

Gulf Warm Core Ring
N43RF

Flight 1 I991002

DATA TYPE	SENSOR or OPTION
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INE	2
Accelerometer	2
Temperature Probe	1
Altitude (for vertical wind)	RA159
Static Pressure	Fuselage
Dynamic Pressure	Fuselage
Dewpoint Probe	2

Notes:

Patched INE 2 positions, pitch, roll, and ground speeds during short time gap beginning 173220z. This was a 6-second time gap.

Patched bad values of APN-159 radar altimeter before take-off, after landing.

Renavigated this flight's INE positions using 11 valid GPS positions.

This flight was prematurely terminated due to a cracked windshield at 2222z. Dropped 6 more expendables along track back to MacDill after the windshield cracked.

SPECIAL NOTE!!! Locations 80, 81 and 82 of record five on the standard tape contain vertical ground, vertical air and vertical wind speeds, respectively, derived from Dave Jorgensen's vertical wind algorithm. It is recommended that these values be used for vertical wind analysis.

	Takeoff	Landing
Aircraft static pressure	1015.5 mb	1015.9 mb
Corrected tower pressure	1016.5 mb	1016.0 mb

Flight Director: Jack Parrish, (813) 828-3310 ext. 3073

U.S. DEPT. COMM./NOAA/OAO - DATA SECTION WORK FORM NO.1 OAOWF1 FILE

FLT ID: 99002I	FM: KMCF	TO: KMCF
FLT NO: 08-01	BLK IN: 0025	ATA: 0015
ETD: 1730	DLK OUT: 1731	RTD: 1740
ETE: 8	BLK TIME: 6:54(6.9)	FLT TIME: 6:35(6.6)
SPONSOR ORG: HRD	PROGRAM: Air Sea Research	PURPOSE: CFS, CTDs, AFSIS

OAO PERSONNEL

AC McKim ✓	SYS ENG McMiller ✓
CP Kean ✓	DATA SYS Delgado ✓
NAV Newton ✓	RADAR Lind ✓
FE Moore	BT/ODW Young D. ✓
RADIO	CLB PWS Dunbar, Nam
FD Parrish ✓	DOPPLER Floyd

PARTICIPATING SCIENTIST/VISITORS/OAO

LAST, FIRST NAME	ACTIVITY ON A/C	AFFILIATION
Black P. ✓		
Croft, J. ✓		
Shay, D. ✓		
Jacob, D. ✓		

PROPOSED/ACTUAL MISSION/REMARKS (RECCO, FIXES, STORM, PENET, NHOP #)

TEAL 13. WXWXA RESEARCH. TEAL 13.
 8 CP 9 CTD 30 SJS Some VA control problems at T.O.
 73 73 - Lost on external BT at T.O.
 1015 155E 100/4 - LF radar levels seem about 10 dB low.
 31 23 150/7
 20.04
 1016.5
 2222Z - Cracked windshield - heading home

31.4/21.3 2255 85/11
 1015.5 040/8 1071.6
 1740 29/24 27.7/21.7
 80/6 30.00
 -59
 086/12 Land

U.S. DEPT. COMM./NOAA/OAO - DATA SECTION WORK FORM NO.2 OAOWF2

FLT ID:

TIME OFF:

TIME ON:

A/C T/O

WX STN

A/C LAND

WX STN

PRESSURE

NO

DATA DISPOSITION/DATE/QUALITY

1/SEC FLT LVL TAPES

FAST FLT LVL TAPES

RADAR TAPES

DOPPLER TAPES

DDW CASSETTES

HARD COPIES

AXDT

AXCP

ODW

PHOTOGRAPHY

FWD

LS

RS

VERT

ON

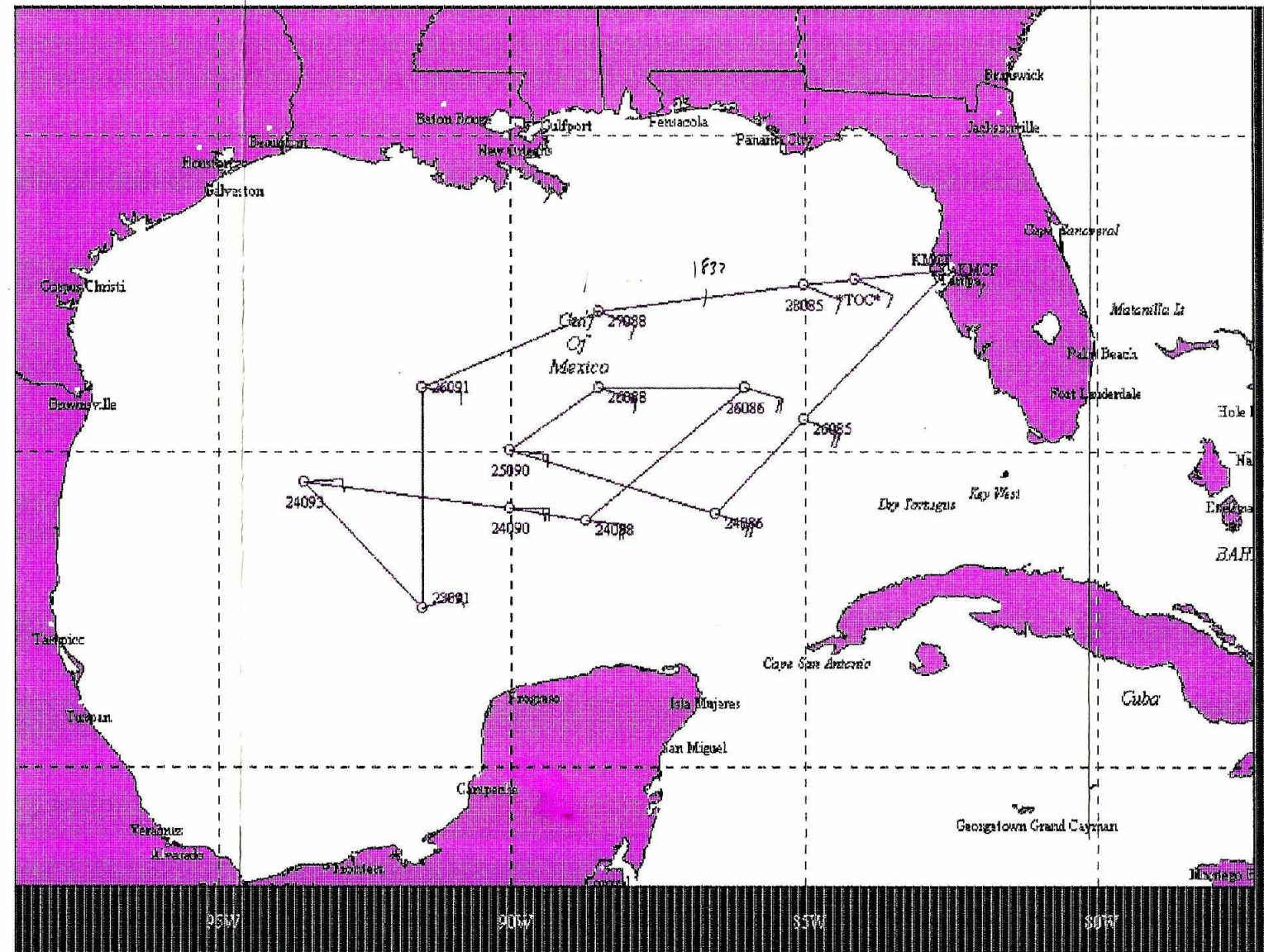
OFF

RATE

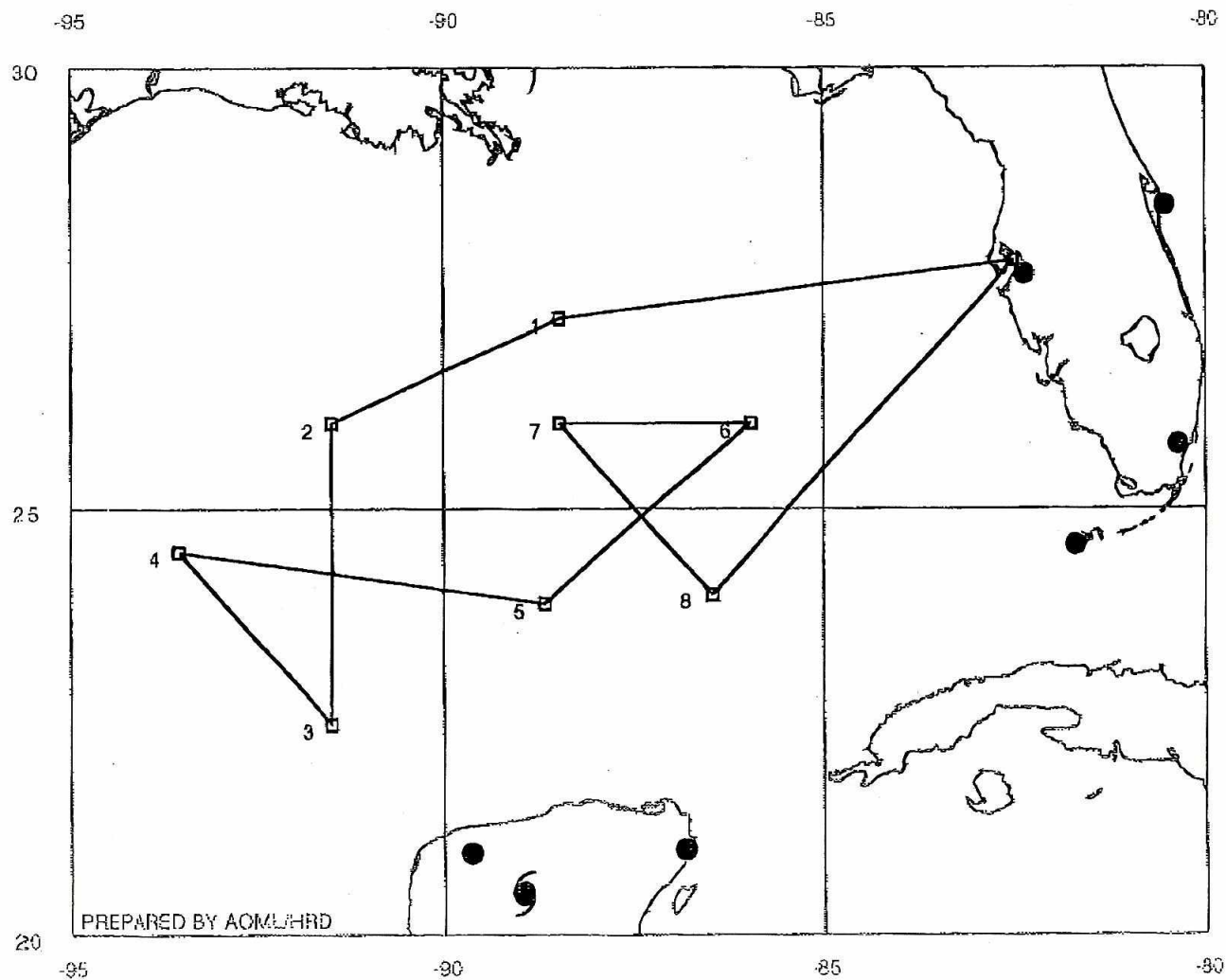
REMARKS

Time	LAT	Lon	TK	WD	WS	RA	GA	HA	TD	SL	PS	12g		
1731	27 50.9	82 29.6				-22		33.5	10.8					
1748	27 54	82 41	241	120	13.3	1782								
180430	27 28	83 51	270	122	15	1786	1907	16.1	7.2	1016.6	816.4	26.9		
183202	27 30	86 00	272	129	17.8	1790	1905	15.4	13.0	1015.7	815.7	25.8	CTD	12
183858	27 26	86 36	262	132	15.2	1789	1899	16.0	11.4	1015.3	816	24.9	BT	12
185045	27 20	87 26											CP	12
185257	27 18	87 36	262	117	14	1788	1895	16.4	7.3	1014.8	816	26.3	BT	14
190147	27 13	88 15	261	117	14.3			16.7	4.8			26.4	CTD	12
191201	26 59	89 00	244	124									BT	16
191752	26 50	89 25	248	101	14	1798	1898	15.8	10.1	1014.1	815.1	26.2	CP	12
192245	26 41	89 46	247	92	14.2	1800	1897	16.1	9.9	1013.6	814.9	26.3	BT	16
194131	26 09.6	91 08.5	243	85	11.4	1799	1890	17.0	6.6	1012.5	815.2	26.5	CTD	14
195208	25 40	91 29	178	96	11.6	1790	1878						BT	12
195455	25 30	91 29	178	90	11	1796	1883	16.7	8.1	1012.2	815.2	25.2	CP	14 (11)
200218	24 55.5	91 29	191	66	12.9	1795	1879	16.4	11.3	1011.9	815.4	26.5	BT	12 (12)
201204	24 19	91 30	181	65	12.6	1797	1874	16.8	11.1	1010.9	815.3	26.3	CTD	12 (13)
202134	23 40	91 29	181	46	21	1793	1863	17.1	11.1	1009.5	815.7	26.0	BT	16 (14)
202800	23 06	91 31	183	46	21	1789	1852	16.2	14.6	1009.4	815.6	25.8	CP	12 (15)
203845	22 33	91 36	257	36	23.7	1793	1850	16.9	12.1	1008	815.0	25.7	CTD	14 (16)
205553	23 21.5	92 21	318	53	22.2	1790	1859	16.8	13.1	1009.9	816	26.0	BT	16 (17)
210335	23 44	92 43	316	60	19	1792	1864	17.1	8.3	1010.3	815.8	26.4	CP	12 (18)
211855	24 30	93 27	100	56	10.7	1791	1866	17.3	5.3	1010.9	815.9	26.4	CTD	16 (19)
213318	24 24	92 30	96	48	12.9	1789	1868	16.9	9.3	1011.3	816.3		BT	12 (20)
220206	24 09.6	90 35	98	55	26	1787	1861	17.0	12.2	1010.2	816.1		BT	16 (22)
220811	24 06	90 04	97	64	29	1788	1858	16.7	12.8	1010.0	816	26.2	CP	12 (23)
221925	24 01	89 21	100	88	23.2	1807	1879	16.6	13.0	1010.3	814.2	25.6	BT	16 (24)
222730	24 08	88 52	55	120	25.6	1807	1884	16.0	12.6	1011.1	814.1	25.9	BT	16 (25)
223837	24 32	88 14	58	119	31	1805	1882	16.0	14.7	1010.6	814	22.6	CP	14
224937	24 50	87 45	56	132	28	1808	1894	17.7	12.1	1011.1	814	26.2	BT	16
225212	25 00	87 30	57	122	22.5	1808	1897	17.0	12.5	1011.6	814	26.3	CTD	12
230158	25 19	86 53	60	135	13	807	1906	16.1	12.5	1013.4	814	26.6	BT	16
230616	25 29	86 37	53	135	19.6	1808	1908	16.9	10.4	1013.3	814	26.3	CP	14
231133	25 42	86 19	53	130	17.8	1808	1912	16.3	12.1	1013.9	814	25.9	CTD	12
2346	27 00	84 07	52	127	17.8	1805	1926	15.9	13.0	1016.0	814		→ 40 HCR	
00015	On													
0005	1h													

OPARS Flight Plan - For NOAA, ETD 0800Z 02OCT1999 From KMCF To KMCF, Leg 1 of



FLEET NUMERICAL METEOROLOGY AND OCEANOGRAPHY CENTER



30
25
20

FLIGHT TRACKS
XXXX/AIR-SEA

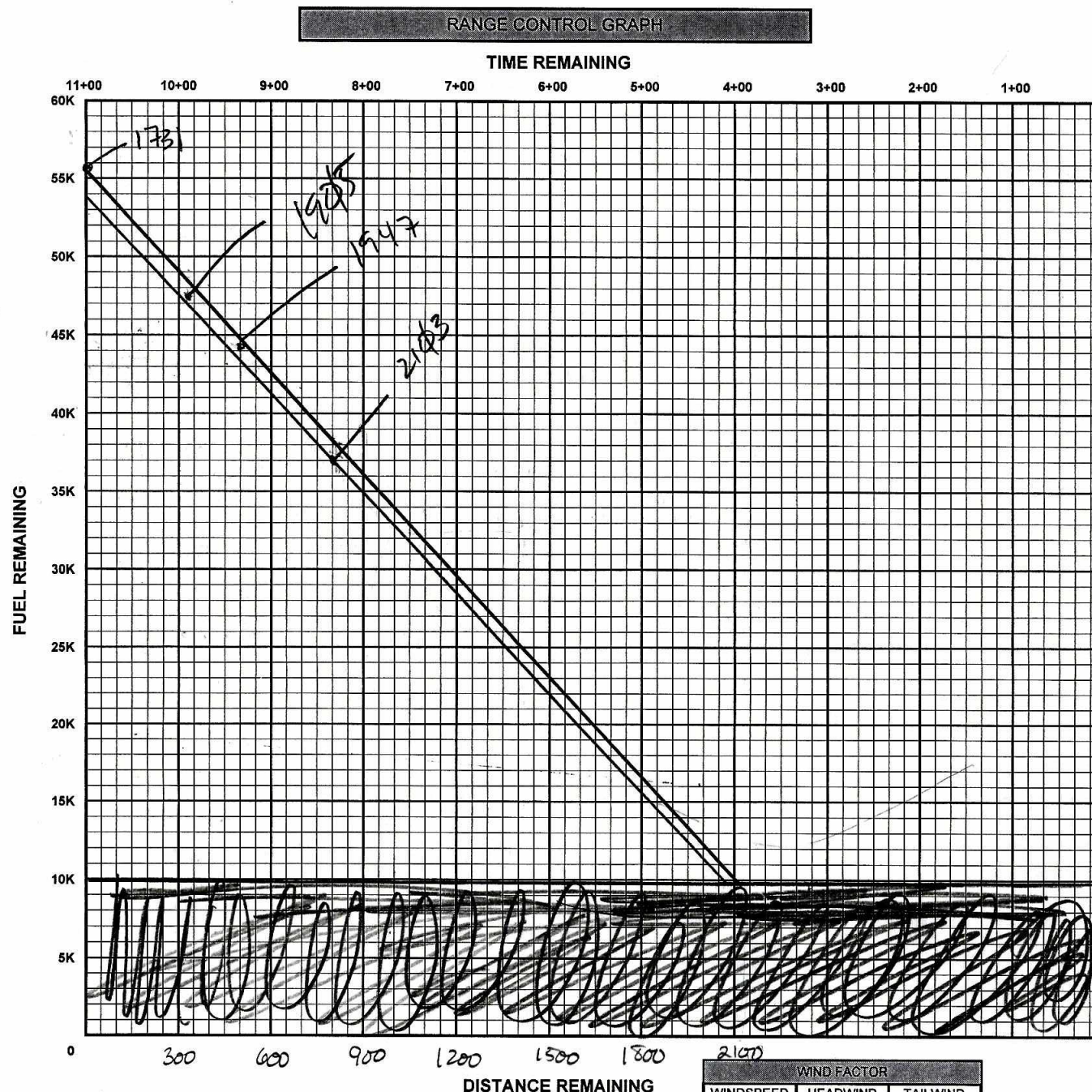
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RAWINSONDES 9908

- Regular
- 12Z only
- 00Z only
- Infrequent
- Infrequent - 00Z
- Infrequent - 12Z

▲ DROP LOCATIONS

REMARKS
INS/ # # SHOT DOWN UPON LANDING - FLYING ON BATT



ETP = .5(TOTAL DISTANCE x OUTBOUND WIND FACTOR)

WIND FACTOR		
WINDSPEED	HEADWIND	TAILWIND
10	1.03	.97
20	1.06	.94
30	1.10	.92
40	1.14	.89
50	1.18	.87
60	1.22	.85

ENROUTE FUEL	
ENROUTE TIME	
ENROUTE FUEL (6K 5K 4 5K RULE)	
RESERVE AT DESTINATION	
REQUIRED RAMP	
ACTUAL RAMP FUEL	

TACTICAL (OFFSTA TO DESTINATION)		
	4 ENG	3 ENG
DISTANCE (OFFSTA TO DEST)		
ENROUTE TIME (OFFSTA TO DEST)		
BURN RATE (LBS/HR)	4500	5500
ENROUTE FUEL REQUIRED		
RESERVE AT DESTINATION		
FUEL AT OFFSTA		

POINT OF SAFE RETURN		
	4 ENG	3 ENG
ETP DISTANCE (TO DEPARTURE)		
ENROUTE TIME (TO DEPARTURE)		
BURN RATE (LBS/HR)	4500	5500
FUEL REQUIRED		
RESERVE AT DEPARTURE		
PSR FUEL		

PRESS ALT	200	250	300	350	
	10,000	1.0	1.0	.99	.99
	20,000	.99	.98	.97	.97
	30,000	.97	.96	.95	.94
	40,000	.96	.94	.92	.90

TRUE AIRSPEED CROSS-CHECK							
TIME	IAS	PRESS ALT	"F" FACTOR	EAS	OAT	TAS	ITAS

CEX - TRUE BEARING METHOD			
COMPASS TYPE	INS1	INS2	WET
MCH (READING)			
MTH (SEXTANT)			
GE			
VAR			
DEV			

CEX - ERB METHOD			
COMPASS TYPE	INS1	INS2	WET
MERB (DIAL 000)			
ZN			
MTH			
MCH (READING)			
GE			
VAR			
DEV			

CEX SIGHT	
GMT	
GHA	
CORR	
GHA	
LONG +W -E	
EXACT LHA	
LAT	
BODY	
DEC	
HC/D	
CORR	
HC	
Z	
ZN	

