

NATIONAL TRANSPORTATION SAFETY BOARD
Office of Research and Engineering
Washington, D.C.

December 18, 2000

Group Chairman's Factual Report - Flight Data Recorder

A. ACCIDENT **DCA00MA030**

Location: Burbank-Glendale-Pasadena Airport, California
Date: March 5, 2000
Time: 1811 Local Time (PST)
Aircraft: Southwest Airlines Co. Flight 1455, a Boeing 737-300, N668SW

B. GROUP IDENTIFICATION

Chairman	:	Thomas R. Jacky, NTSB
Member	:	Prewitt Reaves, Southwest Airlines
Member	:	Craig Heinrichson, Southwest Airlines Pilots Association

C. SUMMARY

On Sunday, March 5, 2000, at 6:11 PST, a Southwest Airlines Boeing 737-300, N668SW, operating as flight 1455 from Las Vegas, Nevada, overran the departure end of runway 08 following a landing at Burbank-Glendale-Pasadena Airport, Burbank, California. The airplane traveled through a fence at the end of the runway and came to rest on a highway outside the airport perimeter. There were no fatalities to the 137 passengers and 5 crewmembers aboard. The flight was on an IFR flight plan and was cleared for a visual approach to land. VFR weather conditions prevailed at the time.

The flight data recorder (FDR), an Allied Signal Aerospace solid-state Flight Data Recorder (SSFDR) model SSFDR 980-4700-001, serial number 792, was removed from N668SW after the accident. The FDR was hand-carried by a representative of the airline to the Vehicle Recorder Division's laboratory in Washington, D.C. for readout and evaluation.

Readout of the FDR was accomplished using the laboratory's playback hardware. Readout was accomplished without significant data loss throughout download of the accident

flight. Plots and tabular listings of pertinent data were then prepared for inclusion in this report.

The FDR data for the accident flight indicate the following:

- 1) During the final five minutes of data prior to airplane touchdown at the Burbank-Glendale-Pasadena Airport, the FDR recorded airspeed values consistently above 200 knots until about 10 seconds prior to touchdown. The airplane's recorded acceleration data indicate that initial airplane touchdown occurred at 37,946 seconds FDR Elapsed Time¹. At the time of touchdown, the airplane's airspeed was recorded as 182 knots.
- 2) During the final five minutes of FDR data prior to airplane touchdown, the maximum wind speed value recorded was 27.5 knots, at 37,838 seconds. After 37,838 seconds, the wind speed values generally decreased, until the value at touchdown of 2.5 knots, and were recorded from 60° to 70° left of the airplane's nose.
- 3) At about 37,750 seconds, the N1 values for both the left and right engines decreased, from 61.35% and 60.48% to approximately 32% and 28%, respectively. The N1 values remained constant for approximately three minutes, until increasing at 37,950 seconds, coincident with the deployment of the airplane's thrust reversers.
- 4) The first indication of trailing edge flap movement, from zero flaps, occurred at 37,860 seconds. The trailing edge flap positions increased to values of about 30 degrees by 37,921 seconds. The values remained constant until time 37,953 seconds (following airplane touchdown), then increased to approximately 40 degrees at 37,956 seconds.
- 5) Observation of the acceleration data indicates that first impact with the airport retaining fence occurred at time 37,966, 20 seconds after touchdown. During the 20 seconds from touchdown to impact, longitudinal acceleration decreased to a local minimum value of -0.572 G's at time 37,959 seconds.
- 6) After touchdown, lateral acceleration remained approximately zero until 37,962 seconds, when lateral acceleration increased coincident with the airplane's right heading change. After the airplane impacted the airport retaining fence, lateral acceleration then decreased and returned to approximately zero.

In the same manner, longitudinal acceleration increased after touchdown to a maximum value of -0.572 G's at 37,959 seconds. The values then decreased, coincident with the change of heading.

¹ All times are FDR Elapsed Time, unless otherwise noted.

- 7) The last valid recorded subframe of data was at 37,986 seconds.

Southwest Airlines also provided the FDR from the airplane that preceded the accident airplane into Burbank. The airline identified the airplane as Flight 1713, a Boeing 737-300, tail number N335SW. The airline removed the FDR from N335SW on Monday, March 6, 2000, the day following the accident. The FDR was hand-carried to the NTSB FDR Laboratory on March 10, 2000. The contents of N335SW's FDR were downloaded and, using the flight history of the airplane supplied by Southwest Airlines, the airplane's approach and landing, as Flight 1713, into Burbank Airport, were identified and plotted. In addition, the entire contents of the FDR were downloaded and the previous approaches and landings of the accident airplane observed. During the 25-hours of data, 20 landings were recorded in addition to Flight 1713's landing at Burbank.

D. DETAILS OF INVESTIGATION

1. Southwest Airlines Flight 14S5, N668SW

A. Description of Recorded Data

This model FDR records airplane flight information in a digital format using solid-state Flash Memory as the recording medium. The FDR records 64 words of digital information every second, with each word 12 bits in length. Each grouping of 64 words (each second) is called a subframe. Each subframe has a unique 12-bit synchronization (sync) word identifying it as either subframe 1, 2, 3, or 4. The sync word is the first word in each subframe. Each grouping of consecutive 1, 2, 3, and 4 subframes comprise a frame (i.e., four seconds of data). The data stream is "in sync" when successive sync words appear at the proper 64-word intervals. Each data parameter (e.g. altitude, heading, airspeed) 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 sequence and sync will be lost along with the surrounding data. An interruption of electrical power to the recorder will also interrupt the serial data stream and cause a loss of sync.

The airplane manufacturer provided a document with information for converting the recorded information from binary to engineering units. A listing of the FDR parameters described by the document is included in Attachment 1.

The FDR's recording medium is required to retain the airplane's most recent 25 hours of operation. Erasing the oldest data and replacing it with the newest accomplishes this.

B. Examination and Readout

The FDR removed from N668SW was sent to the Vehicle Recorder Division's laboratory in Washington, D.C. following the accident. Upon receipt, the recorder was examined for damage. The FDR's dust cover and internal electronic components exhibited no indication of damage or excessive wear.

The FDR was connected to a desktop computer to download data from the FDR into computer memory. Using software provided by the recorder manufacturer, the entire contents of the FDR were downloaded into an NTSB computer. The resultant raw data file was then formatted into a file structure compatible with the Safety Board's Recovery, Analysis, and Presentation System (RAPS) software. The file was then transferred to the RAPS workstation.

The downloaded data were converted from the recorded binary values (0's and 1's) to decimal counts (0 to 4,095) and finally to engineering units (e.g., feet, knots, degrees, etc.) using conversion formulas obtained from the airplane manufacturer. FDR elapsed time, or subframe reference number, from the beginning of the data transcription was used as the time base for data output. The FDR also recorded an independent time source (e.g., Frame Counter) to provide additional timing information.

The entire contents of the accident FDR (i.e., 25 hours) were transcribed to a computer file. Eleven landings and eleven takeoffs were recorded during the previous 25 hours of operation.

C. Data Printout and Graphs

Tabular printouts of selected parameters for the final 5 minutes of recorded data, from 37,690 to 37,986 seconds, are included in Attachment 2.

Six plots of selected parameters during the accident sequence are included in Attachment 3. The plots cover the time period from 37,690 to 37,990 seconds.

2. Southwest Airlines Flight 1713, N335SW

A. Description of Recorded Data

Southwest Airlines identified the aircraft that immediately preceded the accident airplane into Burbank as Southwest Flight 1713 and tail number N335SW. The airplane's FDR, an Allied Signal Solid-State Universal Flight Data Recorder (SSUFDR), part number 980-4120-KXUS, serial number 509, was removed from N335SW and sent to the Vehicle Recorder Laboratory in Washington, D.C., for readout and evaluation.

This model FDR records airplane flight information in a digital format using solid-state Flash Memory as the recording medium. The FDR records 64 words of digital information every second, with each word 12 bits in length. Each grouping of 64 words (each second) is called a subframe. Each subframe has a unique 12-bit synchronization (sync) word identifying it as either subframe 1, 2, 3, or 4. The sync word is the first word in each subframe. Each grouping of consecutive 1, 2, 3, and 4 subframes comprise a frame (i.e., four seconds of data). The data stream is "in sync" when successive sync words appear at the proper 64-word intervals. Each data parameter (e.g. altitude, heading, airspeed) 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 sequence and sync will be lost along with the surrounding data. An interruption of electrical power to the recorder will also interrupt the serial data stream and cause a loss of sync.

The FDR's recording medium is required to retain the airplane's most recent 25 hours of operation. Erasing the oldest data and replacing it with the newest accomplishes this.

N335SW's FDR recorded the same parameters as N668SW, the accident airplane. The airplane manufacturer provided a document with information for converting the recorded information from binary to engineering units. A listing of the FDR parameters described by the document is included in Attachment 1.

B. Examination and Readout

The FDR removed from N335SW was hand-carried to the Vehicle Recorder Division's laboratory in Washington, D.C. following the accident. Upon receipt, the recorder was examined for damage. The FDR's dust cover and internal electronic components exhibited no indication of damage or excessive wear.

The FDR was connected to a desktop computer to download data from the FDR into computer memory. Using software provided by the recorder manufacturer, the entire contents of the FDR were downloaded into an NTSB computer. The resultant raw data file was then formatted into a file structure compatible with the Safety Board's Recovery, Analysis, and Presentation System (RAPS) software. The file was then transferred to the RAPS workstation.

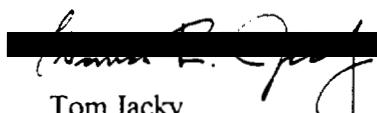
The downloaded data were converted from the recorded binary values (0's and 1's) to decimal counts (0 to 4,095) and finally to engineering units (e.g., feet, knots, degrees, etc.) using conversion formulas obtained from the airplane manufacturer. FDR elapsed time, or subframe reference number, from the beginning of the data transcription was used as the time base for data output. The FDR also recorded an independent time source (e.g., Frame Counter) to provide additional timing information.

The entire contents of the accident FDR (i.e., 25 hours) were transcribed to a computer file. Eleven landings and eleven takeoffs were recorded during the previous 25 hours of operation.

C. Data Printout and Graphs

A tabular printout of selected parameters for the final approach and landing, from 70,780 to 70,839 seconds, are included in Attachment 4.

Six plots of selected parameters during the accident sequence are included in Attachment 5. The plots cover the time period from 70,640 to 70,900 seconds.


Tom Jacky
Aerospace Engineer

Attachments

1. N668SW and N335SW FDR Parameter List
2. Tabular Listings of Southwest Airlines Flight 1455 FDR Data
3. Plots of Southwest Airlines Flight 1455 FDR Data
4. Tabular Listings of Southwest Airlines Flight 1713 FDR Data
5. Plots of Southwest Airlines Flight 1713 FDR Data

ATTACHMENT 1

N668SW and N335SW FDR Parameter List

N668SW and N713SW Parameter Lists

Acceleration - Lateral	Local Limited Master	TO/GA
Acceleration - Longitudinal	Longitude	Total Air Temperature
Acceleration - Vertical	Magnetic Heading	V/S Mode
ALT Acquire	MCP Speed	VHF KEYING CENTER
ALT Hold	N1 - Engine 1	VHF KEYING LEFT
Altitude - Coarse	N1 - Engine 2	VHF KEYING RIGHT
Altitude - Fine	Pitch Attitude	VNAV Mode
Approach	Pitch Trim Position	VOR/LOC
Autopilot ON/OFF	Roll Attitude	VOR/LOC
CMD A	Rudder Pedal Position	Wind Direction
CMD B	Rudder Position	Wind Speed
Computed Airspeed	Single Channel	
Control Column Position	Slat 1 Full Extend	
Control Wheel Position	Slat 1 Intransit	
CWS A	Slat 1 Mid Extend	
CWS B	Slat 2 Full Extend	
CWS Pitch	Slat 2 Intransit	
CWS Roll	Slat 2 Mid Extnd	
Drift Angle	Slat 3 Full Extend	
Elevator Position	Slat 3 Intransit	
F/D A On	Slat 3 Mid Extend	
F/D B On	Slat 4 Full Extend	
Flap 1 Extend	Slat 4 Intransit	
Flap 1 Intransit	Slat 4 Mid Extend	
Flap 2 Extend	Slat 5 Full Extnd	
Flap 2 Intransit	Slat 5 Intransit	
Flap 3 Extend	Slat 5 Mid Extend	
Flap 3 Intransit	Slat 6 Full Extend	
Flap 4 Extend	Slat 6 Intransit	
Flap 4 Intransit	Slat 6 Mid Extend	
Flare Engage	Static Air Temperature	
Frame Counter	Static Pressure	
G/S Engage	T/R Deploy Left INBOARD	
Greenwich Mean Time	T/R Deploy Left OUTBOARD	
Groundspeed	T/R Deploy Right INBOARD	
HDG Select	T/R Deploy Right OUTBOARD	
Impact Pressure	T/R Unlock Left INBOARD	
Latitude	T/R Unlock Left OUTBOARD	
Left Aileron Position	T/R Unlock Right INBOARD	
Left Elevator Position	T/R Unlock Right OUTBOARD	
Level Change	TE Flap Position Left	
LNAV Mode	TE Flap Position Right	

ATTACHMENT 2

Tabular Listings of Southwest Airlines Flight 1455 FDR Data

FDR	CAS	Long.	PITCH	ROLL	ALTITUDE	HEAD	LATG	Vert.	Wind	Wind	Drift	Groundspeed
ELAPSED		Accel						Accel.	Speed	Direction	Angle	
TIME IN									TRUE			
SECONDS	(knots)	(g)	(degs.)	(degs.)	(FEET)	(DEG)	(g)	(G'S)	(kts)	(DEG)	(DEG)	(knots)
37690	241.5	-0.01	1.41	-0.35	5456	160.66	-0.004	0.987	23.5	-87.19	-5.19	262
		-0.01					0.004	1.005				
		-0.012					-0.002	1.005				
		-0.012					-0.006	1.005				
								1.005				
								0.996				
								0.987				
								0.987				
37691	241.5	-0.014	1.41	-0.7	5428	160.66	-0.002	0.987	24	-88.94	-5.27	262
		-0.014					0.002	0.978				
		-0.014					0	0.969				
		-0.01					-0.004	0.969				
								0.969				
								0.969				
								0.978				
								0.996				
37692	241.5	-0.008	1.76	-0.35	5404	160.66	-0.004	1.024	24	-88.59	-5.27	262
		-0.006					0.004	1.024				
		-0.006					0.004	1.033				
		-0.006					0.004	1.042				
								1.042				
								1.042				
								1.042				
37693	241	-0.006	2.11	-0.35	5380	160.66	0.006	1.051	23.5	-87.19	-5.19	262
		-0.006					0.006	1.051				
		-0.006					0.008	1.042				
		-0.006					0	1.033				
								1.042				
								1.033				
								1.015				
								1.015				

FDR	CAS	Long.	PITCH	ROLL	ALTITUDE	HEAD	LATG	Vert.	Wind	Wind	Drift	Groundspeed
ELAPSED		Accel						Accel.	Speed	Direction	Angle	
TIME IN									TRUE			
SECONDS	(knots)	(g)	(degs.)	(degs.)	(FEET)	(DEG)	(g)	(G'S)	(kts)	(DEG)	(DEG)	(knots)
37694	240.5	-0.008	2.29	0.35	5360	160.31	0.004	1.015	23	-84.73	-5.01	262
		-0.01					-0.008	1.024				
		0					-0.004	1.024				
		-0.004					0	1.024				
								1.005				
								1.005				
								1.051				
								1.051				
37695	240.5	-0.004	2.64	-0.35	5340	160.31	-0.01	1.051	23	-83.32	-5.01	261.5
		0					-0.01	1.051				
		0					-0.008	1.051				
		0					-0.008	1.06				
								1.051				
								1.06				
								1.051				
								1.06				
37696	241	0.002	2.99	-0.7	5320	160.31	-0.004	1.051	23	-86.48	-5.1	261.5
		0.002					-0.004	1.051				
		0.002					0	1.051				
		0.002					0.002	1.051				
								1.042				
								1.042				
								1.042				
								1.042				
37697	240.5	0.002	3.52	-0.7	5300	160.31	0	1.051	23.5	-86.13	-5.19	261
		0.002					-0.002	1.06				
		0.002					0.002	1.06				
		0.006					0.01	1.07				
								1.07				
								1.06				
								1.06				
								1.06				

FDR	CAS	Long.	PITCH	ROLL	ALTITUDE	HEAD	LATG	Vert.	Wind	Wind	Drift	Groundspeed
ELAPSED		Accel						Accel.	Speed	Direction	Angle	
TIME IN									TRUE			
SECONDS	(knots)	(g)	(degs.)	(degs.)	(FEET)	(DEG)	(g)	(G'S)	(kts)	(DEG)	(DEG)	(knots)
37698	239	0	3.87	-0.35	5284	160.31	-0.004	1.079	23	-82.62	-5.1	261
		0.002					0.006	1.051				
		0.002					0.01	1.042				
		0.002					-0.014	1.051				
								1.042				
								1.042				
								1.051				
								1.051				
37699	239	0.002	4.04	0.7	5272	159.96	-0.016	1.07	22.5	-82.62	-4.92	260
		0.002					-0.004	1.06				
		0.002					-0.01	1.051				
		0.002					-0.006	1.051				
								1.042				
								1.051				
								1.051				
								1.06				
37700	239	0.004	4.22	0	5260	159.96	-0.006	1.06	22.5	-84.73	-5.01	259.5
		0.002					-0.006	1.051				
		0					-0.008	1.051				
		0					-0.006	1.051				
								1.042				
								1.042				
								1.033				
								1.024				
37701	238	0	4.39	-0.7	5248	160.31	-0.002	1.024	23	-84.37	-5.1	259
		0.002					-0.004	1.024				
		0.002					-0.006	1.024				
		0.002					-0.004	1.033				
								1.033				
								1.033				
								1.042				
								1.051				

FDR	CAS	Long	PITCH	ROLL	ALTITUDE	HEAD	LATG	Vert.	Wind	Wind	Drift	Groundspeed
ELAPSED		Accel						Accel	Speed	Direction	Angle	
TIME IN									TRUE			
SECONDS	(knots)	(g)	(degs.)	(degs.)	(FEET)	(DEG)	(g)	(G'S)	(kts)	(DEG)	(DEG)	(knots)
37702	238.5	0.002	4.92	-0.35	5240	160.31	0	1.051	23.5	-87.54	-5.19	258
		0					-0.006	1.051				
		0.002					-0.008	1.051				
		0					-0.01	1.051				
								1.042				
								1.042				
								1.06				
								1.06				
37703	238.5	0.002	5.1	-0.35	5232	160.31	-0.012	1.051	24	-88.94	-5.36	257
		0.004					-0.008	1.051				
		0.002					-0.008	1.06				
		0.002					-0.008	1.051				
								1.06				
								1.06				
								1.051				
								1.051				
37704	237.5	0.004	5.45	-0.7	5224	160.31	-0.002	1.051	25.5	-88.94	-5.63	256
		0.004					-0.004	1.051				
		0.006					-0.004	1.051				
		0.006					-0.006	1.042				
								1.042				
								1.051				
								1.06				
								1.06				
37705	237	0.008	5.62	-0.7	5220	160.66	-0.006	1.06	26	-89.3	-5.89	255
		0.01					-0.002	1.051				
		0.012					-0.002	1.051				
		0.012					0.002	1.051				
								1.051				
								1.051				
								1.051				
								1.051				

FDR	CAS	Long.	PITCH	ROLL	ALTITUDE	HEAD	LATG	Vert.	Wind	Wind	Drift	Groundspeed
ELAPSED		Accel						Accel.	Speed	Direction	Angle	
TIME IN									TRUE			
SECONDS	(knots)	(g)	(degs.)	(degs.)	(FEET)	(DEG)	(g)	(G'S)	(kts)	(DEG)	(DEG)	(knots)
37706	236	0.014	5.98	-0.7	5220	160.66	0	1.051	26.5	-89.3	-6.06	254
		0.016					0.002	1.042				
		0.02					0.006	1.042				
		0.022					0.004	1.042				
								1.042				
								1.051				
								1.06				
								1.051				
37707	235	0.024	6.15	0	5220	160.66	0.002	1.051	26.5	-88.94	-6.06	253.5
		0.028					0.008	1.051				
		0.031					0.004	1.051				
		0.035					0.006	1.051				
								1.051				
								1.051				
								1.042				
								1.051				
37708	234.5	0.037	6.33	0	5220	160.66	0.004	1.051	26.5	-89.3	-6.06	252.5
		0.039					0	1.06				
		0.039					0	1.06				
		0.041					0.004	1.06				
								1.051				
								1.042				
								1.042				
								1.033				
37709	234	0.041	6.33	0	5224	160.66	0.006	1.033	26	-89.65	-5.98	252
		0.043					0.004	1.024				
		0.043					-0.002	1.015				
		0.045					0	1.024				
								1.024				
								1.024				
								1.024				
								1.033				

FDR	CAS	Long.	PITCH	ROLL	ALTITUDE	HEAD	LATG	Vert.	Wind	Wind	Drift	Groundspeed
ELAPSED		Accel					Accel	Speed	Direction	Angle		
TIME IN								TRUE				
SECONDS	(knots)	(g)	(degs.)	(degs.)	(FEET)	(DEG)	(g)	(G'S)	(kts)	(DEG)	(DEG)	(knots)
37710	233.5	0.046	6.33	0	5228	160.66	0.002	1.033	26	-88.59	-5.98	251.5
		0.045					0	1.033				
		0.047					0.004	1.033				
		0.049					0.004	1.024				
								1.015				
								1.015				
								1.015				
								1.015				
								1.015				
37711	232.5	0.049	6.33	0	5232	160.66	0.002	1.005	25.5	-87.54	-5.89	251
		0.053					0	1.005				
		0.053					0	1.005				
		0.055					0	1.005				
								1.015				
								1.015				
								1.005				
								0.996				
37712	232.5	0.055	6.15	0	5236	160.31	0	0.996	25	-87.54	-5.8	251
		0.057					-0.002	0.987				
		0.059					-0.002	0.987				
		0.057					0	0.996				
								1.005				
								1.005				
								1.015				
								1.005				
37713	232.5	0.059	6.15	0	5240	160.31	0.002	0.996	24.5	-88.59	-5.71	250.5
		0.057					0.002	0.996				
		0.059					0.002	0.996				
		0.059					0.004	0.996				
								0.996				
								1.005				
								1.005				
								0.996				

FDR	CAS	Long.	PITCH	ROLL	ALTITUDE	HEAD	LATG	Vert.	Wind	Wind	Drift	Groundspeed
ELAPSED		Accel						Accel.	Speed	Direction	Angle	
TIME IN									TRUE			
SECONDS	(knots)	(g)	(degs.)	(degs.)	(FEET)	(DEG)	(g)	(G'S)	(kts)	(DEG)	(DEG)	(knots)
37714	232.5	0.061	6.15	0.35	5244	160.31	0	0.996	24	-88.59	-5.63	250.5
		0.059					0.002	1.005				
		0.061					-0.006	1.015				
		0.057					-0.002	1.005				
								0.996				
								0.996				
								0.987				
								0.987				
37715	232.5	0.057	5.98	0.35	5248	159.96	-0.002	0.969	23.5	-88.59	-5.54	250.5
		0.055					-0.002	0.969				
		0.057					-0.002	0.96				
		0.057					-0.006	0.96				
								0.96				
								0.978				
								0.987				
								0.996				
37716	232.5	0.055	5.98	0	5252	159.96	-0.002	0.996	23.5	-88.94	-5.45	250
		0.055					-0.006	0.996				
		0.055					-0.006	0.996				
		0.053					0	0.996				
								0.987				
								0.987				
								0.978				
								0.969				
37717	232	0.053	5.62	0	5256	159.96	-0.002	0.96	23.5	-88.24	-5.45	250
		0.049					-0.004	0.951				
		0.049					-0.006	0.96				
		0.051					-0.008	0.951				
								0.951				
								0.951				
								0.96				
								0.96				

FDR	CAS	Long.	PITCH	ROLL	ALTITUDE	HEAD	LATG	Vert.	Wind	Wind	Drift	Groundspeed
ELAPSED		Accel						Accel.	Speed	Direction	Angle	
TIME IN									TRUE			
SECONDS	(knots)	(g)	(degs.)	(degs.)	(FEET)	(DEG)	(g)	(G'S)	(kts)	(DEG)	(DEG)	(knots)
37718	231.5	0.053	5.62	0	5256	159.96	-0.004	0.969	23.5	-87.19	-5.45	250
		0.055					0	0.978				
		0.055					0.004	0.967				
		0.053					-0.004	1.005				
								1.005				
								1.005				
								1.015				
								1.005				
37719	232	0.053	5.45	0.35	5260	159.96	-0.006	0.996	23	-88.94	-5.36	250
		0.051					-0.004	0.967				
		0.051					-0.006	0.967				
		0.051					-0.008	0.967				
								0.978				
								0.978				
								0.978				
								0.978				
37720	231.5	0.051	5.45	0.35	5260	159.96	-0.008	0.969	23.5	-87.89	-5.36	250
		0.051					-0.008	0.969				
		0.051					-0.008	0.969				
		0.051					-0.004	0.969				
								0.969				
								0.969				
								0.969				
								0.969				
37721	231	0.051	5.45	0	5264	159.96	-0.002	0.978	23.5	-87.54	-5.45	250
		0.051					-0.004	0.967				
		0.051					-0.002	0.978				
		0.053					-0.002	0.978				
								0.978				
								0.969				
								0.978				
								0.978				

FDR	CAS	Long.	PITCH	ROLL	ALTITUDE	HEAD	LATG	Vert.	Wind	Wind	Drift	Groundspeed
ELAPSED		Accel						Accel.	Speed	Direction	Angle	
TIME IN									TRUE			
SECONDS	(knots)	(g)	(degs.)	(degs.)	(FEET)	(DEG)	(g)	(G'S)	(kts)	(DEG)	(DEG)	(knots)
37722	230.5	0.051	5.27	0	5264	159.96	0	0.978	23.5	-85.43	-5.36	250
		0.051					-0.002	0.969				
		0.051					-0.002	0.969				
		0.053					-0.002	0.969				
								0.969				
								0.96				
								0.96				
								0.96				
								0.96				
37723	229	0.053	5.27	0.35	5264	159.96	-0.004	0.969	23	-81.56	-5.27	250
		0.051					-0.004	0.969				
		0.053					-0.004	0.969				
		0.053					-0.002	0.969				
								0.969				
								0.96				
								0.96				
								0.96				
37724	229	0.053	5.1	0.7	5260	159.61	-0.004	0.969	23	-80.86	-5.19	250
		0.053					-0.002	0.969				
		0.053					-0.002	0.969				
		0.053					-0.004	0.969				
								0.969				
								0.969				
								0.969				
								0.978				
37725	229.5	0.053	5.27	0.7	5260	159.61	-0.006	0.978	22.5	-81.91	-5.1	250
		0.055					-0.006	0.978				
		0.057					-0.004	0.978				
		0.057					-0.002	0.987				
								0.996				
								0.996				
								0.996				
								0.996				

FDR	CAS	Long.	PITCH	ROLL	ALTITUDE	HEAD	LATG	Vert.	Wind	Wind	Drift	Groundspeed
ELAPSED		Accel						Accel.	Speed	Direction	Angle	
TIME IN									TRUE			
SECONDS	(knots)	(g)	(degs.)	(degs.)	(FEET)	(DEG)	(g)	(G'S)	(kts)	(DEG)	(DEG)	(knots)
37726	230.5	0.057	5.1	0.7	5256	159.61	-0.004	0.996	21.5	-83.67	-5.01	250
		0.059					-0.002	0.996				
		0.057					-0.004	0.996				
		0.057					-0.012	0.996				
								0.987				
								0.987				
								0.987				
								0.987				
37727	231	0.059	5.27	0.35	5256	159.61	-0.006	0.978	21.5	-83.67	-4.92	250.5
		0.063					0	0.987				
		0.063					-0.002	1.005				
		0.061					-0.006	1.033				
								1.042				
								1.051				
								1.051				
								1.042				
37728	231	0.057	5.27	0.35	5252	159.61	-0.012	1.024	21.5	-83.67	-4.92	250.5
		0.055					-0.01	1.015				
		0.053					-0.02	0.987				
		0.059					-0.018	1.005				
								0.987				
								0.978				
								0.951				
								0.969				
37729	230	0.061	5.45	-0.35	5252	159.61	-0.018	0.996	22.5	-81.56	-5.01	250.5
		0.069					-0.014	1.015				
		0.061					-0.008	1.015				
		0.061					-0.012	1.015				
								1.024				
								1.042				
								1.024				
								1.015				

FDR	CAS	Long.	PITCH	ROLL	ALTITUDE	HEAD	LATG	Vert.	Wind	Wind	Drift	Groundspeed
ELAPSED		Accel						Accel.	Speed	Direction	Angle	
TIME IN									TRUE			
SECONDS	(knots)	(g)	(deg.)	(degs.)	(FEET)	(DEG)	(g)	(G'S)	(kts)	(DEG)	(DEG)	(knots)
37730	230.5	0.061	5.45	-1.05	5252	159.96	0.01	1.024	23.5	-82.97	-5.36	250.5
		0.059					0.006	1.005				
		0.055					-0.014	1.005				
		0.057					0.002	0.987				
								0.987				
								0.987				
								1.024				
								1.024				
37731	231.5	0.059	5.45	-0.35	5248	159.96	-0.006	1.024	23.5	-86.13	-5.36	251
		0.059					0.002	1.015				
		0.055					0	1.033				
		0.053					0.002	1.024				
								1.015				
								0.996				
								0.996				
								0.987				
37732	231.5	0.055	5.45	0.35	5248	159.96	-0.002	0.978	23	-86.48	-5.27	250.5
		0.055					-0.004	0.978				
		0.055					-0.008	0.987				
		0.059					-0.01	0.996				
								1.005				
								1.015				
								1.015				
								1.024				
37733	231	0.059	5.62	0.7	5248	159.96	-0.002	1.024	23	-84.37	-5.27	250.5
		0.061					-0.002	1.042				
		0.059					-0.002	1.024				
		0.057					-0.01	1.015				
								1.015				
								1.015				
								1.015				
								1.015				

FDR	CAS	Long.	PITCH	ROLL	ALTITUDE	HEAD	LATG	Vert.	Wind	Wind	Drift	Groundspeed
ELAPSED		Accel						Accel.	Speed	Direction	Angle	
TIME IN									TRUE			
SECONDS	(knots)	(g)	(degs.)	(degs.)	(FEET)	(DEG)	(g)	(G'S)	(kts)	(DEG)	(DEG)	(knots)
37734	231.5	0.059	5.45	0.7	5248	159.96	-0.004	1.015	23	-84.73	-5.27	250.5
		0.057					-0.008	1.024				
		0.057					-0.008	1.024				
		0.057					-0.008	1.015				
								0.996				
								0.978				
								0.996				
								0.987				
37735	230	0.055	5.45	0.35	5252	159.96	-0.008	0.978	23	-82.62	-5.27	250.5
		0.057					0	0.978				
		0.059					-0.002	0.969				
		0.061					-0.002	0.978				
								0.996				
								1.005				
								1.015				
								1.033				
37736	230.5	0.059	5.45	0.35	5252	159.96	-0.004	1.051	23	-83.67	-5.19	251
		0.059					-0.012	1.033				
		0.059					-0.004	1.015				
		0.059					-0.004	1.005				
								1.015				
								1.005				
								1.005				
								1.005				
37737	230	0.057	5.45	-0.35	5252	159.96	-0.006	1.015	23.5	-82.27	-5.27	251
		0.059					-0.006	1.015				
		0.059					-0.004	0.996				
		0.057					-0.01	0.996				
								1.005				
								0.996				
								0.987				
								0.987				

FDR	CAS	Long.	PITCH	ROLL	ALTITUDE	HEAD	LATG	Vert.	Wind	Wind	Drift	Groundspeed
ELAPSED		Accel						Accel.	Speed	Direction	Angle	
TIME IN									TRUE			
SECONDS	(knots)	(g)	(degs.)	(degs.)	(FEET)	(DEG)	(g)	(G'S)	(kts)	(DEG)	(DEG)	(knots)
37738	230.5	0.057	5.27	-0.35	5256	159.96	0	0.996	23.5	-82.97	-5.36	251
		0.057					0.006	1.005				
		0.057					0.002	0.996				
		0.057					0.006	0.996				
								0.996				
								0.996				
								1.005				
								1.024				
37739	231.5	0.057	5.27	0.35	5256	159.96	0.002	1.024	22.5	-85.43	-5.27	251
		0.057					0	1.015				
		0.053					-0.006	1.005				
		0.053					-0.004	0.996				
								0.996				
								0.996				
								0.987				
								0.978				
37740	232	0.053	5.27	0.7	5260	159.61	-0.004	0.978	22.5	-86.13	-5.1	251
		0.053					-0.004	0.978				
		0.053					-0.014	0.987				
		0.053					-0.012	0.987				
								0.987				
								0.996				
								0.987				
								0.987				
37741	231.5	0.055	5.27	0.35	5260	159.96	-0.008	0.996	22.5	-85.43	-5.19	251
		0.057					-0.004	0.996				
		0.057					-0.004	0.996				
		0.057					-0.006	0.996				
								1.005				
								1.005				
								1.005				
								1.005				

FDR	CAS	Long.	PITCH	ROLL	ALTITUDE	HEAD	LATG	Vert.	Wind	Wind	Drift	Groundspeed
ELAPSED		Accel						Accel.	Speed	Direction	Angle	
TIME IN									TRUE			
SECONDS	(knots)	(g)	(degs.)	(degs.)	(FEET)	(DEG)	(g)	(G'S)	(kts)	(DEG)	(DEG)	(knots)
37742	231.5	0.057	5.1	0.35	5264	159.96	-0.002	0.996	22.5	-84.37	-5.19	251
		0.055					-0.004	0.996				
		0.053					-0.004	0.987				
		0.055					-0.004	0.987				
								0.978				
								0.978				
								0.978				
								0.978				
37743	231.5	0.055	4.92	0.35	5264	159.96	-0.004	0.978	22.5	-84.37	-5.19	251.5
		0.055					-0.004	0.978				
		0.055					-0.002	0.978				
		0.055					-0.002	0.978				
								0.978				
								0.987				
								0.978				
								0.978				
37744	231	0.053	4.92	0.35	5264	159.61	-0.006	0.978	22.5	-83.32	-5.1	251.5
		0.053					-0.004	0.978				
		0.053					-0.006	0.978				
		0.053					-0.006	0.987				
								0.978				
								0.978				
								0.978				
								0.969				
37745	231.5	0.053	4.92	0.35	5268	159.61	-0.002	0.969	22	-83.32	-5.01	251.5
		0.053					-0.004	0.969				
		0.051					-0.004	0.969				
		0.051					-0.002	0.969				
								0.969				
								0.969				
								0.969				
								0.978				

FDR	CAS	Long.	PITCH	ROLL	ALTITUDE	HEAD	LATG	Vert.	Wind	Wind	Drift	Groundspeed
ELAPSED		Accel						Accel.	Speed	Direction	Angle	
TIME IN									TRUE			
SECONDS	(knots)	(g)	(degs.)	(degs.)	(FEET)	(DEG)	(g)	(G'S)	(kts)	(DEG)	(DEG)	(knots)
37746	232	0.051	4.92	0.35	5268	159.61	-0.004	0.969	22	-84.02	-5.01	252
		0.051					-0.002	0.969				
		0.051					-0.002	0.969				
		0.051					-0.006	0.969				
								0.969				
								0.969				
								0.96				
								0.969				
								0.969				
								0.969				
								0.978				
37747	232	0.051	4.92	0.35	5264	159.61	-0.008	0.969	22	-84.37	-4.92	252
		0.051					-0.008	0.969				
		0.051					-0.008	0.969				
		0.053					-0.01	0.969				
								0.969				
								0.969				
								0.969				
								0.978				
37748	231	0.053	4.92	0.35	5264	159.61	-0.006	0.976	22.5	-81.21	-5.01	252
		0.053					-0.006	0.978				
		0.053					-0.006	0.978				
		0.053					0.002	0.978				
								0.978				
								0.978				
								0.978				
								0.987				
37749	232	0.053	4.75	0.35	5260	159.61	0	0.987	22	-82.97	-5.01	252.5
		0.053					0	0.987				
		0.051					0	0.978				
		0.051					-0.004	0.978				
								0.978				
								0.978				
								0.969				
								0.969				

FDR	CAS	Long.	PITCH	ROLL	ALTITUDE	HEAD	LATG	Vert.	Wind	Wind	Drift	Groundspeed
ELAPSED		Accel						Accel.	Speed	Direction	Angle	
TIME IN									TRUE			
SECONDS	(knots)	(g)	(degs.)	(degs.)	(FEET)	(DEG)	(g)	(G'S)	(kts)	(DEG)	(DEG)	(knots)
37750	231.5	0.051	4.92	1.05	5260	159.61	0	0.969	22	-81.91	-4.92	252.5
		0.049					0	0.978				
		0.053					0	0.978				
		0.051					-0.002	0.978				
								0.987				
								0.996				
								1.005				
								1.024				
37751	232.5	0.049	4.92	1.41	5256	159.61	-0.014	0.996	22	-84.02	-4.83	252.5
		0.049					-0.024	1.015				
		0.053					-0.006	0.987				
		0.053					0.002	0.978				
								0.996				
								1.015				
								1.024				
								1.005				
37752	232	0.049	5.1	0.36	5252	159.96	0.002	1.015	22.5	-82.97	-5.01	252.5
		0.049					0.012	1.005				
		0.047					0.008	0.996				
		0.045					-0.002	0.969				
								0.987				
								0.987				
								0.978				
								0.987				
37753	232	0.043	5.1	0.7	5248	159.96	-0.004	0.978	22	-82.62	-5.01	252.5
		0.041					0.002	0.987				
		0.039					0.004	0.987				
		0.037					0.002	0.987				
								0.987				
								0.996				
								1.015				
								1.005				

FDR	CAS	Long.	PITCH	ROLL	ALTITUDE	HEAD	LATG	Vert.	Wind	Wind	Drift	Groundspeed
ELAPSED		Accel						Accel.	Speed	Direction	Angle	
TIME IN									TRUE			
SECONDS	(knots)	(g)	(degs.)	(degs.)	(FEET)	(DEG)	(g)	(G'S)	(kts)	(DEG)	(DEG)	(knots)
37754	230.5	0.035	5.1	1.76	5244	159.96	-0.006	1.005	21.5	-79.1	-4.83	252
		0.035					-0.002	1.015				
		0.031					-0.008	1.015				
		0.026					-0.008	1.024				
								1.024				
								1.015				
								1.005				
								0.987				
37755	231.5	0.022	4.92	1.05	5240	159.96	-0.02	0.969	21.5	-82.27	-4.75	251.5
		0.018					-0.02	0.969				
		0.018					-0.012	0.969				
		0.018					0.004	0.96				
								0.96				
								0.96				
								0.987				
								0.987				
37756	230.5	0.016	5.1	0	5236	159.96	0.006	0.978	21.5	-81.91	-4.83	251
		0.016					-0.004	0.969				
		0.016					-0.01	0.969				
		0.018					-0.004	0.969				
								0.969				
								0.969				
								0.978				
								0.996				
37757	229	0.016	5.27	0.35	5228	159.96	-0.004	0.996	21.5	-78.75	-4.75	250
		0.014					-0.006	0.987				
		0.014					0.002	0.987				
		0.01					-0.012	1.005				
								1.005				
								0.987				
								0.987				
								0.969				

FDR	CAS	Long.	PITCH	ROLL	ALTITUDE	HEAD	LATG	Vert.	Wind	Wind	Drift	Groundspeed
ELAPSED		Accel						Accel.	Speed	Direction	Angle	
TIME IN									TRUE			
SECONDS	(knots)	(g)	(degs.)	(degs.)	(FEET)	(DEG)	(g)	(G'S)	(kts)	(DEG)	(DEG)	(knots)
37758	229.5	0.01	5.1	0	5224	159.96	-0.004	0.969	21	-81.21	-4.83	249.5
		0.012					0.012	0.969				
		0.008					0.01	0.969				
		0.006					-0.002	0.96				
								0.978				
								0.987				
								1.005				
								0.996				
37759	228	0.008	5.27	0.7	5220	159.61	0.006	0.996	20.5	-79.45	-4.66	248.5
		0.014					-0.006	0.996				
		0.014					0.002	1.005				
		0.012					-0.002	1.015				
								1.042				
								1.042				
								1.051				
								1.051				
37760	227.5	0.008	5.1	1.41	5216	159.61	-0.012	1.033	20	-79.45	-4.57	247.5
		0.006					-0.016	1.024				
		0.004					-0.01	1.015				
		0.002					-0.002	1.005				
								0.987				
								0.969				
								0.951				
								0.941				
37761	227	0	4.39	1.41	5208	159.96	-0.002	0.941	20	-80.16	-4.57	247
		-0.004					-0.006	0.941				
		-0.004					-0.012	0.932				
		-0.002					-0.004	0.923				
								0.896				
								0.896				
								0.896				
								0.896				

FDR	CAS	Long.	PITCH	ROLL	ALTITUDE	HEAD	LATG	Vert.	Wind	Wind	Drift	Groundspeed
ELAPSED		Accel						Accel.	Speed	Direction	Angle	
TIME IN										TRUE		
SECONDS	(knots)	(g)	(degs.)	(degs.)	(FEET)	(DEG)	(g)	(G'S)	(kts)	(DEG)	(DEG)	(knots)
37762	226	-0.004	3.69	0.7	5200	159.96	-0.002	0.886	21	-80.51	-4.75	246.5
		-0.006					-0.006	0.868				
		-0.006					-0.002	0.859				
		-0.006					-0.004	0.868				
								0.868				
								0.877				
								0.868				
								0.868				
37763	226	-0.008	3.34	0.7	5188	159.96	-0.006	0.868	21.5	-81.91	-4.92	246
		-0.008					-0.006	0.868				
		-0.006					-0.006	0.868				
		-0.004					-0.002	0.886				
								0.896				
								0.886				
								0.877				
								0.896				
37764	224	0.002	3.34	0.7	5172	160.31	0.004	0.932	22.5	-79.45	-5.1	245.5
		0					0	0.951				
		0					-0.002	0.932				
		0.002					-0.012	0.923				
								0.932				
								0.923				
								0.914				
								0.923				
37765	224	0.002	3.16	1.05	5152	160.31	-0.002	0.932	23	-78.75	-5.19	245.5
		0.002					-0.006	0.923				
		0.004					-0.01	0.923				
		0.004					-0.006	0.932				
								0.932				
								0.941				
								0.951				
								0.96				

FDR	CAS	Long.	PITCH	ROLL	ALTITUDE	HEAD	LATG	Vert.	Wind	Wind	Drift	Groundspeed
ELAPSED		Accel						Accel.	Speed	Direction	Angle	
TIME IN									TRUE			
SECONDS	(knots)	(g)	(degs.)	(degs.)	(FEET)	(DEG)	(g)	(G'S)	(kts)	(DEG)	(DEG)	(knots)
37766	224	0.002	3.16	0	5132	160.66	-0.006	0.951	245	-79.8	-5.54	245
		0.006					0.002	0.941				
		0.006					0.002	0.941				
		0.006					0.004	0.951				
								0.96				
								0.978				
								0.978				
								0.978				
								0.978				
37767	223.5	0.008	2.99	0.35	5112	161.01	0.002	0.978	24.5	-80.51	-5.63	245
		0.006					0.004	0.978				
		0.004					0.008	0.987				
		0.006					0	0.996				
								0.987				
								0.987				
								0.987				
								0.996				
37768	224	0.008	2.99	0.35	5092	161.01	0	0.996	24.5	-81.56	-5.71	245
		0.008					0	0.996				
		0.006					0.004	0.996				
		0.006					0.004	0.996				
								0.996				
								0.996				
								0.987				
								0.987				
								0.987				
37769	223.5	0.006	2.81	0	5068	161.01	0.004	0.978	25	-80.51	-5.71	245
		0.004					0	0.978				
		0.004					0.002	0.978				
		0.004					-0.002	0.969				
								0.96				
								0.96				
								0.969				
								0.978				

FDR	CAS	Long.	PITCH	ROLL	ALTITUDE	HEAD	LATG	Vert.	Wind	Wind	Drift	Groundspeed
ELAPSED		Accel						Accel.	Speed	Direction	Angle	
TIME IN									TRUE			
SECONDS	(knots)	(g)	(degs.)	(degs.)	(FEET)	(DEG)	(g)	(G'S)	(kts)	(DEG)	(DEG)	(knots)
37770	223.5	0.002	2.46	-0.35	5044	161.37	-0.004	0.969	25.5	-81.21	-5.89	245
		0.002					0.002	0.96				
		0.002					0.004	0.951				
		0.002					0.006	0.951				
								0.951				
								0.941				
								0.932				
								0.932				
37771	223	0.002	2.29	-0.35	5020	161.37	0.006	0.932	25.5	-80.16	-5.89	245
		0.002					0	0.932				
		0.004					0.002	0.941				
		0.004					0.008	0.941				
								0.951				
								0.96				
								0.969				
								0.969				
37772	223.5	0.002	1.93	-0.7	4996	161.37	0.004	0.96	25.5	-79.8	-5.89	245
		-0.002					0.002	0.951				
		-0.002					0.006	0.932				
		0					0.008	0.923				
								0.905				
								0.914				
								0.923				
								0.923				
37773	223.5	0	1.93	-0.7	4968	161.01	0.004	0.923	25	-79.45	-5.8	245
		0.002					0.004	0.932				
		0.004					0.004	0.951				
		0.004					0.002	0.951				
								0.96				
								0.969				
								0.969				
								0.978				

FDR	CAS	Long	PITCH	ROLL	ALTITUDE	HEAD	LATG	Vert.	Wind	Wind	Drift	Groundspeed
ELAPSED		Accel						Accel.	Speed	Direction	Angle	
TIME IN									TRUE			
SECONDS	(knots)	(g)	(degs.)	(degs.)	(FEET)	(DEG)	(g)	(GS)	(kts)	(DEG)	(DEG)	(knots)
37774	223.5	0.002	1.76	-0.7	4936	161.01	0	0.969	25	-79.1	-5.71	245.5
		0.004					0	0.969				
		0.002					0.006	0.969				
		0.006					0.012	0.96				
								0.969				
								0.96				
								0.969				
								0.978				
37775	224.5	0	1.58	-0.35	4908	161.01	0.01	0.969	24	-80.16	-5.63	245.5
		-0.002					-0.004	0.941				
		0.002					0.006	0.941				
		0.004					0.006	0.96				
								0.969				
								0.969				
								0.978				
								0.969				
37776	225	0.006	1.58	-0.35	4876	160.66	0.006	0.987	23.5	-80.86	-5.45	246
		0.002					0.002	0.987				
		0.004					-0.002	0.987				
		0.004					-0.004	0.987				
								0.987				
								0.996				
								0.987				
								0.987				
37777	225.5	0.004	1.58	-0.35	4844	160.66	0	0.987	23	-80.51	-5.36	246
		0.004					0.006	0.987				
		0.004					0.006	0.987				
		0.004					0.002	0.978				
								0.987				
								0.996				
								0.996				
								0.996				

FDR	CAS	Long.	PITCH	ROLL	ALTITUDE	HEAD	LATG	Vert.	Wind	Wind	Drift	Groundspeed
ELAPSED		Accel						Accel.	Speed	Direction	Angle	
TIME IN									TRUE			
SECONDS	(knots)	(g)	(degs.)	(degs.)	(FEET)	(DEG)	(g)	(G'S)	(kts)	(DEG)	(DEG)	(knots)
37778	226	0.004	1.58	-0.35	4812	160.31	-0.002	0.987	22.5	-80.51	-5.19	246.5
		0.002					-0.006	0.987				
		0.002					0	0.987				
		0.002					0	0.978				
								0.978				
								0.978				
								0.987				
								0.978				
								0.978				
37779	226	0.002	1.58	-0.35	4780	160.31	0	0.978	22.5	-78.4	-5.1	247
		0.002					-0.004	0.978				
		0.004					0	0.987				
		0.006					0	0.987				
								0.996				
								0.996				
								1.005				
								1.015				
37780	226	0.006	1.58	0	4748	160.31	-0.004	1.015	22.5	-78.4	-5.1	247
		0.006					-0.004	1.005				
		0.004					-0.002	1.005				
		0.004					-0.006	0.996				
								0.987				
								0.996				
								0.987				
								0.987				
37781	227	0.002	1.41	0	4716	160.31	-0.006	0.978	22.5	-79.8	-5.1	247.5
		0.004					-0.01	0.978				
		0.004					-0.018	0.996				
		0.004					-0.008	1.005				
								1.005				
								1.005				
								1.005				
								1.005				

FDR	CAS	Long.	PITCH	ROLL	ALTITUDE	HEAD	LATG	Vert.	Wind	Wind	Drift	Groundspeed
ELAPSED		Accel						Accel.	Speed	Direction	Angle	
TIME IN									TRUE			
SECONDS	(knots)	(g)	(degs.)	(degs.)	(FEET)	(DEG)	(g)	(G'S)	(kts)	(DEG)	(DEG)	(knots)
37782	228	0.006	1.41	-0.35	4684	160.31	-0.004	1.005	23	-80.86	-5.19	248
		0.004					-0.004	1.005				
		0.004					-0.006	1.005				
		0.006					-0.002	0.996				
								0.996				
								1.005				
								1.005				
								1.005				
								1.005				
37783	228.5	0.004	1.58	-0.7	4652	160.31	0	1.015	23.5	-81.21	-5.36	248.5
		0.004					-0.004	1.015				
		0.004					-0.004	1.005				
		0.002					-0.004	1.005				
								1.005				
								1.005				
								1.005				
								1.005				
37784	228.5	0.002	1.41	-0.35	4620	160.66	-0.002	1.005	24	-81.21	-5.46	248.5
		0.004					0	1.005				
		0.002					-0.002	1.015				
		0.004					0.002	1.005				
								0.996				
								0.996				
								0.996				
								0.996				
37785	228.5	0.004	1.41	0	4588	160.66	0.002	0.996	24	-80.51	-5.46	249
		0.002					-0.002	0.996				
		0.002					-0.002	1.005				
		0.002					0	1.005				
								0.996				
								0.996				
								0.996				
								0.996				

FDR	CAS	Long.	PITCH	ROLL	ALTITUDE	HEAD	LATG	Vert.	Wind	Wind	Drift	Groundspeed
ELAPSED		Accel						Accel.	Speed	Direction	Angle	
TIME IN									TRUE			
SECONDS	(knots)	(g)	(degs.)	(degs.)	(FEET)	(DEG)	(g)	(G'S)	(kts)	(DEG)	(DEG)	(knots)
37786	228.5	0.002	1.41	0.35	4560	160.66	-0.002	0.996	24	-79.8	-5.45	249.5
		0.002					0	0.996				
		0.002					0.004	1.005				
		0.002					0	1.005				
								0.996				
								1.005				
								0.996				
								0.996				
37787	229	0.002	1.41	0.35	4528	160.66	0.004	0.996	24	-80.16	-5.45	249.5
		0.002					0.002	0.996				
		0.002					0	0.996				
		0.002					0	0.996				
								0.996				
								1.005				
								1.005				
								1.005				
37788	230	0.002	1.41	0.35	4496	160.66	0	1.005	24	-80.51	-5.45	250
		0					0.002	0.996				
		0.002					0.006	0.996				
		0.002					0.006	1.005				
								1.005				
								0.996				
								1.005				
								1.005				
37789	230.5	0	1.41	0.35	4464	160.66	0.002	1.005	23.5	-81.21	-5.36	250
		0					0	0.996				
		0					0.002	0.996				
		0					0.008	1.005				
								0.996				
								0.996				
								0.996				
								1.005				

FDR	CAS	Long.	PITCH	ROLL	ALTITUDE	HEAD	LATG	Vert.	Wind	Wind	Drift	Groundspeed
ELAPSED		Accel						Accel.	Speed	Direction	Angle	
TIME IN									TRUE			
SECONDS	(knots)	(g)	(degs.)	(degs.)	(FEET)	(DEG)	(g)	(G'S)	(kts)	(DEG)	(DEG)	(knots)
37790	231.5	0	1.41	0.35	4432	160.66	0.006	1.005	22.5	-82.27	-5.19	250.5
		0					0.004	1.005				
		0					0.002	1.005				
		0					0.002	1.015				
								1.005				
								1.005				
								1.005				
								1.005				
								1.005				
37791	232	0	1.41	0.35	4404	160.31	0.004	1.005	22	-82.62	-5.01	250.5
		0					0.004	1.005				
		-0.002					0.002	1.005				
		0					0.004	1.005				
								0.996				
								0.996				
								0.996				
								0.996				
37792	232.5	-0.002	1.41	0.7	4372	160.31	0.004	0.996	21	-82.27	-4.83	251
		0					0.004	1.005				
		-0.002					0.002	1.005				
		-0.002					0.004	1.005				
								1.005				
								0.996				
								1.005				
								1.005				
37793	233.5	-0.002	1.41	0.35	4344	160.31	0.008	0.996	20.5	-82.62	-4.66	251
		0					0.006	0.996				
		-0.002					0.008	1.005				
		-0.002					0	1.005				
								1.015				
								1.015				
								1.005				
								1.005				

FDR	CAS	Long.	PITCH	ROLL	ALTITUDE	HEAD	LATG	Vert.	Wind	Wind	Drift	Groundspeed
ELAPSED		Accel						Accel.	Speed	Direction	Angle	
TIME IN									TRUE			
SECONDS	(knots)	(g)	(degs.)	(degs.)	(FEET)	(DEG)	(g)	(G'S)	(kts)	(DEG)	(DEG)	(knots)
37794	233.5	-0.002	1.41	-0.7	4312	159.96	0	1.005	19.5	-81.91	-4.48	251.5
		-0.002					0.004	1.005				
		-0.002					0.004	1.005				
		-0.002					0.006	1.005				
								1.005				
								1.005				
								0.996				
								0.996				
37795	233.5	-0.002	1.41	-2.81	4284	159.61	0.004	0.996	19	-79.46	-4.31	252
		-0.002					0.004	1.005				
		-0.002					0.004	1.005				
		-0.002					0.006	1.005				
								0.996				
								0.996				
								0.996				
								0.987				
37796	233.5	-0.002	1.41	-5.27	4252	159.26	0.006	0.996	18.5	-78.75	-4.13	252
		-0.002					0.008	0.996				
		-0.002					0.01	0.996				
		-0.002					0.01	0.996				
								0.996				
								1.005				
								1.005				
								1.015				
37797	234	-0.002	1.41	-7.73	4220	158.55	0.01	1.015	18	-78.75	-4.04	252.5
		-0.002					0.012	1.015				
		-0.002					0.012	1.015				
		-0.002					0.016	1.015				
								1.015				
								1.015				
								1.015				
								1.015				

FDR	CAS	Long	PITCH	ROLL	ALTITUDE	HEAD	LATG	Vert.	Wind	Wind	Drift	Groundspeed
ELAPSED		Accel						Accel.	Speed	Direction	Angle	
TIME IN									TRUE			
SECONDS	(knots)	(g)	(degs.)	(degs.)	(FEET)	(DEG)	(g)	(G'S)	(kts)	(DEG)	(DEG)	(knots)
37798	234	-0.002	1.41	-10.2	4192	157.85	0.018	1.015	17.5	-76.99	-3.87	253
		-0.002					0.018	1.005				
		-0.002					0.016	1.005				
		-0.002					0.014	1.005				
								1.005				
								1.005				
								1.015				
								1.015				
37799	234	-0.002	1.41	-12.3	4164	156.8	0.012	1.005	16.5	-72.77	-3.43	253.5
		-0.002					0.012	1.005				
		-0.002					0.012	1.015				
		0					0.012	1.015				
								1.015				
								1.024				
								1.033				
								1.033				
37800	234.5	0.002	1.58	-15.12	4132	155.39	0.008	1.033	15.5	-72.07	-3.25	254
		0.002					0.01	1.033				
		0.004					0.012	1.042				
		0.002					0.014	1.051				
								1.051				
								1.06				
								1.051				
								1.051				
37801	235	0.002	1.41	-16.87	4104	153.98	0.014	1.051	15.5	-72.42	-3.08	255
		0.002					0.014	1.051				
		0.002					0.016	1.051				
		0.002					0.012	1.042				
								1.042				
								1.042				
								1.042				
								1.051				

FDR	CAS	Long.	PITCH	ROLL	ALTITUDE	HEAD	LATG	Vert.	Wind	Wind	Drift	Groundspeed
ELAPSED		Accel						Accel.	Speed	Direction	Angle	
TIME IN									TRUE			
SECONDS	(knots)	(g)	(degs.)	(degs.)	(FEET)	(DEG)	(g)	(G'S)	(kts)	(DEG)	(DEG)	(knots)
37802	235	0.002	1.41	-17.58	4076	152.58	0.008	1.051	15	-69.61	-2.9	255.5
		0.002					0.008	1.051				
		0					0.01	1.051				
		0.002					0.01	1.051				
								1.051				
								1.042				
								1.042				
								1.042				
								1.042				
37803	235.5	0.002	1.23	-17.93	4048	150.82	0.006	1.042	14.5	-67.15	-2.64	256
		0					0.008	1.042				
		0.002					0.008	1.042				
		0					0	1.042				
								1.042				
								1.051				
								1.06				
								1.06				
37804	236.5	-0.002	1.23	-18.28	4020	149.41	-0.006	1.051	14	-68.2	-2.55	256.5
		0					-0.002	1.051				
		0					0.006	1.042				
		-0.002					0.008	1.042				
								1.051				
								1.042				
								1.042				
								1.051				
37805	237	-0.002	1.41	-18.63	3988	148.01	0	1.042	14.5	-70.66	-2.64	257.5
		-0.002					0.006	1.042				
		-0.002					0.004	1.042				
		0					0.006	1.042				
								1.042				
								1.042				
								1.042				
								1.051				

FDR	CAS	Long.	PITCH	ROLL	ALTITUDE	HEAD	LATG	Vert.	Wind	Wind	Drift	Groundspeed
ELAPSED		Accel						Accel.	Speed	Direction	Angle	
TIME IN									TRUE			
SECONDS	(knots)	(g)	(degs.)	(degs.)	(FEET)	(DEG)	(g)	(G'S)	(kts)	(DEG)	(DEG)	(knots)
37806	236	0	1.41	-18.63	3960	146.6	0.006	1.051	15	-66.8	-2.55	258
		-0.002					0.006	1.051				
		0					0.002	1.042				
		-0.002					-0.008	1.033				
								1.033				
								1.051				
								1.06				
								1.051				
37807	236.5	-0.002	1.41	-19.69	3932	145.19	0.006	1.051	16	-68.2	-2.55	258.5
		-0.002					0.006	1.042				
		0.002					0.004	1.042				
		0					0.004	1.042				
								1.051				
								1.06				
								1.07				
								1.07				
37808	236.5	0.002	1.58	-22.5	3900	143.79	0.014	1.06	16.5	-67.5	-2.64	259
		0.002					0.018	1.06				
		0.004					0.016	1.07				
		0.006					0.02	1.07				
								1.07				
								1.07				
								1.07				
37809	236	0.006	1.76	-26.02	3868	141.68	0.028	1.07	17	-65.04	-2.46	260
		0.004					0.022	1.079				
		0.006					0.026	1.079				
		0.01					0.026	1.088				
								1.088				
								1.088				
								1.097				
								1.115				

FDR	CAS	Long.	PITCH	ROLL	ALTITUDE	HEAD	LATG	Vert.	Wind	Wind	Drift	Groundspeed
ELAPSED		Accel						Accel.	Speed	Direction	Angle	
TIME IN									TRUE			
SECONDS	(knots)	(g)	(degs.)	(degs.)	(FEET)	(DEG)	(g)	(G'S)	(kts)	(DEG)	(DEG)	(knots)
37810	235.5	0.014	1.58	-28.12	3840	139.57	0.031	1.143	17.5	-60.82	-2.2	261
		0.014					0.018	1.152				
		0.012					0.016	1.143				
		0.006					0.02	1.143				
								1.152				
								1.143				
								1.106				
								1.079				
37811	236	0.01	1.41	-28.48	3808	137.11	0.016	1.079	17	-58.36	-1.85	261.5
		0.01					0.014	1.115				
		0.012					0.014	1.125				
		0.01					0.014	1.125				
								1.134				
								1.152				
								1.143				
								1.134				
37812	235.5	0.012	1.58	-28.83	3780	134.3	0.014	1.134	17.5	-54.14	-1.49	262.5
		0.01					0.012	1.143				
		0.014					0.01	1.152				
		0.014					0.01	1.134				
								1.143				
								1.161				
								1.152				
								1.143				
37813	235.5	0.014	1.58	-29.18	3752	131.83	0.01	1.134	18.5	-52.03	-1.23	263.5
		0.018					0.008	1.143				
		0.02					0.006	1.152				
		0.024					0.006	1.18				
								1.189				
								1.198				
								1.207				
								1.225				

FDR	CAS	Long.	PITCH	ROLL	ALTITUDE	HEAD	LATG	Vert.	Wind	Wind	Drift	Groundspeed
ELAPSED		Accel						Accel.	Speed	Direction	Angle	
TIME IN									TRUE			
SECONDS	(knots)	(g)	(degs.)	(degs.)	(FEET)	(DEG)	(g)	(G'S)	(kts)	(DEG)	(DEG)	(knots)
37814	235	0.024	2.11	-29.53	3724	129.02	0.002	1.235	19	-48.52	-0.88	264
		0.028					0.008	1.225				
		0.026					0.014	1.225				
		0.024					0.014	1.244				
								1.271				
								1.253				
								1.225				
								1.216				
37815	235	0.028	2.81	-29.53	3700	126.21	0.02	1.235	19.5	-48.16	-0.62	264.5
		0.028					0.006	1.244				
		0.031					0.004	1.253				
		0.026					0.004	1.262				
								1.262				
								1.271				
								1.271				
								1.262				
37816	235	0.028	3.34	-29.18	3680	123.75	0.01	1.253	20	-48.16	-0.44	265
		0.028					0.02	1.253				
		0.031					0.016	1.262				
		0.028					0.016	1.262				
								1.271				
								1.262				
								1.28				
								1.262				
37817	235	0.031	3.52	-28.83	3660	120.94	0.018	1.262	21.5	-48.52	-0.26	265.5
		0.026					0.01	1.253				
		0.024					0.008	1.262				
		0.024					0.002	1.244				
								1.225				
								1.235				
								1.235				
								1.225				

FDR	CAS	Long.	PITCH	ROLL	ALTITUDE	HEAD	LATG	Vert.	Wind	Wind	Drift	Groundspeed
ELAPSED		Accel						Accel.	Speed	Direction	Angle	
TIME IN									TRUE			
SECONDS	(knots)	(g)	(degs.)	(degs.)	(FEET)	(DEG)	(g)	(G'S)	(kts)	(DEG)	(DEG)	(knots)
37818	235	0.02	3.69	-28.83	3648	118.48	0	1.235	21	-49.92	-0.26	265.5
		0.018					0	1.235				
		0.02					0.01	1.207				
		0.022					0.018	1.198				
								1.18				
								1.189				
								1.198				
								1.198				
37819	236	0.02	3.87	-29.18	3632	116.01	0.01	1.216	21	-52.73	-0.26	265.5
		0.022					0.014	1.235				
		0.018					0.002	1.225				
		0.018					0.002	1.198				
								1.18				
								1.18				
								1.18				
								1.18				
37820	235	0.016	3.87	-29.18	3624	113.91	-0.002	1.17	21	-57.3	-0.44	265.5
		0.016					0	1.17				
		0.012					0.01	1.152				
		0.012					0.012	1.143				
								1.161				
								1.143				
								1.134				
								1.134				
37821	233.5	0.01	4.04	-28.83	3608	111.8	0.016	1.143	23.5	-60.12	-0.53	265
		0.012					0.024	1.115				
		0.012					0.022	1.115				
		0.014					0.008	1.106				
								1.115				
								1.115				
								1.106				
								1.115				

FDR	CAS	Long.	PITCH	ROLL	ALTITUDE	HEAD	LATG	Vert.	Wind	Wind	Drift	Groundspeed
ELAPSED		Accel						Accel.	Speed	Direction	Angle	
TIME IN									TRUE			
SECONDS	(knots)	(g)	(degs.)	(degs.)	(FEET)	(DEG)	(g)	(G'S)	(kts)	(DEG)	(DEG)	(knots)
37822	233	0.014	4.22	-28.48	3600	109.69	0.006	1.125	23	-60.47	-0.35	265
		0.012					0.008	1.125				
		0.014					0.018	1.125				
		0.018					0.014	1.115				
								1.115				
								1.115				
								1.125				
								1.143				
37823	232.5	0.018	4.39	-28.48	3588	107.23	0.018	1.161	23.5	-60.12	-0.09	264.5
		0.014					0.016	1.161				
		0.02					0.018	1.143				
		0.014					0.008	1.115				
								1.134				
								1.152				
								1.143				
								1.143				
37824	230	0.02	4.57	-28.48	3576	104.76	0.022	1.115	26.5	-59.77	0.09	264
		0.02					0.026	1.115				
		0.02					0.016	1.115				
		0.02					0.012	1.134				
								1.125				
								1.125				
								1.125				
								1.134				
37825	230.5	0.02	4.39	-28.12	3564	102.3	0.014	1.143	25	-58.01	0.53	264
		0.02					0.022	1.143				
		0.02					0.022	1.134				
		0.02					0.031	1.143				
								1.152				
								1.152				
								1.134				
								1.134				

FDR	CAS	Long.	PITCH	ROLL	ALTITUDE	HEAD	LATG	Vert.	Wind	Wind	Drift	Groundspeed
ELAPSED		Accel						Accel.	Speed	Direction	Angle	
TIME IN									TRUE			
SECONDS	(knots)	(g)	(degs.)	(degs.)	(FEET)	(DEG)	(g)	(GS)	(kts)	(DEG)	(DEG)	(knots)
37826	229	0.022	4.22	-28.12	3556	99.49	0.02	1.143	26	-55.9	1.05	263.5
		0.022					0.012	1.161				
		0.022					0.016	1.152				
		0.022					0.004	1.143				
								1.143				
								1.152				
								1.152				
								1.17				
37827	230.5	0.022	4.22	-28.48	3548	96.68	0.016	1.161	26	-53.44	1.41	263
		0.031					0.02	1.143				
		0.037					0.018	1.161				
		0.031					0.006	1.189				
								1.207				
								1.225				
								1.235				
								1.235				
37828	229	0.024	4.04	-28.83	3540	94.22	-0.002	1.207	24	-55.19	1.58	263
		0.024					-0.002	1.189				
		0.024					0.008	1.17				
		0.022					-0.006	1.161				
								1.143				
								1.143				
								1.152				
								1.152				
37829	232	0.022	3.87	-29.53	3532	92.11	-0.004	1.161	23.5	-56.95	1.49	262.5
		0.016					0.02	1.152				
		0.014					0.006	1.143				
		0.014					0.006	1.134				
								1.115				
								1.088				
								1.106				
								1.106				

FDR	CAS	Long.	PITCH	ROLL	ALTITUDE	HEAD	LATG	Vert.	Wind	Wind	Drift	Groundspeed
ELAPSED		Accel						Accel.	Speed	Direction	Angle	
TIME IN									TRUE			
SECONDS	(knots)	(g)	(degs.)	(degs.)	(FEET)	(DEG)	(g)	(G'S)	(kts)	(DEG)	(DEG)	(knots)
37830	229	0.014	4.04	-28.83	3524	90	0.018	1.106	25.5	-60.47	1.41	262
		0.02					0.016	1.097				
		0.022					-0.002	1.088				
		0.02					0.004	1.088				
								1.106				
								1.143				
								1.161				
								1.161				
37831	229	0.018	4.04	-28.48	3516	87.54	0	1.143	25.5	-62.23	1.49	261.5
		0.018					-0.006	1.125				
		0.014					0.002	1.115				
		0.018					0.008	1.134				
								1.125				
								1.115				
								1.115				
								1.115				
37832	227.5	0.012	4.04	-28.83	3508	85.43	0.002	1.106	26	-65.04	1.49	261
		0.016					0.014	1.079				
		0.016					0.012	1.07				
		0.016					0.028	1.088				
								1.106				
								1.097				
								1.088				
								1.079				
37833	227	0.018	4.04	-28.48	3496	82.97	0.024	1.088	26.5	-65.39	1.67	260.5
		0.018					0.016	1.097				
		0.018					0.016	1.115				
		0.02					0.016	1.125				
								1.088				
								1.079				
								1.106				
								1.125				

FDR	CAS	Long.	PITCH	ROLL	ALTITUDE	HEAD	LATG	Vert.	Wind	Wind	Drift	Groundspeed
ELAPSED		Accel						Accel.	Speed	Direction	Angle	
TIME IN									TRUE			
SECONDS	(knots)	(g)	(degs.)	(degs.)	(FEET)	(DEG)	(g)	(G'S)	(kts)	(DEG)	(DEG)	(knots)
37834	229	0.018	4.04	-28.12	3488	80.51	0.004	1.125	25	-62.93	2.02	260
		0.016					0.004	1.134				
		0.014					0.016	1.134				
		0.014					0.012	1.115				
								1.106				
								1.097				
								1.068				
								1.079				
37835	227.5	0.02	4.22	-29.18	3480	78.05	0.004	1.079	25.5	-63.98	2.29	259.5
		0.028					0.008	1.097				
		0.026					0.01	1.115				
		0.026					0.012	1.143				
								1.17				
								1.17				
								1.17				
								1.189				
37836	228	0.026	4.22	-28.83	3468	75.94	0.008	1.189	25	-66.44	2.2	259
		0.022					0.01	1.18				
		0.016					0.006	1.189				
		0.01					0.008	1.17				
								1.106				
								1.079				
								1.042				
								1.033				
37837	226.5	0.014	4.04	-28.48	3456	73.83	0.016	1.051	26.5	-69.61	2.2	258.5
		0.016					0.031	1.06				
		0.018					0.026	1.07				
		0.02					0.014	1.07				
								1.06				
								1.097				
								1.097				
								1.097				

FDR	CAS	Long.	PITCH	ROLL	ALTITUDE	HEAD	LATG	Vert.	Wind	Wind	Drift	Groundspeed
ELAPSED		Accel						Accel.	Speed	Direction	Angle	
TIME IN									TRUE			
SECONDS	(knots)	(g)	(degs.)	(degs.)	(FEET)	(DEG)	(g)	(G'S)	(kts)	(DEG)	(DEG)	(knots)
37838	223.5	0.018	4.22	-28.12	3444	71.37	0.018	1.097	27.5	-69.61	2.72	257.5
		0.016					0.012	1.079				
		0.022					0.016	1.07				
		0.026					0.024	1.097				
								1.106				
								1.115				
								1.161				
								1.18				
37839	225.5	0.035	4.22	-27.07	3436	68.55	0.018	1.189	26	-65.74	3.08	257
		0.026					0.002	1.216				
		0.018					0.008	1.235				
		0.033					-0.004	1.207				
								1.143				
								1.097				
								1.134				
								1.17				
37840	230	0.031	3.87	-26.37	3428	66.44	-0.014	1.225	22	-64.34	2.99	256.5
		0.024					-0.006	1.253				
		0.022					0.01	1.216				
		0.01					0.022	1.198				
								1.143				
								1.115				
								1.115				
								1.051				
37841	225.5	0.004	3.52	-23.91	3420	64.69	0.008	0.987	25.5	-71.37	2.72	256
		0.006					0.002	0.987				
		0					-0.029	0.987				
		0.006					-0.008	0.969				
								0.987				
								0.978				
								0.951				
								0.987				

FDR	CAS	Long.	PITCH	ROLL	ALTITUDE	HEAD	LATG	Vert.	Wind	Wind	Drift	Groundspeed
ELAPSED		Accel						Accel.	Speed	Direction	Angle	
TIME IN									TRUE			
SECONDS	(knots)	(g)	(degs.)	(degs.)	(FEET)	(DEG)	(g)	(G'S)	(kts)	(DEG)	(DEG)	(knots)
37842	224	0.01	3.69	-19.69	3408	63.28	0.014	1.015	27.5	-73.83	2.81	255.5
		0.004					0.01	1.005				
		0.004					-0.006	0.987				
		0.004					-0.016	0.969				
								0.951				
								0.951				
								0.96				
								0.969				
37843	223	0	3.87	-15.82	3392	61.87	-0.002	0.96	27	-75.94	2.81	255
		0.01					-0.002	0.969				
		0.014					-0.004	0.987				
		0.016					-0.012	1.005				
								1.024				
								1.033				
								1.042				
								1.051				
37844	223.5	0.016	4.04	-14.06	3380	61.17	-0.014	1.042	25	-79.1	2.46	254
		0.008					-0.006	1.033				
		0.008					0.006	1.033				
		0.01					0.004	1.015				
								0.996				
								0.987				
								0.996				
								1.005				
37845	224	0.012	4.04	-10.9	3364	60.47	-0.002	1.015	23.5	-80.86	2.29	253.5
		0.012					-0.012	1.042				
		0.016					-0.004	1.051				
		0.014					-0.002	1.051				
								1.024				
								1.033				
								1.051				
								1.033				

FDR	CAS	Long.	PITCH	ROLL	ALTITUDE	HEAD	LATG	Vert.	Wind	Wind	Drift	Groundspeed
ELAPSED		Accel						Accel.	Speed	Direction	Angle	
TIME IN									TRUE			
SECONDS	(knots)	(g)	(degs.)	(degs.)	(FEET)	(DEG)	(g)	(G'S)	(kts)	(DEG)	(DEG)	(knots)
37846	222	0.012	4.04	-8.44	3352	59.77	0.004	1.024	24	-85.08	2.02	253.5
		0.012					-0.004	1.015				
		0.01					-0.012	1.015				
		0.01					-0.014	1.024				
								1.015				
								1.015				
								1.015				
								1.015				
								1.015				
37847	223	0.006	3.87	-7.03	3336	59.41	-0.01	1.015	23	-86.84	1.76	253
		0.01					-0.006	1.005				
		0.012					-0.004	0.996				
		0.012					-0.002	1.005				
								1.024				
								1.033				
								1.033				
								1.015				
37848	223.5	0.006	3.87	-5.27	3324	59.41	0.01	1.005	23	-80	1.41	252.5
		0.006					0.016	0.987				
		0.004					0.008	0.989				
		0.006					-0.006	0.96				
								0.978				
								0.969				
								0.96				
								0.96				
37849	220.5	0.008	4.04	-4.22	3312	59.06	-0.014	0.978	25	-92.46	1.32	252
		0.01					-0.008	0.987				
		0.012					-0.01	0.978				
		0.012					0.006	0.978				
								0.987				
								0.969				
								0.969				
								0.987				

FDR	CAS	Long.	PITCH	ROLL	ALTITUDE	HEAD	LATG	Vert.	Wind	Wind	Drift	Groundspeed
ELAPSED		Accel						Accel.	Speed	Direction	Angle	
TIME IN									TRUE			
SECONDS	(knots)	(g)	(degs.)	(degs.)	(FEET)	(DEG)	(g)	(G'S)	(kts)	(DEG)	(DEG)	(knots)
37850	220	0.012	4.04	-2.46	3296	59.06	0.014	0.987	24.5	-94.57	1.14	251.5
		0.008					0	0.996				
		0.01					0.012	1.005				
		0.014					0.002	1.005				
								1.005				
								0.996				
								0.987				
								1.005				
37851	221	0.014	4.04	-0.7	3284	59.06	-0.006	1.024	23.5	-92.11	1.32	251
		0.01					0.004	1.033				
		0.01					0	1.024				
		0.012					-0.002	1.005				
								0.987				
								0.978				
								0.987				
								0.996				
37852	222.5	0.014	4.39	-1.06	3272	58.71	-0.004	1.024	22	-91.05	1.32	251
		0.012					-0.01	1.042				
		0.014					-0.008	1.042				
		0.016					-0.008	1.042				
								1.024				
								1.015				
								1.033				
								1.06				
37853	221	0.022	4.75	-1.76	3256	59.06	-0.004	1.079	22.5	-85.27	0.97	250.5
		0.028					-0.008	1.097				
		0.028					-0.008	1.097				
		0.022					-0.01	1.097				
								1.106				
								1.088				
								1.079				
								1.07				

FDR	CAS	Long.	PITCH	ROLL	ALTITUDE	HEAD	LATG	Vert.	Wind	Wind	Drift	Groundspeed
ELAPSED		Accel						Accel.	Speed	Direction	Angle	
TIME IN									TRUE			
SECONDS	(knots)	(g)	(degs.)	(degs.)	(FEET)	(DEG)	(g)	(G'S)	(kts)	(DEG)	(DEG)	(knots)
37854	221.5	0.024	4.92	-1.76	3248	59.41	0	1.079	22	-100.19	0.53	249.5
		0.022					0.006	1.079				
		0.026					0.006	1.079				
		0.031					0.014	1.079				
								1.07				
								1.079				
								1.097				
								1.106				
37855	219	0.02	5.1	-0.7	3244	59.41	0.014	1.079	23	-102.66	0.26	249
		0.014					0.016	1.06				
		0.014					0.018	1.033				
		0.01					0.022	0.978				
								1.015				
								1.024				
								1.024				
								0.996				
37856	219	0.006	5.27	0.35	3236	59.41	0	0.96	21.5	-98.79	0.7	248.5
		0.012					0	0.914				
		0.012					-0.004	0.932				
		0.014					-0.006	0.969				
								1.033				
								1.06				
								1.07				
								1.042				
37857	220.5	0.02	5.98	0.35	3232	59.06	0.014	1.024	21	-96.33	0.88	247.5
		0.022					0.024	1.033				
		0.018					0.004	1.07				
		0.014					0.01	1.079				
								1.079				
								1.042				
								1.033				
								1.024				

FDR	CAS	Long.	PITCH	ROLL	ALTITUDE	HEAD	LATG	Vert.	Wind	Wind	Drift	Groundspeed
ELAPSED		Accel						Accel.	Speed	Direction	Angle	
TIME IN									TRUE			
SECONDS	(knots)	(g)	(degs.)	(degs.)	(FEET)	(DEG)	(g)	(G'S)	(kts)	(DEG)	(DEG)	(knots)
37858	220.5	0.016	6.15	0.35	3228	58.71	-0.002	1.015	20	-92.46	1.14	246.5
		0.02					0.008	1.033				
		0.022					0.012	1.042				
		0.022					0.006	1.042				
								1.06				
								1.079				
								1.088				
								1.079				
37859	219.5	0.022	6.15	0	3228	58.71	0	1.07	19.5	-91.05	1.32	245.5
		0.02					-0.008	1.07				
		0.018					0.002	1.06				
		0.02					-0.004	1.051				
								1.051				
								1.06				
								1.088				
37860	223.5	0.016	6.15	0	3228	58.71	0	1.106	15	-87.54	1.23	244.5
		0.014					0.002	1.097				
		0.018					0.006	1.06				
		0.014					0.006	1.06				
								1.06				
								1.079				
								1.079				
								1.07				
37861	224.5	0.008	6.15	0.7	3232	58.71	-0.02	1.068	15.5	-84.37	1.14	243.5
		0.014					-0.02	1.068				
		0.022					-0.02	1.097				
		0.014					-0.012	1.134				
								1.143				
								1.161				
								1.134				
								1.097				

FDR	CAS	Long.	PITCH	ROLL	ALTITUDE	HEAD	LATG	Vert.	Wind	Wind	Drift	Groundspeed
ELAPSED		Accel						Accel.	Speed	Direction	Angle	
TIME IN									TRUE			
SECONDS	(knots)	(g)	(degs.)	(degs.)	(FEET)	(DEG)	(g)	(G'S)	(kts)	(DEG)	(DEG)	(knots)
37862	218.5	0	5.98	0.35	3236	59.41	-0.006	1.033	18	-98.44	0.53	242
		-0.004					-0.018	0.987				
		-0.006					-0.002	0.951				
		-0.008					-0.004	0.941				
								0.941				
								0.941				
								0.951				
								0.96				
37863	215.5	-0.006	6.15	-0.7	3240	60.12	0.026	0.951	19.5	-107.23	-0.18	241
		-0.004					0.012	0.905				
		0					0.012	0.923				
		0.006					0	0.969				
								0.969				
								0.987				
								0.996				
								1.042				
37864	214	0.006	5.8	0.35	3244	60.47	0.014	1.097	17	-108.63	-0.26	239.5
		0					0.014	1.115				
		-0.006					0.012	1.042				
		-0.008					0.018	0.969				
								0.969				
								0.969				
								0.951				
								0.941				
37865	213.5	-0.01	5.45	1.05	3244	60.12	0	0.923	17.5	-106.17	-0.09	238.5
		-0.01					0.016	0.941				
		-0.008					0.012	0.969				
		-0.008					0.014	0.978				
								0.951				
								0.96				
								0.969				
								0.951				

FDR	CAS	Long	PITCH	ROLL	ALTITUDE	HEAD	LATG	Vert.	Wind	Wind	Drift	Groundspeed
ELAPSED		Accel						Accel.	Speed	Direction	Angle	
TIME IN									TRUE			
SECONDS	(knots)	(g)	(degs.)	(degs.)	(FEET)	(DEG)	(g)	(G'S)	(kts)	(DEG)	(DEG)	(knots)
37866	213.5	-0.014	5.45	0.7	3248	60.12	0.012	0.941	18.5	-102.3	0.18	237
		-0.018					0.024	0.941				
		-0.012					0.012	0.951				
		-0.012					0.01	0.978				
								0.96				
								0.932				
								0.96				
								0.96				
37867	211	-0.008	5.45	-0.35	3252	59.41	-0.002	0.969	18.5	-95.98	0.79	236
		-0.006					0.002	0.969				
		-0.01					0.004	0.978				
		-0.01					-0.002	0.987				
								0.987				
								0.987				
								0.969				
								0.941				
37868	210.5	-0.01	5.27	-0.35	3248	59.06	-0.002	0.941	19.5	-92.11	1.05	234.5
		-0.012					0	0.941				
		-0.012					-0.004	0.951				
		-0.01					-0.004	0.941				
								0.932				
								0.923				
								0.923				
								0.932				
37869	209.5	-0.008	5.27	-0.7	3248	59.06	-0.002	0.951	19.5	-90.35	1.23	233.5
		-0.008					-0.004	0.969				
		-0.008					-0.012	0.969				
		-0.01					-0.02	0.96				
								0.96				
								0.96				
								0.978				
								0.978				

FDR	CAS	Long.	PITCH	ROLL	ALTITUDE	HEAD	LATG	Vert.	Wind	Wind	Drift	Groundspeed
ELAPSED		Accel						Accel.	Speed	Direction	Angle	
TIME IN									TRUE			
SECONDS	(knots)	(g)	(degs.)	(degs.)	(FEET)	(DEG)	(g)	(G'S)	(kts)	(DEG)	(DEG)	(knots)
37870	206.5	-0.01	5.27	-1.05	3244	59.06	-0.018	0.969	20.5	-92.81	1.14	232.5
		-0.008					0	0.96				
		-0.004					0.006	0.941				
		-0.002					0.014	0.932				
								0.941				
								0.941				
								0.951				
								0.969				
37871	205.5	0	5.45	-1.41	3240	59.06	0.01	0.987	20	-94.92	0.97	231.5
		0					0.01	1.005				
		0					0.004	1.006				
		0.002					0.002	1.005				
								1.005				
								1.005				
								1.015				
								1.024				
37872	205	0.004	5.45	-0.7	3236	58.71	0	1.033	18.5	-92.81	1.14	230.5
		0.004					0	1.042				
		0.008					0.002	1.051				
		0.006					-0.004	1.024				
								1.033				
								1.051				
								1.07				
								1.079				
37873	204.5	0.004	5.62	-1.05	3244	58.71	-0.004	1.07	18	-92.81	1.14	229
		0					-0.004	1.042				
		-0.006					-0.008	1.042				
		-0.012					-0.006	1.051				
								1.042				
								1.033				
								1.005				
								0.987				

FDR	CAS	Long	PITCH	ROLL	ALTITUDE	HEAD	LATG	Vert.	Wind	Wind	Drift	Groundspeed
ELAPSED		Accel					Accel		Speed	Direction	Angle	
TIME IN									TRUE			
SECONDS	(knots)	(g)	(degs.)	(degs.)	(FEET)	(DEG)	(g)	(G'S)	(kts)	(DEG)	(DEG)	(knots)
37874	206	-0.016	5.8	-0.35	3244	58.71	-0.004	1.051	15.5	-93.87	0.88	228
		-0.016					0.002	1.07				
		-0.018					0.018	1.051				
		-0.022					-0.002	1.042				
								1.051				
								1.051				
								1.07				
								1.088				
37875	206	-0.033	5.98	-0.35	3240	59.06	0	1.07	16.5	-95.27	0.7	226
		-0.035					0.012	1.042				
		-0.022					-0.006	1.015				
		-0.027					0.002	1.015				
								0.996				
								1.015				
								1.051				
								1.051				
37876	201.5	-0.029	6.33	0.35	3244	59.06	-0.01	1.033	16	-96.09	0.62	224
		-0.024					-0.018	1.042				
		-0.033					-0.014	1.07				
		-0.031					-0.004	1.051				
								1.07				
								1.07				
								1.005				
								1.005				
37877	198	-0.033	5.62	1.76	3244	59.41	0.024	0.996	18	-100.9	0.35	222.5
		-0.035					0.024	0.96				
		-0.039					0.01	0.941				
		-0.041					-0.01	0.932				
								0.932				
								0.932				
								0.914				
								0.914				

FDR	CAS	Long.	PITCH	ROLL	ALTITUDE	HEAD	LATG	Vert.	Wind	Wind	Drift	Groundspeed
ELAPSED		Accel						Accel.	Speed	Direction	Angle	
TIME IN									TRUE			
SECONDS	(knots)	(g)	(degs.)	(degs.)	(FEET)	(DEG)	(g)	(G'S)	(kts)	(DEG)	(DEG)	(knots)
37878	196	-0.043	5.1	4.22	3244	59.41	-0.01	0.905	19	-96.33	0.79	220.5
		-0.043					0.004	0.896				
		-0.047					0	0.886				
		-0.045					-0.004	0.868				
								0.868				
								0.859				
								0.841				
								0.85				
37879	192.5	-0.041	4.75	5.62	3240	59.41	-0.002	0.859	20.5	-93.87	1.14	219.5
		-0.037					0	0.868				
		-0.035					-0.006	0.877				
		-0.033					-0.016	0.886				
								0.886				
								0.905				
								0.932				
								0.969				
37880	193	-0.041	4.22	7.73	3232	59.77	-0.031	0.96	19	-89.65	1.41	218
		-0.047					-0.047	0.932				
		-0.051					-0.033	0.914				
		-0.051					-0.031	0.896				
								0.886				
								0.859				
								0.813				
								0.786				
37881	191	-0.045	3.16	8.79	3220	60.82	-0.02	0.795	19	-96.68	0.7	217
		-0.039					-0.002	0.804				
		-0.033					-0.004	0.822				
		-0.029					-0.008	0.831				
								0.859				
								0.896				
								0.905				
								0.914				

FDR	CAS	Long	PITCH	ROLL	ALTITUDE	HEAD	LATG	Vert.	Wind	Wind	Drift	Groundspeed
ELAPSED		Accel						Accel.	Speed	Direction	Angle	
TIME IN									TRUE			
SECONDS	(knots)	(g)	(degs.)	(degs.)	(FEET)	(DEG)	(g)	(G'S)	(kts)	(DEG)	(DEG)	(knots)
37882	189	-0.022	4.04	10.55	3208	62.23	-0.002	0.978	20	-101.6	0.09	216
		-0.016					-0.01	0.996				
		-0.018					-0.018	1.005				
		-0.024					-0.02	1.015				
								1.024				
								1.024				
								1.033				
								1.015				
37883	190	-0.027	3.69	11.25	3188	63.28	-0.024	1.005	19	-102.66	-0.09	215
		-0.031					-0.024	0.996				
		-0.035					-0.016	0.96				
		-0.033					-0.016	0.96				
								0.941				
								0.896				
								0.886				
								0.896				
37884	188.5	-0.024	2.81	12.3	3172	64.69	-0.002	0.914	19.5	-107.58	-0.7	214.5
		-0.029					-0.008	0.941				
		-0.027					-0.012	0.941				
		-0.022					0.006	0.923				
								0.932				
								0.951				
								0.969				
								0.996				
37885	189.5	-0.027	2.64	14.41	3148	66.09	-0.004	1.005	17.5	-109.34	-0.88	213.5
		-0.029					-0.004	1.024				
		-0.031					0.002	1.015				
		-0.027					-0.002	1.015				
								1.005				
								0.987				
								0.969				
								0.969				

FDR	CAS	Long.	PITCH	ROLL	ALTITUDE	HEAD	LATG	Vert.	Wind	Wind	Drift	Groundspeed
ELAPSED		Accel						Accel.	Speed	Direction	Angle	
TIME IN									TRUE			
SECONDS	(knots)	(g)	(degs.)	(degs.)	(FEET)	(DEG)	(g)	(G'S)	(kts)	(DEG)	(DEG)	(knots)
37886	190	-0.031	2.11	15.47	3126	67.15	0.002	0.969	16.5	-107.93	-0.79	213
		-0.031					-0.018	0.96				
		-0.031					-0.012	0.941				
		-0.037					-0.006	0.96				
								0.969				
								0.969				
								0.969				
								0.941				
37887	189.5	-0.043	1.76	16.17	3100	68.55	-0.024	0.914	18	-109.34	-1.05	212.5
		-0.035					-0.024	0.914				
		-0.033					-0.02	0.914				
		-0.031					-0.027	0.932				
								0.941				
								0.941				
								0.96				
								0.951				
37888	189	-0.024	1.41	17.23	3076	70.66	-0.012	0.96	17.5	-112.85	-1.58	212
		-0.027					-0.002	0.969				
		-0.031					-0.012	0.996				
		-0.031					-0.012	1.024				
								1.005				
								0.996				
								1.005				
								1.015				
37889	189	-0.033	0.88	18.28	3044	72.42	-0.004	1.033	18	-113.55	-1.76	211.5
		-0.037					-0.004	1.015				
		-0.039					-0.012	0.996				
		-0.043					-0.01	0.996				
								0.996				
								0.978				
								0.969				
								0.978				

FDR	CAS	Long.	PITCH	ROLL	ALTITUDE	HEAD	LATG	Vert.	Wind	Wind	Drift	Groundspeed
ELAPSED		Accel						Accel.	Speed	Direction	Angle	
TIME IN									TRUE			
SECONDS	(knots)	(g)	(degs.)	(degs.)	(FEET)	(DEG)	(g)	(G'S)	(kts)	(DEG)	(DEG)	(knots)
37890	189	-0.047	0.18	18.98	3016	74.18	-0.012	0.996	17	-113.91	-1.85	211
		-0.053					-0.006	0.987				
		-0.051					-0.01	0.987				
		-0.051					0.004	0.969				
								0.969				
								0.996				
								1.015				
								1.024				
37891	189.5	-0.055	-0.35	19.34	2980	75.94	0.004	1.024	16.5	-114.61	-2.02	210.5
		-0.061					-0.01	1.024				
		-0.063					-0.016	1.024				
		-0.065					-0.01	1.015				
								1.005				
								0.996				
								0.996				
								0.987				
37892	187	-0.063	-0.35	20.04	2948	77.69	-0.01	0.987	18.5	-112.5	-2.29	210
		-0.057					-0.008	1.005				
		-0.055					0.004	1.015				
		-0.057					-0.002	1.024				
								1.051				
								1.051				
								1.042				
								1.033				
37893	187.5	-0.061	-0.35	18.63	2916	79.8	-0.012	1.024	18.5	-114.61	-2.55	209.5
		-0.061					-0.012	1.015				
		-0.055					-0.004	1.015				
		-0.055					-0.002	1.015				
								1.015				
								1.024				
								1.042				
								1.051				

FDR	CAS	Long.	PITCH	ROLL	ALTITUDE	HEAD	LATG	Vert.	Wind	Wind	Drift	Groundspeed
ELAPSED		Accel.						Accel.	Speed	Direction	Angle	
TIME IN									TRUE			
SECONDS	(knots)	(g)	(degs.)	(degs.)	(FEET)	(DEG)	(g)	(G'S)	(kts)	(DEG)	(DEG)	(knots)
37894	189.5	-0.057	-0.35	16.52	2880	81.91	0.008	1.07	16.5	-120.59	-2.9	209
		-0.065					-0.002	1.06				
		-0.071					0.002	1.033				
		-0.073					0.004	1.024				
								1.024				
								1.015				
								1.024				
								1.042				
37895	188.5	-0.082	-0.35	14.77	2844	83.67	0	1.015	17.5	-122.69	-3.25	208
		-0.082					0	1.005				
		-0.088					0	1.033				
		-0.084					0.002	1.033				
								1.024				
								1.005				
								0.996				
								1.024				
37896	188	-0.082	-1.05	14.06	2808	85.08	0.018	1.042	17	-120.94	-3.16	207.5
		-0.088					0.02	1.033				
		-0.09					0.008	1.015				
		-0.094					0.004	1.005				
								1.015				
								1.015				
								0.996				
								0.996				
37897	186.5	-0.094	-1.41	14.77	2772	85.78	-0.002	0.987	15	-112.85	-2.64	206.5
		-0.096					-0.006	0.96				
		-0.088					-0.016	0.951				
		-0.09					-0.012	0.987				
								1.005				
								1.051				
								1.079				
								1.07				

FDR	CAS	Long.	PITCH	ROLL	ALTITUDE	HEAD	LATG	Vert.	Wind	Wind	Drift	Groundspeed
ELAPSED		Accel						Accel	Speed	Direction	Angle	
TIME IN									TRUE			
SECONDS	(knots)	(g)	(degs)	(degs)	(FEET)	(DEG)	(g)	(G'S)	(kts)	(DEG)	(DEG)	(knots)
37898	190.5	-0.086	-1.23	14.06	2736	86.84	-0.01	1.06	13.5	-120.23	-2.46	206
		-0.084					-0.004	1.097				
		-0.082					-0.006	1.125				
		-0.09					0.01	1.134				
								1.134				
								1.115				
								1.097				
								1.079				
37899	187.5	-0.092	-1.93	10.55	2700	88.24	0.031	1.06	16	-113.91	-2.46	205.5
		-0.094					0.016	1.051				
		-0.09					0.02	1.033				
		-0.1					0.016	0.987				
								0.969				
								0.969				
								0.941				
								0.905				
37900	182.5	-0.094	-2.81	7.73	2668	88.59	0.008	0.886	16.5	-100.55	-2.2	205
		-0.092					0.014	0.886				
		-0.096					0.014	0.923				
		-0.1					0.004	0.96				
								0.969				
								0.941				
								0.932				
								0.923				
37901	186	-0.102	-3.87	9.49	2632	88.94	-0.01	0.914	14.5	-98.44	-1.58	204.5
		-0.108					-0.008	0.923				
		-0.108					-0.006	0.923				
		-0.106					-0.004	0.896				
								0.877				
								0.877				
								0.877				
								0.886				

FDR	CAS	Long.	PITCH	ROLL	ALTITUDE	HEAD	LATG	Vert.	Wind	Wind	Drift	Groundspeed
ELAPSED		Accel						Accel.	Speed	Direction	Angle	
TIME IN									TRUE			
SECONDS	(knots)	(g)	(degs.)	(degs.)	(FEET)	(DEG)	(g)	(G'S)	(kts)	(DEG)	(DEG)	(knots)
37902	186	-0.108	-4.75	10.2	2592	89.3	-0.016	0.886	16	-93.87	-1.32	204.5
		-0.106					-0.022	0.886				
		-0.106					-0.012	0.896				
		-0.106					-0.01	0.905				
								0.905				
								0.886				
								0.868				
								0.859				
37903	184.5	-0.112	-5.27	10.55	2548	90	-0.018	0.822	17.5	-91.76	-1.32	205
		-0.11					-0.01	0.795				
		-0.096					-0.016	0.822				
		-0.104					-0.047	0.841				
								0.85				
								0.914				
								0.951				
								0.941				
37904	185.5	-0.108	-4.92	8.44	2496	91.05	-0.047	0.923	16.5	-98.79	-1.93	205
		-0.104					-0.012	0.923				
		-0.108					-0.01	0.905				
		-0.11					-0.022	0.877				
								0.886				
								0.877				
								0.859				
								0.886				
37905	187	-0.112	-4.92	7.38	2440	92.81	-0.024	0.896	18.5	-110.39	-2.99	205
		-0.106					-0.01	0.896				
		-0.098					-0.006	0.905				
		-0.09					0.022	0.923				
								0.951				
								0.951				
								0.969				
								1.015				

FDR	CAS	Long.	PITCH	ROLL	ALTITUDE	HEAD	LATG	Vert.	Wind	Wind	Drift	Groundspeed
ELAPSED		Accel						Accel.	Speed	Direction	Angle	
TIME IN									TRUE			
SECONDS	(knots)	(g)	(degs.)	(degs.)	(FEET)	(DEG)	(g)	(G'S)	(kts)	(DEG)	(DEG)	(knots)
37906	187	-0.088	-4.92	4.22	2384	94.22	0.041	1.042	17.5	-114.61	-3.69	205.5
		-0.096					0.041	1.033				
		-0.094					0.035	1.005				
		-0.092					0.035	0.969				
								0.978				
								1.024				
								1.042				
								1.033				
37907	190	-0.098	-4.57	-1.76	2332	94.22	0.031	1.033	16.5	-118.48	-3.34	206
		-0.092					0.016	1.033				
		-0.094					0.01	1.051				
		-0.092					0.006	1.088				
								1.097				
								1.106				
								1.088				
								1.07				
37908	190.5	-0.098	-4.75	-9.14	2264	93.51	0.024	1.024	15.5	-114.26	-3.16	206.5
		-0.102					0.026	0.987				
		-0.1					0.035	0.951				
		-0.098					0.033	0.969				
								0.987				
								0.996				
								0.996				
								0.987				
37909	190.5	-0.104	-4.75	-14.77	2232	92.11	0.028	0.996	14.5	-112.15	-2.72	207.5
		-0.1					0.039	0.987				
		-0.098					0.033	0.987				
		-0.096					0.037	1.005				
								1.024				
								1.06				
								1.097				
								1.125				

FDR	CAS	Long.	PITCH	ROLL	ALTITUDE	HEAD	LATG	Vert.	Wind	Wind	Drift	Groundspeed
ELAPSED		Accel						Accel.	Speed	Direction	Angle	
TIME IN									TRUE			
SECONDS	(knots)	(g)	(degs.)	(degs.)	(FEET)	(DEG)	(g)	(G'S)	(kts)	(DEG)	(DEG)	(knots)
37910	189.5	-0.096	-4.22	-17.23	2184	89.65	0.039	1.106	14.5	-102.3	-1.93	208
		-0.1					0.004	1.088				
		-0.1					0.006	1.06				
		-0.108					0.014	1.042				
								1.033				
								1.033				
								1.042				
								1.015				
37911	194	-0.11	-4.92	-18.98	2132	87.89	0.024	0.96	10.5	-106.52	-1.67	208.5
		-0.108					0.016	0.951				
		-0.106					0.02	0.96				
		-0.102					0.041	0.969				
								1.015				
								1.06				
								1.06				
								1.088				
37912	197.5	-0.094	-4.04	-19.34	2084	85.43	0.024	1.115	8.5	-102.3	-0.79	208
		-0.092					0.033	1.161				
		-0.09					0.024	1.216				
		-0.094					0.014	1.235				
								1.262				
								1.28				
								1.271				
								1.207				
37913	196	-0.104	-4.75	-19.34	2040	82.62	0.006	1.161	9.5	-88.24	-0.26	209.5
		-0.11					0.004	1.125				
		-0.114					-0.008	1.097				
		-0.118					-0.018	1.042				
								1.033				
								1.033				
								1.005				
								1.005				

FDR	CAS	Long.	PITCH	ROLL	ALTITUDE	HEAD	LATG	Vert.	Wind	Wind	Drift	Groundspeed
ELAPSED		Accel						Accel.	Speed	Direction	Angle	
TIME IN									TRUE			
SECONDS	(knots)	(g)	(degs.)	(degs.)	(FEET)	(DEG)	(g)	(G'S)	(kts)	(DEG)	(DEG)	(knots)
37914	197.5	-0.118	-5.45	-19.34	1992	80.51	-0.02	0.996	10.5	-86.48	-0.09	210
		-0.11					0.002	0.996				
		-0.11					0.004	1.024				
		-0.114					0.02	1.06				
								1.042				
								1.06				
								1.07				
								1.051				
37915	197	-0.112	-5.45	-18.98	1944	78.75	0.02	1.051	10	-86.48	0	210.5
		-0.106					0.008	1.06				
		-0.11					0.006	1.068				
		-0.112					0.012	1.125				
								1.125				
								1.097				
								1.06				
								1.024				
37916	196	-0.112	-5.27	-17.58	1900	76.99	-0.006	1.015	12	-82.97	0.35	211
		-0.116					-0.022	1.024				
		-0.106					-0.014	1.042				
		-0.104					0.01	1.06				
								1.068				
								1.106				
								1.106				
								1.097				
37917	195	-0.106	-4.75	-16.17	1856	75.23	0.035	1.079	13	-84.37	0.35	211
		-0.108					0.008	1.06				
		-0.112					-0.004	1.042				
		-0.112					-0.018	1.024				
								1.015				
								1.015				
								1.033				
								1.06				

FDR	CAS	Long.	PITCH	ROLL	ALTITUDE	HEAD	LATG	Vert.	Wind	Wind	Drift	Groundspeed
ELAPSED		Accel						Accel.	Speed	Direction	Angle	
TIME IN									TRUE			
SECONDS	(knots)	(g)	(degs.)	(degs.)	(FEET)	(DEG)	(g)	(G'S)	(kts)	(DEG)	(DEG)	(knots)
37918	194.5	-0.114	-4.39	-14.06	1816	73.48	0	1.06	13	-80.86	0.7	211
		-0.114					0.006	1.06				
		-0.116					0	1.06				
		-0.12					-0.018	1.051				
								1.051				
								1.06				
								1.06				
								1.068				
37919	197	-0.13	-4.39	-12.3	1772	72.07	-0.02	1.143	12	-83.32	0.53	211
		-0.128					-0.006	1.161				
		-0.122					0.018	1.06				
		-0.132					0.006	1.024				
								1.051				
								1.051				
								1.06				
								1.097				
37920	200	-0.134	-4.57	-9.84	1736	71.02	0.006	1.125	8	-81.21	0.53	210.5
		-0.149					-0.008	1.152				
		-0.155					-0.016	1.161				
		-0.165					-0.02	1.189				
								1.216				
								1.189				
								1.143				
								1.115				
37921	197.5	-0.167	-5.27	-8.09	1704	70.31	-0.022	1.079	11	-90	0.18	210
		-0.169					-0.014	1.06				
		-0.165					-0.037	1.051				
		-0.167					-0.012	1.005				
								0.996				
								0.978				
								1.015				
								1.033				

FDR	CAS	Long	PITCH	ROLL	ALTITUDE	HEAD	LATG	Vert.	Wind	Wind	Drift	Groundspeed
ELAPSED		Accel						Accel.	Speed	Direction	Angle	
TIME IN									TRUE			
SECONDS	(knots)	(g)	(degs.)	(degs.)	(FEET)	(DEG)	(g)	(GS)	(kts)	(DEG)	(DEG)	(knots)
37922	197.5	-0.173	-4.92	-8.79	1668	70.31	-0.022	1.015	10.5	-105.82	-0.53	209
		-0.175					-0.027	0.969				
		-0.169					0	0.932				
		-0.161					0.022	0.951				
								0.951				
								0.932				
								0.96				
								0.987				
37923	193.5	-0.155	-4.57	-6.33	1632	69.96	0.018	1.042	12.5	-111.09	-0.97	208.5
		-0.161					0.026	1.088				
		-0.161					0.033	1.079				
		-0.169					0.018	1.033				
								1.005				
								0.969				
								0.987				
								0.987				
37924	197	-0.171	-5.45	-2.81	1600	69.26	0.012	0.969	8.5	-103.01	-0.35	208
		-0.169					-0.006	0.941				
		-0.173					-0.006	0.96				
		-0.181					-0.006	0.941				
								0.914				
								0.905				
								0.914				
								0.868				
37925	197	-0.167	-5.8	0	1560	68.55	-0.006	0.831	8.5	-90.35	0.26	207
		-0.167					-0.029	0.859				
		-0.165					-0.035	0.914				
		-0.157					-0.006	0.951				
								0.932				
								0.932				
								0.951				
								1.015				

FDR	CAS	Long.	PITCH	ROLL	ALTITUDE	HEAD	LATG	Vert.	Wind	Wind	Drift	Groundspeed
ELAPSED		Accel						Accel.	Speed	Direction	Angle	
TIME IN									TRUE			
SECONDS	(knots)	(g)	(degs.)	(degs.)	(FEET)	(DEG)	(g)	(G'S)	(kts)	(DEG)	(DEG)	(knots)
37926	197	-0.159	-4.92	0.35	1524	68.55	-0.018	1.042	6	-90.35	0.18	206.5
		-0.161					0	1.07				
		-0.159					-0.002	1.07				
		-0.151					0.002	1.051				
								1.051				
								1.06				
								1.07				
								1.079				
37927	195.5	-0.165	-4.57	1.41	1488	68.55	-0.012	1.106	9.5	-87.54	0.26	206
		-0.163					-0.006	1.106				
		-0.163					0.004	1.051				
		-0.159					-0.008	1.015				
								0.978				
								0.951				
								0.951				
								0.951				
37928	195.5	-0.163	-5.62	4.57	1456	68.55	0.01	0.951	9	-88.24	0.26	206
		-0.173					-0.01	0.941				
		-0.167					-0.02	0.914				
		-0.165					-0.02	0.886				
								0.859				
								0.859				
								0.859				
								0.85				
37929	195	-0.167	-5.98	7.73	1416	68.91	-0.035	0.859	7.5	-84.73	0.44	204.5
		-0.165					-0.024	0.877				
		-0.163					-0.029	0.886				
		-0.169					-0.022	0.914				
								0.941				
								0.96				
								0.941				
								0.923				

FDR	CAS	Long.	PITCH	ROLL	ALTITUDE	HEAD	LATG	Vert.	Wind	Wind	Drift	Groundspeed
ELAPSED		Accel						Accel.	Speed	Direction	Angle	
TIME IN									TRUE			
SECONDS	(knots)	(g)	(degs.)	(degs.)	(FEET)	(DEG)	(g)	(G'S)	(kts)	(DEG)	(DEG)	(knots)
37930	197	-0.167	-6.15	10.2	1372	69.96	-0.024	0.932	5.5	-85.78	0.18	204
		-0.167					-0.02	0.951				
		-0.165					-0.008	0.951				
		-0.165					-0.006	0.96				
								0.96				
								0.951				
								0.951				
								0.941				
37931	197	-0.163	-5.98	11.95	1332	71.02	-0.014	0.941	5	-95.27	-0.09	203.5
		-0.167					-0.01	0.969				
		-0.165					0.002	0.978				
		-0.163					-0.006	0.987				
								0.987				
								0.987				
								0.996				
								1.005				
37932	197	-0.161	-5.1	12.66	1288	72.42	-0.018	1.006	5	-100.9	-0.26	203
		-0.163					-0.02	0.996				
		-0.161					-0.029	1.024				
		-0.155					-0.027	1.042				
								1.042				
								1.024				
								1.024				
								1.06				
37933	196	-0.149	-4.57	10.55	1244	74.18	-0.006	1.07	5	-125.16	-0.97	202.5
		-0.147					0.012	1.097				
		-0.151					0.008	1.125				
		-0.157					0.006	1.152				
								1.134				
								1.115				
								1.115				
								1.106				

FDR	CAS	Long.	PITCH	ROLL	ALTITUDE	HEAD	LATG	Vert.	Wind	Wind	Drift	Groundspeed
ELAPSED		Accel						Accel.	Speed	Direction	Angle	
TIME IN									TRUE			
SECONDS	(knots)	(g)	(degs.)	(degs.)	(FEET)	(DEG)	(g)	(G'S)	(kts)	(DEG)	(DEG)	(knots)
37934	199.5	-0.161	-4.57	6.68	1208	75.23	0.01	1.07	4.5	-165.58	-1.23	201.5
		-0.169					0.002	1.06				
		-0.159					-0.006	1.042				
		-0.157					-0.004	1.024				
								1.06				
								1.07				
								1.097				
								1.088				
37935	197.5	-0.155	-4.57	3.16	1176	75.94	0	1.06	6	-158.2	-1.67	201
		-0.153					0	1.051				
		-0.159					0.024	1.051				
		-0.163					0.018	1.051				
								1.07				
								1.079				
								1.07				
								1.051				
37936	198	-0.165	-4.22	5.62	1140	76.64	-0.002	1.024	6	-168.05	-1.76	200
		-0.165					0	1.005				
		-0.159					-0.002	0.996				
		-0.159					-0.006	1.015				
								1.06				
								1.079				
								1.07				
								1.07				
37937	196	-0.155	-3.52	6.33	1112	77.34	-0.002	1.06	7	-161.01	-1.85	199
		-0.149					0.008	1.051				
		-0.151					-0.01	1.06				
		-0.151					-0.012	1.068				
								1.068				
								1.079				
								1.051				
								1.051				

FDR	CAS	Long.	PITCH	ROLL	ALTITUDE	HEAD	LATG	Vert.	Wind	Wind	Drift	Groundspeed
ELAPSED		Accel						Accel	Speed	Direction	Angle	
TIME IN									TRUE			
SECONDS	(knots)	(g)	(degs.)	(degs.)	(FEET)	(DEG)	(g)	(G'S)	(kts)	(DEG)	(DEG)	(knots)
37938	192	-0.149	-2.81	5.98	1080	78.4	-0.004	1.06	8	-148.01	-2.11	198
		-0.145					0.02	1.042				
		-0.145					0.016	1.06				
		-0.149					0.012	1.033				
								1.015				
								1.06				
								1.07				
								1.07				
37939	193.5	-0.147	-2.64	5.98	1056	78.75	0.026	1.088	6.5	-152.58	-1.76	197
		-0.151					0.022	1.079				
		-0.147					-0.002	1.07				
		-0.145					0.01	1.06				
								1.07				
								1.088				
								1.015				
								0.978				
37940	191.5	-0.141	-2.64	2.81	1024	78.75	0.016	0.987	6	-139.57	-1.41	196
		-0.149					0.012	0.969				
		-0.139					-0.012	0.941				
		-0.139					0.01	0.941				
								0.951				
								0.987				
								1.024				
								1.088				
37941	189.5	-0.124	-0.88	-0.35	996	79.1	0.055	1.115	5	-138.87	-1.41	194.5
		-0.124					0.033	1.161				
		-0.132					0.031	1.189				
		-0.136					0.008	1.207				
								1.216				
								1.189				
								1.17				
								1.143				

FDR	CAS	Long.	PITCH	ROLL	ALTITUDE	HEAD	LATG	Vert.	Wind	Wind	Drift	Groundspeed
ELAPSED		Accel						Accel.	Speed	Direction	Angle	
TIME IN									TRUE			
SECONDS	(knots)	(g)	(degs.)	(degs.)	(FEET)	(DEG)	(g)	(G'S)	(kts)	(DEG)	(DEG)	(knots)
37942	186.5	-0.139	-0.7	-1.76	972	78.4	-0.006	1.125	4	-132.19	-0.97	193
		-0.128					0.014	1.097				
		-0.122					0.022	1.088				
		-0.12					0.016	1.051				
								1.024				
								1.051				
								1.106				
								1.161				
37943	186.5	-0.114	1.23	-4.57	952	78.05	0.024	1.207	4.5	-123.75	-0.88	191.5
		-0.112					0.026	1.271				
		-0.112					0.02	1.262				
		-0.114					0.022	1.244				
								1.207				
								1.207				
								1.161				
37944	185.5	-0.116	1.58	-2.81	940	77.34	0.008	1.143	4	-116.01	-0.62	189.5
		-0.12					0.014	1.161				
		-0.12					0.004	1.207				
		-0.12					0.002	1.262				
								1.253				
								1.198				
								1.134				
								1.088				
37945	183.5	-0.126	0.7	-4.22	940	76.99	0.006	1.042	3.5	-115.31	-0.53	187.5
		-0.128					0	0.996				
		-0.128					0.01	1.042				
		-0.13					0.016	1.06				
								1.051				
								1.024				
								0.987				
								0.951				

FDR	CAS	Long.	PITCH	ROLL	ALTITUDE	HEAD	LATG	Vert.	Wind	Wind	Drift	Groundspeed
ELAPSED		Accel						Accel.	Speed	Direction	Angle	
TIME IN									TRUE			
SECONDS	(knots)	(g)	(degs.)	(degs.)	(FEET)	(DEG)	(g)	(G/S)	(kts)	(DEG)	(DEG)	(knots)
37946	182	-0.13	0.53	-3.52	940	76 29	-0.004	0.932	2.5	-105.12	-0.35	185
		-0.159					-0.02	0.923				
		-0.145					-0.012	0.923				
		-0.21					0.02	0.996				
								1.068				
								1.152				
								1.29				
								1.216				
37947	179.5	-0.163	-0.53	1.05	944	76.29	0.014	1.024	2	-83.32	0.09	182.5
		-0.196					-0.071	0.868				
		-0.261					-0.018	0.786				
		-0.257					-0.008	0.804				
								0.914				
								1.005				
								1.005				
								1.042				
37948	175.5	-0.289	0.18	1.05	936	75.94	0	1.18	2.5	-89.3	-0.09	177.5
		-0.312					0.01	1.216				
		-0.326					-0.018	1.06				
		-0.344					-0.02	0.859				
								0.868				
								1.005				
								1.06				
								1.125				
37949	169.5	-0.33	-0.53	0.7	940	75.94	-0.031	0.987	3	-87.19	0	172
		-0.324					-0.018	0.813				
		-0.334					0.014	0.932				
		-0.346					-0.024	1.015				
								0.969				
								0.951				
								1.042				
								1.06				

FDR	CAS	Long.	PITCH	ROLL	ALTITUDE	HEAD	LATG	Vert.	Wind	Wind	Drift	Groundspeed
ELAPSED		Accel						Accel.	Speed	Direction	Angle	
TIME IN									TRUE			
SECONDS	(knots)	(g)	(degs.)	(degs.)	(FEET)	(DEG)	(g)	(G'S)	(kts)	(DEG)	(DEG)	(knots)
37950	164.5	-0.332	-0.53	0.7	920	76.64	-0.004	1.005	3.5	-122.34	-0.53	166
		-0.381					0.022	0.905				
		-0.391					-0.006	0.96				
		-0.403					-0.014	1.024				
								0.923				
								0.914				
								1.015				
								1.125				
37951	155.5	-0.381	-0.53	0.7	916	76.99	0	1.005	6	-117.42	-0.97	159.5
		-0.395					-0.012	0.886				
		-0.399					-0.004	0.914				
		-0.383					-0.006	1.005				
								1.005				
								1.024				
								1.051				
								0.932				
37952	149.5	-0.385	-0.7	0.35	908	77.34	0.018	0.886	6	-125.51	-1.32	153
		-0.387					-0.008	1.005				
		-0.399					-0.016	1.042				
		-0.401					0.024	1.033				
								0.96				
								0.978				
								0.996				
								0.923				
37953	141	-0.397	-1.05	0.35	904	77.69	0.045	0.96	7.5	-116.83	-1.41	146
		-0.395					0.055	0.868				
		-0.446					0.024	0.795				
		-0.422					-0.004	0.886				
								1.115				
								1.225				
								1.024				
								0.886				

FDR	CAS	Long.	PITCH	ROLL	ALTITUDE	HEAD	LATG	Vert.	Wind	Wind	Drift	Groundspeed
ELAPSED		Accel						Accel.	Speed	Direction	Angle	
TIME IN									TRUE			
SECONDS	(knots)	(g)	(degs.)	(degs.)	(FEET)	(DEG)	(g)	(G'S)	(kts)	(DEG)	(DEG)	(knots)
37954	133.5	-0.422	-0.7	0.35	896	77.69	0.012	0.987	7	-108.28	-1.05	139
		-0.438					0.022	0.96				
		-0.415					0.028	1.134				
		-0.44					0.028	1.06				
								0.96				
								0.831				
								0.932				
								1.042				
37955	128	-0.44	-0.88	0.35	896	77.69	-0.012	1.051	5.5	-112.5	-1.05	132
		-0.43					-0.014	0.987				
		-0.44					-0.01	0.923				
		-0.434					-0.002	0.923				
								0.996				
								1.06				
								0.905				
								0.905				
37956	119	-0.468	-0.88	0.7	896	77.69	0.012	0.951	6	-108.63	-1.14	124
		-0.487					-0.008	1.07				
		-0.489					0.014	1.024				
		-0.495					0.057	0.923				
								0.978				
								1.005				
								0.941				
								0.96				
37957	110	-0.517	-0.88	0.35	900	77.69	0.033	0.969	6.5	-105.12	-1.05	115
		-0.513					0.012	0.996				
		-0.534					-0.01	1.024				
		-0.527					0.018	0.923				
								1.015				
								1.051				
								0.987				
								0.85				

FDR	CAS	Long.	PITCH	ROLL	ALTITUDE	HEAD	LATG	Vert.	Wind	Wind	Drift	Groundspeed
ELAPSED		Accel						Accel.	Speed	Direction	Angle	
TIME IN									TRUE			
SECONDS	(knots)	(g)	(degs.)	(degs.)	(FEET)	(DEG)	(g)	(G'S)	(kts)	(DEG)	(DEG)	(knots)
37958	102	-0.536	-0.88	0.7	904	77.69	0.026	0.996	5.5	-106.17	-1.05	106
		-0.534					-0.004	1.079				
		-0.519					-0.053	0.96				
		-0.527					-0.027	0.978				
								0.886				
								0.951				
								1.106				
								0.969				
37959	96	-0.536	-1.05	0.35	908	77.69	-0.008	0.941	3	-144.49	-0.88	97
		-0.534					0.012	0.978				
		-0.552					0.006	0.978				
		-0.572					0.012	1.015				
								0.941				
								0.905				
								0.987				
								1.024				
37960	81.5	-0.554	-1.05	0.7	908	78.4	0.055	0.996	12.5	105.82	-1.32	87.5
		-0.568					0.037	0.932				
		-0.56					0.053	0.941				
		-0.556					0.092	0.996				
								0.941				
								0.905				
								1.079				
								0.996				
37961	71.5	-0.57	-1.23	0.35	908	79.45	0.041	0.85	21.5	101.6	-1.85	78
		-0.542					0.022	1.005				
		-0.538					0.037	1.015				
		-0.544					0.049	0.886				
								0.888				
								1.015				
								1.088				
								0.905				

FDR	CAS	Long	PITCH	ROLL	ALTITUDE	HEAD	LATG	Vert.	Wind	Wind	Drift	Groundspeed
ELAPSED		Accel						Accel.	Speed	Direction	Angle	
TIME IN									TRUE			
SECONDS	(knots)	(g)	(degs.)	(degs.)	(FEET)	(DEG)	(g)	(G'S)	(kts)	(DEG)	(DEG)	(knots)
37962	64	-0.56	-1.23	0	908	80.51	0.069	0.85	31	99.49	-1.85	68.5
		-0.562					0.114	0.987				
		-0.521					0.138	0.978				
		-0.542					0.169	0.996				
								1.07				
								0.932				
								0.941				
								0.951				
37963	55	-0.538	-1.41	0	912	84.73	0.226	0.932	41	105.47	-2.81	59
		-0.542					0.271	1.005				
		-0.527					0.297	0.987				
		-0.473					0.338	0.951				
								0.951				
								0.987				
								0.951				
								0.896				
37964	45	-0.466	-1.58	-1.05	908	95.27	0.377	0.951	51	120.23	-7.12	50
		-0.434					0.426	1.005				
		-0.409					0.415	1.033				
		-0.385					0.444	0.923				
								0.932				
								0.978				
								0.969				
								0.987				
37965	45	-0.395	-1.58	-1.76	912	106.28	0.474	1.005	60	135.35	-12.66	41.5
		-0.358					0.417	0.996				
		-0.332					0.46	0.905				
		-0.365					0.485	0.896				
								0.951				
								1.033				
								1.06				
								0.978				

FDR	CAS	Long.	PITCH	ROLL	ALTITUDE	HEAD	LATG	Vert.	Wind	Wind	Drift	Groundspeed
ELAPSED		Accel						Accel.	Speed	Direction	Angle	
TIME IN									TRUE			
SECONDS	(knots)	(g)	(degs.)	(degs.)	(FEET)	(DEG)	(g)	(G'S)	(kts)	(DEG)	(DEG)	(knots)
37966	45	-0.379	-1.05	-1.76	904	119.18	0.389	0.896	67.5	145.19	-17.05	34.5
		-0.312					0.332	0.923				
		-0.316					0.438	0.932				
		-0.265					0.387	0.841				
								1.079				
								1.308				
								1.161				
								0.923				
37967	45	-0.35	-0.88	-1.05	920	126.56	0.265	0.776	75	149.41	-19.16	26
		-0.67					0.666	0.804				
		-0.589					0.894	1.125				
		-0.145					0.271	1.152				
								1.115				
								1.042				
								0.639				
								0.538				
37968	45	-0.358	-6.33	-0.35	924	123.75	0.183	0.831	79	138.57	-8.79	20
		-0.534					0.309	1.015				
		-0.21					-0.159	1.125				
		-0.161					-0.079	1.07				
								1.61				
								-0.223				
								0.556				
								0.062				
37969	45	-0.815	-3.52	4.57	924	123.05	0.238	1.17	85.5	137.11	7.47	13.5
		-0.385					0.248	2.554				
		-0.509					0.167	1.72				
		-0.23					0.187	0.767				
								0.346				
								0.914				
								0.951				
								0.676				

FDR	CAS	Long.	PITCH	ROLL	ALTITUDE	HEAD	LATG	Vert.	Wind	Wind	Drift	Groundspeed
ELAPSED		Accel						Accel	Speed	Direction	Angle	
TIME IN									TRUE			
SECONDS	(knots)	(g)	(degs.)	(degs.)	(FEET)	(DEG)	(g)	(G/S)	(kts)	(DEG)	(DEG)	(knots)
37970	45	-0.342	-5.27	3.87	924	133.94	0.114	1.235	88.5	149.41	11.78	11
		-0.226					0.195	1.317				
		-0.214					0.163	1.079				
		-0.257					0.14	0.877				
								0.896				
								0.822				
								0.786				
								1.024				
37971	45	-0.251	-5.62	2.81	924	144.14	0.204	1.042	90	89.65	7.91	9
		-0.21					0.136	1.051				
		-0.253					0.118	1.051				
		-0.212					0.106	0.932				
								0.923				
								0.96				
								0.905				
								0.905				
37972	511.5	-0.228	-5.27	1.76	924	149.41	0.132	1.024	92	163.83	22.41	7
		-0.257					0.085	0.996				
		-0.238					0.096	1.015				
		-0.269					0.065	1.033				
								0.941				
								0.923				
								0.951				
								0.932				
37973	45	-0.277	-5.45	1.76	924	150.12	0.041	1.024	95	89.65	-5.19	4.5
		-0.295					0.061	1.005				
		-0.303					0.047	0.978				
		-0.334					0.037	0.951				
								0.932				
								0.923				
								0.987				
								0.996				

FDR	CAS	Long.	PITCH	ROLL	ALTITUDE	HEAD	LATG	Vert.	Wind	Wind	Drift	Groundspeed
ELAPSED		Accel						Accel.	Speed	Direction	Angle	
TIME IN									TRUE			
SECONDS	(knots)	(g)	(degs.)	(degs.)	(FEET)	(DEG)	(g)	(G'S)	(kts)	(DEG)	(DEG)	(knots)
37974	511.5	-0.365	-5.45	2.11	924	148.01	0.028	0.987	99	161.72	22.41	0.5
		-0.379					0.026	0.969				
		-0.418					0.053	0.932				
		-0.187					0.049	0.923				
								0.941				
								0.978				
								0.969				
								0.978				
37975	45	-0.104	-5.45	2.11	924	146.95	0.02	0.978	99	89.65	44.91	0.5
		-0.153					0.049	0.996				
		-0.143					0.049	1.015				
		-0.145					0.043	0.987				
								0.969				
								0.969				
								0.978				
								0.996				
37976	511.5	-0.153	-5.45	2.11	924	146.95	0.026	1.005	99	160.66	22.41	0.5
		-0.149					0.026	0.987				
		-0.147					0.047	0.978				
		-0.149					0.039	0.987				
								0.996				
								0.987				
								0.978				
								0.978				
37977	45	-0.147	-5.45	2.11	924	146.95	0.037	0.987	99	89.65	44.91	0.5
		-0.149					0.033	0.996				
		-0.147					0.037	0.987				
		-0.147					0.037	0.987				
								0.987				
								0.987				
								0.987				
								0.987				

FDR	CAS	Long.	PITCH	ROLL	ALTITUDE	HEAD	LATG	Vert.	Wind	Wind	Drift	Groundspeed
ELAPSED		Accel						Accel.	Speed	Direction	Angle	
TIME IN									TRUE			
SECONDS	(knots)	(g)	(degs.)	(degs.)	(FEET)	(DEG)	(g)	(G'S)	(kts)	(DEG)	(DEG)	(knots)
37978	511.5	-0.149	-5.45	2.11	924	146.95	0.031	0.987	99	160.66	22.41	0.5
		-0.147					0.035	0.987				
		-0.147					0.035	0.987				
		-0.147					0.035	0.987				
								0.987				
								0.987				
								0.987				
								0.996				
37979	45	-0.147	-5.45	2.11	924	146.95	0.035	0.987	99	89.65	44.91	0.5
		-0.147					0.037	0.987				
		-0.147					0.035	0.987				
		-0.149					0.035	0.987				
								0.987				
								0.987				
								0.987				
								0.987				
37980	511.5	-0.147	-5.45	2.11	924	146.95	0.039	0.987	99	160.66	22.41	0.5
		-0.149					0.035	0.987				
		-0.149					0.037	0.987				
		-0.147					0.035	0.987				
								0.987				
								0.987				
								0.987				
								0.987				
37981	45	-0.147	-5.45	2.11	924	146.95	0.037	0.987	99	89.65	44.91	0.5
		-0.149					0.039	0.987				
		-0.149					0.035	0.987				
		-0.149					0.037	0.987				
								0.987				
								0.987				
								0.987				
								0.987				

FDR	CAS	Long.	PITCH	ROLL	ALTITUDE	HEAD	LATG	Vert.	Wind	Wind	Drift	Groundspeed
ELAPSED		Accel						Accel.	Speed	Direction	Angle	
TIME IN									TRUE			
SECONDS	(knots)	(g)	(degs.)	(degs.)	(FEET)	(DEG)	(g)	(G'S)	(kts)	(DEG)	(DEG)	(knots)
37982	511.5	-0.149	-5.45	2.11	924	146.95	0.035	0.987	99	160.66	22.41	0.5
		-0.149					0.037	0.987				
		-0.147					0.039	0.987				
		-0.147					0.039	0.987				
								0.987				
								0.987				
								0.987				
								0.987				
								0.987				
37983	45	-0.145	-5.45	2.11	924	146.95	0.035	0.987	99	89.65	44.91	0.5
		-0.147					0.037	0.987				
		-0.147					0.039	0.987				
		-0.147					0.037	0.987				
								0.987				
								0.987				
								0.987				
								0.987				
37984	511.5	-0.147	-5.45	2.11	924	146.95	0.037	0.987	99	160.66	22.41	0.5
		-0.149					0.037	0.987				
		-0.149					0.037	0.987				
		-0.147					0.039	0.987				
								0.987				
								0.987				
								0.987				
								0.987				
37985	45	-0.149	-5.45	2.11	924	146.95	0.033	0.987	99	89.65	44.91	0.5
		-0.147					0.037	0.987				
		-0.147					0.037	0.987				
		-0.147					0.035	0.987				
								0.987				
								0.987				
								0.987				
								0.987				

FDR	CAS	Long.	PITCH	ROLL	ALTITUDE	HEAD	LATG	Vert.	Wind	Wind	Drift	Groundspeed
ELAPSED		Accel						Accel.	Speed	Direction	Angle	
TIME IN									TRUE			
SECONDS	(knots)	(g)	(degs.)	(degs.)	(FEET)	(DEG)	(g)	(G'S)	(kts)	(DEG)	(DEG)	(knots)
37986	511.5	-0.149	-5.45	211	924	146.95	0.037	0.987	99	160.66	22.41	0.5
		-0.149					0.035	0.987				
		-0.149					0.035	0.987				
		-0.147					0.037	0.987				
								0.987				
								0.987				
								0.987				

FDR	CAS	PITCH	ALTITUDE	CCP	CWP	TE	TE	Rud	Rudder	Aileron	ELEV	Pitch
ELAPSED						Flap	Flap	Pedal		Posn -	POS L	Trim
TIME IN						Posn	Posn			Left		Posn
SECONDS	(knots)	(degs.)	(FEET)	(degrees)	(degrees)	(deg)	(deg)	(deg)	(degrees)	(degs.)	(degs.)	(Units)
37690	241.5	1.41	5456	0.25	-1.18		0	-0.19	-0.32	0.99	-3.96	5.48
37691	241.5	1.41	5428	0.33	-0.59	0		-0.19	-0.32			5.45
37692	241.5	1.76	5404	0.46	-0.88		0	-0.19	-0.25	1.29	-3.66	5.48
37693	241	2.11	5380	0.5	-2.65	0		-0.19	0			5.45
37694	240.5	2.29	5360	0.54	-3.53		0	-0.19	0	0.82	-3.56	5.45
37695	240.5	2.64	5340	0.54	-1.18	0		-0.19	-0.38			5.48
37696	241	2.99	5320	0.63	-0.59		0	-0.19	-0.38	0.7	-3.46	5.45
37697	240.5	3.52	5300	0.54	-0.29	0		-0.19	-0.19			5.48
37698	239	3.87	5284	0.54	-0.59		0	-0.19	-0.13	1.99	-3.56	5.48
37699	239	4.04	5272	0.54	-0.59	0		-0.19	-0.38			5.48
37700	239	4.22	5260	0.59	-0.59		0	-0.19	-0.32			5.48
37701	238	4.39	5248	0.59	0	0		-0.19	-0.25	0.64	-3.51	5.48
37702	238.5	4.92	5240	0.59	-0.29		0	-0.19	-0.51			5.48
37703	238.5	5.1	5232	0.59	0	0		-0.19	-0.44	0.53	-3.46	5.48
37704	237.5	5.45	5224	0.63	0.59		0	-0.19	-0.32			5.48
37705	237	5.62	5220	0.63	0.29	0		-0.19	-0.13	1.05	-3.71	5.48
37706	236	5.98	5220	0.54	0		0	-0.19	-0.06			5.48
37707	235	6.15	5220	0.42	-1.77	0		-0.19	0	1.64	-3.96	5.48
37708	234.5	6.33	5220	0.29	-2.36		0	-0.19	-0.06			5.48
37709	234	6.33	5224	0.25	-3.24	0		-0.19	-0.6			5.48
37710	233.5	6.33	5228	0.08	-2.06		0	-0.19	-0.06	1.46	-4.25	5.48
37711	232.5	6.33	5232	0.04	-2.36	0		-0.19	-0.06			5.48
37712	232.5	6.15	5236	0	-1.47		0	-0.19	-0.13	1.23	-4.35	5.51
37713	232.5	6.15	5240	0	-0.59	0		-0.19	-0.06			5.45
37714	232.5	6.15	5244	0.04	-1.77		0	-0.19	-0.19	1.11	-4.16	5.37
37715	232.5	5.98	5248	0.17	-0.59	0		-0.19	-0.32			5.28
37716	232.5	5.98	5252	0.21	-0.59		0	-0.19	-0.32	0.76	-3.81	5.19
37717	232	5.62	5256	0.42	-0.59	0		-0.19	-0.25			5.13
37718	231.5	5.62	5256	0.33	-0.59		0	-0.19	-0.32	0.76	-3.81	5.13
37719	232	5.45	5260	0.46	-0.59	0		-0.19	-0.19			5.13
37720	231.5	5.45	5260	0.46	-0.59		0	-0.19	-0.32	0.53	-3.66	5.13
37721	231	5.45	5264	0.38	-0.29	0		-0.19	-0.25			5.13
37722	230.5	5.27	5264	0.42	-0.29		0	-0.19	-0.19	0.58	-3.66	5.13
37723	229	5.27	5264	0.46	-0.29	0		-0.19	-0.13			5.13
37724	229	5.1	5260	0.46	-0.29		0	-0.19	-0.25	0.76	-3.56	5.13
37725	229.5	5.27	5260	0.5	-0.29	0		-0.19	-0.19	0.7	-3.46	5.13
37726	230.5	5.1	5256	0.54	-0.29		0	-0.19	-0.38			5.13
37727	231	5.27	5256	0.54	0	0		-0.19	-0.38			5.13

FDR	CAS	PITCH	ALTITUDE	CCP	CWP	TE	TE	Rud	Rudder	Aileron	ELEV	Pitch
ELAPSED						Flap	Flap	Pedal		Posn -	POS L	Trim
TIME IN						Posn	Posn			Left		Posn
SECONDS	(knots)	(degs.)	(FEET)	(degrees)	(degrees)	(deg)	(deg)	(deg)	(degrees)	(degs.)	(degs)	(Units)
37728	231	5.27	5252	0.59	0		0	-0.19	-0.25	0.12	-3.36	5.13
37729	230	5.45	5252	0.5	5.01	0		-0.19	-0.51			5.13
37730	230.5	5.45	5252	0.54	2.65		0	-0.19	-0.38	0.12	-3.41	5.13
37731	231.5	5.45	5248	0.59	1.47	0		-0.19	-0.32			5.13
37732	231.5	5.45	5248	0.54	0.29		0	-0.19	-0.06	0.64	-3.51	5.13
37733	231	5.62	5248	0.5	0	0		-0.19	-0.19			5.13
37734	231.5	5.45	5248	0.5	0		0	-0.19	-0.25	0.7	-3.51	5.13
37735	230	5.45	5252	0.5	0	0		-0.19	-0.19			5.13
37736	230.5	5.45	5252	0.46	-0.29		0	-0.19	-0.25	0.23	-3.61	5.13
37737	230	5.45	5252	0.5	0.88	0		-0.19	-0.19			5.13
37738	230.5	5.27	5256	0.5	0.29		0	-0.19	-0.25	0.53	-3.61	5.13
37739	231.5	5.27	5256	0.5	0	0		-0.19	0.06			5.13
37740	232	5.27	5260	0.42	-0.29		0	-0.19	-0.19	0.7	-3.71	5.13
37741	231.5	5.27	5260	0.38	0	0		-0.19	-0.44			5.13
37742	231.5	5.1	5264	0.42	0		0	-0.19	-0.19	0.53	-3.61	5.13
37743	231.5	4.92	5264	0.42	0	0		-0.19	-0.25			5.13
37744	231	4.92	5264	0.38	0		0	-0.19	-0.13	0.53	-3.71	5.13
37745	231.5	4.92	5268	0.38	0	0		-0.19	-0.19			5.13
37746	232	4.92	5268	0.38	0		0	-0.19	-0.32	0.58	-3.71	5.13
37747	232	4.92	5264	0.38	0	0		-0.19	-0.25			5.13
37748	231	4.92	5264	0.33	0.29		0	-0.19	-0.38	0.29	-3.76	5.13
37749	232	4.75	5260	0.42	0	0		-0.19	-0.19			5.13
37750	231.5	4.92	5260	0.46	0		0	-0.19	-0.19	0.76	-3.61	5.13
37751	232.5	4.92	5256	0.46	-0.29	0		-0.19	-0.32			5.13
37752	232	5.1	5252	0.46	0.29		0	-0.19	-0.44	0.58	-3.56	5.13
37753	232	5.1	5248	0.5	-0.29	0		-0.19	0			5.13
37754	230.5	5.1	5244	0.63	-3.53		0	-0.19	-0.13	1.34	-3.21	5.13
37755	231.5	4.92	5240	0.84	-0.29	0		-0.19	-0.32			5.1
37756	230.5	5.1	5236	0.84	0.29		0	-0.19	0	0.58	-3.06	5.13
37757	229	5.27	5228	0.84	0.59	0		-0.19	-0.13			5.1
37758	229.5	5.1	5224	1	0.29		0	-0.19	-0.44	1.11	-2.91	5.19
37759	228	5.27	5220	0.8	-0.29	0		-0.19	-0.06			5.28
37760	227.5	5.1	5216	0.59	-2.36		0	-0.19	-0.38	1.23	-3.76	5.39
37761	227	4.39	5208	0.21	-0.59	0		-0.19	-0.38			5.42
37762	226	3.69	5200	0.25	-0.29		0	-0.19	-0.38	0.58	-3.91	5.39
37763	226	3.34	5188	0.42	-0.29	0		-0.19	-0.32			5.39
37764	224	3.34	5172	0.5	-3.53		0	-0.19	-0.13	1.93	-3.51	5.39
37765	224	3.16	5152	0.67	-0.59	0		-0.19	-0.38			5.39
37766	224	3.16	5132	0.8	-0.59		0	-0.19	-0.44	1.17	-3.16	5.39

FDR	CAS	PITCH	ALTITUDE	CCP	CWP	TE	TE	Rud	Rudder	Aileron	ELEV	Pitch
ELAPSED						Flap	Flap	Pedal		Posn -	POS L	Trim
TIME IN						Posn	Posn			Left		Posn
SECONDS	(knots)	(degs.)	(FEET)	(degrees)	(degrees)	(deg)	(deg)	(deg)	(degrees)	(degs.)	(degs)	(Units)
37767	223.5	2.99	5112	0.84	-3.83	0		-0.19	0			5.39
37768	224	2.99	5092	0.8	-4.71		0	-0.19	0	2.16	-3.41	5.45
37769	223.5	2.81	5068	0.59	-5.01	0		-0.19	0			5.54
37770	223.5	2.46	5044	0.42	-4.42		0	-0.19	-0.13	1.75	-3.76	5.6
37771	223	2.29	5020	0.42	-5.01	0		-0.19	0.13			5.6
37772	223.5	1.93	4996	0.42	-3.83		0	-0.19	0.06	2.1	-3.71	5.6
37773	223.5	1.93	4968	0.42	-5.01	0		-0.19	0.06			5.6
37774	223.5	1.76	4936	0.54	-3.53		0	-0.19	-0.13	1.75	-3.56	5.6
37775	224.5	1.58	4908	0.54	-5.89	0		-0.19	0.25			5.6
37776	225	1.58	4876	0.54	-4.42		0	-0.19	0	1.46	-3.56	5.6
37777	225.5	1.58	4844	0.54	-2.36	0		-0.19	-0.32			5.6
37778	226	1.58	4812	0.54	-1.77		0	-0.19	-0.19	0.82	-3.56	5.6
37779	226	1.58	4780	0.54	-2.36	0		-0.19	-0.32			5.6
37780	226	1.58	4748	0.54	-0.59		0	-0.19	-0.38	0.76	-3.56	5.6
37781	227	1.41	4716	0.54	-0.59	0		-0.19	-0.32			5.6
37782	228	1.41	4684	0.54	-0.29		0	-0.19	-0.57	0.64	-3.56	5.6
37783	228.5	1.58	4652	0.5	-0.29	0		-0.19	-0.32			5.6
37784	228.5	1.41	4620	0.5	-0.59		0	-0.19	-0.32	0.99	-3.66	5.6
37785	228.5	1.41	4588	0.5	-1.77	0		-0.19	-0.06			5.6
37786	228.5	1.41	4560	0.5	-2.36		0	-0.19	-0.25	1.46	-3.66	5.6
37787	229	1.41	4528	0.5	-2.94	0		-0.19	-0.13			5.6
37788	230	1.41	4496	0.46	-2.94		0	-0.19	-0.19	1.58	-3.76	5.6
37789	230.5	1.41	4464	0.46	-3.53	0		-0.19	0			5.6
37790	231.5	1.41	4432	0.42	-4.42		0	-0.19	0	1.75	-3.81	5.6
37791	232	1.41	4404	0.38	-4.12	0		-0.19	-0.06			5.6
37792	232.5	1.41	4372	0.38	-3.83		0	-0.19	-0.06	1.99	-3.86	5.6
37793	233.5	1.41	4344	0.38	-9.13	0		-0.19	0			5.6
37794	233.5	1.41	4312	0.33	-12.07		0	-0.19	-0.13	4.32	-3.91	5.6
37795	233.5	1.41	4284	0.33	-14.13	0		-0.19	0			5.6
37796	233.5	1.41	4252	0.38	-14.13		0	-0.19	0	4.55	-3.86	5.6
37797	234	1.41	4220	0.38	-15.61	0		-0.19	0.06			5.6
37798	234	1.41	4192	0.42	-17.08		0	-0.19	0.19	5.31	-3.76	5.6
37799	234	1.41	4164	0.46	-17.37	0		-0.19	0.19			5.6
37800	234.5	1.58	4132	0.46	-11.48		0	-0.19	0	3.21	-3.66	5.6
37801	235	1.41	4104	0.54	-8.54	0		-0.19	-0.06			5.6
37802	235	1.41	4076	0.54	-7.36		0	-0.19	-0.06	2.34	-3.61	5.6
37803	235.5	1.23	4048	0.54	-4.71	0		-0.19	-0.25			5.6
37804	236.5	1.23	4020	0.5	-1.18		0	-0.19	-0.51	0.94	-3.66	5.6
37805	237	1.41	3988	0.46	-1.47	0		-0.19	-0.44			5.6

FDR	CAS	PITCH	ALTITUDE	CCP	CWP	TE	TE	Rud	Rudder	Aileron	ELEV	Pitch
ELAPSED						Flap	Flap	Peda.		Posn -	POS L	Trim
TIME IN						Posn	Posn			Left		Posn
SECONDS	(knots)	(degs.)	(FEET)	(degrees)	(degrees)	(deg)	(deg)	(deg)	(degrees)	(degs.)	(degs)	(Units)
37806	236	1.41	3960	0.46	-7.36		0	-0.19	-0.32	3.56	-3.56	5.6
37807	236.5	1.41	3932	0.54	-14.13	0		-0.19	-0.38			5.6
37808	236.5	1.58	3900	0.71	-18.26		0	-0.19	-0.13	5.77	-3.21	5.6
37809	236	1.76	3868	0.8	-18.26	0		-0.19	0.25			5.6
37810	235.5	1.58	3840	0.88	-11.19		0	-0.19	0.38	3.1	-2.96	5.6
37811	236	1.41	3808	1.13	-9.72	0		-0.19	0.06			5.63
37812	235.5	1.58	3780	0.96	-6.18		0	-0.19	-0.19	2.04	-2.91	5.72
37813	235.5	1.58	3752	1.21	-3.53	0		-0.19	-0.25			5.81
37814	235	2.11	3724	1.26	-1.77		0	-0.19	-0.63	0.94	-2.62	5.89
37815	235	2.81	3700	1.17	-1.77	0		-0.19	-0.32			5.98
37816	235	3.34	3680	0.96	-2.36		0	-0.19	-0.51	2.28	-3.16	6.1
37817	235	3.52	3660	0.75	-5.59	0		-0.19	-0.19			6.18
37818	235	3.69	3648	0.5	-2.36		0	-0.19	-0.57	1.11	-3.91	6.24
37819	235	3.87	3632	0.38	-3.83	0		-0.19	-0.38			6.24
37820	235	3.87	3624	0.25	-1.47		0	-0.19	-0.57	1.75	-4.21	6.24
37821	233.5	4.04	3608	0.17	-4.71	0		-0.19	-0.38			6.24
37822	233	4.22	3600	0.29	-5.3		0	-0.19	-0.13	2.57	-4.06	6.27
37823	232.5	4.39	3588	0.33	-6.48	0		-0.19	-0.06			6.18
37824	230	4.57	3576	0.46	-6.48		0	-0.19	-0.06	2.98	-3.56	6.1
37825	230.5	4.39	3564	0.63	-6.48	0		-0.19	-0.06			6.1
37826	229	4.22	3556	0.67	-8.83		0	-0.19	0.13	2.28	-3.41	6.1
37827	230.5	4.22	3548	0.67	-4.12	0		-0.19	-0.32			6.1
37828	229	4.04	3540	0.75	-1.18		0	-0.19	-0.38	1.11	-3.36	6.07
37829	232	3.87	3532	0.63	0	0		-0.19	-0.7			6.07
37830	229	4.04	3524	0.5	-3.24		0	-0.19	-0.38	2.57	-3.76	6.07
37831	229	4.04	3516	0.59	-2.65	0		-0.19	-0.25			6.1
37832	227.5	4.04	3508	0.59	-5.01		0	-0.19	-0.32	1.87	-3.66	6.07
37833	227	4.04	3496	0.59	-8.83	0		-0.19	0			6.1
37834	229	4.04	3488	0.63	-7.36		0	-0.19	-0.13	1.34	-3.46	6.1
37835	227.5	4.22	3480	0.63	-0.88	0		-0.19	-0.38			6.1
37836	228	4.22	3468	0.63	-4.42		0	-0.19	-0.32	1.29	-3.46	6.07
37837	226.5	4.04	3456	0.67	-4.42	0		-0.19	-0.25			6.07
37838	223.5	4.22	3444	0.67	-10.6		0	-0.19	0.13	3.44	-3.46	6.1
37839	225.5	4.22	3436	0.63	-5.59	0		-0.19	0			6.1
37840	230	3.87	3428	0.42	7.36		0	-0.19	-0.76	-3.62	-3.86	6.1
37841	225.5	3.52	3420	0.33	14.13	0		-0.19	-0.44			6.07
37842	224	3.69	3408	-0.04	16.78		0	-0.19	-1.02	-2.98	-4.25	6.1
37843	223	3.87	3392	0.17	10.6	0		-0.19	-0.82			6.1
37844	223.5	4.04	3380	0.17	17.96		0	-0.19	-0.76	-3.15	-4.06	6.07

FDR	CAS	PITCH	ALTITUDE	CCP	CWP	TE	TE	Rud	Rudder	Aileron	ELEV	Pitch
ELAPSED						Flap	Flap	Pedal		Posn -	POS L	Trim
TIME IN						Posn	Posn			Left		Posn
SECONDS	(knots)	(degs.)	(FEET)	(degrees)	(degrees)	(deg)	(deg)	(deg)	(degrees)	(degs.)	(degs)	(Units)
37845	224	4.04	3364	0.21	9.72	0		-0.19	-0.32			6.01
37846	222	4.04	3352	0.38	6.48		0	-0.19	-0.44	-1.46	-3.76	5.89
37847	223	3.87	3336	0.46	7.36	0		-0.19	-0.63			5.83
37848	223.5	3.87	3324	0.46	2.94		0	-0.19	-0.25	-1.05	-3.76	5.83
37849	220.5	4.04	3312	0.38	4.42	0		-0.19	-0.19			5.83
37850	220	4.04	3296	0.5	-5.3		0	-0.19	0.19	1.23	-3.61	5.83
37851	221	4.04	3284	0.59	-6.48	0		-0.19	0			5.83
37852	222.5	4.39	3272	0.75	-1.18		0	-0.19	-0.13	0.58	-3.21	5.83
37853	221	4.75	3256	0.8	4.12	0		-0.19	-0.25			5.83
37854	221.5	4.92	3248	0.96	2.06		0	-0.19	-0.32	0.64	-3.01	5.83
37855	219	5.1	3244	0.92	-5.59	0		-0.19	0.44			5.81
37856	219	5.27	3236	0.88	-0.59		0	-0.19	0.51	2.22	-3.61	5.89
37857	220.5	5.98	3232	0.63	-9.72	0		-0.19	-0.06			5.92
37858	220.5	6.15	3228	0.67	-2.94		0	-0.19	-0.06	2.75	-3.51	5.95
37859	219.5	6.15	3228	0.63	-4.71	0		-0.19	-0.19			5.92
37860	223.5	6.15	3228	0.67	-8.25		0.18	-0.19	-0.25	3.68	-3.46	5.92
37861	224.5	6.15	3232	0.59	-9.13	0.35		-0.19	-0.19			5.92
37862	218.5	5.98	3236	0.67	-2.36		0.88	-0.19	-0.44	1.64	-3.66	5.89
37863	215.5	6.15	3240	0.33	-0.59	0.97		-0.19	-0.06			5.89
37864	214	5.8	3244	0.38	-12.66		0.97	-0.19	0.19	3.04	-3.16	5.86
37865	213.5	5.45	3244	0.71	-13.25	0.97		-0.19	0.25			5.89
37866	213.5	5.45	3248	0.67	-12.96		0.97	-0.19	0.63	1.87	-3.46	5.86
37867	211	5.45	3252	0.67	-2.65	1.05		-0.19	0.13			5.89
37868	210.5	5.27	3248	0.71	-7.36		1.23	-0.19	-0.25	1.4	-3.36	5.86
37869	209.5	5.27	3248	0.75	-5.01	1.23		-0.19	-0.25			5.86
37870	206.5	5.27	3244	0.88	1.18		1.41	-0.19	-0.76	0.06	-3.11	5.86
37871	205.5	5.45	3240	0.88	-2.65	1.41		-0.19	0			5.86
37872	205	5.45	3236	1	-0.59		1.58	-0.19	-0.13	0.82	-2.86	5.86
37873	204.5	5.62	3244	1.05	0.88	1.67		-0.19	-0.32			5.92
37874	206	5.8	3244	0.59	0.29		1.85	-0.19	-0.51	0.23	-4.11	6.1
37875	206	5.98	3240	0.08	-0.88	1.85		-0.19	-0.06			6.16
37876	201.5	6.33	3244	-0.29	10.01		1.93	-0.19	-0.44	-1.87	-4.7	6.16
37877	198	5.62	3244	-0.25	10.9	1.93		-0.19	-0.13			6.13
37878	196	5.1	3244	-0.33	11.78		1.93	-0.19	-0.13	-2.1	-4.55	6.13
37879	192.5	4.75	3240	-0.5	12.66	2.02		-0.19	-0.25			6.16
37880	193	4.22	3232	-0.8	16.2		3.16	-0.19	-0.63	-3.44	-4.9	6.16
37881	191	3.16	3220	0.75	14.72	3.78		-0.19	-1.46			6.1
37882	189	4.04	3208	0.46	7.95		4.92	-0.19	-0.19	-1.52	-4.75	6.13
37883	190	3.69	3188	0.54	9.13	4.92		-0.19	-0.57			6.13

FDR	CAS	PITCH	ALTITUDE	CCP	CWP	TE	TE	Rud	Rudder	Aileron	ELEV	Pitch
ELAPSED						Flap	Flap	Pedal		Posn -	POS L	Trim
TIME IN						Posn	Posn			Left		Posn
SECONDS	(knots)	(degs.)	(FEET)	(degrees)	(degrees)	(deg)	(deg)	(deg)	(degrees)	(degs.)	(degs)	(Units)
37884	188.5	2.81	3172	0.5	9.13		4.92	-0.19	-0.38	-1.4	-3.46	6.13
37885	189.5	2.64	3148	-0.04	2.06	4.92		-0.17	0.19			6.13
37886	190	2.11	3128	0.42	-0.88		6.59	-0.19	0	1.11	-3.56	6.1
37887	189.5	1.76	3100	0.38	-2.65	7.47		-0.17	-0.32			6.1
37888	189	1.41	3076	0.38	-2.65		9.32	-0.17	-0.44	1.93	-3.61	6.13
37889	189	0.88	3044	0.38	-5.3	9.93		-0.17	0.06			6.1
37890	189	0.18	3016	0.04	-6.48		10.63	-0.14	-0.25	3.39	-3.81	6.07
37891	189.5	-0.35	2980	0.17	-7.07	14.94		-0.14	0.25			6.07
37892	187	-0.35	2948	0.17	-11.19		14.94	-0.11	-0.13	3.44	-3.86	6.07
37893	187.5	-0.35	2916	0.13	-8.54	14.94		-0.11	0.13			6.07
37894	189.5	-0.35	2880	-0.08	-5.89		14.94	-0.08	0.32	1.52	-4.4	6.1
37895	188.5	-0.35	2844	-1.59	-1.77		16		-0.06	0.19		6.1
37896	188	-1.05	2808	-1	-1.47		24.96	-0.06	0.63	1.11	-5.04	6.1
37897	186.5	-1.41	2772	-0.8	-1.77	24.96		-0.06	0.63			6.13
37898	190.5	-1.23	2736	-1.13	-1.77		24.96	-0.06	-0.44	1.11	-5.49	6.1
37899	187.5	-1.93	2700	-1.21	-0.88	24.96		-0.06	0.38			6.04
37900	182.5	-2.81	2668	-1.63	7.66		24.96	-0.06	0.63	-0.35	-6.13	6.07
37901	186	-3.87	2632	-1.59	5.3	24.96		-0.06	0.19			6.04
37902	186	-4.75	2592	-1.63	3.24		24.96	-0.06	-0.25	0.06	-6.03	6.04
37903	184.5	-5.27	2548	-0.67	2.36	24.96		-0.14	-0.51			6.01
37904	185.5	-4.92	2496	-1.34	-0.29		24.96	-0.14	-1.4	1.64	-5.49	6.04
37905	187	-4.92	2440	-1.05	-9.72	24.96		-0.17	-0.82			6.04
37906	187	-4.92	2384	-0.59	-18.55		24.96	-0.17	0.76	5.13	-4.7	6.01
37907	190	-4.57	2332	-0.84	-17.96	24.96		-0.19	1.65			6.04
37908	190.5	-4.75	2284	-1.26	-11.76		24.96	-0.19	0.89	3.27	-5	6.04
37909	190.5	-4.75	2232	0.59	-4.12	24.96		-0.22	1.27			6.01
37910	189.5	-4.22	2184	-1.38	-3.83		24.96	-0.22	1.08	1.46	-5.44	6.04
37911	194	-4.92	2132	-0.42	-0.88	24.96		-0.22	-0.06			5.98
37912	197.5	-4.04	2084	0.08	2.06		24.96	-0.22	0.25	0.12	-5.98	6.04
37913	196	-4.75	2040	-1.13	4.12	24.96		-0.22	-0.19			6.01
37914	197.5	-5.45	1992	-0.67	5.89		24.96	-0.22	-1.52	-0.41	-5.14	6.01
37915	197	-5.45	1944	-1.17	5.59	24.96		-0.22	-0.82			6.01
37916	196	-5.27	1900	-0.54	4.12		24.96	-0.22	-1.02	-0.23	-5.24	6.01
37917	195	-4.75	1856	-0.25	5.3	24.96		-0.22	-0.7			5.98
37918	194.5	-4.39	1816	-1.09	7.07		24.96	-0.22	-1.14	-0.82	-5.39	6.01
37919	197	-4.39	1772	-1.21	8.54	25.22		-0.25	-1.52			5.98
37920	200	-4.57	1736	-1.17	7.95		29.27	-0.25	-0.32	-0.76	-6.47	5.95
37921	197.5	-5.27	1704	-1.21	7.07	29.97		-0.25	-1.46			5.92
37922	197.5	-4.92	1668	-1.88	10.01		29.97	-0.25	-1.52	-1.17	-7.1	5.92

FDR	CAS	PITCH	ALTITUDE	CCP	CWP	TE	TE	Rud	Rudder	Aileron	ELEV	Pitch
ELAPSED						Flap	Flap	Pedal		Posn -	POS L	Trim
TIME IN						Posn	Posn			Left		Posn
SECONDS	(knots)	(degs.)	(FEET)	(degrees)	(degrees)	(deg)	(deg)	(deg)	(degrees)	(degs.)	(degs)	(Units)
37923	193.5	-4.57	1632	-2.59	4.42	29.97		-0.25	-0.25			5.98
37924	197	-5.45	1600	-2.43	7.66		29.97	-0.25	0.7	-0.53	-6.81	5.95
37925	197	-5.8	1560	-2.26	6.18	29.97		-0.22	-0.38			5.95
37926	197	-4.92	1524	-2.22	8.54		29.97	-0.22	-1.33	-0.94	-4.55	5.98
37927	195.5	-4.57	1488	-3.06	16.2	29.97		-0.22	-0.89			6.01
37928	195.5	-5.62	1456	-2.43	7.36		29.97	-0.22	-0.63	-0.88	-7	5.95
37929	195	-5.98	1416	-2.09	7.95	29.97		-0.22	-1.08			5.95
37930	197	-6.15	1372	-2.22	7.95		29.97	-0.22	-1.21	-0.58	-6.03	5.95
37931	197	-5.98	1332	-1.63	0.29	29.97		-0.22	-0.44			5.95
37932	197	-5.1	1288	-1.13	-2.65		29.97	-0.22	-0.32	1.11	-5.73	5.95
37933	196	-4.57	1244	-1.63	-9.72	29.97		-0.22	-0.7			5.98
37934	199.5	-4.57	1208	-1.76	-2.06		29.97	-0.22	0.51	0.64	-6.03	5.95
37935	197.5	-4.57	1176	-1.51	11.78	29.97		-0.22	0.13			5.95
37936	198	-4.22	1140	-1.42	-0.59		29.97	-0.22	0.57	2.22	-5.44	5.92
37937	196	-3.52	1112	-1.21	2.06	29.97		-0.25	-0.06			5.95
37938	192	-2.81	1080	-1.26	-2.06		29.97	-0.25	-0.25	2.04	-6.66	5.95
37939	193.5	-2.64	1056	-1.55	-8.25	29.97		-0.25	1.08			5.95
37940	191.5	-2.64	1024	-0.21	-8.54		29.97	-0.25	0.63	0.99	-4.01	5.95
37941	189.5	-0.88	996	-0.5	-10.6	29.97		0.33	0.89			6.01
37942	188.5	-0.7	972	-0.67	-8.83		29.97	-0.22	1.33	1.29	-0.31	5.92
37943	186.5	1.23	952	-1.42	8.83	29.97		-0.3	0.44			6.01
37944	185.5	1.58	940	0.46	-10.01		29.97	-0.33	0.82	-1.58	-4.95	6.1
37945	183.5	0.7	940	-1.09	13.55	29.97		-0.28	-0.44			6.01
37946	182	0.53	940	0.59	27.09		29.97	-0.19	-0.19	3.1	-4.9	5.98
37947	179.5	-0.53	944	0.29	1.18	29.97		-0.25	0.25			5.92
37948	175.5	0.18	936	-0.88	14.13		29.97	-0.44	-1.65	-3.68	-5.54	5.98
37949	169.5	-0.53	940	-1.55	19.43	29.97		-0.17	-0.06			6.04
37950	164.5	-0.53	920	-1.72	15.61		29.97	-0.3	-2.09	-3.27	-6.08	6.04
37951	155.5	-0.53	916	-0.42	7.07	29.97		-0.36	-0.7			6.01
37952	149.5	-0.7	908	0.59	0		29.97	-0.6	-0.7	-0.12	-3.46	6.01
37953	141	-1.05	904	0.63	0	30.32		-0.85	-0.44			5.98
37954	133.5	-0.7	896	0.63	0		35.51	-0.91	-1.21	-0.35	-3.56	5.98
37955	128	-0.88	896	0.59	0	38.5		-1.02	-1.27			6.07
37956	119	-0.88	896	0.59	0		39.99	-1.29	-1.27	-0.18	-3.46	6.01
37957	110	-0.88	900	0.63	0	39.99		-1.20	-2.03			6.07
37958	102	-0.88	904	0.63	0		39.99	-1.32	-1.59	-0.18	-3.31	6.04
37959	96	-1.05	908	0.67	0	39.99		-1.59	-2.92			6.1
37960	81.5	-1.05	908	0.63	0		39.99	-1.7	-3.87	-0.41	-3.71	6.13
37961	71.5	-1.23	908	0.63	0	39.99		-1.84	-4.38			6.13

FDR	CAS	PITCH	ALTITUDE	CCP	CWP	TE	TE	Rud	Rudder	Aileron	ELEV	Pitch
ELAPSED						Flap	Flap	Pedal		Posn -	POS L	Trim
TIME IN						Posn	Posn			Left		Posn
SECONDS	(knots)	(degs.)	(FEET)	(degrees)	(degrees)	(deg)	(deg)	(deg)	(degrees)	(degs.)	(degs)	(Units)
37962	64	-1.23	908	0.67	0	39.99		-1.48	-4.76	-0.41	-3.46	6.13
37963	55	-1.41	912	0.67	0	39.99		-2.17	-5.58			6.13
37964	45	-1.58	908	0.67	0	39.99		-2.03	-6.53	-0.41	-3.56	6.18
37965	45	-1.58	912	0.67	0	39.99		-0.91	-6.22			6.16
37966	45	-1.05	904	0.63	0	39.99		-2.53	-5.84	-0.41	-3.41	6.16
37967	45	-0.88	920	0.71	1.77	39.99		-3.22	-4.19			6.01
37968	45	-6.33	924	0.33	1.47	39.99		0	-1.78	0	-3.96	6.16
37969	45	3.52	924	0.71	-7.36	39.99		-4.92	-8.88			6.16
37970	45	5.27	924	0.5	-0.59	39.99		39.99	-6.79	-4.82	-0.47	-3.41
37971	45	5.62	924	0.59	-0.59	39.99			-12.78	-22.65		
37972	511.5	5.27	924	0.54	-0.59	39.99		39.99	-13.25	-25.63	-0.47	-3.26
37973	45	5.45	924	0.59	-0.59	39.99			-13.25	-25.25		
37974	511.5	5.45	924	0.59	-0.59	39.99		39.99	-13.25	-25.25	-0.41	-3.01
37975	45	5.45	924	0.54	-0.59	39.99			-9.32	-25.25		
37976	511.5	5.45	924	0.59	-0.59	39.99		39.99	-6.68	-15.16	-0.47	-3.06
37977	45	5.45	924	0.59	-0.59	39.99			-5.19	-12.5		
37978	511.5	5.45	924	0.63	-0.59	39.99		39.99	-4.86	-9.64	-0.47	-3.26
37979	45	5.45	924	0.59	-0.59	39.99			-4.59	-9.52		
37980	511.5	5.45	924	0.59	-0.59	39.99		39.99	-3.57	-8.88	-0.47	-3.11
37981	45	5.45	924	0.59	-0.59	39.99			-2.91	-6.28		
37982	511.5	5.45	924	0.54	-0.59	39.99		39.99	-2.86	-5.46	-0.47	-3.16
37983	45	5.45	924	0.59	-0.59	39.99			-1.95	-3.68		
37984	511.5	5.45	924	0.59	-0.59	-0.09		-0.09	-1.92	-3.43	-0.47	-3.16
37985	45	5.45	924	0.59	-0.59	-0.09			-1.87	-3.36		
37986	511.5	5.45	924	0.59	-0.59	-0.09		-0.09	-1.84	-3.3	-0.47	-3.21

FDR	ALTITUDE	CAS	Ground-speed	N1 Eng 1	N1 Eng 2	T/R Unlock R	T/R Dep R OUTBRD	T/R Unlock R	T/R Dep R	T/R Unlock L	T/R Dep L	T/R Unlock L	T/R Dep L OUTBRD
ELAPSED TIME IN						OUTBD		INBRD	INBOARD	INBD	INBOARD		
SECONDS (FEET)	(knots)	(knots)		(%)	(%)								
37690	5456	241.5	262	32.2	28.07	Locked	Not Depl	Locked	Not Depl	Locked	Not Depl	Locked	Not Depl
37691	5428	241.5	262	32.2	28.07	Locked	Not Depl	Locked	Not Depl	Locked	Not Depl	Locked	Not Depl
37692	5404	241.5	262	32.2	28.07	Locked	Not Depl	Locked	Not Depl	Locked	Not Depl	Locked	Not Depl
37693	5380	241	262	32.2	28.07	Locked	Not Depl	Locked	Not Depl	Locked	Not Depl	Locked	Not Depl
37694	5360	240.5	262	32.2	28.07	Locked	Not Depl	Locked	Not Depl	Locked	Not Depl	Locked	Not Depl
37695	5340	240.5	261.5	32.2	29.07	Locked	Not Depl	Locked	Not Depl	Locked	Not Depl	Locked	Not Depl
37696	5320	241	261.5	33.58	32.58	Locked	Not Depl	Locked	Not Depl	Locked	Not Depl	Locked	Not Depl
37697	5300	240.5	261	37.33	34.45	Locked	Not Depl	Locked	Not Depl	Locked	Not Depl	Locked	Not Depl
37698	5284	239	261	36.83	34.33	Locked	Not Depl	Locked	Not Depl	Locked	Not Depl	Locked	Not Depl
37699	5272	239	260	36.2	33.95	Locked	Not Depl	Locked	Not Depl	Locked	Not Depl	Locked	Not Depl
37700	5260	239	259.5	35.95	33.7	Locked	Not Depl	Locked	Not Depl	Locked	Not Depl	Locked	Not Depl
37701	5248	238	259	35.95	33.45	Locked	Not Depl	Locked	Not Depl	Locked	Not Depl	Locked	Not Depl
37702	5240	238.5	258	35.83	33.33	Locked	Not Depl	Locked	Not Depl	Locked	Not Depl	Locked	Not Depl
37703	5232	238.5	257	35.83	33.33	Locked	Not Depl	Locked	Not Depl	Locked	Not Depl	Locked	Not Depl
37704	5224	237.5	256	35.7	34.33	Locked	Not Depl	Locked	Not Depl	Locked	Not Depl	Locked	Not Depl
37705	5220	237	255	36.58	36.7	Locked	Not Depl	Locked	Not Depl	Locked	Not Depl	Locked	Not Depl
37706	5220	236	254	39.83	40.21	Locked	Not Depl	Locked	Not Depl	Locked	Not Depl	Locked	Not Depl
37707	5220	235	253.5	45.71	45.46	Locked	Not Depl	Locked	Not Depl	Locked	Not Depl	Locked	Not Depl
37708	5220	234.5	252.5	51.59	50.34	Locked	Not Depl	Locked	Not Depl	Locked	Not Depl	Locked	Not Depl
37709	5224	234	252	55.72	53.35	Locked	Not Depl	Locked	Not Depl	Locked	Not Depl	Locked	Not Depl
37710	5228	233.5	251.5	57.98	55.1	Locked	Not Depl	Locked	Not Depl	Locked	Not Depl	Locked	Not Depl
37711	5232	232.5	251	59.35	57.73	Locked	Not Depl	Locked	Not Depl	Locked	Not Depl	Locked	Not Depl
37712	5236	232.5	251	61.6	59.85	Locked	Not Depl	Locked	Not Depl	Locked	Not Depl	Locked	Not Depl
37713	5240	232.5	250.5	63.23	60.6	Locked	Not Depl	Locked	Not Depl	Locked	Not Depl	Locked	Not Depl
37714	5244	232.5	250.5	63.98	61.48	Locked	Not Depl	Locked	Not Depl	Locked	Not Depl	Locked	Not Depl
37715	5248	232.5	250.5	64.11	61.6	Locked	Not Depl	Locked	Not Depl	Locked	Not Depl	Locked	Not Depl
37716	5252	232.5	250	63.86	60.73	Locked	Not Depl	Locked	Not Depl	Locked	Not Depl	Locked	Not Depl
37717	5256	232	250	62.6	60.23	Locked	Not Depl	Locked	Not Depl	Locked	Not Depl	Locked	Not Depl
37718	5256	231.5	250	61.6	60.23	Locked	Not Depl	Locked	Not Depl	Locked	Not Depl	Locked	Not Depl
37719	5260	232	250	61.1	60.23	Locked	Not Depl	Locked	Not Depl	Locked	Not Depl	Locked	Not Depl
37720	5260	231.5	250	60.85	60.23	Locked	Not Depl	Locked	Not Depl	Locked	Not Depl	Locked	Not Depl
37721	5264	231	250	60.85	60.23	Locked	Not Depl	Locked	Not Depl	Locked	Not Depl	Locked	Not Depl
37722	5264	230.5	250	60.85	60.23	Locked	Not Depl	Locked	Not Depl	Locked	Not Depl	Locked	Not Depl
37723	5264	229	250	60.73	60.23	Locked	Not Depl	Locked	Not Depl	Locked	Not Depl	Locked	Not Depl
37724	5260	229	250	60.73	60.23	Locked	Not Depl	Locked	Not Depl	Locked	Not Depl	Locked	Not Depl
37725	5260	229.5	250	60.73	60.35	Locked	Not Depl	Locked	Not Depl	Locked	Not Depl	Locked	Not Depl
37726	5256	230.5	250	60.85	61.6	Locked	Not Depl	Locked	Not Depl	Locked	Not Depl	Locked	Not Depl
37727	5256	231	250.5	61.35	61.85	Locked	Not Depl	Locked	Not Depl	Locked	Not Depl	Locked	Not Depl

FDR	ALTITUDE	CAS	Ground- speed	N1 Eng	N1 Eng	T/R	T/R Dep						
ELAPSED TIME IN SECONDS	(FEET)	(knots)	(knots)	(%)	(%)								
37728	5252	231	250.5	61.35	61.85	Locked	Not Depl						
37729	5252	230	250.5	61.35	61.73	Locked	Not Depl						
37730	5252	230.5	250.5	61.35	61.6	Locked	Not Depl						
37731	5248	231.5	251	61.35	61.48	Locked	Not Depl						
37732	5248	231.5	250.5	61.35	61.48	Locked	Not Depl						
37733	5248	231	250.5	61.35	61.48	Locked	Not Depl						
37734	5248	231.5	250.5	61.35	61.48	Locked	Not Depl						
37735	5252	230	250.5	61.35	61.48	Locked	Not Depl						
37736	5252	230.5	251	61.35	61.48	Locked	Not Depl						
37737	5252	230	251	61.35	61.48	Locked	Not Depl						
37738	5256	230.5	251	61.35	61.48	Locked	Not Depl						
37739	5256	231.5	251	61.35	61.48	Locked	Not Depl						
37740	5260	232	251	61.35	61.48	Locked	Not Depl						
37741	5260	231.5	251	61.35	61.48	Locked	Not Depl						
37742	5264	231.5	251	61.35	61.48	Locked	Not Depl						
37743	5264	231.5	251.5	61.35	61.48	Locked	Not Depl						
37744	5264	231	251.5	61.35	61.48	Locked	Not Depl						
37745	5268	231.5	251.5	61.35	60.98	Locked	Not Depl						
37746	5268	232	252	61.35	60.35	Locked	Not Depl						
37747	5264	232	252	61.35	60.48	Locked	Not Depl						
37748	5264	231	252	61.35	60.48	Locked	Not Depl						
37749	5260	232	252.5	61.35	60.48	Locked	Not Depl						
37750	5260	231.5	252.5	61.35	59.85	Locked	Not Depl						
37751	5256	232.5	252.5	61.23	59.23	Locked	Not Depl						
37752	5252	232	252.5	60.98	58.73	Locked	Not Depl						
37753	5248	232	252.5	60.1	56.47	Locked	Not Depl						
37754	5244	230.5	252	55.85	52.6	Locked	Not Depl						
37755	5240	231.5	251.5	49.72	50.34	Locked	Not Depl						
37756	5236	230.5	251	44.71	47.72	Locked	Not Depl						
37757	5228	229	250	41.21	44.21	Locked	Not Depl						
37758	5224	229.5	249.5	38.71	40.08	Locked	Not Depl						
37759	5220	228	248.5	36.58	36.83	Locked	Not Depl						
37760	5216	227.5	247.5	34.95	34.33	Locked	Not Depl						
37761	5208	227	247	33.83	32.33	Locked	Not Depl						
37762	5200	226	246.5	32.95	30.82	Locked	Not Depl						
37763	5188	226	246	32.2	29.82	Locked	Not Depl						
37764	5172	224	245.5	31.57	29.2	Locked	Not Depl						
37765	5152	224	245.5	31.57	28.57	Locked	Not Depl						
37766	5132	224	245	31.7	27.82	Locked	Not Depl						

FDR	ALTITUDE	CAS	Ground-speed	N1 Eng	N1 Eng	T/R	T/R Dep						
ELAPSED				1	2	Unlock R	R OUTBRD	Unlock R	R	Unlock L	L	Unlock L	L OUTBRD
TIME IN						OUTBD		INBRD		INBD		OUTBD	
SECONDS	(FEET)	(knots)	(knots)	(%)	(%)								
37767	5112	223.5	245	31.7	27.45	Locked	Not Depl						
37768	5092	224	245	31.7	27.57	Locked	Not Depl						
37769	5068	223.5	245	31.7	27.57	Locked	Not Depl						
37770	5044	223.5	245	31.7	27.57	Locked	Not Depl						
37771	5020	223	245	31.7	27.7	Locked	Not Depl						
37772	4996	223.5	245	31.7	27.7	Locked	Not Depl						
37773	4968	223.5	245	31.7	27.7	Locked	Not Depl						
37774	4936	223.5	245.5	31.7	27.7	Locked	Not Depl						
37775	4908	224.5	245.5	31.7	27.82	Locked	Not Depl						
37776	4876	225	246	31.7	27.82	Locked	Not Depl						
37777	4844	225.5	246	31.7	27.82	Locked	Not Depl						
37778	4812	226	246.5	31.7	27.82	Locked	Not Depl						
37779	4780	226	247	31.7	27.82	Locked	Not Depl						
37780	4748	226	247	31.7	27.82	Locked	Not Depl						
37781	4716	227	247.5	31.82	27.82	Locked	Not Depl						
37782	4684	228	248	31.82	27.82	Locked	Not Depl						
37783	4652	228.5	248.5	31.82	27.82	Locked	Not Depl						
37784	4620	228.5	248.5	31.82	27.82	Locked	Not Depl						
37785	4588	228.5	249	31.82	27.82	Locked	Not Depl						
37786	4560	228.5	249.5	31.82	27.82	Locked	Not Depl						
37787	4528	229	249.5	31.82	27.82	Locked	Not Depl						
37788	4496	230	250	31.82	27.82	Locked	Not Depl						
37789	4464	230.5	250	31.82	27.82	Locked	Not Depl						
37790	4432	231.5	250.5	31.82	27.82	Locked	Not Depl						
37791	4404	232	250.5	31.82	27.95	Locked	Not Depl						
37792	4372	232.5	251	31.82	27.95	Locked	Not Depl						
37793	4344	233.5	251	31.82	27.95	Locked	Not Depl						
37794	4312	233.5	251.5	31.82	27.95	Locked	Not Depl						
37795	4284	233.5	252	31.82	27.95	Locked	Not Depl						
37796	4252	233.5	252	31.82	27.95	Locked	Not Depl						
37797	4220	234	252.5	31.82	27.95	Locked	Not Depl						
37798	4192	234	253	31.82	27.95	Locked	Not Depl						
37799	4164	234	253.5	31.82	27.95	Locked	Not Depl						
37800	4132	234.5	254	31.82	27.95	Locked	Not Depl						
37801	4104	235	255	31.82	27.95	Locked	Not Depl						
37802	4076	235	255.5	31.82	27.95	Locked	Not Depl						
37803	4048	235.5	256	31.82	27.95	Locked	Not Depl						
37804	4020	236.5	256.5	31.82	27.95	Locked	Not Depl						
37805	3988	237	257.5	31.82	27.95	Locked	Not Depl						

FDR	ALTITUDE	CAS	Ground-speed	N1 Eng 1	N1 Eng 2	T/R Unlock R	T/R Dep OUTBRD	T/R Unlock R INBRD	T/R Dep INBOARD	T/R Unlock L INBD	T/R Dep INBOARD	T/R Unlock L L	T/R Dep OUTBRD
ELAPSED	TIME IN	SECONDS	(FEET)	(knots)	(knots)	(%)	(%)						
37806	3960	236	258	31.82	27.95	Locked	Not Depl	Locked	Not Depl	Locked	Not Depl	Locked	Not Depl
37807	3932	236.5	258.5	31.82	27.95	Locked	Not Depl	Locked	Not Depl	Locked	Not Depl	Locked	Not Depl
37808	3900	236.5	259	31.82	27.95	Locked	Not Depl	Locked	Not Depl	Locked	Not Depl	Locked	Not Depl
37809	3868	236	260	31.82	27.95	Locked	Not Depl	Locked	Not Depl	Locked	Not Depl	Locked	Not Depl
37810	3840	235.5	261	31.82	27.95	Locked	Not Depl	Locked	Not Depl	Locked	Not Depl	Locked	Not Depl
37811	3808	236	261.5	31.82	27.95	Locked	Not Depl	Locked	Not Depl	Locked	Not Depl	Locked	Not Depl
37812	3780	235.5	262.5	31.82	27.95	Locked	Not Depl	Locked	Not Depl	Locked	Not Depl	Locked	Not Depl
37813	3752	235.5	263.5	31.82	27.95	Locked	Not Depl	Locked	Not Depl	Locked	Not Depl	Locked	Not Depl
37814	3724	235	264	31.82	27.95	Locked	Not Depl	Locked	Not Depl	Locked	Not Depl	Locked	Not Depl
37815	3700	235	264.5	31.82	27.95	Locked	Not Depl	Locked	Not Depl	Locked	Not Depl	Locked	Not Depl
37816	3680	235	265	31.82	27.95	Locked	Not Depl	Locked	Not Depl	Locked	Not Depl	Locked	Not Depl
37817	3660	235	265.5	31.82	27.95	Locked	Not Depl	Locked	Not Depl	Locked	Not Depl	Locked	Not Depl
37818	3648	235	265.5	31.82	27.95	Locked	Not Depl	Locked	Not Depl	Locked	Not Depl	Locked	Not Depl
37819	3632	235	265.5	31.82	27.95	Locked	Not Depl	Locked	Not Depl	Locked	Not Depl	Locked	Not Depl
37820	3624	235	265.5	31.82	27.95	Locked	Not Depl	Locked	Not Depl	Locked	Not Depl	Locked	Not Depl
37821	3608	233.5	265	31.82	27.95	Locked	Not Depl	Locked	Not Depl	Locked	Not Depl	Locked	Not Depl
37822	3600	233	265	31.82	27.95	Locked	Not Depl	Locked	Not Depl	Locked	Not Depl	Locked	Not Depl
37823	3588	232.5	264.5	31.82	27.95	Locked	Not Depl	Locked	Not Depl	Locked	Not Depl	Locked	Not Depl
37824	3576	230	264	31.82	27.95	Locked	Not Depl	Locked	Not Depl	Locked	Not Depl	Locked	Not Depl
37825	3564	230.5	264	31.82	27.95	Locked	Not Depl	Locked	Not Depl	Locked	Not Depl	Locked	Not Depl
37826	3556	229	263.5	31.82	27.95	Locked	Not Depl	Locked	Not Depl	Locked	Not Depl	Locked	Not Depl
37827	3548	230.5	263	31.82	27.95	Locked	Not Depl	Locked	Not Depl	Locked	Not Depl	Locked	Not Depl
37828	3540	229	263	31.82	27.95	Locked	Not Depl	Locked	Not Depl	Locked	Not Depl	Locked	Not Depl
37829	3532	232	262.5	31.82	27.95	Locked	Not Depl	Locked	Not Depl	Locked	Not Depl	Locked	Not Depl
37830	3524	229	262	31.82	27.95	Locked	Not Depl	Locked	Not Depl	Locked	Not Depl	Locked	Not Depl
37831	3516	229	261.5	31.82	27.95	Locked	Not Depl	Locked	Not Depl	Locked	Not Depl	Locked	Not Depl
37832	3508	227.5	261	31.82	27.95	Locked	Not Depl	Locked	Not Depl	Locked	Not Depl	Locked	Not Depl
37833	3496	227	260.5	31.82	27.95	Locked	Not Depl	Locked	Not Depl	Locked	Not Depl	Locked	Not Depl
37834	3488	229	260	31.7	27.95	Locked	Not Depl	Locked	Not Depl	Locked	Not Depl	Locked	Not Depl
37835	3480	227.5	259.5	31.7	27.95	Locked	Not Depl	Locked	Not Depl	Locked	Not Depl	Locked	Not Depl
37836	3468	228	259	31.7	27.95	Locked	Not Depl	Locked	Not Depl	Locked	Not Depl	Locked	Not Depl
37837	3456	226.5	258.5	31.7	27.95	Locked	Not Depl	Locked	Not Depl	Locked	Not Depl	Locked	Not Depl
37838	3444	223.5	257.5	31.7	27.95	Locked	Not Depl	Locked	Not Depl	Locked	Not Depl	Locked	Not Depl
37839	3436	225.5	257	31.7	27.95	Locked	Not Depl	Locked	Not Depl	Locked	Not Depl	Locked	Not Depl
37840	3428	230	256.5	31.7	27.95	Locked	Not Depl	Locked	Not Depl	Locked	Not Depl	Locked	Not Depl
37841	3420	225.5	256	31.7	27.95	Locked	Not Depl	Locked	Not Depl	Locked	Not Depl	Locked	Not Depl
37842	3408	224	255.5	31.7	27.82	Locked	Not Depl	Locked	Not Depl	Locked	Not Depl	Locked	Not Depl
37843	3392	223	255	31.7	27.82	Locked	Not Depl	Locked	Not Depl	Locked	Not Depl	Locked	Not Depl
37844	3380	223.5	254	31.7	27.82	Locked	Not Depl	Locked	Not Depl	Locked	Not Depl	Locked	Not Depl

FDR	ALTITUDE	CAS	Ground-speed	N1 Eng	N1 Eng	T/R	T/R Dep						
ELAPSED				1	2	Unlock R	R OUTBRD	Unlock R	R	Unlock L	L	Unlock L	L OUTBRD
TIME IN						OUTBD		INBRD	INBOARD	INBD	INBOARD		
SECONDS	(FEET)	(knots)	(knots)	(%)	(%)								
37845	3364	224	253.5	31.7	27.82	Locked	Not Depl						
37846	3352	222	253.5	31.7	27.82	Locked	Not Depl						
37847	3336	223	253	31.7	27.82	Locked	Not Depl						
37848	3324	223.5	252.5	31.7	27.82	Locked	Not Depl						
37849	3312	220.5	252	31.7	27.82	Locked	Not Depl						
37850	3296	220	251.5	31.7	27.82	Locked	Not Depl						
37851	3284	221	251	31.7	27.82	Locked	Not Depl						
37852	3272	222.5	251	31.7	27.82	Locked	Not Depl						
37853	3256	221	250.5	31.7	27.82	Locked	Not Depl						
37854	3248	221.5	249.5	31.7	27.82	Locked	Not Depl						
37855	3244	219	249	31.7	27.82	Locked	Not Depl						
37856	3236	219	248.5	31.57	27.82	Locked	Not Depl						
37857	3232	220.5	247.5	31.57	27.82	Locked	Not Depl						
37858	3228	220.5	246.5	31.57	27.82	Locked	Not Depl						
37859	3228	219.5	245.5	31.57	27.82	Locked	Not Depl						
37860	3228	223.5	244.5	31.57	27.82	Locked	Not Depl						
37861	3232	224.5	243.5	31.57	27.82	Locked	Not Depl						
37862	3236	218.5	242	31.57	27.82	Locked	Not Depl						
37863	3240	215.5	241	31.57	27.82	Locked	Not Depl						
37864	3244	214	239.5	31.57	27.7	Locked	Not Depl						
37865	3244	213.5	238.5	31.57	27.7	Locked	Not Depl						
37866	3248	213.5	237	31.57	27.7	Locked	Not Depl						
37867	3252	211	236	31.57	27.7	Locked	Not Depl						
37868	3248	210.5	234.5	31.57	27.7	Locked	Not Depl						
37869	3248	209.5	233.5	31.57	27.82	Locked	Not Depl						
37870	3244	206.5	232.5	31.57	27.82	Locked	Not Depl						
37871	3240	205.5	231.5	31.57	27.7	Locked	Not Depl						
37872	3236	205	230.5	31.57	27.7	Locked	Not Depl						
37873	3244	204.5	229	31.45	27.7	Locked	Not Depl						
37874	3244	206	228	31.45	27.7	Locked	Not Depl						
37875	3240	206	226	31.45	27.7	Locked	Not Depl						
37876	3244	201.5	224	31.45	27.7	Locked	Not Depl						
37877	3244	198	222.5	31.45	27.7	Locked	Not Depl						
37878	3244	196	220.5	31.45	27.57	Locked	Not Depl						
37879	3240	192.5	219.5	31.45	27.57	Locked	Not Depl						
37880	3232	193	218	31.45	27.57	Locked	Not Depl						
37881	3220	191	217	31.45	27.57	Locked	Not Depl						
37882	3208	189	216	31.32	27.57	Locked	Not Depl						
37883	3188	190	215	31.32	27.57	Locked	Not Depl						

FDR	ALTITUDE	CAS	Ground-speed	N1 Eng	N1 Eng	T/R	T/R Dep						
ELAPSED				1	2	Unlock R	R OUTBRD	Unlock R	R	Unlock L	L	Unlock L	L OUTBRD
TIME IN						OUTBD		INBRD	INBOARD	INBD	INBOARD	OUTBD	
SECONDS	(FEET)	(knots)	(knots)	(%)	(%)								
37884	3172	188.5	214.5	31.32	27.57	Locked	Not Depl						
37885	3148	189.5	213.5	31.32	27.45	Locked	Not Depl						
37886	3128	190	213	31.32	27.45	Locked	Not Depl						
37887	3100	189.5	212.5	31.32	27.45	Locked	Not Depl						
37888	3076	189	212	31.32	27.57	Locked	Not Depl						
37889	3044	189	211.5	31.32	27.45	Locked	Not Depl						
37890	3016	189	211	31.2	27.45	Locked	Not Depl						
37891	2980	189.5	210.5	31.2	27.45	Locked	Not Depl						
37892	2948	187	210	31.32	27.45	Locked	Not Depl						
37893	2916	187.5	209.5	31.2	27.45	Locked	Not Depl						
37894	2880	189.5	209	31.2	27.45	Locked	Not Depl						
37895	2844	188.5	208	31.2	27.45	Locked	Not Depl						
37896	2808	188	207.5	31.2	27.45	Locked	Not Depl						
37897	2772	186.5	206.5	31.2	27.32	Locked	Not Depl						
37898	2736	190.5	206	31.2	27.32	Locked	Not Depl						
37899	2700	187.5	205.5	31.2	27.32	Locked	Not Depl						
37900	2668	182.5	205	31.2	27.32	Locked	Not Depl						
37901	2632	186	204.5	31.2	27.32	Locked	Not Depl						
37902	2592	186	204.5	31.07	27.32	Locked	Not Depl						
37903	2548	184.5	205	31.07	27.32	Locked	Not Depl						
37904	2496	185.5	205	31.07	27.32	Locked	Not Depl						
37905	2440	187	205	31.07	27.32	Locked	Not Depl						
37906	2384	187	205.5	31.07	27.32	Locked	Not Depl						
37907	2332	190	206	31.07	27.32	Locked	Not Depl						
37908	2284	190.5	206.5	31.07	27.32	Locked	Not Depl						
37909	2232	190.5	207.5	31.07	27.32	Locked	Not Depl						
37910	2184	189.5	208	31.07	27.32	Locked	Not Depl						
37911	2132	194	208.5	31.07	27.32	Locked	Not Depl						
37912	2084	197.5	209	31.07	27.32	Locked	Not Depl						
37913	2040	196	209.5	31.07	27.32	Locked	Not Depl						
37914	1992	197.5	210	31.07	27.32	Locked	Not Depl						
37915	1944	197	210.5	31.07	27.32	Locked	Not Depl						
37916	1900	196	211	31.07	27.32	Locked	Not Depl						
37917	1856	195	211	31.07	27.32	Locked	Not Depl						
37918	1816	194.5	211	30.95	27.32	Locked	Not Depl						
37919	1772	197	211	31.07	27.32	Locked	Not Depl						
37920	1736	200	210.5	30.95	27.32	Locked	Not Depl						
37921	1704	197.5	210	30.95	27.32	Locked	Not Depl						
37922	1668	197.5	209	31.07	27.32	Locked	Not Depl						

FDR	ALTITUDE	CAS	Ground-speed	N1 Eng	N1 Eng	T/R	T/R Dep	T/R						
ELAPSED				1	2	Unlock R	R OUTBRD	Unlock R	R	Unlock L	L	Unlock L	L OUTBRD	
TIME IN						OUTBD		INBRD		INBD		INBOARD		OUTBD
SECONDS	(FEET)	(knots)	(knots)	(%)	(%)									
37923	1632	193.5	208.5	31.07	27.32	Locked	Not Depl	Not Depl						
37924	1600	197	208	31.07	27.32	Locked	Not Depl	Not Depl						
37925	1560	197	207	31.07	27.32	Locked	Not Depl	Not Depl						
37926	1524	197	206.5	30.95	27.32	Locked	Not Depl	Not Depl						
37927	1488	195.5	206	30.95	27.32	Locked	Not Depl	Not Depl						
37928	1456	195.5	205	30.95	27.32	Locked	Not Depl	Not Depl						
37929	1416	195	204.5	30.95	27.32	Locked	Not Depl	Not Depl						
37930	1372	197	204	30.95	27.32	Locked	Not Depl	Not Depl						
37931	1332	197	203.5	30.95	27.32	Locked	Not Depl	Not Depl						
37932	1288	197	203	30.95	27.32	Locked	Not Depl	Not Depl						
37933	1244	196	202.5	30.95	27.32	Locked	Not Depl	Not Depl						
37934	1208	199.5	201.5	30.95	27.32	Locked	Not Depl	Not Depl						
37935	1176	197.5	201	30.95	27.32	Locked	Not Depl	Not Depl						
37936	1140	198	200	30.95	27.32	Locked	Not Depl	Not Depl						
37937	1112	196	199	30.95	27.32	Locked	Not Depl	Not Depl						
37938	1080	192	198	30.95	27.32	Locked	Not Depl	Not Depl						
37939	1056	193.5	197	30.95	27.2	Locked	Not Depl	Not Depl						
37940	1024	191.5	196	30.95	27.2	Locked	Not Depl	Not Depl						
37941	996	189.5	194.5	30.95	27.2	Locked	Not Depl	Not Depl						
37942	972	188.5	193	30.82	27.2	Locked	Not Depl	Not Depl						
37943	952	186.5	191.5	30.82	27.2	Locked	Not Depl	Not Depl						
37944	940	185.5	189.5	30.82	27.2	Locked	Not Depl	Not Depl						
37945	940	183.5	187.5	30.82	27.07	Locked	Not Depl	Not Depl						
37946	940	182	185	30.82	27.07	Locked	Not Depl	Not Depl						
37947	944	179.5	182.5	30.7	27.07	Locked	Not Depl	Not Depl						
37948	936	175.5	177.5	30.7	27.07	Locked	Not Depl	Not Depl						
37949	940	169.5	172	30.7	27.2	Unlock	Not Depl	Locked						
37950	920	164.5	166	33.08	30.07	Unlock	Deployed	Unlock	Not Depl	Unlock	Not Depl	Deployed	Unlock	Not Depl
37951	916	155.5	159.5	37.83	32.95	Unlock	Deployed	Unlock	Deployed	Unlock	Deployed	Deployed	Unlock	Deployed
37952	908	149.5	153	47.59	37.71	Unlock	Deployed	Unlock	Deployed	Unlock	Deployed	Deployed	Unlock	Deployed
37953	904	141	146	64.11	52.6	Unlock	Deployed	Unlock	Deployed	Unlock	Deployed	Deployed	Unlock	Deployed
37954	896	133.5	139	78.25	69.11	Unlock	Deployed	Unlock	Deployed	Unlock	Deployed	Deployed	Unlock	Deployed
37955	896	128	132	87.13	80.37	Unlock	Deployed	Unlock	Deployed	Unlock	Deployed	Deployed	Unlock	Deployed
37956	896	119	124	89.26	82.87	Unlock	Deployed	Unlock	Deployed	Unlock	Deployed	Deployed	Unlock	Deployed
37957	900	110	115	87.88	82.87	Unlock	Deployed	Unlock	Deployed	Unlock	Deployed	Deployed	Unlock	Deployed
37958	904	102	106	86.88	82.87	Unlock	Deployed	Unlock	Deployed	Unlock	Deployed	Deployed	Unlock	Deployed
37959	908	96	97	86.5	82.87	Unlock	Deployed	Unlock	Deployed	Unlock	Deployed	Deployed	Unlock	Deployed
37960	908	81.5	87.5	86.5	82.87	Unlock	Deployed	Unlock	Deployed	Unlock	Deployed	Deployed	Unlock	Deployed
37961	908	71.5	78	86.5	82.87	Unlock	Deployed	Unlock	Deployed	Unlock	Deployed	Deployed	Unlock	Deployed

FDR	ALTITUDE	CAS	Ground-speed	N1 Eng	N1 Eng	T/R	T/R Dep	T/R	T/R Dep	T/R	T/R Dep	T/R	T/R Dep
ELAPSED				1	2	Unlock R OUTBD	R OUTBRD	Unlock R INBRD	R INBOARD	Unlock L INBD	L INBOARD	Unlock L OUTBD	L OUTBRD
TIME IN													
SECONDS	(FEET)	(knots)	(knots)	(%)	(%)								
37962	908	64	68.5	86.38	83	Unlock	Deployed	Unlock	Deployed	Unlock	Deployed	Unlock	Deployed
37963	912	55	59	86.75	83.88	Unlock	Deployed	Unlock	Deployed	Unlock	Deployed	Unlock	Deployed
37964	908	45	50	87.13	84.25	Unlock	Deployed	Unlock	Deployed	Unlock	Deployed	Unlock	Deployed
37965	912	45	41.5	87.13	84.38	Unlock	Deployed	Unlock	Deployed	Unlock	Deployed	Unlock	Deployed
37966	904	45	34.5	87.13	84.38	Unlock	Deployed	Unlock	Deployed	Unlock	Deployed	Unlock	Deployed
37967	920	45	26	87.38	84.38	Unlock	Deployed	Unlock	Deployed	Unlock	Deployed	Unlock	Deployed
37968	924	45	20	85.13	77.37	Unlock	Deployed	Unlock	Deployed	Unlock	Deployed	Unlock	Deployed
37969	924	45	13.5	35.45	62.6	Unlock	Deployed	Unlock	Deployed	Unlock	Deployed	Unlock	Deployed
37970	924	45	11	74.99	59.98	Unlock	Deployed	Unlock	Deployed	Unlock	Deployed	Unlock	Deployed
37971	924	45	9	62.35	53.72	Unlock	Not Depl	Unlock	Deployed	Unlock	Deployed	Unlock	Deployed
37972	924	511.5	7	58.98	48.59	Unlock	Not Depl	Unlock	Not Depl	Unlock	Not Depl	Unlock	Not Depl
37973	924	45	4.5	54.35	44.21	Unlock	Not Depl	Unlock	Not Depl	Unlock	Not Depl	Unlock	Not Depl
37974	924	511.5	0.5	47.09	40.96	Unlock	Not Depl	Locked	Not Depl	Unlock	Not Depl	Unlock	Not Depl
37975	924	45	0.5	41.83	38.71	Locked	Not Depl	Locked	Not Depl	Unlock	Not Depl	Unlock	Not Depl
37976	924	511.5	0.5	38.21	36.95	Locked	Not Depl	Locked	Not Depl	Unlock	Not Depl	Unlock	Not Depl
37977	924	45	0.5	35.7	35.58	Locked	Not Depl	Locked	Not Depl	Unlock	Not Depl	Unlock	Not Depl
37978	924	511.5	0.5	34.45	34.2	Locked	Not Depl	Locked	Not Depl	Unlock	Not Depl	Unlock	Not Depl
37979	924	45	0.5	33.08	32.58	Locked	Not Depl	Locked	Not Depl	Unlock	Not Depl	Unlock	Not Depl
37980	924	511.5	0.5	31.57	30.95	Locked	Not Depl	Locked	Not Depl	Unlock	Not Depl	Unlock	Not Depl
37981	924	45	0.5	29.95	29.45	Locked	Not Depl	Locked	Not Depl	Unlock	Not Depl	Unlock	Not Depl
37982	924	511.5	0.5	28.45	28.2	Locked	Not Depl	Locked	Not Depl	Unlock	Not Depl	Unlock	Not Depl
37983	924	45	0.5	27.07	26.07	Locked	Not Depl	Locked	Not Depl	Unlock	Not Depl	Unlock	Not Depl
37984	924	511.5	0.5	24.19	23.32	Locked	Not Depl	Locked	Not Depl	Unlock	Not Depl	Unlock	Not Depl
37985	924	45	0.5	21.56	20.81	Locked	Not Depl	Locked	Not Depl	Unlock	Not Depl	Unlock	Not Depl
37986	924	511.5	0.5	19.31	18.94	Locked	Not Depl	Locked	Not Depl	Unlock	Not Depl	Unlock	Not Depl

FDR	ALTITUDE	CAS	Latitude	Longitude	VHF Keying	VHF Left	VHF Center	VHF Right	GMT Hours	GMT Minutes	GMT Seconds	Frame Counter
ELAPSED TIME IN SECONDS	(FEET)	(knots)	(dd:mm:ss)	(dd:mm:ss)					(hrs)	(min)	(sec)	(counts)
37690	5456	241.5	N34°19'46.32"	W118°35'40.69"	Not Keyed	Not Keyed	Not Keyed					
37691	5428	241.5	N34°19'46.32"	W118°35'40.69"	Not Keyed	Not Keyed	Not Keyed		2	6	48	
37692	5404	241.5	N34°19'36.43"	W118°35'40.69"	Not Keyed	Not Keyed	Not Keyed					
37693	5380	241	N34°19'36.43"	W118°35'40.69"	Not Keyed	Not Keyed	Not Keyed					2281
37694	5360	240.5	N34°19'26.54"	W118°35'40.69"	Not Keyed	Not Keyed	Not Keyed					
37695	5340	240.5	N34°19'26.54"	W118°35'40.69"	Not Keyed	Not Keyed	Not Keyed		2	6	52	
37696	5320	241	N34°19'16.66"	W118°35'40.69"	Not Keyed	Not Keyed	Not Keyed					
37697	5300	240.5	N34°19'16.66"	W118°35'40.69"	Not Keyed	Not Keyed	Not Keyed					2282
37698	5284	239	N34°19'16.66"	W118°35'40.69"	Not Keyed	Not Keyed	Not Keyed					
37699	5272	239	N34°19'06.77"	W118°35'30.81"	Not Keyed	Not Keyed	Not Keyed		2	6	56	
37700	5260	239	N34°19'06.77"	W118°35'30.81"	Not Keyed	Not Keyed	Not Keyed					
37701	5248	238	N34°18'56.88"	W118°35'30.81"	Not Keyed	Not Keyed	Not Keyed					2283
37702	5240	238.5	N34°18'56.88"	W118°35'30.81"	Not Keyed	Not Keyed	Not Keyed					
37703	5232	238.5	N34°18'46.99"	W118°35'30.81"	Not Keyed	Not Keyed	Not Keyed		2	7	0	
37704	5224	237.5	N34°18'46.99"	W118°35'30.81"	Not Keyed	Not Keyed	Not Keyed					
37705	5220	237	N34°18'46.99"	W118°35'30.81"	Not Keyed	Not Keyed	Not Keyed					2284
37706	5220	236	N34°18'37.10"	W118°35'30.81"	Not Keyed	Not Keyed	Not Keyed					
37707	5220	235	N34°18'37.10"	W118°35'30.81"	Not Keyed	Not Keyed	Not Keyed		2	7	4	
37708	5220	234.5	N34°18'27.22"	W118°35'30.81"	Not Keyed	Not Keyed	Not Keyed					
37709	5224	234	N34°18'27.22"	W118°35'20.91"	Not Keyed	Not Keyed	Not Keyed					2285
37710	5228	233.5	N34°18'17.33"	W118°35'20.91"	Not Keyed	Not Keyed	Not Keyed					
37711	5232	232.5	N34°18'17.33"	W118°35'20.91"	Not Keyed	Not Keyed	Not Keyed		2	7	8	
37712	5236	232.5	N34°18'17.33"	W118°35'20.91"	Not Keyed	Not Keyed	Not Keyed					
37713	5240	232.5	N34°18'07.44"	W118°35'20.91"	Not Keyed	Not Keyed	Not Keyed					2286
37714	5244	232.5	N34°18'07.44"	W118°35'20.91"	Not Keyed	Not Keyed	Not Keyed					
37715	5248	232.5	N34°17'57.55"	W118°35'20.91"	Not Keyed	Not Keyed	Not Keyed		2	7	12	
37716	5252	232.5	N34°17'57.55"	W118°35'20.91"	Not Keyed	Not Keyed	Not Keyed					
37717	5256	232	N34°17'57.55"	W118°35'20.91"	Not Keyed	Not Keyed	Not Keyed					2287
37718	5256	231.5	N34°17'47.66"	W118°35'20.91"	Not Keyed	Not Keyed	Not Keyed					
37719	5260	232	N34°17'47.66"	W118°35'20.91"	Not Keyed	Not Keyed	Not Keyed		2	7	16	
37720	5260	231.5	N34°17'37.78"	W118°35'11.03"	Not Keyed	Not Keyed	Not Keyed					
37721	5264	231	N34°17'37.78"	W118°35'11.03"	Not Keyed	Not Keyed	Not Keyed					2288
37722	5264	230.5	N34°17'27.89"	W118°35'11.03"	Not Keyed	Not Keyed	Not Keyed					
37723	5264	229	N34°17'27.89"	W118°35'11.03"	Not Keyed	Not Keyed	Not Keyed		2	7	20	
37724	5260	229	N34°17'27.89"	W118°35'11.03"	Not Keyed	Not Keyed	Not Keyed					
37725	5260	229.5	N34°17'18.00"	W118°35'11.03"	Not Keyed	Not Keyed	Not Keyed					2289
37726	5256	230.5	N34°17'18.00"	W118°35'11.03"	Not Keyed	Not Keyed	Not Keyed					
37727	5256	231	N34°17'08.12"	W118°35'11.03"	Not Keyed	Not Keyed	Not Keyed		2	7	24	

FDR	ALTITUDE	CAS	Latitude	Longitude	VHF	VHF	VHF	GMT	GMT	GMT	Frame
ELAPSED					Keying	Keying	Keying	Hours	Minutes	Seconds	Counter
TIME IN					Left	Center	Right				
SECONDS	(FEET)	(knots)	(dd:mm:ss)	(dd:mm:ss)				(hrs)	(min)	(sec)	(counts)
37728	5252	231	N34°17'08.12"	W118°35'11.03"	Not Keyed	Not Keyed	Not Keyed				
37729	5252	230	N34°17'08.12"	W118°35'11.03"	Not Keyed	Not Keyed	Not Keyed				2290
37730	5252	230.5	N34°16'58.23"	W118°35'01.12"	Not Keyed	Not Keyed	Not Keyed				
37731	5248	231.5	N34°16'58.23"	W118°35'01.12"	Not Keyed	Not Keyed	Not Keyed				
37732	5248	231.5	N34°16'48.34"	W118°35'01.12"	Not Keyed	Not Keyed	Not Keyed				
37733	5248	231	N34°16'48.34"	W118°35'01.12"	Not Keyed	Not Keyed	Not Keyed				2291
37734	5248	231.5	N34°16'38.45"	W118°35'01.12"	Not Keyed	Not Keyed	Not Keyed				
37735	5252	230	N34°16'38.45"	W118°35'01.12"	Not Keyed	Not Keyed	Not Keyed	2	7	28	
37736	5252	230.5	N34°16'38.45"	W118°35'01.12"	Not Keyed	Not Keyed	Not Keyed				
37737	5252	230	N34°16'28.56"	W118°35'01.12"	Not Keyed	Not Keyed	Not Keyed				2292
37738	5256	230.5	N34°16'28.56"	W118°35'01.12"	Not Keyed	Not Keyed	Not Keyed				
37739	5256	231.5	N34°16'18.68"	W118°35'01.12"	Not Keyed	Not Keyed	Not Keyed				
37740	5260	232	N34°16'18.68"	W118°34'51.25"	Not Keyed	Not Keyed	Not Keyed	2	7	36	
37741	5260	231.5	N34°16'18.68"	W118°34'51.25"	Not Keyed	Not Keyed	Not Keyed				2293
37742	5264	231.5	N34°16'08.79"	W118°34'51.25"	Not Keyed	Not Keyed	Not Keyed				
37743	5264	231.5	N34°16'08.79"	W118°34'51.25"	Not Keyed	Not Keyed	Not Keyed				
37744	5264	231	N34°15'58.90"	W118°34'51.25"	Not Keyed	Not Keyed	Not Keyed	2	7	40	
37745	5268	231.5	N34°15'58.90"	W118°34'51.25"	Not Keyed	Not Keyed	Not Keyed				2294
37746	5268	232	N34°15'49.02"	W118°34'51.25"	Not Keyed	Not Keyed	Not Keyed				
37747	5264	232	N34°15'49.02"	W118°34'51.25"	Not Keyed	Not Keyed	Not Keyed	2	7	44	
37748	5264	231	N34°15'49.02"	W118°34'51.25"	Not Keyed	Not Keyed	Not Keyed				
37749	5260	232	N34°15'39.12"	W118°34'51.25"	Not Keyed	Not Keyed	Not Keyed				2295
37750	5260	231.5	N34°15'39.12"	W118°34'51.25"	Not Keyed	Not Keyed	Not Keyed				
37751	5256	232.5	N34°15'29.23"	W118°34'41.38"	Not Keyed	Not Keyed	Not Keyed	2	7	48	
37752	5252	232	N34°15'29.23"	W118°34'41.38"	Not Keyed	Not Keyed	Not Keyed				
37753	5248	232	N34°15'29.23"	W118°34'41.38"	Not Keyed	Not Keyed	Not Keyed				2296
37754	5244	230.5	N34°15'19.35"	W118°34'41.38"	Not Keyed	Not Keyed	Not Keyed				
37755	5240	231.5	N34°15'19.35"	W118°34'41.38"	Not Keyed	Not Keyed	Not Keyed	2	7	52	
37756	5236	230.5	N34°15'09.46"	W118°34'41.38"	Not Keyed	Not Keyed	Not Keyed				
37757	5228	229	N34°15'09.46"	W118°34'41.38"	Keyed	Not Keyed	Not Keyed				2297
37758	5224	229.5	N34°14'59.58"	W118°34'41.38"	Keyed	Not Keyed	Not Keyed				
37759	5220	228	N34°14'59.58"	W118°34'41.38"	Keyed	Not Keyed	Not Keyed				
37760	5216	227.5	N34°14'59.58"	W118°34'41.38"	Keyed	Not Keyed	Not Keyed				
37761	5208	227	N34°14'49.69"	W118°34'31.47"	Not Keyed	Not Keyed	Not Keyed				2298
37762	5200	226	N34°14'49.69"	W118°34'31.47"	Not Keyed	Not Keyed	Not Keyed				
37763	5188	226	N34°14'39.80"	W118°34'31.47"	Not Keyed	Not Keyed	Not Keyed	2	8	0	
37764	5172	224	N34°14'39.80"	W118°34'31.47"	Not Keyed	Not Keyed	Not Keyed				
37765	5152	224	N34°14'39.80"	W118°34'31.47"	Not Keyed	Not Keyed	Not Keyed				2299
37766	5132	224	N34°14'29.91"	W118°34'31.47"	Not Keyed	Not Keyed	Not Keyed				

FDR	ALTITUDE	CAS	Latitude	Longitude	VHF Keying	VHF Keying	VHF Keying	GMT Hours	GMT Minutes	GMT Seconds	Frame Counter
ELAPSED TIME IN SECONDS	(FEET)	(knots)	(dd:mm:ss)	(dd:mm:ss)	L>ft	Center	Right				
								(hrs)	(min)	(sec)	(counts)
37767	5112	223.5	N34°14'29.91"	W118°34'31.47"	Not Keyed	Not Keyed	Not Keyed	2	8	4	
37768	5092	224	N34°14'20.02"	W118°34'31.47"	Not Keyed	Not Keyed	Not Keyed				
37769	5068	223.5	N34°14'20.02"	W118°34'31.47"	Not Keyed	Not Keyed	Not Keyed				2300
37770	5044	223.5	N34°14'20.02"	W118°34'31.47"	Not Keyed	Not Keyed	Not Keyed				
37771	5020	223	N34°14'10.13"	W118°34'31.47"	Not Keyed	Not Keyed	Not Keyed	2	8	8	
37772	4996	223.5	N34°14'10.13"	W118°34'21.59"	Not Keyed	Not Keyed	Not Keyed				
37773	4968	223.5	N34°14'00.25"	W118°34'21.59"	Not Keyed	Not Keyed	Not Keyed				2301
37774	4936	223.5	N34°14'00.25"	W118°34'21.59"	Not Keyed	Not Keyed	Not Keyed				
37775	4908	224.5	N34°13'50.36"	W118°34'21.59"	Not Keyed	Not Keyed	Not Keyed	2	8	12	
37776	4876	225	N34°13'50.36"	W118°34'21.59"	Not Keyed	Not Keyed	Not Keyed				
37777	4844	225.5	N34°13'50.36"	W118°34'21.59"	Not Keyed	Not Keyed	Not Keyed				2302
37778	4812	226	N34°13'40.48"	W118°34'21.59"	Not Keyed	Not Keyed	Not Keyed				
37779	4780	226	N34°13'40.48"	W118°34'21.59"	Not Keyed	Not Keyed	Not Keyed	2	8	16	
37780	4748	226	N34°13'30.59"	W118°34'21.59"	Not Keyed	Not Keyed	Not Keyed				
37781	4716	227	N34°13'30.59"	W118°34'21.59"	Not Keyed	Not Keyed	Not Keyed				2303
37782	4684	228	N34°13'30.59"	W118°34'21.59"	Not Keyed	Not Keyed	Not Keyed				
37783	4652	228.5	N34°13'20.70"	W118°34'11.69"	Not Keyed	Not Keyed	Not Keyed	2	8	20	
37784	4620	228.5	N34°13'20.70"	W118°34'11.69"	Not Keyed	Not Keyed	Not Keyed				
37785	4588	228.5	N34°13'10.81"	W118°34'11.69"	Not Keyed	Not Keyed	Not Keyed				2304
37786	4560	228.5	N34°13'10.81"	W118°34'11.69"	Keyed	Not Keyed	Not Keyed				
37787	4528	229	N34°13'10.81"	W118°34'11.69"	Keyed	Not Keyed	Not Keyed	2	8	24	
37788	4496	230	N34°13'00.92"	W118°34'11.69"	Not Keyed	Not Keyed	Not Keyed				
37789	4464	230.5	N34°13'00.92"	W118°34'11.69"	Not Keyed	Not Keyed	Not Keyed				2305
37790	4432	231.5	N34°12'51.03"	W118°34'11.69"	Not Keyed	Not Keyed	Not Keyed				
37791	4404	232	N34°12'51.03"	W118°34'11.69"	Not Keyed	Not Keyed	Not Keyed	2	8	28	
37792	4372	232.5	N34°12'41.15"	W118°34'11.69"	Keyed	Not Keyed	Not Keyed				
37793	4344	233.5	N34°12'41.15"	W118°34'11.69"	Keyed	Not Keyed	Not Keyed				2306
37794	4312	233.5	N34°12'41.15"	W118°34'01.81"	Keyed	Not Keyed	Not Keyed				
37795	4284	233.5	N34°12'31.26"	W118°34'01.81"	Keyed	Not Keyed	Not Keyed	2	8	32	
37796	4252	233.5	N34°12'31.26"	W118°34'01.81"	Not Keyed	Not Keyed	Not Keyed				
37797	4220	234	N34°12'21.38"	W118°34'01.81"	Not Keyed	Not Keyed	Not Keyed				2307
37798	4192	234	N34°12'21.38"	W118°34'01.81"	Not Keyed	Not Keyed	Not Keyed				
37799	4164	234	N34°12'21.38"	W118°34'01.81"	Not Keyed	Not Keyed	Not Keyed	2	8	36	
37800	4132	234.5	N34°12'11.48"	W118°34'01.81"	Not Keyed	Not Keyed	Not Keyed				
37801	4104	235	N34°12'11.48"	W118°34'01.81"	Not Keyed	Not Keyed	Not Keyed				2308
37802	4076	235	N34°12'01.59"	W118°34'01.81"	Not Keyed	Not Keyed	Not Keyed				
37803	4048	235.5	N34°12'01.59"	W118°33'51.91"	Not Keyed	Not Keyed	Not Keyed	2	8	40	
37804	4020	236.5	N34°11'51.71"	W118°33'51.91"	Not Keyed	Not Keyed	Not Keyed				
37805	3988	237	N34°11'51.71"	W118°33'51.91"	Not Keyed	Not Keyed	Not Keyed				2309

FDR	ALTITUDE	CAS	Latitude	Longitude	VHF Keying	VHF Center	VHF Right	GMT Hours	GMT (hrs)	GMT (min)	GMT (sec)	Frame Counter
ELAPSED					Left	Center	Right					
TIME IN												
SECONDS	(FEET)	(knots)	(dd:mm:ss)	(dd:mm:ss)								(counts)
37806	3960	236	N34°11'51.71"	W118°33'51.91"	Not Keyed	Not Keyed	Not Keyed					
37807	3932	236.5	N34°11'41.82"	W118°33'51.91"	Not Keyed	Not Keyed	Not Keyed	2	8	44		
37808	3900	236.5	N34°11'41.82"	W118°33'51.91"	Not Keyed	Not Keyed	Not Keyed					
37809	3868	236	N34°11'31.93"	W118°33'42.03"	Not Keyed	Not Keyed	Not Keyed					2310
37810	3840	235.5	N34°11'31.93"	W118°33'42.03"	Not Keyed	Not Keyed	Not Keyed					
37811	3808	236	N34°11'31.93"	W118°33'42.03"	Not Keyed	Not Keyed	Not Keyed	2	8	48		
37812	3780	235.5	N34°11'22.05"	W118°33'42.03"	Not Keyed	Not Keyed	Not Keyed					
37813	3752	235.5	N34°11'22.05"	W118°33'32.16"	Not Keyed	Not Keyed	Not Keyed					2311
37814	3724	235	N34°11'22.05"	W118°33'32.16"	Not Keyed	Not Keyed	Not Keyed					
37815	3700	235	N34°11'12.16"	W118°33'32.16"	Not Keyed	Not Keyed	Not Keyed	2	8	52		
37816	3680	235	N34°11'12.16"	W118°33'22.25"	Not Keyed	Not Keyed	Not Keyed					
37817	3660	235	N34°11'12.16"	W118°33'22.25"	Not Keyed	Not Keyed	Not Keyed					2312
37818	3648	235	N34°11'02.27"	W118°33'22.25"	Not Keyed	Not Keyed	Not Keyed					
37819	3632	235	N34°11'02.27"	W118°33'12.38"	Not Keyed	Not Keyed	Not Keyed	2	8	56		
37820	3624	235	N34°11'02.27"	W118°33'12.38"	Not Keyed	Not Keyed	Not Keyed					
37821	3608	233.5	N34°10'52.38"	W118°33'02.47"	Not Keyed	Not Keyed	Not Keyed					2313
37822	3600	233	N34°10'52.38"	W118°33'02.47"	Not Keyed	Not Keyed	Not Keyed					
37823	3588	232.5	N34°10'52.38"	W118°32'52.59"	Not Keyed	Not Keyed	Not Keyed	2	9	0		
37824	3576	230	N34°10'52.38"	W118°32'52.59"	Not Keyed	Not Keyed	Not Keyed					
37825	3564	230.5	N34°10'42.49"	W118°32'52.59"	Not Keyed	Not Keyed	Not Keyed					2314
37826	3556	229	N34°10'42.49"	W118°32'42.72"	Not Keyed	Not Keyed	Not Keyed					
37827	3548	230.5	N34°10'42.49"	W118°32'42.72"	Not Keyed	Not Keyed	Not Keyed	2	9	4		
37828	3540	229	N34°10'42.49"	W118°32'32.81"	Not Keyed	Not Keyed	Not Keyed					
37829	3532	232	N34°10'42.49"	W118°32'32.81"	Not Keyed	Not Keyed	Not Keyed					2315
37830	3524	229	N34°10'42.49"	W118°32'22.94"	Not Keyed	Not Keyed	Not Keyed					
37831	3516	229	N34°10'32.61"	W118°32'22.94"	Not Keyed	Not Keyed	Not Keyed	2	9	8		
37832	3508	227.5	N34°10'32.61"	W118°32'13.03"	Not Keyed	Not Keyed	Not Keyed					
37833	3496	227	N34°10'32.61"	W118°32'13.03"	Not Keyed	Not Keyed	Not Keyed					2316
37834	3488	229	N34°10'32.61"	W118°32'03.16"	Not Keyed	Not Keyed	Not Keyed					
37835	3480	227.5	N34°10'32.61"	W118°31'53.28"	Not Keyed	Not Keyed	Not Keyed	2	9	12		
37836	3468	226	N34°10'32.61"	W118°31'53.28"	Not Keyed	Not Keyed	Not Keyed					
37837	3456	226.5	N34°10'32.61"	W118°31'43.38"	Not Keyed	Not Keyed	Not Keyed					2317
37838	3444	223.5	N34°10'32.61"	W118°31'43.38"	Not Keyed	Not Keyed	Not Keyed					
37839	3436	225.5	N34°10'32.61"	W118°31'33.50"	Not Keyed	Not Keyed	Not Keyed	2	9	16		
37840	3428	230	N34°10'32.61"	W118°31'33.50"	Not Keyed	Not Keyed	Not Keyed					
37841	3420	225.5	N34°10'32.61"	W118°31'23.59"	Not Keyed	Not Keyed	Not Keyed					2318
37842	3408	224	N34°10'32.61"	W118°31'23.59"	Not Keyed	Not Keyed	Not Keyed					
37843	3392	223	N34°10'32.61"	W118°31'13.72"	Not Keyed	Not Keyed	Not Keyed	2	9	20		
37844	3380	223.5	N34°10'32.61"	W118°31'13.72"	Not Keyed	Not Keyed	Not Keyed					

FDR	ALTITUDE	CAS	Latitude	Longitude	VHF	VHF	VHF	GMT	GMT	GMT	Frame
ELAPSED					Keying	Keying	Keying	Hours	Minutes	Seconds	Counter
TIME IN					Left	Center	Right				
SECONDS	(FEET)	(knots)	(dd:mm:ss)	(dd:mm:ss)				(hrs)	(min)	(sec)	(counts)
37845	3364	224	N34°10'32.61"	W118°31'03.84"	Not Keyed	Not Keyed	Not Keyed				2319
37846	3352	222	N34°10'42.49"	W118°31'03.84"	Not Keyed	Not Keyed	Not Keyed				
37847	3336	223	N34°10'42.49"	W118°30'53.94"	Not Keyed	Not Keyed	Not Keyed	2	9	24	
37848	3324	223.5	N34°10'42.49"	W118°30'53.94"	Not Keyed	Not Keyed	Not Keyed				
37849	3312	220.5	N34°10'42.49"	W118°30'44.06"	Not Keyed	Not Keyed	Not Keyed				2320
37850	3296	220	N34°10'42.49"	W118°30'44.06"	Not Keyed	Not Keyed	Not Keyed				
37851	3284	221	N34°10'42.49"	W118°30'34.16"	Not Keyed	Not Keyed	Not Keyed	2	9	28	
37852	3272	222.5	N34°10'42.49"	W118°30'34.16"	Not Keyed	Not Keyed	Not Keyed				
37853	3256	221	N34°10'42.49"	W118°30'24.28"	Not Keyed	Not Keyed	Not Keyed				2321
37854	3248	221.5	N34°10'42.49"	W118°30'24.28"	Not Keyed	Not Keyed	Not Keyed				
37855	3244	219	N34°10'52.38"	W118°30'14.41"	Not Keyed	Not Keyed	Not Keyed	2	9	32	
37856	3236	219	N34°10'52.38"	W118°30'14.41"	Not Keyed	Not Keyed	Not Keyed				
37857	3232	220.5	N34°10'52.38"	W118°30'04.50"	Not Keyed	Not Keyed	Not Keyed				2322
37858	3228	220.5	N34°10'52.38"	W118°30'04.50"	Not Keyed	Not Keyed	Not Keyed				
37859	3228	219.5	N34°10'52.38"	W118°29'54.62"	Not Keyed	Not Keyed	Not Keyed	2	9	36	
37860	3228	223.5	N34°10'52.38"	W118°29'54.62"	Not Keyed	Not Keyed	Not Keyed				
37861	3232	224.5	N34°10'52.38"	W118°29'44.72"	Not Keyed	Not Keyed	Not Keyed				2323
37862	3236	218.5	N34°10'52.38"	W118°29'44.72"	Not Keyed	Not Keyed	Not Keyed				
37863	3240	215.5	N34°10'52.38"	W118°29'34.84"	Not Keyed	Not Keyed	Not Keyed	2	9	40	
37864	3244	214	N34°11'02.27"	W118°29'34.84"	Not Keyed	Not Keyed	Not Keyed				
37865	3244	213.5	N34°11'02.27"	W118°29'34.84"	Not Keyed	Not Keyed	Not Keyed				2324
37866	3248	213.5	N34°11'02.27"	W118°29'24.97"	Not Keyed	Not Keyed	Not Keyed				
37867	3252	211	N34°11'02.27"	W118°29'24.97"	Not Keyed	Not Keyed	Not Keyed	2	9	44	
37868	3248	210.5	N34°11'02.27"	W118°29'15.06"	Not Keyed	Not Keyed	Not Keyed				
37869	3248	209.5	N34°11'02.27"	W118°29'15.06"	Keyed	Not Keyed	Not Keyed				2325
37870	3244	206.5	N34°11'02.27"	W118°29'05.19"	Not Keyed	Not Keyed	Not Keyed				
37871	3240	205.5	N34°11'02.27"	W118°29'05.19"	Not Keyed	Not Keyed	Not Keyed	2	9	48	
37872	3236	205	N34°11'02.27"	W118°28'55.28"	Not Keyed	Not Keyed	Not Keyed				
37873	3244	204.5	N34°11'02.27"	W118°28'55.28"	Not Keyed	Not Keyed	Not Keyed				2326
37874	3244	206	N34°11'12.16"	W118°28'45.41"	Not Keyed	Not Keyed	Not Keyed				
37875	3240	206	N34°11'12.16"	W118°28'45.41"	Not Keyed	Not Keyed	Not Keyed	2	9	52	
37876	3244	201.5	N34°11'12.16"	W118°28'35.50"	Not Keyed	Not Keyed	Not Keyed				
37877	3244	198	N34°11'12.16"	W118°28'35.50"	Not Keyed	Not Keyed	Not Keyed				2327
37878	3244	196	N34°11'12.16"	W118°28'35.50"	Keyed	Not Keyed	Not Keyed				
37879	3240	192.5	N34°11'12.16"	W118°28'25.62"	Keyed	Not Keyed	Not Keyed	2	9	56	
37880	3232	193	N34°11'12.16"	W118°28'25.62"	Not Keyed	Not Keyed	Not Keyed				
37881	3220	191	N34°11'12.16"	W118°28'15.75"	Not Keyed	Not Keyed	Not Keyed				2328
37882	3208	189	N34°11'12.16"	W118°28'15.75"	Not Keyed	Not Keyed	Not Keyed				
37883	3188	190	N34°11'12.16"	W118°28'05.84"	Not Keyed	Not Keyed	Not Keyed	2	10	0	

FDR	ALTITUDE	CAS	Latitude	Longitude	VHF Keying	VHF Keying	VHF Keying	GMT Hours	GMT Minutes	GMT Seconds	Frame Counter
ELAPSED					Left	Center	Right				
TIME IN											
SECONDS	(FEET)	(knots)	(dd:mm:ss)	(dd:mm:ss)				(hrs)	(min)	(sec)	(counts)
37884	3172	188.5	N34°11'22.05"	W118°28'05.84"	Not Keyed	Not Keyed	Not Keyed				
37885	3148	189.5	N34°11'22.05"	W118°28'05.84"	Not Keyed	Not Keyed	Not Keyed				2329
37886	3128	190	N34°11'22.05"	W118°2755.97"	Keyed	Not Keyed	Not Keyed				
37887	3100	189.5	N34°11'22.05"	W118°2755.97"	Keyed	Not Keyed	Not Keyed	2	10	4	
37888	3076	189	N34°11'22.05"	W118°2746.06"	Not Keyed	Not Keyed	Not Keyed				
37889	3044	189	N34°11'22.05"	W118°2746.06"	Not Keyed	Not Keyed	Not Keyed				2330
37890	3016	189	N34°11'22.05"	W118°2736.19"	Not Keyed	Not Keyed	Not Keyed				
37891	2980	189.5	N34°11'22.05"	W118°2736.19"	Not Keyed	Not Keyed	Not Keyed	2	10	8	
37892	2948	187	N34°11'22.05"	W118°2736.19"	Not Keyed	Not Keyed	Not Keyed				
37893	2916	187.5	N34°11'22.05"	W118°2726.31"	Not Keyed	Not Keyed	Not Keyed				2331
37894	2880	189.5	N34°11'22.05"	W118°2726.31"	Not Keyed	Not Keyed	Not Keyed				
37895	2844	188.5	N34°11'22.05"	W118°2716.41"	Not Keyed	Not Keyed	Not Keyed	2	10	12	
37896	2808	188	N34°11'22.05"	W118°2716.41"	Not Keyed	Not Keyed	Not Keyed				
37897	2772	186.5	N34°11'22.05"	W118°2706.50"	Not Keyed	Not Keyed	Not Keyed				2332
37898	2736	190.5	N34°11'22.05"	W118°2706.50"	Not Keyed	Not Keyed	Not Keyed				
37899	2700	187.5	N34°11'22.05"	W118°2706.50"	Not Keyed	Not Keyed	Not Keyed	2	10	16	
37900	2668	182.5	N34°11'22.05"	W118°2656.62"	Not Keyed	Not Keyed	Not Keyed				
37901	2632	186	N34°11'22.05"	W118°2656.62"	Not Keyed	Not Keyed	Not Keyed				2333
37902	2592	186	N34°11'12.16"	W118°2646.72"	Not Keyed	Not Keyed	Not Keyed				
37903	2548	184.5	N34°11'12.16"	W118°2646.72"	Not Keyed	Not Keyed	Not Keyed	2	10	20	
37904	2496	185.5	N34°11'12.16"	W118°2646.72"	Not Keyed	Not Keyed	Not Keyed				
37905	2440	187	N34°11'12.16"	W118°2636.84"	Not Keyed	Not Keyed	Not Keyed				2334
37906	2384	187	N34°11'12.16"	W118°2636.84"	Not Keyed	Not Keyed	Not Keyed				
37907	2332	190	N34°11'12.16"	W118°2626.94"	Not Keyed	Not Keyed	Not Keyed	2	10	24	
37908	2284	190.5	N34°11'12.16"	W118°2626.94"	Not Keyed	Not Keyed	Not Keyed				
37909	2232	190.5	N34°11'12.16"	W118°2626.94"	Not Keyed	Not Keyed	Not Keyed				2335
37910	2184	189.5	N34°11'12.16"	W118°2617.06"	Not Keyed	Not Keyed	Not Keyed				
37911	2132	194	N34°11'12.16"	W118°2617.06"	Not Keyed	Not Keyed	Not Keyed	2	10	28	
37912	2084	197.5	N34°11'12.16"	W118°2607.19"	Not Keyed	Not Keyed	Not Keyed				
37913	2040	196	N34°11'12.16"	W118°2607.19"	Not Keyed	Not Keyed	Not Keyed				2336
37914	1992	197.5	N34°11'12.16"	W118°2557.28"	Not Keyed	Not Keyed	Not Keyed				
37915	1944	197	N34°11'12.16"	W118°2557.28"	Not Keyed	Not Keyed	Not Keyed	2	10	32	
37916	1900	196	N34°11'12.16"	W118°2557.28"	Not Keyed	Not Keyed	Not Keyed				
37917	1856	195	N34°11'12.16"	W118°2547.41"	Not Keyed	Not Keyed	Not Keyed				2337
37918	1816	194.5	N34°11'12.16"	W118°2547.41"	Not Keyed	Not Keyed	Not Keyed				
37919	1772	197	N34°11'12.16"	W118°2537.50"	Not Keyed	Not Keyed	Not Keyed	2	10	36	
37920	1736	200	N34°11'12.16"	W118°2537.50"	Not Keyed	Not Keyed	Not Keyed				
37921	1704	197.5	N34°11'12.16"	W118°2527.62"	Not Keyed	Not Keyed	Not Keyed				2338
37922	1668	197.5	N34°11'12.16"	W118°2527.62"	Not Keyed	Not Keyed	Not Keyed				

FDR	ALTITUDE	CAS	Latitude	Longitude	VHF	VHF	VHF	GMT	GMT	Frame
ELAPSED					Keying	Keying	Keying	Hours	Minutes	Seconds
TIME IN					Left	Center	Right			
SECONDS	(FEET)	(knots)	(dd:mm:ss)	(dd:mm:ss)				(hrs)	(min)	(sec)
										(counts)
37923	1632	193.5	N34°11'12.16"	W118°25'27.62"	Not Keyed	Not Keyed	Not Keyed	2	10	40
37924	1600	197	N34°11'12.16"	W118°25'17.72"	Keyed	Not Keyed	Not Keyed			
37925	1560	197	N34°11'12.16"	W118°25'17.72"	Keyed	Not Keyed	Not Keyed			2339
37926	1524	197	N34°11'12.16"	W118°2507.84"	Keyed	Not Keyed	Not Keyed			
37927	1488	195.5	N34°11'12.16"	W118°2507.84"	Not Keyed	Not Keyed	Not Keyed	2	10	44
37928	1456	195.5	N34°11'12.16"	W118°2507.84"	Not Keyed	Not Keyed	Not Keyed			
37929	1416	195	N34°11'12.16"	W118°2457.97"	Not Keyed	Not Keyed	Not Keyed			2340
37930	1372	197	N34°11'12.16"	W118°2457.97"	Not Keyed	Not Keyed	Not Keyed			
37931	1332	197	N34°11'12.16"	W118°2448.06"	Not Keyed	Not Keyed	Not Keyed	2	10	48
37932	1288	197	N34°11'12.16"	W118°2448.06"	Not Keyed	Not Keyed	Not Keyed			
37933	1244	196	N34°11'12.16"	W118°2438.19"	Not Keyed	Not Keyed	Not Keyed			2341
37934	1208	199.5	N34°11'12.16"	W118°2438.19"	Not Keyed	Not Keyed	Not Keyed			
37935	1176	197.5	N34°11'12.16"	W118°2438.19"	Not Keyed	Not Keyed	Not Keyed	2	10	52
37936	1140	198	N34°11'12.16"	W118°2428.28"	Not Keyed	Not Keyed	Not Keyed			
37937	1112	196	N34°11'12.16"	W118°2428.28"	Not Keyed	Not Keyed	Not Keyed			2342
37938	1080	192	N34°11'12.16"	W118°2418.41"	Not Keyed	Not Keyed	Not Keyed			
37939	1056	193.5	N34°11'12.16"	W118°2418.41"	Not Keyed	Not Keyed	Not Keyed	2	10	56
37940	1024	191.5	N34°11'12.16"	W118°2418.41"	Not Keyed	Not Keyed	Not Keyed			
37941	996	189.5	N34°11'12.16"	W118°2408.53"	Not Keyed	Not Keyed	Not Keyed			2343
37942	972	188.5	N34°11'12.16"	W118°2408.53"	Not Keyed	Not Keyed	Not Keyed			
37943	952	186.5	N34°11'12.16"	W118°2358.62"	Not Keyed	Not Keyed	Not Keyed	2	11	0
37944	940	185.5	N34°11'12.16"	W118°2358.62"	Not Keyed	Not Keyed	Not Keyed			
37945	940	183.5	N34°11'12.16"	W118°2358.62"	Not Keyed	Not Keyed	Not Keyed			2344
37946	940	182	N34°11'12.16"	W118°2348.75"	Not Keyed	Not Keyed	Not Keyed			
37947	944	179.5	N34°11'12.16"	W118°2348.75"	Not Keyed	Not Keyed	Not Keyed	2	11	4
37948	936	175.5	N34°11'12.16"	W118°2348.75"	Not Keyed	Not Keyed	Not Keyed			
37949	940	169.5	N34°11'12.16"	W118°2338.84"	Not Keyed	Not Keyed	Not Keyed			2345
37950	920	164.5	N34°11'12.16"	W118°2338.84"	Not Keyed	Not Keyed	Not Keyed			
37951	916	155.5	N34°11'12.16"	W118°2328.97"	Not Keyed	Not Keyed	Not Keyed	2	11	8
37952	908	149.5	N34°11'12.16"	W118°2328.97"	Not Keyed	Not Keyed	Not Keyed			
37953	904	141	N34°11'12.16"	W118°2328.97"	Not Keyed	Not Keyed	Not Keyed			2346
37954	896	133.5	N34°11'12.16"	W118°2319.09"	Not Keyed	Not Keyed	Not Keyed			
37955	896	128	N34°11'12.16"	W118°2319.09"	Not Keyed	Not Keyed	Not Keyed	2	11	12
37956	896	119	N34°11'12.16"	W118°2319.09"	Not Keyed	Not Keyed	Not Keyed			
37957	900	110	N34°11'12.16"	W118°2319.09"	Not Keyed	Not Keyed	Not Keyed			2347
37958	904	102	N34°11'12.16"	W118°2309.19"	Not Keyed	Not Keyed	Not Keyed			.
37959	908	96	N34°11'12.16"	W118°2309.19"	Not Keyed	Not Keyed	Not Keyed	2	11	16
37960	908	81.5	N34°11'12.16"	W118°2309.19"	Not Keyed	Not Keyed	Not Keyed			
37961	908	71.5	N34°11'12.16"	W118°2309.19"	Not Keyed	Not Keyed	Not Keyed			2348

FDR	ALTITUDE	CAS	Latitude	Longitude	VHF Keying	VHF Keying	VHF Keying	GMT Hours	GMT Minutes	GMT Seconds	Frame Counter
ELAPSED TIME IN SECONDS	(FEET)	(knots)	(dd:mm:ss)	(dd:mm:ss)	Left	Center	Right				
								(hrs)	(min)	(sec)	(counts)
37962	908	64	N34°11'12.16"	W118°23'09.19"	Not Keyed	Not Keyed	Not Keyed				
37963	912	55	N34°11'12.16"	W118°22'59.31"	Not Keyed	Not Keyed	Not Keyed	2	11	20	
37964	908	45	N34°11'12.16"	W118°22'59.31"	Not Keyed	Not Keyed	Not Keyed				
37965	912	45	N34°11'12.16"	W118°22'59.31"	Not Keyed	Not Keyed	Not Keyed				2349
37966	904	45	N34°11'12.16"	W118°22'59.31"	Not Keyed	Not Keyed	Not Keyed				
37967	920	45	N34°11'12.16"	W118°22'59.31"	Not Keyed	Not Keyed	Not Keyed	2	11	24	
37968	924	45	N34°11'12.16"	W118°22'59.31"	Not Keyed	Not Keyed	Not Keyed				
37969	924	45	N34°11'12.16"	W118°22'59.31"	Not Keyed	Not Keyed	Not Keyed				2350
37970	924	45	N34°11'12.16"	W118°22'59.31"	Not Keyed	Not Keyed	Not Keyed				
37971	924	45	N34°11'12.16"	W118°22'59.31"	Not Keyed	Not Keyed	Not Keyed	2	11	28	
37972	924	511.5	N34°11'12.16"	W118°22'59.31"	Not Keyed	Not Keyed	Not Keyed				
37973	924	45	N34°11'12.16"	W118°22'59.31"	Not Keyed	Not Keyed	Not Keyed				2351
37974	924	511.5	N34°11'12.16"	W118°22'59.31"	Not Keyed	Not Keyed	Not Keyed				
37975	924	45	N34°11'12.16"	W118°22'59.31"	Not Keyed	Not Keyed	Not Keyed	2	11	32	
37976	924	511.5	N34°11'12.16"	W118°22'59.31"	Not Keyed	Not Keyed	Not Keyed				
37977	924	45	N34°11'12.16"	W118°22'59.31"	Not Keyed	Not Keyed	Not Keyed				2352
37978	924	511.5	N34°11'12.16"	W118°22'59.31"	Not Keyed	Not Keyed	Not Keyed				
37979	924	45	N34°11'12.16"	W118°22'59.31"	Not Keyed	Not Keyed	Not Keyed	2	11	36	
37980	924	511.5	N34°11'12.16"	W118°22'59.31"	Not Keyed	Not Keyed	Not Keyed				
37981	924	45	N34°11'12.16"	W118°22'59.31"	Not Keyed	Not Keyed	Not Keyed				
37982	924	511.5	N34°11'12.16"	W118°22'59.31"	Not Keyed	Not Keyed	Not Keyed				
37983	924	45	N34°11'12.16"	W118°22'59.31"	Not Keyed	Not Keyed	Not Keyed	2	11	40	
37984	924	511.5	N34°11'12.16"	W118°22'59.31"	Keyed	Not Keyed	Not Keyed				
37985	924	45	N34°11'12.16"	W118°22'59.31"	Keyed	Not Keyed	Not Keyed				
37986	924	511.5	N34°11'12.16"	W118°22'59.31"	Keyed	Not Keyed	Not Keyed				

FDR	LNAV	ALT	MCP	A/P	HDG	Flare	VNAV	Lcl	CWS A	CWS B	CMD A	CMD B	CWS	CWS	V/S	ALT	Level	Single	
Elapsed	Mode	Acquir e	Speed	Off	Select	Engage	Mode	Lmtd						Pitch	Roll	Mode	Hold	Change	Chnnl
Time in Seconds	Op		2				Op	Mstr											
37690	Not	Not	Not	On	Engage	Not	Not	FCC R	Not	Not	Engage	Not	Not	Not	Engage	Not	No Lvl	Not	
37691	Not	Not	Not	On	Engage	Not	Not	FCC R	Not	Not	Engage	Not	Not	Not	Engage	Not	No Lvl	Not	
37692	Not	Not	Not	On	Engage	Not	Not	FCC R	Not	Not	Engage	Not	Not	Not	Not	Not	No Lvl	Not	
37693	Not	Not	Not	On	Engage	Not	Not	FCC R	Not	Not	Engage	Not	Not	Not	Not	Not	No Lvl	Not	
37694	Not	Not	Not	On	Engage	Not	Not	FCC R	Not	Not	Engage	Not	Not	Not	Not	Not	No Lvl	Not	
37695	Not	Not	Not	On	Engage	Not	Not	FCC R	Not	Not	Engage	Not	Not	Not	Not	Not	No Lvl	Not	
37696	Not	Not	Not	On	Engage	Not	Not	FCC R	Not	Not	Engage	Not	Not	Not	Not	Not	No Lvl	Not	
37697	Not	Not	Not	On	Engage	Not	Not	FCC R	Not	Not	Engage	Not	Not	Not	Not	Not	No Lvl	Not	
37698	Not	Not	Not	On	Engage	Not	Not	FCC R	Not	Not	Engage	Not	Not	Not	Not	Not	No Lvl	Not	
37699	Not	Not	Not	On	Engage	Not	Not	FCC R	Not	Not	Engage	Not	Not	Not	Not	Not	No Lvl	Not	
37700	Not	Not	Not	On	Engage	Not	Not	FCC R	Not	Not	Engage	Not	Not	Not	Not	Not	No Lvl	Not	
37701	Not	Not	Not	On	Engage	Not	Not	FCC R	Not	Not	Engage	Not	Not	Not	Not	Not	No Lvl	Not	
37702	Not	Not	Not	On	Engage	Not	Not	FCC R	Not	Not	Engage	Not	Not	Not	Not	Not	No Lvl	Not	
37703	Not	Not	Not	On	Engage	Not	Not	FCC R	Not	Not	Engage	Not	Not	Not	Not	Not	No Lvl	Not	
37704	Not	Not	Not	On	Engage	Not	Not	FCC R	Not	Not	Engage	Not	Not	Not	Not	Not	No Lvl	Not	
37705	Not	Not	Not	On	Engage	Not	Not	FCC R	Not	Not	Engage	Not	Not	Not	Not	Engage	No Lvl	Not	
37706	Not	Not	Not	On	Engage	Not	Not	FCC R	Not	Not	Engage	Not	Not	Not	Not	Engage	No Lvl	Not	
37707	Not	Not	Not	On	Engage	Not	Not	FCC R	Not	Not	Engage	Not	Not	Not	Not	Engage	No Lvl	Not	
37708	Not	Not	Not	On	Engage	Not	Not	FCC R	Not	Not	Engage	Not	Not	Not	Not	Engage	No Lvl	Not	
37709	Not	Not	Not	On	Engage	Not	Not	FCC R	Not	Not	Engage	Not	Not	Not	Not	Engage	No Lvl	Not	
37710	Not	Not	Not	On	Engage	Not	Not	FCC R	Not	Not	Engage	Not	Not	Not	Not	Engage	No Lvl	Not	
37711	Not	Not	Not	On	Engage	Not	Not	FCC R	Not	Not	Engage	Not	Not	Not	Not	Engage	No Lvl	Not	
37712	Not	Not	Not	On	Engage	Not	Not	FCC R	Not	Not	Engage	Not	Not	Not	Not	Engage	No Lvl	Not	
37713	Not	Not	Not	On	Engage	Not	Not	FCC R	Not	Not	Engage	Not	Not	Not	Not	Engage	No Lvl	Not	
37714	Not	Not	Not	On	Engage	Not	Not	FCC R	Not	Not	Engage	Not	Not	Not	Not	Engage	No Lvl	Not	
37715	Not	Not	Not	On	Engage	Not	Not	FCC R	Not	Not	Engage	Not	Not	Not	Not	Engage	No Lvl	Not	
37716	Not	Not	Not	On	Engage	Not	Not	FCC R	Not	Not	Engage	Not	Not	Not	Not	Engage	No Lvl	Not	
37717	Not	Not	Not	On	Engage	Not	Not	FCC R	Not	Not	Engage	Not	Not	Not	Not	Engage	No Lvl	Not	
37718	Not	Not	Not	On	Engage	Not	Not	FCC R	Not	Not	Engage	Not	Not	Not	Not	Engage	No Lvl	Not	
37719	Not	Not	Not	On	Engage	Not	Not	FCC R	Not	Not	Engage	Not	Not	Not	Not	Engage	No Lvl	Not	
37720	Not	Not	Not	On	Engage	Not	Not	FCC R	Not	Not	Engage	Not	Not	Not	Not	Engage	No Lvl	Not	
37721	Not	Not	Not	On	Engage	Not	Not	FCC R	Not	Not	Engage	Not	Not	Not	Not	Engage	No Lvl	Not	
37722	Not	Not	Not	On	Engage	Not	Not	FCC R	Not	Not	Engage	Not	Not	Not	Not	Engage	No Lvl	Not	
37723	Not	Not	Not	On	Engage	Not	Not	FCC R	Not	Not	Engage	Not	Not	Not	Not	Engage	No Lvl	Not	
37724	Not	Not	Not	On	Engage	Not	Not	FCC R	Not	Not	Engage	Not	Not	Not	Not	Engage	No Lvl	Not	
37725	Not	Not	Not	On	Engage	Not	Not	FCC R	Not	Not	Engage	Not	Not	Not	Not	Engage	No Lvl	Not	

FDR	LNAV	ALT	MCP	A/P	HDG	Flare	VNAV	Lcl	CWS A	CWS B	CMD A	CMD B	CWS	CWS	V/S	ALT	Level	Single	
Elapsed	Mode	Acquire	Speed	Off	Select	Engage	Mode	Lmtd						Pitch	Roll	Mode	Hold	Change	Chnnl
Time in Seconds	Op		2				Op	Mstr											
37726	Not	Not	Not	On	Engage	Not	Not	FCC R	Not	Not	Engage	Not	Not	Not	Engage	No Lvl	Not		
37727	Not	Not	Not	On	Engage	Not	Not	FCC R	Not	Not	Engage	Not	Not	Not	Engage	No Lvl	Not		
37728	Not	Not	Not	On	Engage	Not	Not	FCC R	Not	Not	Engage	Not	Not	Not	Engage	No Lvl	Not		
37729	Not	Not	Not	On	Engage	Not	Not	FCC R	Not	Not	Engage	Not	Not	Not	Engage	No Lvl	Not		
37730	Not	Not	Not	On	Engage	Not	Not	FCC R	Not	Not	Engage	Not	Not	Not	Engage	No Lvl	Not		
37731	Not	Not	Not	On	Engage	Not	Not	FCC R	Not	Not	Engage	Not	Not	Not	Engage	No Lvl	Not		
37732	Not	Not	Not	On	Engage	Not	Not	FCC R	Not	Not	Engage	Not	Not	Not	Engage	No Lvl	Not		
37733	Not	Not	Not	On	Engage	Not	Not	FCC R	Not	Not	Engage	Not	Not	Not	Engage	No Lvl	Not		
37734	Not	Not	Not	On	Engage	Not	Not	FCC R	Not	Not	Engage	Not	Not	Not	Engage	No Lvl	Not		
37735	Not	Not	Not	On	Engage	Not	Not	FCC R	Not	Not	Engage	Not	Not	Not	Engage	No Lvl	Not		
37736	Not	Not	Not	On	Engage	Not	Not	FCC R	Not	Not	Engage	Not	Not	Not	Engage	No Lvl	Not		
37737	Not	Not	Not	On	Engage	Not	Not	FCC R	Not	Not	Engage	Not	Not	Not	Engage	No Lvl	Not		
37738	Not	Not	Not	On	Engage	Not	Not	FCC R	Not	Not	Engage	Not	Not	Not	Engage	No Lvl	Not		
37739	Not	Not	Not	On	Engage	Not	Not	FCC R	Not	Not	Engage	Not	Not	Not	Engage	No Lvl	Not		
37740	Not	Not	Not	On	Engage	Not	Not	FCC R	Not	Not	Engage	Not	Not	Not	Engage	No Lvl	Not		
37741	Not	Not	Not	On	Engage	Not	Not	FCC R	Not	Not	Engage	Not	Not	Not	Engage	No Lvl	Not		
37742	Not	Not	Not	On	Engage	Not	Not	FCC R	Not	Not	Engage	Not	Not	Not	Engage	No Lvl	Not		
37743	Not	Not	Not	On	Engage	Not	Not	FCC R	Not	Not	Engage	Not	Not	Not	Engage	No Lvl	Not		
37744	Not	Not	Not	On	Engage	Not	Not	FCC R	Not	Not	Engage	Not	Not	Not	Engage	No Lvl	Not		
37745	Not	Not	Not	On	Engage	Not	Not	FCC R	Not	Not	Engage	Not	Not	Not	Engage	No Lvl	Not		
37746	Not	Not	Not	On	Engage	Not	Not	FCC R	Not	Not	Engage	Not	Not	Not	Engage	No Lvl	Not		
37747	Not	Not	Not	On	Engage	Not	Not	FCC R	Not	Not	Engage	Not	Not	Not	Engage	No Lvl	Not		
37748	Not	Not	Not	On	Engage	Not	Not	FCC R	Not	Not	Engage	Not	Not	Not	Engage	No Lvl	Not		
37749	Not	Not	Not	On	Engage	Not	Not	FCC R	Not	Not	Engage	Not	Not	Not	Engage	No Lvl	Not		
37750	Not	Not	Not	On	Engage	Not	Not	FCC R	Not	Not	Engage	Not	Not	Not	Engage	No Lvl	Not		
37751	Not	Not	Not	On	Engage	Not	Not	FCC R	Not	Not	Engage	Not	Not	Not	Engage	No Lvl	Not		
37752	Not	Not	Not	On	Engage	Not	Not	FCC R	Not	Not	Engage	Not	Not	Not	Engage	No Lvl	Not		
37753	Not	Not	Not	On	Engage	Not	Not	FCC R	Not	Not	Engage	Not	Not	Not	Engage	No Lvl	Not		
37754	Not	Not	Not	On	Engage	Not	Not	FCC R	Not	Not	Engage	Not	Not	Not	Engage	No Lvl	Not		
37755	Not	Not	Not	On	Engage	Not	Not	FCC R	Not	Not	Engage	Not	Not	Not	Engage	No Lvl	Not		
37756	Not	Not	Not	On	Engage	Not	Not	FCC R	Not	Not	Engage	Not	Not	Not	Engage	No Lvl	Not		
37757	Not	Not	Not	On	Engage	Not	Not	FCC R	Not	Not	Engage	Not	Not	Not	Engage	No Lvl	Not		
37758	Not	Not	Not	On	Engage	Not	Not	FCC R	Not	Not	Engage	Not	Not	Not	Engage	Engage	Engage	No Lvl	
37759	Not	Not	Not	On	Engage	Not	Not	FCC R	Not	Not	Engage	Not	Not	Not	Engage	Not	No Lvl	Not	
37760	Not	Not	Not	On	Engage	Not	Not	FCC R	Not	Not	Engage	Not	Not	Not	Engage	Not	No Lvl	Not	
37761	Not	Not	Not	On	Engage	Not	Not	FCC R	Not	Not	Engage	Not	Not	Not	Engage	Not	No Lvl	Not	
37762	Not	Not	Not	On	Engage	Not	Not	FCC R	Not	Not	Engage	Not	Not	Not	Engage	Not	No Lvl	Not	
37763	Not	Not	Not	On	Engage	Not	Not	FCC R	Not	Not	Engage	Not	Not	Not	Engage	Not	No Lvl	Not	

FDR	LNAV	ALT	MCP	A/P	HDG	Flare	VNAV	Lcl	CWS A	CWS B	CMD A	CMD B	CWS	CWS	V/S	ALT	Level	Single		
Elapsed	Mode	Acquir e	Speed	Off	Select	Engage	Mode	Lmtd							Pitch	Roll	Mode	Hold	Change	Chnnl
Time in Seconds	Op		2				Op	Mstr												
37840	Not	Not	Not	On	Not	Not	Not	FCC R	Not	Not	Engage	Not	Not	Not	Engage	Not	No Lvl	Not		
37841	Not	Not	Not	On	Not	Not	Not	FCC R	Not	Not	Engage	Not	Not	Not	Engage	Not	No Lvl	Not		
37842	Not	Not	Not	On	Not	Not	Not	FCC R	Not	Not	Engage	Not	Not	Not	Engage	Not	No Lvl	Not		
37843	Not	Not	Not	On	Not	Not	Not	FCC R	Not	Not	Engage	Not	Not	Not	Engage	Not	No Lvl	Not		
37844	Not	Not	Not	On	Not	Not	Not	FCC R	Not	Not	Engage	Not	Not	Not	Engage	Not	No Lvl	Not		
37845	Not	Not	Not	On	Not	Not	Not	FCC R	Not	Not	Engage	Not	Not	Not	Engage	Not	No Lvl	Not		
37846	Not	Not	Not	On	Not	Not	Not	FCC R	Not	Not	Engage	Not	Not	Not	Engage	Not	No Lvl	Not		
37847	Not	Not	Not	On	Not	Not	Not	FCC R	Not	Not	Engage	Not	Not	Not	Engage	Not	No Lvl	Not		
37848	Not	Not	Not	On	Not	Not	Not	FCC R	Not	Not	Engage	Not	Not	Not	Engage	Not	No Lvl	Not		
37849	Not	Not	Not	On	Not	Not	Not	FCC R	Not	Not	Engage	Not	Not	Not	Engage	Not	No Lvl	Not		
37850	Not	Not	Not	On	Not	Not	Not	FCC R	Not	Not	Engage	Not	Not	Not	Not	Not	No Lvl	Not		
37851	Not	Not	Not	On	Not	Not	Not	FCC R	Not	Not	Engage	Not	Not	Not	Not	Not	No Lvl	Not		
37852	Not	Not	Not	On	Not	Not	Not	FCC R	Not	Not	Engage	Not	Not	Not	Not	Not	No Lvl	Not		
37853	Not	Not	Not	On	Not	Not	Not	FCC R	Not	Not	Engage	Not	Not	Not	Not	Not	No Lvl	Not		
37854	Not	Not	Not	On	Not	Not	Not	FCC R	Not	Not	Engage	Not	Not	Not	Not	Not	No Lvl	Not		
37855	Not	Not	Not	On	Not	Not	Not	FCC R	Not	Not	Engage	Not	Not	Not	Not	Not	No Lvl	Not		
37856	Not	Not	Not	On	Not	Not	Not	FCC R	Not	Not	Engage	Not	Not	Not	Not	Not	No Lvl	Not		
37857	Not	Not	Not	On	Not	Not	Not	FCC R	Not	Not	Engage	Not	Not	Not	Not	Not	No Lvl	Not		
37858	Not	Not	Not	On	Not	Not	Not	FCC R	Not	Not	Engage	Not	Not	Not	Not	Engage	No Lvl	Not		
37859	Not	Not	Not	On	Not	Not	Not	FCC R	Not	Not	Engage	Not	Not	Not	Not	Engage	No Lvl	Not		
37860	Not	Not	Not	On	Not	Not	Not	FCC R	Not	Not	Engage	Not	Not	Not	Not	Engage	No Lvl	Not		
37861	Not	Not	Not	On	Not	Not	Not	FCC R	Not	Not	Engage	Not	Not	Not	Not	Engage	No Lvl	Not		
37862	Not	Not	Not	On	Not	Not	Not	FCC R	Not	Not	Engage	Not	Not	Not	Not	Engage	No Lvl	Not		
37863	Not	Not	Not	On	Not	Not	Not	FCC R	Not	Not	Engage	Not	Not	Not	Not	Engage	No Lvl	Not		
37864	Not	Not	Not	On	Not	Not	Not	FCC R	Not	Not	Engage	Not	Not	Not	Not	Engage	No Lvl	Not		
37865	Not	Not	Not	On	Not	Not	Not	FCC R	Not	Not	Engage	Not	Not	Not	Not	Engage	No Lvl	Not		
37866	Not	Not	Not	On	Not	Not	Not	FCC R	Not	Not	Engage	Not	Not	Not	Not	Engage	No Lvl	Not		
37867	Not	Not	Not	On	Not	Not	Not	FCC R	Not	Not	Engage	Not	Not	Not	Not	Engage	No Lvl	Not		
37868	Not	Not	Not	On	Not	Not	Not	FCC R	Not	Not	Engage	Not	Not	Not	Not	Engage	No Lvl	Not		
37869	Not	Not	Not	On	Not	Not	Not	FCC R	Not	Not	Engage	Not	Not	Not	Not	Engage	No Lvl	Not		
37870	Not	Not	Not	On	Not	Not	Not	FCC R	Not	Not	Engage	Not	Not	Not	Not	Engage	No Lvl	Not		
37871	Not	Not	Not	On	Not	Not	Not	FCC R	Not	Not	Engage	Not	Not	Not	Not	Engage	No Lvl	Not		
37872	Not	Not	Not	On	Not	Not	Not	FCC R	Not	Not	Engage	Not	Not	Not	Not	Engage	No Lvl	Not		
37873	Not	Not	Not	On	Not	Not	Not	FCC R	Not	Not	Engage	Not	Not	Not	Not	Engage	No Lvl	Not		
37874	Not	Not	Not	On	Not	Not	Not	FCC R	Not	Not	Engage	Not	Not	Not	Not	Engage	No Lvl	Not		
37875	Not	Not	Not	On	Not	Not	Not	FCC R	Not	Not	Engage	Not	Not	Not	Not	Not	Engage	No Lvl	Not	
37876	Not	Not	Not	Off	Not	Not	Not	FCC R	Not	Not	Engage	Not	Not	Not	Not	Not	Engage	No Lvl	Not	
37877	Not	Not	Not	Off	Not	Not	Not	FCC R	Not	Not	Engage	Not	Not	Not	Not	Not	Engage	No Lvl	Not	

FDR	LNAV	ALT	MCP	A/P	HDG	Flare	VNAV	Lcl	CWS A	CWS B	CMD A	CMD B	CWS	CWS	V/S	ALT	Level	Single	
Elapsed	Mode	Acquir e	Speed	Off	Select	Engage	Mode	Lmtd						Pitch	Roll	Mode	Hold	Change	Chnnl
Time in Seconds	Op		2				Op	Mstr											
37954	Not	Not	Not	Off	Not	Not	Not	FCC R	Not	Not	Not	Not	Not	Not	Not	Engage	No Lvl	Not	
37955	Not	Not	Not	Off	Not	Not	Not	FCC R	Not	Not	Not	Not	Not	Not	Not	Engage	No Lvl	Not	
37956	Not	Not	Not	Off	Not	Not	Not	FCC R	Not	Not	Not	Not	Not	Not	Not	Engage	No Lvl	Not	
37957	Not	Not	Not	Off	Not	Not	Not	FCC R	Not	Not	Not	Not	Not	Not	Not	Engage	No Lvl	Not	
37958	Not	Not	Not	Off	Not	Not	Not	FCC R	Not	Not	Not	Not	Not	Not	Not	Engage	No Lvl	Not	
37959	Not	Not	Not	Off	Not	Not	Not	FCC R	Not	Not	Not	Not	Not	Not	Not	Engage	No Lvl	Not	
37960	Not	Not	Not	Off	Not	Not	Not	FCC R	Not	Not	Not	Not	Not	Not	Not	Engage	No Lvl	Not	
37961	Not	Not	Not	Off	Not	Not	Not	FCC R	Not	Not	Not	Not	Not	Not	Not	Engage	No Lvl	Not	
37962	Not	Not	Not	Off	Not	Not	Not	FCC R	Not	Not	Not	Not	Not	Not	Not	Engage	No Lvl	Not	
37963	Not	Not	Not	Off	Not	Not	Not	FCC R	Not	Not	Not	Not	Not	Not	Not	Engage	No Lvl	Not	
37964	Not	Not	Not	Off	Not	Not	Not	FCC R	Not	Not	Not	Not	Not	Not	Not	Engage	No Lvl	Not	
37965	Not	Not	Not	Off	Not	Not	Not	FCC R	Not	Not	Not	Not	Not	Not	Not	Engage	No Lvl	Not	
37966	Not	Not	Not	Off	Not	Not	Not	FCC R	Not	Not	Not	Not	Not	Not	Not	Engage	No Lvl	Not	
37967	Not	Not	Not	Off	Not	Not	Not	FCC R	Not	Not	Not	Not	Not	Not	Not	Engage	No Lvl	Not	
37968	Not	Not	Not	Off	Not	Not	Not	FCC R	Not	Not	Not	Not	Not	Not	Not	Engage	No Lvl	Not	
37969	Not	Not	Not	Off	Not	Not	Not	FCC R	Not	Not	Not	Not	Not	Not	Not	Engage	No Lvl	Not	
37970	Not	Not	Not	Off	Not	Not	Not	FCC R	Not	Not	Not	Not	Not	Not	Not	Engage	No Lvl	Not	
37971	Not	Not	Not	Off	Not	Not	Not	FCC R	Not	Not	Not	Not	Not	Not	Not	Engage	No Lvl	Not	
37972	Not	Not	Not	Off	Not	Not	Not	FCC R	Not	Not	Not	Not	Not	Not	Not	Engage	No Lvl	Not	
37973	Not	Not	Not	Off	Not	Not	Not	FCC R	Not	Not	Not	Not	Not	Not	Not	Engage	No Lvl	Not	
37974	Not	Not	Not	Off	Not	Not	Not	FCC R	Not	Not	Not	Not	Not	Not	Not	Engage	No Lvl	Not	
37975	Not	Not	Not	Off	Not	Not	Not	FCC R	Not	Not	Not	Not	Not	Not	Not	Engage	No Lvl	Not	
37976	Not	Not	Not	Off	Not	Not	Not	FCC R	Not	Not	Not	Not	Not	Not	Not	Engage	No Lvl	Not	
37977	Not	Not	Not	Off	Not	Not	Not	FCC R	Not	Not	Not	Not	Not	Not	Not	Engage	No Lvl	Not	
37978	Not	Not	Not	Off	Not	Not	Not	FCC R	Not	Not	Not	Not	Not	Not	Not	Engage	No Lvl	Not	
37979	Not	Not	Not	Off	Not	Not	Not	FCC R	Not	Not	Not	Not	Not	Not	Not	Engage	No Lvl	Not	
37980	Not	Not	Not	Off	Not	Not	Not	FCC R	Not	Not	Not	Not	Not	Not	Not	Engage	No Lvl	Not	
37981	Not	Not	Not	Off	Not	Not	Not	FCC R	Not	Not	Not	Not	Not	Not	Not	Engage	No Lvl	Not	
37982	Not	Not	Not	Off	Not	Not	Not	FCC R	Not	Not	Not	Not	Not	Not	Not	Engage	No Lvl	Not	
37983	Not	Not	Not	Off	Not	Not	Not	FCC R	Not	Not	Not	Not	Not	Not	Not	Engage	No Lvl	Not	
37984	Not	Not	Not	Off	Not	Not	Not	FCC R	Not	Not	Not	Not	Not	Not	Not	Engage	No Lvl	Not	
37985	Not	Not	Not	Off	Not	Not	Not	FCC R	Not	Not	Not	Not	Not	Not	Not	Engage	No Lvl	Not	
37986	Not	Not	Not	Off	Not	Not	Not	FCC R	Not	Not	Not	Not	Not	Not	Not	Engage	No Lvl	Not	

FDR	ALTITUDE	Static Air Temp	Static Pressure	Impact Pressure	Total Air Temp	TO/GA	VOR/LOC	G/S	F/D	F/D	Approach
Elapsed Time in Seconds	(FT)	(degs C)	(in Hg)	(mb)	(degs. C)			Engage	A On	B On	
37690	5456				7.25	NOT	Not	Not	On	Off	Not
37691	5428				7.5	NOT	Not	Not	On	Off	Not
37692	5404				7.5	NOT	Not	Not	On	Off	Not
37693	5380				7.5	NOT	Not	Not	On	Off	Not
37694	5360				7.75	NOT	Not	Not	On	Off	Not
37695	5340				7.75	NOT	Not	Not	On	Off	Not
37696	5320				7.75	NOT	Not	Not	On	Off	Not
37697	5300				7.75	NOT	Not	Not	On	Off	Not
37698	5284				8	NOT	Not	Not	On	Off	Not
37699	5272				8	NOT	Not	Not	On	Off	Not
37700	5260				8	NOT	Not	Not	On	Off	Not
37701	5248				8	NOT	Not	Not	On	Off	Not
37702	5240				8	NOT	Not	Not	On	Off	Not
37703	5232				8	NOT	Not	Not	On	Off	Not
37704	5224				7.75	NOT	Not	Not	On	Off	Not
37705	5220				7.75	NOT	Not	Not	On	Off	Not
37706	5220				7.75	NOT	Not	Not	On	Off	Not
37707	5220				7.5	NOT	Not	Not	On	Off	Not
37708	5220				7.5	NOT	Not	Not	On	Off	Not
37709	5224				7.25	NOT	Not	Not	On	Off	Not
37710	5228				7.25	NOT	Not	Not	On	Off	Not
37711	5232				7	NOT	Not	Not	On	Off	Not
37712	5236				7	NOT	Not	Not	On	Off	Not
37713	5240				6.75	NOT	Not	Not	On	Off	Not
37714	5244				6.75	NOT	Not	Not	On	Off	Not
37715	5248				6.75	NOT	Not	Not	On	Off	Not
37716	5252				6.75	NOT	Not	Not	On	Off	Not
37717	5256				6.75	NOT	Not	Not	On	Off	Not
37718	5256				6.75	NOT	Not	Not	On	Off	Not
37719	5260				6.5	NOT	Not	Not	On	Off	Not
37720	5260				6.5	NOT	Not	Not	On	Off	Not
37721	5264				6.5	NOT	Not	Not	On	Off	Not
37722	5264				6.5	NOT	Not	Not	On	Off	Not
37723	5264				6.5	NOT	Not	Not	On	Off	Not
37724	5260				6.25	NOT	Not	Not	On	Off	Not
37725	5260				6.25	NOT	Not	Not	On	Off	Not
37726	5256				6.25	NOT	Not	Not	On	Off	Not
37727	5256				6.25	NOT	Not	Not	On	Off	Not
37728	5252				6.25	NOT	Not	Not	On	Off	Not

FDR	ALTITUDE	Static Air Temp	Static Pressure	Impact Pressure	Total Air Temp	TO/GA	VOR/LOC	G/S Engage	F/D A On	F/D B On	Approach
Elapsed Time in Seconds	(FT)	(degs C)	(in Hg)	(mb)	(degs C)						
37729	5252				6.25	NOT	Not	Not	On	Off	Not
37730	5252				6.5	NOT	Not	Not	On	Off	Not
37731	5248				6.5	NOT	Not	Not	On	Off	Not
37732	5248				6.5	NOT	Not	Not	On	Off	Not
37733	5248				6.5	NOT	Not	Not	On	Off	Not
37734	5248				6.5	NOT	Not	Not	On	Off	Not
37735	5252				6.5	NOT	Not	Not	On	Off	Not
37736	5252				6.5	NOT	Not	Not	On	Off	Not
37737	5252				6.5	NOT	Not	Not	On	Off	Not
37738	5256				6.5	NOT	Not	Not	On	Off	Not
37739	5256				6.5	NOT	Not	Not	On	Off	Not
37740	5260				6.5	NOT	Not	Not	On	Off	Not
37741	5260				6.5	NOT	Not	Not	On	Off	Not
37742	5264				6.5	NOT	Not	Not	On	Off	Not
37743	5264				6.5	NOT	Not	Not	On	Off	Not
37744	5264		89.625		6.5	NOT	Not	Not	On	Off	Not
37745	5268				6.5	NOT	Not	Not	On	Off	Not
37746	5268				6.5	NOT	Not	Not	On	Off	Not
37747	5264				6.5	NOT	Not	Not	On	Off	Not
37748	5264	-1.5			6.5	NOT	Not	Not	On	Off	Not
37749	5260				6.5	NOT	Not	Not	On	Off	Not
37750	5260				6.5	NOT	Not	Not	On	Off	Not
37751	5256				6.5	NOT	Not	Not	On	Off	Not
37752	5252	24.656			6.75	NOT	Not	Not	On	Off	Not
37753	5248				6.75	NOT	Not	Not	On	Off	Not
37754	5244				6.75	NOT	Not	Not	On	Off	Not
37755	5240				6.5	NOT	Not	Not	On	Off	Not
37756	5236				6.75	NOT	Not	Not	On	Off	Not
37757	5228				6.75	NOT	Not	Not	On	Off	Not
37758	5224				6.75	NOT	Not	Not	On	Off	Not
37759	5220				6.75	NOT	Not	Not	On	Off	Not
37760	5216				6.5	NOT	Not	Not	On	Off	Not
37761	5208				6.5	NOT	Not	Not	On	Off	Not
37762	5200				6.5	NOT	Not	Not	On	Off	Not
37763	5188				6.5	NOT	Not	Not	On	Off	Not
37764	5172				6.5	NOT	Not	Not	On	Off	Not
37765	5152				6.25	NOT	Not	Not	On	Off	Not
37766	5132				6.5	NOT	Not	Not	On	Off	Not
37767	5112				6.5	NOT	Not	Not	On	Off	Not

FDR	ALTITUDE	Static Air Temp	Static Pressure	Impact Pressure	Total Air Temp	TO/GA	VOR/LOC	G/S Engage	F/D A On	F/D B On	Approach
Elapsed Time In Seconds	(FT)	(degs C)	(in Hg)	(mb)	(degs. C)						
37768	5092				6.75	NOT	Not	Not	On	Off	Not
37769	5068				6.75	NOT	Not	Not	On	Off	Not
37770	5044				6.75	NOT	Not	Not	On	Off	Not
37771	5020				7	NOT	Not	Not	On	Off	Not
37772	4996				7	NOT	Not	Not	On	Off	Not
37773	4968				7	NOT	Not	Not	On	Off	Not
37774	4936				7	NOT	Not	Not	On	Off	Not
37775	4908				7.25	NOT	Not	Not	On	Off	Not
37776	4876				7.25	NOT	Not	Not	On	Off	Not
37777	4844				7.5	NOT	Not	Not	On	Off	Not
37778	4812				7.5	NOT	Not	Not	On	Off	Not
37779	4780				7.75	NOT	Not	Not	On	Off	Not
37780	4748				7.75	NOT	Not	Not	On	Off	Not
37781	4716				7.75	NOT	Not	Not	On	Off	Not
37782	4684				8	NOT	Not	Not	On	Off	Not
37783	4652				8.25	NOT	Not	Not	On	Off	Not
37784	4620				8.25	NOT	Not	Not	On	Off	Not
37785	4588				8.5	NOT	Not	Not	On	Off	Not
37786	4560				8.5	NOT	Not	Not	On	Off	Not
37787	4528				8.75	NOT	Not	Not	On	Off	Not
37788	4496				8.75	NOT	Not	Not	On	Off	Not
37789	4464				8.75	NOT	Not	Not	On	Off	Not
37790	4432				9	NOT	Not	Not	On	Off	Not
37791	4404				9	NOT	Not	Not	On	Off	Not
37792	4372				9	NOT	Not	Not	On	Off	Not
37793	4344				9	NOT	Not	Not	On	Off	Not
37794	4312				9	NOT	Not	Not	On	Off	Not
37795	4284				9	NOT	Not	Not	On	Off	Not
37796	4252				9	NOT	Not	Not	On	Off	Not
37797	4220				9	NOT	Not	Not	On	Off	Not
37798	4192				9	NOT	Not	Not	On	Off	Not
37799	4164				9	NOT	Not	Not	On	Off	Not
37800	4132				9	NOT	Not	Not	On	Off	Not
37801	4104				9	NOT	Not	Not	On	Off	Not
37802	4076				9	NOT	Not	Not	On	Off	Not
37803	4048				9.25	NOT	Not	Not	On	Off	Not
37804	4020				9.25	NOT	Not	Not	On	Off	Not
37805	3988				9.25	NOT	Engage	Not	On	Off	Not
37806	3960				9.25	NOT	Engage	Not	On	Off	Not

FDR	ALTITUDE	Static Air Temp	Static Pressure	Impact Pressure	Total Air Temp	TO/GA	VOR/LOC	G/S Engage	F/D A On	F/D B On	Approach
Elapsed Time in Seconds	(FT) (deg C)	(in Hg)		(mb)	(deg. C)						
37807	3932				9.25	NOT	Engage	Not	On	Off	Not
37808	3900			93.625	9.25	NOT	Engage	Not	On	Off	Not
37809	3868				9.25	NOT	Engage	Not	On	Off	Not
37810	3840				9.25	NOT	Engage	Not	On	Off	Not
37811	3808				9.25	NOT	Engage	Not	On	Off	Not
37812	3780	1.5			9.25	NOT	Engage	Not	On	Off	Not
37813	3752				9.5	NOT	Engage	Not	On	Off	Not
37814	3724				9.5	NOT	Engage	Not	On	Off	Not
37815	3700				9.5	NOT	Engage	Not	On	Off	Not
37816	3680		26.144		9.75	NOT	Engage	Not	On	Off	Not
37817	3660				9.75	NOT	Engage	Not	On	Off	Not
37818	3648				9.75	NOT	Engage	Not	On	Off	Not
37819	3632				9.75	NOT	Engage	Not	On	Off	Not
37820	3624				9.75	NOT	Engage	Not	On	Off	Not
37821	3608				9.75	NOT	Engage	Not	On	Off	Not
37822	3600				9.5	NOT	Engage	Not	On	Off	Not
37823	3588				9.5	NOT	Engage	Not	On	Off	Not
37824	3576				9.5	NOT	Engage	Not	On	Off	Not
37825	3564				9.5	NOT	Engage	Not	On	Off	Not
37826	3556				9.75	NOT	Engage	Not	On	Off	Not
37827	3548				10	NOT	Engage	Not	On	Off	Not
37828	3540				10	NOT	Engage	Not	On	Off	Not
37829	3532				9.75	NOT	Engage	Not	On	Off	Not
37830	3524				9.5	NOT	Engage	Not	On	Off	Not
37831	3516				9.5	NOT	Engage	Not	On	Off	Not
37832	3508				9.25	NOT	Engage	Not	On	Off	Not
37833	3496				9.25	NOT	Engage	Not	On	Off	Not
37834	3488				9.25	NOT	Engage	Not	On	Off	Not
37835	3480				9.25	NOT	Engage	Not	On	Off	Not
37836	3468				9.25	NOT	Engage	Not	On	Off	Not
37837	3456				9.25	NOT	Engage	Not	On	Off	Not
37838	3444				9	NOT	Engage	Not	On	Off	Not
37839	3436				9	NOT	Engage	Not	On	Off	Not
37840	3428				9	NOT	Engage	Not	On	Off	Not
37841	3420				9.25	NOT	Engage	Not	On	Off	Not
37842	3408				9.25	NOT	Engage	Not	On	Off	Not
37843	3392				9.25	NOT	Engage	Not	On	Off	Not
37844	3380				9	NOT	Engage	Not	On	Off	Not
37845	3364				9	NOT	Engage	Not	On	Off	Not

FDR	ALTITUDE	Static Air Temp	Static Pressure	Impact Pressure	Total Air Temp	TO/GA	VOR/LOC	G/S Engage	F/D A On	F/D B On	Approach
Elapsed Time in Seconds	(FT)	(degs C)	(in Hg)	(mb)	(degs. C)						
37846	3352				9	NOT	Engage	Not	On	Off	Not
37847	3336				9.25	NOT	Engage	Not	On	Off	Not
37848	3324				9.25	NOT	Engage	Not	On	Off	Not
37849	3312				9.25	NOT	Engage	Not	On	Off	Not
37850	3296				9.25	NOT	Engage	Not	On	Off	Not
37851	3284				9.25	NOT	Engage	Not	On	Off	Not
37852	3272				9.25	NOT	Engage	Not	On	Off	Not
37853	3256				9.25	NOT	Engage	Not	On	Off	Not
37854	3248				9.25	NOT	Engage	Not	On	Off	Not
37855	3244				9.25	NOT	Engage	Not	On	Off	Not
37856	3236				9.25	NOT	Engage	Not	On	Off	Not
37857	3232				9.25	NOT	Engage	Not	On	Off	Not
37858	3228				9.25	NOT	Engage	Not	On	Off	Not
37859	3228				9.25	NOT	Engage	Not	On	Off	Not
37860	3228				9.25	NOT	Engage	Not	On	Off	Not
37861	3232				9.5	NOT	Engage	Not	On	Off	Not
37862	3236				9.5	NOT	Engage	Not	On	Off	Not
37863	3240				9.25	NOT	Engage	Not	On	Off	Not
37864	3244				9.25	NOT	Engage	Not	On	Off	Not
37865	3244				9.25	NOT	Engage	Not	On	Off	Not
37866	3248				9	NOT	Engage	Not	On	Off	Not
37867	3252				9	NOT	Engage	Not	On	Off	Not
37868	3248				9	NOT	Engage	Not	On	Off	Not
37869	3248				8.75	NOT	Engage	Not	On	Off	Not
37870	3244				8.75	NOT	Engage	Not	On	Off	Not
37871	3240				8.75	NOT	Engage	Not	On	Off	Not
37872	3236		70.125		8.5	NOT	Engage	Not	On	Off	Not
37873	3244				8.5	NOT	Engage	Not	On	Off	Not
37874	3244				8.5	NOT	Engage	Not	On	Off	Not
37875	3240				8.5	NOT	Engage	Not	On	Off	Not
37876	3244	2.75			8.5	NOT	Engage	Not	On	Off	Not
37877	3244				8.25	NOT	Engage	Not	On	Off	Not
37878	3244				8.25	NOT	Engage	Not	On	Off	Not
37879	3240				8	NOT	Engage	Not	On	Off	Not
37880	3232		26.576		8	NOT	Engage	Not	On	Off	Not
37881	3220				7.75	NOT	Engage	Not	On	Off	Not
37882	3208				7.75	NOT	Engage	Not	On	Off	Not
37883	3188				7.75	NOT	Engage	Not	On	Off	Not
37884	3172				7.75	NOT	Engage	Not	On	Off	Not

FDR	ALTITUDE	Static Air Temp	Static Pressure	Impact Pressure	Total Air Temp	TO/GA	VOR/LOC	G/S	F/D	F/D	Approach
Elapsed Time in Seconds	(FT)	(degs C)	(in Hg)	(mb)	(degs. C)			Engage	A On	B On	
37885	3148				7.75	NOT	Engage	Not	On	Off	Not
37886	3128				7.75	NOT	Engage	Not	On	Off	Not
37887	3100				7.75	NOT	Engage	Not	On	Off	Not
37888	3076				7.75	NOT	Engage	Not	On	Off	Not
37889	3044				7.75	NOT	Engage	Not	On	Off	Not
37890	3016				8	NOT	Engage	Not	On	Off	Not
37891	2980				8	NOT	Engage	Not	On	Off	Not
37892	2948				8	NOT	Engage	Not	On	Off	Not
37893	2916				8	NOT	Engage	Not	On	Off	Not
37894	2880				8.25	NOT	Engage	Not	On	Off	Not
37895	2844				8.25	NOT	Engage	Not	On	Off	Not
37896	2808				8.5	NOT	Engage	Not	On	Off	Not
37897	2772				8.5	NOT	Engage	Not	On	Off	Not
37898	2736				8.5	NOT	Engage	Not	On	Off	Not
37899	2700				8.75	NOT	Engage	Not	On	Off	Not
37900	2668				8.75	NOT	Engage	Not	On	Off	Not
37901	2632				8.75	NOT	Engage	Not	On	Off	Not
37902	2592				9	NOT	Engage	Not	On	Off	Not
37903	2548				9	NOT	Engage	Not	On	Off	Not
37904	2496				9	NOT	Engage	Not	On	Off	Not
37905	2440				9.25	NOT	Engage	Not	On	Off	Not
37906	2384				9.25	NOT	Engage	Not	On	Off	Not
37907	2332				9.5	NOT	Engage	Not	On	Off	Not
37908	2284				9.75	NOT	Engage	Not	On	Off	Not
37909	2232				10	NOT	Engage	Not	On	Off	Not
37910	2184				10.25	NOT	Engage	Not	On	Off	Not
37911	2132				10.25	NOT	Engage	Not	On	Off	Not
37912	2084				10.5	NOT	Engage	Not	On	Off	Not
37913	2040				10.75	NOT	Engage	Not	On	Off	Not
37914	1992				11	NOT	Engage	Not	On	Off	Not
37915	1944				11.25	NOT	Engage	Not	On	Off	Not
37916	1900				11.25	NOT	Engage	Not	On	Off	Not
37917	1856				11.5	NOT	Engage	Not	On	Off	Not
37918	1816				11.5	NOT	Engage	Not	On	Off	Not
37919	1772				11.75	NOT	Engage	Not	On	Off	Not
37920	1736				11.75	NOT	Engage	Not	On	Off	Not
37921	1704				12	NOT	Engage	Not	On	Off	Not
37922	1668				12.25	NOT	Engage	Not	On	Off	Not
37923	1632				12.25	NOT	Engage	Not	On	Off	Not

FDR	ALTITUDE	Static Air Temp	Static Pressure	Impact Pressure	Total Air Temp	TO/GA	VOR/LOC	G/S	F/D	F/D	Approach
Elapsed Time in Seconds	(FT)	(degs C)	(in Hg)	(mb)	(degs. C)			Engage	A On	B On	
37924	1600				12.25	NOT	Engage	Not	On	Off	Not
37925	1560				12.5	NOT	Engage	Not	On	Off	Not
37926	1524				12.5	NOT	Engage	Not	On	Off	Not
37927	1488				12.75	NOT	Engage	Not	On	Off	Not
37928	1456				12.75	NOT	Engage	Not	On	Off	Not
37929	1416				12.75	NOT	Engage	Not	On	Off	Not
37930	1372				13	NOT	Engage	Not	On	Off	Not
37931	1332				13	NOT	Engage	Not	On	Off	Not
37932	1288				13.25	NOT	Engage	Not	On	Off	Not
37933	1244				13.25	NOT	Engage	Not	On	Off	Not
37934	1208				13.5	NOT	Engage	Not	On	Off	Not
37935	1176				13.5	NOT	Engage	Not	On	Off	Not
37936	1140			63.75	13.75	NOT	Engage	Not	On	Off	Not
37937	1112				13.75	NOT	Engage	Not	On	Off	Not
37938	1080				13.75	NOT	Engage	Not	On	Off	Not
37939	1056				14	NOT	Engage	Not	On	Off	Not
37940	1024	9			14	NOT	Engage	Not	On	Off	Not
37941	996				14	NOT	Engage	Not	On	Off	Not
37942	972				14	NOT	Engage	Not	On	Off	Not
37943	952				14	NOT	Engage	Not	On	Off	Not
37944	940		28.912		14	NOT	Engage	Not	On	Off	Not
37945	940				14	NOT	Engage	Not	On	Off	Not
37946	940				14	NOT	Engage	Not	On	Off	Not
37947	944				14	NOT	Engage	Not	On	Off	Not
37948	936				13.75	NOT	Engage	Not	On	Off	Not
37949	940				13.75	NOT	Engage	Not	On	Off	Not
37950	920				13.5	NOT	Engage	Not	On	Off	Not
37951	916				13.25	NOT	Engage	Not	On	Off	Not
37952	908				13	NOT	Engage	Not	On	Off	Not
37953	904				12.75	NOT	Engage	Not	On	Off	Not
37954	896				12.5	NOT	Engage	Not	On	Off	Not
37955	896				12.5	NOT	Engage	Not	On	Off	Not
37956	896				12.25	NOT	Engage	Not	On	Off	Not
37957	900				12	NOT	Engage	Not	On	Off	Not
37958	904				11.75	NOT	Engage	Not	On	Off	Not
37959	908				11.5	NOT	Engage	Not	On	Off	Not
37960	908				11.5	NOT	Engage	Not	On	Off	Not
37961	908				11.25	NOT	Engage	Not	On	Off	Not
37962	908				11.5	NOT	Engage	Not	On	Off	Not

FDR	ALTITUDE	Static Air Temp	Static Pressure	Impact Pressure	Total Air Temp	TO/GA	VOR/LOC	G/S	F/D	F/D	Approach
Elapsed Time in Seconds	(FT)	(degs C)	(in Hg)	(mb)	(degs. C)			Engage	A On	B On	
37963	912				11.5	NOT	Engage	Not	On	Off	Not
37964	908				11	NOT	Engage	Not	On	Off	Not
37965	912				11	NOT	Engage	Not	On	Off	Not
37966	904				10.75	NOT	Engage	Not	On	Off	Not
37967	920				10.75	NOT	Engage	Not	On	Off	Not
37968	924				82	NOT	Engage	Not	On	Off	Not
37969	924				82	NOT	Engage	Not	On	Off	Not
37970	924				82	NOT	Engage	Not	On	Off	Not
37971	924				-64.25	NOT	Engage	Not	On	Off	Not
37972	924				82	NOT	Engage	Not	On	Off	Not
37973	924				-64.25	NOT	Engage	Not	On	Off	Not
37974	924				82	NOT	Engage	Not	On	Off	Not
37975	924				-64.25	NOT	Engage	Not	On	Off	Not
37976	924				82	NOT	Engage	Not	On	Off	Not
37977	924				-64.25	NOT	Engage	Not	On	Off	Not
37978	924				82	NOT	Engage	Not	On	Off	Not
37979	924				-64.25	NOT	Engage	Not	On	Off	Not
37980	924				82	NOT	Engage	Not	On	Off	Not
37981	924				-64.25	NOT	Engage	Not	On	Off	Not
37982	924				82	NOT	Engage	Not	On	Off	Not
37983	924				-64.25	NOT	Engage	Not	On	Off	Not
37984	924				82	NOT	Engage	Not	On	Off	Not
37985	924				-64.25	NOT	Engage	Not	On	Off	Not
37986	924				82	NOT	Engage	Not	On	Off	Not

FDR	Flap 1	Flap 1	Flap 2	Flap 2	Flap 3	Flap 3	Flap 4	Flap 4
Elapsed	Ext.	In	Ext.	In	Ext.	In	Ext.	In
Time in		Transit		Transit		Transit		Transit
Seconds								
37690	Not	Not	Not	Not	Not	Not	Not	Not
37691	Not	Not	Not	Not	Not	Not	Not	Not
37692	Not	Not	Not	Not	Not	Not	Not	Not
37693	Not	Not	Not	Not	Not	Not	Not	Not
37694	Not	Not	Not	Not	Not	Not	Not	Not
37695	Not	Not	Not	Not	Not	Not	Not	Not
37696	Not	Not	Not	Not	Not	Not	Not	Not
37697	Not	Not	Not	Not	Not	Not	Not	Not
37698	Not	Not	Not	Not	Not	Not	Not	Not
37699	Not	Not	Not	Not	Not	Not	Not	Not
37700	Not	Not	Not	Not	Not	Not	Not	Not
37701	Not	Not	Not	Not	Not	Not	Not	Not
37702	Not	Not	Not	Not	Not	Not	Not	Not
37703	Not	Not	Not	Not	Not	Not	Not	Not
37704	Not	Not	Not	Not	Not	Not	Not	Not
37705	Not	Not	Not	Not	Not	Not	Not	Not
37706	Not	Not	Not	Not	Not	Not	Not	Not
37707	Not	Not	Not	Not	Not	Not	Not	Not
37708	Not	Not	Not	Not	Not	Not	Not	Not
37709	Not	Not	Not	Not	Not	Not	Not	Not
37710	Not	Not	Not	Not	Not	Not	Not	Not
37711	Not	Not	Not	Not	Not	Not	Not	Not
37712	Not	Not	Not	Not	Not	Not	Not	Not
37713	Not	Not	Not	Not	Not	Not	Not	Not
37714	Not	Not	Not	Not	Not	Not	Not	Not
37715	Not	Not	Not	Not	Not	Not	Not	Not
37716	Not	Not	Not	Not	Not	Not	Not	Not
37717	Not	Not	Not	Not	Not	Not	Not	Not
37718	Not	Not	Not	Not	Not	Not	Not	Not
37719	Not	Not	Not	Not	Not	Not	Not	Not
37720	Not	Not	Not	Not	Not	Not	Not	Not
37721	Not	Not	Not	Not	Not	Not	Not	Not
37722	Not	Not	Not	Not	Not	Not	Not	Not
37723	Not	Not	Not	Not	Not	Not	Not	Not
37724	Not	Not	Not	Not	Not	Not	Not	Not
37725	Not	Not	Not	Not	Not	Not	Not	Not
37726	Not	Not	Not	Not	Not	Not	Not	Not
37727	Not	Not	Not	Not	Not	Not	Not	Not
37728	Not	Not	Not	Not	Not	Not	Not	Not
37729	Not	Not	Not	Not	Not	Not	Not	Not
37730	Not	Not	Not	Not	Not	Not	Not	Not
37731	Not	Not	Not	Not	Not	Not	Not	Not
37732	Not	Not	Not	Not	Not	Not	Not	Not
37733	Not	Not	Not	Not	Not	Not	Not	Not
37734	Not	Not	Not	Not	Not	Not	Not	Not
37735	Not	Not	Not	Not	Not	Not	Not	Not
37736	Not	Not	Not	Not	Not	Not	Not	Not
37737	Not	Not	Not	Not	Not	Not	Not	Not
37738	Not	Not	Not	Not	Not	Not	Not	Not
37739	Not	Not	Not	Not	Not	Not	Not	Not

FDR	Flap 1	Flap 1	Flap 2	Flap 2	Flap 3	Flap 3	Flap 4	Flap 4
Elapsed	Ext.	In	Ext.	In	Ext.	In	Ext.	In
Time in		Transit		Transit		Transit		Transit
Seconds								
37740	Not	Not	Not	Not	Not	Not	Not	Not
37741	Not	Not	Not	Not	Not	Not	Not	Not
37742	Not	Not	Not	Not	Not	Not	Not	Not
37743	Not	Not	Not	Not	Not	Not	Not	Not
37744	Not	Not	Not	Not	Not	Not	Not	Not
37745	Not	Not	Not	Not	Not	Not	Not	Not
37746	Not	Not	Not	Not	Not	Not	Not	Not
37747	Not	Not	Not	Not	Not	Not	Not	Not
37748	Not	Not	Not	Not	Not	Not	Not	Not
37749	Not	Not	Not	Not	Not	Not	Not	Not
37750	Not	Not	Not	Not	Not	Not	Not	Not
37751	Not	Not	Not	Not	Not	Not	Not	Not
37752	Not	Not	Not	Not	Not	Not	Not	Not
37753	Not	Not	Not	Not	Not	Not	Not	Not
37754	Not	Not	Not	Not	Not	Not	Not	Not
37755	Not	Not	Not	Not	Not	Not	Not	Not
37756	Not	Not	Not	Not	Not	Not	Not	Not
37757	Not	Not	Not	Not	Not	Not	Not	Not
37758	Not	Not	Not	Not	Not	Not	Not	Not
37759	Not	Not	Not	Not	Not	Not	Not	Not
37760	Not	Not	Not	Not	Not	Not	Not	Not
37761	Not	Not	Not	Not	Not	Not	Not	Not
37762	Not	Not	Not	Not	Not	Not	Not	Not
37763	Not	Not	Not	Not	Not	Not	Not	Not
37764	Not	Not	Not	Not	Not	Not	Not	Not
37765	Not	Not	Not	Not	Not	Not	Not	Not
37766	Not	Not	Not	Not	Not	Not	Not	Not
37767	Not	Not	Not	Not	Not	Not	Not	Not
37768	Not	Not	Not	Not	Not	Not	Not	Not
37769	Not	Not	Not	Not	Not	Not	Not	Not
37770	Not	Not	Not	Not	Not	Not	Not	Not
37771	Not	Not	Not	Not	Not	Not	Not	Not
37772	Not	Not	Not	Not	Not	Not	Not	Not
37773	Not	Not	Not	Not	Not	Not	Not	Not
37774	Not	Not	Not	Not	Not	Not	Not	Not
37775	Not	Not	Not	Not	Not	Not	Not	Not
37776	Not	Not	Not	Not	Not	Not	Not	Not
37777	Not	Not	Not	Not	Not	Not	Not	Not
37778	Not	Not	Not	Not	Not	Not	Not	Not
37779	Not	Not	Not	Not	Not	Not	Not	Not
37780	Not	Not	Not	Not	Not	Not	Not	Not
37781	Not	Not	Not	Not	Not	Not	Not	Not
37782	Not	Not	Not	Not	Not	Not	Not	Not
37783	Not	Not	Not	Not	Not	Not	Not	Not
37784	Not	Not	Not	Not	Not	Not	Not	Not
37785	Not	Not	Not	Not	Not	Not	Not	Not
37786	Not	Not	Not	Not	Not	Not	Not	Not
37787	Not	Not	Not	Not	Not	Not	Not	Not
37788	Not	Not	Not	Not	Not	Not	Not	Not
37789	Not	Not	Not	Not	Not	Not	Not	Not
37790	Not	Not	Not	Not	Not	Not	Not	Not

FDR	Flap 1	Flap 1	Flap 2	Flap 2	Flap 3	Flap 3	Flap 4	Flap 4
Elapsed	Ext.	In	Ext.	In	Ext.	In	Ext.	In
Time in		Transit		Transit		Transit		Transit
Seconds								
37791	Not	Not	Not	Not	Not	Not	Not	Not
37792	Not	Not	Not	Not	Not	Not	Not	Not
37793	Not	Not	Not	Not	Not	Not	Not	Not
37794	Not	Not	Not	Not	Not	Not	Not	Not
37795	Not	Not	Not	Not	Not	Not	Not	Not
37796	Not	Not	Not	Not	Not	Not	Not	Not
37797	Not	Not	Not	Not	Not	Not	Not	Not
37798	Not	Not	Not	Not	Not	Not	Not	Not
37799	Not	Not	Not	Not	Not	Not	Not	Not
37800	Not	Not	Not	Not	Not	Not	Not	Not
37801	Not	Not	Not	Not	Not	Not	Not	Not
37802	Not	Not	Not	Not	Not	Not	Not	Not
37803	Not	Not	Not	Not	Not	Not	Not	Not
37804	Not	Not	Not	Not	Not	Not	Not	Not
37805	Not	Not	Not	Not	Not	Not	Not	Not
37806	Not	Not	Not	Not	Not	Not	Not	Not
37807	Not	Not	Not	Not	Not	Not	Not	Not
37808	Not	Not	Not	Not	Not	Not	Not	Not
37809	Not	Not	Not	Not	Not	Not	Not	Not
37810	Not	Not	Not	Not	Not	Not	Not	Not
37811	Not	Not	Not	Not	Not	Not	Not	Not
37812	Not	Not	Not	Not	Not	Not	Not	Not
37813	Not	Not	Not	Not	Not	Not	Not	Not
37814	Not	Not	Not	Not	Not	Not	Not	Not
37815	Not	Not	Not	Not	Not	Not	Not	Not
37816	Not	Not	Not	Not	Not	Not	Not	Not
37817	Not	Not	Not	Not	Not	Not	Not	Not
37818	Not	Not	Not	Not	Not	Not	Not	Not
37819	Not	Not	Not	Not	Not	Not	Not	Not
37820	Not	Not	Not	Not	Not	Not	Not	Not
37821	Not	Not	Not	Not	Not	Not	Not	Not
37822	Not	Not	Not	Not	Not	Not	Not	Not
37823	Not	Not	Not	Not	Not	Not	Not	Not
37824	Not	Not	Not	Not	Not	Not	Not	Not
37825	Not	Not	Not	Not	Not	Not	Not	Not
37826	Not	Not	Not	Not	Not	Not	Not	Not
37827	Not	Not	Not	Not	Not	Not	Not	Not
37828	Not	Not	Not	Not	Not	Not	Not	Not
37829	Not	Not	Not	Not	Not	Not	Not	Not
37830	Not	Not	Not	Not	Not	Not	Not	Not
37831	Not	Not	Not	Not	Not	Not	Not	Not
37832	Not	Not	Not	Not	Not	Not	Not	Not
37833	Not	Not	Not	Not	Not	Not	Not	Not
37834	Not	Not	Not	Not	Not	Not	Not	Not
37835	Not	Not	Not	Not	Not	Not	Not	Not
37836	Not	Not	Not	Not	Not	Not	Not	Not
37837	Not	Not	Not	Not	Not	Not	Not	Not
37838	Not	Not	Not	Not	Not	Not	Not	Not
37839	Not	Not	Not	Not	Not	Not	Not	Not
37840	Not	Not	Not	Not	Not	Not	Not	Not
37841	Not	Not	Not	Not	Not	Not	Not	Not

FDR	Flap 1	Flap 1	Flap 2	Flap 2	Flap 3	Flap 3	Flap 4	Flap 4
Elapsed	Ext.	In	Ext.	In	Ext.	In	Ext.	In
Time in Seconds		Transit		Transit		Transit		Transit
37842	Not	Not	Not	Not	Not	Not	Not	Not
37843	Not	Not	Not	Not	Not	Not	Not	Not
37844	Not	Not	Not	Not	Not	Not	Not	Not
37845	Not	Not	Not	Not	Not	Not	Not	Not
37846	Not	Not	Not	Not	Not	Not	Not	Not
37847	Not	Not	Not	Not	Not	Not	Not	Not
37848	Not	Not	Not	Not	Not	Not	Not	Not
37849	Not	Not	Not	Not	Not	Not	Not	Not
37850	Not	Not	Not	Not	Not	Not	Not	Not
37851	Not	Not	Not	Not	Not	Not	Not	Not
37852	Not	Not	Not	Not	Not	Not	Not	Not
37853	Not	Not	Not	Not	Not	Not	Not	Not
37854	Not	Not	Not	Not	Not	Not	Not	Not
37855	Not	Not	Not	Not	Not	Not	Not	Not
37856	Not	Not	Not	Not	Not	Not	Not	Not
37857	Not	Not	Not	Not	Not	Not	Not	Not
37858	Not	Not	Not	Not	Not	Not	Not	Not
37859	Not	Not	Not	Not	Not	Not	Not	Not
37860	Not	Not	Not	Not	Not	Not	Not	Not
37861	Not	Not	Not	Not	Not	Not	Not	Not
37862	Not	Intrans	Not	Intransi	Not	Intransi	Not	Intransi
37863	Not	Intrans	Not	Intransi	Not	Intransi	Not	Intransi
37864	Not	Intrans	Not	Intransi	Not	Intransi	Not	Intransi
37865	Not	Intrans	Not	Intransi	Not	Intransi	Extend	Not
37866	Extend	Not	Extend	Not	Extend	Not	Extend	Not
37867	Extend	Not	Extend	Not	Extend	Not	Extend	Not
37868	Extend	Not	Extend	Not	Extend	Not	Extend	Not
37869	Extend	Not	Extend	Not	Extend	Not	Extend	Not
37870	Extend	Not	Extend	Not	Extend	Not	Extend	Not
37871	Extend	Not	Extend	Not	Extend	Not	Extend	Not
37872	Extend	Not	Extend	Not	Extend	Not	Extend	Not
37873	Extend	Not	Extend	Not	Extend	Not	Extend	Not
37874	Extend	Not	Extend	Not	Extend	Not	Extend	Not
37875	Extend	Not	Extend	Not	Extend	Not	Extend	Not
37876	Extend	Not	Extend	Not	Extend	Not	Extend	Not
37877	Extend	Not	Extend	Not	Extend	Not	Extend	Not
37878	Extend	Not	Extend	Not	Extend	Not	Extend	Not
37879	Extend	Not	Extend	Not	Extend	Not	Extend	Not
37880	Extend	Not	Extend	Not	Extend	Not	Extend	Not
37881	Extend	Not	Extend	Not	Extend	Not	Extend	Not
37882	Extend	Not	Extend	Not	Extend	Not	Extend	Not
37883	Extend	Not	Extend	Not	Extend	Not	Extend	Not
37884	Extend	Not	Extend	Not	Extend	Not	Extend	Not
37885	Extend	Not	Extend	Not	Extend	Not	Extend	Not
37886	Extend	Not	Extend	Not	Extend	Not	Extend	Not
37887	Extend	Not	Extend	Not	Extend	Not	Extend	Not
37888	Extend	Not	Extend	Not	Extend	Not	Extend	Not
37889	Extend	Not	Extend	Not	Extend	Not	Extend	Not
37890	Extend	Not	Extend	Not	Extend	Not	Extend	Not
37891	Extend	Not	Extend	Not	Extend	Not	Extend	Not
37892	Extend	Not	Extend	Not	Extend	Not	Extend	Not

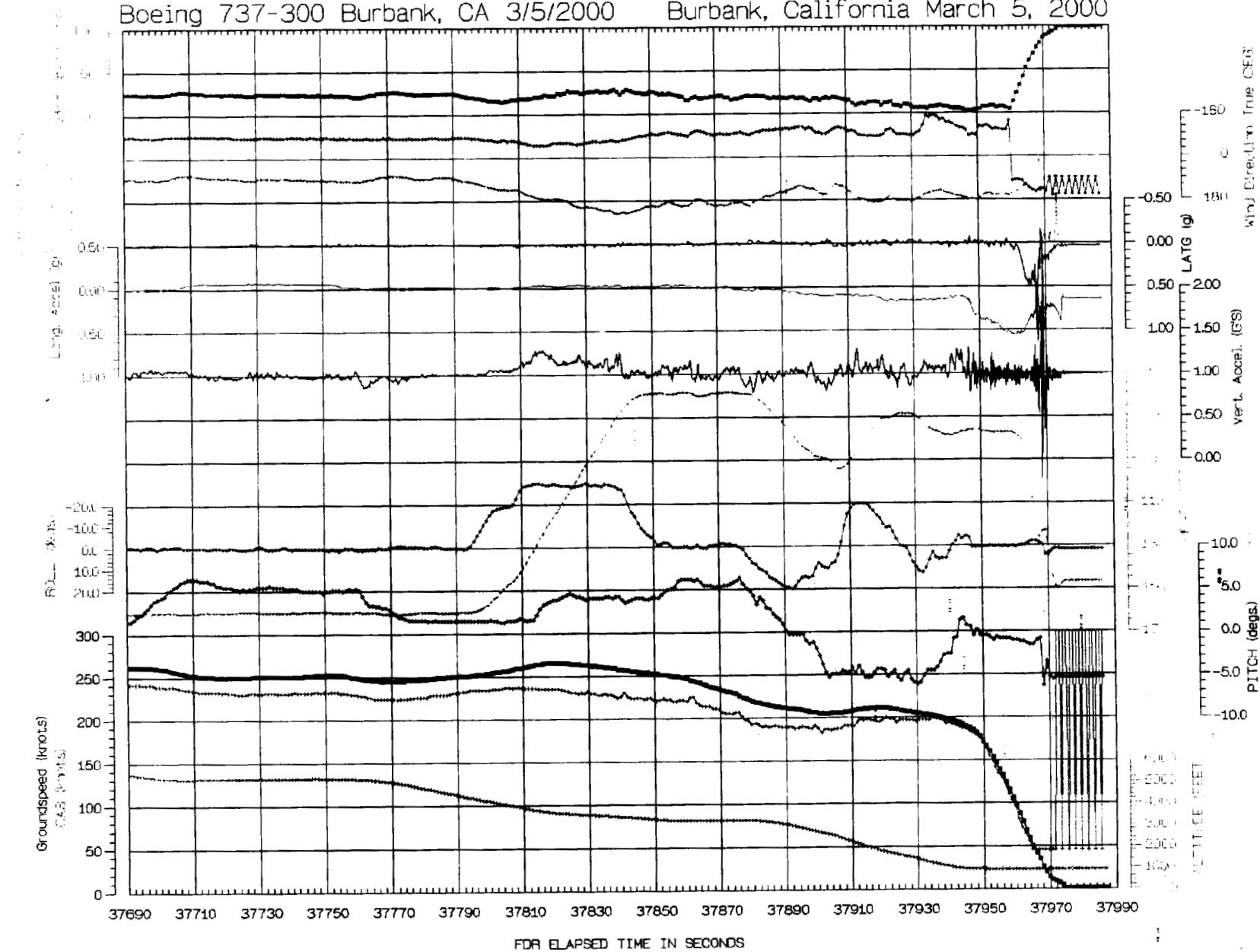
ATTACHMENT 3

Plots of Southwest Airlines Flight 1455 FDR Data

Southwest Flight 1455

Boeing 737-300 Burbank, CA 3/5/2000

Burbank, California March 5, 2000



Finalized Data - AC_Perf_5min

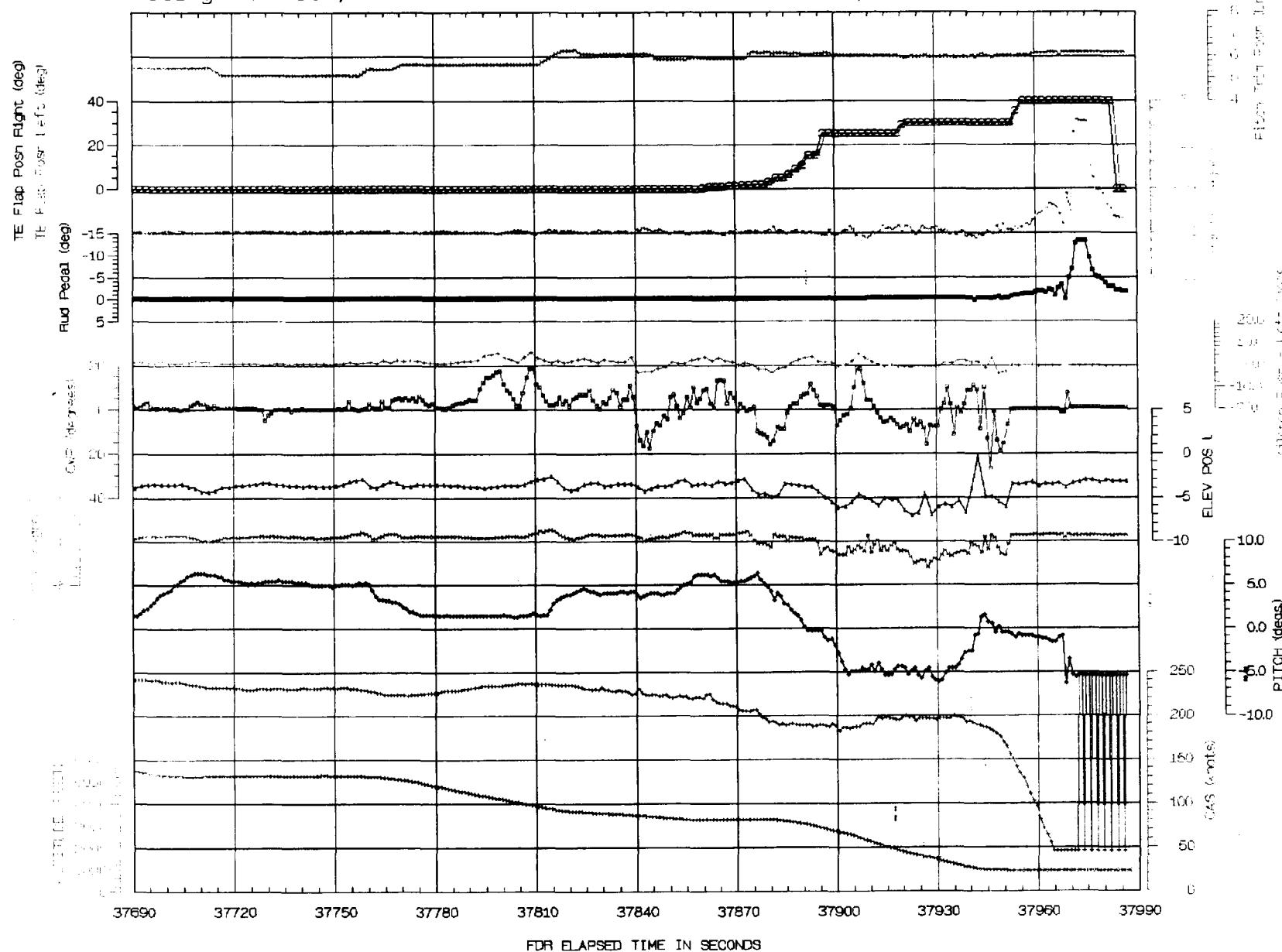
Revised: December 19, 2000

National Transportation Safety Board

Southwest Flight 1455

Boeing 737-300, N668SW

Burbank, California 3/5/2000



Finalized Data - Controls 5 Min.

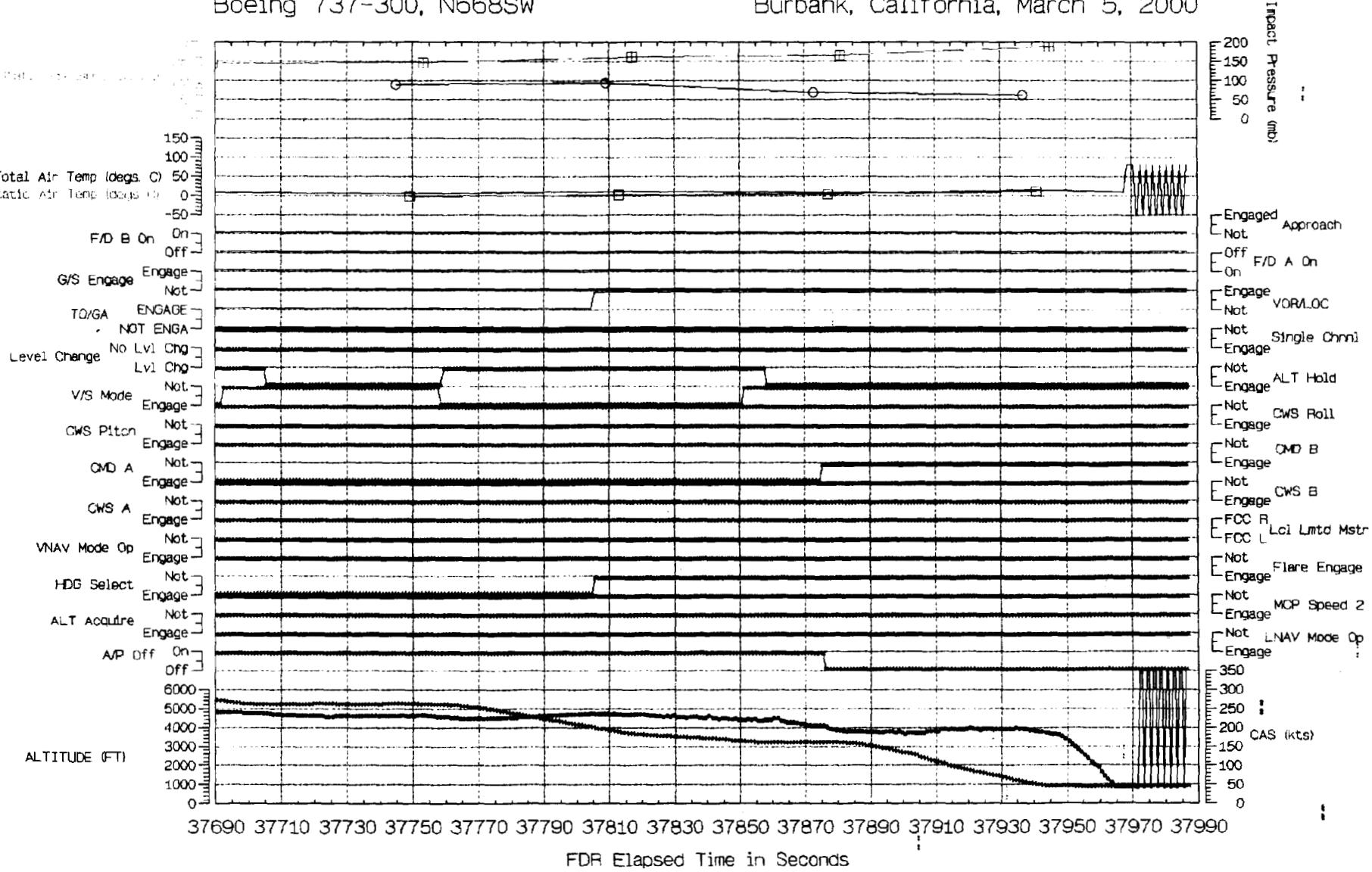
Revised: December 19, 2000

National Transportation Safety Board

Southwest Flight 1455

Boeing 737-300, N668SW

Burbank, California, March 5, 2000



Finalized Data - a_p_disc 5 min.

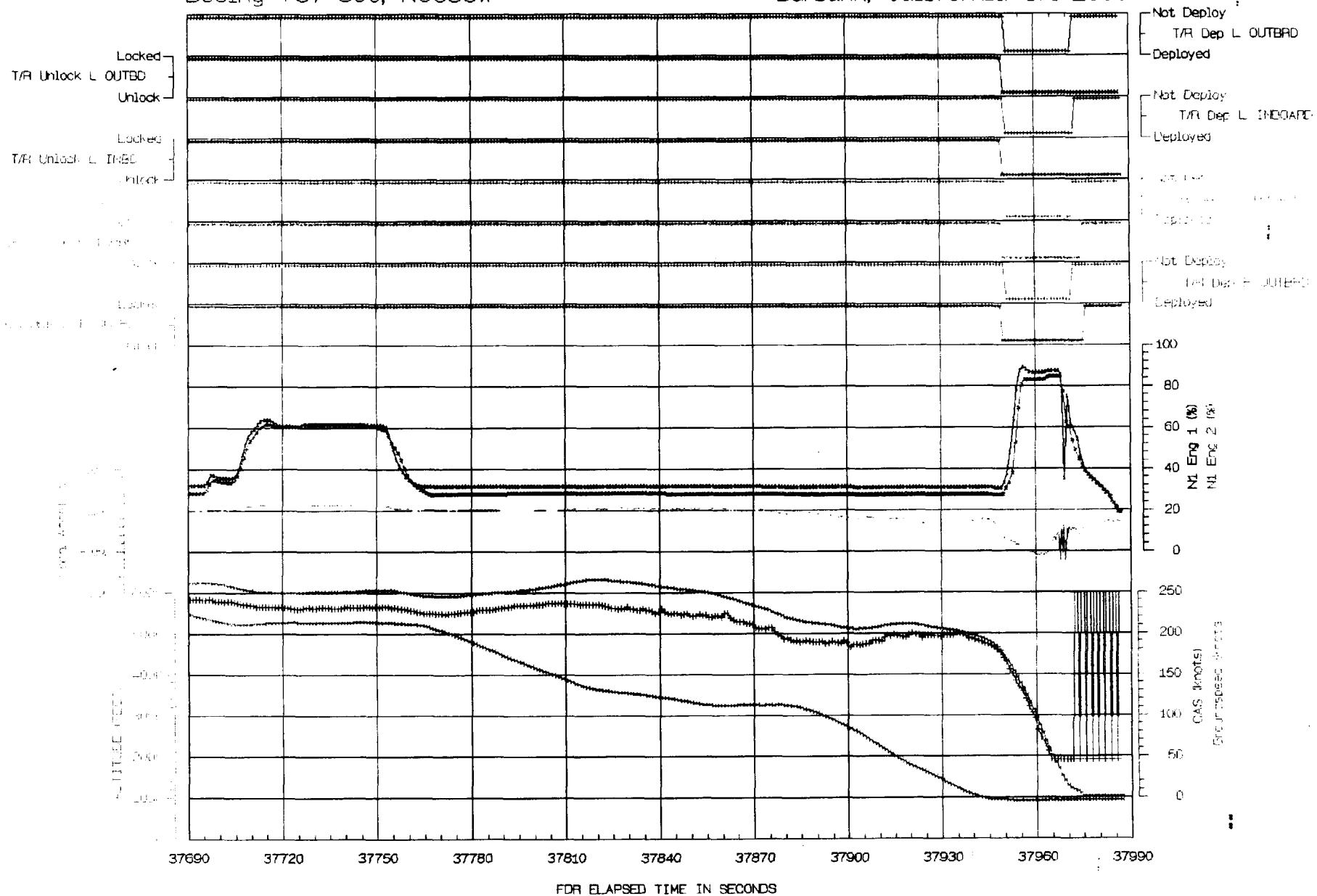
Revised: December 19, 2000

National Transportation Safety Board

Southwest Flight 1455

Boeing 737-300, N668SW

Burbank, California 3/5/2000



Finalized Data - Engines 5 Minutes

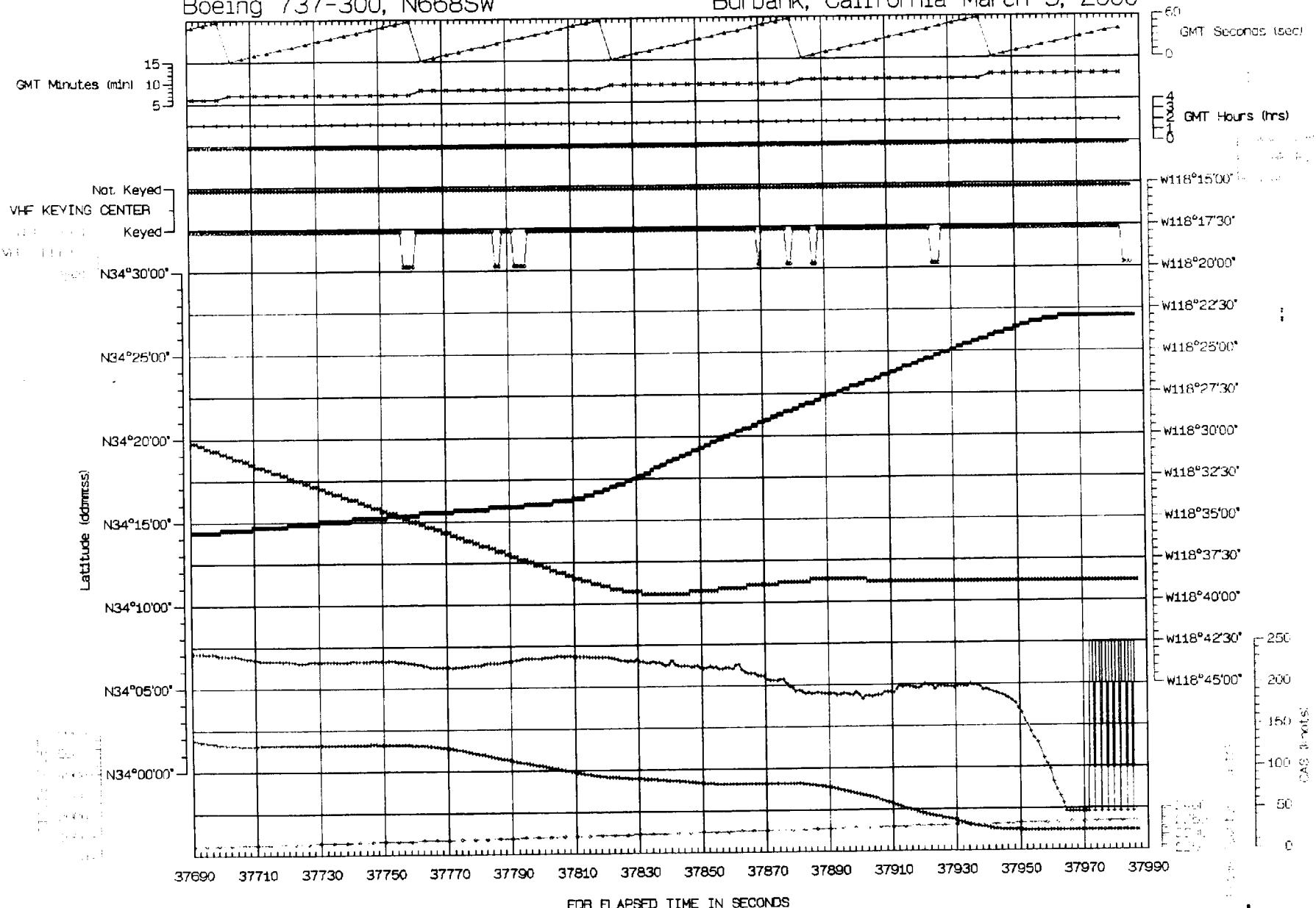
Revised: December 19, 2000

National Transportation Safety Board

Southwest Flight 1455

Boeing 737-300, N668SW

Burbank, California March 5, 2000



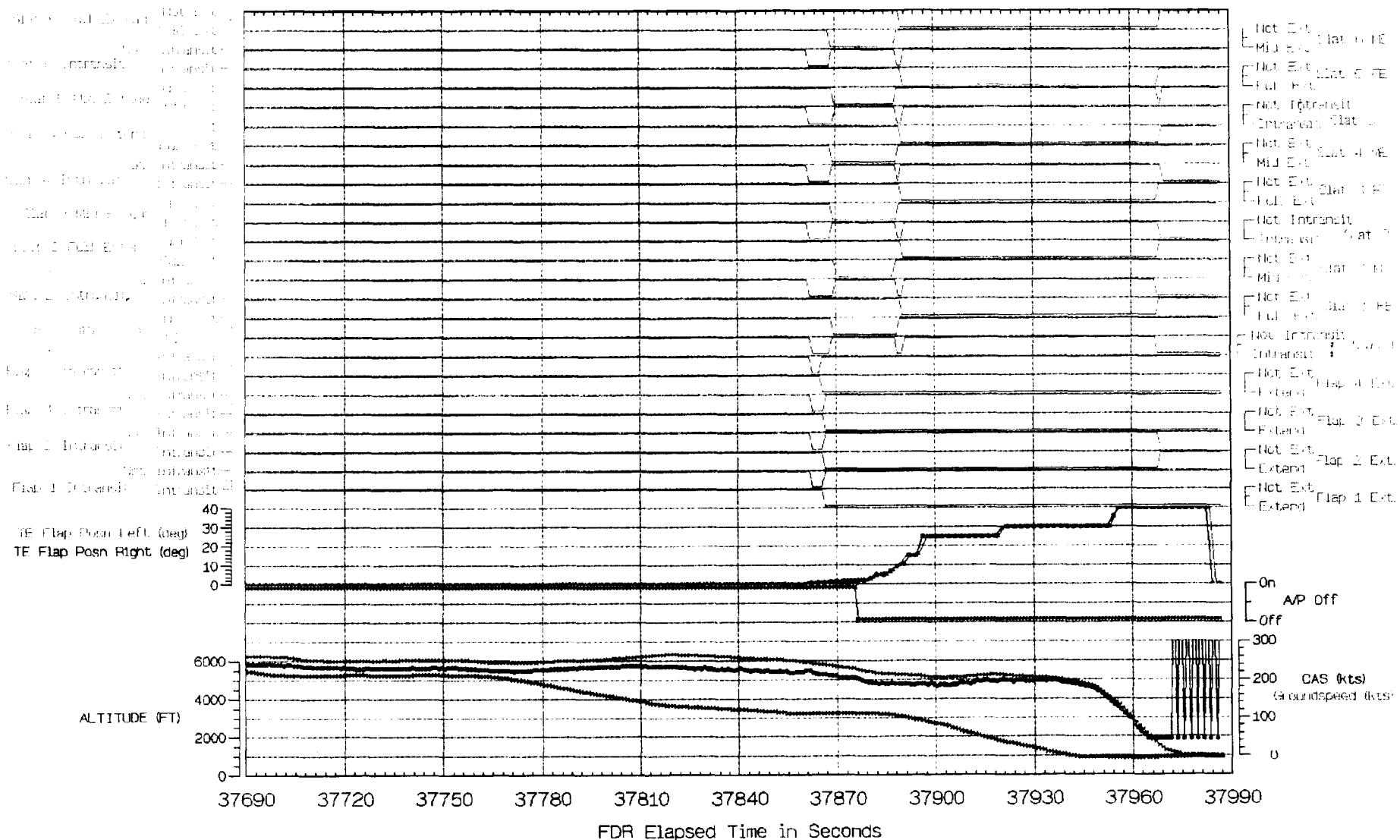
Finalized Data - Lat_Lng 5 Minutes
Revised: December 19, 2000

National Transportation Safety Board

Southwest Flight 1455

Boeing 737-300, N668SW

Burbank, California, March 5, 2000



Finalized Data - Slats & Flaps 5 min.

Revised: December 19, 2000

National Transportation Safety Board

ATTACHMENT 4

Tabular Listings of Southwest Airlines Flight 1713 FDR Data

FDR	Altitude	CAS	HEAD	PITCH	ROLL	HEAD	Vert.	Wind	Wind	Drift	Ground	N1 Eng	N1 Eng
Elapsed							Accel.	Speed	Direction	Angle	speed	1	2
Time In								TRUE					
Seconds	(FEET)	(kts)	(DEG)	(degs.)	(degs.)	(DEG)	(G'S)	(kts)	(DEG)	(DEG)	(kts)	(% rpm)	(% rpm)
70780	1876	135.5	78.4	-2.46	1.05	78.4	0.996	17.5	-116	-3.2	154	28.45	30.45
							1.015						
							1.015						
							0.996						
							1.005						
							0.987						
							0.987						
							1.005						
70781	1848	135.5	78.4	-2.11	-0.7	78.4	1.005	18	-116.7	-3.4	154	28.45	30.57
							1.005						
							1.005						
							1.005						
							1.005						
							0.996						
							0.996						
							0.996						
70782	1824	134.5	79.1	-1.76	-1.41	79.1	0.969	19.5	-119.5	-4	153	28.45	30.45
							0.96						
							0.96						
							0.969						
							0.978						
							0.978						
							0.996						
							0.996						
70783	1800	133.5	79.45	-1.23	0	79.5	1.005	19.5	-121.6	-4.3	153	28.45	31.82
							1.024						
							1.033						
							1.033						
							1.042						
							1.051						
							1.07						
							1.079						
70784	1776	134.5	79.1	-1.23	1.41	79.1	1.07	17.5	-119.2	-3.7	152	31.7	34.45
							1.06						
							1.042						
							1.024						
							0.987						
							0.96						
							0.951						

FDR	Altitude	CAS	HEAD	PITCH	ROLL	HEAD	Vert.	Wind	Wind	Drift	Ground	N1 Eng	N1 Eng
Elapsed							Accel.	Speed	Direction	Angle	speed	1	2
Time In								TRUE					
Seconds	(FEET)	(kts)	(DEG)	(degs.)	(degs.)	(DEG)	(G'S)	(kts)	(DEG)	(DEG)	(kts)	(% rpm)	(% rpm)
70785	1752	135.5	78.4	-1.58	0	78.4	0.932	16.5	-114.6	-2.9	152	35.2	37.58
							0.932						
							0.932						
							0.96						
							0.978						
							0.987						
							0.978						
							0.96						
							0.96						
70786	1728	135	77.69	-1.23	-0.35	77.7	0.96	15.5	-111.1	-2.5	152	41.71	44.84
							0.96						
							0.941						
							0.941						
							0.96						
							0.951						
							0.969						
							0.978						
70787	1704	133	78.05	-0.53	1.05	78	0.996	19.5	-110.7	-2.6	152	48.47	52.34
							1.005						
							1.015						
							1.015						
							1.015						
							1.015						
							1.033						
70788	1684	132.5	78.05	0.88	1.41	78	1.051	18	-107.9	-2.4	152	49.09	53.35
							1.051						
							1.042						
							1.042						
							1.042						
							1.051						
70789	1660	131.5	77.69	1.05	-0.7	77.7	1.042	19.5	-104.1	-2	152	48.72	53.1
							1.033						
							1.015						
							0.996						
							0.987						
							0.96						

FDR	Altitude	CAS	HEAD	PITCH	ROLL	HEAD	Vert.	Wind	Wind	Drift	Ground	N1 Eng	N1 Eng
Elapsed							Accel.	Speed	Direction	Angle	speed	1	2
Time In								TRUE					
Seconds	(FEET)	(kts)	(DEG)	(degs.)	(degs.)	(DEG)	(G'S)	(kts)	(DEG)	(DEG)	(kts)	(% rpm)	(% rpm)
70790	1636	131	77.69	1.05	-1.41	77.7	0.987	18	-103.7	-2	152	48.59	53.1
							1.005						
							1.024						
							1.033						
							1.033						
							1.042						
							1.079						
							1.088						
70791	1620	133.5	77.69	1.41	-2.11	77.7	1.07	17	-110	-2.6	152	50.72	53.1
							1.06						
							1.06						
							1.07						
							1.079						
							1.079						
							1.07						
							1.06						
70792	1600	132	78.05	0.7	-0.35	78	1.042	19	-112.9	-3.1	152	52.6	52.97
							1.005						
							0.978						
							0.969						
							0.969						
							0.96						
							0.969						
							0.978						
70793	1580	131.5	78.4	0.18	0.7	78.4	0.987	19.5	-111.8	-2.9	152	52.6	52.85
							1.005						
							0.996						
							1.005						
							1.015						
							1.024						
							1.033						
							1.033						
70794	1568	131	78.05	0.88	-0.7	78	1.042	19.5	-108.3	-2.5	152	52.09	52.85
							1.051						
							1.06						
							1.051						
							1.033						

FDR	Altitude	CAS	HEAD	PITCH	ROLL	HEAD	Vert.	Wind	Wind	Drift	Ground	N1 Eng	N1 Eng
Elapsed							Accel.	Speed	Direction	Angle	speed	1	2
Time In								TRUE					
Seconds	(FEET)	(kts)	(DEG)	(degs.)	(degs.)	(DEG)	(G'S)	(kts)	(DEG)	(DEG)	(kts)	(% rpm)	(% rpm)
70795	1548	132	77.69	0.7	-1.76	77.7	1.033						
							1.051						
							1.06						
							1.051						
							1.015						
							0.969						
							0.951						
							0.932						
							0.923						
							0.941						
							0.951						
70796	1528	131.5	77.69	0.18	-0.35	77.7	0.96	17.5	-108.3	-2.5	151	51.72	52.72
							0.951						
							0.951						
							0.951						
							0.96						
							0.951						
							0.951						
							0.969						
70797	1516	131.5	77.34	1.05	0.35	77.3	0.996	18.5	-106.2	-2.2	151	51.72	52.6
							1.005						
							1.033						
							1.042						
							1.005						
							0.978						
							0.969						
							0.987						
70798	1496	133	76.99	1.76	2.46	77	0.987	16.5	-102	-1.6	150	51.59	53.72
							1.005						
							1.024						
							1.06						
							1.088						
							1.079						
							1.061						
							1.033						
70799	1484	132.5	77.34	1.58	2.11	77.3	1.024	16	-102.7	-1.6	150	52.97	56.47
							1.015						
							1.033						
							1.033						

FDR	Altitude	CAS	HEAD	PITCH	ROLL	HEAD	Vert. Accel.	Wind Speed	Wind Direction	Drift Angle	Ground speed	N1 Eng 1	N1 Eng 2
Elapsed									TRUE				
Time In Seconds	(FEET)	(kts)	(DEG)	(degs.)	(degs.)	(DEG)	(G'S)	(kts)	(DEG)	(DEG)	(kts)	(% rpm)	(% rpm)
							1.033						
							1.024						
							1.024						
							1.015						
70800	1468	132.5	77.69	1.76	2.11	77.7	0.996	17	-102.3	-1.5	150	57.47	61.23
							1.005						
							1.024						
							1.051						
							1.06						
							1.051						
							1.042						
							1.033						
70801	1456	131	78.05	2.11	-0.7	78	1.015	19	-104.4	-2	150	60.48	61.73
							1.024						
							1.042						
							1.033						
							1.042						
							1.07						
							1.088						
							1.088						
70802	1448	132.5	78.4	2.29	-1.76	78.4	1.097	18	-110.7	-2.8	151	60.73	61.73
							1.088						
							1.042						
							1.042						
							1.033						
							1.024						
							1.024						
							1.024						
70803	1432	132	79.1	1.93	0	79.1	1.024	18.5	-111.4	-3.2	151	61.6	61.73
							1.015						
							0.969						
							0.941						
							0.941						
							0.932						
							0.932						
							0.923						
70804	1424	133.5	78.75	1.41	-2.46	78.7	0.914	16	-113.2	-2.9	151	61.48	61.85
							0.914						
							0.932						

FDR	Altitude	CAS	HEAD	PITCH	ROLL	HEAD	Vert.	Wind	Wind	Drift	Ground	N1 Eng	N1 Eng
Elapsed							Accel.	Speed	Direction	Angle	speed	1	2
Time In								TRUE					
Seconds	(FEET)	(kts)	(DEG)	(degs.)	(degs.)	(DEG)	(G'S)	(kts)	(DEG)	(DEG)	(kts)	(% rpm)	(% rpm)
							0.96						
							0.96						
							0.96						
							0.969						
							0.987						
70805	1412	134	78.4	1.41	-2.11	78.4	0.996	16.5	-114.6	-2.9	151	61.48	61.98
							1.015						
							1.015						
							0.996						
							0.987						
							0.987						
							0.996						
							1.015						
70806	1400	135	78.05	1.23	1.05	78	1.051	15	-112.5	-2.4	151	61.6	62.1
							1.07						
							1.07						
							1.079						
							1.042						
							1.005						
							0.969						
							0.951						
70807	1388	133	77.69	0.53	-0.7	77.7	0.932	16.5	-107.9	-2.1	151	61.85	62.1
							0.914						
							0.914						
							0.914						
							0.905						
							0.886						
							0.905						
							0.914						
70808	1376	135	77.69	0.7	-0.35	77.7	0.951	13.5	-108.3	-2.1	151	61.73	62.1
							0.969						
							0.969						
							0.969						
							0.987						
							0.987						
							1.005						
70809	1364	136	77.69	1.23	-0.35	77.7	1.005	145	-110.4	-2	150	61.6	60.23
							0.996						

FDR	Altitude	CAS	HEAD	PITCH	ROLL	HEAD	Vert. Accel.	Wind Speed	Wind Direction	Drift Angle	Ground speed	N1 Eng	N1 Eng
Elapsed Time In Seconds	(FEET)	(kts)	(DEG)	(degs.)	(degs.)	(DEG)	(G'S)	(kts)	(DEG)	(DEG)	(kts)	(% rpm)	(% rpm)
70810	1348	136	77.69	1.05	0.36	77.7	1.024	13	-110.4	-2	150	57.1	56.6
							1.005						
							1.015						
							1.024						
							1.024						
							1.024						
							1.024						
70811	1340	140.5	77.34	-0.7	-0.7	77.3	0.969	9.5	-116	-1.8	150	54.47	55.6
							0.951						
							0.941						
							0.941						
							0.941						
							0.923						
							0.914						
							0.914						
70812	1324	138.5	77.69	-1.76	-1.41	77.7	0.923	11.5	-120.9	-2.3	150	54.47	54.72
							0.932						
							0.932						
							0.941						
							0.932						
							0.932						
							0.923						
70813	1308	137.5	78.05	-1.93	-2.81	78	0.914	12	-120.6	-2.7	150	51.34	52.47
							0.923						
							0.914						
							0.923						
							0.923						
							0.905						
							0.914						
							0.923						
70814	1292	137	77.69	-1.93	-2.46	77.7	0.923	12	-119.2	-2.6	150	49.09	51.59

FDR	Altitude	CAS	HEAD	PITCH	ROLL	HEAD	Vert.	Wind	Wind	Drift	Ground	N1 Eng	N1 Eng
Elapsed							Accel.	Speed	Direction	Angle	speed	1	2
Time In								TRUE					
Seconds	(FEET)	(kts)	(DEG)	(degs.)	(degs.)	(DEG)	(G'S)	(kts)	(DEG)	(DEG)	(kts)	(% rpm)	(% rpm)
							0.923						
							0.923						
							0.914						
							0.905						
							0.914						
							0.914						
							0.896						
70815	1272	136	77.34	-1.23	-2.46	77.3	0.896	13	-117.4	-2.5	150	48.59	51.47
							0.905						
							0.896						
							0.905						
							0.941						
							0.978						
							1.005						
							1.015						
70816	1252	139.5	76.99	-0.18	0.35	77	1.06	8.5	-119.2	-1.9	150	48.09	51.47
							1.07						
							1.079						
							1.088						
							1.079						
							1.06						
							1.051						
							1.06						
70817	1236	139	76.29	0	0.35	76.3	1.07	8.5	-115	-1.6	148	47.72	51.47
							1.051						
							1.042						
							1.06						
							1.06						
							1.06						
							1.051						
							1.024						
70818	1220	138.5	76.29	-0.7	2.46	76.3	0.996	7.5	-107.6	-1.2	148	47.72	51.47
							0.996						
							0.978						
							0.969						
							0.978						
							0.978						
							0.996						
							1.005						

FDR	Altitude	CAS	HEAD	PITCH	ROLL	HEAD	Vert.	Wind	Wind	Drift	Ground	N1 Eng	N1 Eng
Elapsed							Accel.	Speed	Direction	Angle	speed	1	2
Time In								TRUE					
Seconds	(FEET)	(kts)	(DEG)	(degs.)	(degs.)	(DEG)	(G'S)	(kts)	(DEG)	(DEG)	(kts)	(% rpm)	(% rpm)
70819	1204	139.5	76.64	-1.05	1.05	76.6	1.005	7.5	-114.3	-1.4	148	47.84	51.47
							0.967						
							0.978						
							0.967						
							1.005						
							1.015						
							1.033						
							1.024						
70820	1188	138.5	76.64	-0.88	-0.35	76.6	1.024	9	-116	-1.6	148	47.84	50.97
							1.015						
							0.987						
							0.969						
							0.951						
							0.923						
							0.941						
							0.932						
70821	1172	136.5	77.34	-1.41	-0.35	77.3	0.914	10.5	-120.2	-2.4	148	46.46	49.09
							0.905						
							0.905						
							0.905						
							0.905						
							0.941						
							0.96						
							0.978						
70822	1160	136.5	77.69	-0.35	0.35	77.7	0.987	10.5	-124.5	-2.5	147	44.84	48.47
							0.987						
							1.005						
							1.033						
							1.051						
							1.07						
							1.079						
							1.088						
70823	1144	136	77.69	0.35	1.41	77.7	1.079	10.5	-121.3	-2.3	146	44.59	48.34
							1.07						
							1.042						
							1.051						
							1.042						
							0.987						
							0.969						

FDR	Altitude	CAS	HEAD	PITCH	ROLL	HEAD	Vert. Accel.	Wind Speed	Wind Direction	Drift Angle	Ground speed	N1 Eng	N1 Eng
Elapsed									TRUE			1	2
Time In													
Seconds	(FEET)	(kts)	(DEG)	(degs.)	(degs.)	(DEG)	(G'S)	(kts)	(DEG)	(DEG)	(kts)	(% rpm)	(% rpm)
70824	1128	136	77.69	-0.18	-0.7	77.7	0.96	12	-128	-2.8	146	44.71	48.34
							0.969						
							0.951						
							0.932						
							0.923						
							0.941						
							0.951						
							0.96						
							0.996						
70825	1112	134.5	78.75	0.7	-0.36	78.7	1.005	13.5	-133.9	-3.7	145	44.84	49.22
							1.015						
							1.005						
							1.024						
							1.024						
							1.015						
							1.024						
							1.024						
70826	1100	134	79.1	1.23	-0.36	79.1	1.005	12.5	-130.4	-3.7	145	49.34	56.22
							0.996						
							1.005						
							1.015						
							1.024						
							1.033						
							1.042						
							1.051						
							1.033						
							1.033						
							1.005						
							0.996						
70827	1084	136.5	78.4	1.05	0.36	78.4	1.042	9.5	-133.9	-3.1	144	54.97	57.98
							1.042						
							1.051						
							1.033						
							1.033						
							1.033						
							1.005						
							0.996						
70828	1068	138	77.69	0.18	-1.76	77.7	1.005	7.5	-134.3	-2.3	144	55.35	58.35
							1.015						
							0.987						
							0.941						
							0.914						
							0.905						

FDR	Altitude	CAS	HEAD	PITCH	ROLL	HEAD	Vert Accel.	Wind Speed	Wind Direction	Drift Angle	Ground speed	N1 Eng	N1 Eng
Elapsed Time In Seconds	(FEET)	(kts)	(DEG)	(degs.)	(degs.)	(DEG)	(G'S)	(kts)	(DEG)	(DEG)	(kts)	(% rpm)	(% rpm)
							0.914		TRUE			1	2
							0.969						
70829	1056	137.5	77.34	-0.35	2.11	77.3	1.015	7.5	-127.3	-1.9	144	55.85	58.73
							0.996						
							0.967						
							0.951						
							0.941						
							0.969						
							0.96						
							0.923						
70830	1040	136	76.64	-0.7	-0.7	76.6	0.932	7	-113.6	-1.4	144	56.1	58.1
							0.923						
							0.914						
							0.923						
							0.914						
							0.923						
							0.951						
							0.978						
70831	1024	136.5	76.99	0	0	77	1.015	6.5	-119.9	-1.6	144	51.47	54.6
							1.024						
							1.024						
							1.06						
							1.06						
							1.06						
							1.042						
							1.033						
70832	1004	137	76.64	0	0.7	76.6	1.024	6	-114.3	-1.1	144	48.22	53.72
							1.005						
							0.996						
							0.996						
							1.005						
							1.015						
							1.024						
							1.033						
70833	988	135.5	76.64	0.7	-1.05	76.6	1.015	7.5	-111.8	-1.2	144	48.09	53.6
							0.969						
							0.96						
							1.024						
							1.06						

FDR	Altitude	CAS	HEAD	PITCH	ROLL	HEAD	Vert	Wind	Wind	Drift	Ground	N1 Eng	N1 Eng
Elapsed							Accel.	Speed	Direction	Angle	speed	1	2
Time In								TRUE					
Seconds	(FEET)	(kts)	(DEG)	(degs.)	(degs.)	(DEG)	(G'S)	(kts)	(DEG)	(DEG)	(kts)	(% rpm)	(% rpm)
							1.06						
							1.07						
							1.088						
70834	972	136	76.99	3.16	-1.41	77	1.125	8	-126.9	-2	142	48.72	52.34
							1.161						
							1.17						
							1.189						
							1.216						
							1.216						
							1.207						
70835	964	135	77.69	3.52	-1.41	77.7	1.18	9	-135.4	-2.6	142	45.34	43.09
							1.161						
							1.134						
							1.097						
							1.051						
							1.015						
							0.987						
							0.96						
70836	960	132.5	78.4	1.93	-0.7	78.4	0.951	10	-138.2	-3.3	140	38.46	36.33
							0.96						
							0.941						
							0.96						
							0.969						
							0.978						
							0.996						
							1.005						
70837	956	132	77.69	1.93	0.36	77.7	0.996	9	-131.8	-2.5	139	33.95	32.08
							0.987						
							0.996						
							0.969						
							0.951						
							0.951						
							0.941						
							0.951						
70838	956	128.5	76.99	1.58	0	77	1.225	8.5	-120.2	-1.8	136	30.82	29.87
							1.317						
							1.29						
							1.262						

FDR	Altitude	CAS	HEAD	PITCH	ROLL	HEAD	Vert. Accel.	Wind Speed	Wind Direction	Drift Angle	Ground speed	N1 Eng 1	N1 Eng 2
Elapsed								TRUE					
Time In Seconds	(FEET)	(kts)	(DEG)	(degs.)	(degs.)	(DEG)	(G'S)	(kts)	(DEG)	(DEG)	(kts)	(% rpm)	(% rpm)
70839	948	126	76.99	0.18	-1.05	77	0.795	9	-126.6	-2.1	134	29.07	29.57
							0.896						
							0.987						
							1.161						
							1.216						
							1.079						
							1.005						
							0.905						

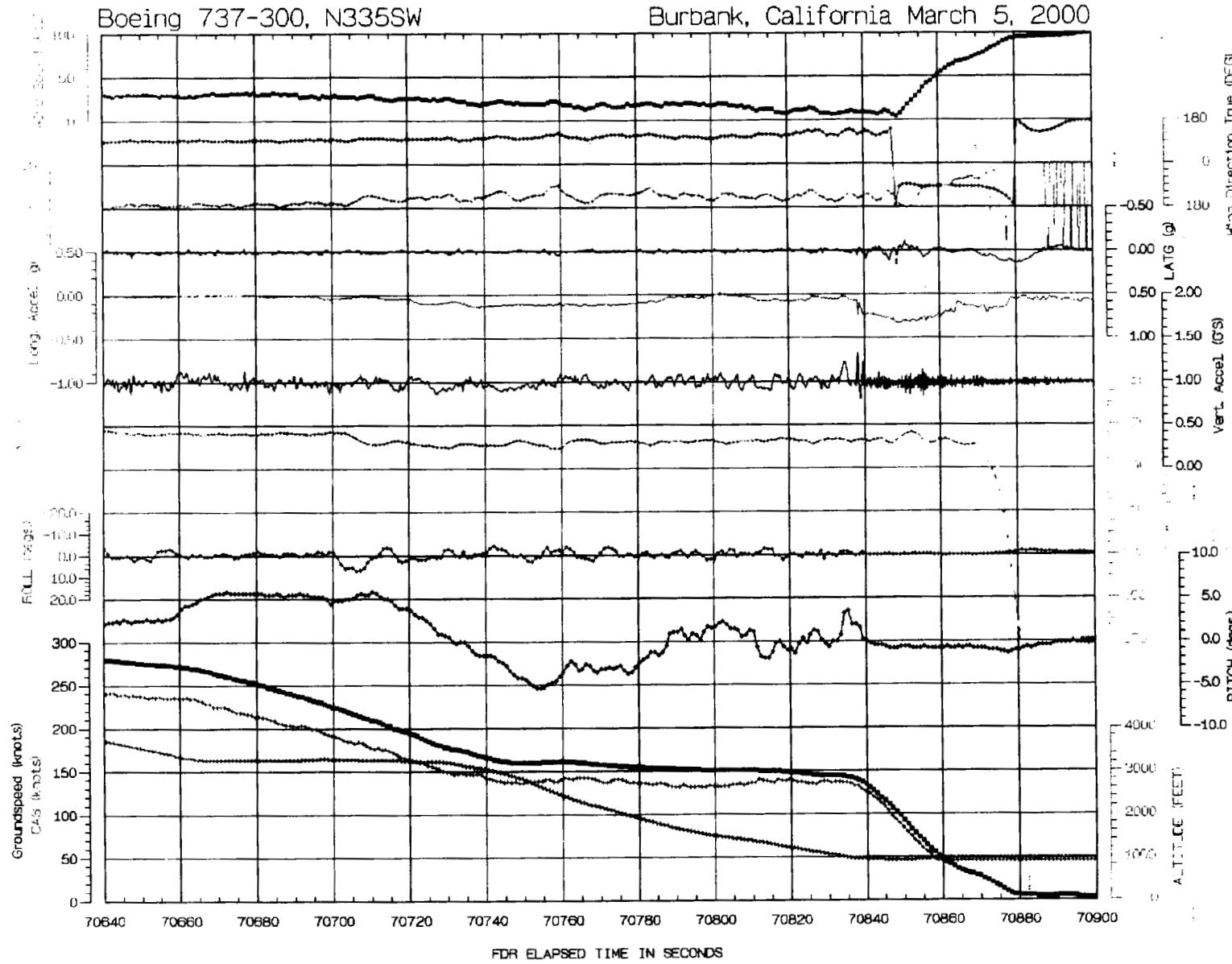
ATTACHMENT 5

Plots of Southwest Airlines Flight 1713 FDR Data

Southwest Flight 1713

Boeing 737-300, N335SW

Burbank, California March 5, 2000



Finalized - Approach - Aircraft Performance

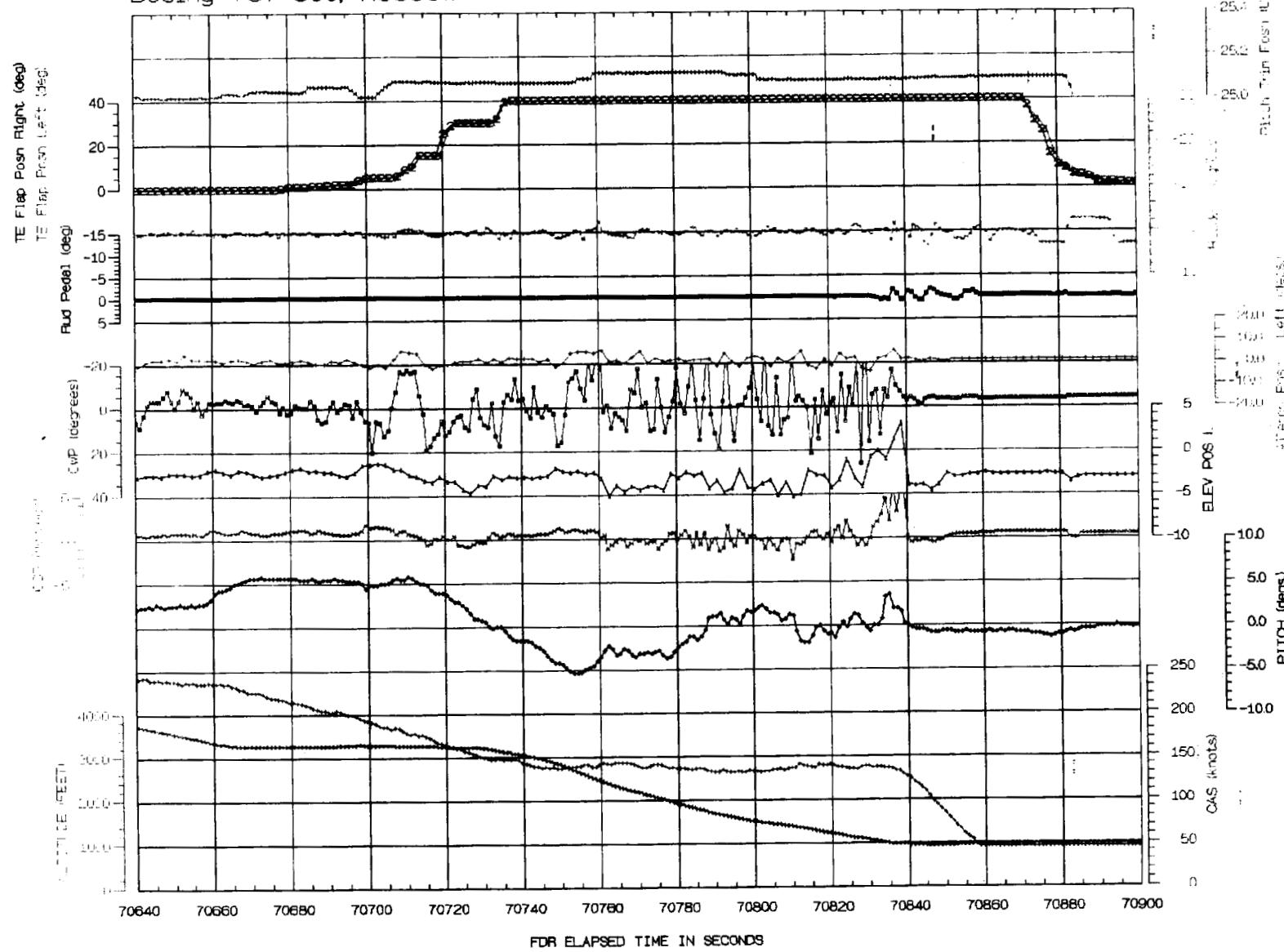
Revised: October 19, 2000

National Transportation Safety Board

Southwest Flight 1713

Boeing 737-300, N335SW

Burbank, California 3/5/2000



Finalized - Approach - Control Positions

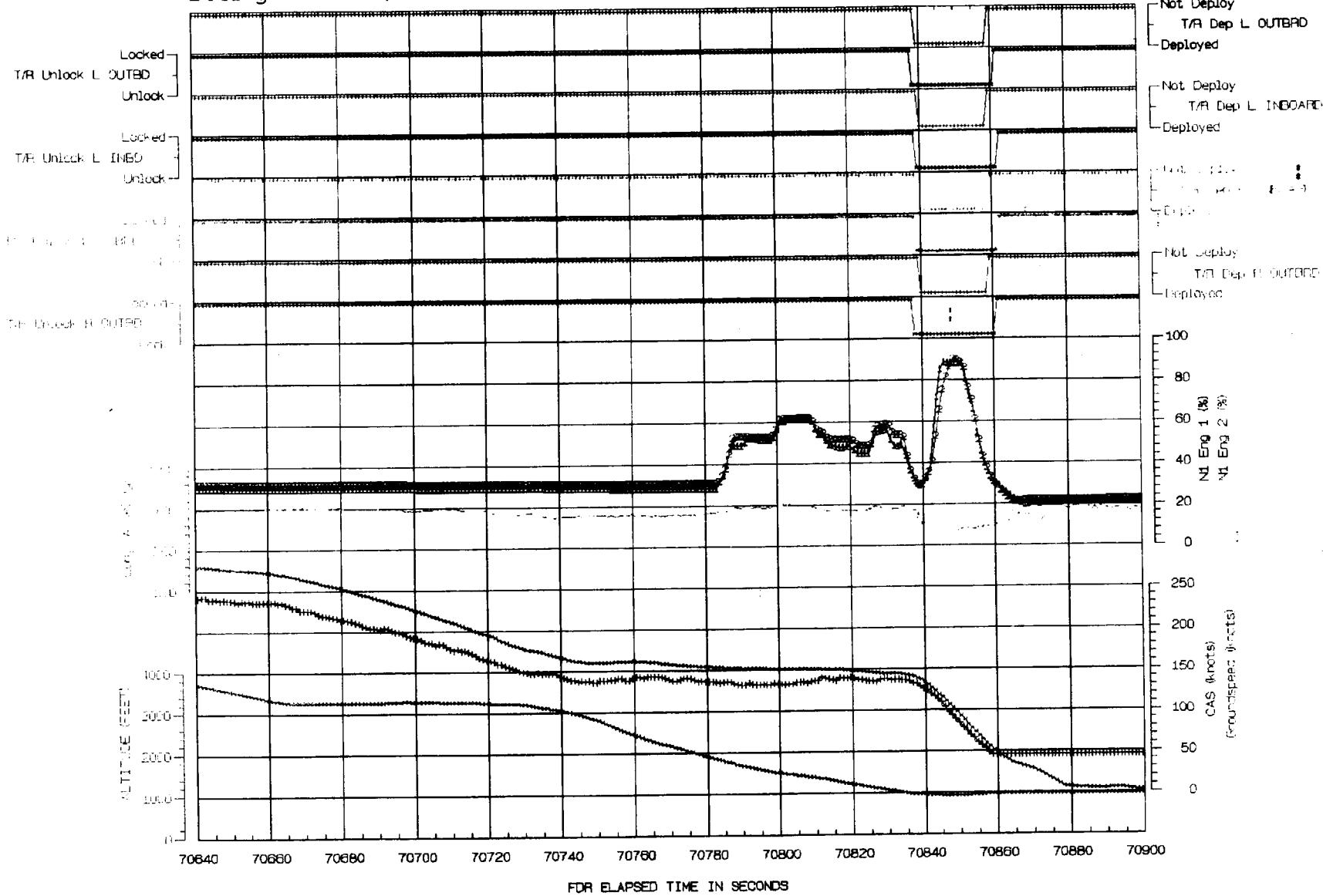
Revised: October 19, 2000

National Transportation Safety Board

Southwest Flight 1713

Boeing 737-300, N335SW

Burbank, California 3/5/2000



Finalized - Approach - Engine Parameters

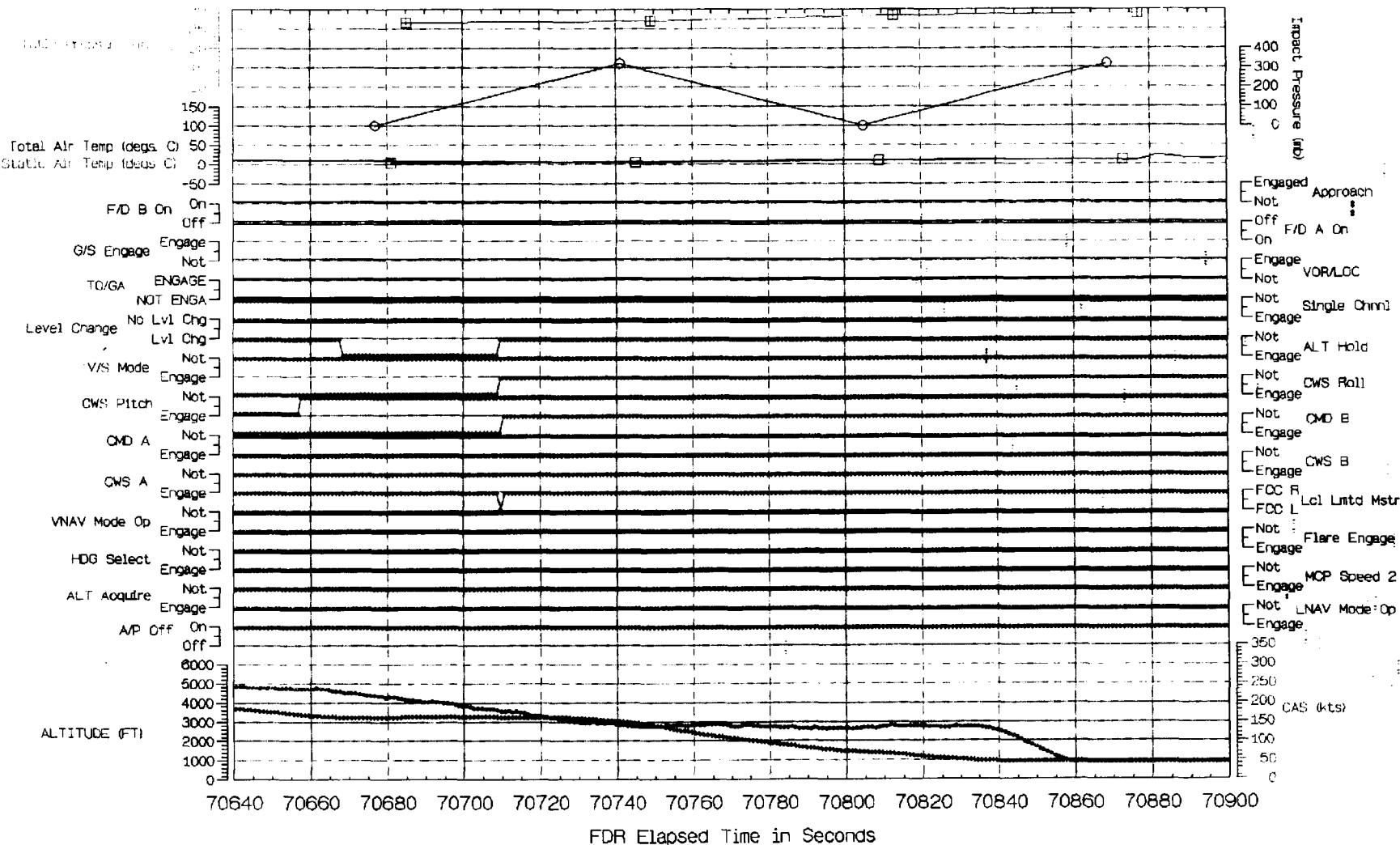
Revised: October 19, 2000

National Transportation Safety Board

Southwest Flight 1713

Boeing 737-300, N335SW

Burbank, California, March 5, 2000



Finalized - Approach - Autopilot Discretes

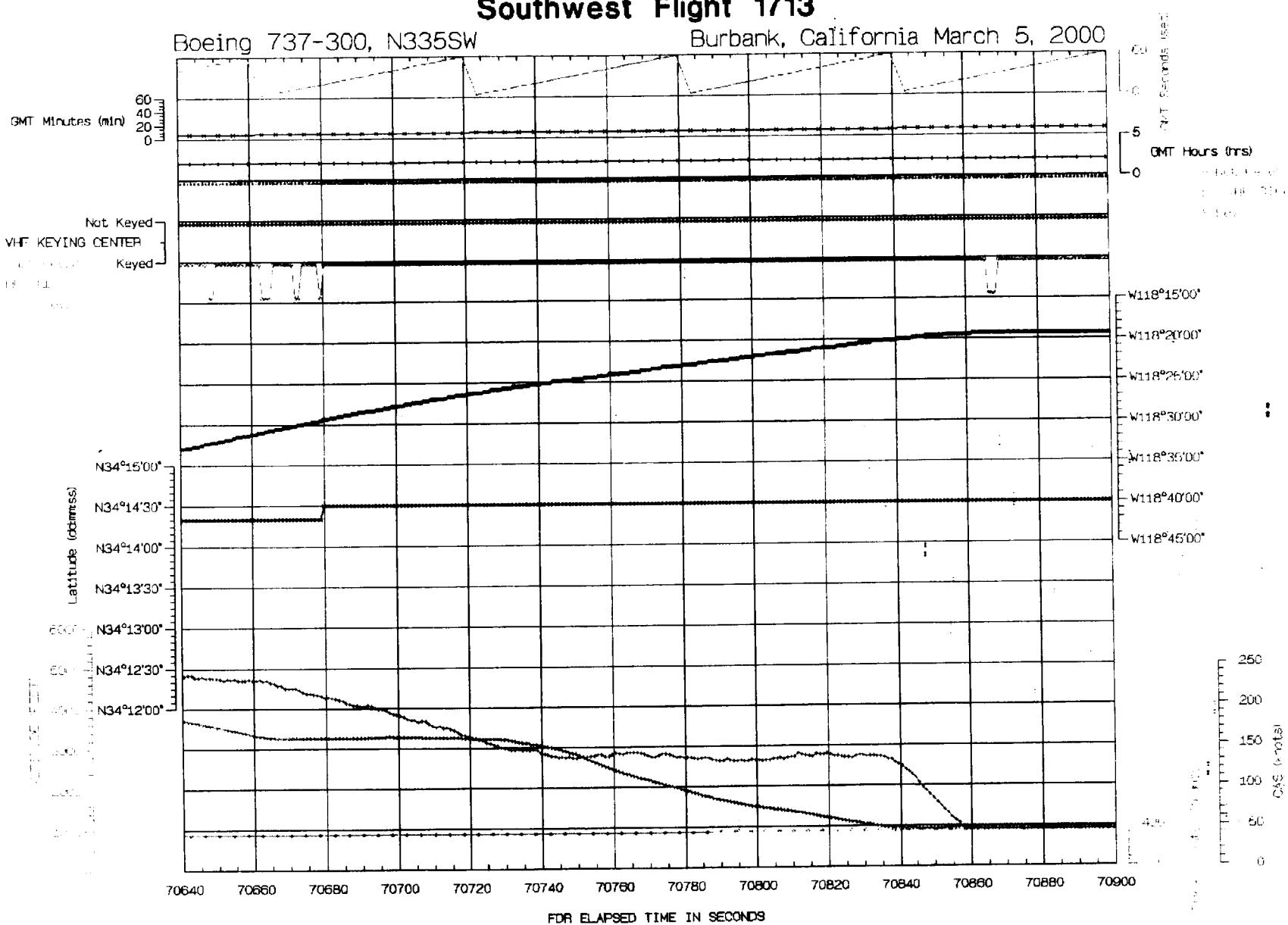
Revised: October 20, 2000

National Transportation Safety Board

Southwest Flight 1713

Boeing 737-300, N335SW

Burbank, California March 5, 2000



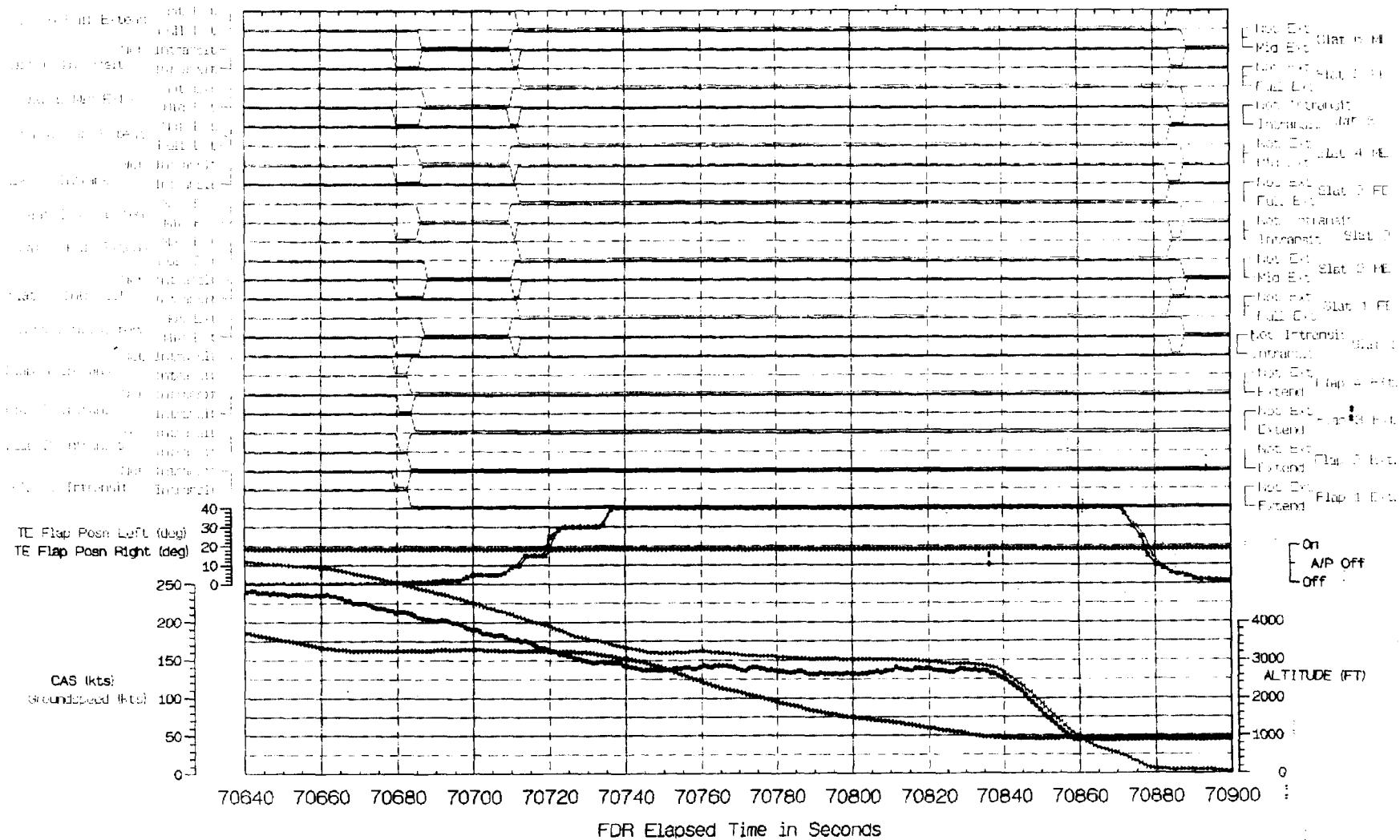
Finalized Data - Approach
Revised: December 21, 2000

National Transportation Safety Board

Southwest Flight 1713

Boeing 737-300, N335SW

Burbank, California, March 5, 2000



Finalized - Approach - Flaps and Slats

Revised: October 19, 2000

National Transportation Safety Board