

Table 5.1: Test Matrix and Run Number Index

| Model<br>(Builder)<br>Designer          | Configuration         | V-dist &<br>Profile |    | Drag Data |         |         |         | Lift & Moment Data |                 |                 |         |
|---|-----------------------|---------------------|----|-----------|---------|---------|---------|--------------------|-----------------|-----------------|---------|
|   |                       | Fig.                | p. | Fig.      | p.      | Re      | Run #   | Fig.               | p.              | Re              | Run #   |
| E387 (E)<br>(Y. Tinel)<br>Eppler        | clean                 | 5.1                 | 46 | 5.3       | 47      | 100,000 | BM05141 | 5.4                | 48              | 100,000         | BM05140 |
|   |                       | 5.2                 |    |           |         | 200,000 | BM04979 |                    |                 | 200,000         | BM04978 |
|   |                       |                     |    |           | 300,000 | BM04981 | 49      | 300,000            | BM04980         |                 |         |
|   |                       |                     |    |           | 350,000 | BM04983 | 50      | 350,000            | BM04982/BM05121 |                 |         |
|   |                       |                     |    | 460,000   | BM04985 | 460,000 |         | BM04984            |                 |                 |         |
|   |                       |                     |    | 500,000   | BM04987 | 500,000 | BM04986 |                    |                 |                 |         |
|   | Zigzag trip<br>type F |                     |    | 5.5       | 51      | 100,000 | BM04989 | 5.6                | 52              | 100,000         | BM04988 |
|   |                       |                     |    |           |         | 200,000 | BM04991 | 53                 | 200,000         | BM04990         |         |
|   |                       |                     |    |           |         | 350,000 | BM04993 |                    | 350,000         | BM04992/BM05120 |         |
|   |                       |                     |    |           |         | 500,000 | BM04995 | 500,000            | BM04994         |                 |         |
| FX 63-137 (C)<br>(Y. Tinel)<br>Wortmann | clean                 | 5.7                 | 54 | 5.9       | 55      | 100,000 | BM04997 | 5.10               | 56              | 100,000         | BM04996 |
|   |                       | 5.8                 |    |           |         | 150,000 | BM04999 |                    |                 | 150,000         | BM04998 |
|   |                       |                     |    |           | 200,000 | BM05001 | 57      | 200,000            | BM05000         |                 |         |
|   |                       |                     |    |           | 350,000 | BM05003 | 58      | 350,000            | BM05002         |                 |         |
|   |                       |                     |    | 500,000   | BM05005 | 500,000 |         | BM05004            |                 |                 |         |
|   | Zigzag trip<br>type F |                     |    | 5.11      | 59      | 100,000 | BM05007 | 5.12               | 60              | 100,000         | BM05006 |
|   |                       |                     |    |           |         | 150,000 | BM05009 | 61                 | 150,000         | BM05008         |         |
|   |                       |                     |    |           |         | 200,000 | BM05011 |                    | 200,000         | BM05010         |         |
|   |                       |                     |    |           |         | 350,000 | BM05013 | 62                 | 350,000         | BM05012         |         |
|   |                       |                     |    |           |         | 500,000 | BM05015 |                    | 500,000         | BM05014         |         |
| S822 (B)<br>(Y. Tinel)<br>Somers        | clean                 | 5.13                | 64 | 5.15      | 65      | 100,000 | BM05017 | 5.16               | 66              | 100,000         | BM05016 |
|   |                       | 5.14                |    |           |         | 150,000 | BM05019 |                    |                 | 150,000         | BM05018 |
|   |                       |                     |    |           | 200,000 | BM05021 | 67      | 200,000            | BM05020         |                 |         |
|   |                       |                     |    |           | 350,000 | BM05023 | 68      | 350,000            | BM05022/BM05125 |                 |         |
|   |                       |                     |    | 500,000   | BM05025 | 500,000 |         | BM05024            |                 |                 |         |
|   | Zigzag trip<br>type F |                     |    | 5.17      | 69      | 100,000 | BM05027 | 5.18               | 70              | 100,000         | BM05026 |
|   |                       |                     |    |           |         | 150,000 | BM05029 | 71                 | 150,000         | BM05028         |         |
|   |                       |                     |    |           |         | 200,000 | BM05031 |                    | 200,000         | BM05030         |         |
|   |                       |                     |    |           |         | 350,000 | BM05033 | 72                 | 350,000         | BM05032/BM05124 |         |
|   |                       |                     |    |           |         | 500,000 | BM05035 |                    | 500,000         | BM05034         |         |

|   |                       |              |    |      |     |   |  |      |                        |   |   |
|---|-----------------------|--------------|----|------|-----|---|--|------|------------------------|---|---|
| S834<br>(Y. Tinel)<br>Somers              | clean                 | 5.19<br>5.20 | 78 | 5.21 | 79  | 100,000<br>150,000<br>200,000<br>350,000<br>500,000 | BM05037<br>BM05039<br>BM05041<br>BM05043<br>BM05045              | 5.22 | 80<br><br>81<br><br>82 | 100,000<br>150,000<br>200,000<br>350,000<br>500,000 | BM05036<br>BM05038<br>BM05040<br>BM05042/BM05129<br>BM05044/BM05130 |
|   | Zigzag trip<br>type F |              |    | 5.23 | 83  | 100,000<br>150,000<br>200,000<br>350,000<br>500,000 | BM05047<br>BM05049<br>BM05051<br>BM05053<br>BM05055              | 5.24 | 84<br><br>85<br><br>86 | 100,000<br>150,000<br>200,000<br>350,000<br>500,000 | BM05046<br>BM05048<br>BM05050<br>BM05052/BM05128<br>BM05054/BM05127 |
| SD2030 (B)<br>(Y. Tinel)<br>Selig/Donovan | clean                 | 5.25<br>5.26 | 88 | 5.27 | 89  | 100,000<br>200,000<br>350,000<br>500,000            | BM05077<br>BM05079/BM05133<br>BM05081/BM05134<br>BM05083/BM05135 | 5.28 | 90<br><br>91           | 100,000<br>200,000<br>350,000<br>500,000            | BM05094<br>BM05078<br>BM05080/BM05132<br>BM05082                    |
|   | Zigzag trip<br>type F |              |    | 5.29 | 92  | 100,000<br>200,000<br>350,000<br>500,000            | BM05085<br>BM05087<br>BM05089<br>BM05091                         | 5.30 | 93<br><br>94           | 100,000<br>200,000<br>350,000<br>500,000            | BM05095<br>BM05086<br>BM05088/BM05131<br>BM05090                    |
| SH3055<br>(Y. Tinel)<br>Selig/Hanley      | clean                 | 5.31<br>5.32 | 96 | 5.33 | 97  | 100,000<br>200,000<br>350,000<br>500,000            | BM05057<br>BM05059<br>BM05061<br>BM05063                         | 5.34 | 98<br><br>99           | 100,000<br>200,000<br>350,000<br>500,000            | BM05056<br>BM05058<br>BM05060<br>BM05062                            |
|   | Zigzag trip<br>type F |              |    | 5.35 | 100 | 100,000<br>200,000<br>350,000<br>500,000            | BM05065<br>BM05067<br>BM05069<br>BM05071                         | 5.36 | 101<br><br>102         | 100,000<br>200,000<br>350,000<br>500,000            | BM05117<br>BM05066<br>BM05068<br>BM05070                            |