

DOCKET NO. SA-510

EXHIBIT NO. 10A

**NATIONAL TRANSPORTATION SAFETY BOARD
WASHINGTON, D.C.**

**GROUP CHAIRMAN'S REPORT OF INVESTIGATION
FLIGHT DATA RECORDER FACTUAL REPORT**

NATIONAL TRANSPORTATION SAFETY BOARD

Office of Research and Engineering
Washington, D.C. 20594

November 28, 1994

FLIGHT DATA RECORDER FACTUAL REPORT

DCA-94-MA-076

A. ACCIDENT

Location : Aliquippa, Pennsylvania

Date : September 8, 1994

Time : 1904 Eastern Daylight Time (EDT)

Airplane : Boeing B737-300, N513AU

B. GROUP

The flight data recorder group convened at the Vehicle Performance Division's Laboratory on September 10, 1994. The following group members participated in the investigation.

Chairman : K. Jeremy Akel, National Transportation Safety Board

Member : Roy Beiber, USAir, Inc.

Member : H. Keith Hagy, Airline Pilots Association

Member : Martin D. Ingham, Boeing Commercial Airplane Group

Member : Jean-Marc Lapene, Bureau Enquetes - Accidents

Member : Frank Rock, Federal Aviation Administration

C. SUMMARY

On September 8, 1994, at 1904 Eastern Daylight Time (EDT), USAir flight 427, a Boeing B737-300, N513AU, crashed while maneuvering to land at Pittsburgh International Airport, Pittsburgh, Pennsylvania. The airplane was being operated on an instrument flight rules (IFR) flight plan under the provisions of Title 14, Code of Federal Regulation (CFR), Part 121, on a regularly scheduled flight from Chicago-O'Hare International Airport, Chicago, Illinois, to Pittsburgh. The airplane was destroyed by impact forces and fire near Aliquippa, Pennsylvania. All 132 persons on board the airplane

were fatally injured.

The solid state flight data recorder (SSFDR), a Loral/Fairchild Data Systems model F1000, part number S603-1000-00, and serial number 442, was removed from the wreckage and sent to the Vehicle Performance Division's laboratory at the National Transportation Safety Board on September 8, 1994 for readout and evaluation.

The SSFDR data indicated that at 1031:37 DFDR elapsed time, while the airplane was descending through a pressure altitude of 5,984 feet, maintaining a magnetic heading of 139 degrees, and flying at an indicated airspeed of 191.47 knots, roll attitude values consistent with a left wing down motion were observed. Engine data at this time indicated N1 values to be 30.3% and 31.4% for the left and right engine, respectively. The left wing down motion trend lasted for 14 seconds until roll attitude values stabilized at approximately -15 degrees (left wing down). During this time frame, pitch attitude values increased from approximately +4 degrees to +8 degrees nose up. At 1031:58, magnetic heading indicated 121.11 degrees, roll attitude values changed to approximately -14 degrees (left wing down), and engine N1 data indicated 64.4% and 64.5% for the left and right engine, respectively.

At 1032:10, roll attitude values began to change towards a wings level state from a left wing down state. At 1032:12 fluctuations were observed in the longitudinal acceleration and the vertical acceleration data. These fluctuations continued until the end of the flight with the majority of each subsequent peak increasing in magnitude. At 1032:13, a 4.6 knot increase from 190.70 knots to 195.30 knots was observed. One second later, indicated airspeed was observed at 189.60 knots, roll attitude at -7.78 degrees (left wing down), and the first fluctuations were observed in the control column position data.

At 1032:15, roll angles values began to increase towards left wing down. One second later roll attitudes reached -20.28 degrees (left wing down) and pitch attitude values departed from +7.0 degrees (nose up) and decreased for the next 14 seconds. At 1032:17, a roll attitude value of -14.57 degrees (left wing down) was observed followed by a departure in roll attitude values in the left wing down direction for the majority of the remainder of flight. Concurrently, engine N1 values were observed to increase for two seconds. Engine N1 parameters then decreased and stabilized between 30% and 32% at 1032:28.

At 1032:30 pitch attitude values were observed at a local minimum value of -86.50 degrees (nose down). Pitch attitude values increased for the next 5 seconds and decreased again until the last recorded value of -79.05 degrees (nose down) was observed at 1032:39. At 1032:37, maximum vertical acceleration values of 3.852 Gs and maximum longitudinal acceleration values of 0.587 Gs were observed in the data. The recorded data terminated at 1032:39. At this time, pressure altitude indicated 1,188 feet and indicated airspeed was observed at 261.70 knots.

The airplane's SSFDR is configured to record the data parameters presented in attachment I. The data sources for each parameter are presented in attachment II. A diagram of the SSFDR assembly unit is presented in attachment III.

D. DETAILS OF THE INVESTIGATION

1. Description of Data

This model flight recorder records airplane data in Aeronautical Radio Incorporated (ARINC) 542A format (expanded from 5 to 13 parameters) in a digital format using solid state non-volatile Flash Memory as the recording medium. It records 64 12-bit words of digital data every second. Each grouping of 64 words (one second) is called a subframe. A group of four subframes comprise one frame. Each subframe has a 12-bit synchronization (sync) word in the first word slot which marks the beginning of a subframe. The data stream is "in sync" when successive words appear at 64-word intervals. Each data parameter has a specifically assigned word number within the subframe.

If the data stream is interrupted, the sync words will not appear at the proper interval or in sequence and sync will be lost along with data surrounding the sync words. An interruption of power to the SSFDR will disrupt the serial data stream and cause a loss of sync.

At least 25 hours of the latest operational data are retained on the recording medium. This is accomplished by erasing the oldest data while simultaneously sampling new data.

2. Examination and Read-out

a. Examination

The SSFDR was examined upon receipt was found to be in bad physical condition with indications of external and internal impact damage. The crash survivable memory module unit was separated from its mounts and had translated to the rear of the unit destroying all of the circuit boards in the flight recorder. Insulation and dirt, which are not intrinsic to the SSFDR, were found inside the unit.

The crash protected memory module unit was extracted from the SSFDR. There were indications of damage to a circuit board (STIF card) fixed to the top of the crash protected memory module unit. The data ribbon from the memory module to the STIF card was then disconnected and the crash protected memory module unit was opened. The memory module was examined for damage and discontinuity to its memory cable, circuit boards, or integrated circuits. No damage was noted on any of the

- b. memory module components.
Read-out

The memory module of the damaged SSFDR was connected via the STIF card to an SSFDR maintained at Safety Board's laboratory exclusively for the readout of damaged recorders. This SSFDR was connected to the Read Out Center (ROC) using an RS422 cable. Power was applied to the recorder and the data were downloaded to the ROC. A "quick-access" file was generated representing the last 10.5 hours of total data. The quick access file was used for all data processing.

The flight data were reduced from the recorded decimal values (0-4095) to engineering units (e.g., feet, knots, etc.) by conversion formulas obtained from the USAir and verified by the DFDR group members. The actual conversion is accomplished by an automated process that incorporates the laboratory's ROC. Relative (elapsed) time, recorded by the internal clock of the SSFDR was used as a time base for all data output.

The ROC software is limited to the conversion of only complete frames (4 seconds). Therefore, in order to recover the complete data from the flight, a raw data file containing the entire down loaded data set was sent to Loral/Fairchild on floppy disk. Loral/Fairchild was able to recover approximately 1.9375 seconds (124 words) of additional data at the end of the flight. The raw data values were sent back to the Safety Board and conversion formulas were applied to obtain engineering units. The last 1.9375 seconds of data are represented in all the attached data tables and in one data plot.

E. DATA TABLES

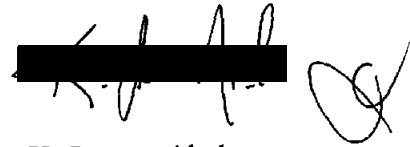
Attachment IV contains data from the last 5 minutes of flight 427 and the raw decimal data from the last 1.9375 seconds of flight that were recovered by Loral/Fairchild Data Systems. An "XX" for pitch attitude and EGT values at 1032:39 elapsed time represents two word locations where data were unrecoverable. Attachment V contains data representing flight 427's take off from Chicago O'Hare (2.5 minutes).

F. DATA PLOTS

Five data plots of the flight are presented in attachment VI. The elapsed time correlation on the plots are as follows:

1030:00 DFDR elapsed time = 0.0 plot elapsed time.

000005



K. Jeremy Akel
Aerospace Engineer

Attachments

- I. SSFDR parameter list
- II. SSFDR data source table
- III. SSFDR assembly diagram
- IV. ORD-PIT last 5 minutes data table
- V. ORD-PIT takeoff data table
- VI. ORD-PIT plots

ATTACHMENT I
(SSFDR parameter list)

000007

File Version #: 1.500
 Configuration name: CONFIG:737-300/400 SSFDR 542A ELEC VER. 1.2 PRINTER
 Configuration description: Wed Mar 09 15:40:07 1994
 Data source: GS/2 Standard Database And USAir Data
 FDR File: SS542E.DFR

```
=====
1. ALTITUDE                WN=19+58
Type: COMBINATION
Subframes in which parameter occurs:  1  2  3  4
Range of E/U data: -1000 - 135000
Report header: Altitude    WN=19+58
Percent error allowed in the E/U values:  ± 0
Absolute error allowed in the E/U values:  ± 50
Combination method: STD. 542 ALTITUDE  1. ALTITUDE COARSE          WN=19 (1)
      2. ALTITUDE FINE          WN=58 (2)
=====
```

```
=====
2. ALTITUDE COARSE        WN=19
Type: RECORDED
Subframes in which parameter occurs:  1  2  3  4
Range of E/U data: 0 - 135000
Report header: Alt. Coarse WN=19
Percent error allowed in the E/U values:  ± 0
Absolute error allowed in the E/U values:  ± 1
FDR input signal: SYNCHRO-Alt. Coarse (S0, S1-4)
Prerequisite conditions: 0
Data words: 1
Word Number    Signed    Mask    Shift Count
-----
      19         NO    0X0FFF         0
Conversion algorithm: STANDARD 542 CONVERSION
=====
```

```
=====
3. ALTITUDE FINE          WN=58
Type: RECORDED
Subframes in which parameter occurs:  1  2  3  4
Range of E/U data: 0 - 5000
Report header: Alt. Fine WN=58
Percent error allowed in the E/U values:  ± 0
Absolute error allowed in the E/U values:  ± 1
FDR input signal: SYNCHRO-Alt. Fine (S1, S1-5)
Prerequisite conditions: 0
Data words: 1
Word Number    Signed    Mask    Shift Count
-----
      58         NO    0X0FFF         0
Conversion algorithm: STANDARD 542 CONVERSION
=====
```

4. ATC KEYING WN=11

Type: RECORDED

Subframes in which parameter occurs: 1 2 3 4

Range of E/U data: 0 - 1

Report header: ATC Keying WN=11

Percent error allowed in the E/U values: ± 0 Absolute error allowed in the E/U values: ± 0

FDR input signal: DISCRETE/OTHER-Binary 2

Prerequisite conditions: 0

Data words: 1

Word Number	Signed	Mask	Shift Count
11	NO	0X0004	2

Conversion algorithm: STANDARD 542 CONVERSION

5. CONTROL COLUMN PITCH 1 WN=23

Type: RECORDED

Subframes in which parameter occurs: 1 2 3 4

Range of E/U data: -42.857 - 42.857

Report header: CCP Pitch WN=23

Percent error allowed in the E/U values: ± 0 Absolute error allowed in the E/U values: ± 1.5

FDR input signal: SYNCHRO-Flaps (S6, S2-6)

Prerequisite conditions: 0

Data words: 1

Word Number	Signed	Mask	Shift Count
23	NO	0X0FFF	0

Conversion algorithm: DISCONTINUOUS LINEAR SYNCHRO

 $y = -42.857 + 0.02093137973138 * x$

6. CONTROL COLUMN PITCH 2 WN=55

Type: RECORDED

Subframes in which parameter occurs: 1 2 3 4

Range of E/U data: -42.857 - 42.857

Report header: Cont. Col. Pitch 2 WN=55

Percent error allowed in the E/U values: ± 0 Absolute error allowed in the E/U values: ± 1.5

FDR input signal: SYNCHRO-Flaps (S6, S2-6)

Prerequisite conditions: 0

Data words: 1

Word Number	Signed	Mask	Shift Count
55	NO	0X0FFF	0

Conversion algorithm: DISCONTINUOUS LINEAR SYNCHRO

 $y = -42.857 + 0.02093137973138 * x$

=====

7. EGT ENGINE 1 WN=32

Type: RECORDED

Subframes in which parameter occurs: 1 2 3 4

Range of E/U data: 0 - 1150

Report header: EGT Eng.1 WN=32

Percent error allowed in the E/U values: ± 0

Absolute error allowed in the E/U values: ± 0

FDR input signal: DC SYNCHRO-Engine 3 (S10, S2-5)

Prerequisite conditions: 0

Data words: 1

Word Number	Signed	Mask	Shift Count
-----	-----	-----	-----
32	NO	0X0FFF	0

Conversion algorithm: CURVE FIT

Type: POLYNOMIAL Order: 3 Data Points: 11

1.	242,	0
2.	356,	50
3.	565,	150
4.	835,	300
5.	1068,	450
6.	1270,	600
7.	1391,	700
8.	1448,	750
9.	1603,	900
10.	1741,	1050
11.	1826,	1150

Standard Error: 1.460 Maximum Error: 1.873

$y = -108.44390633398 + 0.44067448767131*x + -9.4262462786354e-006*(x^2) + 7.953482647536e-008*(x^3)$

=====

8. EGT ENGINE 2 WN=64

Type: RECORDED

Subframes in which parameter occurs: 1 2 3 4

Range of E/U data: 0 - 1150

Report header: EGT Eng.2 WN=64

Percent error allowed in the E/U values: ± 0

Absolute error allowed in the E/U values: ± 0

FDR input signal: DC SYNCHRO-Engine 4 (S11, S2-2)

Prerequisite conditions: 0

Data words: 1

Word Number	Signed	Mask	Shift Count
-----	-----	-----	-----
64	NO	0X0FFF	0

Conversion algorithm: CURVE FIT

Type: POLYNOMIAL Order: 3 Data Points: 11

1.	242,	0
2.	356,	50
3.	565,	150
4.	835,	300
5.	1068,	450
6.	1270,	600
7.	1391,	700
8.	1448,	750
9.	1603,	900
10.	1741,	1050
11.	1826,	1150

Standard Error: 1.460 Maximum Error: 1.873

$y = -108.44390633398 + 0.44067448767131*x + -9.4262462786354e-006*(x^2) + 7.953482647536e-008*(x^3)$

=====

9. FUEL FLOW ENGINE 1 WN=16

Type: RECORDED

Subframes in which parameter occurs: 1 2 3 4

Range of E/U data: 0 - 12000

Report header: F.Flow Eng.1 WN=16

Percent error allowed in the E/U values: ± 0 Absolute error allowed in the E/U values: ± 0

FDR input signal: DC SYNCHRO-Engine 1 (S8, S2-7)

Prerequisite conditions: 0

Data words: 1

Word Number	Signed	Mask	Shift Count
-----	-----	-----	-----
16	NO	0X0FFF	0

Conversion algorithm: CURVE FIT

Type: POLYNOMIAL Order: 3 Data Points: 17

1.	191,	280
2.	242,	500
3.	355,	1000
4.	463,	1500
5.	564,	2000
6.	660,	2500
7.	749,	3000
8.	835,	3500
9.	994,	4500
10.	1138,	5500
11.	1271,	6500
12.	1391,	7500
13.	1501,	8500
14.	1604,	9500
15.	1697,	10500
16.	1784,	11500
17.	1826,	12000

Standard Error: 13.858 Maximum Error: 24.446

$$y = -563.07100186032 + 4.3299033112825 * x + -1.4997055434239e-005 * (x^2) + 7.7080038017104e-007 * (x^3)$$

=====

10. FUEL FLOW ENGINE 2

WN=48

Type: RECORDED

Subframes in which parameter occurs: 1 2 3 4

Range of E/U data: 0 - 12000

Report header: F.Flow Eng.2 WN=48

Percent error allowed in the E/U values: ± 0 Absolute error allowed in the E/U values: ± 0

FDR input signal: DC SYNCHRO-Engine 2 (S9, S2-4)

Prerequisite conditions: 0

Data words: 1

Word Number	Signed	Mask	Shift Count
48	NO	0X0FFF	0

Conversion algorithm: CURVE FIT

Type: POLYNOMIAL Order: 3 Data Points: 17

1.	191,	280
2.	242,	500
3.	355,	1000
4.	463,	1500
5.	564,	2000
6.	660,	2500
7.	749,	3000
8.	835,	3500
9.	994,	4500
10.	1138,	5500
11.	1271,	6500
12.	1391,	7500
13.	1501,	8500
14.	1604,	9500
15.	1697,	10500
16.	1784,	11500
17.	1826,	12000

Standard Error: 13.858 Maximum Error: 24.446

$$y = -563.07100186032 + 4.3299033112825x + -1.4997055434239e-005(x^2) + 7.7080038017104e-007(x^3)$$

=====

11. HEADING

WN=09

Type: RECORDED

Subframes in which parameter occurs: 1 2 3 4

Range of E/U data: 0 - 359.912

Report header: Head WN=09

Percent error allowed in the E/U values: ± 0 Absolute error allowed in the E/U values: ± 0

FDR input signal: SYNCHRO-Heading (S3, S1-6)

Prerequisite conditions: 0

Data words: 1

Word Number	Signed	Mask	Shift Count
9	NO	0X0FFF	0

Conversion algorithm: STANDARD 542 CONVERSION

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1. The first part of the document is a list of 10 items, each with a number and a description. The items are:

1. The first part of the document is a list of 10 items, each with a number and a description. The items are:
2. The second part of the document is a list of 10 items, each with a number and a description. The items are:
3. The third part of the document is a list of 10 items, each with a number and a description. The items are:
4. The fourth part of the document is a list of 10 items, each with a number and a description. The items are:
5. The fifth part of the document is a list of 10 items, each with a number and a description. The items are:
6. The sixth part of the document is a list of 10 items, each with a number and a description. The items are:
7. The seventh part of the document is a list of 10 items, each with a number and a description. The items are:
8. The eighth part of the document is a list of 10 items, each with a number and a description. The items are:
9. The ninth part of the document is a list of 10 items, each with a number and a description. The items are:
10. The tenth part of the document is a list of 10 items, each with a number and a description. The items are:

```

14. LONG ACC 2                WN=21
Type: RECORDED
Subframes in which parameter occurs: 1 2 3 4
Range of E/U data: -1.05 - 1.05
Report header: Long Acc 2 WN=21
Percent error allowed in the E/U values:  $\pm 0$ 
Absolute error allowed in the E/U values:  $\pm 0.015$ 
FDR input signal: ACCELERATION-DC Longitudinal
Prerequisite conditions: 0
Data words: 1
Word Number      Signed      Mask      Shift Count
-----
      21          NO      0X0FFF          0
Conversion algorithm: STANDARD 542 CONVERSION

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=====
15. LONG ACC 3                WN=37
Type: RECORDED
Subframes in which parameter occurs: 1 2 3 4
Range of E/U data: -1.05 - 1.05
Report header: Long Acc 3 WN=37
Percent error allowed in the E/U values:  $\pm 0$ 
Absolute error allowed in the E/U values:  $\pm 0.015$ 
FDR input signal: ACCELERATION-DC Longitudinal
Prerequisite conditions: 0
Data words: 1
Word Number    Signed    Mask    Shift Count
-----
      37         NO    0X0FFF         0
Conversion algorithm: STANDARD 542 CONVERSION
=====
```

```
=====
16. LONG ACC 4                WN=53
Type: RECORDED
Subframes in which parameter occurs: 1 2 3 4
Range of E/U data: -1.05 - 1.05
Report header: Long Acc 4 WN=53
Percent error allowed in the E/U values:  $\pm 0$ 
Absolute error allowed in the E/U values:  $\pm 0.015$ 
FDR input signal: ACCELERATION-DC Longitudinal
Prerequisite conditions: 0
Data words: 1
Word Number    Signed    Mask    Shift Count
-----
      53         NO    0X0FFF         0
Conversion algorithm: STANDARD 542 CONVERSION
=====
```

```
=====
17. N1 ENGINE 1              WN=51
Type: RECORDED
Subframes in which parameter occurs: 1 2 3 4
Range of E/U data: 0 - 120
Report header: N1 Eng.1 WN=51
Percent error allowed in the E/U values:  $\pm 0$ 
Absolute error allowed in the E/U values:  $\pm 0$ 
FDR input signal: LOW-LEVEL DC VOLTAGE-DC6
Prerequisite conditions: 0
Data words: 1
Word Number    Signed    Mask    Shift Count
-----
      51         NO    0X0FFF         0
Conversion algorithm: CURVE FIT
Type: POLYNOMIAL    Order: 1    Data Points: 2
1.      135,          0
2.     3771,         120
Standard Error: 0.000    Maximum Error: 0.000
y = -4.4554455445545 + 0.033003300330033*x
=====
```

```

=====
18. N1 ENGINE 2                WN=30
Type: RECORDED
Subframes in which parameter occurs:  1  2  3  4
Range of E/U data: 0 - 120
Report header: N1 Eng.2 WN=30
Percent error allowed in the E/U values:  ± 0
Absolute error allowed in the E/U values:  ± 0
FDR input signal: LOW-LEVEL DC VOLTAGE-DC1
Prerequisite conditions: 0
Data words: 1
Word Number      Signed      Mask      Shift Count
-----
      30          NO      0X0FFF          0
Conversion algorithm: CURVE FIT
Type: POLYNOMIAL   Order: 1   Data Points: 2
1.      135,          0
2.      3771,         120
Standard Error: 0.000   Maximum Error: 0.000
y = -4.4554455445545 + 0.033003300330033*x
=====

```

```

=====
19. N2 ENGINE 1                WN=31
Type: RECORDED
Subframes in which parameter occurs:  1  2  3  4
Range of E/U data: 0 - 120
Report header: N2 Eng.1 WN=31
Percent error allowed in the E/U values:  ± 0
Absolute error allowed in the E/U values:  ± 0
FDR input signal: LOW-LEVEL DC VOLTAGE-DC5
Prerequisite conditions: 0
Data words: 1
Word Number      Signed      Mask      Shift Count
-----
      31          NO      0X0FFF          0
Conversion algorithm: CURVE FIT
Type: POLYNOMIAL   Order: 1   Data Points: 2
1.      135,          0
2.      3771,         120
Standard Error: 0.000   Maximum Error: 0.000
y = -4.4554455445545 + 0.033003300330033*x
=====

```


=====

20. N2 ENGINE 2 WN=06
Type: RECORDED
Subframes in which parameter occurs: 1 2 3 4
Range of E/U data: 0 - 120
Report header: N2 Eng.2 WN=06
Percent error allowed in the E/U values: ± 0
Absolute error allowed in the E/U values: ± 0
FDR input signal: LOW-LEVEL DC VOLTAGE-DC7
Prerequisite conditions: 0
Data words: 1

Word Number	Signed	Mask	Shift Count
-----	-----	-----	-----
6	NO	0X0FFF	0

Conversion algorithm: CURVE FIT
Type: POLYNOMIAL Order: 1 Data Points: 2
1. 135, 0
2. 3771, 120
Standard Error: 0.000 Maximum Error: 0.000
 $y = -4.4554455445545 + 0.033003300330033*x$

=====

21. PITCH ATT 1 WN=13
Type: RECORDED
Subframes in which parameter occurs: 1 2 3 4
Range of E/U data: -180 - 180
Report header: Pitch Att 1 WN=13
Percent error allowed in the E/U values: ± 0
Absolute error allowed in the E/U values: ± 1
FDR input signal: SYNCHRO-Pitch Att. (S4, S1-2)
Prerequisite conditions: 0
Data words: 1

Word Number	Signed	Mask	Shift Count
-----	-----	-----	-----
13	NO	0X0FFF	0

Conversion algorithm: STANDARD 542 CONVERSION

=====

22. PITCH ATT 2 WN=29
Type: RECORDED
Subframes in which parameter occurs: 1 2 3 4
Range of E/U data: -180 - 180
Report header: Pitch Att 2 WN=29
Percent error allowed in the E/U values: ± 0
Absolute error allowed in the E/U values: ± 1
FDR input signal: SYNCHRO-Pitch Att. (S4, S1-2)
Prerequisite conditions: 0
Data words: 1

Word Number	Signed	Mask	Shift Count
-----	-----	-----	-----
29	NO	0X0FFF	0

Conversion algorithm: STANDARD 542 CONVERSION

=====

23. PITCH ATT 3 WN=45
Type: RECORDED
Subframes in which parameter occurs: 1 2 3 4
Range of E/U data: -180 - 180
Report header: Pitch Att 3 WN=45
Percent error allowed in the E/U values: ± 0
Absolute error allowed in the E/U values: ± 1
FDR input signal: SYNCHRO-Pitch Att. (S4, S1-2)
Prerequisite conditions: 0
Data words: 1

Word Number	Signed	Mask	Shift Count
-----	-----	-----	-----
45	NO	0X0FFF	0

Conversion algorithm: STANDARD 542 CONVERSION

=====

24. PITCH ATT 4 WN=61
Type: RECORDED
Subframes in which parameter occurs: 1 2 3 4
Range of E/U data: -180 - 180
Report header: Pitch Att 4 WN=61
Percent error allowed in the E/U values: ± 0
Absolute error allowed in the E/U values: ± 1
FDR input signal: SYNCHRO-Pitch Att. (S4, S1-2)
Prerequisite conditions: 0
Data words: 1

Word Number	Signed	Mask	Shift Count
-----	-----	-----	-----
61	NO	0X0FFF	0

Conversion algorithm: STANDARD 542 CONVERSION

=====

25. ROLL ATT 1 WN=14
Type: RECORDED
Subframes in which parameter occurs: 1 2 3 4
Range of E/U data: -180 - 179.999
Report header: Roll Att 1 WN=14
Percent error allowed in the E/U values: ± 0
Absolute error allowed in the E/U values: ± 1
FDR input signal: SYNCHRO-Roll Att. (S5, S1-3)
Prerequisite conditions: 0
Data words: 1

Word Number	Signed	Mask	Shift Count
-----	-----	-----	-----
14	NO	0X0FFF	0

Conversion algorithm: STANDARD 542 CONVERSION

=====

26. ROLL ATT 2 WN=46
Type: RECORDED
Subframes in which parameter occurs: 1 2 3 4
Range of E/U data: -180 - 180
Report header: Roll att 2 WN=46
Percent error allowed in the E/U values: ± 0
Absolute error allowed in the E/U values: ± 1
FDR input signal: SYNCHRO-Roll Att. (S5, S1-3)
Prerequisite conditions: 0
Data words: 1

Word Number	Signed	Mask	Shift Count
-----	-----	-----	-----
46	NO	0X0FFF	0

Conversion algorithm: STANDARD 542 CONVERSION

=====

27. VERT ACC 1 WN=04
Type: RECORDED
Subframes in which parameter occurs: 1 2 3 4
Range of E/U data: -3.375 - 6.46875
Report header: Vert Acc 1 WN=04
Percent error allowed in the E/U values: ± 0
Absolute error allowed in the E/U values: ± 0.045
FDR input signal: ACCELERATION-DC Vertical
Prerequisite conditions: 0
Data words: 1

Word Number	Signed	Mask	Shift Count
-----	-----	-----	-----
4	NO	0X0FFF	0

Conversion algorithm: POLYNOMIAL
 $y = -3.25451484 + 0.002392069 * x$

=====

28. VERT ACC 2 WN=12
Type: RECORDED
Subframes in which parameter occurs: 1 2 3 4
Range of E/U data: -3.375 - 6.46875
Report header: Vert Acc 2 WN=12
Percent error allowed in the E/U values: ± 0
Absolute error allowed in the E/U values: ± 0.045
FDR input signal: ACCELERATION-DC Vertical
Prerequisite conditions: 0
Data words: 1

Word Number	Signed	Mask	Shift Count
-----	-----	-----	-----
12	NO	0X0FFF	0

Conversion algorithm: POLYNOMIAL
 $y = -3.25451484 + 0.002392069 * x$

=====

29. VERT ACC 3

WN=20

Type: RECORDED

Subframes in which parameter occurs: 1 2 3 4

Range of E/U data: -3.375 - 6.46875

Report header: Vert Acc 3 WN=20

Percent error allowed in the E/U values: ± 0 Absolute error allowed in the E/U values: ± 0.045

FDR input signal: ACCELERATION-DC Vertical

Prerequisite conditions: 0

Data words: 1

Word Number	Signed	Mask	Shift Count
20	NO	0X0FFF	0

Conversion algorithm: POLYNOMIAL

 $y = -3.25451484 + 0.002392069 \cdot x$

=====

30. VERT ACC 4

WN=28

Type: RECORDED

Subframes in which parameter occurs: 1 2 3 4

Range of E/U data: -3.375 - 6.46875

Report header: Vert Acc 4 WN=28

Percent error allowed in the E/U values: ± 0 Absolute error allowed in the E/U values: ± 0.045

FDR input signal: ACCELERATION-DC Vertical

Prerequisite conditions: 0

Data words: 1

Word Number	Signed	Mask	Shift Count
28	NO	0X0FFF	0

Conversion algorithm: POLYNOMIAL

 $y = -3.25451484 + 0.002392069 \cdot x$

=====

31. VERT ACC 5

WN=36

Type: RECORDED

Subframes in which parameter occurs: 1 2 3 4

Range of E/U data: -3.375 - 6.46875

Report header: Vert Acc 5 WN=36

Percent error allowed in the E/U values: ± 0 Absolute error allowed in the E/U values: ± 0.045

FDR input signal: ACCELERATION-DC Vertical

Prerequisite conditions: 0

Data words: 1

Word Number	Signed	Mask	Shift Count
36	NO	0X0FFF	0

Conversion algorithm: POLYNOMIAL

 $y = -3.25451484 + 0.002392069 \cdot x$

=====

32. VERT ACC 6 WN=44
Type: RECORDED
Subframes in which parameter occurs: 1 2 3 4
Range of E/U data: -3.375 - 6.46875
Report header: Vert Acc 6 WN=44
Percent error allowed in the E/U values: ± 0
Absolute error allowed in the E/U values: ± 0.045
FDR input signal: ACCELERATION-DC Vertical
Prerequisite conditions: 0
Data words: 1

Word Number	Signed	Mask	Shift Count
-----	-----	-----	-----
44	NO	0X0FFF	0

Conversion algorithm: POLYNOMIAL
 $y = -3.25451484 + 0.002392069 * x$

=====

33. VERT ACC 7 WN=52
Type: RECORDED
Subframes in which parameter occurs: 1 2 3 4
Range of E/U data: -3.375 - 6.46875
Report header: Vert Acc 7 WN=52
Percent error allowed in the E/U values: ± 0
Absolute error allowed in the E/U values: ± 0.045
FDR input signal: ACCELERATION-DC Vertical
Prerequisite conditions: 0
Data words: 1

Word Number	Signed	Mask	Shift Count
-----	-----	-----	-----
52	NO	0X0FFF	0

Conversion algorithm: POLYNOMIAL
 $y = -3.25451484 + 0.002392069 * x$

=====

34. VERT ACC 8 WN=60
Type: RECORDED
Subframes in which parameter occurs: 1 2 3 4
Range of E/U data: -3.375 - 6.46875
Report header: Vert Acc 8 WN=60
Percent error allowed in the E/U values: ± 0
Absolute error allowed in the E/U values: ± 0.045
FDR input signal: ACCELERATION-DC Vertical
Prerequisite conditions: 0
Data words: 1

Word Number	Signed	Mask	Shift Count
-----	-----	-----	-----
60	NO	0X0FFF	0

Conversion algorithm: POLYNOMIAL

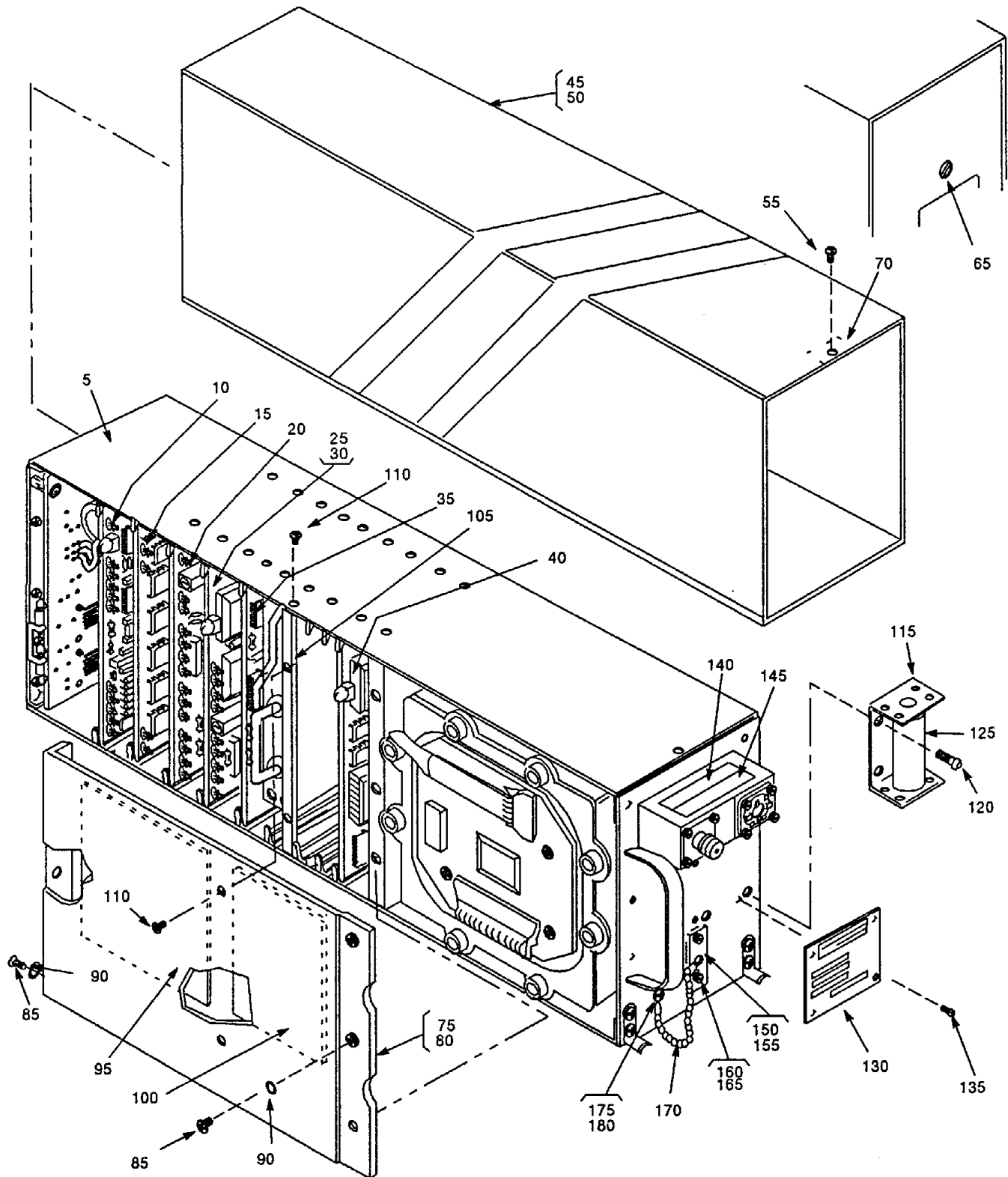
000021

ATTACHMENT II
(SSFDR data source table)

USAir 427, B737-300
DATA SOURCE TABLE

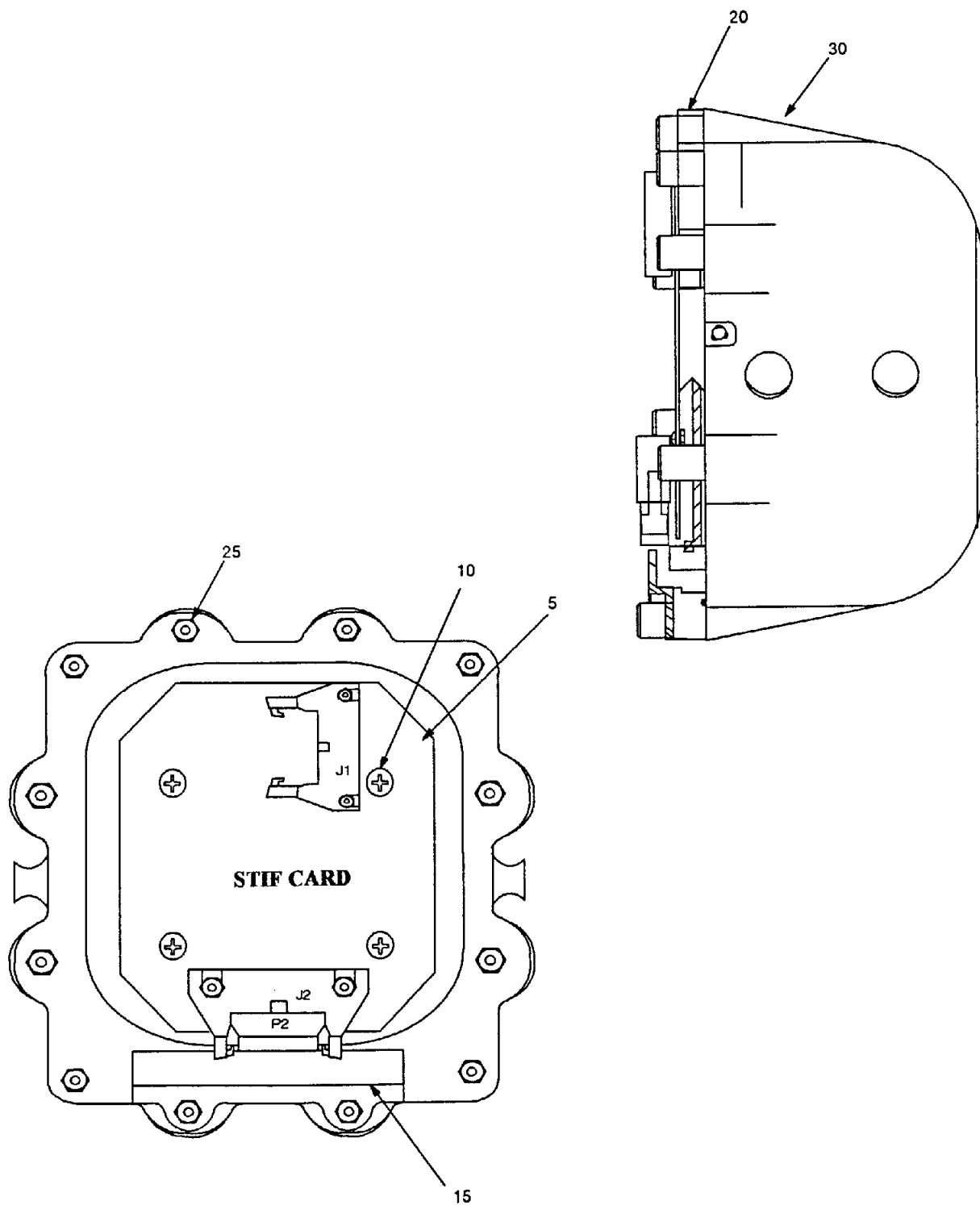
DATA PARAMETER	SOURCE	UNITS	SIGN
RELATIVE TIME	INTERNAL CLOCK	SECONDS	N/A
PRESSURE ALTITUDE (Altitude)	CAPTAINS PRIMARY STATIC SYSTEM	FEET	N/A
INDICATED AIRSPEED (IAS)	CAPTAINS PRIMARY PITOT STATIC SYSTEM	NAUTICAL MILES PER HOUR	N/A
MAGNETIC HEADING (HEAD)	#2 COMPASS SYSTEM	DEGREES	0.0 = MAG. NORTH
PITCH ATTITUDE (Pitch Att)	#1 IRU SYSTEM	DEGREES	+ = Nose up
ROLL ATTITUDE (Roll Att)	#1 IRU SYSTEM	DEGREES	+ = Left wing up
VERTICAL ACCELERATION (Vert Acc)	2 - Axis Accelerometer (Right, main wheel well)	Gs (+1.0 = nominal)	+ = Upward acceleration
LONGITUDINAL ACCELERATION (Long)	2 - Axis Accelerometer (Right, main wheel well)	Gs (0.0 = nominal)	+ = Forward acceleration
CONTROL COLUMN POSITION (Cont. Col. Pitch)	Synchro (Base of Captain's control column)	DEGREES	- = Back deflection
N1 (N1)	SPEED SENSOR	PERCENT	N/A
N2 (N2)	CONTROL ALTERNATOR	PERCENT	N/A
EXHAUST GAS TEMPERATURE (EGT)	THERMOCOUPLE	DEGREES CELSIUS	N/A
FUEL FLOW (F. Flow)	FUEL FLOW TRANSMITTER	POUNDS PER HOUR	N/A
MICROPHONE KEYING (ATC Keying)	AUDIO ACCESSORY UNIT (All keys)	DISCRETE	0 = Keyed

ATTACHMENT III
(SSFDR Assembly Diagram)



Fairchild Model F1000 Solid State Flight Data Recorder, SSFDR, Final Assembly,
S903-2000-00, S800-2000-00, S703-1000-00, S603-1000-00, S800-3000-00

Figure 1



Flash Crash Survivable Unit,
253E0348-00, -01, -02
Figure 12

**ATTACHMENT IV
(ORD-PIT Final 5 Minutes)**

000027

CONFIG:737-300/400 SSFDR 542A ELEC VER. 1.2 PRINTER

	RELATIVE TIME	Altitude	IAS	Head	Pitch Att 1	Pitch Att 2	Pitch Att 3	Pitch Att 4	Roll Att 1	Roll att 2
S	HH:MM:WN=19+58	WN=10	WN=09	WN=13	WN=29	WN=45	WN=61	WN=14	WN=46	
3	10:27:24	10840	217.39	160.18	5.85	5.85	5.85	5.91	0.79	0.57
4	10:27:25	10835	216.68	160.37	5.91	5.91	5.91	5.98	0.28	-0.17
1	10:27:26	10830	215.97	160.55	5.91	5.98	5.98	5.91	-0.39	-0.51
2	10:27:27	10825	215.61	160.55	5.85	5.71	5.71	5.58	-0.57	-0.57
3	10:27:28	10818	215.12	160.64	5.51	5.44	5.38	5.31	-0.57	-0.57
4	10:27:29	10811	214.39	160.82	5.24	5.18	5.11	5.05	-0.62	-0.62
1	10:27:30	10802	213.77	160.64	4.98	4.91	4.85	4.78	-0.68	-0.62
2	10:27:31	10791	213.40	160.73	4.72	4.65	4.65	4.59	-0.57	-0.62
3	10:27:32	10778	213.15	160.55	4.59	4.52	4.52	4.52	-0.74	-0.85
4	10:27:33	10764	213.03	160.37	4.46	4.46	4.46	4.46	-0.91	-0.97
1	10:27:34	10751	212.90	160.46	4.46	4.46	4.46	4.46	-1.03	-1.03
2	10:27:35	10736	212.90	160.27	4.52	4.52	4.52	4.52	-1.03	-0.97
3	10:27:36	10719	212.52	160.37	4.59	4.59	4.65	4.65	-0.91	-0.85
4	10:27:37	10703	212.14	160.37	4.65	4.65	4.65	4.65	-0.79	-0.74
1	10:27:38	10688	211.64	160.18	4.65	4.65	4.65	4.65	-0.68	-0.57
2	10:27:39	10672	211.25	160.18	4.59	4.59	4.59	4.59	-0.57	-0.57
3	10:27:40	10657	210.74	160.09	4.59	4.52	4.52	4.46	-0.51	-0.45
4	10:27:41	10641	210.35	160.27	4.46	4.39	4.39	4.33	-0.45	-0.39
1	10:27:42	10624	209.83	160.09	4.27	4.20	4.14	4.07	-0.34	-0.34
2	10:27:43	10606	209.57	160.18	4.01	4.01	3.95	3.88	-0.22	-0.17
3	10:27:44	10587	209.18	160.00	3.82	3.75	3.69	3.63	0.17	0.28
4	10:27:45	10567	208.91	160.00	3.63	3.57	3.50	3.44	0.28	0.34
1	10:27:46	10545	208.52	160.00	3.38	3.31	3.25	3.19	0.34	0.34
2	10:27:47	10522	208.65	159.81	3.19	3.13	3.13	3.07	0.22	-0.06
3	10:27:48	10498	208.78	159.91	3.00	3.00	3.00	2.94	-0.22	-0.28
4	10:27:49	10471	208.91	159.81	2.88	2.88	2.82	2.88	-0.28	-0.28
1	10:27:50	10444	209.18	159.91	2.82	2.76	2.82	2.82	-0.17	-0.11
2	10:27:51	10415	209.44	160.09	2.82	2.82	2.82	2.82	-0.11	-0.11
3	10:27:52	10386	209.83	160.09	2.82	2.82	2.82	2.82	-0.06	-0.06
4	10:27:53	10358	210.48	160.09	2.88	2.88	2.94	2.88	-0.06	-0.11
1	10:27:54	10329	210.87	160.27	3.00	3.00	3.07	3.07	-0.11	-0.11
2	10:27:55	10301	211.38	160.37	3.07	3.13	3.13	3.19	-0.11	-0.06
3	10:27:56	10274	211.76	160.27	3.19	3.25	3.31	3.31	0.11	0.17
4	10:27:57	10249	212.14	160.46	3.31	3.31	3.38	3.38	0.17	0.22
1	10:27:58	10223	212.40	160.37	3.38	3.38	3.38	3.44	0.22	0.17
2	10:27:59	10199	212.65	160.46	3.44	3.44	3.44	3.44	-0.17	-0.28
3	10:28:00	10174	212.77	160.46	3.44	3.44	3.44	3.44	-0.51	-0.79
4	10:28:01	10150	213.15	160.37	3.44	3.50	3.50	3.50	-0.91	-0.79
1	10:28:02	10128	213.28	160.37	3.50	3.50	3.50	3.50	-0.68	-0.62
2	10:28:03	10104	212.65	160.00	3.50	3.50	3.50	3.44	-0.62	-0.62
3	10:28:04	10081	212.40	159.81	3.44	3.44	3.44	3.38	-0.74	-0.74
4	10:28:05	10058	212.27	159.72	3.38	3.38	3.31	3.31	-0.74	-0.62
1	10:28:06	10034	212.02	159.54	3.25	3.25	3.25	3.19	-0.45	-0.39
2	10:28:07	10009	212.02	159.54	3.19	3.19	3.19	3.19	-0.22	0.11
3	10:28:08	9983	212.02	159.72	3.19	3.19	3.13	3.13	0.28	0.34
4	10:28:09	9957	211.89	159.54	3.13	3.13	3.13	3.13	0.39	0.34
1	10:28:10	9931	211.76	159.72	3.13	3.13	3.13	3.13	0.34	0.34
2	10:28:11	9905	211.76	159.81	3.13	3.13	3.13	3.13	0.34	0.39
3	10:28:12	9878	211.89	159.91	3.13	3.13	3.19	3.13	0.39	0.34
4	10:28:13	9851	211.89	160.00	3.19	3.19	3.19	3.19	0.34	0.22
1	10:28:14	9823	212.14	160.18	3.19	3.25	3.25	3.25	0.17	0.11
2	10:28:15	9797	212.14	160.09	3.31	3.31	3.38	3.38	-0.11	-0.17
3	10:28:16	9771	212.27	160.09	3.44	3.38	3.44	3.44	-0.22	-0.28
4	10:28:17	9744	212.40	160.09	3.44	3.50	3.50	3.50	-0.34	-0.39

RELATIVE				Pitch	Pitch	Pitch	Pitch	Roll	Roll	
S	TIME	Altitude	IAS	Head	Att 1	Att 2	Att 3	Att 4	Att 1	att 2
F	HH:MM:WN=19+58	WN=10	WN=09	WN=13	WN=29	WN=45	WN=61	WN=14	WN=46	
1	10:28:18	9718	212.52	160.09	3.50	3.57	3.57	3.57	-0.45	-0.51
2	10:28:19	9694	212.52	160.00	3.63	3.63	3.63	3.63	-0.57	-0.57
3	10:28:20	9668	212.40	160.09	3.63	3.63	3.63	3.63	-0.57	-0.51
4	10:28:21	9644	212.40	160.09	3.63	3.69	3.63	3.69	-0.45	-0.45
1	10:28:22	9618	212.14	160.00	3.63	3.63	3.63	3.63	-0.39	-0.45
2	10:28:23	9596	212.27	160.00	3.63	3.63	3.63	3.63	-0.51	-0.51
3	10:28:24	9572	212.40	160.09	3.63	3.57	3.63	3.57	-0.45	-0.39
4	10:28:25	9547	212.65	160.00	3.63	3.57	3.63	3.63	-0.34	-0.34
1	10:28:26	9525	212.90	160.00	3.63	3.63	3.63	3.63	-0.34	-0.39
2	10:28:27	9502	213.65	159.91	3.63	3.63	3.69	3.69	-0.51	-0.51
3	10:28:28	9481	213.77	159.91	3.75	3.75	3.75	3.75	-0.51	-0.57
4	10:28:29	9458	214.39	160.00	3.82	3.82	3.88	3.88	-0.51	-0.45
1	10:28:30	9438	214.88	160.09	3.95	3.95	4.01	4.07	-0.45	-0.39
2	10:28:31	9418	215.00	160.09	4.07	4.14	4.14	4.20	-0.34	-0.28
3	10:28:32	9399	215.49	160.09	4.20	4.20	4.27	4.27	-0.17	-0.22
4	10:28:33	9380	215.49	160.09	4.27	4.33	4.33	4.33	-0.28	-0.39
1	10:28:34	9363	215.24	160.00	4.33	4.33	4.39	4.33	-0.51	-0.57
2	10:28:35	9346	215.24	160.09	4.39	4.33	4.33	4.33	-0.57	-0.57
3	10:28:36	9329	215.12	160.00	4.27	4.33	4.33	4.27	-0.51	-0.51
4	10:28:37	9312	215.00	160.00	4.27	4.27	4.27	4.27	-0.51	-0.51
1	10:28:38	9295	214.88	160.09	4.27	4.27	4.27	4.20	-0.51	-0.51
2	10:28:39	9277	214.76	160.00	4.20	4.27	4.27	4.20	-0.51	-0.51
3	10:28:40	9258	214.63	160.09	4.20	4.14	4.14	4.14	-0.45	-0.45
4	10:28:41	9240	214.39	160.00	4.14	4.14	4.14	4.14	-0.45	-0.45
1	10:28:42	9222	214.02	160.00	4.20	4.14	4.20	4.14	-0.45	-0.45
2	10:28:43	9203	213.77	160.09	4.20	4.20	4.20	4.20	-0.45	-0.39
3	10:28:44	9184	213.52	160.00	4.20	4.20	4.20	4.20	-0.39	-0.45
4	10:28:45	9165	213.40	160.00	4.20	4.20	4.20	4.20	-0.45	-0.45
1	10:28:46	9146	213.28	160.09	4.20	4.20	4.27	4.27	-0.39	-0.34
2	10:28:47	9126	213.03	160.09	4.27	4.27	4.20	4.27	-0.39	-0.39
3	10:28:48	9108	212.65	160.00	4.27	4.27	4.27	4.27	-0.45	-0.51
4	10:28:49	9089	212.40	160.09	4.27	4.27	4.27	4.27	-0.57	-0.57
1	10:28:50	9070	212.40	160.09	4.27	4.27	4.27	4.27	-0.57	-0.51
2	10:28:51	9051	212.27	160.00	4.27	4.27	4.27	4.27	-0.51	-0.51
3	10:28:52	9033	212.27	160.09	4.27	4.27	4.27	4.27	-0.51	-0.51
4	10:28:53	9014	212.27	159.91	4.27	4.33	4.33	4.33	-0.57	-0.57
1	10:28:54	8995	212.27	160.00	4.33	4.33	4.27	4.33	-0.51	-0.45
2	10:28:55	8978	212.27	159.81	4.33	4.33	4.33	4.39	-0.39	-0.45
3	10:28:56	8960	212.27	159.81	4.39	4.33	4.39	4.39	-0.45	-0.39
4	10:28:57	8943	212.40	159.81	4.39	4.39	4.39	4.39	-0.39	-0.39
1	10:28:58	8927	212.27	159.91	4.39	4.39	4.46	4.39	-0.39	-0.34
2	10:28:59	8911	212.02	159.91	4.39	4.46	4.39	4.39	-0.28	-0.28
3	10:29:00	8894	211.64	159.81	4.39	4.39	4.39	4.39	-0.22	-0.28
4	10:29:01	8876	211.51	159.91	4.39	4.39	4.33	4.33	-0.22	-0.17
1	10:29:02	8859	211.51	160.09	4.33	4.33	4.33	4.27	-0.17	-0.11
2	10:29:03	8842	211.64	159.91	4.27	4.27	4.27	4.27	0.11	0.17
3	10:29:04	8824	211.38	160.00	4.27	4.27	4.27	4.27	0.17	0.17
4	10:29:05	8806	211.12	160.00	4.27	4.27	4.27	4.27	0.11	-0.11
1	10:29:06	8787	211.12	159.91	4.27	4.33	4.33	4.27	-0.17	-0.22
2	10:29:07	8769	211.12	159.91	4.33	4.33	4.33	4.33	-0.22	-0.28
3	10:29:08	8751	211.12	159.91	4.33	4.33	4.33	4.33	-0.22	-0.22
4	10:29:09	8734	211.12	159.72	4.33	4.33	4.33	4.33	-0.17	-0.17
1	10:29:10	8716	211.00	159.81	4.39	4.33	4.39	4.39	-0.11	-0.17
2	10:29:11	8698	210.87	159.81	4.39	4.39	4.39	4.39	-0.17	-0.17

RELATIVE				Pitch	Pitch	Pitch	Pitch	Roll	Roll	
S	TIME	Altitude	IAS	Head	Att 1	Att 2	Att 3	Att 4	Att 1	Att 2
F	HH:MM:WN=19+58	WN=10	WN=09	WN=13	WN=29	WN=45	WN=61	WN=14	WN=46	
3	10:29:12	8679	210.61	159.72	4.39	4.39	4.39	4.39	-0.17	-0.11
4	10:29:13	8661	210.48	159.81	4.39	4.33	4.33	4.33	-0.11	-0.06
1	10:29:14	8643	210.48	159.81	4.33	4.33	4.33	4.33	0.11	0.22
2	10:29:15	8625	210.22	159.72	4.33	4.33	4.33	4.33	0.22	0.34
3	10:29:16	8606	210.35	159.72	4.33	4.33	4.33	4.27	0.45	0.45
4	10:29:17	8589	210.61	159.81	4.33	4.33	4.33	4.33	0.34	0.28
1	10:29:18	8570	210.74	159.81	4.33	4.33	4.33	4.33	0.22	0.17
2	10:29:19	8552	210.74	159.72	4.33	4.33	4.33	4.33	0.17	0.11
3	10:29:20	8534	210.74	159.81	4.33	4.39	4.33	4.39	0.11	0.17
4	10:29:21	8516	210.61	159.72	4.39	4.39	4.39	4.39	0.17	0.22
1	10:29:22	8496	210.35	159.81	4.39	4.39	4.39	4.39	0.22	0.22
2	10:29:23	8477	210.35	159.91	4.39	4.39	4.39	4.39	0.22	0.17
3	10:29:24	8458	210.09	159.81	4.39	4.33	4.33	4.33	0.17	0.11
4	10:29:25	8440	210.09	160.00	4.33	4.33	4.27	4.33	-0.11	-0.17
1	10:29:26	8421	209.83	159.91	4.27	4.27	4.27	4.27	-0.17	-0.22
2	10:29:27	8400	209.83	160.09	4.27	4.27	4.27	4.27	-0.28	-0.28
3	10:29:28	8381	209.57	160.00	4.20	4.27	4.20	4.20	-0.28	-0.28
4	10:29:29	8363	209.57	160.00	4.20	4.20	4.20	4.20	-0.22	-0.17
1	10:29:30	8343	209.44	160.00	4.20	4.20	4.20	4.20	-0.11	-0.06
2	10:29:31	8324	209.18	160.00	4.20	4.20	4.20	4.20	0.11	-0.11
3	10:29:32	8303	209.04	160.00	4.14	4.14	4.14	4.14	-0.22	-0.28
4	10:29:33	8284	208.91	159.81	4.14	4.14	4.07	4.07	-0.34	-0.34
1	10:29:34	8263	209.04	159.91	4.07	4.07	4.07	4.07	-0.39	-0.39
2	10:29:35	8242	208.91	159.72	4.01	4.01	4.07	4.01	-0.68	-1.26
3	10:29:36	8220	208.78	159.72	4.01	4.01	4.07	4.01	-2.33	-3.75
4	10:29:37	8199	208.78	159.63	4.01	4.01	4.07	4.07	-5.51	-7.22
1	10:29:38	8177	208.38	158.98	4.01	4.01	4.01	3.95	-8.94	-10.43
2	10:29:39	8155	207.85	158.04	3.95	3.88	3.88	3.82	-11.66	-12.61
3	10:29:40	8134	207.45	156.60	3.82	3.75	3.82	3.75	-13.33	-13.99
4	10:29:41	8110	207.04	155.03	3.75	3.69	3.69	3.63	-14.48	-14.90
1	10:29:42	8088	207.04	153.54	3.63	3.57	3.69	3.69	-15.24	-15.49
2	10:29:43	8065	207.18	152.22	3.75	3.75	3.82	3.82	-15.58	-15.58
3	10:29:44	8045	207.18	150.88	3.88	3.88	3.88	3.88	-15.66	-15.66
4	10:29:45	8025	207.18	149.52	3.88	3.88	3.88	3.88	-15.66	-15.58
1	10:29:46	8005	206.91	148.47	3.88	3.82	3.82	3.88	-15.49	-15.32
2	10:29:47	7986	206.64	147.40	3.82	3.82	3.82	3.82	-15.15	-15.07
3	10:29:48	7968	206.50	146.12	3.82	3.82	3.82	3.82	-14.98	-14.82
4	10:29:49	7950	206.37	145.14	3.82	3.69	3.69	3.69	-14.57	-14.15
1	10:29:50	7931	206.10	143.94	3.69	3.63	3.63	3.63	-13.50	-12.69
2	10:29:51	7912	205.96	142.96	3.63	3.63	3.63	3.69	-11.82	-10.96
3	10:29:52	7892	205.82	142.30	3.69	3.69	3.75	3.82	-10.05	-9.08
4	10:29:53	7873	205.69	141.75	3.88	3.82	3.88	3.88	-8.28	-7.36
1	10:29:54	7854	205.55	141.19	3.88	3.88	3.88	3.88	-6.66	-5.98
2	10:29:55	7834	205.55	140.97	3.95	3.95	3.95	4.01	-5.38	-4.91
3	10:29:56	7814	205.27	140.75	4.01	4.07	4.07	4.07	-4.46	-4.14
4	10:29:57	7796	205.00	140.53	4.07	4.14	4.07	4.07	-3.82	-3.50
1	10:29:58	7778	204.86	140.31	4.14	4.07	4.07	4.07	-3.31	-3.07
2	10:29:59	7760	204.44	140.19	4.14	4.14	4.14	4.14	-2.82	-2.63
3	10:30:00	7742	204.17	140.19	4.20	4.14	4.14	4.20	-2.45	-2.39
4	10:30:01	7723	203.75	139.86	4.20	4.20	4.20	4.20	-2.27	-2.21
1	10:30:02	7706	203.47	139.75	4.20	4.20	4.20	4.20	-2.09	-1.97
2	10:30:03	7689	203.33	139.86	4.20	4.20	4.20	4.20	-1.85	-1.67
3	10:30:04	7672	202.76	139.64	4.27	4.20	4.20	4.27	-1.49	-1.38
4	10:30:05	7655	202.34	139.64	4.27	4.27	4.27	4.27	-1.26	-1.14

S F	RELATIVE			Pitch Att 1 WN=13	Pitch Att 2 WN=29	Pitch Att 3 WN=45	Pitch Att 4 WN=61	Roll Att 1 WN=14	Roll att 2 WN=46
	TIME	Altitude	IAS						
	HH:MM:WN=19+58	WN=10	WN=09						
1	10:30:06	7637	201.91	139.64	4.27	4.27	4.27	4.20	-1.03
2	10:30:07	7621	201.48	139.53	4.20	4.14	4.14	4.14	-1.03
3	10:30:08	7604	201.05	139.42	4.20	4.14	4.20	4.20	-1.03
4	10:30:09	7587	200.77	139.42	4.20	4.27	4.27	4.27	-0.97
1	10:30:10	7569	200.33	139.53	4.27	4.20	4.20	4.20	-0.85
2	10:30:11	7552	200.04	139.30	4.20	4.20	4.20	4.27	-0.79
3	10:30:12	7534	199.75	139.30	4.27	4.27	4.27	4.33	-0.79
4	10:30:13	7516	199.46	139.42	4.33	4.33	4.33	4.39	-0.74
1	10:30:14	7496	199.46	139.19	4.39	4.39	4.46	4.46	-0.74
2	10:30:15	7479	199.31	139.30	4.52	4.46	4.52	4.52	-0.62
3	10:30:16	7463	199.17	139.30	4.59	4.59	4.65	4.65	-0.57
4	10:30:17	7445	199.02	139.42	4.72	4.72	4.72	4.78	-0.57
1	10:30:18	7430	198.73	139.30	4.78	4.78	4.85	4.85	-0.62
2	10:30:19	7414	198.58	139.30	4.85	4.85	4.91	4.91	-0.51
3	10:30:20	7399	198.44	139.30	4.91	4.91	4.98	4.98	-0.51
4	10:30:21	7384	198.29	139.42	4.98	5.05	5.05	5.05	-0.51
1	10:30:22	7371	197.99	139.19	5.05	5.05	5.11	5.11	-0.62
2	10:30:23	7357	197.85	139.19	5.11	5.18	5.18	5.18	-0.68
3	10:30:24	7345	197.70	139.30	5.24	5.24	5.24	5.24	-0.62
4	10:30:25	7332	196.95	139.08	5.24	5.18	5.24	5.24	-0.79
1	10:30:26	7319	196.80	139.19	5.24	5.24	5.31	5.31	-0.85
2	10:30:27	7308	196.95	139.08	5.31	5.38	5.38	5.38	-0.74
3	10:30:28	7295	196.21	138.97	5.44	5.38	5.44	5.44	-0.57
4	10:30:29	7284	195.15	139.19	5.44	5.44	5.44	5.38	-0.39
1	10:30:30	7271	194.55	139.08	5.38	5.31	5.31	5.24	-0.28
2	10:30:31	7257	194.09	139.19	5.24	5.24	5.18	5.18	-0.39
3	10:30:32	7242	193.48	139.30	5.11	5.11	5.11	5.11	-0.34
4	10:30:33	7227	193.17	139.42	5.11	5.11	5.11	5.11	-0.28
1	10:30:34	7213	192.86	139.42	5.11	5.11	5.11	5.11	-0.34
2	10:30:35	7198	192.40	139.30	5.11	5.18	5.18	5.18	-0.45
3	10:30:36	7183	192.40	139.19	5.18	5.24	5.31	5.31	-0.51
4	10:30:37	7168	192.56	139.30	5.31	5.38	5.38	5.38	-0.34
1	10:30:38	7155	192.09	139.08	5.38	5.38	5.38	5.31	-0.34
2	10:30:39	7141	191.63	139.19	5.31	5.38	5.31	5.31	-0.34
3	10:30:40	7127	191.32	139.19	5.38	5.31	5.38	5.31	-0.22
4	10:30:41	7113	191.01	139.08	5.31	5.31	5.24	5.24	-0.11
1	10:30:42	7100	190.85	139.19	5.18	5.18	5.18	5.18	-0.06
2	10:30:43	7085	191.01	139.30	5.11	5.11	5.05	5.05	-0.17
3	10:30:44	7072	190.70	139.19	5.05	5.05	5.05	5.05	-0.39
4	10:30:45	7058	190.38	139.42	5.05	5.05	5.05	5.05	-0.39
1	10:30:46	7044	190.54	139.42	5.05	4.98	5.05	5.05	-0.51
2	10:30:47	7029	190.23	139.42	4.98	4.98	4.98	4.98	-0.74
3	10:30:48	7014	189.76	139.75	4.98	4.98	4.98	4.98	-0.68
4	10:30:49	6999	189.44	139.64	4.91	4.91	4.91	4.85	-0.51
1	10:30:50	6982	189.13	139.75	4.85	4.85	4.78	4.78	-0.45
2	10:30:51	6966	188.65	139.75	4.78	4.72	4.72	4.72	-0.45
3	10:30:52	6949	188.34	139.64	4.65	4.65	4.59	4.59	-0.79
4	10:30:53	6930	187.86	139.64	4.52	4.52	4.46	4.46	-1.08
1	10:30:54	6912	187.38	139.75	4.46	4.46	4.39	4.39	-1.14
2	10:30:55	6893	187.07	139.86	4.39	4.39	4.33	4.33	-1.14
3	10:30:56	6871	187.07	139.75	4.33	4.27	4.27	4.27	-1.03
4	10:30:57	6851	186.91	139.64	4.27	4.27	4.20	4.20	-0.91
1	10:30:58	6829	186.59	139.75	4.20	4.20	4.20	4.20	-1.20
2	10:30:59	6807	186.43	139.64	4.20	4.14	4.14	4.14	-1.49

S F	RELATIVE TIME HH:MM:WN	Altitude WN=19+58	IAS WN=10	Head WN=09	Pitch Att 1 WN=13	Pitch Att 2 WN=29	Pitch Att 3 WN=45	Pitch Att 4 WN=61	Roll Att 1 WN=14	Roll att 2 WN=46
3	10:31:00	6787	187.38	139.86	4.14	4.14	4.14	4.14	-1.85	-1.85
4	10:31:01	6766	187.54	139.86	4.20	4.20	4.20	4.27	-1.67	-1.38
1	10:31:02	6746	187.86	140.08	4.20	4.20	4.27	4.27	-1.20	-1.20
2	10:31:03	6727	188.02	140.08	4.27	4.27	4.27	4.27	-1.20	-1.20
3	10:31:04	6706	188.34	139.97	4.27	4.27	4.27	4.27	-1.20	-1.26
4	10:31:05	6686	188.34	140.19	4.27	4.27	4.27	4.27	-1.26	-1.20
1	10:31:06	6667	188.34	140.08	4.27	4.27	4.20	4.20	-1.20	-1.32
2	10:31:07	6647	188.50	140.08	4.20	4.20	4.14	4.14	-1.38	-1.49
3	10:31:08	6626	188.50	140.19	4.14	4.07	4.07	4.01	-1.55	-1.49
4	10:31:09	6606	188.65	139.97	4.07	4.01	4.01	3.95	-1.38	-1.26
1	10:31:10	6584	188.50	139.86	3.95	3.95	3.88	3.88	-1.14	-1.03
2	10:31:11	6564	188.50	139.86	3.95	3.95	3.95	3.88	-1.03	-1.14
3	10:31:12	6542	188.50	139.64	3.95	3.95	3.95	3.88	-1.26	-1.32
4	10:31:13	6520	188.50	139.53	3.88	3.88	3.88	3.88	-1.32	-1.26
1	10:31:14	6498	188.65	139.53	3.88	3.82	3.82	3.88	-1.03	-0.97
2	10:31:15	6475	188.81	139.53	3.82	3.82	3.82	3.82	-0.91	-0.85
3	10:31:16	6451	189.28	139.53	3.82	3.82	3.82	3.82	-0.74	-0.68
4	10:31:17	6428	189.28	139.53	3.88	3.82	3.88	3.82	-0.57	-0.57
1	10:31:18	6404	189.44	139.30	3.88	3.88	3.88	3.88	-0.57	-0.57
2	10:31:19	6381	189.60	139.19	3.88	3.95	3.95	3.95	-0.51	-0.51
3	10:31:20	6359	189.60	139.08	3.95	3.95	3.95	3.95	-0.45	-0.45
4	10:31:21	6337	189.76	139.08	3.95	3.95	3.95	3.88	-0.39	-0.28
1	10:31:22	6314	189.76	138.97	3.95	3.95	3.95	3.95	-0.28	-0.28
2	10:31:23	6291	189.91	139.08	3.95	3.95	3.95	3.95	-0.28	-0.39
3	10:31:24	6269	190.38	138.97	3.95	3.95	3.95	3.95	-0.45	-0.51
4	10:31:25	6248	190.38	139.19	3.95	3.95	3.95	3.88	-0.45	-0.39
1	10:31:26	6227	190.23	139.08	3.88	3.88	3.88	3.82	-0.28	-0.22
2	10:31:27	6205	190.07	139.19	3.82	3.82	3.82	3.82	-0.22	-0.22
3	10:31:28	6183	189.91	139.42	3.82	3.82	3.82	3.82	-0.22	-0.22
4	10:31:29	6160	189.76	139.53	3.82	3.82	3.75	3.75	-0.22	-0.28
1	10:31:30	6139	190.07	139.42	3.75	3.75	3.69	3.69	-0.22	-0.22
2	10:31:31	6117	190.38	139.42	3.69	3.69	3.69	3.63	-0.22	-0.22
3	10:31:32	6095	190.38	139.64	3.69	3.63	3.63	3.63	-0.34	-0.51
4	10:31:33	6072	191.32	139.53	3.69	3.63	3.69	3.69	-0.68	-0.68
1	10:31:34	6049	191.47	139.64	3.69	3.69	3.69	3.69	-0.74	-0.68
2	10:31:35	6028	191.47	139.64	3.75	3.75	3.75	3.75	-0.62	-0.57
3	10:31:36	6005	191.63	139.64	3.75	3.75	3.82	3.82	-0.57	-0.68
4	10:31:37	5984	191.47	139.53	3.82	3.75	3.82	3.82	-0.79	-0.97
1	10:31:38	5962	191.63	139.53	3.82	3.82	3.82	3.82	-1.08	-1.20
2	10:31:39	5941	192.40	139.53	3.82	3.82	3.82	3.82	-1.26	-1.20
3	10:31:40	5920	192.25	139.64	3.82	3.82	3.88	3.88	-1.14	-1.03
4	10:31:41	5898	192.09	139.75	3.88	4.01	4.14	4.27	-0.97	-1.03
1	10:31:42	5880	192.09	139.75	4.39	4.59	4.78	4.91	-1.20	-1.67
2	10:31:43	5863	192.25	139.64	5.11	5.31	5.44	5.58	-2.39	-3.31
3	10:31:44	5847	192.25	139.53	5.64	5.78	5.85	5.98	-4.52	-6.18
4	10:31:45	5835	191.94	139.19	6.05	6.18	6.18	6.32	-7.78	-9.38
1	10:31:46	5825	191.47	137.97	6.39	6.46	6.59	6.66	-10.66	-11.43
2	10:31:47	5819	191.32	136.51	6.80	6.94	7.01	7.08	-12.13	-12.77
3	10:31:48	5814	191.01	134.72	7.15	7.22	7.22	7.29	-13.17	-13.66
4	10:31:49	5811	190.54	133.15	7.36	7.36	7.43	7.43	-14.15	-14.48
1	10:31:50	5808	190.38	131.59	7.43	7.43	7.43	7.43	-14.82	-14.98
2	10:31:51	5806	190.07	130.36	7.50	7.50	7.57	7.57	-15.15	-15.07
3	10:31:52	5806	190.07	128.92	7.64	7.64	7.71	7.71	-14.98	-14.90
4	10:31:53	5806	189.91	127.70	7.64	7.64	7.64	7.64	-14.90	-14.90

S F	RELATIVE TIMEAltitude			Pitch		Pitch		Pitch		Roll	
	HH:MM:WN=19+58	IAS WN=10	Head WN=09	Att 1 WN=13	Att 2 WN=29	Att 3 WN=45	Att 4 WN=61	Att 1 WN=14	att 2 WN=46		
1	10:31:54	5806	189.76	126.27	7.57	7.57	7.50	7.50	-14.98	-15.07	
2	10:31:55	5808	189.60	124.97	7.43	7.50	7.50	7.50	-14.98	-14.82	
3	10:31:56	5808	189.13	123.67	7.50	7.50	7.57	7.57	-14.82	-14.82	
4	10:31:57	5808	189.44	122.49	7.57	7.57	7.57	7.57	-14.82	-14.73	
1	10:31:58	5808	189.28	121.11	7.57	7.57	7.57	7.57	-14.57	-14.40	
2	10:31:59	5808	188.97	119.95	7.57	7.57	7.57	7.57	-14.15	-14.07	
3	10:32:00	5808	189.28	118.60	7.57	7.57	7.57	7.57	-13.99	-13.99	
4	10:32:01	5809	189.28	117.38	7.57	7.57	7.57	7.57	-13.99	-13.99	
1	10:32:02	5809	189.28	116.36	7.57	7.57	7.57	7.57	-13.90	-13.99	
2	10:32:03	5811	189.60	115.07	7.57	7.57	7.50	7.50	-13.90	-13.90	
3	10:32:04	5811	189.76	113.69	7.50	7.50	7.50	7.50	-13.90	-13.82	
4	10:32:05	5812	190.07	112.54	7.50	7.50	7.43	7.43	-13.90	-14.07	
1	10:32:06	5814	190.38	111.21	7.43	7.43	7.43	7.36	-13.99	-13.99	
2	10:32:07	5815	190.38	110.09	7.36	7.36	7.36	7.36	-13.99	-14.07	
3	10:32:08	5816	190.38	108.91	7.29	7.29	7.36	7.29	-14.15	-14.15	
4	10:32:09	5816	190.70	107.83	7.29	7.29	7.22	7.22	-14.15	-14.07	
1	10:32:10	5818	190.54	106.61	7.22	7.22	7.22	7.15	-13.74	-13.33	
2	10:32:11	5818	190.85	105.58	7.15	7.15	7.08	7.08	-12.85	-12.29	
3	10:32:12	5818	190.70	104.57	7.08	7.01	7.01	7.01	-11.43	-10.66	
4	10:32:13	5816	195.30	103.99	7.08	7.22	7.22	7.08	-9.23	-8.43	
1	10:32:14	5822	189.60	103.41	6.94	6.94	7.01	7.15	-7.78	-7.78	
2	10:32:15	5827	192.56	102.53	7.22	7.36	7.43	7.22	-11.12	-16.95	
3	10:32:16	5812	190.70	100.58	6.87	6.46	6.05	5.58	-20.28	-17.39	
4	10:32:17	5790	191.32	94.91	4.98	4.46	3.82	3.25	-14.57	-17.30	
1	10:32:18	5758	191.16	88.86	2.57	1.79	1.32	1.26	-26.26	-35.08	
2	10:32:19	5719	190.70	83.47	1.43	1.32	0.79	-0.45	-36.71	-37.92	
3	10:32:20	5694	189.91	76.26	-2.09	-3.88	-5.98	-7.50	-42.93	-49.64	
4	10:32:21	5646	188.97	70.64	-8.79	-9.75	-10.50	-11.19	-54.60	-57.62	
1	10:32:22	5606	187.38	60.98	-12.05	-12.77	-13.66	-14.48	-61.40	-65.43	
2	10:32:23	5573	187.70	52.19	-15.41	-16.43	-17.48	-18.46	-69.44	-71.72	
3	10:32:24	5516	187.38	40.92	-19.54	-20.46	-21.49	-22.54	-71.72	-70.73	
4	10:32:25	5495	186.27	26.26	-23.69	-24.97	-26.46	-27.99	-71.36	-75.93	
1	10:32:26	5489	186.43	13.74	-29.95	-31.96	-34.32	-36.71	-84.69	-92.51	
2	10:32:27	5228	191.32	5.11	-39.58	-42.48	-45.95	-49.53	-98.00	-101.12	
3	10:32:28	5007	193.33	355.02	-53.62	-57.72	-62.11	-66.31	-104.15	-109.36	
4	10:32:29	4889	197.70	341.00	-70.82	-75.02	-79.34	-83.20	-120.69	-138.97	
1	10:32:30	4550	207.85	347.79	-86.50	-86.05	-82.22	-78.34	-163.74	77.63	
2	10:32:31	4051	215.61	95.31	-73.65	-69.35	-64.44	-60.15	61.91	49.53	
3	10:32:32	3913	220.93	92.45	-55.79	-52.19	-48.97	-47.07	29.74	5.91	
4	10:32:33	3492	230.22	77.71	-46.06	-45.73	-45.39	-44.83	-14.23	-15.07	
1	10:32:34	2929	239.32	53.07	-43.60	-42.03	-39.92	-38.36	-10.35	-14.23	
2	10:32:35	2972	236.19	24.57	-37.59	-37.92	-39.14	-41.03	-35.08	-58.89	
3	10:32:36	2397	245.72	5.44	-43.60	-46.62	-50.64	-54.38	-68.51	-63.94	
4	10:32:37	1880	247.86	342.78	-57.83	-60.26	-61.91	-63.13	-56.98	-55.58	
1	10:32:38	1874	246.50	299.30	-64.56	-65.94	-67.96	-70.20	-68.25	-81.79	
2	10:32:39	1188	261.70	271.00	-73.24	-76.68	-79.05	XX.XX	-76.44	-40.73	

S	RELATIVE TIME	Altitude	Long Acc 1	Long Acc 2	Long Acc 3	Long ATC Acc 4	Keying
F	HH:MM:SS	WN=19+58	WN=05	WN=21	WN=37	WN=53	WN=11
3	10:27:24	10840	0.021	0.021	0.022	0.022	00001
4	10:27:25	10835	0.024	0.023	0.024	0.026	00001
1	10:27:26	10830	0.027	0.027	0.028	0.027	00001
2	10:27:27	10825	0.027	0.026	0.025	0.026	00001
3	10:27:28	10818	0.024	0.024	0.024	0.022	00001
4	10:27:29	10811	0.022	0.024	0.022	0.022	00001
1	10:27:30	10802	0.022	0.022	0.022	0.023	00001
2	10:27:31	10791	0.022	0.022	0.022	0.024	00001
3	10:27:32	10778	0.024	0.024	0.024	0.025	00001
4	10:27:33	10764	0.025	0.026	0.026	0.027	00001
1	10:27:34	10751	0.027	0.027	0.027	0.029	00001
2	10:27:35	10736	0.029	0.028	0.029	0.030	00001
3	10:27:36	10719	0.030	0.032	0.032	0.032	00001
4	10:27:37	10703	0.033	0.033	0.034	0.033	00001
1	10:27:38	10688	0.033	0.034	0.033	0.034	00001
2	10:27:39	10672	0.034	0.033	0.033	0.033	00001
3	10:27:40	10657	0.033	0.033	0.033	0.033	00001
4	10:27:41	10641	0.032	0.032	0.032	0.031	00001
1	10:27:42	10624	0.031	0.030	0.030	0.030	00001
2	10:27:43	10606	0.029	0.029	0.030	0.029	00001
3	10:27:44	10587	0.029	0.029	0.029	0.029	00001
4	10:27:45	10567	0.030	0.029	0.028	0.029	00001
1	10:27:46	10545	0.030	0.029	0.028	0.028	00001
2	10:27:47	10522	0.028	0.027	0.030	0.029	00001
3	10:27:48	10498	0.029	0.029	0.030	0.029	00001
4	10:27:49	10471	0.030	0.029	0.030	0.030	00001
1	10:27:50	10444	0.031	0.030	0.031	0.030	00000
2	10:27:51	10415	0.032	0.033	0.033	0.033	00000
3	10:27:52	10386	0.033	0.034	0.034	0.035	00001
4	10:27:53	10358	0.035	0.036	0.035	0.035	00001
1	10:27:54	10329	0.035	0.036	0.037	0.037	00001
2	10:27:55	10301	0.037	0.037	0.037	0.037	00001
3	10:27:56	10274	0.037	0.038	0.037	0.037	00001
4	10:27:57	10249	0.037	0.037	0.037	0.036	00001
1	10:27:58	10223	0.036	0.036	0.036	0.035	00001
2	10:27:59	10199	0.035	0.034	0.034	0.035	00001
3	10:28:00	10174	0.034	0.034	0.034	0.033	00001
4	10:28:01	10150	0.033	0.033	0.032	0.033	00001
1	10:28:02	10128	0.033	0.032	0.033	0.033	00001
2	10:28:03	10104	0.033	0.033	0.033	0.032	00001
3	10:28:04	10081	0.032	0.032	0.032	0.032	00001
4	10:28:05	10058	0.030	0.030	0.030	0.030	00001
1	10:28:06	10034	0.031	0.030	0.029	0.030	00001
2	10:28:07	10009	0.029	0.030	0.030	0.031	00001
3	10:28:08	9983	0.030	0.031	0.029	0.030	00001
4	10:28:09	9957	0.030	0.030	0.032	0.032	00001
1	10:28:10	9931	0.031	0.032	0.032	0.032	00001
2	10:28:11	9905	0.032	0.032	0.032	0.033	00001
3	10:28:12	9878	0.032	0.032	0.032	0.033	00001
4	10:28:13	9851	0.033	0.032	0.034	0.033	00001
1	10:28:14	9823	0.033	0.034	0.033	0.033	00001
2	10:28:15	9797	0.034	0.033	0.034	0.034	00001
3	10:28:16	9771	0.035	0.034	0.034	0.035	00001
4	10:28:17	9744	0.034	0.035	0.035	0.035	00001

RELATIVE S TIME Altitude F HH:MM:SWN=19+58	Long Acc 1 WN=05	Long Acc 2 WN=21	Long Acc 3 WN=37	Long ATC Acc 4Keying WN=53WN=11
1 10:28:18	9718	0.034	0.035	0.035 00001
2 10:28:19	9694	0.035	0.035	0.036 00001
3 10:28:20	9668	0.036	0.035	0.035 00001
4 10:28:21	9644	0.035	0.035	0.035 00001
1 10:28:22	9618	0.035	0.034	0.034 00001
2 10:28:23	9596	0.034	0.035	0.035 00001
3 10:28:24	9572	0.035	0.034	0.034 00001
4 10:28:25	9547	0.033	0.033	0.033 00001
1 10:28:26	9525	0.035	0.035	0.035 00001
2 10:28:27	9502	0.034	0.034	0.033 00001
3 10:28:28	9481	0.034	0.035	0.035 00001
4 10:28:29	9458	0.035	0.035	0.035 00001
1 10:28:30	9438	0.034	0.035	0.035 00001
2 10:28:31	9418	0.034	0.035	0.034 00001
3 10:28:32	9399	0.034	0.034	0.033 00001
4 10:28:33	9380	0.033	0.033	0.033 00001
1 10:28:34	9363	0.032	0.032	0.032 00001
2 10:28:35	9346	0.030	0.030	0.029 00001
3 10:28:36	9329	0.029	0.030	0.030 00001
4 10:28:37	9312	0.027	0.028	0.028 00001
1 10:28:38	9295	0.028	0.028	0.028 00001
2 10:28:39	9277	0.029	0.028	0.029 00001
3 10:28:40	9258	0.029	0.029	0.028 00001
4 10:28:41	9240	0.028	0.028	0.029 00001
1 10:28:42	9222	0.029	0.029	0.030 00001
2 10:28:43	9203	0.031	0.030	0.031 00001
3 10:28:44	9184	0.030	0.032	0.031 00001
4 10:28:45	9165	0.032	0.031	0.032 00001
1 10:28:46	9146	0.033	0.032	0.033 00001
2 10:28:47	9126	0.032	0.033	0.033 00001
3 10:28:48	9108	0.033	0.033	0.033 00001
4 10:28:49	9089	0.034	0.034	0.033 00001
1 10:28:50	9070	0.034	0.034	0.034 00001
2 10:28:51	9051	0.033	0.034	0.035 00001
3 10:28:52	9033	0.033	0.034	0.033 00001
4 10:28:53	9014	0.035	0.034	0.035 00001
1 10:28:54	8995	0.035	0.035	0.034 00001
2 10:28:55	8978	0.035	0.035	0.035 00001
3 10:28:56	8960	0.035	0.035	0.034 00001
4 10:28:57	8943	0.035	0.034	0.034 00001
1 10:28:58	8927	0.033	0.034	0.035 00001
2 10:28:59	8911	0.034	0.034	0.034 00001
3 10:29:00	8894	0.034	0.034	0.033 00001
4 10:29:01	8876	0.034	0.033	0.033 00001
1 10:29:02	8859	0.033	0.033	0.033 00001
2 10:29:03	8842	0.033	0.033	0.033 00001
3 10:29:04	8824	0.032	0.033	0.033 00001
4 10:29:05	8806	0.033	0.033	0.034 00001
1 10:29:06	8787	0.034	0.034	0.034 00001
2 10:29:07	8769	0.035	0.034	0.034 00001
3 10:29:08	8751	0.034	0.034	0.034 00001
4 10:29:09	8734	0.034	0.034	0.035 00001
1 10:29:10	8716	0.035	0.035	0.035 00001
2 10:29:11	8698	0.035	0.037	0.036 00001

CONFIG:737-300/400 SSFDR 542A ELEC VER. 1.2 PRINTER

	RELATIVE TIME	Altitude	Long Acc 1	Long Acc 2	Long Acc 3	Long Acc 4	ATC Keying
S	HH:MM:SS	SWN=19+58	WN=05	WN=21	WN=37	WN=53	WN=11
3	10:29:12	8679	0.037	0.036	0.036	0.036	00001
4	10:29:13	8661	0.036	0.037	0.036	0.036	00001
1	10:29:14	8643	0.036	0.035	0.035	0.035	00001
2	10:29:15	8625	0.035	0.035	0.036	0.036	00001
3	10:29:16	8606	0.036	0.036	0.035	0.035	00001
4	10:29:17	8589	0.035	0.035	0.035	0.035	00001
1	10:29:18	8570	0.035	0.035	0.035	0.034	00001
2	10:29:19	8552	0.035	0.035	0.035	0.035	00001
3	10:29:20	8534	0.035	0.035	0.035	0.035	00001
4	10:29:21	8516	0.035	0.035	0.035	0.035	00001
1	10:29:22	8496	0.035	0.035	0.035	0.036	00001
2	10:29:23	8477	0.036	0.036	0.035	0.035	00001
3	10:29:24	8458	0.035	0.036	0.035	0.035	00001
4	10:29:25	8440	0.036	0.035	0.035	0.035	00001
1	10:29:26	8421	0.035	0.035	0.035	0.035	00001
2	10:29:27	8400	0.035	0.035	0.036	0.036	00001
3	10:29:28	8381	0.037	0.037	0.037	0.037	00001
4	10:29:29	8363	0.037	0.037	0.036	0.036	00001
1	10:29:30	8343	0.036	0.037	0.036	0.036	00001
2	10:29:31	8324	0.036	0.037	0.036	0.036	00001
3	10:29:32	8303	0.035	0.035	0.037	0.036	00001
4	10:29:33	8284	0.037	0.035	0.037	0.037	00001
1	10:29:34	8263	0.037	0.036	0.036	0.036	00001
2	10:29:35	8242	0.036	0.037	0.036	0.037	00000
3	10:29:36	8220	0.036	0.037	0.037	0.037	00000
4	10:29:37	8199	0.037	0.038	0.038	0.040	00000
1	10:29:38	8177	0.039	0.039	0.039	0.039	00000
2	10:29:39	8155	0.039	0.041	0.039	0.040	00000
3	10:29:40	8134	0.040	0.041	0.040	0.041	00001
4	10:29:41	8110	0.041	0.041	0.039	0.039	00001
1	10:29:42	8088	0.039	0.038	0.039	0.039	00001
2	10:29:43	8065	0.040	0.041	0.038	0.037	00001
3	10:29:44	8045	0.037	0.035	0.034	0.033	00001
4	10:29:45	8025	0.032	0.030	0.029	0.029	00001
1	10:29:46	8005	0.029	0.028	0.027	0.027	00001
2	10:29:47	7986	0.025	0.025	0.025	0.025	00001
3	10:29:48	7968	0.025	0.025	0.023	0.023	00001
4	10:29:49	7950	0.023	0.024	0.022	0.022	00001
1	10:29:50	7931	0.022	0.020	0.022	0.021	00001
2	10:29:51	7912	0.022	0.021	0.021	0.022	00001
3	10:29:52	7892	0.022	0.022	0.024	0.023	00001
4	10:29:53	7873	0.024	0.024	0.024	0.023	00001
1	10:29:54	7854	0.023	0.023	0.022	0.023	00001
2	10:29:55	7834	0.023	0.022	0.023	0.022	00001
3	10:29:56	7814	0.023	0.022	0.022	0.023	00001
4	10:29:57	7796	0.024	0.024	0.024	0.024	00001
1	10:29:58	7778	0.024	0.023	0.024	0.023	00001
2	10:29:59	7760	0.023	0.024	0.023	0.025	00001
3	10:30:00	7742	0.025	0.023	0.024	0.024	00001
4	10:30:01	7723	0.024	0.024	0.025	0.024	00001
1	10:30:02	7706	0.026	0.025	0.026	0.025	00001
2	10:30:03	7689	0.025	0.026	0.026	0.026	00001
3	10:30:04	7672	0.026	0.026	0.027	0.026	00001
4	10:30:05	7655	0.026	0.027	0.027	0.028	00001

RELATIVE S TIME Altitude F HH:MM:SWN=19+58	Long Acc 1 WN=05	Long Acc 2 WN=21	Long Acc 3 WN=37	Long ATC Acc 4Keying WN=53WN=11
1 10:30:06	7637	0.027	0.028	0.026 00001
2 10:30:07	7621	0.026	0.025	0.026 00001
3 10:30:08	7604	0.025	0.026	0.026 00001
4 10:30:09	7587	0.027	0.028	0.027 00001
1 10:30:10	7569	0.027	0.027	0.028 00001
2 10:30:11	7552	0.027	0.029	0.027 00001
3 10:30:12	7534	0.028	0.028	0.030 00001
4 10:30:13	7516	0.030	0.029	0.030 00001
1 10:30:14	7496	0.030	0.032	0.032 00001
2 10:30:15	7479	0.032	0.033	0.032 00001
3 10:30:16	7463	0.033	0.032	0.033 00001
4 10:30:17	7445	0.033	0.033	0.033 00001
1 10:30:18	7430	0.034	0.034	0.034 00001
2 10:30:19	7414	0.035	0.034	0.034 00000
3 10:30:20	7399	0.034	0.035	0.035 00000
4 10:30:21	7384	0.035	0.034	0.035 00001
1 10:30:22	7371	0.035	0.034	0.033 00001
2 10:30:23	7357	0.035	0.035	0.035 00001
3 10:30:24	7345	0.036	0.036	0.036 00000
4 10:30:25	7332	0.036	0.037	0.035 00001
1 10:30:26	7319	0.035	0.035	0.035 00001
2 10:30:27	7308	0.034	0.033	0.033 00001
3 10:30:28	7295	0.034	0.034	0.033 00001
4 10:30:29	7284	0.033	0.034	0.035 00001
1 10:30:30	7271	0.034	0.033	0.033 00001
2 10:30:31	7257	0.034	0.035	0.034 00001
3 10:30:32	7242	0.035	0.035	0.035 00001
4 10:30:33	7227	0.036	0.038	0.039 00001
1 10:30:34	7213	0.039	0.040	0.040 00001
2 10:30:35	7198	0.042	0.042	0.042 00001
3 10:30:36	7183	0.042	0.043	0.043 00001
4 10:30:37	7168	0.043	0.043	0.043 00001
1 10:30:38	7155	0.044	0.042	0.042 00001
2 10:30:39	7141	0.041	0.041	0.042 00001
3 10:30:40	7127	0.041	0.041	0.042 00001
4 10:30:41	7113	0.041	0.040	0.040 00001
1 10:30:42	7100	0.040	0.040	0.040 00001
2 10:30:43	7085	0.041	0.039	0.038 00001
3 10:30:44	7072	0.038	0.038	0.040 00001
4 10:30:45	7058	0.041	0.041	0.040 00001
1 10:30:46	7044	0.040	0.039	0.039 00001
2 10:30:47	7029	0.039	0.038	0.039 00001
3 10:30:48	7014	0.040	0.040	0.040 00001
4 10:30:49	6999	0.040	0.041	0.041 00001
1 10:30:50	6982	0.039	0.040	0.039 00001
2 10:30:51	6966	0.040	0.040	0.040 00001
3 10:30:52	6949	0.041	0.040	0.040 00001
4 10:30:53	6930	0.041	0.040	0.040 00001
1 10:30:54	6912	0.041	0.041	0.042 00001
2 10:30:55	6893	0.041	0.041	0.043 00001
3 10:30:56	6871	0.044	0.044	0.044 00001
4 10:30:57	6851	0.044	0.044	0.045 00001
1 10:30:58	6829	0.047	0.048	0.048 00001
2 10:30:59	6807	0.049	0.049	0.049 00001

	RELATIVE S TIME Altitude	Long Acc 1	Long Acc 2	Long Acc 3	Long ATC Acc 4Keying	
F	HH:MM:SWN=19+58	WN=05	WN=21	WN=37	WN=53WN=11	
3	10:31:00	6787	0.048	0.048	0.048	00001
4	10:31:01	6766	0.049	0.049	0.048	00001
1	10:31:02	6746	0.048	0.048	0.048	00001
2	10:31:03	6727	0.046	0.048	0.046	00001
3	10:31:04	6706	0.045	0.045	0.044	00001
4	10:31:05	6686	0.043	0.043	0.044	00001
1	10:31:06	6667	0.043	0.043	0.043	00001
2	10:31:07	6647	0.043	0.043	0.043	00001
3	10:31:08	6626	0.043	0.042	0.042	00001
4	10:31:09	6606	0.042	0.042	0.042	00001
1	10:31:10	6584	0.042	0.042	0.042	00001
2	10:31:11	6564	0.042	0.042	0.043	00001
3	10:31:12	6542	0.043	0.043	0.043	00001
4	10:31:13	6520	0.042	0.042	0.042	00001
1	10:31:14	6498	0.043	0.043	0.042	00001
2	10:31:15	6475	0.041	0.041	0.042	00001
3	10:31:16	6451	0.043	0.043	0.043	00001
4	10:31:17	6428	0.043	0.042	0.043	00001
1	10:31:18	6404	0.042	0.042	0.043	00001
2	10:31:19	6381	0.044	0.043	0.043	00001
3	10:31:20	6359	0.043	0.042	0.042	00001
4	10:31:21	6337	0.043	0.043	0.044	00001
1	10:31:22	6314	0.043	0.042	0.043	00001
2	10:31:23	6291	0.043	0.041	0.042	00001
3	10:31:24	6269	0.042	0.042	0.043	00001
4	10:31:25	6248	0.043	0.043	0.042	00001
1	10:31:26	6227	0.043	0.042	0.043	00001
2	10:31:27	6205	0.043	0.042	0.042	00001
3	10:31:28	6183	0.043	0.043	0.042	00001
4	10:31:29	6160	0.042	0.043	0.042	00001
1	10:31:30	6139	0.042	0.042	0.041	00001
2	10:31:31	6117	0.041	0.040	0.041	00001
3	10:31:32	6095	0.041	0.041	0.039	00001
4	10:31:33	6072	0.039	0.040	0.042	00001
1	10:31:34	6049	0.040	0.040	0.040	00001
2	10:31:35	6028	0.042	0.041	0.041	00001
3	10:31:36	6005	0.040	0.041	0.042	00001
4	10:31:37	5984	0.042	0.042	0.041	00001
1	10:31:38	5962	0.041	0.041	0.040	00001
2	10:31:39	5941	0.039	0.039	0.038	00001
3	10:31:40	5920	0.038	0.041	0.040	00001
4	10:31:41	5898	0.041	0.041	0.042	00001
1	10:31:42	5880	0.047	0.050	0.053	00001
2	10:31:43	5863	0.059	0.061	0.063	00001
3	10:31:44	5847	0.062	0.065	0.065	00001
4	10:31:45	5835	0.070	0.071	0.072	00001
1	10:31:46	5825	0.077	0.080	0.083	00001
2	10:31:47	5819	0.090	0.094	0.096	00001
3	10:31:48	5814	0.099	0.098	0.097	00001
4	10:31:49	5811	0.100	0.099	0.099	00000
1	10:31:50	5808	0.101	0.099	0.099	00000
2	10:31:51	5806	0.101	0.103	0.101	00000
3	10:31:52	5806	0.104	0.106	0.105	00001
4	10:31:53	5806	0.107	0.108	0.107	00001

RELATIVE S TIME Altitude F HH:MM:SWN=19+58	Long Acc 1 WN=05	Long Acc 2 WN=21	Long Acc 3 WN=37	Long ATC Acc 4Keying WN=53WN=11
1 10:31:54	5806	0.107	0.108	0.107 00001
2 10:31:55	5808	0.107	0.108	0.107 0.110 00001
3 10:31:56	5808	0.110	0.110	0.107 0.111 00001
4 10:31:57	5808	0.112	0.112	0.112 0.112 00001
1 10:31:58	5808	0.112	0.112	0.111 0.112 00001
2 10:31:59	5808	0.114	0.114	0.115 0.115 00001
3 10:32:00	5808	0.115	0.114	0.116 0.115 00001
4 10:32:01	5809	0.115	0.114	0.114 0.114 00001
1 10:32:02	5809	0.114	0.115	0.114 0.114 00001
2 10:32:03	5811	0.114	0.115	0.115 0.115 00001
3 10:32:04	5811	0.114	0.115	0.114 0.114 00001
4 10:32:05	5812	0.115	0.114	0.113 0.114 00001
1 10:32:06	5814	0.114	0.112	0.113 0.113 00001
2 10:32:07	5815	0.112	0.112	0.112 0.112 00001
3 10:32:08	5816	0.111	0.110	0.110 0.110 00001
4 10:32:09	5816	0.109	0.108	0.107 0.106 00001
1 10:32:10	5818	0.106	0.107	0.105 0.107 00001
2 10:32:11	5818	0.107	0.105	0.104 0.102 00001
3 10:32:12	5818	0.107	0.109	0.096 0.084 00001
4 10:32:13	5816	0.081	0.119	0.123 0.110 00001
1 10:32:14	5822	0.080	0.076	0.081 0.096 00001
2 10:32:15	5827	0.116	0.105	0.111 0.112 00001
3 10:32:16	5812	0.101	0.102	0.095 0.097 00001
4 10:32:17	5790	0.096	0.095	0.081 0.088 00001
1 10:32:18	5758	0.124	0.138	0.161 0.177 00001
2 10:32:19	5719	0.205	0.232	0.251 0.253 00001
3 10:32:20	5694	0.237	0.203	0.170 0.135 00001
4 10:32:21	5646	0.116	0.120	0.136 0.157 00001
1 10:32:22	5606	0.178	0.198	0.216 0.233 00001
2 10:32:23	5573	0.244	0.254	0.265 0.272 00001
3 10:32:24	5516	0.295	0.314	0.335 0.349 00001
4 10:32:25	5495	0.334	0.324	0.332 0.345 00001
1 10:32:26	5489	0.356	0.360	0.361 0.354 00001
2 10:32:27	5228	0.346	0.335	0.335 0.343 00000
3 10:32:28	5007	0.349	0.369	0.379 0.392 00000
4 10:32:29	4889	0.414	0.428	0.410 0.382 00000
1 10:32:30	4550	0.372	0.360	0.351 0.341 00001
2 10:32:31	4051	0.353	0.403	0.441 0.456 00000
3 10:32:32	3913	0.490	0.509	0.496 0.465 00000
4 10:32:33	3492	0.441	0.424	0.425 0.415 00000
1 10:32:34	2929	0.478	0.538	0.561 0.556 00000
2 10:32:35	2972	0.560	0.494	0.468 0.467 00000
3 10:32:36	2397	0.451	0.452	0.446 0.463 00000
4 10:32:37	1880	0.511	0.546	0.580 0.587 00000
1 10:32:38	1874	0.541	0.501	0.473 0.458 00000
2 10:32:39	1880	0.484	0.472	0.519 0.556 00000

S	RELATIVE		N1	N1	N2	N2	EGT	EGT	F.Flow	F.Flow
	TIME	Altitude	Eng.1	Eng.2	Eng.1	Eng.2	Eng.1	Eng.2	Eng.1	Eng.2
F	HH:MM:WN=19+58		WN=51	WN=30	WN=31	WN=06	WN=32	WN=64	WN=16	WN=48
3	10:27:24	10840	31.3	32.4	70.4	71.0	451.8	445.6	837	874
4	10:27:25	10835	31.3	32.4	70.4	71.1	452.5	445.6	837	874
1	10:27:26	10830	31.3	32.4	70.4	71.1	451.8	446.3	842	864
2	10:27:27	10825	31.2	32.4	70.4	71.0	452.5	446.3	842	869
3	10:27:28	10818	31.3	32.4	70.4	70.9	453.2	446.9	846	874
4	10:27:29	10811	31.2	32.3	70.3	70.9	454.6	447.6	842	874
1	10:27:30	10802	31.2	32.3	70.4	70.9	453.9	448.3	846	874
2	10:27:31	10791	31.2	32.4	70.3	70.9	454.6	447.6	846	878
3	10:27:32	10778	31.2	32.3	70.4	71.0	455.3	447.6	842	874
4	10:27:33	10764	31.2	32.3	70.4	71.0	453.9	448.3	837	869
1	10:27:34	10751	31.3	32.3	70.4	70.9	456.0	447.6	842	864
2	10:27:35	10736	31.2	32.3	70.4	71.0	456.0	447.6	837	869
3	10:27:36	10719	31.2	32.3	70.3	70.9	455.3	449.0	837	869
4	10:27:37	10703	31.2	32.3	70.3	70.9	457.4	449.0	842	878
1	10:27:38	10688	31.2	32.3	70.3	70.9	456.0	449.0	842	878
2	10:27:39	10672	31.2	32.3	70.3	71.0	456.0	449.0	842	874
3	10:27:40	10657	31.2	32.3	70.3	70.9	456.7	448.3	846	878
4	10:27:41	10641	31.2	32.2	70.3	70.9	456.0	449.0	842	874
1	10:27:42	10624	31.2	32.3	70.4	70.9	456.7	449.0	846	878
2	10:27:43	10606	31.1	32.2	70.3	70.9	455.3	449.7	842	874
3	10:27:44	10587	31.2	32.3	70.3	70.9	456.7	449.0	846	878
4	10:27:45	10567	31.1	32.2	70.3	70.9	457.4	449.0	842	874
1	10:27:46	10545	31.2	32.3	70.3	70.9	458.1	450.4	846	883
2	10:27:47	10522	31.1	32.2	70.3	70.8	458.8	450.4	842	874
3	10:27:48	10498	31.1	32.2	70.3	70.9	459.5	450.4	846	887
4	10:27:49	10471	31.1	32.2	70.3	70.9	458.8	449.7	842	883
1	10:27:50	10444	31.1	32.2	70.3	70.9	458.8	450.4	842	878
2	10:27:51	10415	31.1	32.2	70.2	70.9	458.1	450.4	837	883
3	10:27:52	10386	31.1	32.1	70.3	70.8	458.8	451.1	842	883
4	10:27:53	10358	31.1	32.2	70.2	70.8	458.1	451.1	846	883
1	10:27:54	10329	31.1	32.2	70.3	70.9	458.8	450.4	842	878
2	10:27:55	10301	31.1	32.1	70.2	71.0	459.5	450.4	842	887
3	10:27:56	10274	31.1	32.2	70.3	70.9	459.5	451.1	842	878
4	10:27:57	10249	31.1	32.2	70.3	71.0	459.5	451.1	846	887
1	10:27:58	10223	31.1	32.2	70.3	70.9	458.8	451.8	851	887
2	10:27:59	10199	31.1	32.2	70.3	70.9	460.2	451.1	846	892
3	10:28:00	10174	31.1	32.1	70.2	71.0	459.5	451.8	855	896
4	10:28:01	10150	31.1	32.2	70.3	70.9	460.2	451.1	851	887
1	10:28:02	10128	31.1	32.1	70.3	70.9	458.8	451.1	851	892
2	10:28:03	10104	31.1	32.2	70.3	71.0	459.5	451.8	851	883
3	10:28:04	10081	31.1	32.2	70.3	70.9	459.5	451.8	846	887
4	10:28:05	10058	31.1	32.2	70.2	70.8	459.5	451.1	846	887
1	10:28:06	10034	31.1	32.2	70.3	70.8	460.9	451.1	851	887
2	10:28:07	10009	31.1	32.2	70.2	70.8	458.8	451.8	851	892
3	10:28:08	9983	31.1	32.2	70.3	70.8	460.9	451.8	851	892
4	10:28:09	9957	31.1	32.2	70.2	70.8	459.5	451.8	855	892
1	10:28:10	9931	31.1	32.2	70.3	70.8	460.9	451.1	851	896
2	10:28:11	9905	31.1	32.2	70.3	70.9	460.2	451.8	851	892
3	10:28:12	9878	31.1	32.2	70.3	70.9	460.9	451.8	851	892
4	10:28:13	9851	31.1	32.2	70.3	70.9	460.9	451.1	864	892
1	10:28:14	9823	31.1	32.2	70.3	70.7	460.2	451.8	855	892
2	10:28:15	9797	31.1	32.2	70.3	70.9	461.6	451.8	860	892
3	10:28:16	9771	31.1	32.2	70.3	70.9	460.9	451.8	864	896
4	10:28:17	9744	31.1	32.2	70.3	70.9	462.3	451.8	864	901

S	RELATIVE TIME	Altitude	N1	N1	N2	N2	EGT	EGT	F.Flow	F.Flow
			Eng.1	Eng.2	Eng.1	Eng.2	Eng.1	Eng.2	Eng.1	Eng.2
F	HH:MM:WN=19+58	WN=51	WN=30	WN=31	WN=06	WN=32	WN=64	WN=16	WN=48	
1	10:28:18	9718	31.1	32.2	70.3	70.9	460.9	451.8	864	901
2	10:28:19	9694	31.1	32.2	70.3	70.9	460.9	451.8	864	906
3	10:28:20	9668	31.1	32.2	70.3	71.0	460.2	451.8	864	910
4	10:28:21	9644	31.0	32.2	70.2	70.9	460.9	451.8	864	906
1	10:28:22	9618	31.0	32.1	70.3	70.9	463.0	452.5	864	910
2	10:28:23	9596	31.1	32.2	70.3	70.8	461.6	452.5	869	906
3	10:28:24	9572	31.1	32.1	70.3	70.8	461.6	452.5	864	901
4	10:28:25	9547	31.0	32.2	70.3	70.9	462.3	451.8	869	910
1	10:28:26	9525	31.0	32.2	70.3	70.9	462.3	452.5	874	906
2	10:28:27	9502	31.0	32.2	70.2	70.8	460.9	453.2	874	910
3	10:28:28	9481	31.0	32.2	70.2	70.9	460.9	453.2	874	906
4	10:28:29	9458	31.1	32.2	70.2	70.9	460.9	452.5	874	906
1	10:28:30	9438	31.1	32.2	70.3	70.8	462.3	452.5	874	915
2	10:28:31	9418	31.1	32.2	70.3	70.8	463.0	453.2	864	906
3	10:28:32	9399	31.1	32.2	70.3	70.8	463.0	453.2	874	910
4	10:28:33	9380	31.1	32.2	70.3	70.9	462.3	453.2	874	910
1	10:28:34	9363	31.1	32.2	70.3	71.0	462.3	452.5	874	910
2	10:28:35	9346	31.1	32.1	70.3	70.9	462.3	451.8	869	910
3	10:28:36	9329	31.1	32.1	70.3	71.0	463.0	452.5	874	910
4	10:28:37	9312	31.1	32.1	70.3	70.9	463.0	452.5	883	910
1	10:28:38	9295	31.1	32.1	70.3	70.9	463.0	452.5	878	915
2	10:28:39	9277	31.1	32.2	70.3	71.0	463.0	452.5	878	919
3	10:28:40	9258	31.0	32.1	70.2	70.9	463.0	453.2	878	919
4	10:28:41	9240	31.1	32.2	70.3	70.9	463.7	453.2	874	915
1	10:28:42	9222	31.1	32.1	70.3	70.9	463.0	453.2	883	910
2	10:28:43	9203	31.0	32.1	70.3	70.8	463.7	453.2	878	915
3	10:28:44	9184	31.0	32.2	70.3	70.9	462.3	453.2	878	915
4	10:28:45	9165	31.1	32.1	70.3	70.9	463.0	452.5	883	915
1	10:28:46	9146	31.0	32.1	70.2	71.0	463.7	453.2	878	919
2	10:28:47	9126	31.1	32.2	70.3	71.0	463.7	453.2	878	910
3	10:28:48	9108	31.0	32.1	70.3	70.9	463.7	453.9	878	919
4	10:28:49	9089	31.0	32.1	70.3	70.8	463.7	453.9	883	915
1	10:28:50	9070	31.0	32.1	70.3	70.8	465.8	453.9	883	924
2	10:28:51	9051	31.0	32.2	70.2	70.8	464.4	454.6	878	924
3	10:28:52	9033	31.1	32.2	70.3	70.9	463.7	453.9	883	915
4	10:28:53	9014	31.0	32.1	70.3	70.8	464.4	454.6	887	924
1	10:28:54	8995	31.0	32.2	70.3	70.9	465.8	453.9	883	919
2	10:28:55	8978	31.0	32.1	70.3	70.9	465.8	454.6	887	924
3	10:28:56	8960	31.0	32.2	70.3	70.8	465.8	455.3	883	928
4	10:28:57	8943	31.0	32.1	70.3	70.8	465.8	454.6	887	924
1	10:28:58	8927	31.1	32.1	70.3	71.0	465.1	453.9	887	928
2	10:28:59	8911	31.0	32.1	70.3	70.9	465.8	454.6	887	924
3	10:29:00	8894	31.0	32.2	70.3	70.9	465.8	454.6	892	919
4	10:29:01	8876	31.0	32.1	70.3	70.8	465.8	454.6	887	924
1	10:29:02	8859	31.1	32.1	70.3	70.8	465.8	455.3	883	938
2	10:29:03	8842	31.0	32.1	70.3	70.9	464.4	454.6	887	933
3	10:29:04	8824	31.1	32.1	70.3	70.9	467.9	455.3	887	928
4	10:29:05	8806	31.0	32.1	70.3	70.9	465.1	455.3	887	933
1	10:29:06	8787	31.0	32.2	70.3	71.1	465.8	455.3	883	928
2	10:29:07	8769	31.0	32.1	70.3	70.9	465.8	455.3	892	933
3	10:29:08	8751	31.1	32.1	70.3	71.0	465.8	455.3	892	938
4	10:29:09	8734	31.0	32.1	70.3	70.9	466.5	456.0	892	933
1	10:29:10	8716	31.1	32.1	70.3	70.9	465.8	455.3	901	938
2	10:29:11	8698	31.0	32.2	70.3	70.8	466.5	456.0	896	938

S	RELATIVE TIME	Altitude	N1	N1	N2	N2	EGT	EGT	F.Flow	F.Flow
			Eng.1	Eng.2	Eng.1	Eng.2	Eng.1	Eng.2	Eng.1	Eng.2
F	HH:MM:WN=19+58	WN=51	WN=30	WN=31	WN=06	WN=32	WN=64	WN=16	WN=48	
3	10:29:12	8679	31.0	32.1	70.3	70.9	465.8	456.7	892	942
4	10:29:13	8661	31.0	32.2	70.3	70.9	465.8	456.0	892	928
1	10:29:14	8643	31.0	32.1	70.3	70.9	465.8	456.7	896	933
2	10:29:15	8625	31.0	32.1	70.3	71.1	466.5	456.0	896	938
3	10:29:16	8606	31.1	32.1	70.3	70.9	467.9	455.3	892	938
4	10:29:17	8589	31.0	32.1	70.2	70.9	465.1	457.4	896	933
1	10:29:18	8570	31.0	32.1	70.3	70.8	467.9	456.7	896	938
2	10:29:19	8552	31.0	32.1	70.3	70.8	465.8	457.4	901	938
3	10:29:20	8534	31.0	32.1	70.3	70.8	467.2	457.4	896	933
4	10:29:21	8516	31.1	32.1	70.3	70.8	467.9	456.7	901	938
1	10:29:22	8496	31.0	32.1	70.2	70.9	466.5	457.4	896	942
2	10:29:23	8477	31.0	32.1	70.3	70.9	467.9	457.4	901	938
3	10:29:24	8458	31.0	32.1	70.3	70.9	466.5	458.1	896	938
4	10:29:25	8440	31.0	32.1	70.3	70.9	468.6	457.4	896	942
1	10:29:26	8421	31.0	32.1	70.3	70.9	467.9	457.4	901	942
2	10:29:27	8400	31.0	32.1	70.3	70.9	469.3	457.4	901	942
3	10:29:28	8381	31.0	32.1	70.3	70.9	467.9	457.4	901	951
4	10:29:29	8363	31.1	32.1	70.3	71.0	467.9	458.1	901	938
1	10:29:30	8343	31.0	32.1	70.3	70.9	467.9	458.1	901	947
2	10:29:31	8324	31.0	32.1	70.4	70.8	467.9	458.1	906	947
3	10:29:32	8303	31.0	32.1	70.4	70.9	468.6	458.8	906	942
4	10:29:33	8284	31.0	32.1	70.4	70.9	467.2	458.8	910	942
1	10:29:34	8263	31.0	32.1	70.3	70.9	470.0	458.8	906	951
2	10:29:35	8242	31.0	32.0	70.3	70.9	467.2	458.8	906	951
3	10:29:36	8220	31.0	32.0	70.4	70.9	470.0	458.1	906	951
4	10:29:37	8199	31.0	32.0	70.4	70.9	469.3	458.8	906	951
1	10:29:38	8177	30.9	32.1	70.3	71.0	469.3	458.8	906	947
2	10:29:39	8155	30.9	32.1	70.4	70.9	470.0	458.8	906	947
3	10:29:40	8134	30.9	32.1	70.4	70.8	469.3	458.8	915	947
4	10:29:41	8110	30.9	32.0	70.4	70.7	470.0	460.2	915	951
1	10:29:42	8088	30.9	32.0	70.4	70.9	473.6	462.3	924	965
2	10:29:43	8065	30.8	32.0	70.4	70.9	473.6	464.4	933	965
3	10:29:44	8045	30.8	32.0	70.3	70.9	476.4	465.1	933	965
4	10:29:45	8025	30.8	32.0	70.3	70.8	477.9	465.8	938	974
1	10:29:46	8005	30.8	31.9	70.4	70.8	476.4	466.5	938	970
2	10:29:47	7986	30.8	32.0	70.4	70.9	477.9	467.2	942	965
3	10:29:48	7968	30.8	31.9	70.4	70.8	480.7	467.2	942	965
4	10:29:49	7950	30.8	32.0	70.4	71.0	479.3	467.2	933	974
1	10:29:50	7931	30.8	32.0	70.4	70.9	477.2	467.9	933	970
2	10:29:51	7912	30.8	31.9	70.4	70.9	479.3	469.3	938	974
3	10:29:52	7892	30.8	31.9	70.3	70.8	479.3	469.3	933	974
4	10:29:53	7873	30.8	31.9	70.4	70.9	481.4	469.3	938	979
1	10:29:54	7854	30.8	31.9	70.4	70.9	479.3	470.0	938	979
2	10:29:55	7834	30.8	32.0	70.3	70.9	481.4	470.0	938	974
3	10:29:56	7814	30.8	32.0	70.3	71.0	481.4	470.0	938	979
4	10:29:57	7796	30.8	31.9	70.4	71.0	480.0	470.0	938	979
1	10:29:58	7778	30.8	31.9	70.3	71.0	482.2	470.0	938	979
2	10:29:59	7760	30.9	32.0	70.4	70.9	482.2	471.5	942	974
3	10:30:00	7742	30.8	32.0	70.4	70.8	482.2	471.5	933	979
4	10:30:01	7723	30.8	31.9	70.4	70.8	481.4	471.5	942	979
1	10:30:02	7706	30.8	32.0	70.4	70.9	481.4	470.8	942	984
2	10:30:03	7689	30.8	31.9	70.4	70.9	482.2	472.2	938	984
3	10:30:04	7672	30.8	31.9	70.4	70.9	482.2	471.5	942	988
4	10:30:05	7655	30.8	32.0	70.4	70.9	483.6	472.2	942	984

	RELATIVE	N1	N1	N2	N2	EGT	EGT	F.Flow	F.Flow	
S	TIMEAltitude	Enq.1	Enq.2	Enq.1	Enq.2	Enq.1	Enq.2	Enq.1	Enq.2	
F	HH:MM:WN=19+58	WN=51	WN=30	WN=31	WN=06	WN=32	WN=64	WN=16	WN=48	
1	10:30:06	7637	30.8	32.0	70.4	70.9	482.9	472.2	947	988
2	10:30:07	7621	30.7	32.0	70.4	71.0	482.9	472.2	942	984
3	10:30:08	7604	30.8	31.9	70.4	70.9	482.9	473.6	947	984
4	10:30:09	7587	30.8	31.9	70.4	70.9	484.3	473.6	947	988
1	10:30:10	7569	30.8	32.0	70.4	70.9	483.6	472.9	947	984
2	10:30:11	7552	30.8	32.0	70.4	70.9	482.9	473.6	947	988
3	10:30:12	7534	30.8	32.0	70.4	71.0	485.0	472.9	942	984
4	10:30:13	7516	30.8	32.0	70.4	71.0	483.6	473.6	947	997
1	10:30:14	7496	30.8	32.0	70.4	71.0	484.3	472.9	942	984
2	10:30:15	7479	30.8	31.9	70.4	71.0	484.3	474.3	947	988
3	10:30:16	7463	30.8	31.9	70.4	70.9	484.3	475.0	956	984
4	10:30:17	7445	30.7	31.9	70.4	70.9	484.3	475.0	951	988
1	10:30:18	7430	30.7	31.9	70.4	70.9	486.5	474.3	951	993
2	10:30:19	7414	30.6	31.9	70.4	71.1	486.5	475.0	956	993
3	10:30:20	7399	30.7	31.9	70.4	71.0	486.5	475.7	947	984
4	10:30:21	7384	30.6	31.9	70.4	71.0	487.9	475.0	951	993
1	10:30:22	7371	30.7	31.9	70.4	71.0	486.5	475.7	951	988
2	10:30:23	7357	30.7	31.9	70.4	70.9	486.5	475.0	956	993
3	10:30:24	7345	30.6	31.8	70.4	71.0	487.2	475.7	947	993
4	10:30:25	7332	30.7	31.8	70.5	71.0	487.9	475.7	951	997
1	10:30:26	7319	30.7	31.9	70.5	71.0	487.2	476.4	961	997
2	10:30:27	7308	30.7	31.9	70.4	70.9	486.5	476.4	956	988
3	10:30:28	7295	30.7	31.9	70.5	70.9	486.5	476.4	961	997
4	10:30:29	7284	30.7	31.9	70.4	70.9	487.2	476.4	961	993
1	10:30:30	7271	30.7	31.8	70.4	71.0	487.2	476.4	965	997
2	10:30:31	7257	30.7	31.8	70.4	70.9	487.9	477.2	965	997
3	10:30:32	7242	30.7	31.8	70.4	71.0	489.4	476.4	961	997
4	10:30:33	7227	30.7	31.9	70.4	71.0	489.4	476.4	961	993
1	10:30:34	7213	30.7	31.8	70.4	70.9	488.6	477.2	956	1002
2	10:30:35	7198	30.6	31.8	70.4	70.9	488.6	477.2	965	1007
3	10:30:36	7183	30.6	31.8	70.4	71.0	490.8	477.9	965	1002
4	10:30:37	7168	30.7	31.8	70.5	71.0	490.1	477.2	965	997
1	10:30:38	7155	30.7	31.8	70.4	71.0	490.8	477.2	970	1002
2	10:30:39	7141	30.6	31.8	70.4	71.1	489.4	477.2	961	997
3	10:30:40	7127	30.6	31.8	70.4	71.1	490.1	477.2	965	1011
4	10:30:41	7113	30.7	31.8	70.5	71.1	489.4	477.2	961	1002
1	10:30:42	7100	30.6	31.8	70.4	71.1	489.4	477.9	961	1002
2	10:30:43	7085	30.6	31.8	70.4	71.1	489.4	478.6	961	993
3	10:30:44	7072	30.6	31.8	70.4	71.0	489.4	477.2	961	1002
4	10:30:45	7058	30.6	31.7	70.4	71.0	489.4	477.9	961	1011
1	10:30:46	7044	30.7	31.8	70.4	71.0	489.4	477.9	965	1002
2	10:30:47	7029	30.6	31.8	70.4	71.0	490.1	477.2	965	1002
3	10:30:48	7014	30.6	31.7	70.4	70.9	490.1	477.2	965	1002
4	10:30:49	6999	30.6	31.7	70.4	70.9	490.1	477.2	961	1002
1	10:30:50	6982	30.5	31.7	70.4	70.9	489.4	477.2	965	1002
2	10:30:51	6966	30.5	31.7	70.4	71.0	487.9	477.2	961	997
3	10:30:52	6949	30.5	31.7	70.4	70.9	489.4	477.2	961	1002
4	10:30:53	6930	30.6	31.7	70.4	71.0	489.4	477.9	965	997
1	10:30:54	6912	30.5	31.7	70.4	70.9	490.8	477.2	970	1007
2	10:30:55	6893	30.5	31.7	70.4	70.9	489.4	477.9	965	1007
3	10:30:56	6871	30.5	31.7	70.4	70.9	490.8	477.9	965	1007
4	10:30:57	6851	30.5	31.7	70.4	70.8	488.6	477.9	965	1002
1	10:30:58	6829	30.5	31.6	70.4	70.9	489.4	478.6	970	1011
2	10:30:59	6807	30.4	31.6	70.4	70.9	489.4	477.9	970	1007

S	RELATIVE TIME	Altitude	N1	N1	N2	N2	EGT	EGT	F.Flow	F.Flow
			Eng.1	Eng.2	Eng.1	Eng.2	Eng.1	Eng.2	Eng.1	Eng.2
F	HH:MM:WN=19+58		WN=51	WN=30	WN=31	WN=06	WN=32	WN=64	WN=16	WN=48
3	10:31:00	6787	30.5	31.6	70.4	70.9	488.6	477.9	965	1007
4	10:31:01	6766	30.4	31.6	70.4	71.0	489.4	477.2	965	1011
1	10:31:02	6746	30.4	31.6	70.3	70.9	490.1	477.2	970	1007
2	10:31:03	6727	30.5	31.5	70.4	70.9	490.8	477.2	965	1002
3	10:31:04	6706	30.4	31.5	70.4	70.8	489.4	477.2	970	1011
4	10:31:05	6686	30.4	31.5	70.3	70.7	489.4	477.2	965	1007
1	10:31:06	6667	30.4	31.6	70.2	70.8	490.1	477.2	970	1011
2	10:31:07	6647	30.4	31.6	70.3	70.7	489.4	477.2	970	1007
3	10:31:08	6626	30.4	31.6	70.3	70.8	489.4	476.4	965	1002
4	10:31:09	6606	30.4	31.5	70.2	70.7	489.4	477.2	974	1007
1	10:31:10	6584	30.4	31.5	70.3	70.7	488.6	477.2	965	1002
2	10:31:11	6564	30.4	31.6	70.3	70.7	489.4	477.2	970	1007
3	10:31:12	6542	30.4	31.6	70.3	70.7	489.4	477.2	974	1020
4	10:31:13	6520	30.5	31.6	70.3	70.7	488.6	476.4	970	1020
1	10:31:14	6498	30.4	31.5	70.2	70.8	489.4	475.7	974	1016
2	10:31:15	6475	30.4	31.5	70.3	70.8	489.4	476.4	974	1020
3	10:31:16	6451	30.4	31.6	70.3	70.7	487.9	476.4	979	1016
4	10:31:17	6428	30.3	31.5	70.3	70.7	489.4	477.2	974	1011
1	10:31:18	6404	30.4	31.5	70.3	70.7	488.6	476.4	979	1016
2	10:31:19	6381	30.4	31.5	70.2	70.7	489.4	476.4	974	1020
3	10:31:20	6359	30.3	31.5	70.3	70.8	491.5	476.4	974	1011
4	10:31:21	6337	30.4	31.6	70.3	70.7	488.6	477.2	979	1020
1	10:31:22	6314	30.3	31.5	70.3	70.7	488.6	476.4	979	1025
2	10:31:23	6291	30.3	31.6	70.2	70.7	490.8	477.2	979	1020
3	10:31:24	6269	30.3	31.6	70.3	70.7	489.4	477.2	974	1020
4	10:31:25	6248	30.4	31.6	70.2	70.7	490.1	477.2	984	1020
1	10:31:26	6227	30.3	31.5	70.3	70.7	488.6	476.4	988	1025
2	10:31:27	6205	30.4	31.5	70.3	70.8	490.8	476.4	984	1025
3	10:31:28	6183	30.4	31.5	70.2	70.8	490.1	476.4	988	1020
4	10:31:29	6160	30.4	31.5	70.2	70.7	490.1	477.2	988	1020
1	10:31:30	6139	30.4	31.5	70.3	70.7	490.8	477.2	993	1020
2	10:31:31	6117	30.4	31.6	70.2	70.6	489.4	477.2	988	1025
3	10:31:32	6095	30.4	31.5	70.3	70.7	489.4	477.9	988	1025
4	10:31:33	6072	30.4	31.5	70.2	70.6	489.4	477.2	993	1030
1	10:31:34	6049	30.4	31.5	70.3	70.7	489.4	477.2	993	1025
2	10:31:35	6028	30.4	31.5	70.3	70.7	490.8	476.4	988	1025
3	10:31:36	6005	30.3	31.4	70.2	70.8	490.8	477.2	988	1030
4	10:31:37	5984	30.3	31.4	70.3	70.8	490.1	477.2	993	1020
1	10:31:38	5962	30.4	31.4	70.3	70.7	490.8	477.2	997	1025
2	10:31:39	5941	30.4	31.4	70.3	70.6	490.8	477.9	997	1034
3	10:31:40	5920	30.4	31.4	70.3	70.7	490.8	477.2	993	1025
4	10:31:41	5898	30.5	31.5	70.3	70.7	491.5	477.2	997	1034
1	10:31:42	5880	31.0	31.7	70.3	70.6	495.9	495.9	1002	1104
2	10:31:43	5863	33.2	34.7	72.2	71.5	526.1	531.4	1244	1410
3	10:31:44	5847	35.3	37.7	74.9	74.6	548.8	554.2	1433	1631
4	10:31:45	5835	38.0	42.8	77.7	77.9	565.0	563.4	1583	1887
1	10:31:46	5825	43.2	49.6	80.7	81.1	576.7	555.7	1778	2099
2	10:31:47	5819	48.7	55.8	82.5	83.0	562.7	547.3	1917	2346
3	10:31:48	5814	52.6	57.8	83.4	83.9	549.6	538.2	2058	2473
4	10:31:49	5811	56.2	58.0	84.7	84.3	548.8	533.6	2248	2510
1	10:31:50	5808	58.2	58.2	85.3	84.7	542.7	530.6	2404	2531
2	10:31:51	5806	59.4	59.2	85.7	85.0	542.7	532.1	2499	2579
3	10:31:52	5806	60.9	60.8	86.2	85.4	542.7	535.1	2595	2681
4	10:31:53	5806	62.0	62.2	86.7	85.8	545.0	538.9	2698	2779

S	RELATIVE TIME	Altitude	N1	N1	N2	N2	EGT	EGT	F.Flow	F.Flow
			Eng.1	Eng.2	Eng.1	Eng.2	Eng.1	Eng.2	Eng.1	Eng.2
F	HH:MM:WN=19+58		WN=51	WN=30	WN=31	WN=06	WN=32	WN=64	WN=16	WN=48
1	10:31:54	5806	62.8	63.0	87.0	86.2	548.8	543.5	2779	2856
2	10:31:55	5808	63.3	63.6	87.2	86.4	551.1	546.5	2834	2906
3	10:31:56	5808	63.8	64.2	87.4	86.5	552.6	548.8	2890	2956
4	10:31:57	5808	64.1	64.5	87.5	86.8	555.7	551.9	2912	2990
1	10:31:58	5808	64.4	64.5	87.7	86.8	557.3	552.6	2956	3001
2	10:31:59	5808	65.1	64.7	87.9	87.0	558.8	555.7	2984	3024
3	10:32:00	5808	65.6	65.2	88.0	87.1	562.7	557.3	3035	3040
4	10:32:01	5809	65.9	65.4	88.1	87.3	565.8	558.8	3080	3069
1	10:32:02	5809	66.0	65.5	88.1	87.3	566.6	561.1	3097	3086
2	10:32:03	5811	66.1	65.6	88.2	87.3	568.9	562.7	3103	3091
3	10:32:04	5811	66.1	65.8	88.2	87.4	568.1	564.2	3108	3114
4	10:32:05	5812	66.1	66.0	88.2	87.5	568.9	565.8	3108	3108
1	10:32:06	5814	66.1	65.9	88.3	87.5	572.0	565.8	3108	3114
2	10:32:07	5815	66.2	65.9	88.3	87.6	572.8	566.6	3108	3114
3	10:32:08	5816	66.1	65.6	88.3	87.6	571.2	565.8	3114	3097
4	10:32:09	5816	66.1	65.0	88.3	87.5	572.0	565.0	3108	3052
1	10:32:10	5818	65.7	64.8	88.3	87.4	572.0	565.0	3074	3007
2	10:32:11	5818	65.4	64.6	88.1	87.3	572.0	564.2	3040	2984
3	10:32:12	5818	65.2	64.4	88.0	87.2	572.8	562.7	3018	2973
4	10:32:13	5816	65.0	64.3	88.0	87.3	570.4	562.7	2995	2951
1	10:32:14	5822	64.7	64.2	88.0	87.2	569.7	562.7	2973	2934
2	10:32:15	5827	64.4	64.1	87.8	87.2	565.0	563.4	2934	2923
3	10:32:16	5812	64.4	64.2	87.7	87.0	567.3	562.7	2923	2917
4	10:32:17	5790	64.1	63.9	87.7	87.1	568.1	562.7	2912	2906
1	10:32:18	5758	68.2	65.7	88.0	87.0	582.2	593.3	2923	3125
2	10:32:19	5719	75.4	74.5	90.6	88.6	618.3	604.6	3670	3749
3	10:32:20	5694	68.8	67.9	89.8	89.4	599.7	570.4	3834	3391
4	10:32:21	5646	56.0	54.1	86.7	87.0	554.9	538.2	3040	2483
1	10:32:22	5606	46.4	45.6	83.6	83.8	529.9	522.4	2150	1862
2	10:32:23	5573	40.7	40.8	81.2	81.4	517.9	511.2	1607	1481
3	10:32:24	5516	37.0	37.5	78.9	79.2	508.3	504.6	1282	1244
4	10:32:25	5495	34.4	34.9	76.9	77.3	501.7	501.0	1076	1085
1	10:32:26	5489	32.7	33.1	75.1	75.5	497.3	497.3	956	988
2	10:32:27	5228	31.3	31.8	73.2	74.0	493.0	493.0	878	938
3	10:32:28	5007	30.2	30.9	71.5	72.4	490.8	491.5	833	887
4	10:32:29	4889	30.0	30.3	70.6	71.1	495.1	501.0	837	906
1	10:32:30	4550	30.4	30.8	70.9	70.9	511.2	508.3	970	1016
2	10:32:31	4051	30.1	30.7	71.0	71.0	512.7	506.8	1002	1011
3	10:32:32	3913	30.5	30.6	70.9	70.8	512.7	512.7	988	1020
4	10:32:33	3492	30.8	31.2	71.2	70.9	521.6	515.7	1034	1095
1	10:32:34	2929	30.1	31.0	71.1	71.3	518.6	511.2	1053	1081
2	10:32:35	2972	30.6	31.4	70.8	71.2	517.2	518.6	1016	1122
3	10:32:36	2397	30.8	31.7	71.3	71.7	524.6	515.7	1104	1160
4	10:32:37	1880	30.0	31.5	71.0	71.8	515.7	514.9	1062	1136
1	10:32:38	1874	30.8	31.8	70.8	71.5	521.6	518.6	1067	1183
2	10:32:39	1188	30.7	31.9	71.4	71.9	526.8	XXX.X	1150	1197

	RELATIVE	Vert	Vert	Vert	Vert	Vert	Vert	Vert	Vert	CCCont.	Col.
S	TIME	Acc 1	Acc 2	Acc 3	Acc 4	Acc 5	Acc 6	Acc 7	Acc 8	PiPitch	2
F	HH:MM:SS	WN=04	WN=12	WN=20	WN=28	WN=36	WN=44	WN=52	WN=60	WNWN=55	
3	10:27:24	0.939	0.939	0.941	0.946	0.944	0.941	0.946	0.946	-0.5	-0.6
4	10:27:25	0.951	0.953	0.948	0.953	0.958	0.958	0.963	0.963	-0.6	-0.7
1	10:27:26	0.967	0.970	0.970	0.972	0.977	0.972	0.975	0.972	-0.6	-0.5
2	10:27:27	0.970	0.965	0.958	0.956	0.951	0.948	0.946	0.939	-0.5	-0.4
3	10:27:28	0.939	0.936	0.934	0.934	0.929	0.929	0.929	0.927	-0.4	-0.4
4	10:27:29	0.924	0.924	0.927	0.924	0.922	0.917	0.924	0.922	-0.4	-0.4
1	10:27:30	0.920	0.920	0.915	0.920	0.920	0.917	0.920	0.922	-0.4	-0.5
2	10:27:31	0.922	0.922	0.920	0.922	0.924	0.920	0.927	0.924	-0.5	-0.6
3	10:27:32	0.924	0.927	0.927	0.924	0.924	0.932	0.934	0.932	-0.6	-0.7
4	10:27:33	0.934	0.939	0.936	0.939	0.939	0.939	0.941	0.946	-0.7	-0.8
1	10:27:34	0.944	0.946	0.948	0.951	0.956	0.956	0.956	0.951	-0.8	-0.9
2	10:27:35	0.956	0.958	0.958	0.965	0.956	0.958	0.965	0.975	-0.9	-0.9
3	10:27:36	0.967	0.970	0.967	0.975	0.972	0.972	0.975	0.977	-0.8	-0.7
4	10:27:37	0.979	0.982	0.984	0.979	0.979	0.984	0.977	0.977	-0.6	-0.6
1	10:27:38	0.977	0.979	0.979	0.975	0.975	0.977	0.977	0.972	-0.5	-0.4
2	10:27:39	0.972	0.975	0.965	0.970	0.970	0.970	0.967	0.967	-0.4	-0.4
3	10:27:40	0.967	0.967	0.967	0.967	0.965	0.963	0.965	0.963	-0.4	-0.3
4	10:27:41	0.958	0.958	0.956	0.956	0.956	0.951	0.948	0.946	-0.3	-0.3
1	10:27:42	0.946	0.944	0.941	0.946	0.941	0.941	0.939	0.939	-0.2	-0.2
2	10:27:43	0.939	0.934	0.934	0.934	0.932	0.932	0.934	0.934	-0.2	-0.2
3	10:27:44	0.929	0.932	0.929	0.927	0.927	0.924	0.929	0.927	-0.2	-0.1
4	10:27:45	0.929	0.929	0.927	0.932	0.924	0.927	0.924	0.929	-0.1	-0.2
1	10:27:46	0.934	0.929	0.927	0.924	0.920	0.922	0.917	0.920	-0.2	-0.3
2	10:27:47	0.920	0.917	0.922	0.922	0.922	0.924	0.924	0.927	-0.2	-0.2
3	10:27:48	0.932	0.929	0.929	0.936	0.932	0.929	0.932	0.932	-0.3	-0.3
4	10:27:49	0.932	0.929	0.932	0.934	0.934	0.936	0.939	0.941	-0.3	-0.3
1	10:27:50	0.941	0.941	0.946	0.944	0.946	0.946	0.946	0.948	-0.4	-0.4
2	10:27:51	0.951	0.953	0.948	0.956	0.958	0.956	0.956	0.963	-0.4	-0.5
3	10:27:52	0.958	0.965	0.965	0.967	0.970	0.972	0.977	0.975	-0.5	-0.5
4	10:27:53	0.975	0.982	0.977	0.979	0.982	0.984	0.982	0.982	-0.6	-0.6
1	10:27:54	0.987	0.989	0.989	0.994	0.996	0.996	0.994	0.994	-0.6	-0.6
2	10:27:55	0.994	0.999	1.001	1.003	1.001	0.996	1.001	0.999	-0.6	-0.6
3	10:27:56	1.001	0.999	1.003	1.001	1.003	1.003	1.001	1.003	-0.6	-0.6
4	10:27:57	1.001	1.001	1.001	1.006	1.001	1.003	1.003	1.001	-0.5	-0.5
1	10:27:58	1.001	1.001	0.999	0.999	1.001	0.999	0.996	0.996	-0.5	-0.5
2	10:27:59	0.996	0.999	0.996	0.989	0.996	0.994	0.987	0.989	-0.5	-0.4
3	10:28:00	0.987	0.984	0.987	0.984	0.984	0.977	0.982	0.982	-0.4	-0.4
4	10:28:01	0.977	0.979	0.979	0.979	0.975	0.975	0.979	0.979	-0.4	-0.4
1	10:28:02	0.979	0.979	0.979	0.982	0.979	0.979	0.977	0.975	-0.3	-0.3
2	10:28:03	0.975	0.972	0.972	0.972	0.972	0.967	0.965	0.965	-0.3	-0.3
3	10:28:04	0.965	0.963	0.965	0.965	0.963	0.963	0.965	0.963	-0.3	-0.3
4	10:28:05	0.963	0.960	0.958	0.960	0.958	0.953	0.958	0.958	-0.3	-0.3
1	10:28:06	0.958	0.958	0.956	0.956	0.956	0.951	0.951	0.953	-0.3	-0.3
2	10:28:07	0.953	0.951	0.956	0.953	0.956	0.953	0.958	0.956	-0.3	-0.3
3	10:28:08	0.953	0.960	0.958	0.958	0.958	0.958	0.958	0.960	-0.3	-0.3
4	10:28:09	0.958	0.958	0.958	0.956	0.958	0.963	0.960	0.958	-0.3	-0.3
1	10:28:10	0.958	0.963	0.960	0.960	0.960	0.960	0.960	0.960	-0.3	-0.4
2	10:28:11	0.963	0.963	0.963	0.963	0.965	0.963	0.963	0.965	-0.4	-0.4
3	10:28:12	0.965	0.970	0.967	0.963	0.967	0.970	0.967	0.967	-0.4	-0.4
4	10:28:13	0.967	0.970	0.972	0.967	0.972	0.972	0.972	0.972	-0.4	-0.4
1	10:28:14	0.975	0.972	0.975	0.977	0.975	0.979	0.977	0.979	-0.4	-0.4
2	10:28:15	0.977	0.979	0.977	0.982	0.982	0.979	0.979	0.984	-0.4	-0.4
3	10:28:16	0.984	0.984	0.982	0.982	0.982	0.982	0.982	0.982	-0.5	-0.5
4	10:28:17	0.984	0.982	0.984	0.987	0.984	0.982	0.984	0.987	-0.5	-0.5

	RELATIVE	Vert	Vert	Vert	Vert	Vert	Vert	Vert	Vert	CCCont.	Col.
S	TIME	Acc 1	Acc 2	Acc 3	Acc 4	Acc 5	Acc 6	Acc 7	Acc 8	PiPitch	2
F	HH:MM:SS	WN=04	WN=12	WN=20	WN=28	WN=36	WN=44	WN=52	WN=60	WNWN=55	
1	10:28:18	0.984	0.982	0.984	0.984	0.984	0.991	0.987	0.989	-0.5	-0.5
2	10:28:19	0.989	0.994	0.989	0.991	0.987	0.991	0.989	0.989	-0.4	-0.4
3	10:28:20	0.989	0.989	0.984	0.987	0.984	0.982	0.984	0.989	-0.4	-0.4
4	10:28:21	0.982	0.984	0.982	0.984	0.984	0.984	0.984	0.984	-0.4	-0.4
1	10:28:22	0.984	0.984	0.984	0.982	0.979	0.982	0.979	0.982	-0.4	-0.4
2	10:28:23	0.982	0.984	0.982	0.984	0.982	0.984	0.982	0.979	-0.4	-0.4
3	10:28:24	0.977	0.982	0.979	0.977	0.982	0.979	0.977	0.977	-0.4	-0.4
4	10:28:25	0.977	0.979	0.977	0.982	0.982	0.987	0.984	0.984	-0.4	-0.4
1	10:28:26	0.984	0.994	0.989	0.987	0.987	0.989	0.989	0.989	-0.4	-0.4
2	10:28:27	0.989	0.984	0.984	0.984	0.987	0.989	0.989	0.991	-0.4	-0.4
3	10:28:28	0.994	0.991	0.994	0.991	0.996	0.996	0.994	0.999	-0.4	-0.4
4	10:28:29	0.999	0.994	0.999	0.999	0.996	0.999	1.003	0.999	-0.4	-0.4
1	10:28:30	0.999	1.001	0.996	1.003	1.001	1.001	1.003	1.001	-0.4	-0.4
2	10:28:31	1.001	1.001	1.001	1.001	1.001	1.001	1.003	1.001	-0.4	-0.4
3	10:28:32	0.999	1.001	0.996	0.996	0.999	0.996	0.996	0.999	-0.3	-0.3
4	10:28:33	1.003	0.996	0.999	0.994	0.996	0.994	0.989	0.989	-0.3	-0.3
1	10:28:34	0.989	0.987	0.987	0.984	0.987	0.987	0.982	0.984	-0.3	-0.2
2	10:28:35	0.984	0.984	0.982	0.982	0.977	0.979	0.977	0.975	-0.2	-0.1
3	10:28:36	0.972	0.970	0.972	0.967	0.970	0.970	0.967	0.967	-0.1	-0.1
4	10:28:37	0.967	0.963	0.967	0.963	0.965	0.963	0.963	0.960	-0.1	-0.1
1	10:28:38	0.960	0.963	0.960	0.965	0.963	0.965	0.965	0.963	-0.1	-0.2
2	10:28:39	0.963	0.965	0.963	0.965	0.965	0.967	0.965	0.963	-0.3	-0.3
3	10:28:40	0.963	0.958	0.965	0.960	0.958	0.953	0.956	0.956	-0.4	-0.4
4	10:28:41	0.960	0.960	0.958	0.958	0.960	0.963	0.960	0.965	-0.4	-0.5
1	10:28:42	0.965	0.965	0.967	0.963	0.970	0.970	0.967	0.967	-0.5	-0.5
2	10:28:43	0.965	0.965	0.965	0.970	0.965	0.967	0.970	0.967	-0.5	-0.5
3	10:28:44	0.970	0.970	0.967	0.975	0.972	0.972	0.970	0.970	-0.5	-0.5
4	10:28:45	0.972	0.970	0.972	0.972	0.972	0.970	0.972	0.975	-0.5	-0.5
1	10:28:46	0.972	0.972	0.970	0.975	0.977	0.975	0.975	0.977	-0.5	-0.5
2	10:28:47	0.975	0.977	0.977	0.975	0.977	0.972	0.977	0.975	-0.6	-0.6
3	10:28:48	0.975	0.975	0.977	0.979	0.975	0.977	0.975	0.979	-0.6	-0.6
4	10:28:49	0.979	0.982	0.979	0.975	0.977	0.972	0.977	0.977	-0.6	-0.6
1	10:28:50	0.975	0.979	0.979	0.977	0.975	0.975	0.972	0.972	-0.6	-0.6
2	10:28:51	0.977	0.977	0.975	0.977	0.975	0.977	0.977	0.977	-0.6	-0.6
3	10:28:52	0.979	0.977	0.982	0.979	0.982	0.979	0.982	0.977	-0.6	-0.6
4	10:28:53	0.979	0.979	0.982	0.979	0.984	0.977	0.979	0.982	-0.6	-0.6
1	10:28:54	0.979	0.979	0.977	0.977	0.982	0.979	0.982	0.982	-0.6	-0.6
2	10:28:55	0.979	0.982	0.982	0.982	0.984	0.982	0.984	0.984	-0.6	-0.6
3	10:28:56	0.982	0.984	0.984	0.984	0.987	0.984	0.987	0.984	-0.6	-0.6
4	10:28:57	0.984	0.984	0.982	0.979	0.977	0.975	0.979	0.979	-0.6	-0.6
1	10:28:58	0.979	0.977	0.979	0.979	0.977	0.979	0.977	0.977	-0.6	-0.6
2	10:28:59	0.977	0.975	0.977	0.979	0.975	0.975	0.975	0.972	-0.5	-0.5
3	10:29:00	0.972	0.972	0.967	0.967	0.970	0.970	0.967	0.967	-0.5	-0.5
4	10:29:01	0.965	0.965	0.963	0.963	0.965	0.967	0.965	0.963	-0.5	-0.5
1	10:29:02	0.963	0.963	0.963	0.965	0.963	0.963	0.963	0.963	-0.5	-0.5
2	10:29:03	0.958	0.965	0.960	0.960	0.963	0.960	0.965	0.960	-0.5	-0.5
3	10:29:04	0.963	0.967	0.963	0.963	0.965	0.963	0.963	0.965	-0.5	-0.6
4	10:29:05	0.963	0.965	0.965	0.965	0.965	0.965	0.965	0.970	-0.6	-0.6
1	10:29:06	0.970	0.972	0.970	0.970	0.972	0.970	0.972	0.972	-0.6	-0.6
2	10:29:07	0.967	0.970	0.972	0.970	0.970	0.975	0.972	0.972	-0.6	-0.6
3	10:29:08	0.970	0.972	0.972	0.972	0.972	0.972	0.967	0.975	-0.6	-0.6
4	10:29:09	0.972	0.967	0.970	0.970	0.972	0.975	0.970	0.972	-0.6	-0.6
1	10:29:10	0.975	0.977	0.972	0.972	0.972	0.975	0.975	0.975	-0.6	-0.6
2	10:29:11	0.977	0.977	0.977	0.977	0.975	0.977	0.975	0.975	-0.6	-0.6

	RELATIVE	Vert	Vert	Vert	Vert	Vert	Vert	Vert	Vert	CCCont.	Col.
S	TIME	Acc 1	Acc 2	Acc 3	Acc 4	Acc 5	Acc 6	Acc 7	Acc 8	PiPitch	2
F	HH:MM:SS	WN=04	WN=12	WN=20	WN=28	WN=36	WN=44	WN=52	WN=60	WNWN=55	
3	10:29:12	0.977	0.979	0.975	0.972	0.972	0.975	0.977	0.977	-0.6	-0.6
4	10:29:13	0.972	0.975	0.975	0.977	0.977	0.977	0.975	0.972	-0.6	-0.6
1	10:29:14	0.975	0.975	0.975	0.975	0.970	0.975	0.970	0.972	-0.6	-0.6
2	10:29:15	0.970	0.972	0.972	0.972	0.970	0.970	0.972	0.977	-0.6	-0.6
3	10:29:16	0.972	0.975	0.975	0.975	0.972	0.972	0.972	0.975	-0.6	-0.6
4	10:29:17	0.975	0.970	0.970	0.975	0.972	0.972	0.972	0.970	-0.6	-0.6
1	10:29:18	0.970	0.970	0.970	0.970	0.970	0.970	0.970	0.967	-0.6	-0.6
2	10:29:19	0.970	0.970	0.970	0.967	0.972	0.970	0.972	0.970	-0.6	-0.6
3	10:29:20	0.967	0.970	0.970	0.972	0.970	0.970	0.970	0.972	-0.6	-0.6
4	10:29:21	0.970	0.972	0.970	0.975	0.972	0.972	0.972	0.975	-0.6	-0.6
1	10:29:22	0.972	0.970	0.970	0.970	0.970	0.975	0.972	0.972	-0.6	-0.6
2	10:29:23	0.975	0.975	0.972	0.967	0.970	0.965	0.970	0.963	-0.6	-0.6
3	10:29:24	0.967	0.965	0.965	0.965	0.965	0.963	0.965	0.965	-0.6	-0.6
4	10:29:25	0.965	0.963	0.970	0.965	0.965	0.965	0.965	0.970	-0.6	-0.6
1	10:29:26	0.970	0.967	0.967	0.967	0.970	0.965	0.970	0.967	-0.6	-0.6
2	10:29:27	0.965	0.963	0.963	0.967	0.970	0.970	0.970	0.967	-0.6	-0.6
3	10:29:28	0.970	0.975	0.975	0.975	0.975	0.975	0.970	0.972	-0.6	-0.6
4	10:29:29	0.970	0.972	0.972	0.972	0.972	0.967	0.967	0.967	-0.6	-0.6
1	10:29:30	0.967	0.965	0.965	0.965	0.967	0.970	0.967	0.967	-0.6	-0.6
2	10:29:31	0.967	0.970	0.965	0.967	0.965	0.967	0.965	0.967	-0.6	-0.6
3	10:29:32	0.960	0.965	0.965	0.960	0.958	0.963	0.958	0.965	-0.6	-0.6
4	10:29:33	0.963	0.960	0.960	0.960	0.963	0.963	0.963	0.965	-0.6	-0.6
1	10:29:34	0.965	0.963	0.963	0.963	0.965	0.965	0.967	0.965	-0.6	-0.6
2	10:29:35	0.967	0.970	0.970	0.970	0.965	0.975	0.970	0.970	-0.6	-0.6
3	10:29:36	0.970	0.970	0.967	0.972	0.970	0.967	0.970	0.970	-0.7	-0.7
4	10:29:37	0.967	0.970	0.970	0.970	0.975	0.975	0.970	0.970	-0.6	-0.6
1	10:29:38	0.967	0.970	0.965	0.963	0.965	0.963	0.967	0.965	-0.7	-0.7
2	10:29:39	0.963	0.965	0.965	0.965	0.967	0.967	0.975	0.970	-0.8	-0.9
3	10:29:40	0.970	0.970	0.975	0.977	0.984	0.987	0.991	0.991	-0.9	-0.9
4	10:29:41	0.999	1.003	1.003	1.003	1.003	1.006	1.006	1.008	-1.0	-1.1
1	10:29:42	1.011	1.013	1.018	1.023	1.030	1.034	1.039	1.044	-1.0	-0.9
2	10:29:43	1.051	1.051	1.061	1.061	1.061	1.063	1.058	1.056	-0.6	-0.5
3	10:29:44	1.058	1.054	1.049	1.054	1.054	1.046	1.049	1.044	-0.5	-0.4
4	10:29:45	1.039	1.042	1.039	1.034	1.034	1.037	1.032	1.025	-0.4	-0.4
1	10:29:46	1.020	1.023	1.023	1.018	1.013	1.015	1.018	1.015	-0.4	-0.4
2	10:29:47	1.013	1.011	1.008	1.011	1.008	1.008	1.011	1.006	-0.3	-0.2
3	10:29:48	1.011	1.006	1.003	1.003	0.999	0.996	0.999	0.996	-0.2	-0.2
4	10:29:49	0.991	0.989	0.987	0.984	0.982	0.977	0.977	0.979	-0.3	-0.3
1	10:29:50	0.977	0.975	0.975	0.975	0.977	0.977	0.979	0.977	-0.3	-0.3
2	10:29:51	0.979	0.984	0.984	0.984	0.982	0.984	0.982	0.984	-0.3	-0.4
3	10:29:52	0.987	0.984	0.987	0.989	0.994	0.991	0.994	0.996	-0.4	-0.4
4	10:29:53	0.996	0.999	0.996	1.008	0.996	0.994	0.989	0.994	-0.5	-0.7
1	10:29:54	0.989	0.989	0.987	0.989	0.987	0.984	0.984	0.982	-0.7	-0.7
2	10:29:55	0.984	0.984	0.984	0.984	0.982	0.984	0.982	0.977	-0.6	-0.6
3	10:29:56	0.982	0.982	0.982	0.982	0.984	0.984	0.984	0.984	-0.6	-0.6
4	10:29:57	0.982	0.982	0.982	0.984	0.982	0.982	0.984	0.982	-0.6	-0.6
1	10:29:58	0.984	0.979	0.982	0.979	0.977	0.979	0.977	0.975	-0.6	-0.6
2	10:29:59	0.975	0.975	0.979	0.975	0.975	0.979	0.979	0.977	-0.7	-0.7
3	10:30:00	0.982	0.977	0.977	0.979	0.982	0.979	0.979	0.977	-0.7	-0.7
4	10:30:01	0.979	0.977	0.977	0.977	0.975	0.977	0.982	0.979	-0.7	-0.7
1	10:30:02	0.977	0.979	0.979	0.979	0.977	0.977	0.977	0.977	-0.7	-0.7
2	10:30:03	0.982	0.977	0.977	0.977	0.982	0.984	0.982	0.977	-0.8	-0.8
3	10:30:04	0.979	0.977	0.977	0.979	0.979	0.979	0.982	0.979	-0.8	-0.8
4	10:30:05	0.977	0.979	0.979	0.979	0.979	0.982	0.982	0.979	-0.8	-0.8

S	RELATIVE TIME F HH:MM:SS	Vert Acc 1 WN=04	Vert Acc 2 WN=12	Vert Acc 3 WN=20	Vert Acc 4 WN=28	Vert Acc 5 WN=36	Vert Acc 6 WN=44	Vert Acc 7 WN=52	Vert Acc 8 WN=60	CCCont. PiPitch WNWN=55	Col. 2
1	10:30:06	0.977	0.979	0.979	0.977	0.972	0.972	0.970	0.970	-0.8	-0.7
2	10:30:07	0.967	0.963	0.963	0.965	0.958	0.958	0.960	0.960	-0.6	-0.5
3	10:30:08	0.958	0.960	0.963	0.965	0.965	0.965	0.970	0.967	-0.5	-0.5
4	10:30:09	0.970	0.967	0.967	0.972	0.970	0.967	0.970	0.970	-0.5	-0.5
1	10:30:10	0.967	0.970	0.967	0.965	0.965	0.970	0.963	0.967	-0.5	-0.5
2	10:30:11	0.970	0.965	0.967	0.967	0.970	0.970	0.965	0.970	-0.6	-0.6
3	10:30:12	0.970	0.972	0.972	0.970	0.975	0.977	0.972	0.975	-0.6	-0.6
4	10:30:13	0.977	0.975	0.975	0.977	0.979	0.977	0.977	0.979	-0.6	-0.7
1	10:30:14	0.982	0.979	0.979	0.984	0.982	0.984	0.982	0.987	-0.7	-0.7
2	10:30:15	0.987	0.984	0.987	0.987	0.989	0.987	0.989	0.989	-0.7	-0.8
3	10:30:16	0.987	0.989	0.989	0.984	0.987	0.989	0.987	0.991	-0.8	-0.8
4	10:30:17	0.987	0.991	0.991	0.987	0.989	0.987	0.991	0.987	-0.8	-0.8
1	10:30:18	0.989	0.989	0.989	0.991	0.994	0.989	0.991	0.994	-0.8	-0.8
2	10:30:19	0.989	0.991	0.989	0.989	0.989	0.991	0.989	0.987	-0.8	-0.8
3	10:30:20	0.991	0.987	0.987	0.989	0.991	0.989	0.989	0.989	-0.8	-0.8
4	10:30:21	0.991	0.989	0.989	0.989	0.989	0.989	0.987	0.987	-0.8	-0.8
1	10:30:22	0.989	0.982	0.982	0.982	0.982	0.982	0.979	0.984	-0.8	-0.8
2	10:30:23	0.984	0.984	0.984	0.989	0.994	0.989	0.991	0.994	-0.8	-0.8
3	10:30:24	0.994	0.996	0.994	0.994	0.989	0.991	0.994	0.991	-0.8	-0.8
4	10:30:25	0.989	0.984	0.987	0.984	0.982	0.979	0.979	0.977	-0.8	-0.8
1	10:30:26	0.975	0.975	0.972	0.972	0.977	0.977	0.979	0.977	-0.8	-0.8
2	10:30:27	0.977	0.975	0.977	0.977	0.972	0.975	0.972	0.965	-0.8	-0.8
3	10:30:28	0.965	0.965	0.965	0.963	0.963	0.965	0.965	0.960	-0.8	-0.7
4	10:30:29	0.956	0.951	0.956	0.958	0.958	0.958	0.958	0.956	-0.7	-0.7
1	10:30:30	0.958	0.956	0.958	0.953	0.951	0.948	0.948	0.948	-0.7	-0.8
2	10:30:31	0.946	0.948	0.948	0.948	0.948	0.946	0.951	0.951	-0.8	-0.8
3	10:30:32	0.948	0.951	0.951	0.951	0.956	0.956	0.956	0.958	-0.9	-0.9
4	10:30:33	0.963	0.965	0.963	0.963	0.965	0.967	0.963	0.970	-1.0	-1.0
1	10:30:34	0.970	0.967	0.967	0.970	0.970	0.972	0.975	0.972	-1.0	-1.1
2	10:30:35	0.972	0.975	0.975	0.977	0.982	0.982	0.984	0.984	-1.0	-0.8
3	10:30:36	0.982	0.982	0.982	0.984	0.982	0.987	0.984	0.984	-0.6	-0.6
4	10:30:37	0.984	0.984	0.991	0.991	0.991	0.989	0.994	0.991	-0.5	-0.5
1	10:30:38	0.989	0.989	0.984	0.987	0.982	0.982	0.979	0.979	-0.5	-0.5
2	10:30:39	0.979	0.979	0.975	0.975	0.975	0.972	0.977	0.977	-0.5	-0.5
3	10:30:40	0.975	0.979	0.979	0.977	0.975	0.979	0.977	0.977	-0.5	-0.4
4	10:30:41	0.979	0.977	0.979	0.979	0.977	0.972	0.972	0.972	-0.4	-0.4
1	10:30:42	0.970	0.967	0.970	0.967	0.975	0.972	0.972	0.972	-0.4	-0.4
2	10:30:43	0.970	0.970	0.965	0.965	0.960	0.960	0.960	0.958	-0.4	-0.4
3	10:30:44	0.956	0.960	0.963	0.965	0.965	0.970	0.965	0.965	-0.5	-0.4
4	10:30:45	0.965	0.970	0.970	0.965	0.965	0.970	0.967	0.972	-0.4	-0.4
1	10:30:46	0.970	0.967	0.967	0.963	0.963	0.958	0.958	0.958	-0.5	-0.4
2	10:30:47	0.960	0.958	0.953	0.956	0.958	0.958	0.960	0.960	-0.4	-0.4
3	10:30:48	0.960	0.958	0.958	0.960	0.958	0.958	0.958	0.958	-0.4	-0.4
4	10:30:49	0.956	0.958	0.953	0.956	0.956	0.956	0.956	0.953	-0.4	-0.4
1	10:30:50	0.953	0.953	0.948	0.956	0.953	0.953	0.953	0.953	-0.4	-0.4
2	10:30:51	0.956	0.953	0.953	0.956	0.953	0.953	0.953	0.948	-0.4	-0.5
3	10:30:52	0.951	0.951	0.951	0.946	0.946	0.946	0.948	0.944	-0.5	-0.5
4	10:30:53	0.944	0.944	0.941	0.941	0.941	0.941	0.944	0.946	-0.5	-0.5
1	10:30:54	0.946	0.951	0.946	0.946	0.944	0.948	0.946	0.946	-0.5	-0.5
2	10:30:55	0.948	0.948	0.948	0.946	0.951	0.948	0.948	0.951	-0.6	-0.6
3	10:30:56	0.953	0.953	0.953	0.963	0.960	0.958	0.958	0.958	-0.6	-0.7
4	10:30:57	0.958	0.960	0.963	0.965	0.965	0.963	0.972	0.970	-0.7	-0.7
1	10:30:58	0.970	0.972	0.970	0.975	0.975	0.979	0.979	0.979	-0.8	-0.8
2	10:30:59	0.979	0.979	0.979	0.977	0.982	0.982	0.982	0.984	-0.8	-0.8

S	RELATIVE TIME HH:MM:SS	Vert Acc 1 WN=04	Vert Acc 2 WN=12	Vert Acc 3 WN=20	Vert Acc 4 WN=28	Vert Acc 5 WN=36	Vert Acc 6 WN=44	Vert Acc 7 WN=52	Vert Acc 8 WN=60	CCCont. PiPitch WNWN=55	Col. 2
3	10:31:00	0.982	0.977	0.979	0.977	0.984	0.982	0.982	0.982	-0.8	-0.8
4	10:31:01	0.982	0.987	0.989	0.984	0.984	0.989	0.984	0.984	-0.8	-0.8
1	10:31:02	0.987	0.984	0.984	0.982	0.984	0.984	0.984	0.984	-0.8	-0.7
2	10:31:03	0.984	0.987	0.984	0.982	0.984	0.987	0.979	0.977	-0.7	-0.7
3	10:31:04	0.979	0.977	0.972	0.970	0.970	0.970	0.970	0.970	-0.7	-0.6
4	10:31:05	0.967	0.965	0.965	0.963	0.960	0.960	0.958	0.960	-0.6	-0.6
1	10:31:06	0.960	0.963	0.965	0.965	0.965	0.970	0.963	0.970	-0.6	-0.6
2	10:31:07	0.967	0.970	0.967	0.965	0.970	0.965	0.967	0.963	-0.6	-0.5
3	10:31:08	0.963	0.960	0.963	0.960	0.960	0.958	0.963	0.963	-0.5	-0.5
4	10:31:09	0.963	0.963	0.960	0.960	0.963	0.960	0.965	0.965	-0.6	-0.6
1	10:31:10	0.958	0.958	0.958	0.958	0.956	0.958	0.953	0.953	-0.6	-0.6
2	10:31:11	0.956	0.960	0.956	0.960	0.958	0.960	0.963	0.965	-0.6	-0.5
3	10:31:12	0.963	0.963	0.963	0.963	0.958	0.960	0.960	0.963	-0.5	-0.5
4	10:31:13	0.965	0.965	0.963	0.960	0.963	0.960	0.960	0.960	-0.6	-0.6
1	10:31:14	0.960	0.963	0.965	0.965	0.965	0.963	0.963	0.960	-0.6	-0.6
2	10:31:15	0.958	0.965	0.963	0.963	0.965	0.967	0.972	0.972	-0.6	-0.6
3	10:31:16	0.972	0.972	0.970	0.967	0.967	0.970	0.970	0.970	-0.6	-0.6
4	10:31:17	0.975	0.975	0.972	0.975	0.972	0.972	0.972	0.972	-0.6	-0.6
1	10:31:18	0.970	0.970	0.965	0.967	0.970	0.972	0.975	0.977	-0.6	-0.6
2	10:31:19	0.982	0.979	0.982	0.975	0.975	0.972	0.970	0.970	-0.6	-0.6
3	10:31:20	0.975	0.975	0.975	0.977	0.977	0.977	0.975	0.972	-0.6	-0.5
4	10:31:21	0.977	0.975	0.975	0.979	0.977	0.977	0.977	0.977	-0.5	-0.5
1	10:31:22	0.979	0.972	0.972	0.975	0.970	0.972	0.975	0.967	-0.5	-0.5
2	10:31:23	0.970	0.967	0.972	0.975	0.977	0.975	0.979	0.977	-0.5	-0.5
3	10:31:24	0.977	0.975	0.977	0.979	0.977	0.979	0.982	0.979	-0.5	-0.5
4	10:31:25	0.982	0.979	0.977	0.979	0.977	0.979	0.977	0.977	-0.5	-0.5
1	10:31:26	0.972	0.979	0.975	0.977	0.977	0.977	0.975	0.975	-0.5	-0.5
2	10:31:27	0.972	0.972	0.972	0.972	0.972	0.970	0.972	0.967	-0.5	-0.5
3	10:31:28	0.967	0.972	0.970	0.970	0.972	0.970	0.970	0.970	-0.5	-0.5
4	10:31:29	0.972	0.975	0.967	0.972	0.975	0.972	0.970	0.972	-0.5	-0.4
1	10:31:30	0.967	0.967	0.970	0.967	0.967	0.967	0.967	0.967	-0.4	-0.4
2	10:31:31	0.967	0.965	0.965	0.963	0.965	0.963	0.963	0.963	-0.4	-0.4
3	10:31:32	0.965	0.970	0.965	0.965	0.965	0.965	0.965	0.965	-0.4	-0.4
4	10:31:33	0.965	0.967	0.972	0.975	0.977	0.975	0.975	0.970	-0.4	-0.4
1	10:31:34	0.972	0.975	0.975	0.979	0.977	0.977	0.977	0.977	-0.5	-0.5
2	10:31:35	0.979	0.984	0.984	0.984	0.982	0.977	0.979	0.977	-0.5	-0.5
3	10:31:36	0.979	0.982	0.979	0.982	0.987	0.984	0.982	0.984	-0.5	-0.5
4	10:31:37	0.979	0.982	0.979	0.984	0.984	0.982	0.982	0.982	-0.5	-0.4
1	10:31:38	0.979	0.979	0.977	0.977	0.979	0.977	0.977	0.977	-0.4	-0.4
2	10:31:39	0.979	0.977	0.972	0.970	0.972	0.970	0.970	0.972	-0.4	-0.4
3	10:31:40	0.972	0.975	0.977	0.982	0.982	0.977	0.977	0.977	-0.4	-0.6
4	10:31:41	0.984	0.984	0.984	0.989	0.991	0.991	0.994	1.003	-0.9	-1.0
1	10:31:42	1.008	1.015	1.027	1.039	1.044	1.046	1.051	1.058	-1.1	-1.1
2	10:31:43	1.058	1.068	1.068	1.066	1.063	1.070	1.070	1.066	-1.0	-0.9
3	10:31:44	1.063	1.063	1.063	1.054	1.054	1.054	1.054	1.056	-0.8	-0.8
4	10:31:45	1.054	1.051	1.046	1.044	1.046	1.051	1.051	1.042	-0.7	-0.6
1	10:31:46	1.042	1.042	1.039	1.042	1.044	1.046	1.049	1.051	-0.6	-0.5
2	10:31:47	1.058	1.063	1.068	1.068	1.073	1.075	1.080	1.080	-0.5	-0.4
3	10:31:48	1.073	1.068	1.066	1.061	1.058	1.061	1.061	1.061	-0.4	-0.2
4	10:31:49	1.054	1.042	1.046	1.049	1.046	1.046	1.046	1.042	-0.1	-0.0
1	10:31:50	1.039	1.034	1.032	1.030	1.023	1.018	1.023	1.023	0.1	0.1
2	10:31:51	1.020	1.023	1.025	1.020	1.018	1.018	1.013	1.018	0.1	-0.0
3	10:31:52	1.020	1.023	1.020	1.023	1.015	1.018	1.011	1.011	-0.1	-0.3
4	10:31:53	1.015	1.020	1.015	1.015	1.015	1.013	1.008	1.008	-0.3	-0.4

S F	RELATIVE TIME HH:MM:SS	Vert	Vert	Vert	Vert	Vert	Vert	Vert	Vert	CCCont.	Col.
		Acc 1 WN=04	Acc 2 WN=12	Acc 3 WN=20	Acc 4 WN=28	Acc 5 WN=36	Acc 6 WN=44	Acc 7 WN=52	Acc 8 WN=60	PiPitch WNWN=55	2
1	10:31:54	1.013	1.008	1.003	1.001	0.994	0.991	0.994	0.994	-0.6	-0.8
2	10:31:55	0.991	0.994	0.989	0.987	0.984	0.991	1.003	1.001	-0.8	-0.8
3	10:31:56	0.996	0.996	0.991	0.994	0.991	0.991	0.999	0.999	-0.8	-0.7
4	10:31:57	0.999	1.003	1.003	1.001	1.003	0.996	0.996	0.996	-0.7	-0.7
1	10:31:58	0.996	0.994	0.994	0.996	0.991	0.996	0.996	0.999	-0.7	-0.7
2	10:31:59	1.001	1.003	1.003	1.001	1.003	1.001	0.999	1.001	-0.7	-0.6
3	10:32:00	1.001	0.996	1.001	1.008	1.006	1.001	1.001	1.001	-0.6	-0.6
4	10:32:01	1.003	0.996	0.996	0.991	0.989	0.991	0.989	0.989	-0.6	-0.6
1	10:32:02	0.996	0.991	0.996	0.996	0.999	0.991	0.989	0.991	-0.6	-0.6
2	10:32:03	0.996	0.996	0.999	0.994	1.001	1.003	0.994	0.989	-0.6	-0.6
3	10:32:04	0.994	0.996	0.994	0.999	1.001	0.991	0.991	0.999	-0.6	-0.5
4	10:32:05	1.001	1.001	0.999	0.991	0.994	0.996	0.996	0.987	-0.5	-0.5
1	10:32:06	0.991	0.991	0.989	0.994	0.999	0.999	1.001	0.996	-0.5	-0.5
2	10:32:07	0.989	0.989	0.987	0.994	0.991	0.994	0.989	0.989	-0.5	-0.5
3	10:32:08	0.987	0.984	0.982	0.989	0.989	0.989	0.984	0.987	-0.5	-0.5
4	10:32:09	0.984	0.982	0.979	0.977	0.979	0.975	0.975	0.972	-0.4	-0.4
1	10:32:10	0.975	0.975	0.975	0.972	0.970	0.977	0.979	0.982	-0.4	-0.4
2	10:32:11	0.977	0.975	0.977	0.970	0.963	0.965	0.963	0.972	-0.4	-0.4
3	10:32:12	0.984	0.994	0.999	1.003	0.922	0.889	0.889	0.879	-0.4	-0.4
4	10:32:13	0.845	0.951	1.099	1.058	1.023	1.018	0.989	0.867	-0.0	-0.3
1	10:32:14	0.774	0.838	0.841	0.850	0.865	0.934	0.934	1.003	-0.5	-0.1
2	10:32:15	1.049	1.070	1.054	1.054	1.042	1.044	0.984	0.903	0.8	1.9
3	10:32:16	0.834	0.767	0.752	0.771	0.817	0.850	0.889	0.934	1.0	0.5
4	10:32:17	0.953	0.963	0.960	0.934	0.920	0.886	0.874	0.977	-0.6	-2.2
1	10:32:18	0.996	1.006	0.944	0.944	0.855	0.905	0.960	1.058	-5.0	-5.7
2	10:32:19	1.180	1.288	1.412	1.451	1.520	1.561	1.554	1.534	-1.9	-1.5
3	10:32:20	1.472	1.396	1.345	1.288	1.247	1.145	1.042	1.046	-4.1	-8.6
4	10:32:21	1.092	1.130	1.190	1.233	1.288	1.350	1.398	1.441	-8.3	-8.2
1	10:32:22	1.479	1.508	1.544	1.566	1.594	1.621	1.632	1.630	-8.7	-10.4
2	10:32:23	1.642	1.654	1.671	1.687	1.702	1.678	1.711	1.754	-10.6	-13.4
3	10:32:24	1.795	1.819	1.848	1.900	1.939	1.996	1.991	2.006	-10.5	-11.9
4	10:32:25	1.982	1.929	1.934	1.931	1.963	1.996	1.951	1.979	-12.1	-12.7
1	10:32:26	1.967	1.991	1.958	1.936	1.941	1.905	1.874	1.857	-12.7	-13.5
2	10:32:27	1.879	1.893	1.817	1.886	1.865	1.908	1.936	1.951	-13.9	-14.2
3	10:32:28	2.015	2.053	2.089	2.168	2.175	2.183	2.252	2.302	-14.1	-14.1
4	10:32:29	2.333	2.405	2.400	2.372	2.288	2.350	2.199	2.286	-13.9	-14.2
1	10:32:30	2.226	2.226	2.168	2.211	2.168	2.053	2.216	2.178	-14.2	-14.2
2	10:32:31	2.202	2.367	2.381	2.589	2.637	2.683	2.764	2.805	-14.3	-14.2
3	10:32:32	2.986	3.006	3.037	3.106	3.104	3.061	2.905	2.699	-14.1	-14.2
4	10:32:33	2.616	2.539	2.498	2.427	2.532	2.525	2.592	2.730	-14.3	-14.2
1	10:32:34	2.833	2.951	3.096	3.199	3.316	3.383	3.532	3.522	-14.3	-14.2
2	10:32:35	3.625	3.537	3.415	3.273	3.195	3.020	2.967	2.671	-14.4	-14.5
3	10:32:36	2.852	2.585	2.845	2.663	2.773	2.903	2.939	3.001	-14.4	-14.5
4	10:32:37	3.087	3.250	3.357	3.503	3.661	3.723	3.852	3.852	-14.5	-14.5
1	10:32:38	3.675	3.628	3.525	3.317	3.118	3.008	2.850	2.855	-14.5	-14.5
2	10:32:39	2.912	2.833	3.013	3.029	3.333	3.376	3.484	3.647	-14.2	-11.8

000051

FRAME 302 CHIP 11 SEQ 217 PAGE 2 FRAME TYPE - NORMAL SYNC LOSS

0583	0000	0000	2897	3041	2302	0000	4095	3439	1145	3913	2877	3401	3363	0000	0368
0000	0011	0084	2834	2966	2306	3404	4095	0000	0000	0000	2747	3387	1100	2282	1170
0000	0000	0000	2664	2913	2309	0000	4095	0000	0000	0000	2618	3366	3200	0000	0393
0000	0000	1069	2552	2886	2314	3402	4095	3772	1535	0000	2554	3342	0000	0000	1166
1464	0000	0000	2578	2935	2315	0000	4095	3088	1272	3913	2545	3308	3270	0000	0386
0000	0006	0070	2620	2912	2318	3417	4095	0000	0000	0000	2627	3267	1102	2299	1177
0000	0000	0000	2754	3000	2318	0000	4095	0000	0000	0000	2772	3237	3621	0000	0396
0000	0000	1064	2817	3068	2318	3532	4095	3773	0949	0000	2885	0184	0000	0000	0161
2631	0000	0000	2631	2814	2054	0000	3841	2834	1018	3659	2465	0159	3622	0000	0387
0000	0006	0071	2466	2813	2059	3532	4095	0000	0000	0000	2466	0159	1102	2307	1177
0000	0000	0000	2468	2815	2059	0000	4095	0000	0000	0000	2469	0159	3621	0000	0396
0000	0000	1062	2470	2813	2057	3532	4095	3772	0949	0000	2472	0159	0000	0000	0161
3512	0000	0000	2471	2813	2057	0000	3839	2838	1021	3654	2471	0159	3621	0000	0387
0000	0006	0071	2470	2816	2058	3532	0002	0000	0000	0000	2470	0159	1103	2314	1174
0000	0000	0000	2466	2812	2048	0000	4095	0000	0000	0000	2467	0158	3622	0000	0396
0000	0000	1063	2467	2815	2053	3532	4095	3773	0953	0000	2469	0158	0000	0000	0161

END OF STORE

ATTACHMENT V
(ORD-PIT Takeoff)

S F	RELATIVE TIME		Altitude	IAS	Head	Pitch	Pitch	Pitch	Pitch	Roll	Roll
	HH:MM:WN=19+58	WN=10				WN=09	Att 1 WN=13	Att 2 WN=29	Att 3 WN=45	Att 4 WN=61	Att 1 WN=14
3	09:38:48	584	45.26	319.97	0.79	0.79	0.79	0.74	0.45	0.28	
4	09:38:49	584	45.26	320.19	0.74	0.79	0.74	0.74	0.34	0.39	
1	09:38:50	585	45.26	319.19	0.74	0.74	0.74	0.74	0.34	0.39	
2	09:38:51	585	45.26	318.30	0.79	0.79	0.85	0.79	0.39	0.39	
3	09:38:52	587	49.50	318.64	0.79	0.79	0.79	0.79	0.39	0.39	
4	09:38:53	587	52.22	319.08	0.79	0.85	0.85	0.91	0.34	0.34	
1	09:38:54	587	59.24	319.19	0.85	0.85	0.85	0.85	0.28	0.39	
2	09:38:55	587	63.73	319.08	0.85	0.85	0.85	0.85	0.28	0.39	
3	09:38:56	588	67.48	319.30	0.85	0.85	0.97	0.91	0.39	0.34	
4	09:38:57	588	71.50	319.08	0.97	0.91	0.91	0.91	0.45	0.51	
1	09:38:58	587	75.61	318.64	0.91	0.91	0.97	0.97	0.57	0.51	
2	09:38:59	587	80.36	318.52	0.97	0.97	0.97	0.97	0.51	0.57	
3	09:39:00	587	85.15	318.75	0.97	0.91	0.85	0.91	0.57	0.68	
4	09:39:01	587	87.03	318.52	0.91	0.97	1.03	1.03	0.62	0.85	
1	09:39:02	588	89.90	317.74	1.03	1.03	1.03	1.08	0.68	0.45	
2	09:39:03	590	94.27	318.30	1.14	1.14	1.14	1.14	0.62	0.22	
3	09:39:04	588	98.37	319.53	1.14	1.14	1.08	1.08	0.39	0.39	
4	09:39:05	588	102.68	319.64	1.14	1.08	1.08	1.03	0.57	0.62	
1	09:39:06	592	106.69	318.41	1.08	1.08	1.14	1.14	0.68	0.68	
2	09:39:07	592	110.72	317.97	1.14	1.14	1.14	1.14	0.79	0.68	
3	09:39:08	588	115.30	318.41	1.08	1.08	1.08	1.14	0.68	0.68	
4	09:39:09	592	117.84	318.75	1.14	1.20	1.20	1.20	0.57	0.57	
1	09:39:10	593	124.00	318.52	1.20	1.26	1.26	1.26	0.39	0.51	
2	09:39:11	590	127.28	319.19	1.32	1.38	1.38	1.32	0.45	0.34	
3	09:39:12	590	132.10	319.53	1.32	1.38	1.32	1.38	0.34	0.39	
4	09:39:13	592	136.71	319.30	1.38	1.38	1.38	1.55	0.51	0.51	
1	09:39:14	590	138.05	318.75	1.91	2.45	2.88	3.25	0.68	0.74	
2	09:39:15	584	140.76	318.41	3.75	4.27	4.65	5.11	0.68	0.79	
3	09:39:16	584	143.84	318.52	5.64	6.12	6.59	7.15	0.91	0.62	
4	09:39:17	582	146.98	318.75	7.71	8.35	8.86	9.45	1.14	1.55	
1	09:39:18	588	147.93	319.19	9.97	10.50	10.96	11.35	2.45	2.82	
2	09:39:19	596	151.47	319.30	11.82	12.29	12.61	12.93	1.79	0.28	
3	09:39:20	615	155.56	319.19	13.33	13.82	14.23	14.73	-1.03	-1.20	
4	09:39:21	641	158.05	319.30	15.24	15.83	16.35	16.87	-0.91	-0.17	
1	09:39:22	671	160.04	319.30	17.30	17.57	17.74	17.83	0.91	0.74	
2	09:39:23	705	158.71	318.97	18.01	18.10	18.19	18.28	-0.22	-0.74	
3	09:39:24	737	158.71	318.86	18.28	18.19	18.19	18.28	-0.91	-0.97	
4	09:39:25	770	158.38	318.41	18.46	18.55	18.73	18.82	-0.68	-1.03	
1	09:39:26	811	156.88	317.97	18.91	19.00	19.18	19.18	-1.61	-1.20	
2	09:39:27	850	157.38	317.30	19.09	18.82	18.64	18.46	-0.74	-1.14	
3	09:39:28	892	157.38	316.85	18.28	18.28	18.19	18.10	-1.38	-0.51	
4	09:39:29	933	156.55	317.07	18.10	18.01	18.01	17.92	0.28	-0.22	
1	09:39:30	977	160.21	317.52	18.01	18.01	17.92	17.74	0.17	0.68	
2	09:39:31	1022	156.39	317.97	17.74	17.57	17.57	17.66	-0.22	-0.79	
3	09:39:32	1064	155.73	318.08	17.66	17.74	17.74	17.74	-0.17	0.91	
4	09:39:33	1106	155.73	318.19	17.74	17.74	17.74	17.66	1.61	1.55	
1	09:39:34	1147	158.88	318.19	17.57	17.48	17.39	17.22	0.91	0.34	
2	09:39:35	1189	161.38	318.52	17.13	17.13	17.04	17.04	-0.17	0.11	
3	09:39:36	1230	161.71	318.52	16.95	16.95	16.87	16.95	0.34	-0.22	
4	09:39:37	1270	161.38	318.30	16.95	17.04	17.22	17.39	-0.45	-0.62	
1	09:39:38	1311	160.04	317.74	17.57	17.74	17.92	18.01	-0.62	-0.62	
2	09:39:39	1352	160.54	317.30	18.10	18.19	18.19	18.19	-0.79	-0.79	
3	09:39:40	1393	160.54	317.07	18.10	18.10	18.10	18.10	-0.85	-1.14	
4	09:39:41	1435	160.88	317.07	18.10	18.01	17.92	17.83	-1.08	-1.03	

S F	RELATIVE TIMEAltitude		IAS WN=10	Head WN=09	Pitch Att 1		Pitch Att 2	Pitch Att 3	Pitch Att 4	Roll Att 1		Roll att 2
	HH:MM:WN=19+58				WN=13	WN=29				WN=14	WN=46	
1	09:39:42	1477	159.38	317.18	17.74	17.48	17.22	17.04	-1.38	-2.03		
2	09:39:43	1519	157.71	316.96	16.78	16.43	16.17	15.83	-2.45	-2.33		
3	09:39:44	1559	157.38	317.18	15.58	15.41	15.24	14.98	-1.55	-0.34		
4	09:39:45	1591	157.05	316.96	14.82	14.65	14.57	14.40	0.79	1.26		
1	09:39:46	1622	158.54	316.85	14.32	14.23	14.15	14.07	1.26	0.97		
2	09:39:47	1650	158.71	316.74	14.07	14.07	14.07	13.99	0.57	-0.11		
3	09:39:48	1678	160.04	316.96	13.90	13.74	13.50	13.33	-0.68	-1.08		
4	09:39:49	1703	159.38	317.41	13.09	12.93	12.61	12.53	-1.32	-1.55		
1	09:39:50	1725	161.21	317.74	12.45	12.45	12.45	12.45	-1.38	-0.22		
2	09:39:51	1746	164.90	318.08	12.45	12.53	12.53	12.53	1.43	3.38		
3	09:39:52	1766	165.57	318.52	12.45	12.45	12.37	12.29	5.31	7.64		
4	09:39:53	1783	167.25	318.97	12.21	12.21	12.21	12.29	9.90	11.90		
1	09:39:54	1798	168.42	319.42	12.37	12.53	12.69	12.85	12.77	13.09		
2	09:39:55	1820	169.94	320.86	13.01	13.17	13.33	13.50	12.93	12.77		
3	09:39:56	1842	172.28	323.07	13.58	13.74	13.82	13.82	13.50	14.73		
4	09:39:57	1865	173.79	325.25	13.82	13.90	13.90	14.07	15.75	16.78		
1	09:39:58	1888	176.79	327.40	14.15	14.15	14.15	14.07	17.39	17.57		
2	09:39:59	1913	179.60	329.31	13.82	13.58	13.33	13.09	17.66	17.13		
3	09:40:00	1941	180.26	331.19	12.93	12.85	12.77	12.77	16.17	14.98		
4	09:40:01	1970	179.93	333.54	12.77	12.77	12.77	12.85	14.82	15.32		
1	09:40:02	2001	179.77	335.72	12.93	13.01	13.09	13.09	15.92	16.52		
2	09:40:03	2029	185.95	337.27	13.01	13.01	13.01	13.17	17.30	18.46		
3	09:40:04	2062	185.79	338.51	13.33	13.50	13.74	13.90	18.37	18.55		
4	09:40:05	2094	184.17	339.54	13.90	13.90	13.82	13.82	18.28	17.92		
1	09:40:06	2128	185.30	340.64	13.74	13.66	13.50	13.41	17.39	16.78		
2	09:40:07	2163	186.59	342.34	13.33	13.25	13.17	13.09	16.87	17.39		
3	09:40:08	2199	187.54	344.59	13.09	13.09	13.17	13.25	18.01	18.37		
4	09:40:09	2232	185.62	346.83	13.25	13.33	13.33	13.41	18.64	18.46		
1	09:40:10	2271	185.14	349.04	13.41	13.33	13.33	13.33	18.10	18.37		
2	09:40:11	2306	188.50	351.79	13.25	13.25	13.25	13.25	19.36	20.65		
3	09:40:12	2340	189.60	353.68	13.33	13.33	13.41	13.41	20.84	20.37		
4	09:40:13	2377	189.76	356.05	13.41	13.33	13.33	13.25	20.19	20.56		
1	09:40:14	2411	188.34	358.39	13.33	13.25	13.25	13.17	20.65	20.37		
2	09:40:15	2452	187.22	0.74	13.17	13.01	12.93	12.77	19.18	18.19		
3	09:40:16	2489	190.07	3.25	12.69	12.69	12.77	12.93	18.73	19.91		
4	09:40:17	2531	193.17	5.44	13.09	13.17	13.33	13.41	20.65	21.40		
1	09:40:18	2569	193.78	6.87	13.41	13.50	13.50	13.58	21.87	21.30		
2	09:40:19	2608	193.17	8.07	13.58	13.58	13.58	13.41	19.63	17.83		
3	09:40:20	2649	193.02	9.60	13.25	13.17	13.17	13.17	17.22	17.66		
4	09:40:21	2690	191.78	10.73	13.25	13.41	13.50	13.58	18.01	17.39		
1	09:40:22	2728	194.39	11.35	13.66	13.74	13.66	13.58	16.69	16.26		
2	09:40:23	2769	195.00	12.53	13.50	13.41	13.41	13.25	16.17	15.83		
3	09:40:24	2808	194.85	13.66	13.25	13.17	13.09	13.01	15.32	14.65		
4	09:40:25	2845	194.55	14.73	12.93	12.93	12.85	12.77	13.74	12.53		
1	09:40:26	2882	195.00	15.83	12.69	12.45	12.29	11.97	11.19	9.97		
2	09:40:27	2915	197.10	17.30	11.66	11.27	10.89	10.58	8.64	8.43		
3	09:40:28	2944	197.70	18.37	10.35	10.20	9.97	9.75	8.57	8.00		
4	09:40:29	2971	198.29	18.91	9.67	9.82	9.97	10.20	7.01	5.98		
1	09:40:30	2995	199.90	19.36	10.35	10.43	10.43	10.43	5.18	4.59		
2	09:40:31	3018	202.20	19.73	10.28	10.28	10.20	10.20	3.69	2.70		
3	09:40:32	3039	202.76	19.73	10.28	10.28	10.35	10.43	1.85	1.03		
4	09:40:33	3062	204.31	19.82	10.50	10.58	10.66	10.81	0.34	0.17		
1	09:40:34	3087	207.58	19.82	10.96	11.12	11.27	11.43	0.34	0.22		
2	09:40:35	3113	209.31	19.63	11.58	11.82	11.97	12.21	0.11	0.28		

S	RELATIVE		IAS	Head	Pitch		Pitch		Pitch		Pitch		Roll	
	TIME	Altitude			Att 1	Att 2	Att 3	Att 4	Att 1	Att 2	Att 3	Att 4	Att 1	att 2
F	HH:MM:WN	WN=19+58	WN=10	WN=09	WN=13	WN=29	WN=45	WN=61	WN=14	WN=46				
3	09:40:36	3143	209.57	19.82	12.37	12.45	12.61	12.61	0.34	1.20				
4	09:40:37	3177	210.74	19.73	12.69	12.77	12.93	13.01	2.03	1.91				
1	09:40:38	3216	209.18	19.63	13.09	13.17	13.17	13.25	0.62	-0.39				
2	09:40:39	3257	210.48	19.82	13.25	13.41	13.50	13.58	-0.11	0.79				
3	09:40:40	3299	211.00	19.91	13.74	13.82	14.07	14.23	1.43	1.14				
4	09:40:41	3344	211.12	20.09	14.32	14.40	14.48	14.48	-0.11	-0.74				
1	09:40:42	3394	209.96	20.46	14.48	14.57	14.65	14.82	-1.03	-0.91				
2	09:40:43	3444	210.35	20.74	14.98	15.07	15.15	15.24	-0.34	0.97				
3	09:40:44	3495	209.44	20.65	15.24	15.15	14.98	14.82	1.79	1.26				
4	09:40:45	3549	211.12	20.56	14.65	14.48	14.32	14.07	0.91	1.67				
1	09:40:46	3601	209.70	20.37	13.82	13.58	13.33	13.01	1.79	0.85				
2	09:40:47	3649	208.91	20.09	12.77	12.61	12.37	12.21	-0.39	-1.26				
3	09:40:48	3693	212.02	20.00	12.05	11.90	11.90	11.90	-1.55	-1.32				
4	09:40:49	3736	211.25	19.82	11.90	11.97	11.97	12.05	-0.91	-0.91				
1	09:40:50	3772	213.52	19.82	12.13	12.29	12.29	12.29	-0.57	-0.11				
2	09:40:51	3813	214.02	19.73	12.29	12.21	12.05	12.05	0.62	1.32				
3	09:40:52	3854	214.88	19.63	11.97	11.90	11.90	11.90	1.49	0.62				
4	09:40:53	3893	214.39	19.82	11.90	11.97	12.05	12.21	-0.51	-0.97				
1	09:40:54	3933	213.77	20.37	12.21	12.21	12.21	12.13	-1.91	-2.82				
2	09:40:55	3972	213.90	20.74	12.05	11.90	11.66	11.43	-1.91	-0.57				
3	09:40:56	4010	213.90	20.84	11.27	11.19	11.04	11.04	0.85	1.97				
4	09:40:57	4046	214.76	20.74	10.89	10.89	10.81	10.73	2.70	3.25				
1	09:40:58	4080	215.12	20.74	10.66	10.58	10.43	10.35	3.19	3.31				
2	09:40:59	4112	216.21	20.74	10.35	10.28	10.28	10.28	2.39	1.14				
3	09:41:00	4142	217.74	20.74	10.28	10.35	10.35	10.35	0.68	0.51				
4	09:41:01	4170	217.74	20.56	10.28	10.28	10.20	10.12	0.34	-0.22				
1	09:41:02	4200	218.56	20.46	10.12	10.05	10.05	9.97	-0.68	-1.08				
2	09:41:03	4228	220.04	20.37	10.05	10.12	10.28	10.35	-1.43	-1.79				
3	09:41:04	4255	221.92	20.28	10.28	10.35	10.28	10.20	-2.39	-2.94				
4	09:41:05	4284	222.36	20.28	10.20	10.12	10.05	10.05	-3.31	-3.88				
1	09:41:06	4314	223.75	20.09	10.05	10.05	10.12	10.20	-4.20	-4.65				
2	09:41:07	4342	222.03	19.82	10.28	10.28	10.35	10.28	-4.27	-3.00				
3	09:41:08	4371	224.80	19.82	10.12	9.97	9.90	9.90	-1.73	-0.79				
4	09:41:09	4402	224.28	19.82	9.90	9.90	9.90	9.90	-0.11	0.62				
1	09:41:10	4435	226.23	20.00	9.90	9.90	9.82	9.67	1.55	1.73				
2	09:41:11	4463	224.07	20.00	9.82	9.82	9.90	9.90	1.26	1.26				
3	09:41:12	4490	225.52	20.00	9.90	9.82	9.82	9.67	0.97	0.91				
4	09:41:13	4519	227.53	19.82	9.53	9.45	9.30	9.08	1.26	1.61				
1	09:41:14	4547	229.18	19.73	9.08	9.01	9.08	9.16	1.55	0.91				
2	09:41:15	4577	231.23	19.82	9.16	9.23	9.23	9.23	0.28	-0.51				
3	09:41:16	4604	229.93	20.09	9.30	9.38	9.45	9.45	-0.68	0.39				
4	09:41:17	4631	230.31	20.65	9.45	9.53	9.67	9.90	2.57	5.38				
1	09:41:18	4663	230.96	20.84	10.05	10.20	10.43	10.58	8.00	10.12				
2	09:41:19	4695	231.87	21.59	10.81	10.89	11.04	11.12	11.74	13.17				
3	09:41:20	4731	232.40	22.82	11.19	11.19	11.19	11.19	14.57	16.00				
4	09:41:21	4768	233.02	24.38	11.19	11.19	11.19	11.27	17.30	18.55				
1	09:41:22	4807	233.72	26.16	11.27	11.27	11.35	11.35	19.63	20.46				
2	09:41:23	4848	234.07	27.78	11.43	11.43	11.43	11.43	21.12	21.77				
3	09:41:24	4889	235.00	29.54	11.43	11.50	11.50	11.50	22.34	22.82				
4	09:41:25	4934	234.83	31.43	11.50	11.50	11.50	11.58	23.40	23.60				
1	09:41:26	4977	234.32	33.45	11.58	11.66	11.58	11.58	23.60	23.79				
2	09:41:27	5025	234.66	35.73	11.58	11.50	11.43	11.35	24.28	24.18				
3	09:41:28	5071	235.00	37.37	11.35	11.35	11.43	11.43	23.60	23.02				
4	09:41:29	5118	235.00	39.14	11.43	11.50	11.58	11.58	23.02	23.40				

S	RELATIVE		Altitude	IAS	Head	Pitch	Pitch	Pitch	Pitch	Roll	Roll
	TIME	WN				Att 1	Att 2	Att 3	Att 4	Att 1	att 2
F	HH:MM:WN	WN	WN=19+58	WN=10	WN=09	WN=13	WN=29	WN=45	WN=61	WN=14	WN=46
1	09:41:30		5166	234.83	41.03	11.66	11.58	11.66	11.74	23.99	24.38
2	09:41:31		5215	234.32	43.04	11.74	11.74	11.82	11.82	24.57	24.67
3	09:41:32		5264	233.81	44.94	11.82	11.82	11.82	11.82	24.77	24.87
4	09:41:33		5313	233.55	46.85	11.82	11.90	11.90	11.90	24.77	24.47
1	09:41:34		5362	233.20	48.86	11.90	11.90	11.90	11.90	23.99	23.69
2	09:41:35		5412	232.94	50.64	11.97	11.90	11.97	11.90	23.60	23.79
3	09:41:36		5463	232.58	52.52	11.90	11.97	11.97	11.97	23.99	24.18
4	09:41:37		5513	232.14	54.27	11.90	11.90	11.90	11.90	24.18	24.08
1	09:41:38		5562	231.87	56.12	11.90	11.90	11.90	11.90	24.08	24.08
2	09:41:39		5612	231.69	58.04	11.90	11.90	11.90	11.82	24.18	24.18
3	09:41:40		5662	231.23	59.84	11.82	11.82	11.82	11.82	24.08	23.99
4	09:41:41		5709	231.14	61.81	11.74	11.66	11.58	11.58	23.89	23.79
1	09:41:42		5757	231.23	63.64	11.58	11.50	11.50	11.43	23.60	23.50
2	09:41:43		5803	231.69	65.62	11.43	11.35	11.35	11.35	23.50	23.60
3	09:41:44		5848	231.69	67.56	11.27	11.27	11.19	11.12	23.99	24.38
4	09:41:45		5894	232.32	69.35	11.12	11.04	11.04	10.96	24.67	24.77
1	09:41:46		5938	232.40	71.27	10.89	10.89	10.89	10.81	24.57	24.38
2	09:41:47		5981	232.76	73.22	10.81	10.81	10.89	10.89	24.28	24.08
3	09:41:48		6024	232.94	75.10	10.89	10.89	10.81	10.81	24.18	24.18
4	09:41:49		6067	233.29	76.91	10.81	10.81	10.81	10.73	24.38	24.47
1	09:41:50		6110	233.89	78.73	10.73	10.73	10.73	10.73	24.47	24.28
2	09:41:51		6152	233.81	80.62	10.73	10.73	10.73	10.73	23.99	23.79
3	09:41:52		6193	233.46	82.50	10.66	10.66	10.58	10.58	23.60	23.50
4	09:41:53		6234	233.72	84.29	10.50	10.43	10.35	10.35	23.40	23.30
1	09:41:54		6273	233.55	85.93	10.35	10.35	10.35	10.28	23.30	23.30
2	09:41:55		6313	233.98	87.61	10.28	10.28	10.20	10.20	23.50	23.60
3	09:41:56		6352	234.92	89.15	10.12	10.12	10.12	10.12	23.69	23.69
4	09:41:57		6392	235.76	90.68	10.12	10.05	10.05	10.05	23.40	22.82
1	09:41:58		6431	236.11	92.33	10.05	10.05	9.97	10.05	22.15	21.77
2	09:41:59		6469	236.28	93.88	9.97	10.05	10.05	9.97	21.30	21.12
3	09:42:00		6506	236.98	95.44	10.05	10.05	9.97	10.05	21.02	20.84
4	09:42:01		6546	237.51	96.94	9.97	9.97	10.05	10.12	21.12	20.84
1	09:42:02		6586	237.77	98.28	10.20	10.20	10.20	10.12	20.37	19.73
2	09:42:03		6625	238.68	99.53	10.05	10.05	9.97	9.97	18.91	18.28
3	09:42:04		6663	238.77	100.81	9.97	9.97	9.97	10.05	17.83	17.30
4	09:42:05		6703	238.77	102.13	10.05	10.12	10.12	10.12	16.78	16.00
1	09:42:06		6743	238.86	103.17	10.05	10.05	9.97	9.97	15.15	14.40
2	09:42:07		6783	238.95	104.40	9.90	9.90	9.82	9.82	13.74	13.01
3	09:42:08		6823	238.50	105.41	9.67	9.67	9.67	9.60	12.21	11.50
4	09:42:09		6862	238.50	106.26	9.60	9.60	9.60	9.53	10.89	10.35
1	09:42:10		6899	239.60	107.04	9.45	9.45	9.38	9.38	9.75	9.16
2	09:42:11		6936	239.69	107.48	9.30	9.23	9.23	9.16	8.35	7.22
3	09:42:12		6973	239.97	107.92	9.08	9.01	8.94	8.86	5.78	4.65
4	09:42:13		7007	240.16	108.28	8.79	8.72	8.64	8.57	3.50	2.76
1	09:42:14		7038	240.63	108.46	8.57	8.43	8.43	8.35	2.33	1.91
2	09:42:15		7071	241.59	108.64	8.35	8.28	8.21	8.14	1.38	1.26
3	09:42:16		7101	242.18	108.73	8.14	8.21	8.21	8.28	1.43	1.49
4	09:42:17		7130	243.16	108.82	8.35	8.28	8.35	8.35	1.32	1.08
1	09:42:18		7157	243.87	108.91	8.28	8.28	8.35	8.43	0.34	-0.45
2	09:42:19		7187	244.68	109.00	8.50	8.57	8.64	8.72	-0.68	-0.57
3	09:42:20		7217	244.68	108.91	8.72	8.64	8.57	8.57	-0.39	-0.39
4	09:42:21		7247	245.83	108.82	8.50	8.50	8.57	8.64	-0.39	-0.57
1	09:42:22		7279	247.75	108.91	8.64	8.72	8.79	8.86	-0.51	-0.34
2	09:42:23		7311	248.08	108.91	8.94	9.08	9.16	9.23	-0.28	-0.11

RELATIVE S TIME Altitude F HH:MM:SWN=19+58	Long Acc 1 WN=05	Long Acc 2 WN=21	Long Acc 3 WN=37	Long ATC Acc 4Keying WN=53WN=11
3 09:38:48	584	0.257	0.261	0.269 00001
4 09:38:49	584	0.270	0.269	0.262 0.255 00001
1 09:38:50	585	0.252	0.246	0.243 0.235 00001
2 09:38:51	585	0.237	0.230	0.235 0.237 00001
3 09:38:52	587	0.241	0.244	0.246 0.244 00001
4 09:38:53	587	0.246	0.246	0.245 0.248 00001
1 09:38:54	587	0.248	0.246	0.243 0.240 00001
2 09:38:55	587	0.240	0.242	0.240 0.243 00001
3 09:38:56	588	0.242	0.240	0.242 0.240 00001
4 09:38:57	588	0.237	0.238	0.236 0.237 00001
1 09:38:58	587	0.233	0.236	0.235 0.235 00001
2 09:38:59	587	0.228	0.232	0.232 0.233 00001
3 09:39:00	587	0.232	0.230	0.233 0.233 00001
4 09:39:01	587	0.230	0.232	0.228 0.229 00001
1 09:39:02	588	0.229	0.215	0.226 0.217 00001
2 09:39:03	590	0.222	0.231	0.222 0.218 00001
3 09:39:04	588	0.224	0.224	0.223 0.225 00001
4 09:39:05	588	0.218	0.221	0.221 0.213 00001
1 09:39:06	592	0.215	0.209	0.210 0.213 00001
2 09:39:07	592	0.206	0.215	0.214 0.206 00001
3 09:39:08	588	0.208	0.207	0.210 0.211 00001
4 09:39:09	592	0.210	0.209	0.207 0.206 00001
1 09:39:10	593	0.197	0.200	0.201 0.199 00001
2 09:39:11	590	0.204	0.200	0.202 0.202 00001
3 09:39:12	590	0.198	0.199	0.199 0.197 00001
4 09:39:13	592	0.199	0.196	0.194 0.198 00001
1 09:39:14	590	0.194	0.208	0.213 0.223 00001
2 09:39:15	584	0.225	0.232	0.237 0.246 00001
3 09:39:16	584	0.251	0.262	0.265 0.264 00001
4 09:39:17	582	0.274	0.285	0.290 0.292 00001
1 09:39:18	588	0.301	0.310	0.315 0.321 00001
2 09:39:19	596	0.326	0.323	0.330 0.331 00001
3 09:39:20	615	0.328	0.330	0.332 0.330 00001
4 09:39:21	641	0.331	0.330	0.329 0.328 00001
1 09:39:22	671	0.332	0.332	0.317 0.317 00001
2 09:39:23	705	0.321	0.321	0.315 0.316 00001
3 09:39:24	737	0.313	0.300	0.297 0.307 00001
4 09:39:25	770	0.309	0.313	0.308 0.302 00001
1 09:39:26	811	0.293	0.294	0.298 0.297 00001
2 09:39:27	850	0.294	0.291	0.283 0.280 00001
3 09:39:28	892	0.284	0.290	0.290 0.288 00001
4 09:39:29	933	0.290	0.287	0.278 0.275 00001
1 09:39:30	977	0.279	0.281	0.280 0.281 00001
2 09:39:31	1022	0.281	0.279	0.279 0.284 00001
3 09:39:32	1064	0.285	0.287	0.281 0.282 00001
4 09:39:33	1106	0.291	0.287	0.285 0.287 00001
1 09:39:34	1147	0.285	0.288	0.287 0.277 00001
2 09:39:35	1189	0.279	0.282	0.278 0.277 00001
3 09:39:36	1230	0.276	0.270	0.266 0.262 00001
4 09:39:37	1270	0.259	0.256	0.260 0.266 00001
1 09:39:38	1311	0.273	0.274	0.277 0.280 00001
2 09:39:39	1352	0.283	0.285	0.285 0.283 00001
3 09:39:40	1393	0.281	0.280	0.282 0.284 00001
4 09:39:41	1435	0.283	0.280	0.278 0.276 00001

RELATIVE S TIME Altitude F HH:MM:SWN=19+58	Long Acc 1 WN=05	Long Acc 2 WN=21	Long Acc 3 WN=37	Long ATC Acc 4Keying WN=53WN=11
1 09:39:42	1477	0.275	0.272	0.272 00001
2 09:39:43	1519	0.269	0.267	0.262 0.258 00001
3 09:39:44	1559	0.257	0.257	0.257 0.255 00001
4 09:39:45	1591	0.255	0.257	0.258 0.260 00001
1 09:39:46	1622	0.258	0.261	0.263 0.266 00001
2 09:39:47	1650	0.269	0.271	0.274 0.276 00001
3 09:39:48	1678	0.277	0.278	0.278 0.275 00001
4 09:39:49	1703	0.279	0.272	0.259 0.257 00001
1 09:39:50	1725	0.259	0.259	0.263 0.265 00001
2 09:39:51	1746	0.265	0.270	0.272 0.272 00000
3 09:39:52	1766	0.272	0.277	0.267 0.268 00000
4 09:39:53	1783	0.268	0.266	0.267 0.267 00000
1 09:39:54	1798	0.272	0.278	0.279 0.283 00001
2 09:39:55	1820	0.284	0.284	0.288 0.292 00001
3 09:39:56	1842	0.292	0.290	0.288 0.285 00001
4 09:39:57	1865	0.282	0.281	0.282 0.290 00000
1 09:39:58	1888	0.298	0.290	0.286 0.290 00000
2 09:39:59	1913	0.281	0.270	0.272 0.267 00001
3 09:40:00	1941	0.262	0.265	0.264 0.267 00001
4 09:40:01	1970	0.268	0.268	0.267 0.274 00001
1 09:40:02	2001	0.280	0.280	0.278 0.280 00001
2 09:40:03	2029	0.272	0.271	0.274 0.272 00001
3 09:40:04	2062	0.267	0.271	0.276 0.281 00001
4 09:40:05	2094	0.276	0.271	0.265 0.261 00001
1 09:40:06	2128	0.268	0.270	0.257 0.255 00001
2 09:40:07	2163	0.259	0.258	0.255 0.257 00001
3 09:40:08	2199	0.257	0.257	0.260 0.260 00001
4 09:40:09	2232	0.260	0.260	0.257 0.262 00001
1 09:40:10	2271	0.261	0.259	0.263 0.270 00001
2 09:40:11	2306	0.261	0.261	0.255 0.251 00001
3 09:40:12	2340	0.256	0.252	0.255 0.259 00001
4 09:40:13	2377	0.260	0.259	0.257 0.265 00001
1 09:40:14	2411	0.266	0.268	0.263 0.265 00001
2 09:40:15	2452	0.268	0.268	0.266 0.259 00001
3 09:40:16	2489	0.253	0.251	0.252 0.249 00001
4 09:40:17	2531	0.260	0.268	0.268 0.265 00001
1 09:40:18	2569	0.260	0.252	0.252 0.249 00001
2 09:40:19	2608	0.254	0.256	0.260 0.256 00000
3 09:40:20	2649	0.249	0.247	0.244 0.241 00000
4 09:40:21	2690	0.238	0.234	0.240 0.248 00000
1 09:40:22	2728	0.245	0.252	0.252 0.246 00001
2 09:40:23	2769	0.245	0.247	0.246 0.237 00001
3 09:40:24	2808	0.236	0.236	0.236 0.232 00001
4 09:40:25	2845	0.231	0.230	0.226 0.225 00001
1 09:40:26	2882	0.225	0.225	0.233 0.232 00001
2 09:40:27	2915	0.234	0.226	0.218 0.215 00000
3 09:40:28	2944	0.216	0.214	0.214 0.210 00000
4 09:40:29	2971	0.215	0.218	0.222 0.231 00000
1 09:40:30	2995	0.233	0.234	0.242 0.244 00001
2 09:40:31	3018	0.240	0.237	0.236 0.231 00001
3 09:40:32	3039	0.234	0.236	0.239 0.238 00001
4 09:40:33	3062	0.239	0.244	0.240 0.243 00001
1 09:40:34	3087	0.243	0.245	0.249 0.248 00001
2 09:40:35	3113	0.249	0.251	0.255 0.257 00001

S	RELATIVE TIME Altitude HH:MM:SWN=19+58	Long Acc 1 WN=05	Long Acc 2 WN=21	Long Acc 3 WN=37	Long ATC Acc 4Keying WN=53WN=11
3	09:40:36	3143	0.257	0.255	0.252 00001
4	09:40:37	3177	0.247	0.250	0.252 0.251 00001
1	09:40:38	3216	0.253	0.254	0.253 0.248 00001
2	09:40:39	3257	0.244	0.245	0.244 0.243 00001
3	09:40:40	3299	0.243	0.239	0.241 0.247 00001
4	09:40:41	3344	0.249	0.252	0.252 0.247 00001
1	09:40:42	3394	0.245	0.239	0.238 0.237 00001
2	09:40:43	3444	0.238	0.236	0.239 0.243 00001
3	09:40:44	3495	0.244	0.236	0.236 0.238 00001
4	09:40:45	3549	0.231	0.233	0.235 0.229 00001
1	09:40:46	3601	0.225	0.221	0.217 0.217 00001
2	09:40:47	3649	0.218	0.214	0.213 0.213 00001
3	09:40:48	3693	0.213	0.213	0.217 0.217 00001
4	09:40:49	3736	0.217	0.220	0.217 0.219 00001
1	09:40:50	3772	0.222	0.223	0.223 0.220 00001
2	09:40:51	3813	0.217	0.214	0.210 0.208 00001
3	09:40:52	3854	0.206	0.205	0.207 0.204 00001
4	09:40:53	3893	0.203	0.208	0.208 0.208 00001
1	09:40:54	3933	0.212	0.215	0.213 0.209 00001
2	09:40:55	3972	0.211	0.208	0.209 0.203 00001
3	09:40:56	4010	0.197	0.196	0.194 0.193 00001
4	09:40:57	4046	0.195	0.193	0.197 0.196 00001
1	09:40:58	4080	0.197	0.197	0.192 0.191 00001
2	09:40:59	4112	0.195	0.195	0.189 0.193 00001
3	09:41:00	4142	0.196	0.193	0.194 0.198 00001
4	09:41:01	4170	0.197	0.198	0.197 0.197 00001
1	09:41:02	4200	0.196	0.195	0.194 0.194 00001
2	09:41:03	4228	0.193	0.195	0.199 0.200 00001
3	09:41:04	4255	0.197	0.197	0.194 0.192 00001
4	09:41:05	4284	0.193	0.193	0.190 0.191 00001
1	09:41:06	4314	0.187	0.187	0.189 0.191 00001
2	09:41:07	4342	0.196	0.200	0.199 0.212 00001
3	09:41:08	4371	0.206	0.200	0.196 0.193 00001
4	09:41:09	4402	0.189	0.191	0.194 0.187 00001
1	09:41:10	4435	0.188	0.187	0.186 0.175 00001
2	09:41:11	4463	0.175	0.185	0.185 0.185 00001
3	09:41:12	4490	0.189	0.190	0.189 0.187 00001
4	09:41:13	4519	0.193	0.189	0.189 0.183 00001
1	09:41:14	4547	0.183	0.180	0.179 0.179 00001
2	09:41:15	4577	0.181	0.181	0.183 0.183 00001
3	09:41:16	4604	0.187	0.191	0.191 0.187 00000
4	09:41:17	4631	0.186	0.186	0.185 0.187 00000
1	09:41:18	4663	0.189	0.191	0.194 0.194 00001
2	09:41:19	4695	0.195	0.197	0.198 0.200 00001
3	09:41:20	4731	0.198	0.195	0.195 0.191 00001
4	09:41:21	4768	0.190	0.191	0.191 0.191 00001
1	09:41:22	4807	0.192	0.192	0.191 0.192 00001
2	09:41:23	4848	0.192	0.194	0.193 0.192 00001
3	09:41:24	4889	0.194	0.195	0.195 0.194 00001
4	09:41:25	4934	0.192	0.193	0.194 0.193 00001
1	09:41:26	4977	0.194	0.197	0.195 0.194 00001
2	09:41:27	5025	0.196	0.196	0.194 0.191 00001
3	09:41:28	5071	0.190	0.189	0.189 0.190 00001
4	09:41:29	5118	0.192	0.191	0.193 0.193 00001

	RELATIVE TIME Altitude	Long Acc 1	Long Acc 2	Long Acc 3	Long ATC Acc 4	Keying
S	HH:MM:SSWN=19+58	WN=05	WN=21	WN=37	WN=53	WN=11
1	09:41:30	5166	0.193	0.193	0.193	0.192 00001
2	09:41:31	5215	0.193	0.191	0.191	0.192 00001
3	09:41:32	5264	0.193	0.191	0.191	0.193 00001
4	09:41:33	5313	0.193	0.193	0.191	0.191 00001
1	09:41:34	5362	0.191	0.191	0.192	0.192 00001
2	09:41:35	5412	0.190	0.190	0.190	0.190 00001
3	09:41:36	5463	0.190	0.191	0.189	0.189 00001
4	09:41:37	5513	0.189	0.189	0.189	0.188 00001
1	09:41:38	5562	0.187	0.188	0.189	0.189 00001
2	09:41:39	5612	0.189	0.189	0.189	0.189 00001
3	09:41:40	5662	0.188	0.189	0.188	0.189 00001
4	09:41:41	5709	0.189	0.187	0.186	0.186 00001
1	09:41:42	5757	0.185	0.183	0.184	0.185 00001
2	09:41:43	5803	0.185	0.185	0.185	0.186 00001
3	09:41:44	5848	0.186	0.185	0.186	0.184 00001
4	09:41:45	5894	0.183	0.183	0.181	0.183 00001
1	09:41:46	5938	0.184	0.185	0.184	0.183 00001
2	09:41:47	5981	0.184	0.184	0.183	0.184 00001
3	09:41:48	6024	0.184	0.186	0.186	0.186 00001
4	09:41:49	6067	0.186	0.186	0.184	0.184 00001
1	09:41:50	6110	0.182	0.184	0.184	0.183 00001
2	09:41:51	6152	0.182	0.183	0.185	0.186 00001
3	09:41:52	6193	0.185	0.185	0.184	0.184 00001
4	09:41:53	6234	0.183	0.183	0.179	0.180 00001
1	09:41:54	6273	0.179	0.181	0.182	0.184 00001
2	09:41:55	6313	0.182	0.182	0.181	0.179 00001
3	09:41:56	6352	0.181	0.180	0.179	0.179 00001
4	09:41:57	6392	0.178	0.179	0.178	0.179 00001
1	09:41:58	6431	0.177	0.177	0.179	0.177 00001
2	09:41:59	6469	0.175	0.177	0.178	0.179 00001
3	09:42:00	6506	0.180	0.177	0.178	0.178 00001
4	09:42:01	6546	0.178	0.174	0.170	0.176 00001
1	09:42:02	6586	0.179	0.177	0.181	0.177 00001
2	09:42:03	6625	0.176	0.174	0.172	0.171 00001
3	09:42:04	6663	0.170	0.171	0.170	0.171 00001
4	09:42:05	6703	0.173	0.174	0.174	0.173 00001
1	09:42:06	6743	0.171	0.171	0.170	0.169 00001
2	09:42:07	6783	0.169	0.167	0.168	0.168 00001
3	09:42:08	6823	0.167	0.166	0.166	0.167 00001
4	09:42:09	6862	0.166	0.167	0.165	0.165 00001
1	09:42:10	6899	0.166	0.165	0.166	0.161 00001
2	09:42:11	6936	0.161	0.161	0.162	0.162 00001
3	09:42:12	6973	0.160	0.160	0.160	0.159 00001
4	09:42:13	7007	0.159	0.160	0.158	0.158 00001
1	09:42:14	7038	0.157	0.157	0.157	0.155 00001
2	09:42:15	7071	0.157	0.158	0.157	0.157 00001
3	09:42:16	7101	0.155	0.155	0.156	0.159 00001
4	09:42:17	7130	0.159	0.161	0.160	0.160 00001
1	09:42:18	7157	0.160	0.159	0.159	0.159 00001
2	09:42:19	7187	0.159	0.161	0.162	0.163 00001
3	09:42:20	7217	0.163	0.162	0.160	0.159 00001
4	09:42:21	7247	0.157	0.158	0.156	0.157 00001
1	09:42:22	7279	0.156	0.157	0.158	0.158 00001
2	09:42:23	7311	0.157	0.160	0.162	0.161 00001

S	RELATIVE TIME	Vert Acc 1 WN=04	Vert Acc 2 WN=12	Vert Acc 3 WN=20	Vert Acc 4 WN=28	Vert Acc 5 WN=36	Vert Acc 6 WN=44	Vert Acc 7 WN=52	Vert Acc 8 WN=60	CCCont. PiPitch WNWN=55	Col. 2
F	HH:MM:SS										
3	09:38:48	0.944	0.977	1.006	0.970	0.953	0.956	0.967	0.972	-0.0	0.1
4	09:38:49	0.958	0.982	0.960	0.958	0.975	0.967	0.972	0.970	-0.0	-0.1
1	09:38:50	0.965	0.977	0.991	0.941	0.934	0.987	0.994	0.958	-0.1	-0.1
2	09:38:51	0.951	0.977	0.989	0.963	0.929	0.960	1.015	0.989	-0.1	-0.1
3	09:38:52	0.946	0.956	0.972	0.975	0.956	0.965	0.996	0.979	-0.1	-0.1
4	09:38:53	0.960	0.946	0.953	0.965	0.994	0.989	0.963	0.960	-0.1	-0.1
1	09:38:54	0.965	0.979	0.944	0.958	0.958	0.984	0.979	0.975	-0.1	-0.1
2	09:38:55	0.977	0.979	0.946	0.951	0.979	0.979	0.951	0.970	-0.1	-0.1
3	09:38:56	0.984	0.979	0.984	0.977	0.944	0.951	0.977	0.991	-0.1	-0.1
4	09:38:57	0.963	0.934	0.972	0.994	0.987	0.941	0.948	0.972	-0.1	-0.1
1	09:38:58	0.989	0.996	0.956	0.946	0.970	0.972	0.972	0.984	-0.0	-0.1
2	09:38:59	0.963	0.953	0.939	0.977	1.006	0.979	0.956	0.946	-0.0	-0.0
3	09:39:00	0.936	0.982	1.008	0.996	0.953	0.972	0.946	0.960	-0.0	-0.1
4	09:39:01	0.999	0.972	0.922	0.939	1.006	1.020	0.963	0.927	-0.1	-0.1
1	09:39:02	0.939	0.999	1.058	0.970	0.848	0.917	1.008	1.006	-0.2	-0.1
2	09:39:03	1.018	0.956	0.927	0.922	1.003	1.011	0.958	0.946	-0.1	-0.1
3	09:39:04	0.924	0.956	0.979	1.023	0.982	0.936	0.920	0.960	0.1	0.2
4	09:39:05	1.018	1.011	0.941	0.917	0.965	1.015	0.991	0.948	1.6	1.8
1	09:39:06	0.917	0.960	1.018	1.027	0.946	0.922	0.934	0.975	1.8	1.7
2	09:39:07	1.027	0.963	0.910	0.967	0.991	0.982	0.977	0.934	1.9	1.8
3	09:39:08	0.946	0.987	0.975	0.972	0.979	0.944	0.984	0.972	1.9	1.8
4	09:39:09	0.956	0.951	0.960	0.977	0.984	0.948	0.958	0.989	1.8	1.7
1	09:39:10	0.991	0.970	0.948	0.936	0.970	0.979	0.979	0.963	1.7	1.6
2	09:39:11	0.944	0.994	0.975	0.958	0.956	0.951	0.944	0.977	1.3	0.4
3	09:39:12	0.996	0.982	0.970	0.936	0.922	1.001	0.982	0.972	-0.2	-1.7
4	09:39:13	0.948	0.958	0.958	1.006	0.946	0.924	1.018	1.023	-3.7	-5.8
1	09:39:14	0.982	0.951	0.920	0.996	0.991	0.944	0.951	0.982	-3.3	-3.1
2	09:39:15	0.958	0.934	0.948	0.991	0.982	0.951	0.893	0.891	-3.0	-3.0
3	09:39:16	0.934	1.003	1.011	0.994	0.958	0.934	0.910	0.927	-3.2	-3.6
4	09:39:17	0.953	0.970	0.975	0.975	0.972	0.963	0.967	0.972	-4.1	-4.5
1	09:39:18	0.972	0.975	0.989	1.015	1.027	1.044	1.068	1.049	-5.4	-6.1
2	09:39:19	1.039	1.063	1.056	1.068	1.082	1.092	1.099	1.092	-6.1	-6.0
3	09:39:20	1.087	1.089	1.089	1.106	1.128	1.147	1.154	1.145	-5.6	-4.7
4	09:39:21	1.145	1.137	1.147	1.128	1.140	1.173	1.171	1.183	-4.4	-1.9
1	09:39:22	1.188	1.180	1.161	1.133	1.118	1.099	1.099	1.104	-1.0	-1.7
2	09:39:23	1.106	1.116	1.121	1.109	1.087	1.070	1.087	1.097	-1.1	-0.3
3	09:39:24	1.085	1.034	1.013	0.991	0.984	0.994	1.006	1.018	-0.3	-0.8
4	09:39:25	1.015	1.032	1.056	1.046	1.011	0.989	0.967	0.979	-0.2	0.1
1	09:39:26	0.956	0.934	0.951	0.970	0.972	0.979	0.994	0.989	1.3	2.6
2	09:39:27	0.984	0.979	0.970	0.941	0.922	0.917	0.903	0.889	2.5	1.1
3	09:39:28	0.901	0.924	0.929	0.941	0.946	0.941	0.934	0.936	1.4	1.4
4	09:39:29	0.953	0.970	0.967	0.929	0.903	0.893	0.905	0.927	1.3	1.3
1	09:39:30	0.917	0.920	0.924	0.924	0.917	0.922	0.920	0.915	2.4	1.6
2	09:39:31	0.891	0.889	0.877	0.869	0.889	0.889	0.905	0.910	1.4	1.5
3	09:39:32	0.912	0.929	0.910	0.896	0.877	0.891	0.912	0.917	1.3	0.9
4	09:39:33	0.941	0.953	0.929	0.927	0.929	0.915	0.951	0.963	0.9	0.6
1	09:39:34	0.970	0.963	0.965	0.958	0.941	0.939	0.927	0.922	0.4	0.3
2	09:39:35	0.934	0.951	0.951	0.946	0.951	0.951	0.939	0.934	0.3	0.4
3	09:39:36	0.927	0.920	0.920	0.891	0.879	0.867	0.860	0.838	0.1	-0.1
4	09:39:37	0.826	0.834	0.838	0.826	0.855	0.886	0.891	0.901	0.1	0.2
1	09:39:38	0.920	0.920	0.922	0.946	0.953	0.958	0.953	0.951	0.2	0.2
2	09:39:39	0.970	0.977	0.977	0.970	0.965	0.963	0.946	0.953	0.2	0.2
3	09:39:40	0.963	0.958	0.958	0.967	0.967	0.960	0.967	0.965	0.2	0.2
4	09:39:41	0.963	0.956	0.944	0.948	0.944	0.936	0.941	0.936	0.3	0.2

S	RELATIVE TIME HH:MM:SS	Vert	Vert	Vert	Vert	Vert	Vert	Vert	Vert	CCCont. PiPitch 2	Col.
		Acc 1 WN=04	Acc 2 WN=12	Acc 3 WN=20	Acc 4 WN=28	Acc 5 WN=36	Acc 6 WN=44	Acc 7 WN=52	Acc 8 WN=60		
1	09:39:42	0.927	0.915	0.910	0.908	0.905	0.903	0.893	0.872	0.3	-0.1
2	09:39:43	0.862	0.855	0.860	0.831	0.817	0.807	0.795	0.786	0.1	-0.1
3	09:39:44	0.783	0.793	0.800	0.795	0.793	0.795	0.781	0.786	-0.1	-0.1
4	09:39:45	0.793	0.798	0.802	0.807	0.810	0.817	0.814	0.817	-0.4	-0.4
1	09:39:46	0.810	0.814	0.819	0.824	0.831	0.836	0.850	0.862	-1.0	-1.0
2	09:39:47	0.867	0.874	0.874	0.879	0.886	0.896	0.905	0.915	-0.9	-0.5
3	09:39:48	0.912	0.912	0.917	0.889	0.893	0.917	0.903	0.898	-0.5	-0.5
4	09:39:49	0.920	0.908	0.862	0.822	0.802	0.790	0.793	0.807	-1.2	-1.2
1	09:39:50	0.810	0.814	0.814	0.836	0.845	0.855	0.877	0.886	-1.2	-1.3
2	09:39:51	0.889	0.886	0.889	0.912	0.915	0.903	0.910	0.915	-1.4	-1.3
3	09:39:52	0.917	0.927	0.924	0.915	0.891	0.884	0.915	0.908	-1.4	-1.4
4	09:39:53	0.879	0.898	0.908	0.891	0.893	0.898	0.910	0.922	-1.3	-1.2
1	09:39:54	0.946	0.956	0.963	0.977	0.975	0.977	0.994	0.994	-1.1	-1.1
2	09:39:55	0.991	1.003	1.008	1.008	1.013	1.025	1.032	1.025	-1.1	-1.1
3	09:39:56	1.039	1.025	1.020	1.025	1.039	1.020	1.023	1.013	-1.0	-0.9
4	09:39:57	0.994	0.991	0.984	0.989	0.982	1.027	1.082	1.080	-1.3	-0.9
1	09:39:58	1.104	1.111	1.092	1.106	1.111	1.109	1.106	1.073	-0.4	-0.1
2	09:39:59	1.039	1.032	1.003	0.982	1.013	1.006	0.960	0.967	-0.1	-0.6
3	09:40:00	0.970	0.963	0.956	0.970	0.963	0.956	0.963	0.965	-0.8	-0.9
4	09:40:01	0.963	0.967	0.965	0.963	0.972	1.003	1.006	1.008	-0.9	-1.2
1	09:40:02	1.032	1.015	1.025	1.061	1.049	1.054	1.061	1.068	-0.5	-0.8
2	09:40:03	1.034	1.015	1.030	1.008	1.030	1.042	1.039	1.037	-1.3	-1.4
3	09:40:04	1.013	1.013	1.030	1.042	1.061	1.068	1.078	1.078	-1.2	-0.4
4	09:40:05	1.068	1.039	1.020	1.013	0.991	0.989	1.001	1.015	-0.5	-0.6
1	09:40:06	1.027	1.046	1.023	0.982	0.944	0.953	0.948	0.953	-0.6	-0.6
2	09:40:07	0.970	0.960	0.970	0.963	0.953	0.967	0.967	0.965	-0.7	-0.9
3	09:40:08	0.965	0.972	0.984	0.989	0.999	0.996	0.982	0.982	-1.1	-0.9
4	09:40:09	0.975	0.970	0.975	0.972	0.989	0.999	0.996	1.001	-0.9	-1.0
1	09:40:10	0.989	0.977	0.965	0.977	1.013	1.023	1.030	0.996	-0.9	-0.9
2	09:40:11	0.979	0.989	0.996	0.989	0.970	0.965	0.984	0.996	-0.9	-0.9
3	09:40:12	1.006	1.003	0.994	1.013	1.027	1.003	0.999	1.027	-1.1	-1.0
4	09:40:13	1.013	1.020	1.020	0.999	1.001	1.008	1.020	1.037	-0.8	-1.0
1	09:40:14	1.030	1.042	1.049	1.046	1.020	1.001	1.044	1.058	-0.9	-0.7
2	09:40:15	1.061	1.061	1.042	1.032	1.011	1.018	0.967	0.932	-1.1	-1.4
3	09:40:16	0.939	0.958	0.970	0.979	0.977	0.963	0.979	1.023	-1.2	-1.0
4	09:40:17	1.073	1.080	1.087	1.111	1.078	1.061	1.058	1.061	-1.0	-0.5
1	09:40:18	1.054	1.030	1.008	1.006	0.996	1.011	1.013	1.015	-0.6	-0.8
2	09:40:19	1.046	1.054	1.051	1.063	1.051	1.013	0.989	0.984	-0.5	-0.1
3	09:40:20	0.967	0.951	0.939	0.927	0.927	0.912	0.903	0.901	-0.7	-0.3
4	09:40:21	0.917	0.912	0.920	0.965	0.991	0.979	0.984	0.991	-0.2	-0.4
1	09:40:22	0.984	1.025	1.058	1.034	1.001	1.008	0.999	0.979	-0.3	-0.3
2	09:40:23	0.984	0.991	1.006	1.018	1.011	0.965	0.920	0.924	-0.3	-0.3
3	09:40:24	0.936	0.932	0.922	0.944	0.929	0.908	0.905	0.901	-0.6	-0.6
4	09:40:25	0.905	0.896	0.896	0.886	0.903	0.908	0.881	0.857	-0.2	0.1
1	09:40:26	0.881	0.898	0.901	0.934	0.970	0.939	0.927	0.951	0.1	0.1
2	09:40:27	0.927	0.881	0.845	0.819	0.800	0.781	0.774	0.764	0.1	-0.4
3	09:40:28	0.774	0.807	0.807	0.800	0.812	0.805	0.762	0.752	-0.0	-1.2
4	09:40:29	0.764	0.779	0.798	0.822	0.838	0.865	0.901	0.922	-1.5	-1.4
1	09:40:30	0.908	0.908	0.924	0.944	0.965	0.994	0.982	0.941	-0.6	-0.9
2	09:40:31	0.944	0.939	0.917	0.903	0.872	0.872	0.891	0.905	-1.2	-1.0
3	09:40:32	0.922	0.915	0.944	0.958	0.956	0.965	0.956	0.932	-1.1	-1.2
4	09:40:33	0.932	0.956	0.958	0.965	0.977	0.965	0.977	0.989	-1.1	-1.1
1	09:40:34	0.984	0.994	1.015	1.034	1.044	1.037	1.042	1.042	-1.2	-1.1
2	09:40:35	1.046	1.049	1.046	1.068	1.070	1.061	1.068	1.070	-0.7	-0.5

S	RELATIVE TIME HH:MM:SS	Vert	Vert	Vert	Vert	Vert	Vert	Vert	Vert	CCCont. PiPitch 2	Col.
		Acc 1 WN=04	Acc 2 WN=12	Acc 3 WN=20	Acc 4 WN=28	Acc 5 WN=36	Acc 6 WN=44	Acc 7 WN=52	Acc 8 WN=60		
3	09:40:36	1.080	1.080	1.056	1.054	1.061	1.049	1.044	1.063	0.2	0.2
4	09:40:37	1.051	1.030	1.054	1.061	1.066	1.063	1.075	1.056	-0.4	-0.0
1	09:40:38	1.061	1.073	1.070	1.037	1.020	1.020	1.011	1.001	-0.1	-0.0
2	09:40:39	1.001	1.001	1.006	1.008	1.006	1.001	1.003	1.013	-0.0	0.1
3	09:40:40	1.011	0.989	0.982	1.020	1.023	1.030	1.056	1.063	0.1	0.1
4	09:40:41	1.061	1.078	1.070	1.066	1.058	1.039	1.015	0.996	0.1	0.1
1	09:40:42	0.989	0.994	0.975	0.967	0.956	0.956	0.965	0.960	0.1	0.1
2	09:40:43	0.960	0.956	0.953	0.972	0.984	1.001	0.996	0.982	0.2	0.8
3	09:40:44	1.015	1.020	0.996	0.989	0.987	0.967	0.948	0.936	0.3	0.3
4	09:40:45	0.920	0.915	0.920	0.936	0.946	0.944	0.917	0.905	0.3	0.3
1	09:40:46	0.893	0.867	0.865	0.845	0.838	0.838	0.834	0.824	0.3	0.3
2	09:40:47	0.824	0.805	0.790	0.795	0.798	0.793	0.795	0.795	0.3	0.3
3	09:40:48	0.798	0.793	0.807	0.810	0.819	0.836	0.838	0.845	-0.6	-0.7
4	09:40:49	0.860	0.862	0.879	0.896	0.884	0.881	0.893	0.901	-0.8	-1.4
1	09:40:50	0.912	0.960	0.975	0.970	0.984	0.984	0.963	0.946	-1.0	-0.9
2	09:40:51	0.948	0.941	0.932	0.920	0.915	0.905	0.905	0.915	-0.9	-0.7
3	09:40:52	0.929	0.924	0.927	0.917	0.927	0.941	0.932	0.920	-0.7	-0.7
4	09:40:53	0.901	0.908	0.934	0.963	0.944	0.953	0.953	0.967	-1.1	-0.5
1	09:40:54	0.991	0.996	0.989	0.970	0.956	0.922	0.912	0.941	-0.5	0.1
2	09:40:55	0.948	0.951	0.939	0.920	0.898	0.891	0.872	0.872	0.1	0.1
3	09:40:56	0.860	0.857	0.862	0.867	0.869	0.857	0.857	0.860	0.1	0.1
4	09:40:57	0.867	0.869	0.860	0.857	0.879	0.893	0.908	0.908	0.1	0.1
1	09:40:58	0.908	0.908	0.893	0.874	0.845	0.850	0.877	0.877	0.0	-0.1
2	09:40:59	0.896	0.901	0.896	0.877	0.838	0.865	0.884	0.891	-0.3	-0.3
3	09:41:00	0.893	0.896	0.901	0.910	0.920	0.929	0.934	0.941	-0.2	-0.2
4	09:41:01	0.934	0.936	0.936	0.936	0.936	0.936	0.927	0.922	-0.2	-0.4
1	09:41:02	0.924	0.915	0.915	0.920	0.922	0.922	0.924	0.910	-0.3	-1.0
2	09:41:03	0.898	0.929	0.972	0.970	0.970	0.970	0.975	1.011	-0.7	-0.4
3	09:41:04	1.001	0.965	0.970	0.953	0.936	0.939	0.932	0.936	-0.3	-0.2
4	09:41:05	0.946	0.946	0.951	0.944	0.936	0.905	0.912	0.912	-0.3	-0.5
1	09:41:06	0.896	0.898	0.896	0.927	0.936	0.915	0.915	0.932	-0.5	-0.5
2	09:41:07	0.948	0.982	1.003	1.027	1.066	1.080	1.106	1.092	-0.5	-0.4
3	09:41:08	1.061	1.034	1.018	0.984	0.956	0.958	0.960	0.929	-0.8	-0.7
4	09:41:09	0.934	0.963	0.982	0.967	0.984	0.970	0.920	0.927	-0.3	-0.4
1	09:41:10	0.941	0.963	0.944	0.929	0.901	0.855	0.810	0.786	0.1	0.1
2	09:41:11	0.810	0.829	0.869	0.927	0.946	0.927	0.912	0.948	-0.1	0.1
3	09:41:12	0.965	0.944	0.946	0.953	0.948	0.965	0.963	0.965	0.1	-0.0
4	09:41:13	0.975	0.975	0.977	0.977	0.977	0.965	0.939	0.924	0.0	-0.4
1	09:41:14	0.912	0.920	0.924	0.917	0.908	0.917	0.927	0.946	-0.4	0.1
2	09:41:15	0.944	0.941	0.929	0.936	0.944	0.929	0.922	0.960	-0.3	-0.5
3	09:41:16	0.996	0.999	0.989	0.979	0.956	0.948	0.932	0.946	-0.5	-0.5
4	09:41:17	0.967	0.965	0.958	0.963	0.965	0.972	0.999	1.018	-1.1	-1.2
1	09:41:18	1.027	1.023	1.034	1.042	1.049	1.054	1.061	1.061	-1.4	-1.3
2	09:41:19	1.066	1.070	1.078	1.082	1.092	1.092	1.087	1.082	-1.3	-1.2
3	09:41:20	1.078	1.075	1.075	1.070	1.066	1.054	1.044	1.039	-1.1	-1.0
4	09:41:21	1.039	1.044	1.056	1.051	1.039	1.039	1.039	1.049	-1.1	-1.2
1	09:41:22	1.051	1.049	1.044	1.046	1.054	1.061	1.063	1.063	-1.2	-1.2
2	09:41:23	1.058	1.066	1.078	1.080	1.075	1.087	1.066	1.058	-1.2	-1.3
3	09:41:24	1.080	1.080	1.080	1.085	1.087	1.073	1.070	1.066	-1.0	-0.9
4	09:41:25	1.070	1.066	1.063	1.068	1.068	1.066	1.066	1.070	-0.9	-0.7
1	09:41:26	1.075	1.082	1.085	1.080	1.080	1.063	1.054	1.085	0.0	-0.2
2	09:41:27	1.099	1.099	1.089	1.092	1.080	1.068	1.061	1.049	-0.2	-0.4
3	09:41:28	1.049	1.044	1.042	1.039	1.044	1.044	1.044	1.042	-0.4	-0.4
4	09:41:29	1.051	1.051	1.058	1.061	1.066	1.066	1.068	1.070	-0.5	-0.5

S	RELATIVE TIME HH:MM:SS	Vert Acc 1 WN=04	Vert Acc 2 WN=12	Vert Acc 3 WN=20	Vert Acc 4 WN=28	Vert Acc 5 WN=36	Vert Acc 6 WN=44	Vert Acc 7 WN=52	Vert Acc 8 WN=60	CCCont. PiPitch WNWN=55	Col. 2
1	09:41:30	1.068	1.070	1.070	1.070	1.068	1.066	1.061	1.066	-0.5	-0.4
2	09:41:31	1.066	1.063	1.061	1.061	1.061	1.061	1.056	1.051	-0.4	-0.4
3	09:41:32	1.054	1.049	1.054	1.051	1.049	1.054	1.056	1.056	-0.4	-0.5
4	09:41:33	1.058	1.056	1.056	1.056	1.051	1.054	1.056	1.054	-0.4	-0.4
1	09:41:34	1.051	1.051	1.051	1.049	1.044	1.049	1.044	1.044	-0.4	-0.4
2	09:41:35	1.042	1.039	1.039	1.039	1.037	1.034	1.030	1.037	-0.3	-0.3
3	09:41:36	1.034	1.034	1.034	1.032	1.034	1.034	1.030	1.030	-0.3	-0.3
4	09:41:37	1.030	1.027	1.025	1.020	1.023	1.023	1.023	1.018	-0.3	-0.3
1	09:41:38	1.020	1.020	1.023	1.015	1.023	1.023	1.025	1.023	-0.4	-0.4
2	09:41:39	1.032	1.027	1.032	1.030	1.027	1.025	1.023	1.027	-0.4	-0.3
3	09:41:40	1.023	1.025	1.025	1.027	1.025	1.027	1.027	1.023	-0.3	-0.2
4	09:41:41	1.023	1.015	1.013	1.011	1.013	1.008	1.008	1.003	-0.2	-0.2
1	09:41:42	0.999	0.994	0.996	0.999	1.001	1.003	1.006	1.013	-0.3	-0.2
2	09:41:43	1.015	1.013	1.015	1.015	1.015	1.023	1.023	1.023	-0.2	-0.2
3	09:41:44	1.023	1.015	1.018	1.023	1.018	1.023	1.015	1.013	-0.2	-0.2
4	09:41:45	1.008	1.008	1.001	0.999	0.999	1.001	1.018	1.008	-0.1	-0.3
1	09:41:46	1.008	1.015	1.015	1.018	1.013	1.011	1.008	1.008	-0.4	-0.4
2	09:41:47	1.020	1.020	1.018	1.018	1.018	1.018	1.023	1.020	-0.4	-0.4
3	09:41:48	1.025	1.034	1.042	1.039	1.034	1.039	1.037	1.032	-0.4	-0.3
4	09:41:49	1.032	1.034	1.039	1.042	1.039	1.025	1.023	1.020	-0.3	-0.3
1	09:41:50	1.020	1.027	1.030	1.023	1.023	1.023	1.020	1.008	-0.3	-0.3
2	09:41:51	1.011	1.013	1.020	1.027	1.027	1.027	1.037	1.042	-0.3	-0.2
3	09:41:52	1.039	1.042	1.037	1.032	1.032	1.034	1.032	1.025	-0.2	-0.1
4	09:41:53	1.027	1.018	1.015	1.006	0.994	0.996	0.991	1.006	-0.1	-0.1
1	09:41:54	0.994	1.003	1.003	1.003	1.023	1.030	1.027	1.032	-0.2	-0.1
2	09:41:55	1.032	1.025	1.023	1.020	1.013	1.011	1.013	1.003	-0.1	-0.1
3	09:41:56	1.003	1.025	1.025	1.034	1.027	1.020	1.023	1.027	-0.2	-0.1
4	09:41:57	1.020	1.023	1.030	1.025	1.020	1.015	1.013	1.018	-0.1	-0.1
1	09:41:58	1.013	1.015	1.015	1.013	1.015	1.015	1.013	1.001	-0.1	-0.1
2	09:41:59	1.008	1.013	1.015	1.015	1.018	1.025	1.027	1.032	-0.1	-0.1
3	09:42:00	1.034	1.030	1.032	1.025	1.023	1.015	1.030	1.042	-0.1	-0.1
4	09:42:01	1.042	1.042	1.023	0.967	0.965	0.989	1.006	1.025	-0.1	-0.1
1	09:42:02	1.054	1.070	1.058	1.058	1.070	1.061	1.051	1.037	-0.0	-0.0
2	09:42:03	1.025	1.018	1.008	0.987	0.989	0.994	0.989	0.987	-0.1	-0.1
3	09:42:04	0.987	0.991	0.996	0.994	0.987	0.987	0.989	1.003	-0.1	-0.1
4	09:42:05	1.008	1.013	1.018	1.015	1.023	1.011	1.011	1.008	-0.0	-0.0
1	09:42:06	1.003	1.003	0.994	0.994	0.991	0.984	0.977	0.972	0.0	-0.0
2	09:42:07	0.970	0.965	0.963	0.965	0.965	0.963	0.960	0.956	-0.0	-0.0
3	09:42:08	0.956	0.946	0.941	0.946	0.941	0.941	0.941	0.944	0.0	0.1
4	09:42:09	0.939	0.941	0.944	0.936	0.939	0.932	0.936	0.960	0.1	0.1
1	09:42:10	0.956	0.944	0.946	0.946	0.934	0.932	0.927	0.929	0.1	0.1
2	09:42:11	0.934	0.932	0.929	0.936	0.934	0.936	0.939	0.929	0.1	0.1
3	09:42:12	0.920	0.915	0.915	0.908	0.901	0.903	0.905	0.898	0.1	0.1
4	09:42:13	0.901	0.898	0.896	0.908	0.903	0.901	0.896	0.891	0.1	0.1
1	09:42:14	0.893	0.896	0.893	0.889	0.898	0.901	0.896	0.903	0.2	0.1
2	09:42:15	0.908	0.908	0.901	0.898	0.898	0.898	0.893	0.891	0.1	-0.1
3	09:42:16	0.889	0.884	0.886	0.898	0.917	0.936	0.946	0.951	-0.4	-0.2
4	09:42:17	0.956	0.965	0.965	0.958	0.956	0.965	0.958	0.965	-0.3	-0.3
1	09:42:18	0.963	0.958	0.944	0.936	0.936	0.941	0.956	0.960	-0.7	-0.6
2	09:42:19	0.963	0.970	0.982	0.989	0.989	1.001	1.006	1.011	-0.5	-0.3
3	09:42:20	1.011	1.008	0.999	0.982	0.972	0.965	0.960	0.960	-0.2	-0.2
4	09:42:21	0.963	0.963	0.970	0.967	0.963	0.958	0.963	0.963	-0.1	-0.0
1	09:42:22	0.963	0.960	0.965	0.965	0.972	0.958	0.948	0.963	-0.0	-0.1
2	09:42:23	0.989	0.999	1.015	1.023	1.032	1.023	1.023	1.013	-0.0	0.0

S	RELATIVE TIME	Altitude	N1	N1	N2	N2	EGT	EGT	F.Flow	F.Flow
			Eng.1	Eng.2	Eng.1	Eng.2	Eng.1	Eng.2	Eng.1	Eng.2
F	HH:MM:WN=19+58		WN=51	WN=30	WN=31	WN=06	WN=32	WN=64	WN=16	WN=48
3	09:38:48	584	90.9	88.2	97.3	93.9	778.1	737.7	6866	6579
4	09:38:49	584	90.9	91.7	98.4	95.9	795.1	764.2	7744	7629
1	09:38:50	585	89.7	90.5	97.9	97.1	796.0	767.0	7879	7961
2	09:38:51	585	89.3	88.7	97.3	96.4	795.1	767.9	7762	7825
3	09:38:52	587	89.8	88.8	97.4	95.9	802.6	778.1	7700	7735
4	09:38:53	587	90.2	90.0	97.8	96.1	809.3	785.6	7789	7852
1	09:38:54	587	90.5	90.2	98.0	96.6	816.0	790.3	7852	7933
2	09:38:55	587	90.6	90.3	98.2	96.7	819.9	795.1	7906	7988
3	09:38:56	588	90.7	90.4	98.3	96.9	824.7	796.9	7933	8015
4	09:38:57	588	90.7	90.4	98.3	96.9	826.6	799.8	7942	8015
1	09:38:58	587	90.8	90.4	98.2	96.8	830.5	802.6	7942	8024
2	09:38:59	587	90.7	90.4	98.3	96.8	830.5	805.5	7952	8006
3	09:39:00	587	90.7	90.5	98.1	96.8	832.5	807.4	7952	7997
4	09:39:01	587	90.8	90.5	98.1	96.8	834.4	808.4	7942	7988
1	09:39:02	588	90.8	90.4	98.2	96.9	836.4	809.3	7942	7988
2	09:39:03	590	90.8	90.4	98.2	96.9	837.3	812.2	7942	7979
3	09:39:04	588	90.8	90.4	98.1	96.8	838.3	815.1	7942	7988
4	09:39:05	588	90.8	90.4	98.1	96.7	842.2	815.1	7942	7997
1	09:39:06	592	90.8	90.4	98.1	96.8	842.2	817.0	7942	7988
2	09:39:07	592	90.8	90.4	98.0	96.9	844.2	818.0	7933	7997
3	09:39:08	588	90.8	90.4	97.9	96.8	844.2	818.9	7942	7997
4	09:39:09	592	90.8	90.4	97.9	96.7	846.2	819.9	7942	7979
1	09:39:10	593	90.8	90.4	97.8	96.9	847.1	822.8	7952	7988
2	09:39:11	590	90.8	90.4	97.9	96.6	847.1	824.7	7942	7997
3	09:39:12	590	90.8	90.4	97.8	96.7	846.2	824.7	7961	7997
4	09:39:13	592	90.7	90.3	97.8	96.7	849.1	824.7	7961	7988
1	09:39:14	590	90.7	90.4	97.7	96.6	851.1	827.6	7952	7979
2	09:39:15	584	90.8	90.3	97.8	96.6	851.1	827.6	7970	7988
3	09:39:16	584	90.8	90.4	97.8	96.6	852.1	829.6	7979	8015
4	09:39:17	582	90.8	90.3	97.7	96.7	853.1	830.5	7979	8015
1	09:39:18	588	90.7	90.3	97.7	96.7	854.1	831.5	7988	8034
2	09:39:19	596	90.7	90.3	97.8	96.6	855.0	832.5	8006	8015
3	09:39:20	615	90.7	90.3	97.7	96.6	858.0	833.4	8015	8024
4	09:39:21	641	90.8	90.3	97.7	96.7	857.0	835.4	8015	8024
1	09:39:22	671	90.8	90.2	97.7	96.6	858.0	836.4	8024	8024
2	09:39:23	705	90.8	90.2	97.7	96.6	859.0	836.4	8024	8024
3	09:39:24	737	90.7	90.2	97.7	96.6	858.0	836.4	8024	8034
4	09:39:25	770	90.7	90.2	97.7	96.7	860.0	836.4	8024	8043
1	09:39:26	811	90.7	90.3	97.7	96.7	860.0	838.3	8024	8061
2	09:39:27	850	90.7	90.2	97.7	96.6	860.0	839.3	8015	8061
3	09:39:28	892	90.7	90.3	97.6	96.7	862.0	838.3	8006	8052
4	09:39:29	933	90.7	90.3	97.6	96.7	861.0	840.3	7997	8034
1	09:39:30	977	90.7	90.3	97.6	96.6	861.0	841.3	7997	7997
2	09:39:31	1022	90.7	90.4	97.6	96.6	862.0	842.2	7988	7988
3	09:39:32	1064	90.8	90.4	97.6	96.7	864.0	842.2	7988	7988
4	09:39:33	1106	90.7	90.4	97.6	96.6	862.0	843.2	7979	7979
1	09:39:34	1147	90.8	90.4	97.6	96.6	863.0	844.2	7970	7979
2	09:39:35	1189	90.8	90.4	97.5	96.6	864.0	844.2	7970	7970
3	09:39:36	1230	90.8	90.4	97.6	96.6	864.0	844.2	7961	7970
4	09:39:37	1270	90.8	90.4	97.6	96.6	864.0	844.2	7952	7942
1	09:39:38	1311	90.8	90.4	97.5	96.5	863.0	844.2	7942	7933
2	09:39:39	1352	90.9	90.4	97.6	96.7	863.0	845.2	7933	7924
3	09:39:40	1393	90.8	90.4	97.5	96.6	864.0	845.2	7924	7915
4	09:39:41	1435	90.9	90.4	97.6	96.5	864.0	845.2	7915	7906

S	RELATIVE TIME		N1	N1	N2	N2	EGT	EGT	F.Flow	F.Flow
	HH:MM:WN=19+58	Altitude	Eng.1	Eng.2	Eng.1	Eng.2	Eng.1	Eng.2	Eng.1	Eng.2
F			WN=51	WN=30	WN=31	WN=06	WN=32	WN=64	WN=16	WN=48
1	09:39:42	1477	90.8	90.4	97.5	96.6	864.0	845.2	7906	7897
2	09:39:43	1519	90.8	90.4	97.5	96.6	864.0	845.2	7897	7861
3	09:39:44	1559	90.8	90.4	97.5	96.7	864.0	845.2	7897	7861
4	09:39:45	1591	90.8	90.4	97.4	96.4	863.0	845.2	7879	7861
1	09:39:46	1622	90.8	90.4	97.5	96.6	863.0	846.2	7888	7870
2	09:39:47	1650	90.9	90.4	97.4	96.6	863.0	846.2	7879	7861
3	09:39:48	1678	90.8	90.4	97.4	96.4	863.0	846.2	7870	7870
4	09:39:49	1703	90.8	90.4	97.4	96.5	864.0	846.2	7861	7861
1	09:39:50	1725	90.8	90.4	97.5	96.5	864.0	847.1	7834	7816
2	09:39:51	1746	90.8	90.4	97.5	96.4	863.0	846.2	7834	7825
3	09:39:52	1766	90.8	90.4	97.4	96.5	863.0	846.2	7825	7807
4	09:39:53	1783	90.8	90.4	97.4	96.5	864.0	847.1	7834	7843
1	09:39:54	1798	90.8	90.4	97.4	96.5	862.0	846.2	7834	7852
2	09:39:55	1820	90.8	90.4	97.4	96.5	862.0	847.1	7825	7843
3	09:39:56	1842	90.8	90.4	97.4	96.5	862.0	848.1	7825	7852
4	09:39:57	1865	90.8	90.4	97.4	96.4	862.0	848.1	7834	7843
1	09:39:58	1888	90.8	90.4	97.4	96.5	862.0	847.1	7825	7843
2	09:39:59	1913	90.9	90.4	97.4	96.5	862.0	847.1	7825	7843
3	09:40:00	1941	90.8	90.4	97.4	96.5	861.0	847.1	7825	7825
4	09:40:01	1970	90.8	90.4	97.4	96.4	861.0	847.1	7816	7825
1	09:40:02	2001	90.9	90.4	97.4	96.4	861.0	848.1	7816	7825
2	09:40:03	2029	90.8	90.4	97.4	96.5	860.0	847.1	7807	7816
3	09:40:04	2062	90.8	90.4	97.4	96.5	861.0	847.1	7807	7789
4	09:40:05	2094	90.8	90.4	97.5	96.4	861.0	848.1	7807	7798
1	09:40:06	2128	90.8	90.4	97.4	96.5	862.0	847.1	7807	7798
2	09:40:07	2163	90.8	90.4	97.4	96.5	860.0	847.1	7798	7780
3	09:40:08	2199	90.8	90.4	97.4	96.4	862.0	847.1	7789	7780
4	09:40:09	2232	90.8	90.4	97.5	96.5	861.0	847.1	7780	7771
1	09:40:10	2271	90.8	90.4	97.4	96.4	859.0	847.1	7789	7780
2	09:40:11	2306	90.8	90.4	97.5	96.5	859.0	847.1	7780	7753
3	09:40:12	2340	90.8	90.4	97.4	96.5	860.0	847.1	7780	7744
4	09:40:13	2377	90.9	90.4	97.5	96.4	857.0	847.1	7771	7744
1	09:40:14	2411	90.9	90.5	97.5	96.4	859.0	847.1	7753	7744
2	09:40:15	2452	90.9	90.4	97.4	96.5	860.0	846.2	7753	7753
3	09:40:16	2489	90.9	90.4	97.5	96.5	858.0	847.1	7753	7744
4	09:40:17	2531	90.9	90.4	97.4	96.5	858.0	847.1	7744	7735
1	09:40:18	2569	90.9	90.4	97.5	96.4	858.0	847.1	7735	7735
2	09:40:19	2608	90.9	90.4	97.4	96.5	858.0	846.2	7744	7726
3	09:40:20	2649	90.9	90.4	97.4	96.5	858.0	846.2	7735	7726
4	09:40:21	2690	90.9	90.4	97.4	96.5	857.0	846.2	7709	7718
1	09:40:22	2728	90.9	90.4	97.5	96.4	856.0	845.2	7691	7718
2	09:40:23	2769	90.9	90.4	97.4	96.5	856.0	845.2	7691	7726
3	09:40:24	2808	90.9	90.4	97.4	96.5	856.0	846.2	7682	7718
4	09:40:25	2845	90.9	90.4	97.4	96.4	856.0	845.2	7691	7691
1	09:40:26	2882	90.9	90.4	97.5	96.5	857.0	844.2	7682	7691
2	09:40:27	2915	90.9	90.4	97.4	96.6	854.1	844.2	7673	7700
3	09:40:28	2944	90.9	90.4	97.4	96.5	855.0	844.2	7655	7709
4	09:40:29	2971	90.9	90.5	97.4	96.6	854.1	844.2	7638	7673
1	09:40:30	2995	90.9	90.5	97.5	96.5	855.0	844.2	7638	7664
2	09:40:31	3018	90.9	90.5	97.4	96.5	855.0	843.2	7638	7655
3	09:40:32	3039	90.9	90.5	97.4	96.4	854.1	843.2	7646	7638
4	09:40:33	3062	90.9	90.5	97.4	96.4	855.0	843.2	7638	7638
1	09:40:34	3087	90.9	90.5	97.4	96.5	854.1	843.2	7638	7638
2	09:40:35	3113	90.9	90.5	97.4	96.4	852.1	844.2	7638	7638

S	RELATIVE TIME	Altitude HH:MM:WN=19+58	N1 Eng.1 WN=51	N1 Eng.2 WN=30	N2 Eng.1 WN=31	N2 Eng.2 WN=06	EGT Eng.1 WN=32	EGT Eng.2 WN=64	F.Flow Eng.1 WN=16	F.Flow Eng.2 WN=48
3	09:40:36	3143	90.9	90.5	97.4	96.3	854.1	843.2	7638	7646
4	09:40:37	3177	90.9	90.5	97.4	96.4	852.1	842.2	7629	7646
1	09:40:38	3216	90.9	90.5	97.4	96.5	850.1	842.2	7629	7646
2	09:40:39	3257	90.9	90.5	97.4	96.4	851.1	842.2	7620	7629
3	09:40:40	3299	90.9	90.5	97.4	96.3	850.1	842.2	7602	7611
4	09:40:41	3344	91.0	90.5	97.3	96.4	849.1	841.3	7602	7620
1	09:40:42	3394	91.0	90.5	97.3	96.4	850.1	840.3	7593	7602
2	09:40:43	3444	91.0	90.5	97.3	96.3	849.1	840.3	7593	7602
3	09:40:44	3495	90.9	90.5	97.3	96.3	848.1	839.3	7576	7584
4	09:40:45	3549	91.0	90.5	97.3	96.4	850.1	839.3	7567	7576
1	09:40:46	3601	90.9	90.5	97.3	96.3	849.1	840.3	7558	7567
2	09:40:47	3649	91.0	90.5	97.3	96.4	849.1	839.3	7540	7540
3	09:40:48	3693	91.0	90.5	97.3	96.4	849.1	840.3	7540	7532
4	09:40:49	3736	91.0	90.6	97.3	96.4	848.1	839.3	7523	7532
1	09:40:50	3772	90.3	90.1	97.1	96.3	842.2	833.4	7488	7444
2	09:40:51	3813	89.6	89.0	96.8	96.0	837.3	827.6	7340	7271
3	09:40:52	3854	89.1	88.9	96.4	95.7	832.5	823.7	7160	7160
4	09:40:53	3893	88.8	87.9	96.2	95.5	828.6	819.9	7050	6999
1	09:40:54	3933	88.5	87.9	96.1	95.4	826.6	818.0	6941	6891
2	09:40:55	3972	88.4	88.2	96.0	95.6	822.8	817.0	6874	6882
3	09:40:56	4010	88.3	88.2	95.9	95.6	818.9	815.1	6808	6874
4	09:40:57	4046	88.2	88.0	95.8	95.5	818.9	812.2	6759	6833
1	09:40:58	4080	88.2	87.8	95.9	95.6	817.0	809.3	6734	6783
2	09:40:59	4112	88.1	87.7	95.9	95.2	815.1	810.3	6726	6742
3	09:41:00	4142	88.2	87.7	95.9	95.5	814.1	808.4	6709	6718
4	09:41:01	4170	88.1	87.8	95.8	95.5	814.1	808.4	6701	6718
1	09:41:02	4200	88.1	87.7	95.8	95.4	813.1	806.5	6693	6701
2	09:41:03	4228	88.1	87.8	95.8	95.5	813.1	806.5	6693	6701
3	09:41:04	4255	88.1	87.7	95.8	95.4	811.2	806.5	6693	6701
4	09:41:05	4284	88.0	87.7	95.8	95.5	808.4	805.5	6685	6693
1	09:41:06	4314	88.1	87.8	95.8	95.4	810.3	805.5	6677	6701
2	09:41:07	4342	88.1	87.7	95.8	95.4	810.3	804.5	6669	6693
3	09:41:08	4371	88.0	87.8	95.8	95.5	809.3	803.6	6660	6701
4	09:41:09	4402	88.1	87.7	95.8	95.4	808.4	803.6	6660	6701
1	09:41:10	4435	88.0	87.7	95.8	95.4	808.4	803.6	6660	6701
2	09:41:11	4463	88.0	87.7	95.8	95.5	807.4	803.6	6652	6693
3	09:41:12	4490	88.0	87.7	95.8	95.4	807.4	802.6	6636	6693
4	09:41:13	4519	88.0	87.7	95.8	95.5	807.4	802.6	6636	6693
1	09:41:14	4547	88.0	87.7	95.8	95.4	807.4	802.6	6644	6685
2	09:41:15	4577	88.1	87.7	95.8	95.5	808.4	802.6	6636	6685
3	09:41:16	4604	88.1	87.7	95.8	95.5	807.4	800.7	6644	6677
4	09:41:17	4631	88.1	87.8	95.9	95.4	804.5	800.7	6636	6677
1	09:41:18	4663	88.1	87.7	95.9	95.5	804.5	799.8	6628	6669
2	09:41:19	4695	88.1	87.7	95.9	95.6	804.5	799.8	6636	6652
3	09:41:20	4731	88.1	87.8	95.9	95.5	803.6	799.8	6628	6660
4	09:41:21	4768	88.2	87.7	95.9	95.4	804.5	798.8	6612	6660
1	09:41:22	4807	88.2	87.8	95.8	95.4	805.5	798.8	6612	6636
2	09:41:23	4848	88.2	87.7	95.8	95.3	803.6	798.8	6620	6628
3	09:41:24	4889	88.2	87.8	95.9	95.4	805.5	797.9	6620	6628
4	09:41:25	4934	88.2	87.8	96.0	95.5	806.5	798.8	6628	6636
1	09:41:26	4977	88.3	87.9	95.9	95.4	805.5	799.8	6628	6636
2	09:41:27	5025	88.2	88.0	96.0	95.4	804.5	798.8	6628	6644
3	09:41:28	5071	88.3	87.9	96.0	95.5	806.5	799.8	6628	6652
4	09:41:29	5118	88.3	87.9	96.0	95.4	805.5	798.8	6628	6652

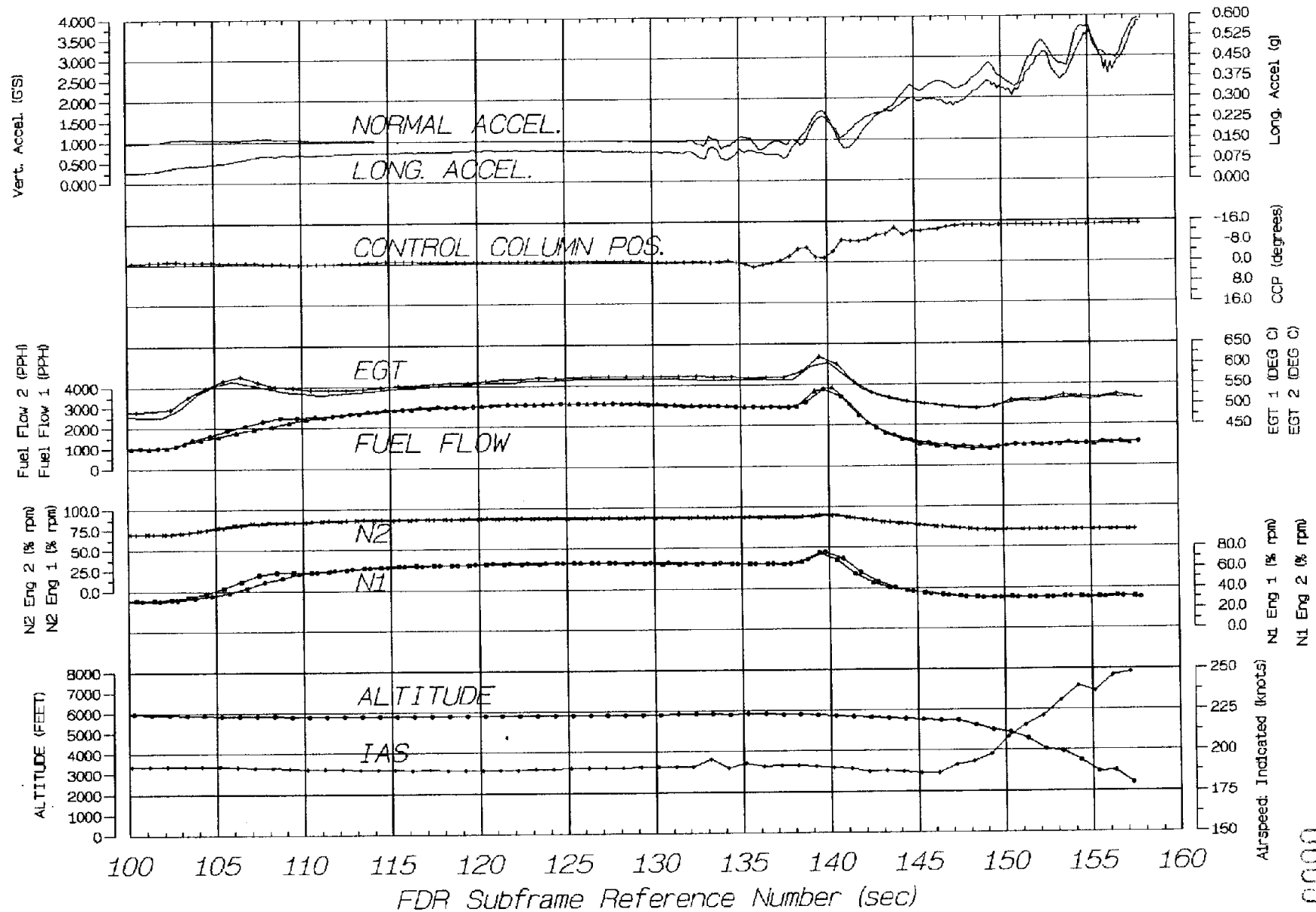
S	RELATIVE TIME	Altitude	N1	N1	N2	N2	EGT	EGT	F.Flow	F.Flow
			Eng.1	Eng.2	Eng.1	Eng.2	Eng.1	Eng.2	Eng.1	Eng.2
F	HH:MM:WN=19+58		WN=51	WN=30	WN=31	WN=06	WN=32	WN=64	WN=16	WN=48
1	09:41:30	5166	88.3	88.0	96.0	95.4	805.5	799.8	6628	6644
2	09:41:31	5215	88.3	88.1	96.0	95.4	804.5	799.8	6612	6644
3	09:41:32	5264	88.4	88.1	96.0	95.5	806.5	798.8	6595	6636
4	09:41:33	5313	88.4	88.1	96.1	95.5	806.5	798.8	6595	6612
1	09:41:34	5362	88.4	88.1	96.0	95.5	806.5	799.8	6595	6612
2	09:41:35	5412	88.4	88.0	96.0	95.4	805.5	797.9	6579	6603
3	09:41:36	5463	88.3	88.0	96.0	95.5	806.5	796.9	6555	6587
4	09:41:37	5513	88.3	88.0	96.0	95.5	803.6	797.9	6539	6579
1	09:41:38	5562	88.3	88.0	96.0	95.4	805.5	798.8	6515	6563
2	09:41:39	5612	88.3	88.0	96.0	95.4	803.6	796.9	6507	6555
3	09:41:40	5662	88.3	88.0	96.0	95.5	802.6	796.9	6491	6547
4	09:41:41	5709	88.3	88.0	96.0	95.4	801.7	796.9	6483	6523
1	09:41:42	5757	88.3	88.0	95.9	95.4	802.6	796.0	6467	6515
2	09:41:43	5803	88.3	88.0	95.9	95.5	800.7	796.9	6459	6507
3	09:41:44	5848	88.3	87.9	95.9	95.4	800.7	795.1	6451	6475
4	09:41:45	5894	88.3	87.9	95.9	95.4	801.7	795.1	6443	6459
1	09:41:46	5938	88.3	88.0	96.0	95.4	801.7	796.0	6443	6451
2	09:41:47	5981	88.3	87.9	96.0	95.4	799.8	796.0	6435	6451
3	09:41:48	6024	88.3	87.9	96.0	95.5	801.7	795.1	6435	6451
4	09:41:49	6067	88.3	88.0	96.0	95.5	800.7	795.1	6427	6443
1	09:41:50	6110	88.3	87.9	96.0	95.5	800.7	796.0	6419	6435
2	09:41:51	6152	88.3	88.0	96.0	95.4	799.8	795.1	6411	6443
3	09:41:52	6193	88.3	88.0	95.9	95.5	799.8	794.1	6411	6435
4	09:41:53	6234	88.3	88.0	96.0	95.5	799.8	794.1	6403	6435
1	09:41:54	6273	88.3	88.0	96.0	95.4	797.9	794.1	6395	6427
2	09:41:55	6313	88.3	88.0	96.0	95.4	797.9	793.2	6387	6435
3	09:41:56	6352	88.3	88.1	96.0	95.5	797.9	793.2	6379	6419
4	09:41:57	6392	88.3	88.1	96.0	95.4	798.8	793.2	6379	6427
1	09:41:58	6431	88.3	88.0	95.9	95.5	798.8	793.2	6371	6403
2	09:41:59	6469	88.3	88.1	95.9	95.4	797.9	793.2	6371	6395
3	09:42:00	6506	88.3	88.1	95.9	95.3	798.8	793.2	6363	6403
4	09:42:01	6546	88.3	88.1	95.9	95.4	798.8	792.2	6355	6387
1	09:42:02	6586	88.3	88.1	95.9	95.4	798.8	792.2	6355	6379
2	09:42:03	6625	88.4	88.1	95.9	95.4	797.9	792.2	6355	6387
3	09:42:04	6663	88.4	88.1	95.9	95.5	798.8	792.2	6347	6371
4	09:42:05	6703	88.4	88.2	96.0	95.5	798.8	792.2	6347	6363
1	09:42:06	6743	88.4	88.2	96.0	95.4	799.8	793.2	6339	6371
2	09:42:07	6783	88.5	88.1	96.0	95.5	797.9	792.2	6347	6363
3	09:42:08	6823	88.5	88.1	96.0	95.4	798.8	792.2	6339	6347
4	09:42:09	6862	88.4	88.3	96.0	95.3	796.9	793.2	6323	6347
1	09:42:10	6899	88.4	88.2	96.0	95.4	798.8	791.3	6323	6347
2	09:42:11	6936	88.4	88.3	96.0	95.4	797.9	792.2	6316	6347
3	09:42:12	6973	88.4	88.2	96.0	95.4	796.9	791.3	6308	6355
4	09:42:13	7007	88.4	88.2	95.9	95.4	796.9	790.3	6308	6339
1	09:42:14	7038	88.4	88.2	96.0	95.3	796.0	790.3	6300	6331
2	09:42:15	7071	88.5	88.3	96.0	95.4	796.9	789.4	6308	6323
3	09:42:16	7101	88.5	88.3	95.9	95.4	796.9	790.3	6292	6300
4	09:42:17	7130	88.4	88.2	96.0	95.3	796.0	788.4	6300	6300
1	09:42:18	7157	88.5	88.2	96.0	95.3	796.9	788.4	6292	6300
2	09:42:19	7187	88.4	88.2	96.0	95.2	796.0	788.4	6292	6300
3	09:42:20	7217	88.5	88.2	96.0	95.3	795.1	787.5	6284	6292
4	09:42:21	7247	88.5	88.2	96.0	95.3	795.1	787.5	6276	6276
1	09:42:22	7279	88.4	88.2	95.9	95.3	794.1	788.4	6276	6276
2	09:42:23	7311	88.5	88.2	96.0	95.3	793.2	786.6	6268	6276

**ATTACHMENT VI
(ORD-PIT Data Plot)**

USAir Flight 427

Last minute of data (w/o last 2 secs.)

NTSB # : DCA-94-MA-076



Engine Data

Revised: November 1994

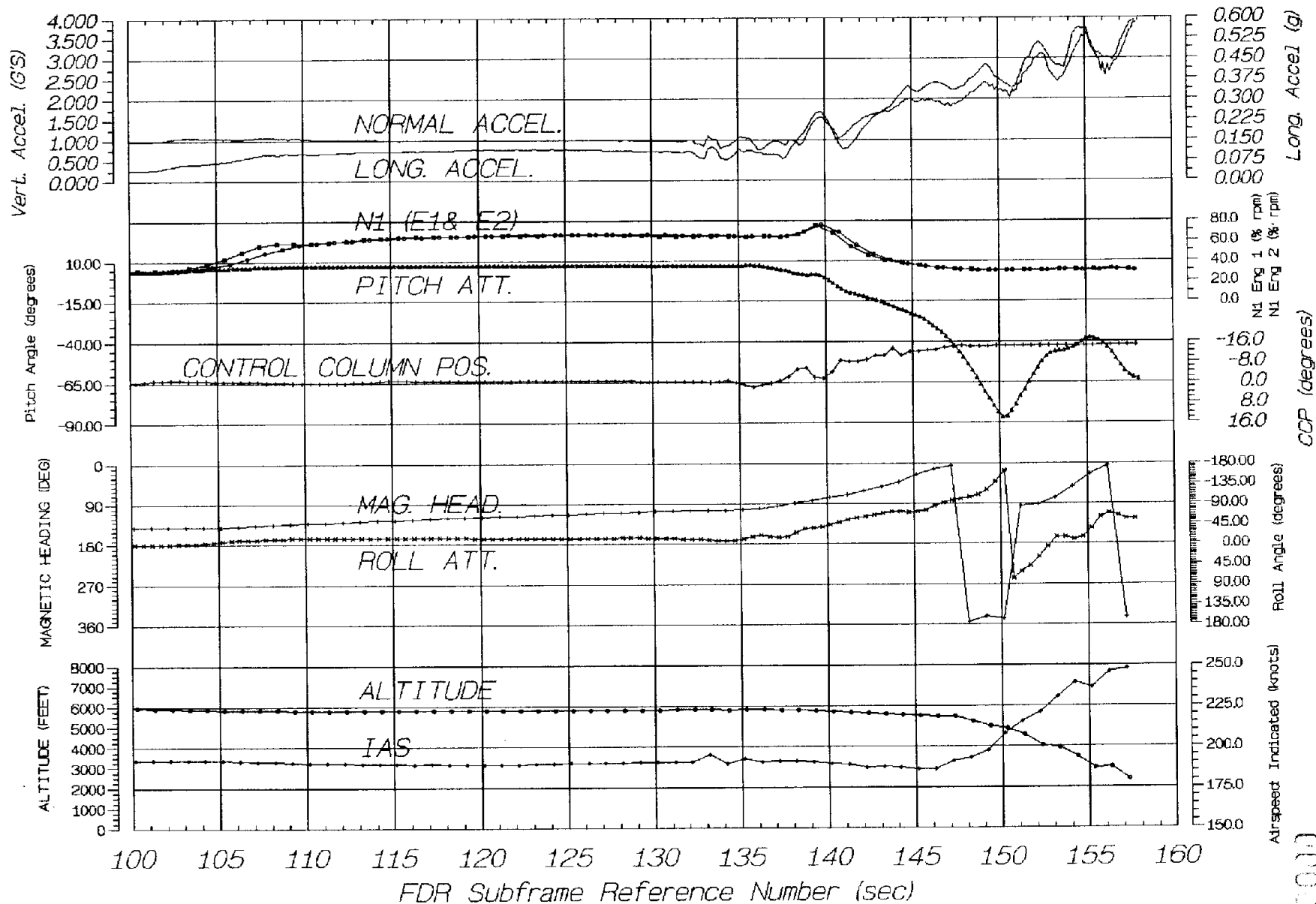
NTSB Flight Recorder Laboratory

000070

USAir Flight 427

Last minute of data (w/o last 2 secs.)

NTSB # : DCA-94-MA-076



Flight Data

Revised: November 1994

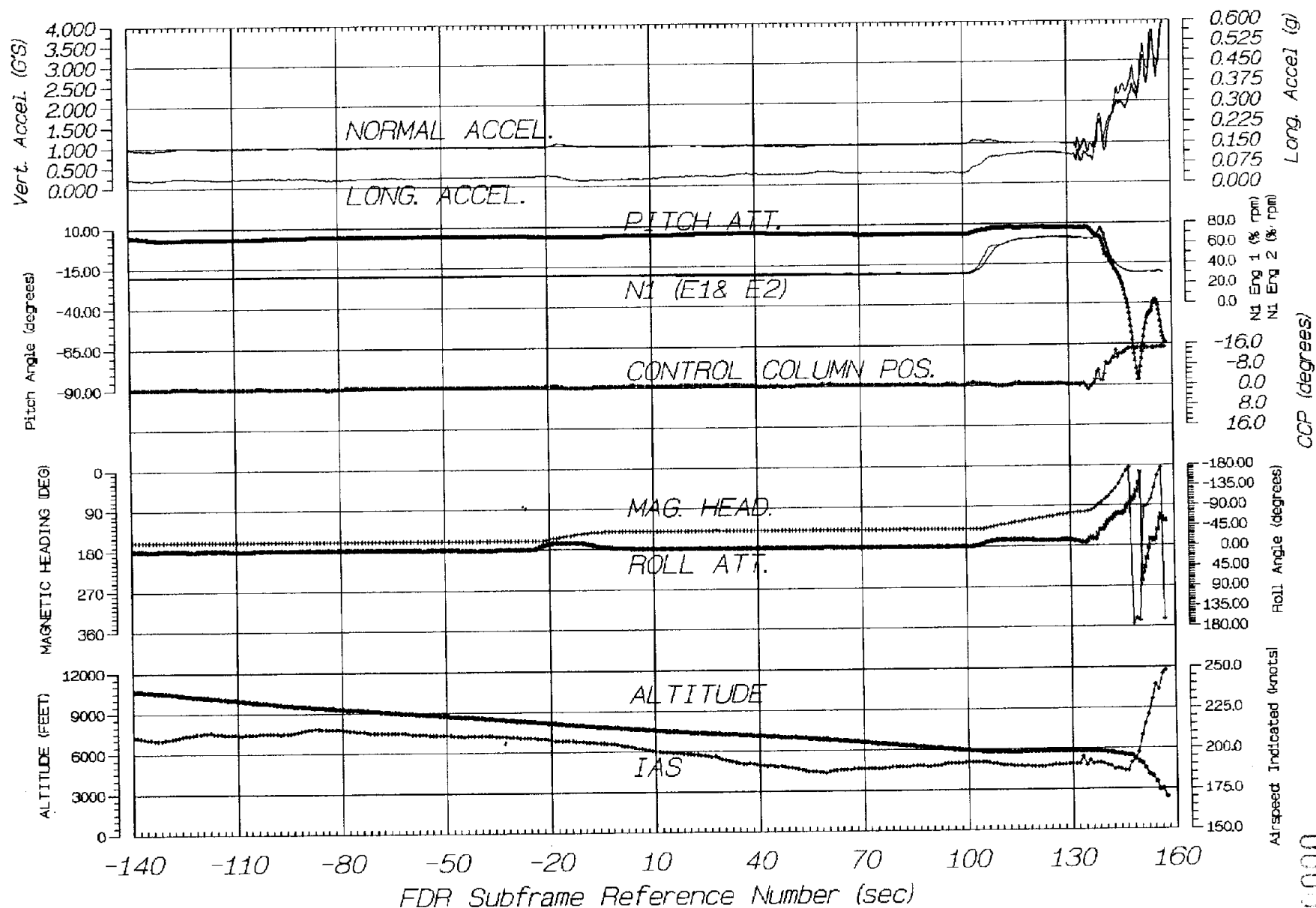
NTSB Flight Recorder Laboratory

000771

USAir Flight 427

Last 5 minutes of data (w/o last 2 secs.)

NTSB # : DCA-94-MA-076



Flight Data

Revised: November 1994

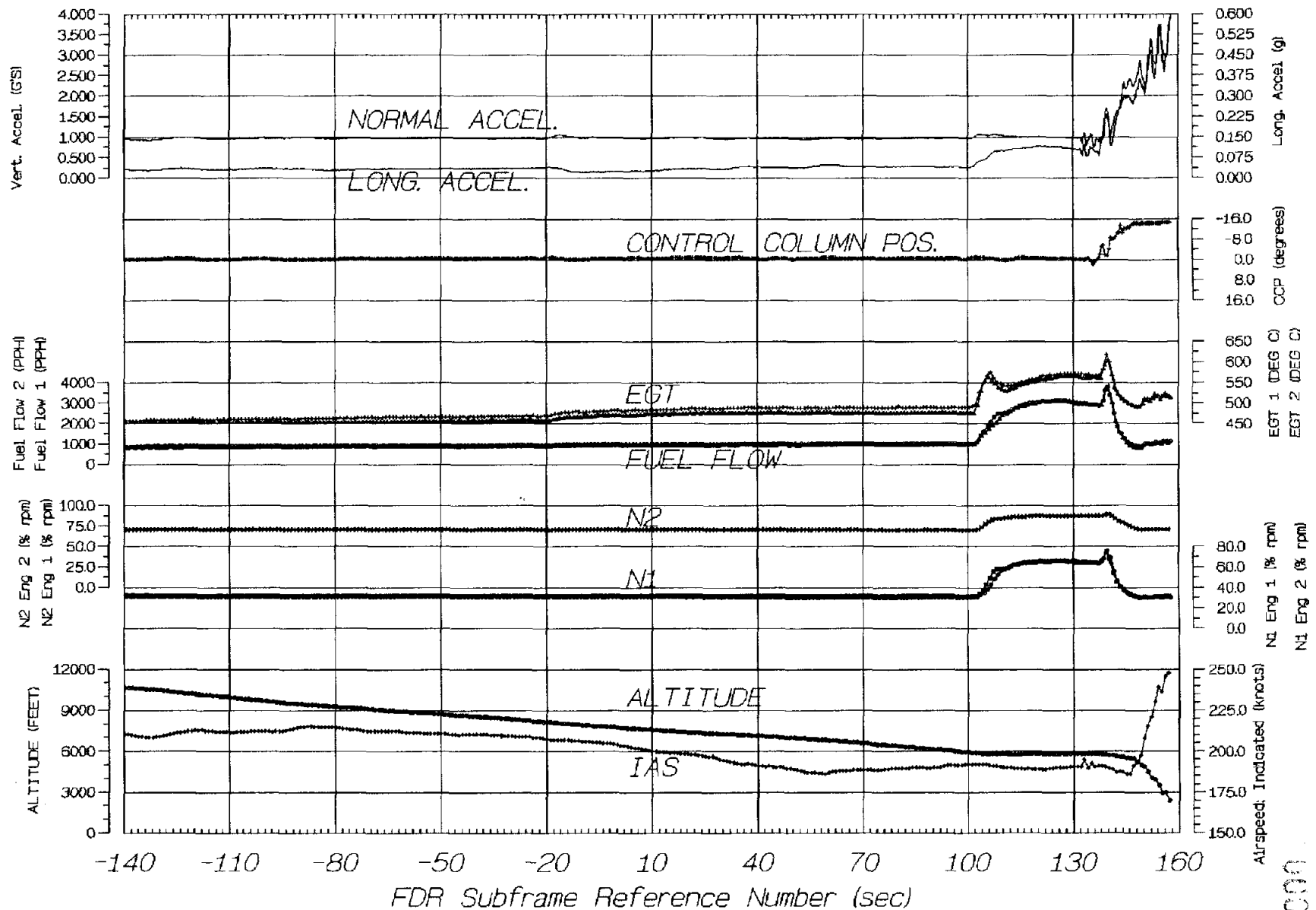
NTSB Flight Recorder Laboratory

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USAir Flight 427

Last 5 minutes of data (w/o last 2 secs.)

NTSB #: DCA-94-MA-076



Engine Data

Revised: November 1994

NTSB Flight Recorder Laboratory

600373

000074

USAIR 427

