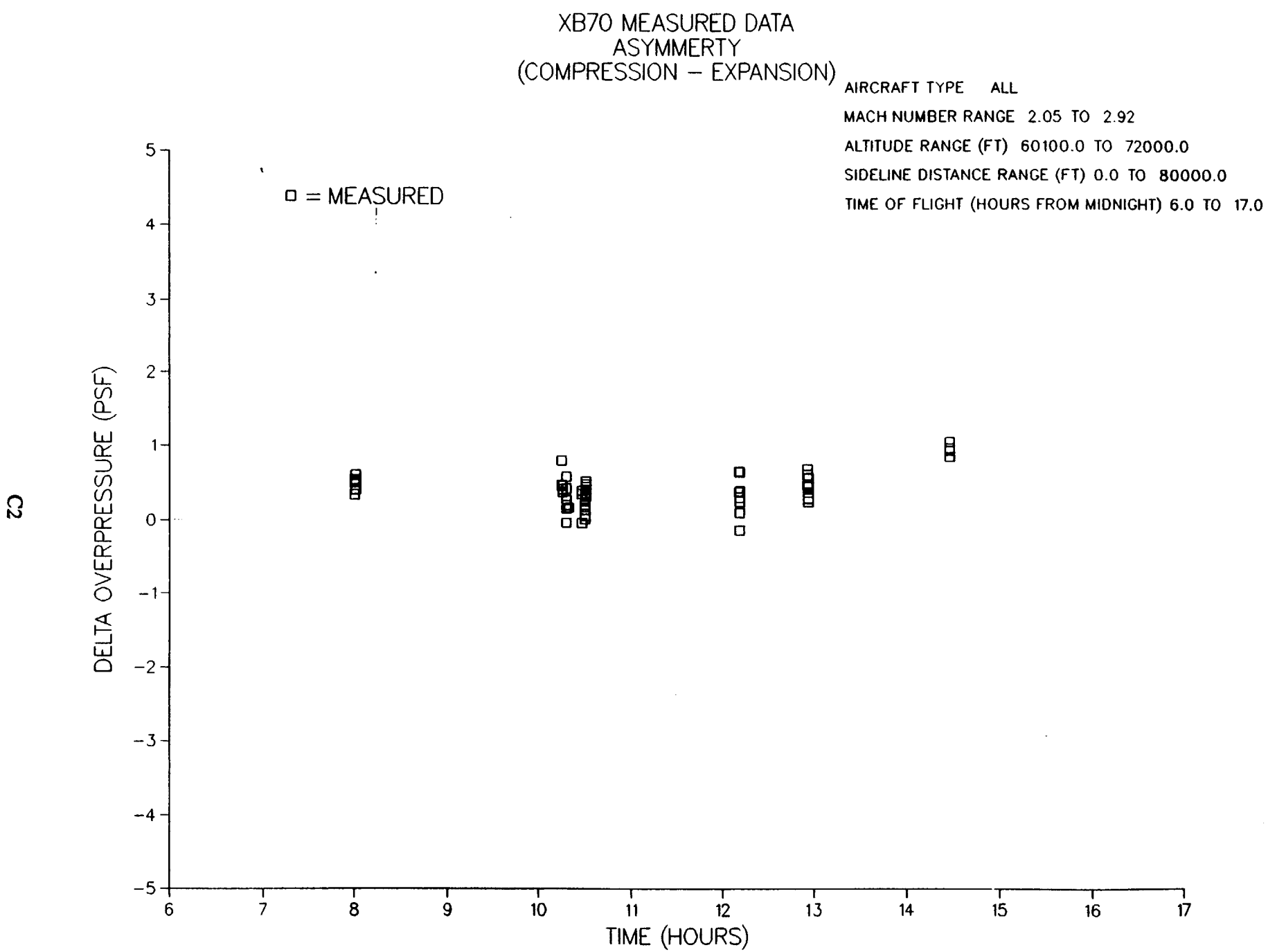


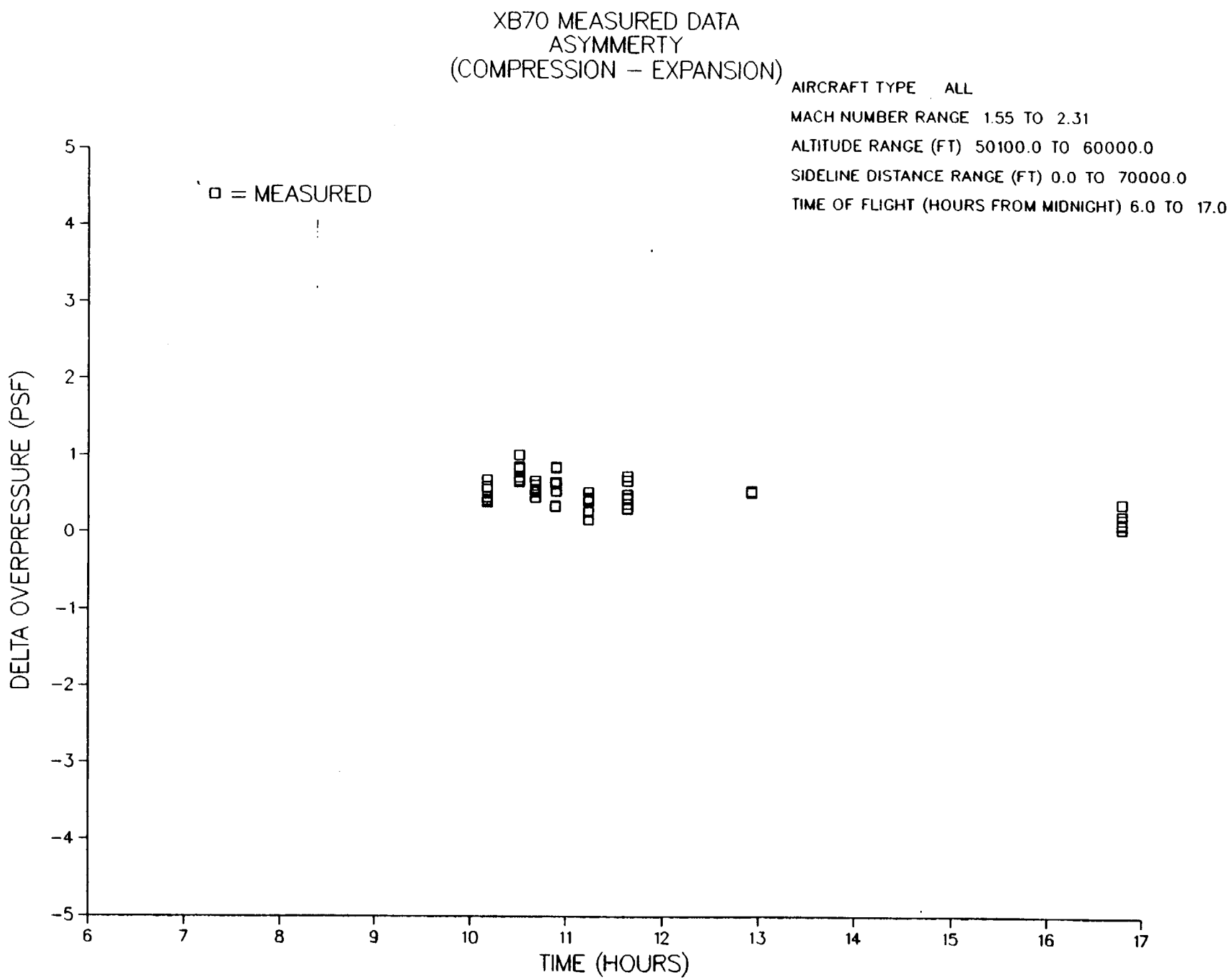

XB70 MEASURED DATA
VS
MDBOOM CALCULATED DATA
AIRCRAFT TYPE ALL
MACH NUMBER RANGE 1.00 TO 1.40
ALTITUDE RANGE (FT) 31800. TO 50000.
SIDELINE DISTANCE RANGE (FT) 0.0 TO 80000.0
TIME OF FLIGHT (HOURS FROM MIDNIGHT) 6.0 TO 17.0
□ = MEASURED
RISE TIME to 100% Maximum Overpressure (msec)
SIDELINE DISTANCE (FEET)
0
5
10
15
20
25
30
35
40
45
50
0
5000
10000
15000
20000
25000
30000
35000
40000
45000
50000
55000
60000
65000
70000
75000
80000

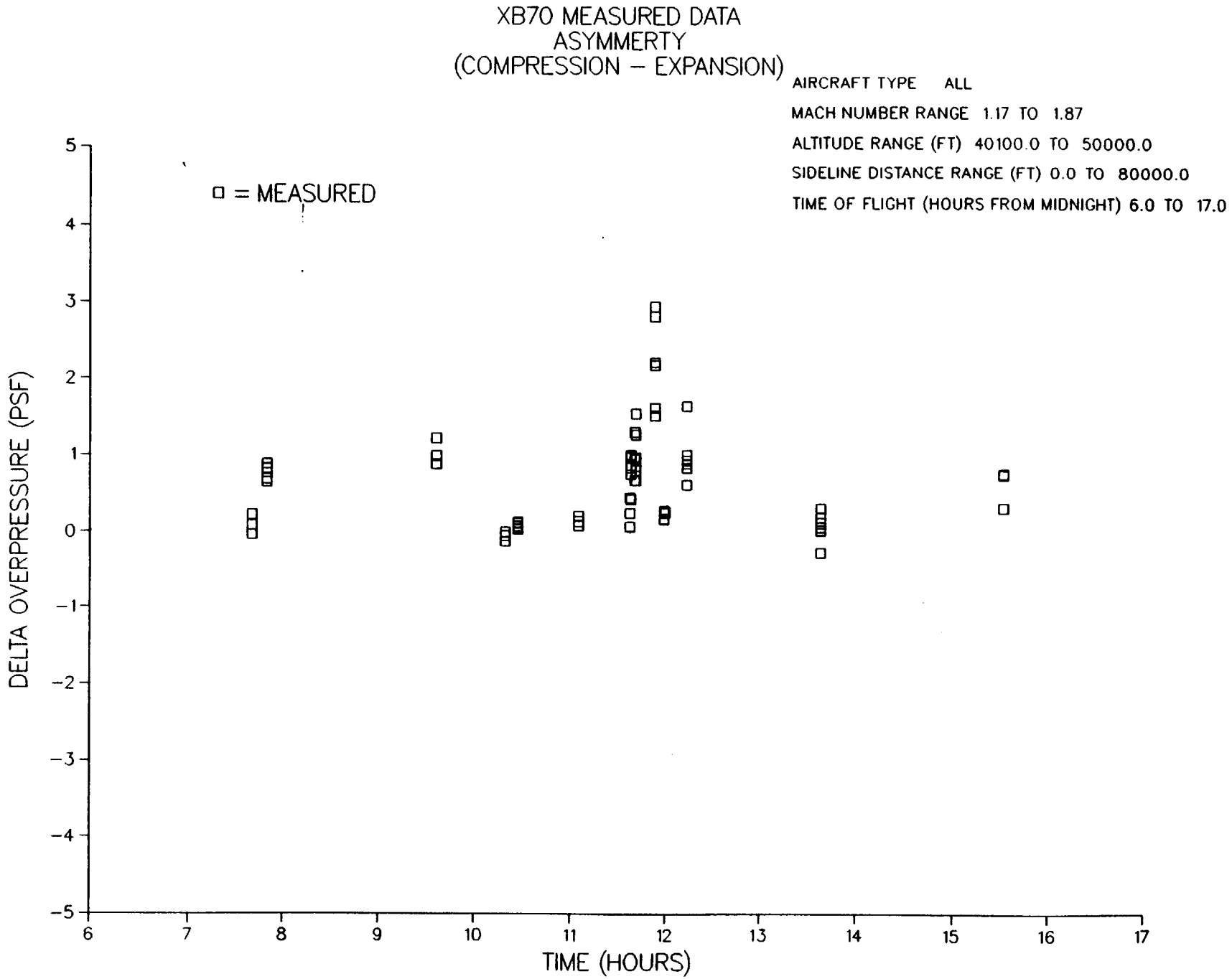
B70

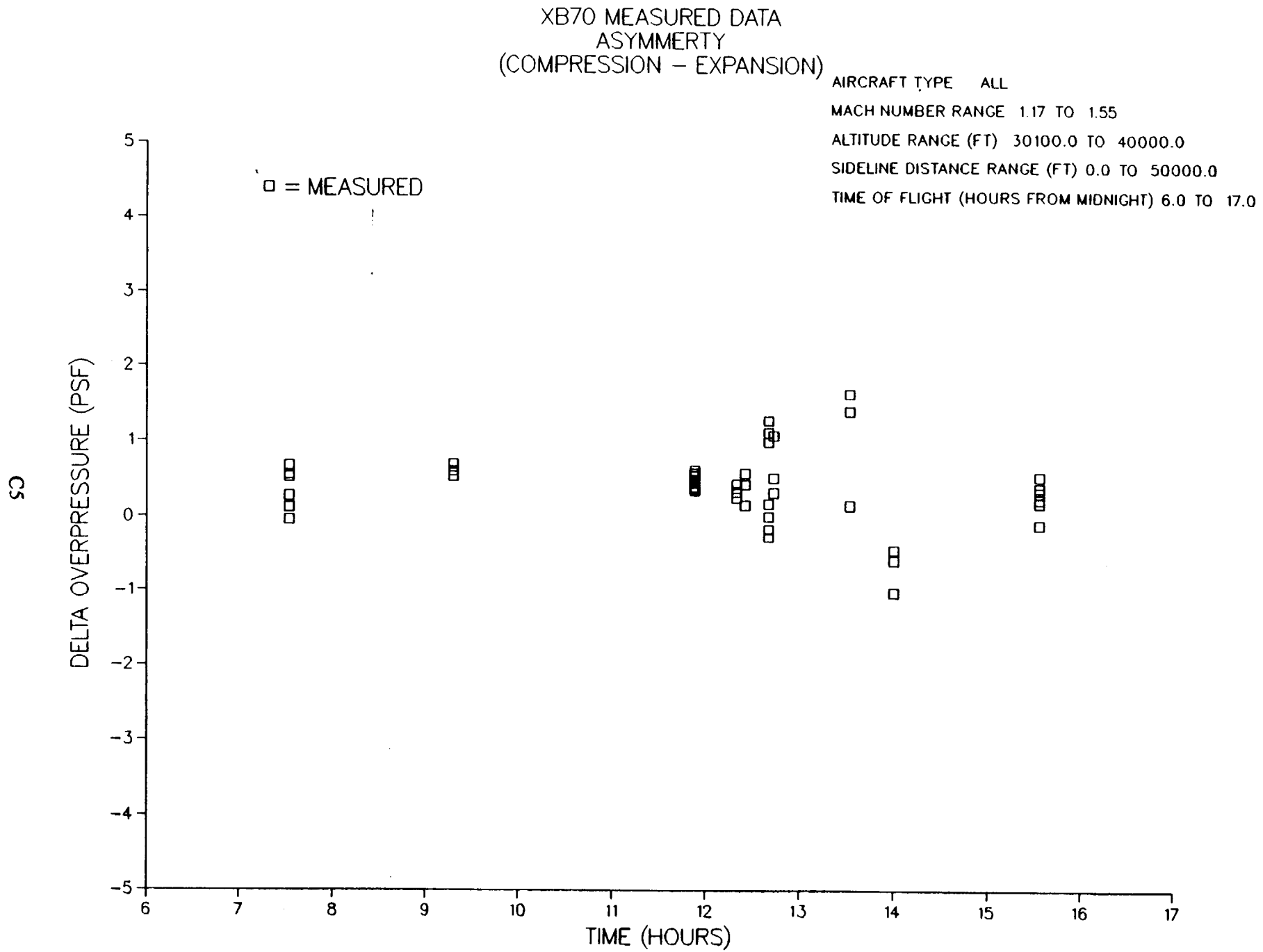
# APPENDIX C

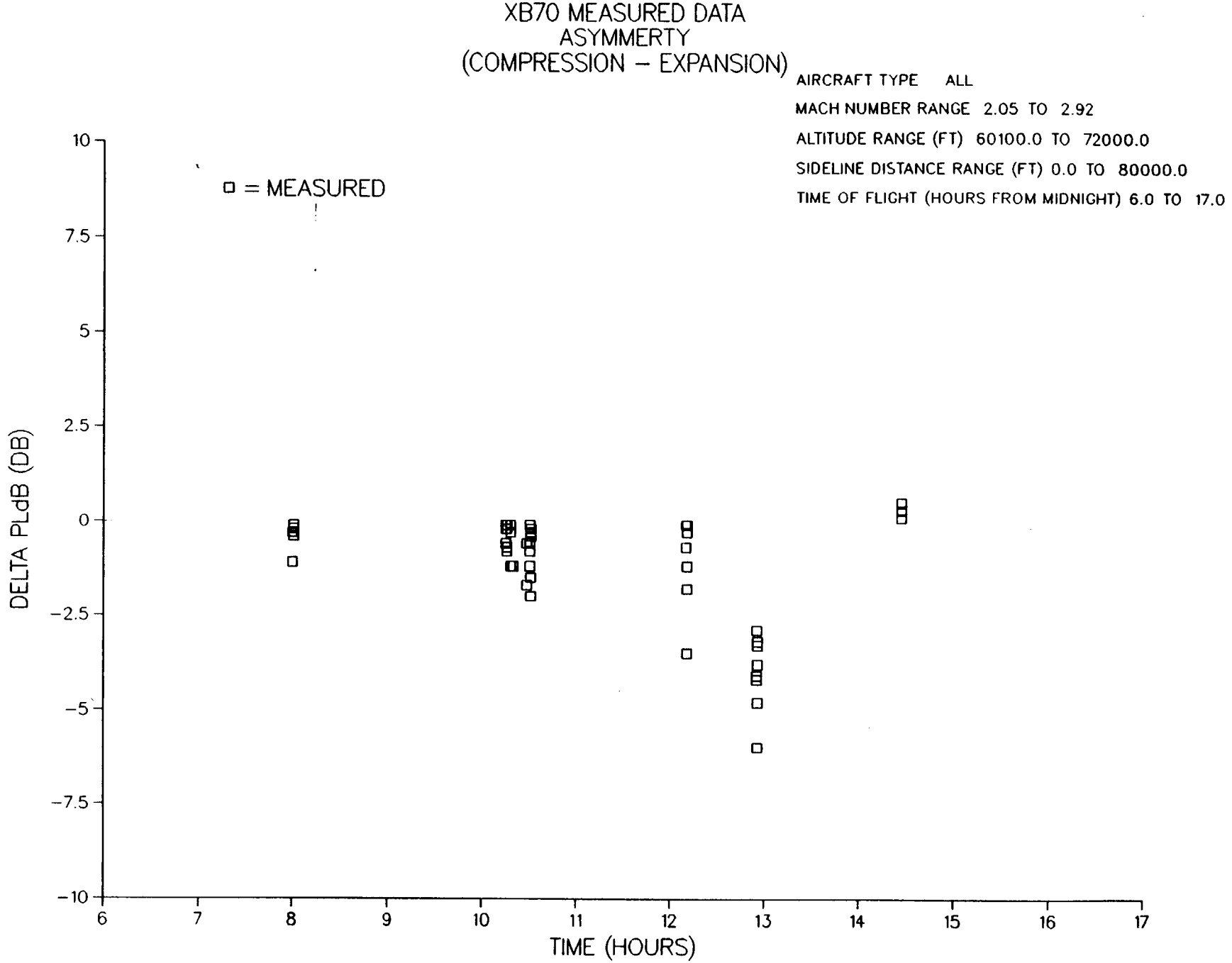
## Asymmetry Plots

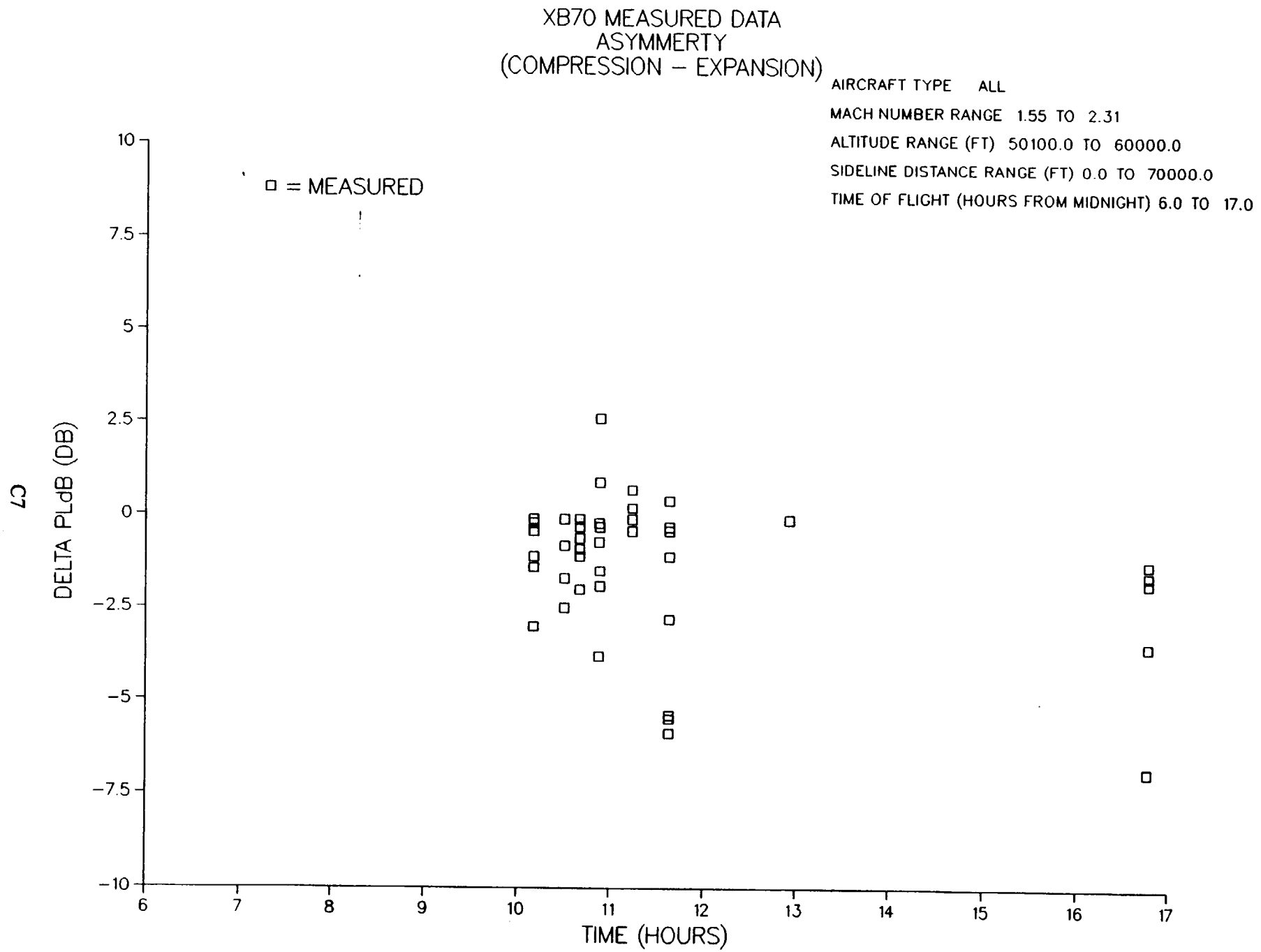

XB70 MEASURED DATA
ASYMMERTY
(COMPRESSION – EXPANSION)
AIRCRAFT TYPE ALL
MACH NUMBER RANGE 2.05 TO 2.92
ALTITUDE RANGE (FT) 60100.0 TO 72000.0
SIDELINE DISTANCE RANGE (FT) 0.0 TO 80000.0
TIME OF FLIGHT (HOURS FROM MIDNIGHT) 6.0 TO 17.0
□ = MEASURED
DELTA OVERPRESSURE (PSF)
5
4
3
2
1
0
-1
-2
-3
-4
-5
6
7
8
9
10
11
12
13
14
15
16
17
TIME (HOURS)


XB70 MEASURED DATA
ASYMMERTY
(COMPRESSION – EXPANSION)
AIRCRAFT TYPE ALL
MACH NUMBER RANGE 1.55 TO 2.31
ALTITUDE RANGE (FT) 50100.0 TO 60000.0
SIDELINE DISTANCE RANGE (FT) 0.0 TO 70000.0
TIME OF FLIGHT (HOURS FROM MIDNIGHT) 6.0 TO 17.0
□ = MEASURED
DELTA OVERPRESSURE (PSF)
5
4
3
2
1
0
-1
-2
-3
-4
-5
6
7
8
9
10
11
12
13
14
15
16
17
TIME (HOURS)

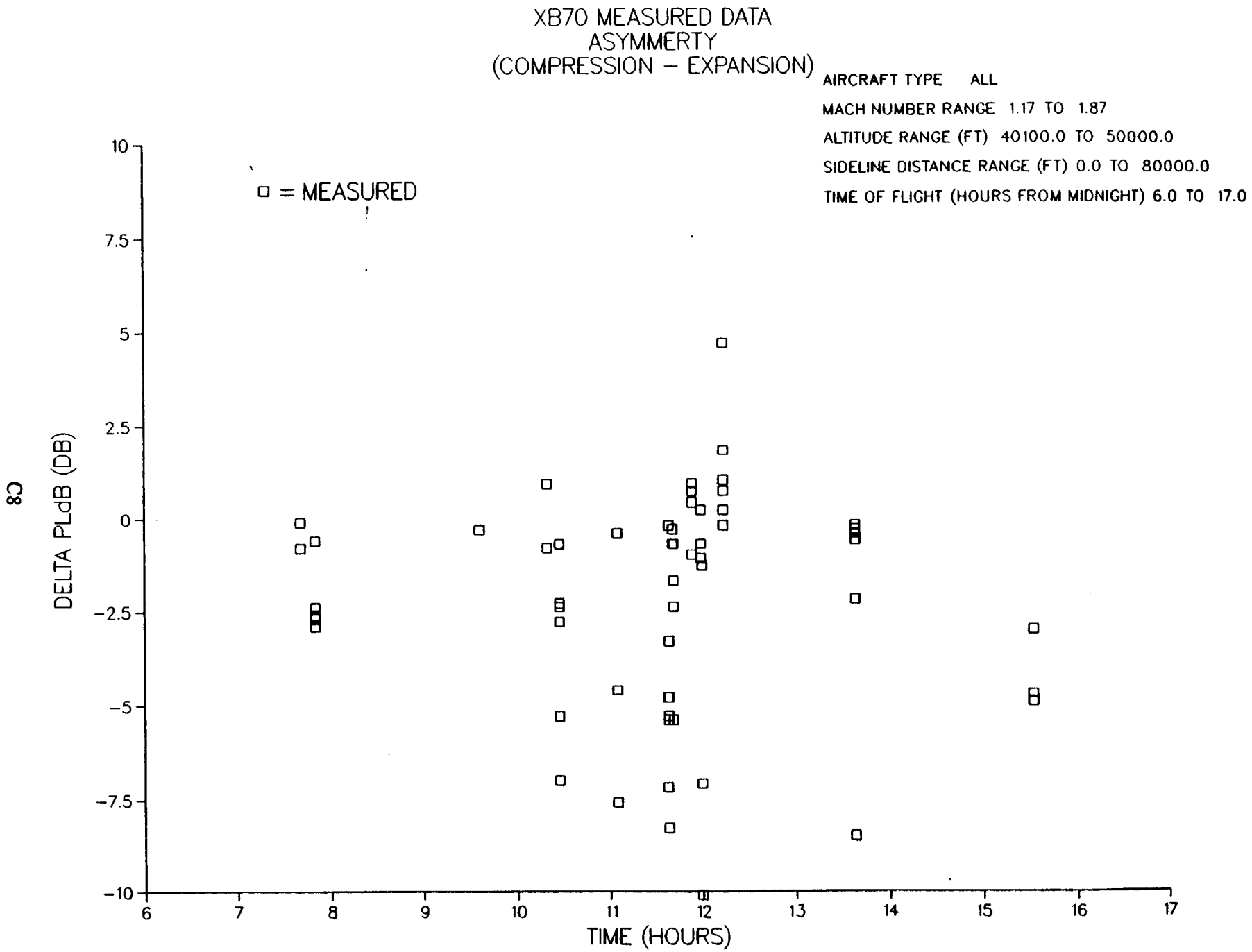

XB70 MEASURED DATA
ASYMMERTY
(COMPRESSION – EXPANSION)
AIRCRAFT TYPE ALL
MACH NUMBER RANGE 1.17 TO 1.87
ALTITUDE RANGE (FT) 40100.0 TO 50000.0
SIDELINE DISTANCE RANGE (FT) 0.0 TO 80000.0
TIME OF FLIGHT (HOURS FROM MIDNIGHT) 6.0 TO 17.0
□ = MEASURED
DELTA OVERPRESSURE (PSF)
TIME (HOURS)
5
4
3
2
1
0
-1
-2
-3
-4
-5
6
7
8
9
10
11
12
13
14
15
16
17


XB70 MEASURED DATA
ASYMMERTY
(COMPRESSION – EXPANSION)
AIRCRAFT TYPE ALL
MACH NUMBER RANGE 1.17 TO 1.55
ALTITUDE RANGE (FT) 30100.0 TO 40000.0
SIDELINE DISTANCE RANGE (FT) 0.0 TO 50000.0
TIME OF FLIGHT (HOURS FROM MIDNIGHT) 6.0 TO 17.0
□ = MEASURED
DELTA OVERPRESSURE (PSF)
TIME (HOURS)
5
4
3
2
1
0
-1
-2
-3
-4
-5
6
7
8
9
10
11
12
13
14
15
16
17

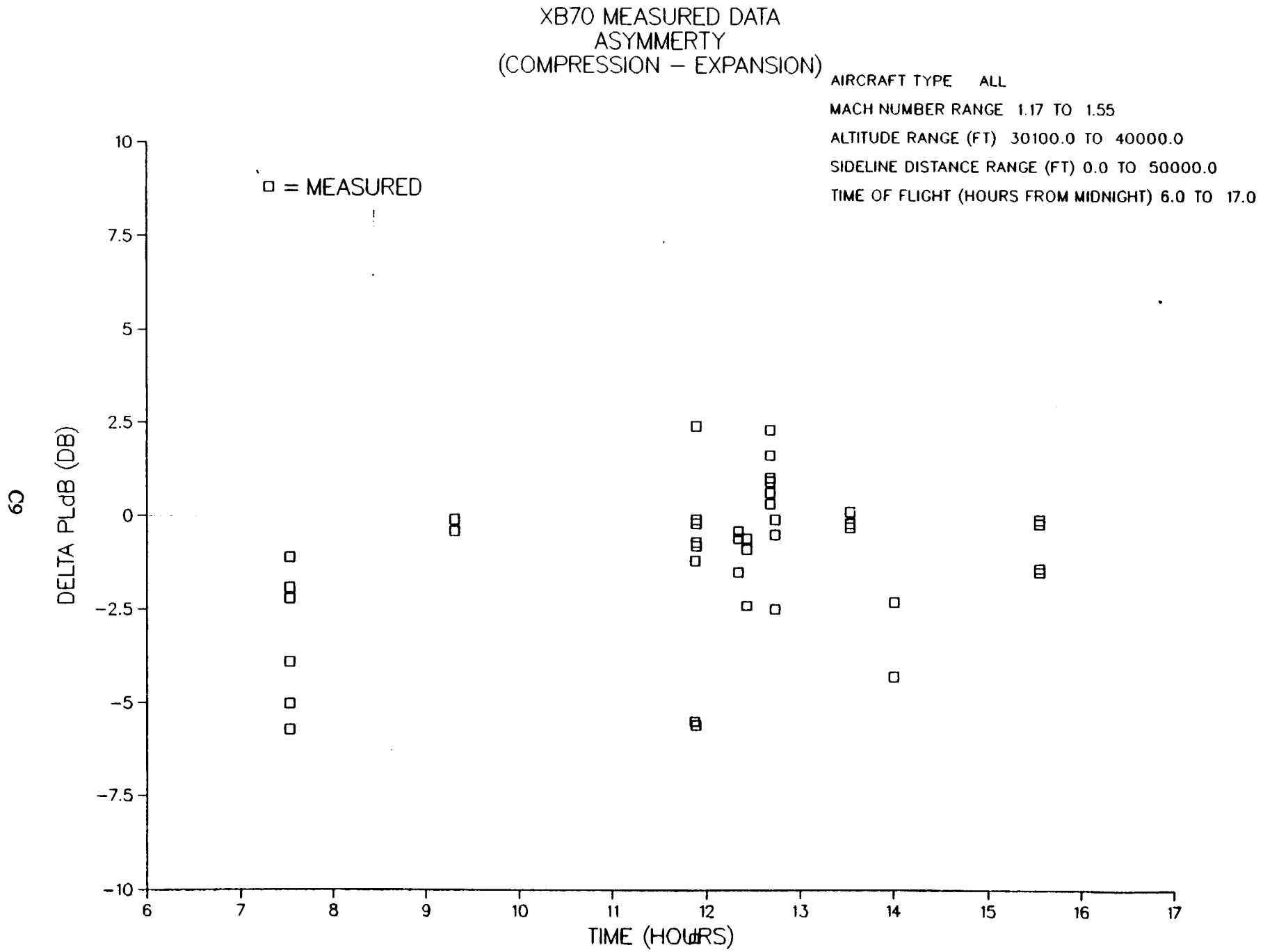

XB70 MEASURED DATA
ASYMMERTY
(COMPRESSION – EXPANSION)
AIRCRAFT TYPE ALL
MACH NUMBER RANGE 2.05 TO 2.92
ALTITUDE RANGE (FT) 60100.0 TO 72000.0
SIDELINE DISTANCE RANGE (FT) 0.0 TO 80000.0
TIME OF FLIGHT (HOURS FROM MIDNIGHT) 6.0 TO 17.0
□ = MEASURED
DELTA PLdB (DB)
10
7.5
5
2.5
0
-2.5
-5
-7.5
-10
6
7
8
9
10
11
12
13
14
15
16
17
TIME (HOURS)

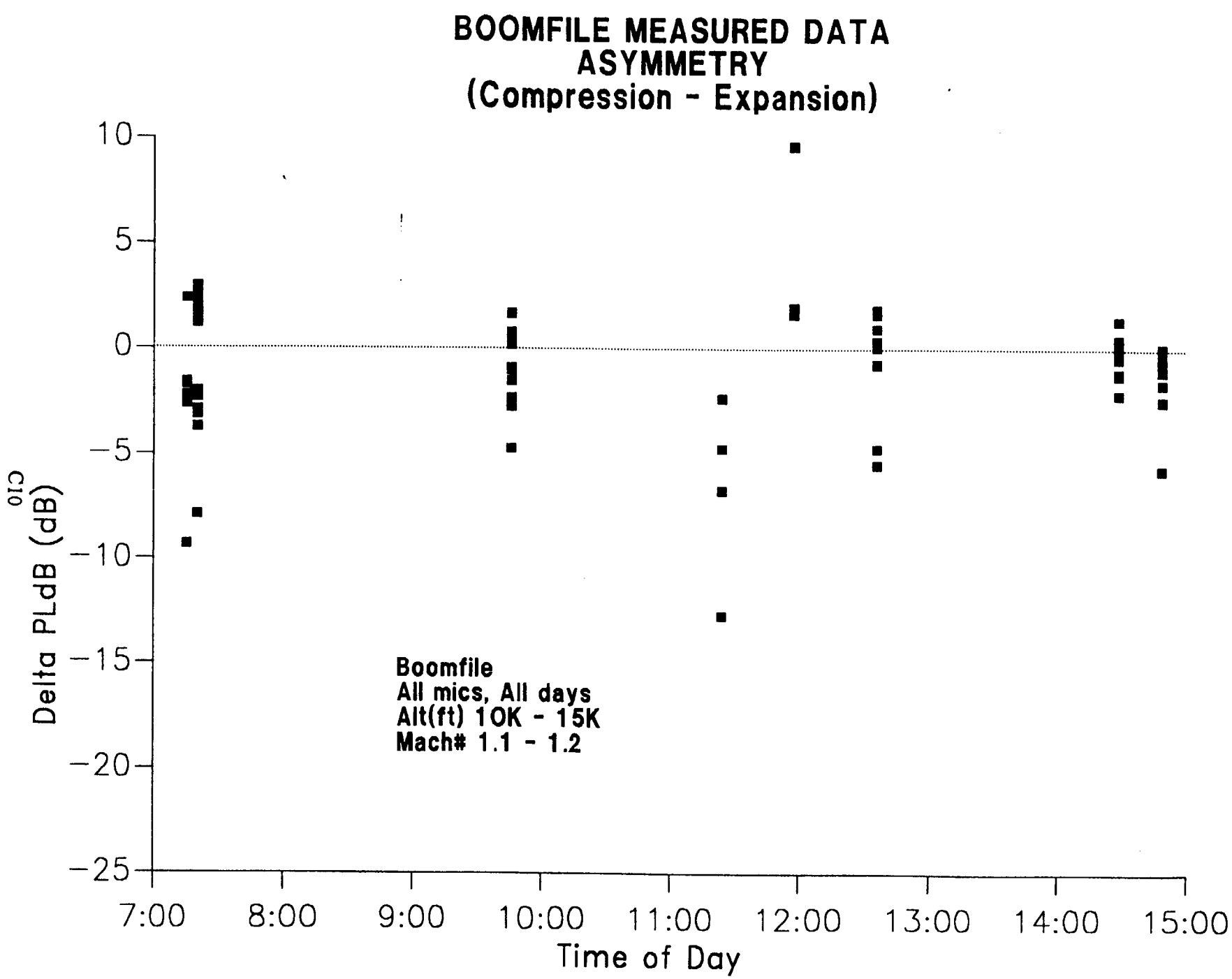

XB70 MEASURED DATA
ASYMMERTY
(COMPRESSION – EXPANSION)
AIRCRAFT TYPE ALL
MACH NUMBER RANGE 1.55 TO 2.31
ALTITUDE RANGE (FT) 50100.0 TO 60000.0
SIDELINE DISTANCE RANGE (FT) 0.0 TO 70000.0
TIME OF FLIGHT (HOURS FROM MIDNIGHT) 6.0 TO 17.0
□ = MEASURED
DELTA PLdB (DB)
10
7.5
5
2.5
0
-2.5
-5
-7.5
-10
6
7
8
9
10
11
12
13
14
15
16
17
TIME (HOURS)

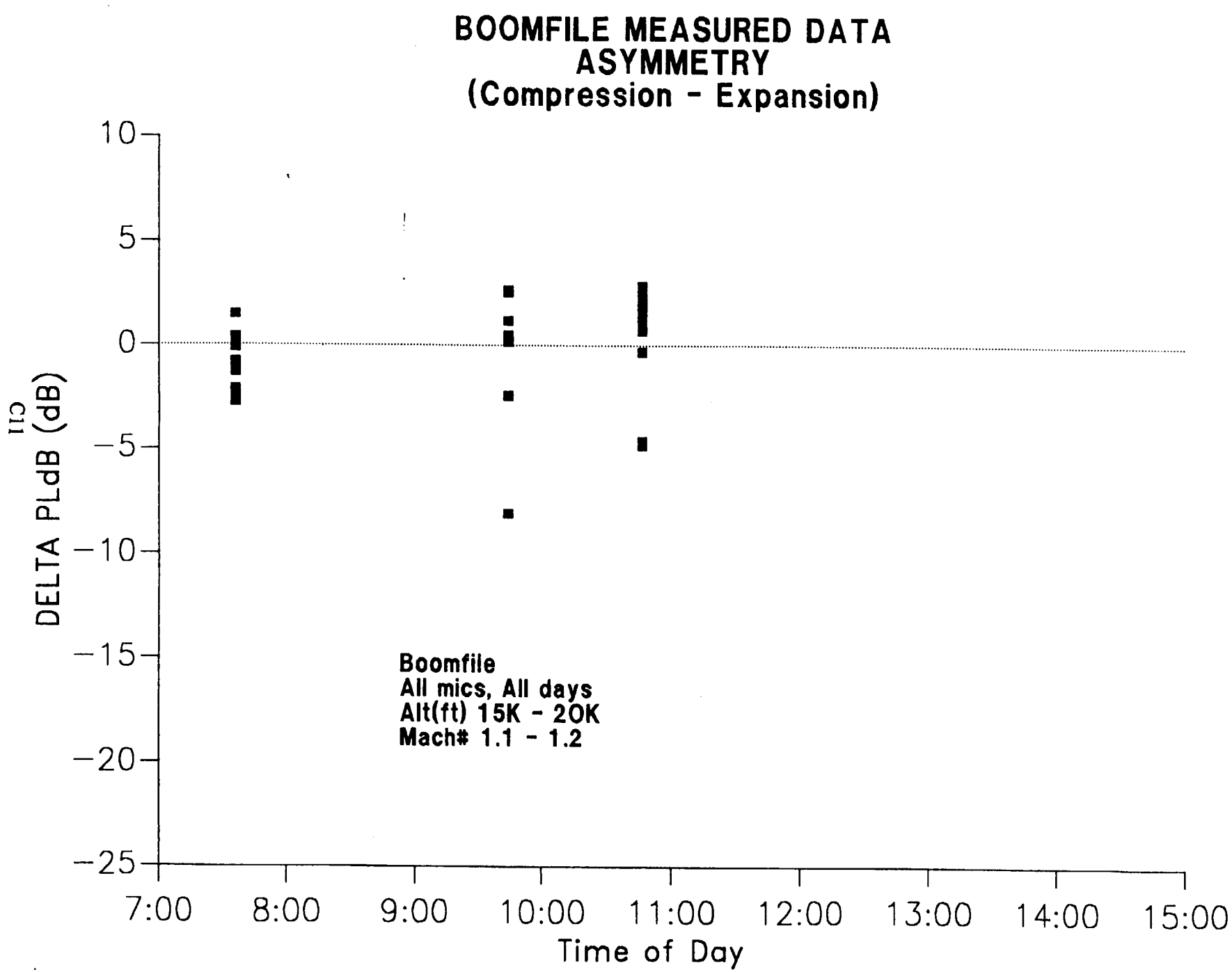
C7

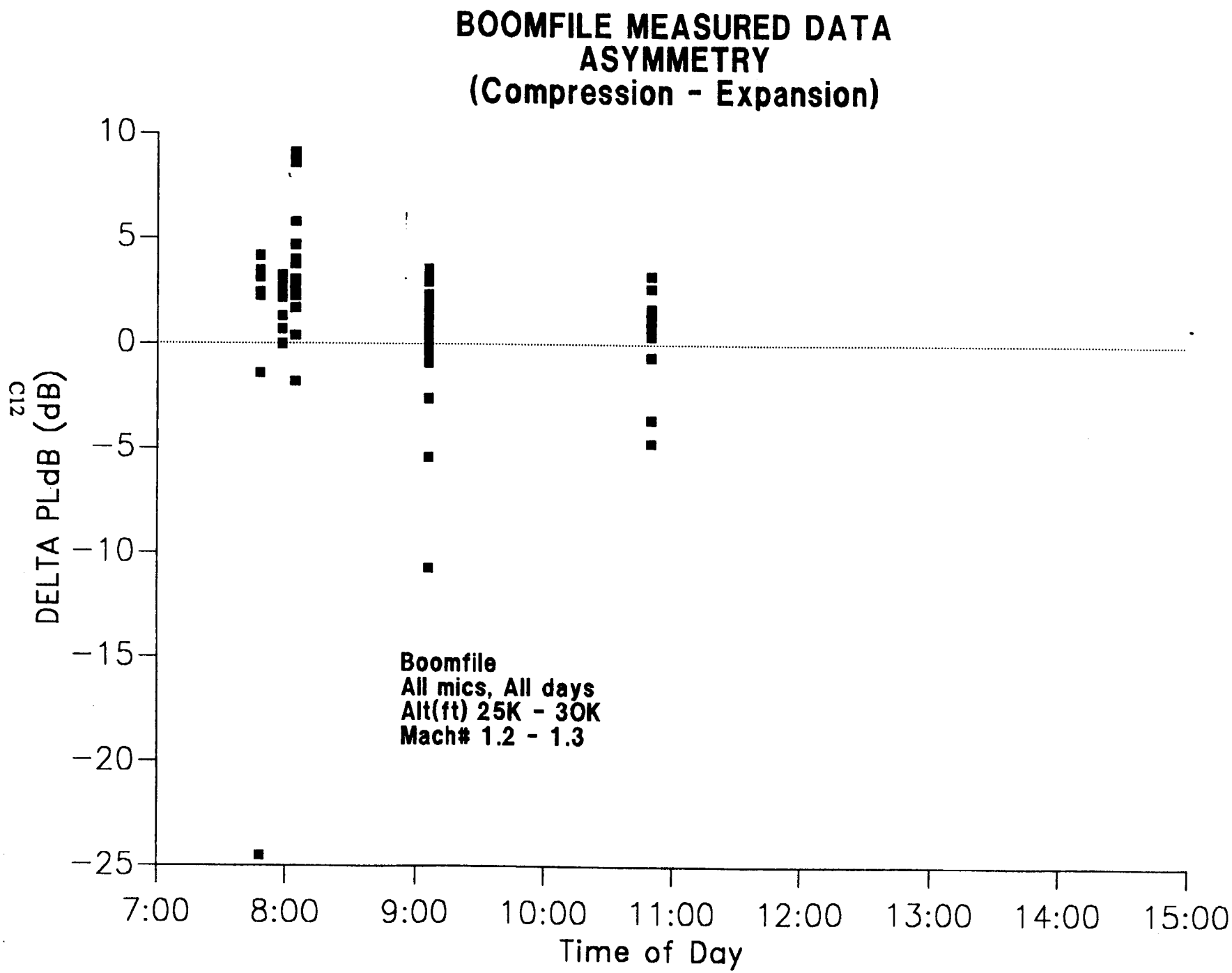

XB70 MEASURED DATA
ASYMMERTY
(COMPRESSION – EXPANSION)
AIRCRAFT TYPE ALL
MACH NUMBER RANGE 1.17 TO 1.87
ALTITUDE RANGE (FT) 40100.0 TO 50000.0
SIDELINE DISTANCE RANGE (FT) 0.0 TO 80000.0
TIME OF FLIGHT (HOURS FROM MIDNIGHT) 6.0 TO 17.0
□ = MEASURED
DELTA PLdB (DB)
TIME (HOURS)
10
7.5
5
2.5
0
-2.5
-5
-7.5
-10
6
7
8
9
10
11
12
13
14
15
16
17

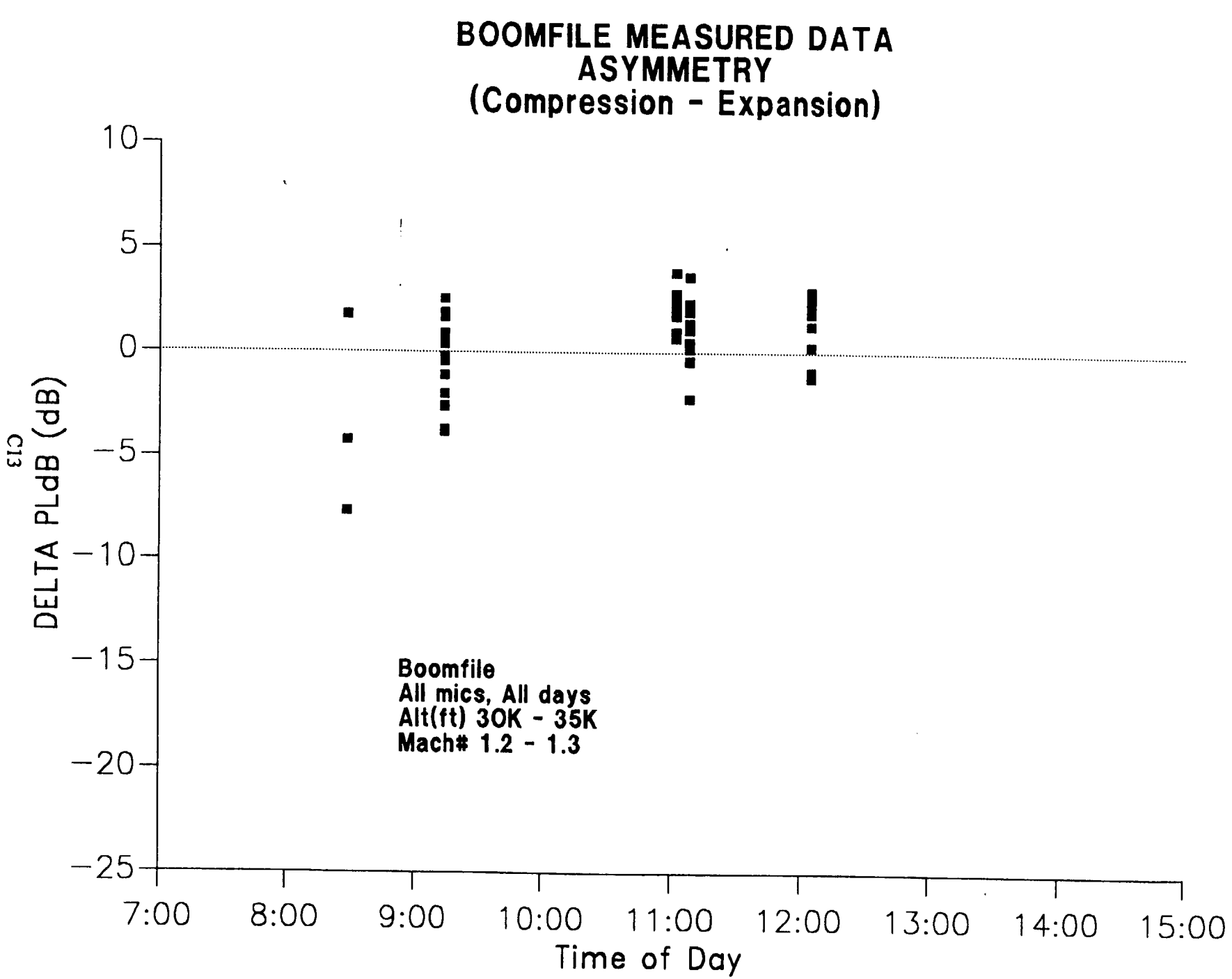
C8

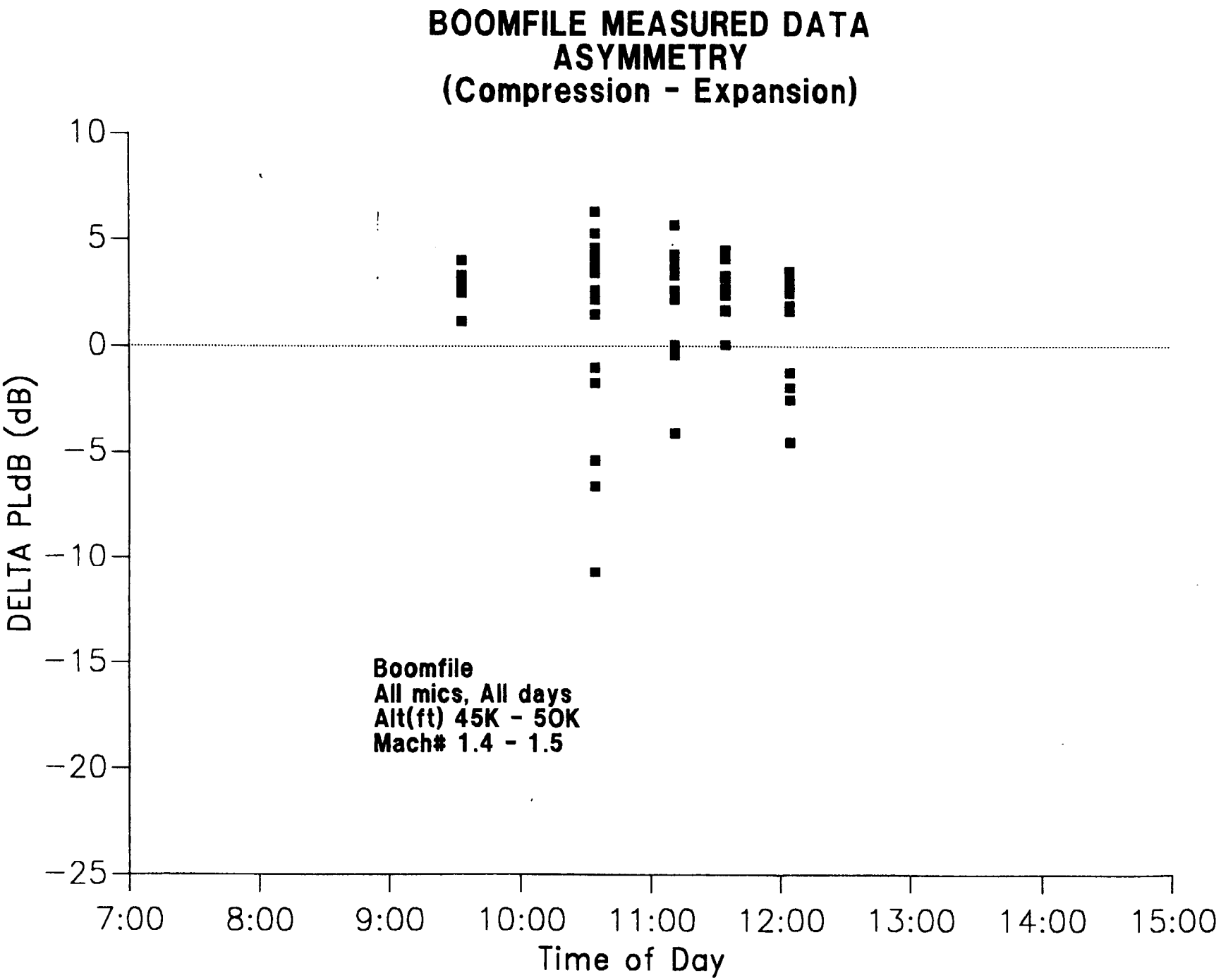

XB70 MEASURED DATA
ASYMMERTY
(COMPRESSION – EXPANSION)
AIRCRAFT TYPE ALL
MACH NUMBER RANGE 1.17 TO 1.55
ALTITUDE RANGE (FT) 30100.0 TO 40000.0
SIDELINE DISTANCE RANGE (FT) 0.0 TO 50000.0
TIME OF FLIGHT (HOURS FROM MIDNIGHT) 6.0 TO 17.0
□ = MEASURED
DELTA PLdB (DB)
TIME (HOURS)
10
7.5
5
2.5
0
-2.5
-5
-7.5
-10
6
7
8
9
10
11
12
13
14
15
16
17


BOOMFILE MEASURED DATA
ASYMMETRY
(Compression - Expansion)
10
5
0
−5
−10
−15
−20
−25
Delta PLdB (dB) C10
Boomfile
All mics, All days
Alt(ft) 10K - 15K
Mach# 1.1 - 1.2
7:00
8:00
9:00
10:00
11:00
12:00
13:00
14:00
15:00
Time of Day


BOOMFILE MEASURED DATA
ASYMMETRY
(Compression - Expansion)
DELTA PLdB (dB)
C11
10
5
0
−5
−10
−15
−20
−25
Boomfile
All mics, All days
Alt(ft) 15K - 20K
Mach# 1.1 - 1.2
7:00
8:00
9:00
10:00
11:00
12:00
13:00
14:00
15:00
Time of Day


BOOMFILE MEASURED DATA
ASYMMETRY
(Compression - Expansion)
DELTA PLdB (dB) C12
10
5
0
−5
−10
−15
−20
−25
Boomfile
All mics, All days
Alt(ft) 25K - 30K
Mach# 1.2 - 1.3
7:00
8:00
9:00
10:00
11:00
12:00
13:00
14:00
15:00
Time of Day


BOOMFILE MEASURED DATA
ASYMMETRY
(Compression - Expansion)
DELTA PLdB (dB) C13
10
5
0
−5
−10
−15
−20
−25
Boomfile
All mics, All days
Alt(ft) 30K - 35K
Mach# 1.2 - 1.3
7:00
8:00
9:00
10:00
11:00
12:00
13:00
14:00
15:00
Time of Day


BOOMFILE MEASURED DATA
ASYMMETRY
(Compression - Expansion)
DELTA PLdB (dB)
C14
10
5
0
−5
−10
−15
−20
−25
Boomfile
All mics, All days
Alt(ft) 45K - 50K
Mach# 1.4 - 1.5
7:00
8:00
9:00
10:00
11:00
12:00
13:00
14:00
15:00
Time of Day

# APPENDIX D

## XB-70
## Equivalent
## Metrics

## XB-70 Database (Noise Metrics) Log Averaged Mean Value Of Each Microphone Cluster For Each Flight

| FILE | TIME | POINTS | AVG Pmax (PSF) | AVG Pmin (PSF) | LAVG Lpk (dB) | LAVG ESEL (dB) | LAVG ASEL (dB) | LAVG CSEL (dB) | LAVG PLDB (dB) | Sideline (Feet) | DFBR (Feet) | Altitude (Feet) | Mach # |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 11.23 | 6 | 1.692 | -1.317 | 132.3 | 120.2 | 85.5 | 105.7 | 101.0 | 21349.6 | 38871.3 | 50500.0 | 1.83 |
| 2 | 12.22 | 6 | 3.697 | -2.717 | 139.0 | 126.0 | 95.0 | 113.3 | 110.8 | 0.0 | 34988.7 | 48000.0 | 1.80 |
| 3 | 8.00 | 3 | 1.597 | -1.134 | 131.7 | 121.0 | 86.6 | 103.6 | 100.4 | 37535.6 | 33313.7 | 66000.0 | 2.60 |
| 3 | 8.00 | 3 | 1.567 | -1.057 | 131.6 | 120.0 | 85.5 | 104.3 | 100.5 | 3636.3 | 28950.3 | 66000.0 | 2.60 |
| 4 | 7.53 | 6 | 2.578 | -2.234 | 135.9 | 125.1 | 94.5 | 110.0 | 109.0 | 5791.6 | 58107.0 | 32000.0 | 1.23 |
| 5 | 7.67 | 3 | 2.110 | -2.021 | 134.1 | 124.0 | 92.1 | 108.7 | 106.5 | 29667.2 | 64346.6 | 42300.0 | 1.38 |
| 6 | 13.50 | 2 | 0.310 | -0.098 | 117.4 | 108.1 | 71.3 | 84.1 | 82.1 | 74248.0 | 109088.3 | 46000.0 | 1.40 |
| 7 | 11.98 | 3 | 2.120 | -1.922 | 134.1 | 123.3 | 85.4 | 106.3 | 100.7 | 42784.5 | 70516.5 | 42500.0 | 1.42 |
| 7 | 11.98 | 3 | 1.340 | -1.097 | 130.1 | 120.2 | 82.0 | 100.2 | 95.9 | 15315.4 | 51959.1 | 42500.0 | 1.42 |
| 8 | 12.42 | 3 | 3.047 | -2.667 | 137.3 | 126.0 | 95.8 | 111.2 | 110.2 | 9761.6 | 36090.2 | 33800.0 | 1.50 |
| 9 | 12.33 | 3 | 2.480 | -2.149 | 135.5 | 126.2 | 88.4 | 105.5 | 103.0 | 4129.4 | 43559.4 | 33000.0 | 1.35 |
| 10 | 12.72 | 3 | 3.720 | -3.090 | 139.1 | 127.2 | 97.9 | 113.4 | 113.1 | 4376.0 | 35616.1 | 31000.0 | 1.42 |
| 11 | 13.53 | 3 | 3.550 | -2.489 | 138.8 | 125.4 | 100.2 | 112.1 | 114.4 | 679.7 | 34421.8 | 34000.0 | 1.51 |
| 12 | 9.60 | 3 | 3.210 | -2.182 | 137.7 | 125.2 | 90.8 | 110.4 | 107.0 | 13179.9 | 33015.1 | 41000.0 | 1.76 |
| 13 | 10.45 | 6 | 0.285 | -0.211 | 116.7 | 107.2 | 74.9 | 90.2 | 86.8 | 61258.5 | 95298.9 | 50000.0 | 1.40 |
| 14 | 12.92 | 2 | 2.025 | -1.490 | 133.7 | 121.7 | 91.0 | 106.5 | 104.6 | 34303.9 | 44502.1 | 50500.0 | 1.80 |
| 15 | 11.08 | 3 | 1.000 | -0.864 | 127.6 | 117.2 | 80.0 | 99.5 | 94.8 | 32663.3 | 36965.6 | 41500.0 | 1.87 |
| 16 | 13.63 | 6 | 2.758 | -2.687 | 136.4 | 125.5 | 95.4 | 110.7 | 110.0 | 12614.5 | 38626.7 | 41500.0 | 1.61 |
| 17 | 10.17 | 6 | 1.285 | -0.791 | 129.8 | 118.2 | 82.6 | 101.6 | 97.3 | 62130.1 | 58816.5 | 53000.0 | 1.82 |
| 18 | 10.50 | 6 | 1.972 | -1.179 | 133.6 | 122.2 | 90.3 | 106.1 | 104.2 | 30107.7 | 34212.1 | 60000.0 | 2.31 |
| 19 | 10.67 | 6 | 1.833 | -1.270 | 132.9 | 121.1 | 88.2 | 105.3 | 102.1 | 36435.2 | 47650.3 | 54000.0 | 1.79 |
| 20 | 10.50 | 6 | 1.875 | -1.747 | 133.1 | 123.3 | 89.1 | 106.7 | 103.7 | 0.0 | 30380.0 | 65500.0 | 2.48 |
| 21 | 13.25 | 3 | 3.307 | -2.624 | 138.0 | 126.7 | 95.2 | 110.5 | 110.1 | 14098.4 | 31779.2 | 30500.0 | 1.55 |
| 21 | 14.00 | 3 | 3.000 | -3.692 | 137.2 | 128.1 | 94.4 | 111.3 | 109.5 | 44863.5 | 109830.6 | 38000.0 | 1.25 |
| 22 | 9.30 | 3 | 1.713 | -1.112 | 132.3 | 120.6 | 86.8 | 105.0 | 101.4 | 8382.3 | 39292.3 | 37000.0 | 1.50 |
| 22 | 10.47 | 3 | 3.007 | -2.774 | 137.1 | 126.5 | 95.8 | 111.2 | 110.3 | 31396.4 | 29518.4 | 70000.0 | 2.90 |
| 23 | 14.45 | 4 | 2.330 | -1.380 | 135.0 | 121.8 | 89.7 | 108.3 | 104.6 | 10303.2 | 26985.1 | 70000.0 | 2.92 |
| 24 | 10.33 | 1 | 1.260 | -1.089 | 129.6 | 119.4 | 84.3 | 102.6 | 98.6 | 42966.2 | 31445.0 | 69800.0 | 2.91 |
| 25 | 7.83 | 6 | 2.045 | -1.258 | 133.8 | 122.0 | 84.8 | 104.1 | 99.2 | 41697.9 | 45253.1 | 44900.0 | 1.80 |
| 26 | 10.30 | 6 | 1.992 | -1.726 | 133.6 | 123.5 | 89.0 | 106.9 | 103.4 | 12345.6 | 39728.2 | 66000.0 | 2.05 |
| 27 | 11.88 | 6 | 3.283 | -1.072 | 138.1 | 121.4 | 89.5 | 108.7 | 105.6 | 4336.5 | 33788.5 | 45100.0 | 1.78 |
| 28 | 11.67 | 3 | 3.250 | -2.276 | 137.9 | 126.0 | 87.8 | 109.3 | 103.9 | 20803.9 | 35615.2 | 41000.0 | 1.75 |
| 28 | 11.67 | 6 | 3.592 | -2.578 | 138.7 | 127.0 | 91.7 | 110.4 | 107.5 | 1617.5 | 30478.8 | 42000.0 | 1.82 |
| 29 | 15.53 | 3 | 3.850 | -3.242 | 139.3 | 129.2 | 93.1 | 110.8 | 108.4 | 6830.5 | 107588.3 | 41000.0 | 1.17 |
| 29 | 15.53 | 6 | 3.183 | -2.921 | 137.7 | 127.3 | 90.8 | 110.8 | 107.0 | 11649.8 | 110456.8 | 40000.0 | 1.17 |
| 30 | 10.50 | 3 | 1.820 | -1.501 | 132.8 | 122.2 | 84.7 | 105.4 | 100.1 | 3765.7 | 29191.4 | 68500.0 | 2.66 |
| 30 | 10.50 | 6 | 1.720 | -1.301 | 132.3 | 121.9 | 82.2 | 104.2 | 98.0 | 18175.1 | 30479.4 | 69300.0 | 2.66 |
| 31 | 10.25 | 3 | 1.863 | -1.291 | 133.0 | 121.5 | 87.6 | 105.3 | 102.0 | 44358.2 | 32813.6 | 66000.0 | 2.74 |
| 31 | 10.25 | 4 | 1.592 | -1.188 | 131.6 | 120.5 | 84.4 | 104.1 | 99.7 | 32738.2 | 30366.6 | 66000.0 | 2.74 |
| 32 | 12.17 | 3 | 2.130 | -1.576 | 134.2 | 122.7 | 90.2 | 106.9 | 104.7 | 9039.8 | 27905.4 | 70300.0 | 2.84 |
| 32 | 12.17 | 6 | 1.738 | -1.486 | 132.4 | 122.4 | 84.3 | 104.7 | 99.5 | 3855.9 | 27717.3 | 70300.0 | 2.84 |
| 33 | 10.88 | 3 | 2.967 | -2.522 | 137.1 | 125.8 | 90.7 | 110.6 | 106.7 | 30342.2 | 43183.1 | 51000.0 | 1.80 |

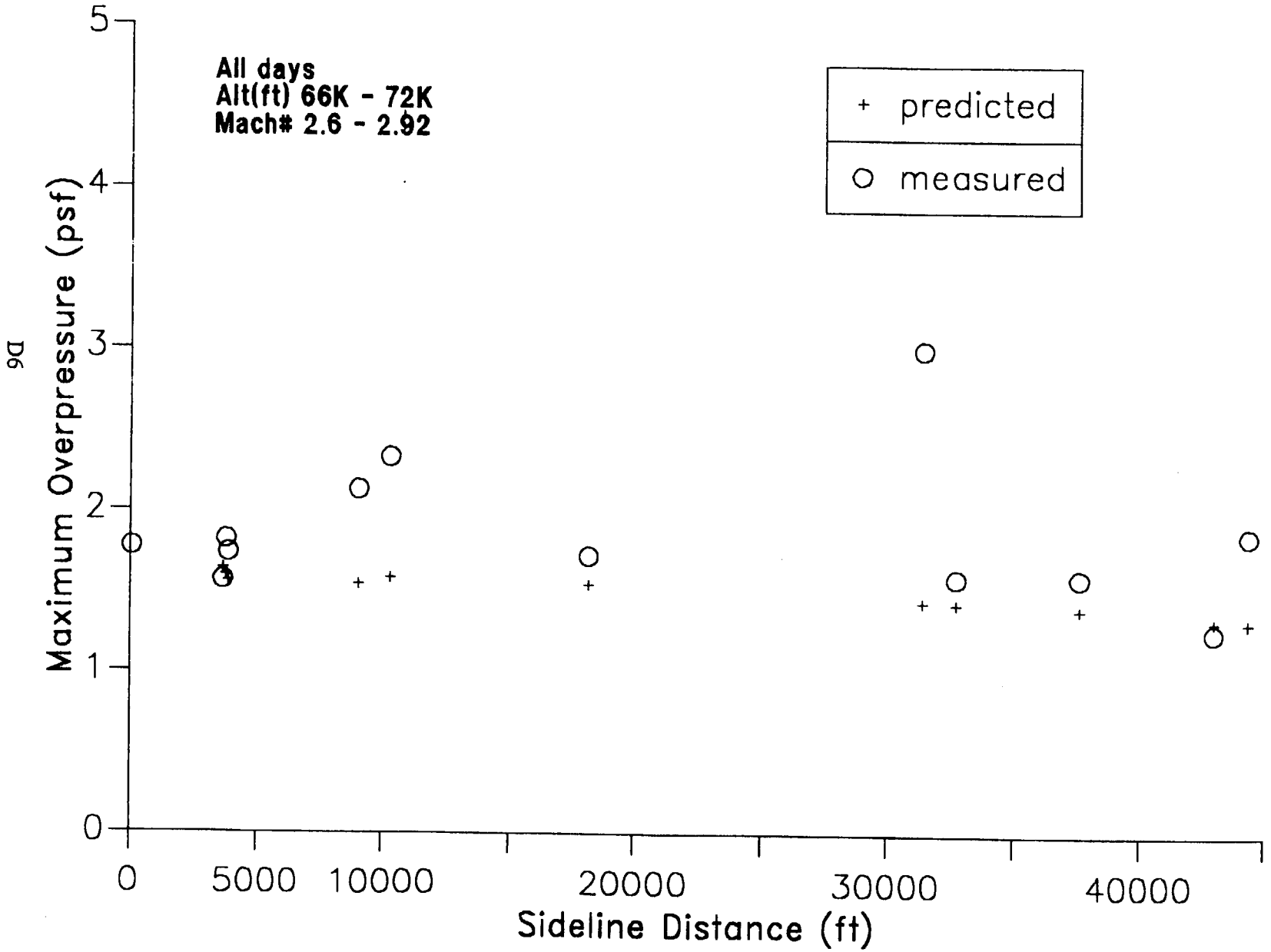
| | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 33 | 10.88 | 6 | 2.087 | -1.411 | 134.0 | 121.8 | 88.7 | 106.3 | 102.7 | 1933.7 | 37020.1 | 51000.0 | 1.80 |
| 34 | 11.62 | 3 | 3.000 | -2.753 | 137.2 | 126.3 | 88.2 | 108.4 | 104.0 | 45073.2 | 59818.1 | 44000.0 | 1.56 |
| 34 | 11.62 | 6 | 1.928 | -1.100 | 133.3 | 120.0 | 81.0 | 102.1 | 95.8 | 12424.4 | 42893.0 | 44000.0 | 1.56 |
| 34 | 11.87 | 3 | 1.600 | -1.138 | 131.7 | 121.0 | 89.0 | 98.9 | 99.2 | 49614.0 | 83739.4 | 36400.0 | 1.36 |
| 34 | 11.87 | 6 | 1.308 | -0.867 | 130.0 | 118.2 | 77.6 | 98.6 | 91.3 | 46177.4 | 79606.8 | 36400.0 | 1.36 |
| 35 | 11.63 | 8 | 2.840 | -2.366 | 136.7 | 126.3 | 83.4 | 106.4 | 99.6 | 3011.4 | 48586.6 | 52000.0 | 1.55 |
| 36 | 16.77 | 6 | 1.675 | -1.488 | 132.2 | 122.2 | 83.1 | 102.7 | 98.0 | 29468.5 | 32027.1 | 53000.0 | 2.26 |
| 37 | 12.92 | 3 | 2.617 | -2.035 | 136.0 | 124.8 | 85.5 | 106.0 | 100.9 | 70589.5 | 51856.5 | 64000.0 | 2.20 |
| 37 | 12.92 | 5 | 1.024 | -0.642 | 127.8 | 116.2 | 77.0 | 98.2 | 92.3 | 14429.3 | 35416.2 | 64000.0 | 2.20 |
| 38 | 10.32 | 3 | 2.227 | -2.286 | 134.5 | 124.7 | 94.3 | 108.4 | 108.6 | 3744.8 | 64628.0 | 44300.0 | 1.30 |
| 39 | 12.67 | 7 | 2.211 | -1.768 | 134.7 | 122.1 | 95.5 | 109.8 | 110.2 | 25729.4 | 86275.2 | 39800.0 | 1.24 |
| 40 | 0.00 | 15 | 2.573 | -2.021 | 135.9 | 124.7 | 90.1 | 108.3 | 105.2 | 25729.4 | 86275.2 | 39800.0 | 1.24 |
| 41 | 0.00 | 16 | 1.773 | -1.525 | 132.6 | 122.4 | 88.7 | 105.6 | 103.1 | 6000.0 | 0.0 | 52900.0 | 1.81 |
| 42 | 0.00 | 16 | 3.642 | -3.476 | 138.9 | 127.4 | 97.3 | 114.2 | 112.9 | 70.0 | 0.0 | 72000.0 | 2.83 |

## XB-70 Database (Noise Metrics) Standard Deviation Of Each Microphone Cluster For Each Flight

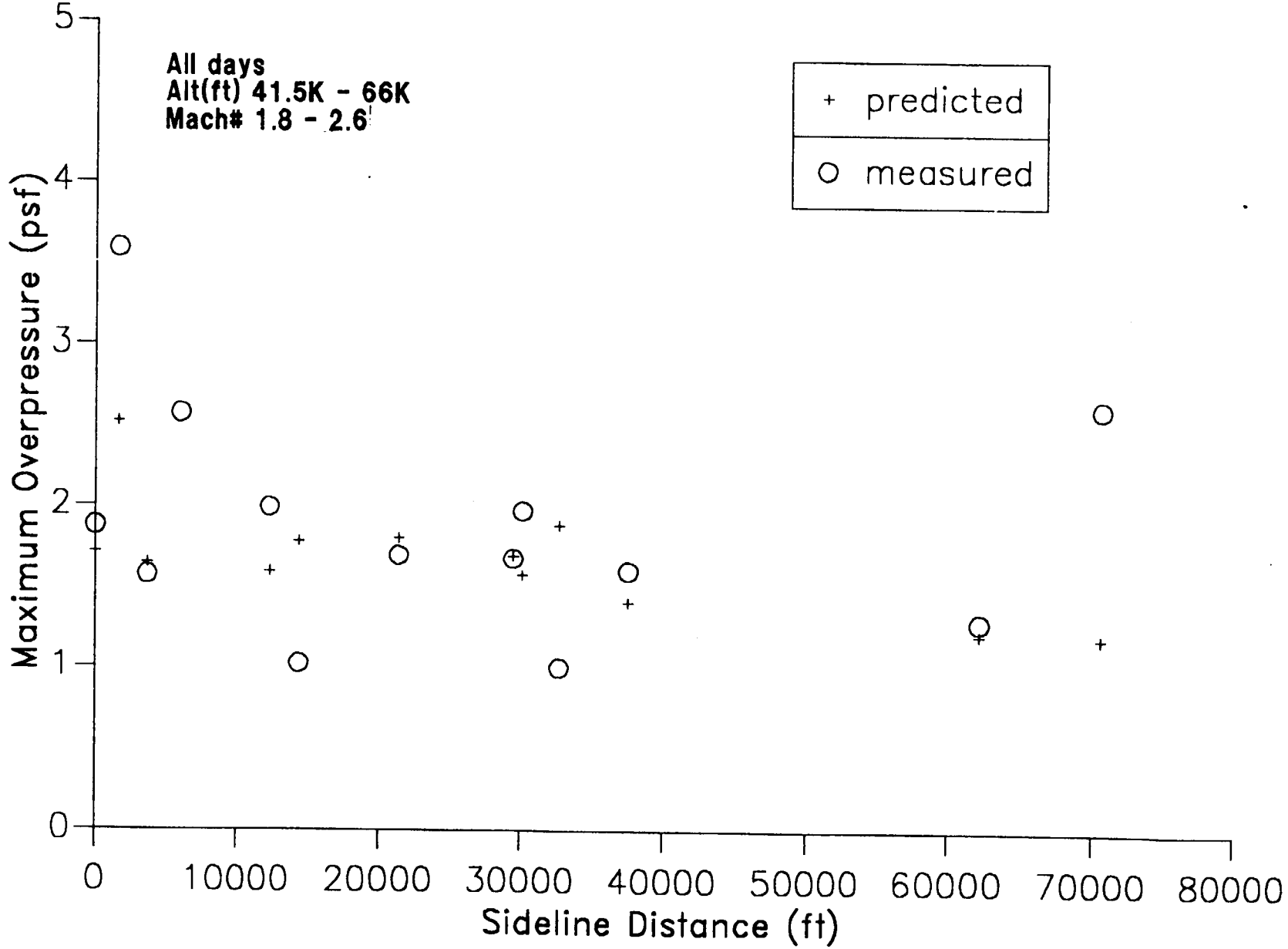
| FILE | TIME | POINTS | STDV Pmax (PSF) | STDV Pmin (PSF) | STDV Lpk (dB) | STDV ESEL (dB) | STDV ASEL (dB) | STDV CSEL (dB) | STDV PLDB (dB) | Sideline (Feet) | DFBR (Feet) | Altitude (Feet) | Mach # |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 11.23 | 6 | 0.293 | 0.212 | 1.595 | 1.394 | 1.555 | 1.475 | 1.623 | 21349.6 | 38871.3 | 50500.0 | 1.83 |
| 2 | 12.22 | 6 | 0.447 | 0.412 | 1.077 | 1.032 | 1.524 | 1.054 | 0.775 | 0.0 | 34988.7 | 48000.0 | 1.80 |
| 3 | 8.00 | 3 | 0.114 | 0.051 | 0.663 | 0.153 | 1.179 | 0.375 | 0.984 | 37535.6 | 33313.7 | 66000.0 | 2.60 |
| 3 | 8.00 | 3 | 0.275 | 0.188 | 1.651 | 1.677 | 2.573 | 1.498 | 2.042 | 3636.3 | 28950.3 | 66000.0 | 2.60 |
| 4 | 7.53 | 6 | 0.407 | 0.224 | 1.406 | 0.871 | 4.856 | 2.082 | 4.437 | 5791.6 | 58107.0 | 32000.0 | 1.23 |
| 5 | 7.67 | 3 | 0.096 | 0.080 | 0.415 | 0.204 | 4.549 | 0.752 | 2.815 | 29667.2 | 64346.6 | 42300.0 | 1.38 |
| 6 | 13.50 | 2 | 0.014 | 0.057 | 0.422 | 0.849 | 0.214 | 0.636 | 0.063 | 74248.0 | 109088.3 | 46000.0 | 1.40 |
| 7 | 11.98 | 3 | 0.036 | 0.043 | 0.114 | 0.088 | 1.877 | 0.260 | 1.457 | 42784.5 | 70516.5 | 42500.0 | 1.42 |
| 7 | 11.98 | 3 | 0.075 | 0.071 | 0.451 | 0.114 | 2.883 | 1.472 | 1.868 | 15315.4 | 51959.1 | 42500.0 | 1.42 |
| 8 | 12.42 | 3 | 0.235 | 0.040 | 0.652 | 0.346 | 2.593 | 0.903 | 2.376 | 9761.6 | 36090.2 | 33800.0 | 1.50 |
| 9 | 12.33 | 3 | 0.096 | 0.123 | 0.375 | 0.781 | 2.457 | 0.438 | 1.682 | 4129.4 | 43559.4 | 33000.0 | 1.35 |
| 10 | 12.72 | 3 | 0.659 | 0.371 | 1.608 | 0.839 | 3.694 | 1.761 | 3.062 | 4376.0 | 35616.1 | 31000.0 | 1.42 |
| 11 | 13.53 | 3 | 0.786 | 0.019 | 2.065 | 0.153 | 4.909 | 2.055 | 4.554 | 679.7 | 34421.8 | 34000.0 | 1.51 |
| 12 | 9.60 | 3 | 0.130 | 0.068 | 0.350 | 0.114 | 1.528 | 0.169 | 0.777 | 13179.9 | 33015.1 | 41000.0 | 1.76 |
| 13 | 10.45 | 6 | 0.037 | 0.051 | 1.201 | 1.539 | 1.989 | 1.574 | 1.801 | 61258.5 | 95298.9 | 50000.0 | 1.40 |
| 14 | 12.92 | 2 | 0.106 | 0.087 | 0.424 | 0.636 | 0.707 | 0.063 | 0.494 | 34303.9 | 44502.1 | 50500.0 | 1.80 |
| 15 | 11.08 | 3 | 0.000 | 0.059 | 0.051 | 0.682 | 3.592 | 0.642 | 2.627 | 32663.3 | 36965.6 | 41500.0 | 1.87 |
| 16 | 13.63 | 6 | 0.226 | 0.108 | 0.698 | 0.382 | 3.673 | 1.222 | 3.255 | 12614.5 | 38626.7 | 41500.0 | 1.61 |
| 17 | 10.17 | 6 | 0.075 | 0.057 | 0.487 | 0.233 | 2.509 | 0.516 | 1.851 | 62130.1 | 58816.5 | 53000.0 | 1.82 |
| 18 | 10.50 | 6 | 0.266 | 0.160 | 1.121 | 1.192 | 3.282 | 1.367 | 2.696 | 30107.7 | 34212.1 | 60000.0 | 2.31 |
| 19 | 10.67 | 6 | 0.062 | 0.083 | 0.306 | 0.403 | 1.822 | 0.541 | 1.291 | 36435.2 | 47650.3 | 54000.0 | 1.79 |
| 20 | 10.50 | 6 | 0.129 | 0.151 | 0.645 | 0.602 | 2.887 | 0.783 | 2.036 | 0.0 | 30380.0 | 65500.0 | 2.48 |
| 21 | 13.25 | 3 | 0.238 | 0.231 | 0.606 | 0.210 | 3.387 | 1.097 | 2.873 | 14098.4 | 31779.2 | 30500.0 | 1.55 |
| 21 | 14.00 | 3 | 0.185 | 0.321 | 0.503 | 0.436 | 3.717 | 1.494 | 3.338 | 44863.5 | 109830.6 | 38000.0 | 1.25 |
| 22 | 9.30 | 3 | 0.148 | 0.232 | 0.777 | 1.873 | 0.953 | 1.561 | 0.908 | 8382.3 | 39292.3 | 37000.0 | 1.50 |
| 22 | 10.47 | 3 | 0.060 | 0.232 | 0.144 | 0.284 | 2.008 | 0.348 | 1.649 | 31396.4 | 29518.4 | 70000.0 | 2.90 |
| 23 | 14.45 | 4 | 0.084 | 0.079 | 0.323 | 0.418 | 2.714 | 0.063 | 1.477 | 10303.2 | 26985.1 | 70000.0 | 2.92 |
| 24 | 10.33 | 1 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 42966.2 | 31445.0 | 69800.0 | 2.91 |
| 25 | 7.83 | 6 | 0.082 | 0.087 | 0.316 | 0.445 | 4.289 | 1.060 | 3.555 | 41697.9 | 45253.1 | 44900.0 | 1.80 |
| 26 | 10.30 | 6 | 0.153 | 0.286 | 0.669 | 0.937 | 2.711 | 0.880 | 2.043 | 12345.6 | 39728.2 | 66000.0 | 2.05 |
| 27 | 11.88 | 6 | 0.601 | 0.070 | 1.581 | 0.532 | 2.185 | 1.647 | 2.715 | 4336.5 | 33788.5 | 45100.0 | 1.78 |
| 28 | 11.67 | 3 | 0.312 | 0.105 | 0.888 | 0.204 | 0.750 | 1.251 | 0.359 | 20803.9 | 35615.2 | 41000.0 | 1.75 |
| 28 | 11.67 | 6 | 0.357 | 0.085 | 0.870 | 0.339 | 1.818 | 0.912 | 1.570 | 1617.5 | 30478.8 | 42000.0 | 1.82 |
| 29 | 15.53 | 3 | 0.135 | 0.143 | 0.293 | 0.051 | 0.693 | 1.332 | 1.277 | 6830.5 | 107588.3 | 41000.0 | 1.17 |
| 29 | 15.53 | 6 | 0.266 | 0.193 | 0.729 | 0.431 | 2.315 | 0.435 | 1.426 | 11649.8 | 110456.8 | 40000.0 | 1.17 |
| 30 | 10.50 | 3 | 0.082 | 0.078 | 0.361 | 0.210 | 0.984 | 0.855 | 0.907 | 3765.7 | 29191.4 | 68500.0 | 2.66 |
| 30 | 10.50 | 6 | 0.103 | 0.114 | 0.506 | 0.737 | 1.319 | 0.537 | 0.686 | 18175.1 | 30479.4 | 69300.0 | 2.66 |
| 31 | 10.25 | 3 | 0.143 | 0.076 | 0.667 | 0.306 | 4.085 | 0.951 | 3.126 | 44358.2 | 32813.6 | 66000.0 | 2.74 |
| 31 | 10.25 | 4 | 0.078 | 0.052 | 0.445 | 0.331 | 1.547 | 0.451 | 1.282 | 32738.2 | 30366.6 | 66000.0 | 2.74 |
| 32 | 12.17 | 3 | 0.191 | 0.037 | 0.808 | 0.198 | 5.243 | 1.068 | 4.165 | 9039.8 | 27905.4 | 70300.0 | 2.84 |
| 32 | 12.17 | 6 | 0.107 | 0.187 | 0.534 | 0.492 | 3.135 | 0.448 | 2.211 | 3855.9 | 27717.3 | 70300.0 | 2.84 |
| 33 | 10.88 | 3 | 0.161 | 0.027 | 0.492 | 0.153 | 1.652 | 0.350 | 0.363 | 30342.2 | 43183.1 | 51000.0 | 1.80 |

| | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 33 | 10.88 | 6 | 0.038 | 0.154 | 0.158 | 1.056 | 2.089 | 1.125 | 0.805 | 1933.7 | 37020.1 | 51000.0 | 1.80 |
| 34 | 11.62 | 3 | 0.312 | 0.150 | 0.888 | 0.633 | 3.002 | 2.055 | 3.436 | 45073.2 | 59818.1 | 44000.0 | 1.56 |
| 34 | 11.62 | 6 | 0.192 | 0.097 | 0.928 | 0.472 | 1.372 | 0.562 | 0.935 | 12424.4 | 42893.0 | 44000.0 | 1.56 |
| 34 | 11.87 | 3 | 0.050 | 0.085 | 0.250 | 0.702 | 9.307 | 0.402 | 5.755 | 49614.0 | 83739.4 | 36400.0 | 1.36 |
| 34 | 11.87 | 6 | 0.116 | 0.070 | 0.771 | 0.525 | 1.842 | 1.147 | 2.097 | 46177.4 | 79606.8 | 36400.0 | 1.36 |
| 35 | 11.63 | 8 | 0.171 | 0.198 | 0.496 | 0.714 | 1.385 | 1.566 | 1.775 | 3011.4 | 48586.6 | 52000.0 | 1.55 |
| 36 | 16.77 | 6 | 0.296 | 0.250 | 1.647 | 1.592 | 2.059 | 1.915 | 2.294 | 29468.5 | 32027.1 | 53000.0 | 2.26 |
| 37 | 12.92 | 3 | 0.208 | 0.124 | 0.677 | 0.402 | 1.305 | 2.023 | 2.285 | 70589.5 | 51856.5 | 64000.0 | 2.20 |
| 37 | 12.92 | 5 | 0.127 | 0.029 | 1.074 | 0.420 | 1.159 | 1.886 | 1.779 | 14429.3 | 35416.2 | 64000.0 | 2.20 |
| 38 | 10.32 | 3 | 0.097 | 0.038 | 0.405 | 0.270 | 4.779 | 0.458 | 3.656 | 3744.8 | 64628.0 | 44300.0 | 1.30 |
| 39 | 12.67 | 7 | 0.520 | 0.209 | 1.973 | 0.785 | 4.854 | 2.581 | 4.760 | 25729.4 | 86275.2 | 39800.0 | 1.24 |
| 40 | 0.00 | 15 | 0.359 | 0.252 | 1.225 | 0.883 | 2.616 | 1.684 | 2.534 | 25729.4 | 86275.2 | 39800.0 | 1.24 |
| 41 | 0.00 | 16 | 0.149 | 0.073 | 0.700 | 0.375 | 2.785 | 1.245 | 2.532 | 6000.0 | 0.0 | 52900.0 | 1.81 |
| 42 | 0.00 | 16 | 0.468 | 0.162 | 1.121 | 0.375 | 4.227 | 2.186 | 4.003 | 70.0 | 0.0 | 72000.0 | 2.83 |

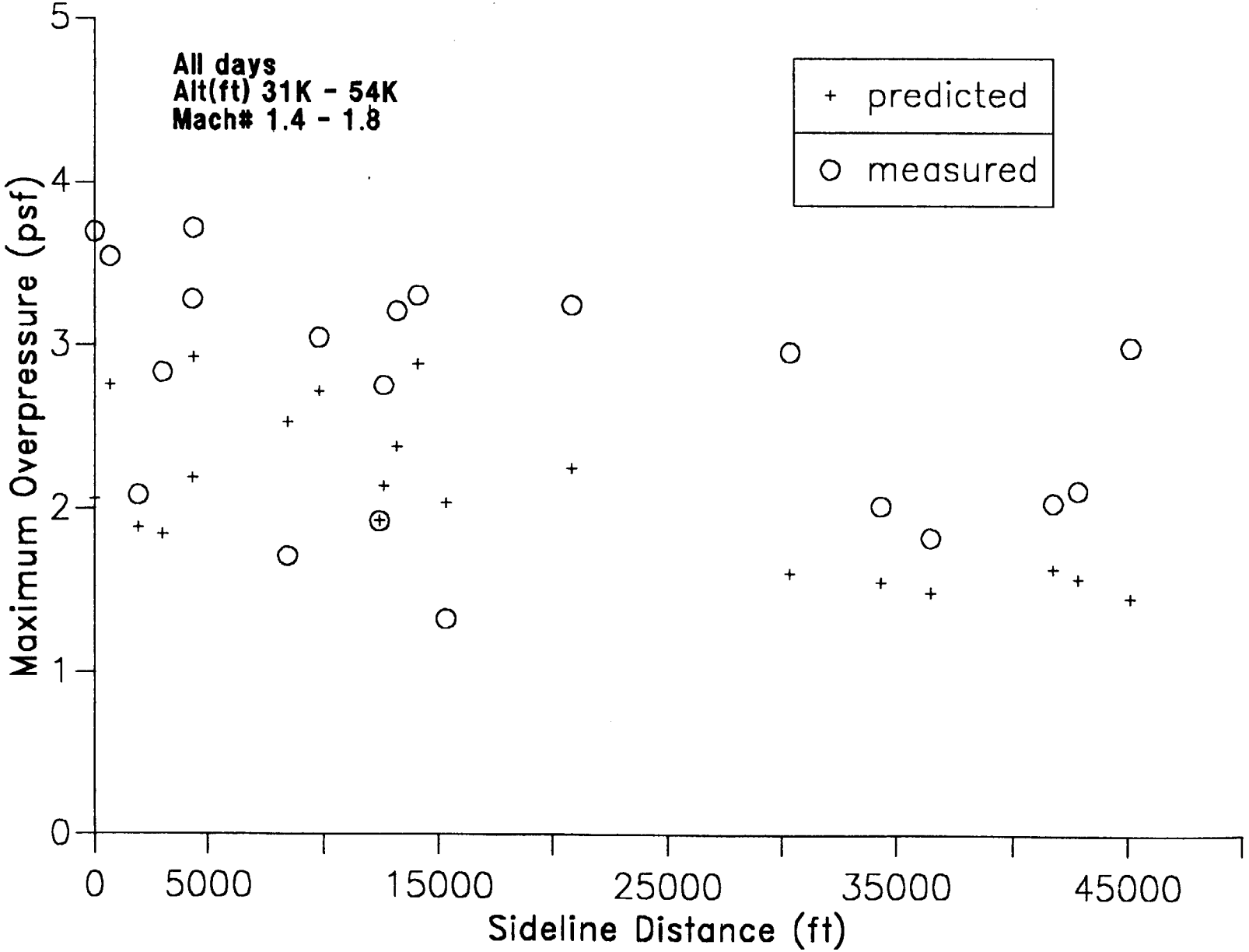
# XB-70 MEASURED DATA
# vs
# MDBOOM CALCULATED DATA

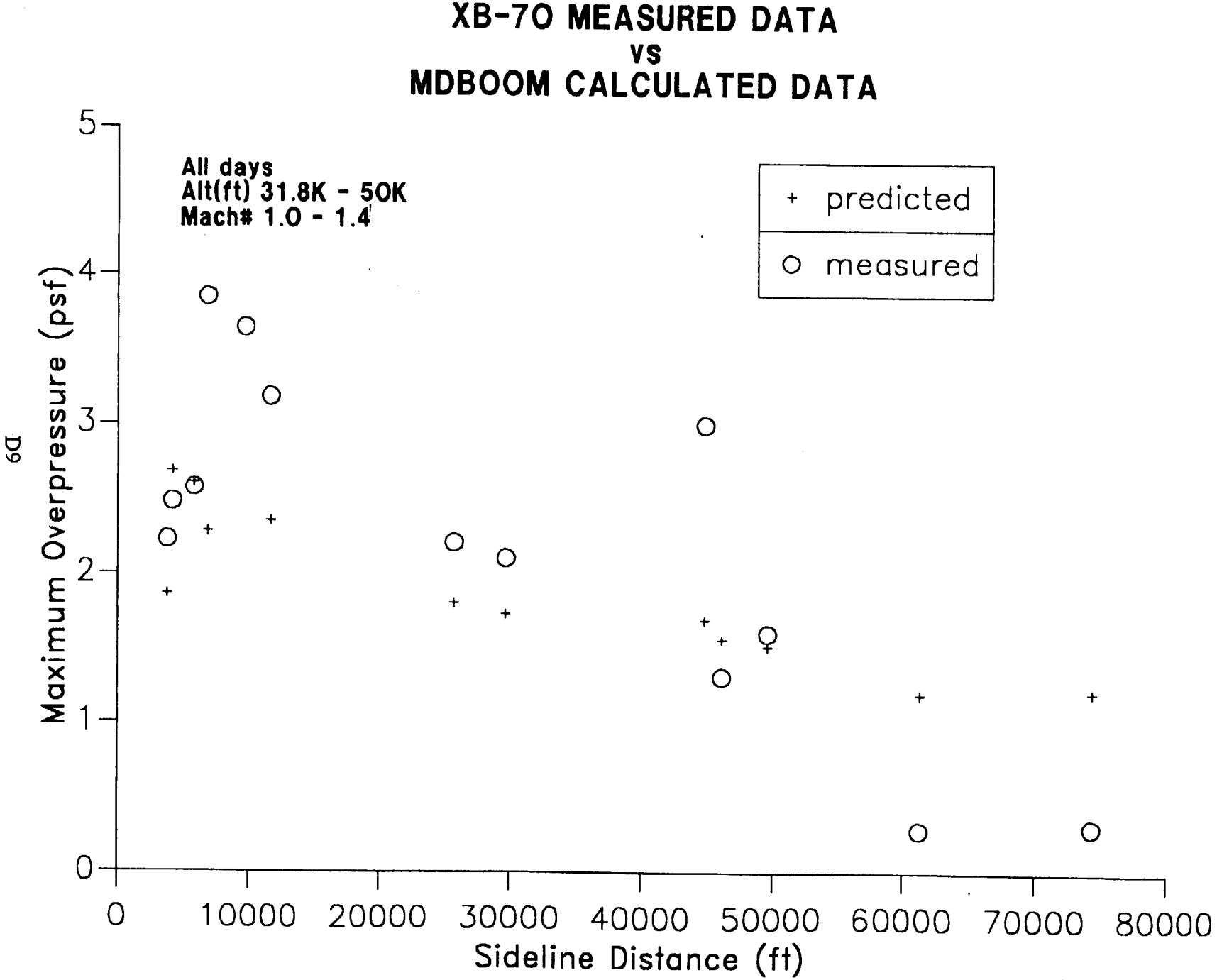


# XB-70 MEASURED DATA
# vs
# MDBOOM CALCULATED DATA

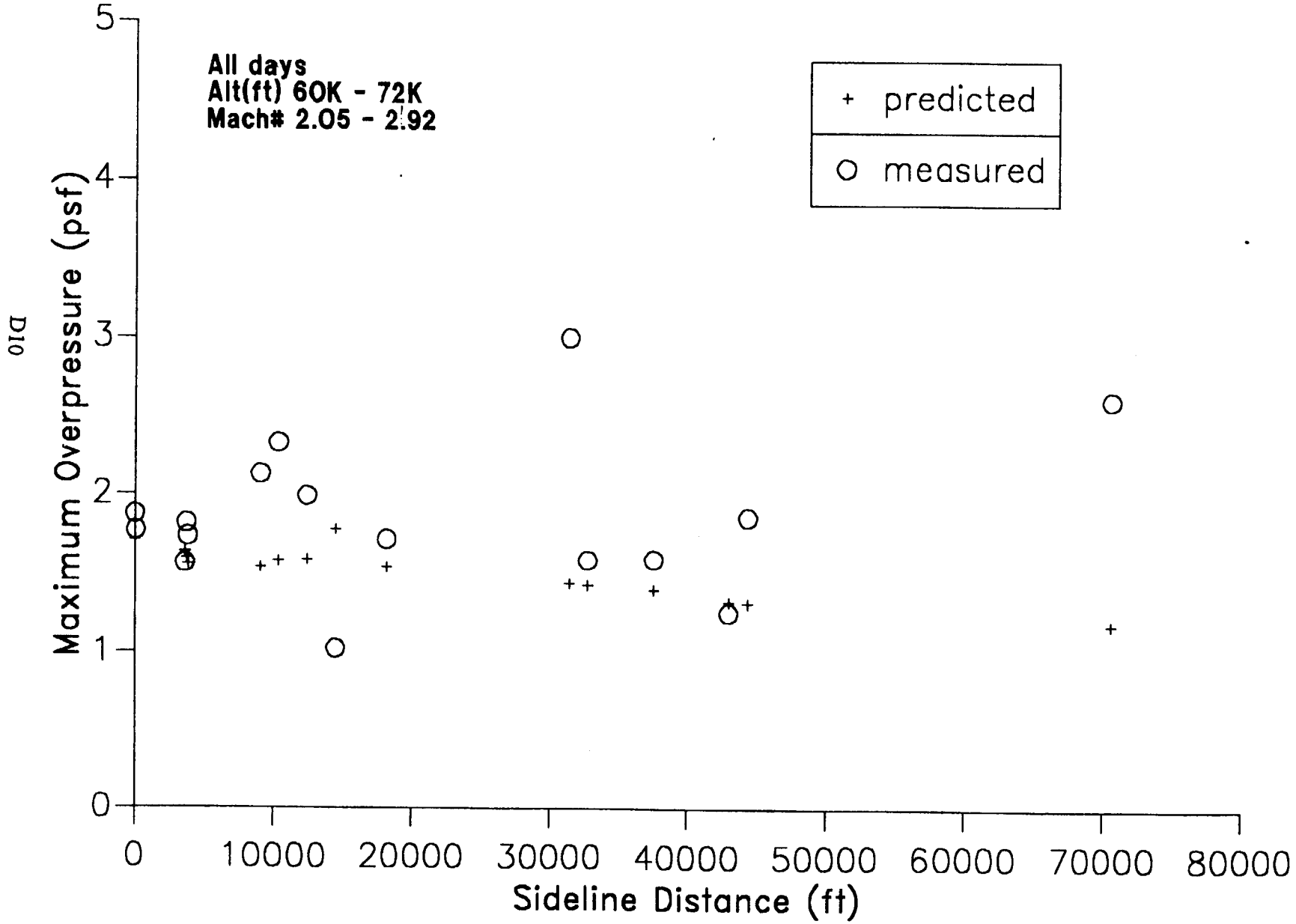


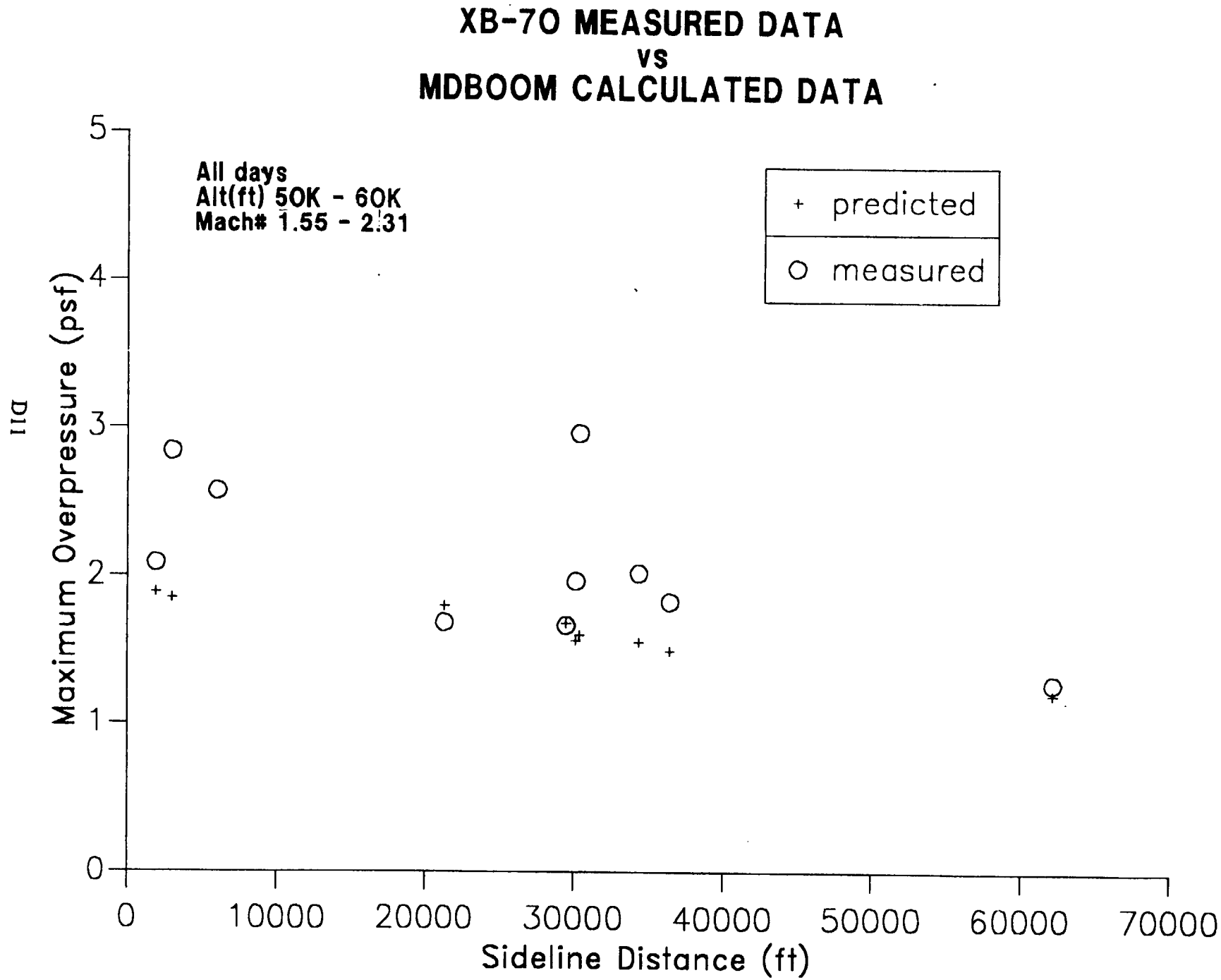
# XB-70 MEASURED DATA
# vs
# MDBOOM CALCULATED DATA



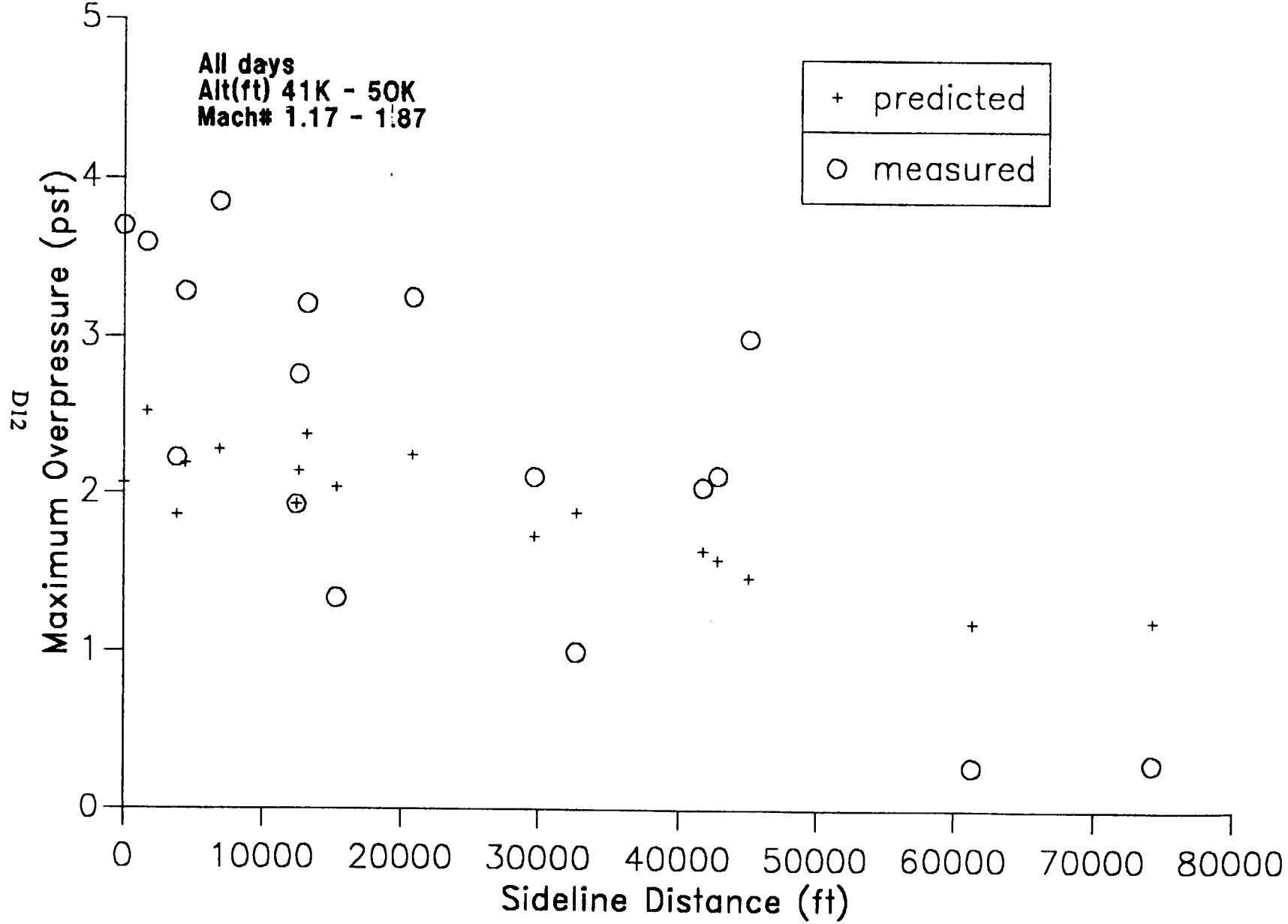

XB-70 MEASURED DATA
vs
MDBOOM CALCULATED DATA
All days
Alt(ft) 31.8K - 50K
Mach# 1.0 - 1.4
predicted
measured
Maximum Overpressure (psf)
Sideline Distance (ft)
0
1
2
3
4
5
0
10000
20000
30000
40000
50000
60000
70000
80000

# XB-70 MEASURED DATA
# vs
# MDBOOM CALCULATED DATA

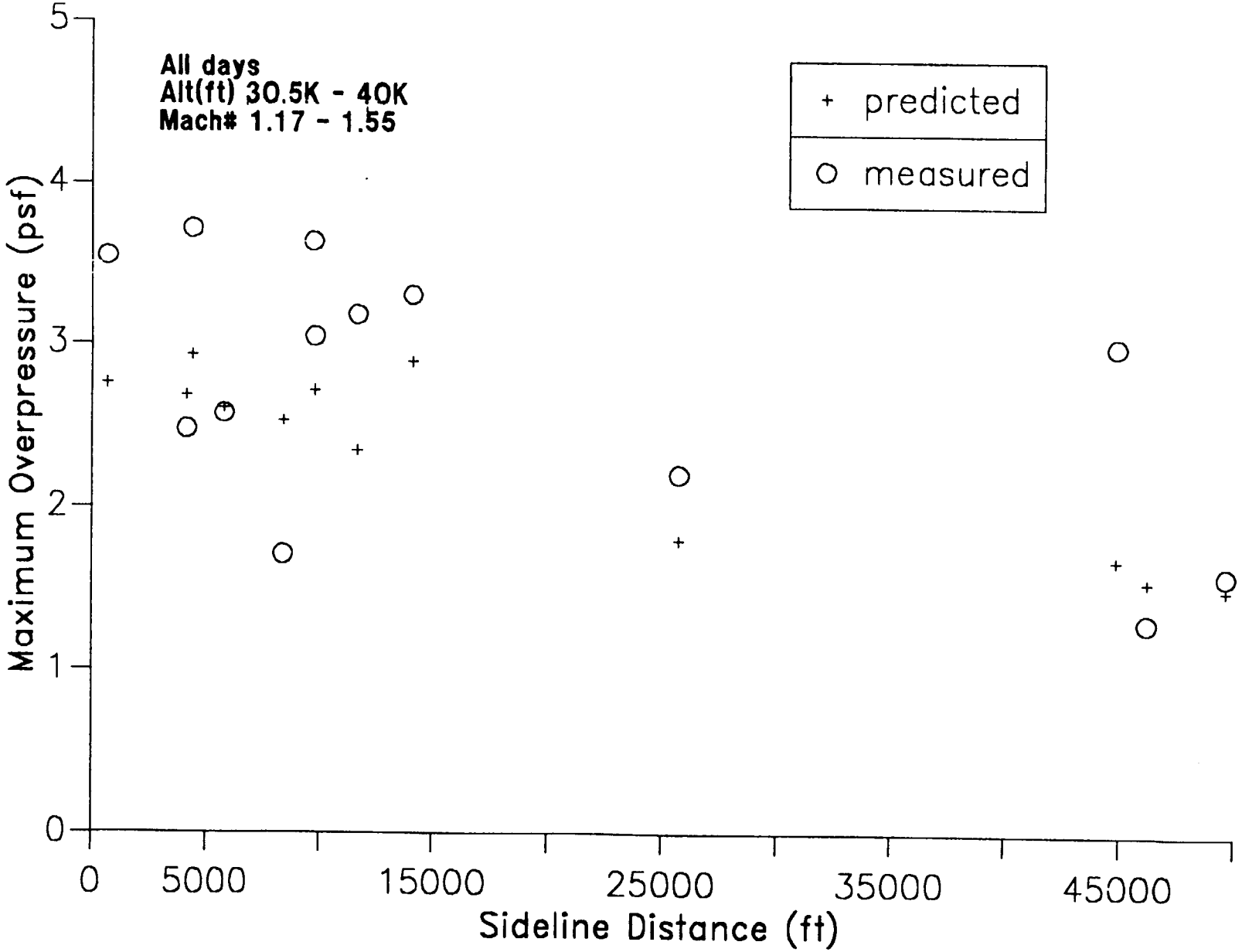


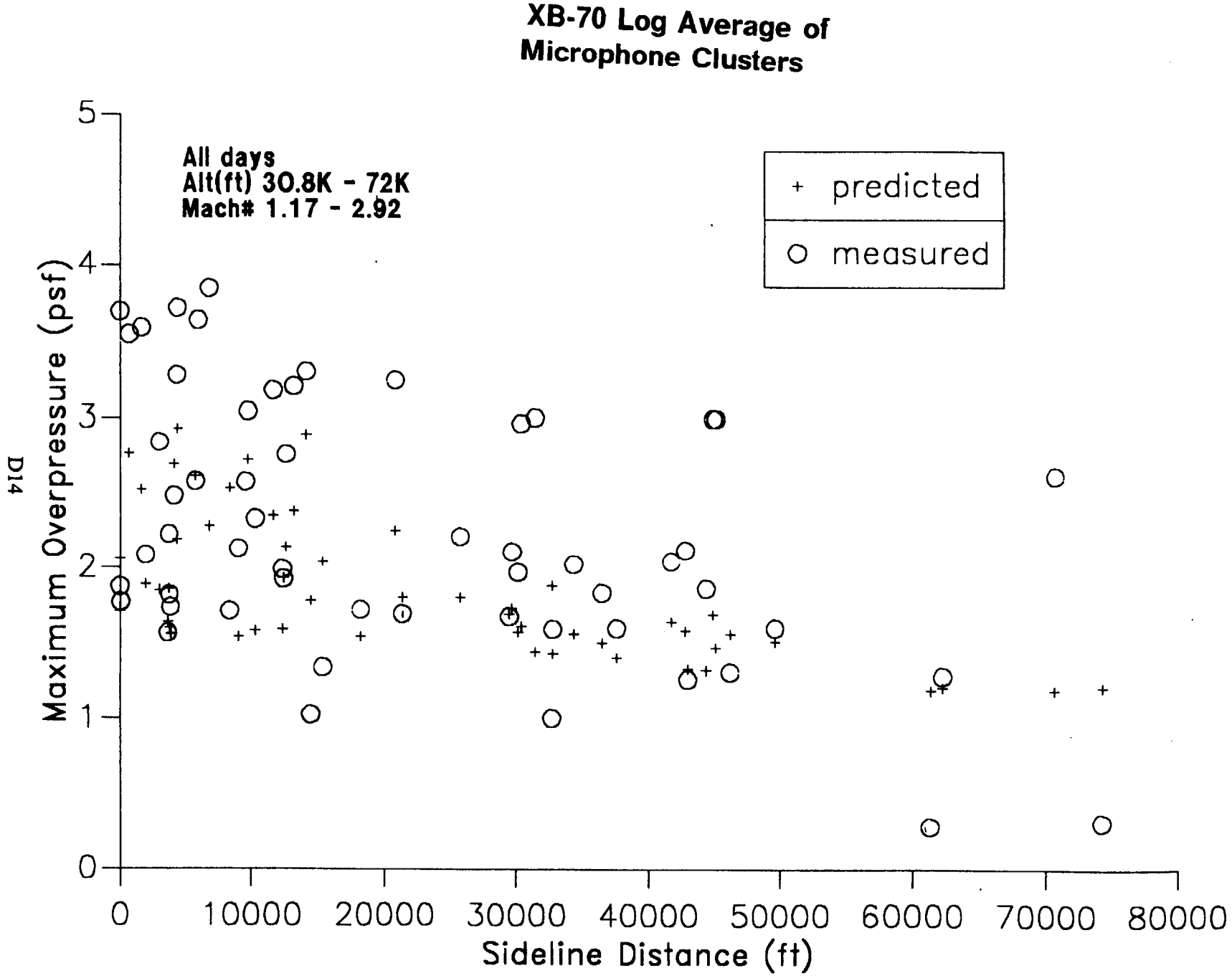

XB-70 MEASURED DATA
vs
MDBOOM CALCULATED DATA
All days
Alt(ft) 50K - 60K
Mach# 1.55 - 2.31
predicted
measured
Maximum Overpressure (psf)
Sideline Distance (ft)
0
1
2
3
4
5
0
10000
20000
30000
40000
50000
60000
70000

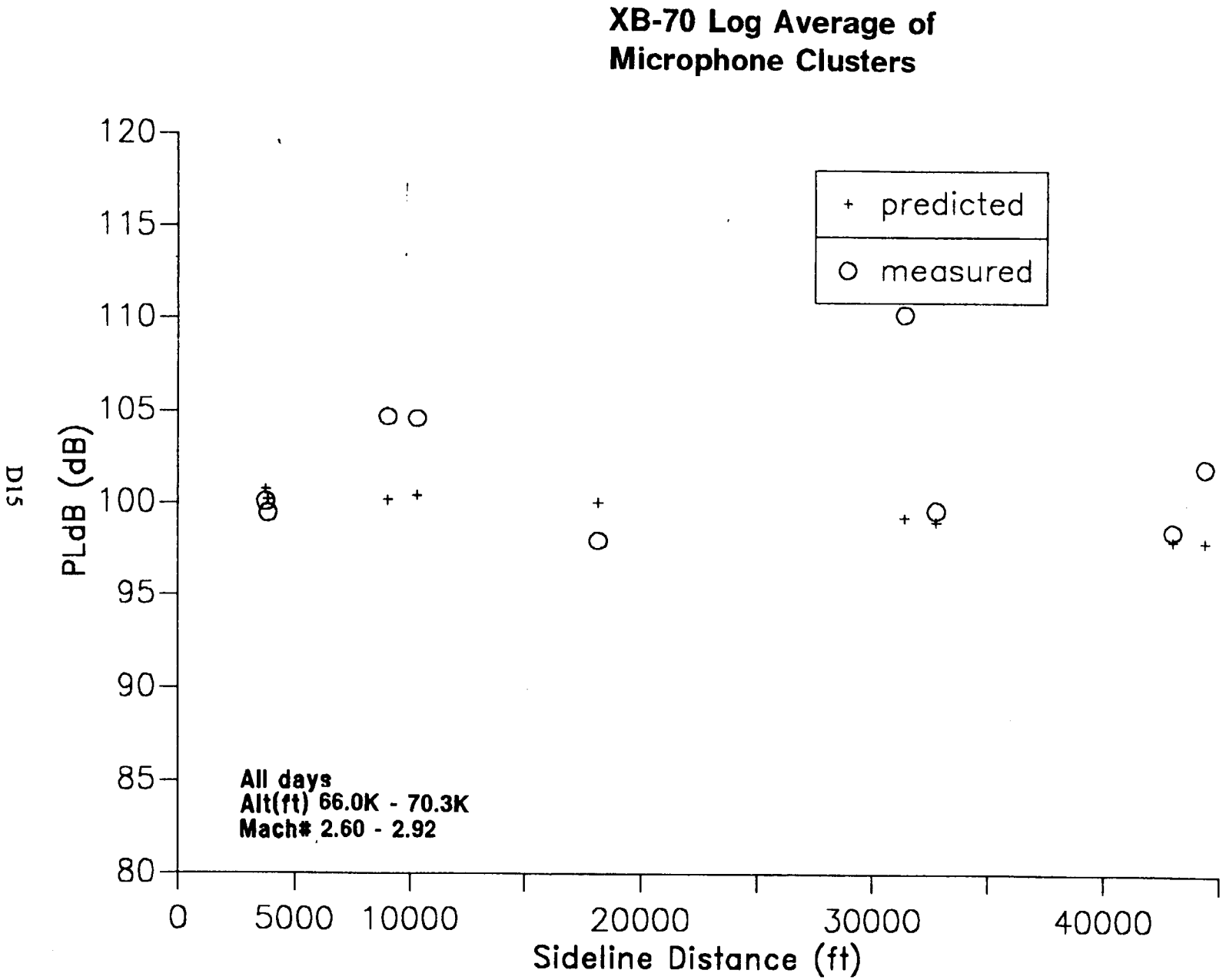
# XB-70 MEASURED DATA
# vs
# MDBOOM CALCULATED DATA

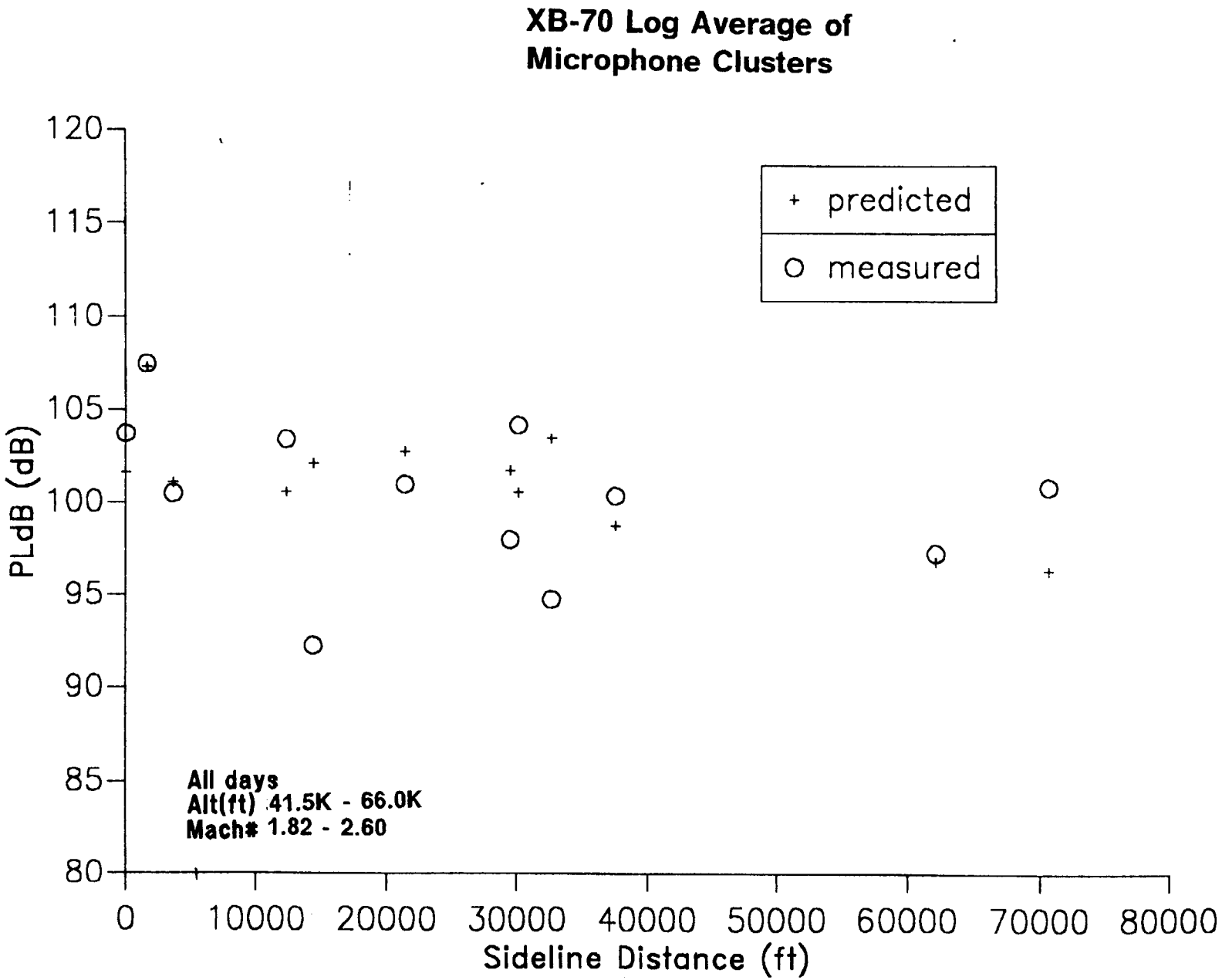


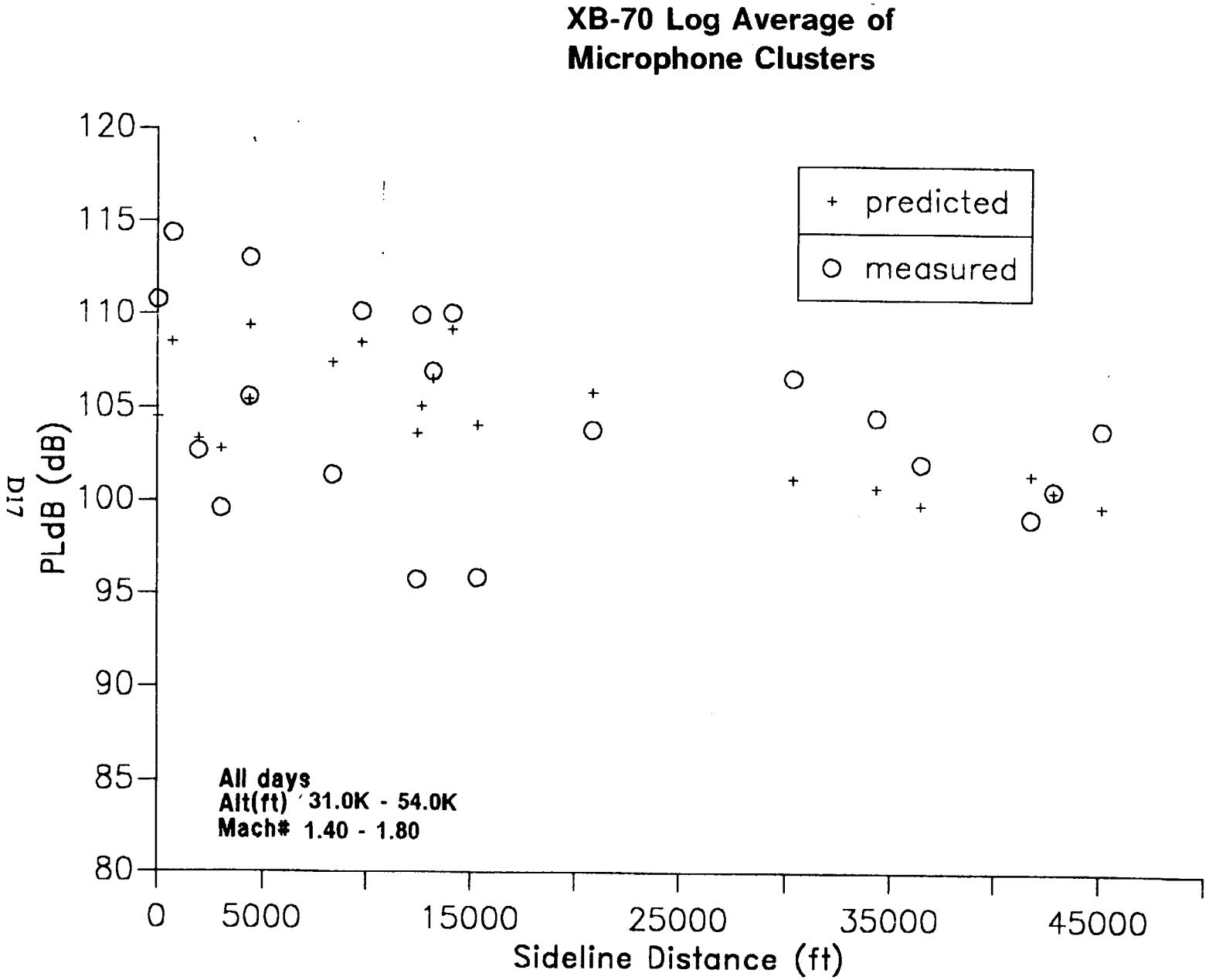
# XB-70 MEASURED DATA
# vs
# MDBOOM CALCULATED DATA

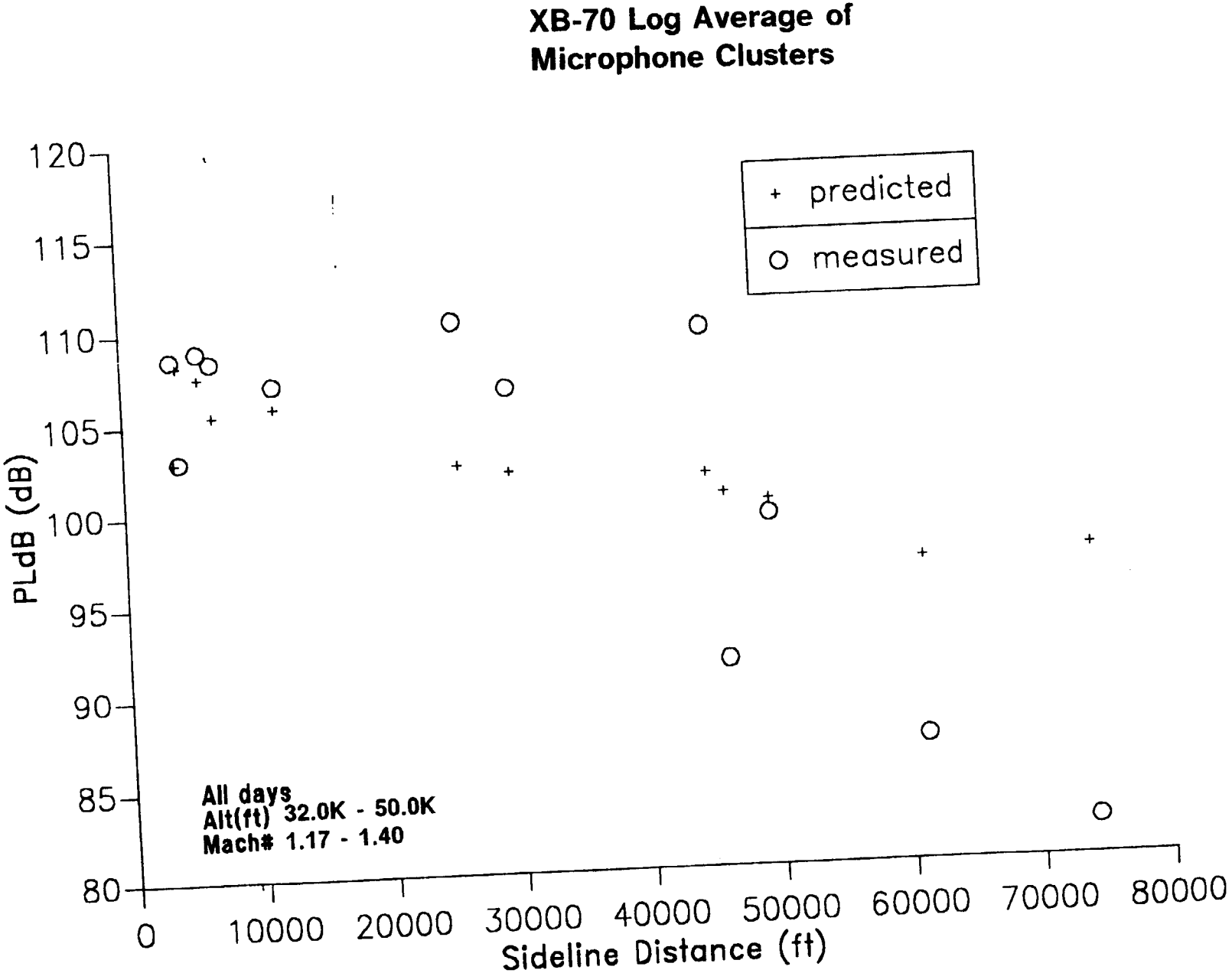



XB-70 Log Average of
Microphone Clusters
All days
Alt(ft) 30.8K - 72K
Mach# 1.17 - 2.92
+ predicted
O measured
Maximum Overpressure (psf)
Sideline Distance (ft)
0
1
2
3
4
5
0
10000
20000
30000
40000
50000
60000
70000
80000

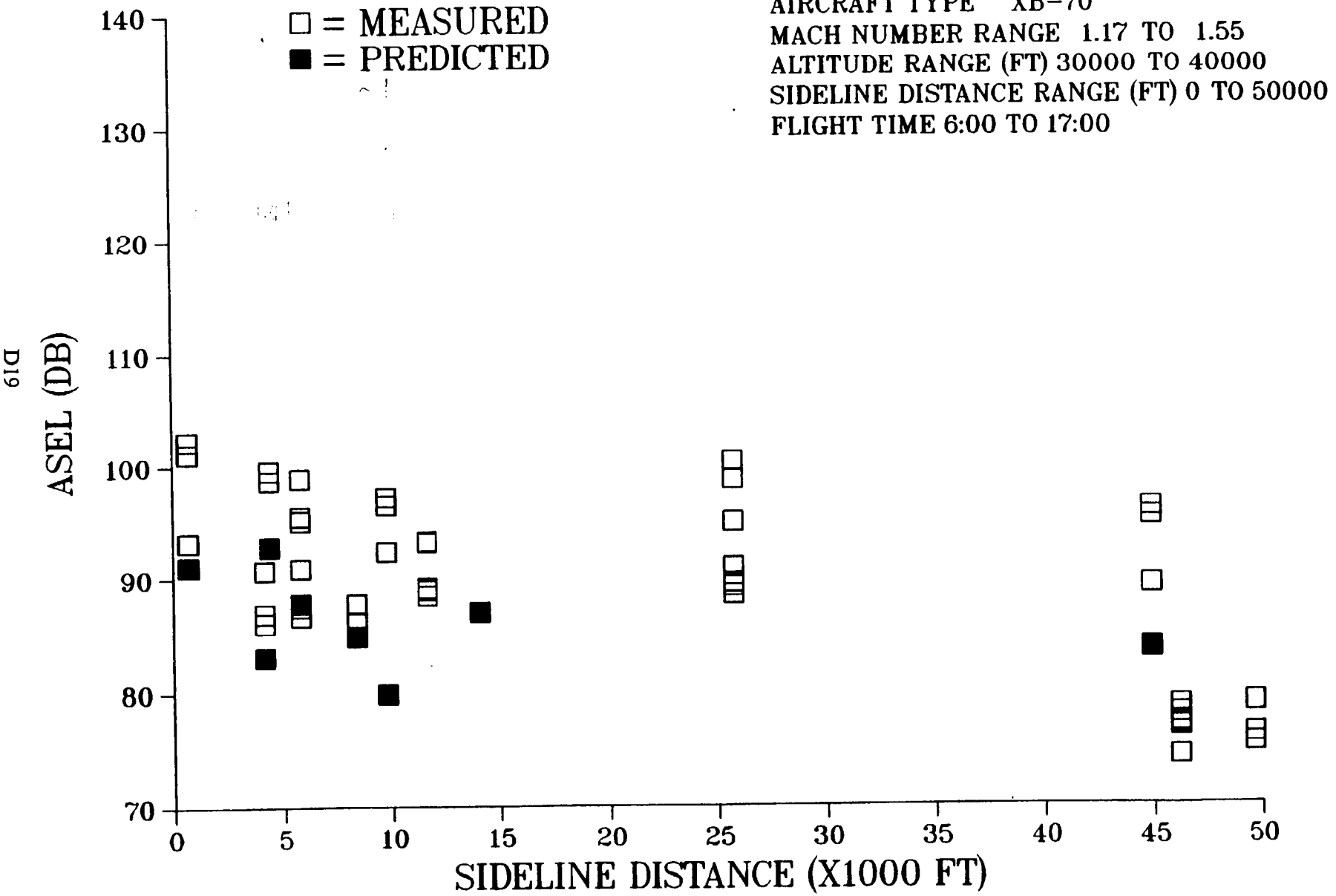

XB-70 Log Average of
Microphone Clusters
predicted
measured
PLdB (dB)
120
115
110
105
100
95
90
85
80
All days
Alt(ft) 66.0K - 70.3K
Mach# 2.60 - 2.92
0
5000
10000
20000
30000
40000
Sideline Distance (ft)

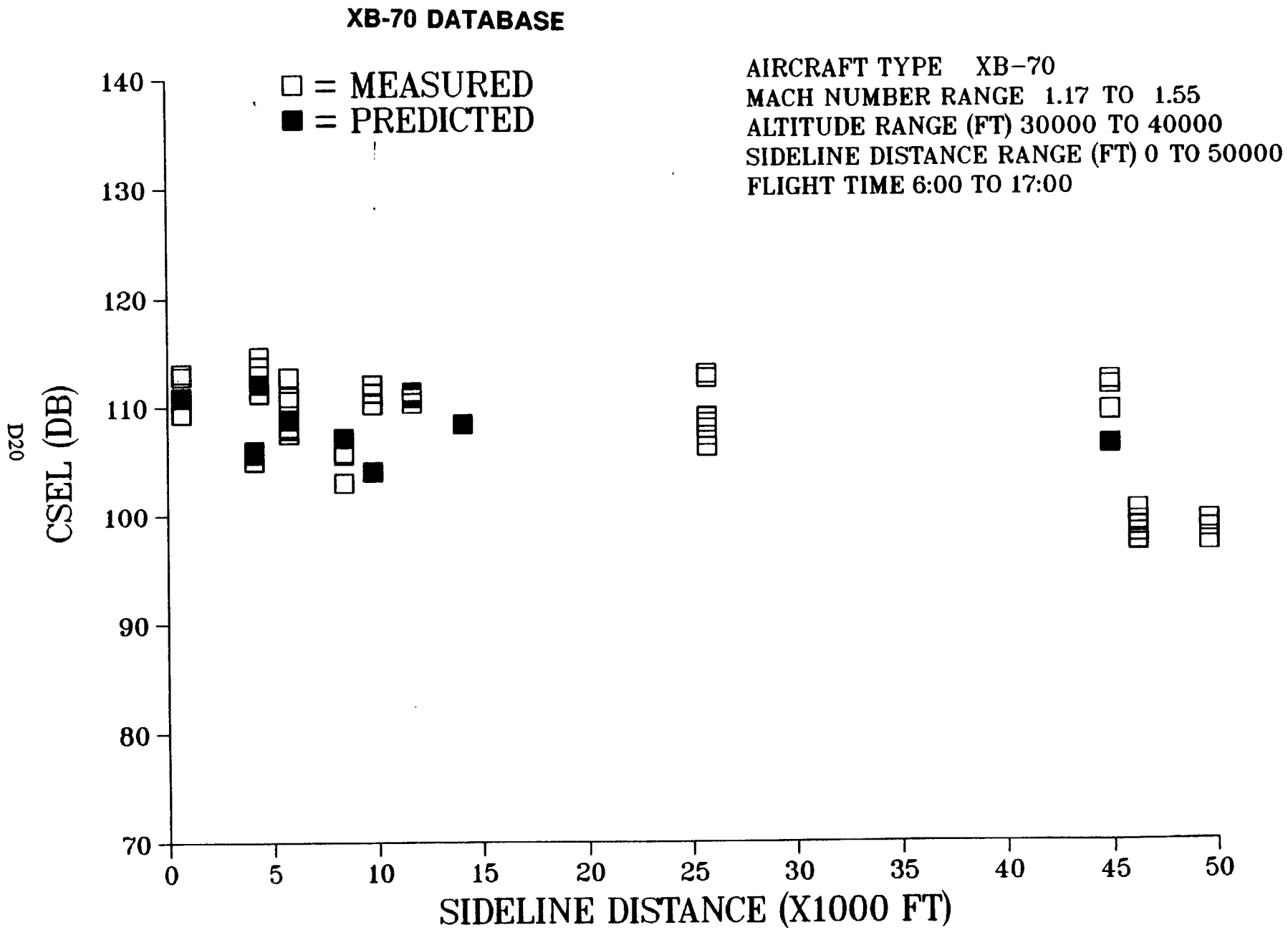

XB-70 Log Average of
Microphone Clusters
predicted
measured
PLdB (dB)
120
115
110
105
100
95
90
85
80
All days
Alt(ft) 41.5K - 66.0K
Mach# 1.82 - 2.60
0
10000
20000
30000
40000
50000
60000
70000
80000
Sideline Distance (ft)

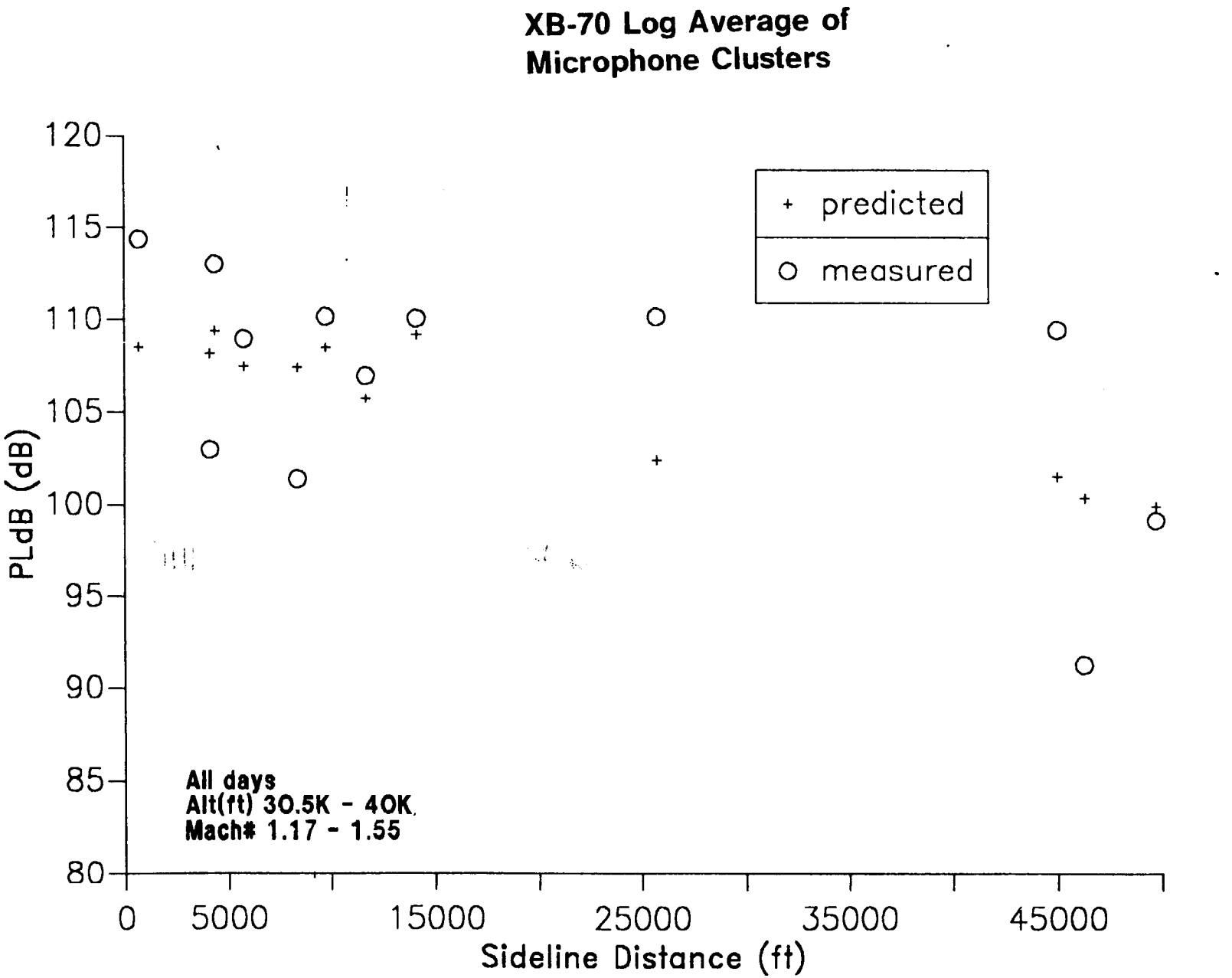

XB-70 Log Average of
Microphone Clusters
predicted
measured
PLdB (dB)
D17
120
115
110
105
100
95
90
85
80
All days
Alt(ft) 31.0K - 54.0K
Mach# 1.40 - 1.80
0
5000
15000
25000
35000
45000
Sideline Distance (ft)

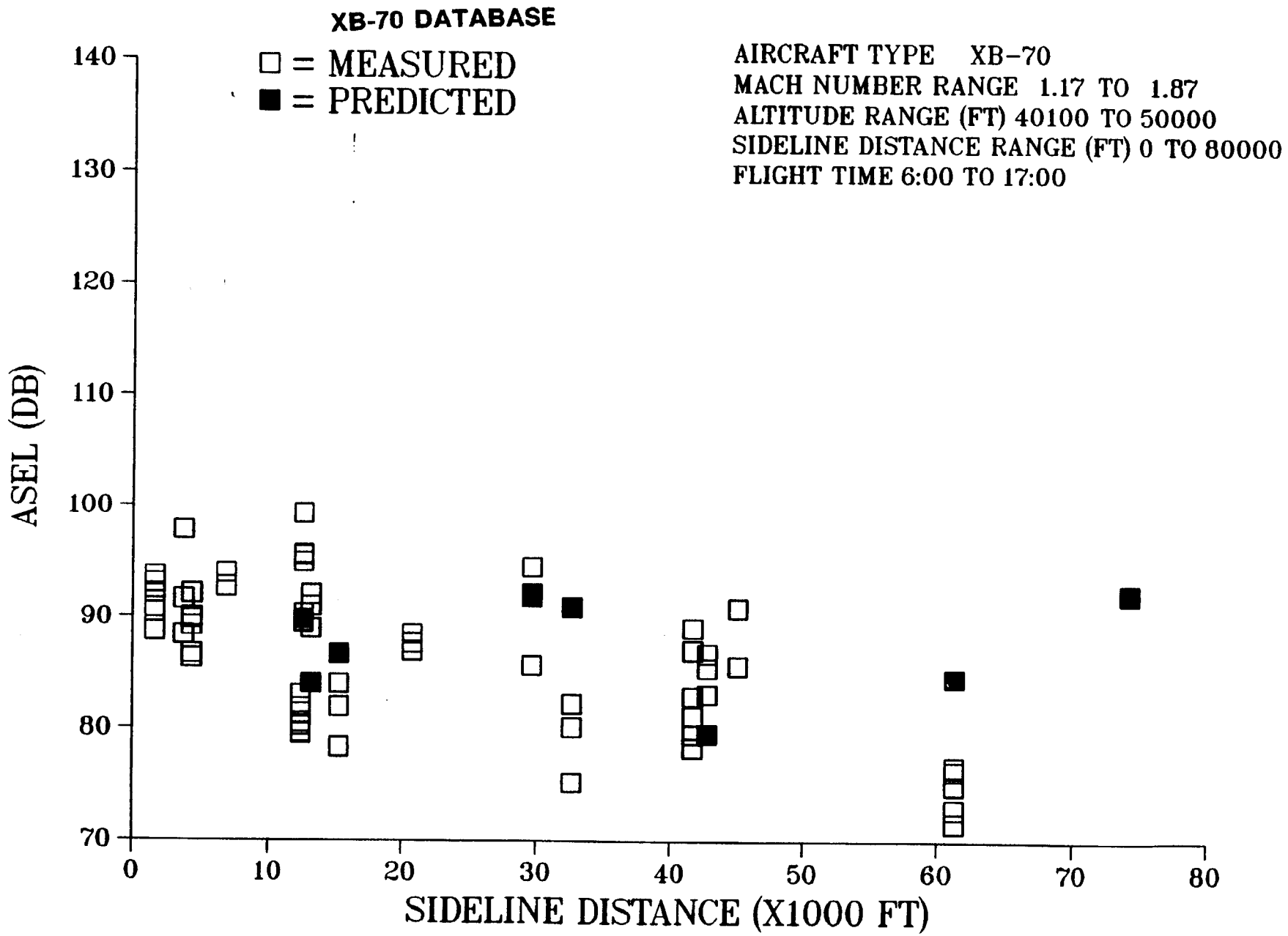

XB-70 Log Average of
Microphone Clusters
120
115
110
105
100
95
90
85
80
PLdB (dB)
+ predicted
O measured
All days
Alt(ft) 32.0K - 50.0K
Mach# 1.17 - 1.40
0
10000
20000
30000
40000
50000
60000
70000
80000
Sideline Distance (ft)

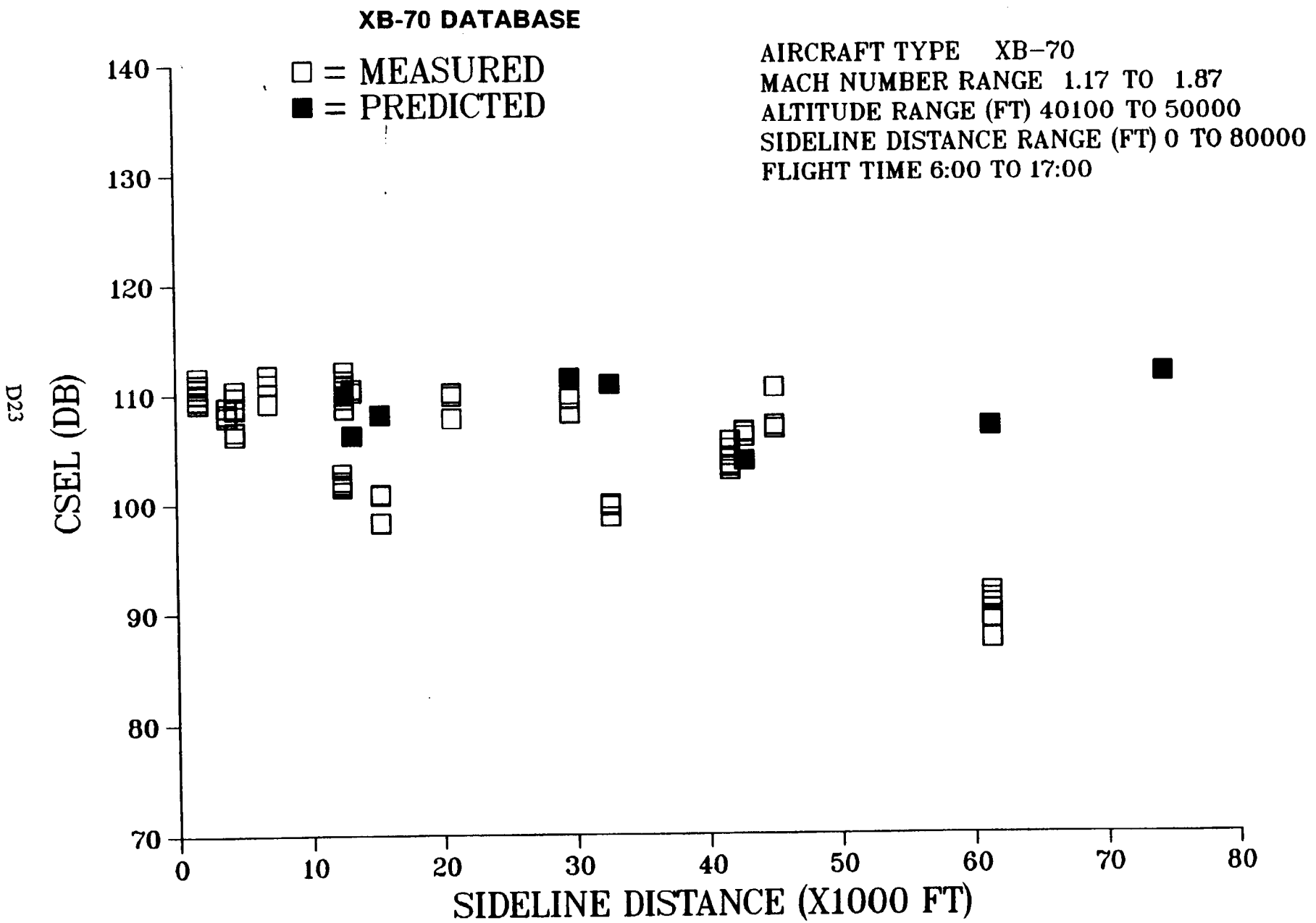
## XB-70 DATABASE

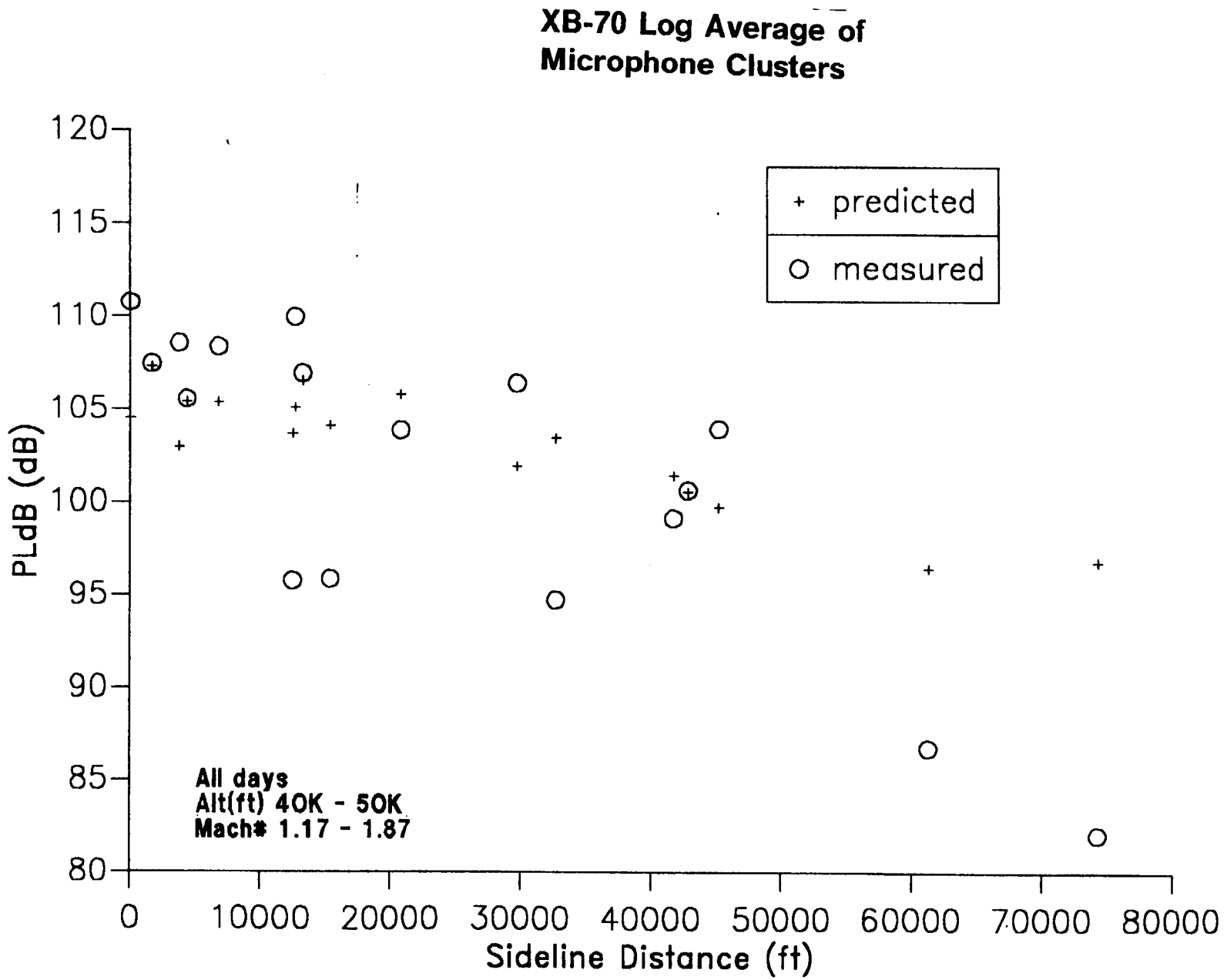


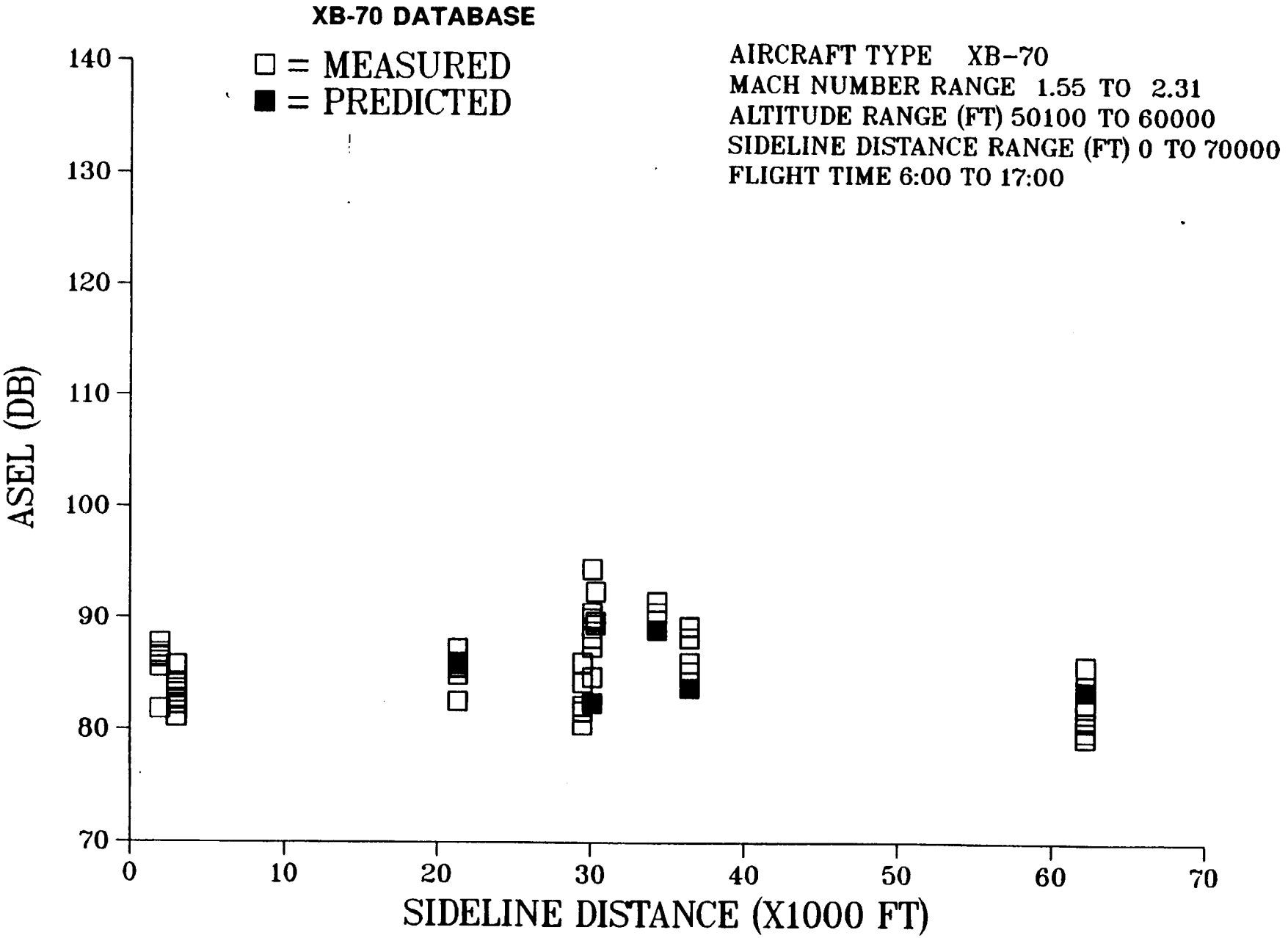

XB-70 DATABASE
□ = MEASURED
■ = PREDICTED
AIRCRAFT TYPE XB-70
MACH NUMBER RANGE 1.17 TO 1.55
ALTITUDE RANGE (FT) 30000 TO 40000
SIDELINE DISTANCE RANGE (FT) 0 TO 50000
FLIGHT TIME 6:00 TO 17:00
CSEL (DB)
140
130
120
110
100
90
80
70
0
5
10
15
20
25
30
35
40
45
50
SIDELINE DISTANCE (X1000 FT)

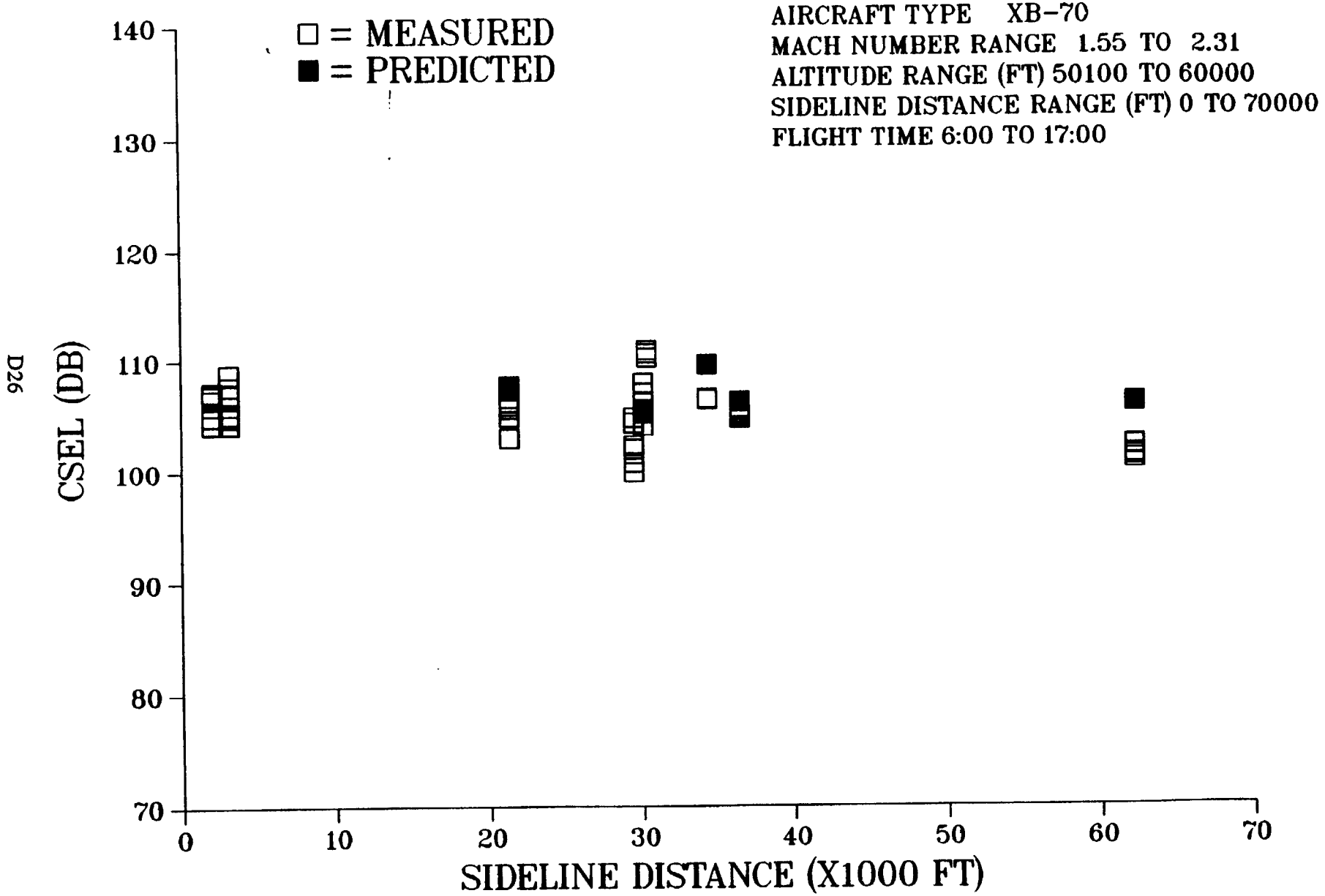

XB-70 Log Average of
Microphone Clusters
120
115
110
105
100
95
90
85
80
PLdB (dB)
predicted
measured
All days
Alt(ft) 30.5K - 40K
Mach# 1.17 - 1.55
0
5000
15000
25000
35000
45000
Sideline Distance (ft)

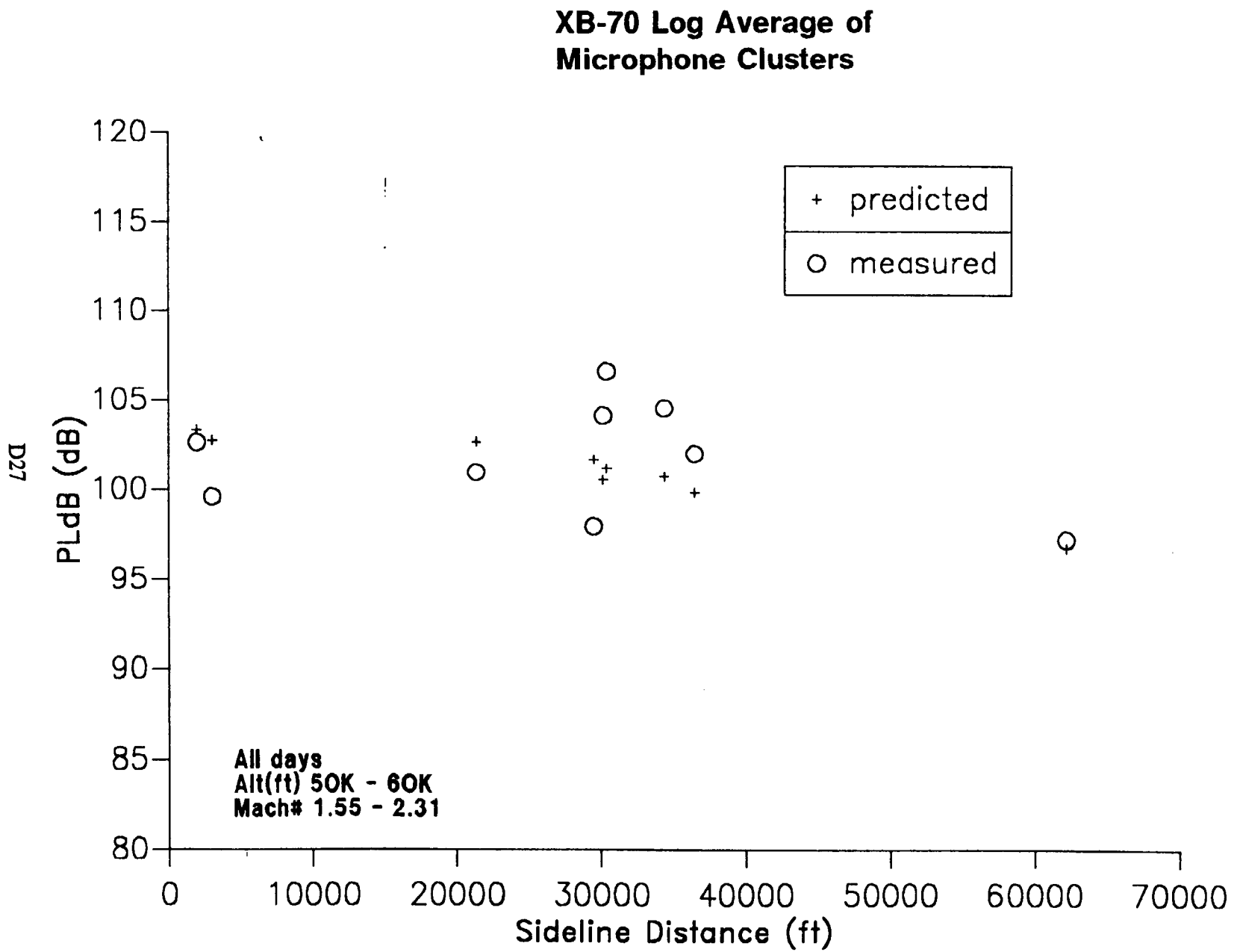

XB-70 DATABASE
□ = MEASURED
■ = PREDICTED
AIRCRAFT TYPE XB-70
MACH NUMBER RANGE 1.17 TO 1.87
ALTITUDE RANGE (FT) 40100 TO 50000
SIDELINE DISTANCE RANGE (FT) 0 TO 80000
FLIGHT TIME 6:00 TO 17:00
ASEL (DB)
140
130
120
110
100
90
80
70
0
10
20
30
40
50
60
70
80
SIDELINE DISTANCE (X1000 FT)

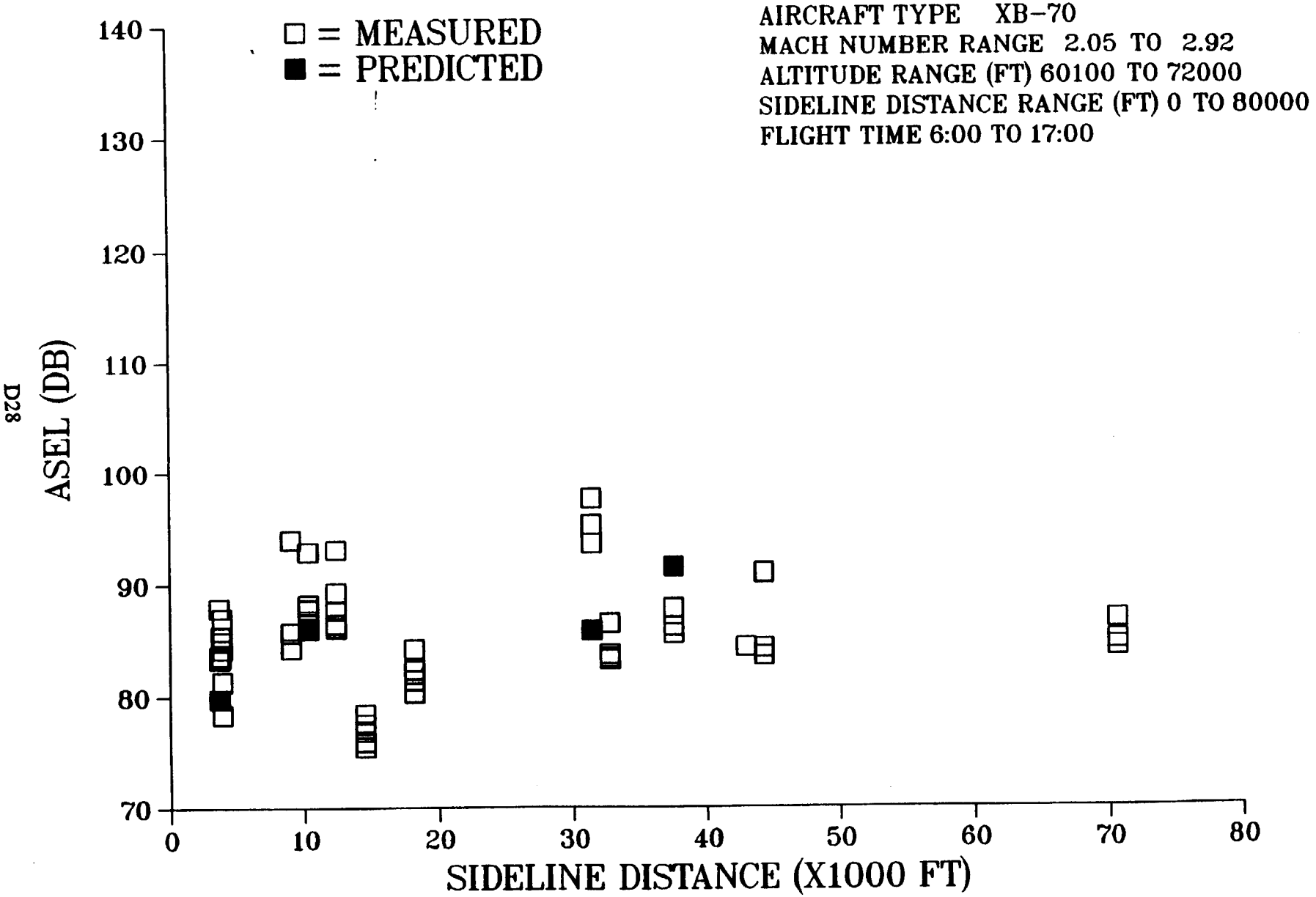

XB-70 DATABASE
□ = MEASURED
■ = PREDICTED
AIRCRAFT TYPE XB-70
MACH NUMBER RANGE 1.17 TO 1.87
ALTITUDE RANGE (FT) 40100 TO 50000
SIDELINE DISTANCE RANGE (FT) 0 TO 80000
FLIGHT TIME 6:00 TO 17:00
CSEL (DB)
140
130
120
110
100
90
80
70
0
10
20
30
40
50
60
70
80
SIDELINE DISTANCE (X1000 FT)

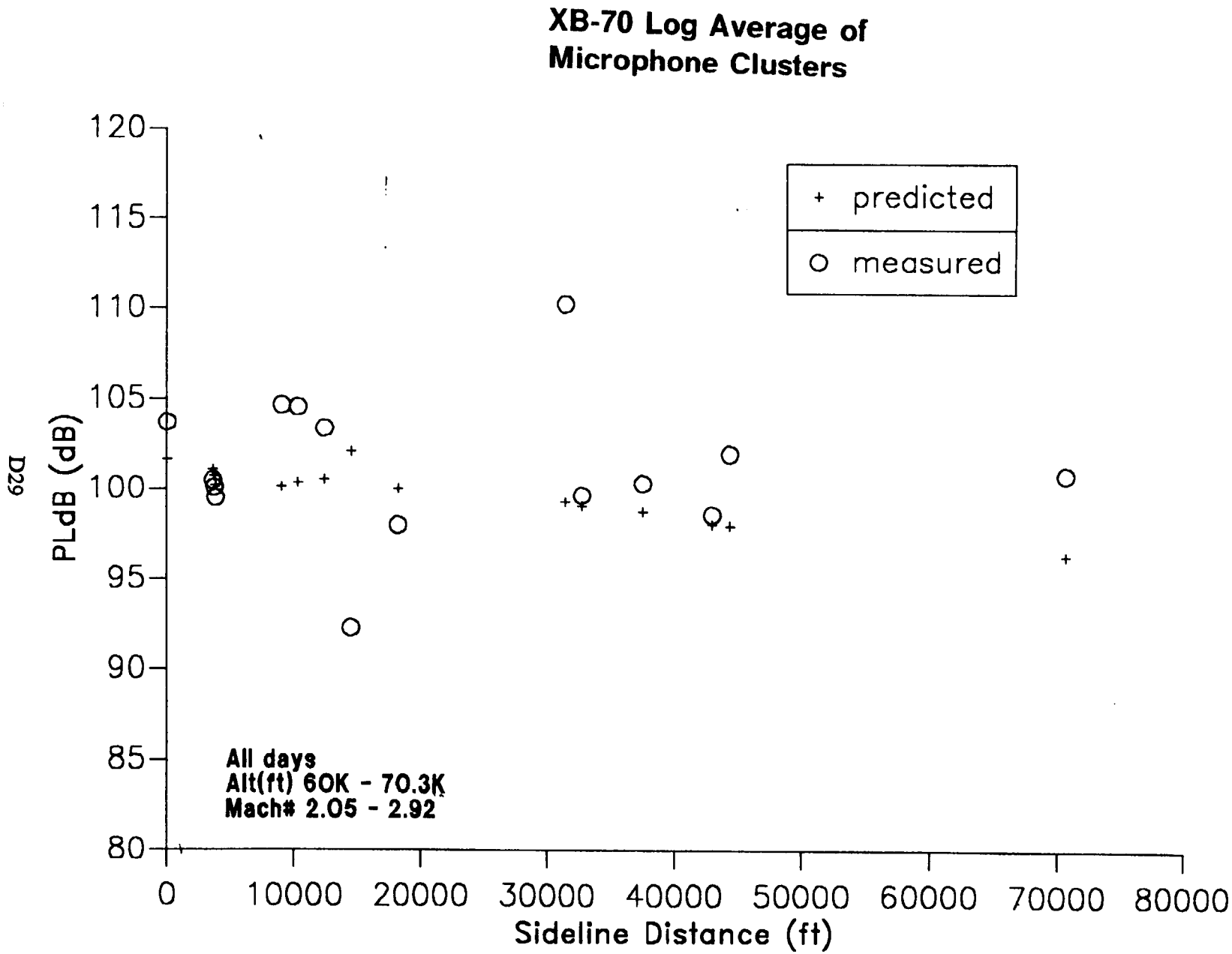

XB-70 Log Average of
Microphone Clusters
predicted
measured
PLdB (dB)
120
115
110
105
100
95
90
85
80
All days
Alt(ft) 40K - 50K
Mach# 1.17 - 1.87
0
10000
20000
30000
40000
50000
60000
70000
80000
Sideline Distance (ft)


XB-70 DATABASE
□ = MEASURED
■ = PREDICTED
AIRCRAFT TYPE XB-70
MACH NUMBER RANGE 1.55 TO 2.31
ALTITUDE RANGE (FT) 50100 TO 60000
SIDELINE DISTANCE RANGE (FT) 0 TO 70000
FLIGHT TIME 6:00 TO 17:00
ASEL (DB)
140
130
120
110
100
90
80
70
0
10
20
30
40
50
60
70
SIDELINE DISTANCE (X1000 FT)


□ = MEASURED
■ = PREDICTED
AIRCRAFT TYPE XB-70
MACH NUMBER RANGE 1.55 TO 2.31
ALTITUDE RANGE (FT) 50100 TO 60000
SIDELINE DISTANCE RANGE (FT) 0 TO 70000
FLIGHT TIME 6:00 TO 17:00
CSEL (DB)
140
130
120
110
100
90
80
70
0
10
20
30
40
50
60
70
SIDELINE DISTANCE (X1000 FT)


XB-70 Log Average of
Microphone Clusters
predicted
measured
PLdB (dB)
120
115
110
105
100
95
90
85
80
All days
Alt(ft) 50K - 60K
Mach# 1.55 - 2.31
0
10000
20000
30000
40000
50000
60000
70000
Sideline Distance (ft)


□ = MEASURED
■ = PREDICTED
AIRCRAFT TYPE XB-70
MACH NUMBER RANGE 2.05 TO 2.92
ALTITUDE RANGE (FT) 60100 TO 72000
SIDELINE DISTANCE RANGE (FT) 0 TO 80000
FLIGHT TIME 6:00 TO 17:00
ASEL (DB)
140
130
120
110
100
90
80
70
0
10
20
30
40
50
60
70
80
SIDELINE DISTANCE (X1000 FT)


XB-70 Log Average of
Microphone Clusters
120
115
110
105
100
95
90
85
80
PLdB (dB)
+ predicted
O measured
All days
Alt(ft) 60K - 70.3K
Mach# 2.05 - 2.92
0
10000
20000
30000
40000
50000
60000
70000
80000
Sideline Distance (ft)

# REPORT DOCUMENTATION PAGE

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K. R. Elmer and M. C. Joshi

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**13. ABSTRACT** *(Maximum 200 words)*

Sonic boom signatures from two databases - the BOOMFILE and the XB-70 were analyzed in terms of C-weighted sound exposure level (CSEL), A-weighted sound exposure level (ASEL), and Stevens Mark VII perceived level (PLdB), as well as the more traditional peak positive overpressure and rise time. The variability of these parameters due to propagation through atmosphere was analyzed for different aircraft Mach number and altitude groups.

The low Mach number / low altitude group had significantly greater variation in rise time, overpressure, and loudness level than the high Mach number / high altitude group. The loudness of measured booms were found to have a variation of up to 25 dB relative to the loudness of boom predicted for a non-turbulent atmosphere. This is due primarily to the steeper ray paths of the high Mach number / high altitude group and the corresponding shorter distances traveled by these rays through the lower atmosphere resulting in reduced refraction effects. The general trend of decreased overpressure and loudness level with increasing lateral distance was also seen. Sonic boom signatures from early morning flights had less variation in rise time and overpressure than afternoon flights because of reduced turbulence. Measures of asymmetry (difference between compression and expansion portion of the signature) showed that the variability in Δ loudness level was greater than the variability in Δ overpressure due to the large influence of turbulence on rise time. Lastly, analysis of data within 50% of lateral cutoff showed that the mean value for overpressure and loudness level was independent of time of day but that the frequency with which it occurred was greater in the morning. This is a clear indicator of increased turbulence in the afternoon..

**14. SUBJECT TERMS**
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