

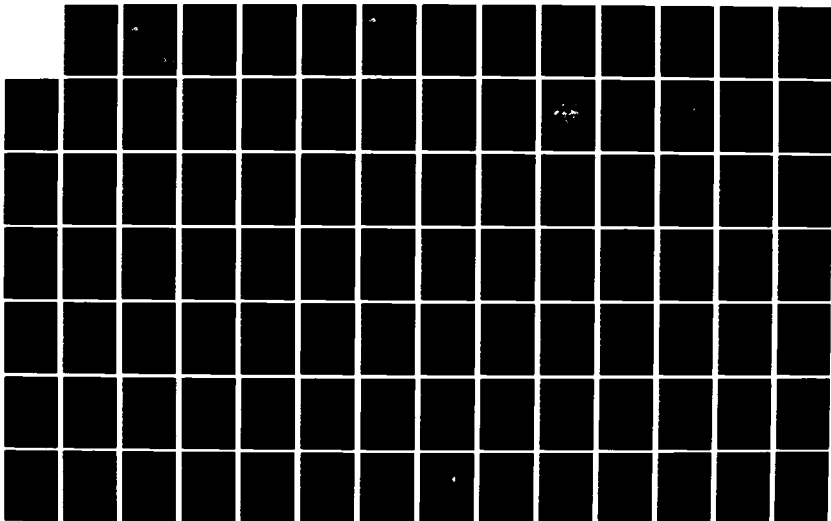
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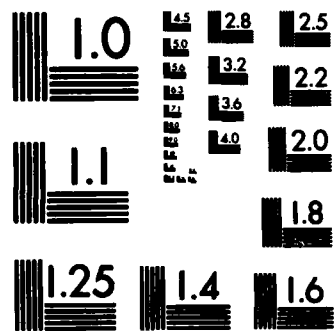
AN ANALYSIS OF AIRCRAFT DATA COLLECTED IN THE ALBORAN  
SEA DURING DONDE VA. (U) NAVAL OCEAN RESEARCH AND  
DEVELOPMENT ACTIVITY NSTL STATION MS.

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MICROCOPY RESOLUTION TEST CHART  
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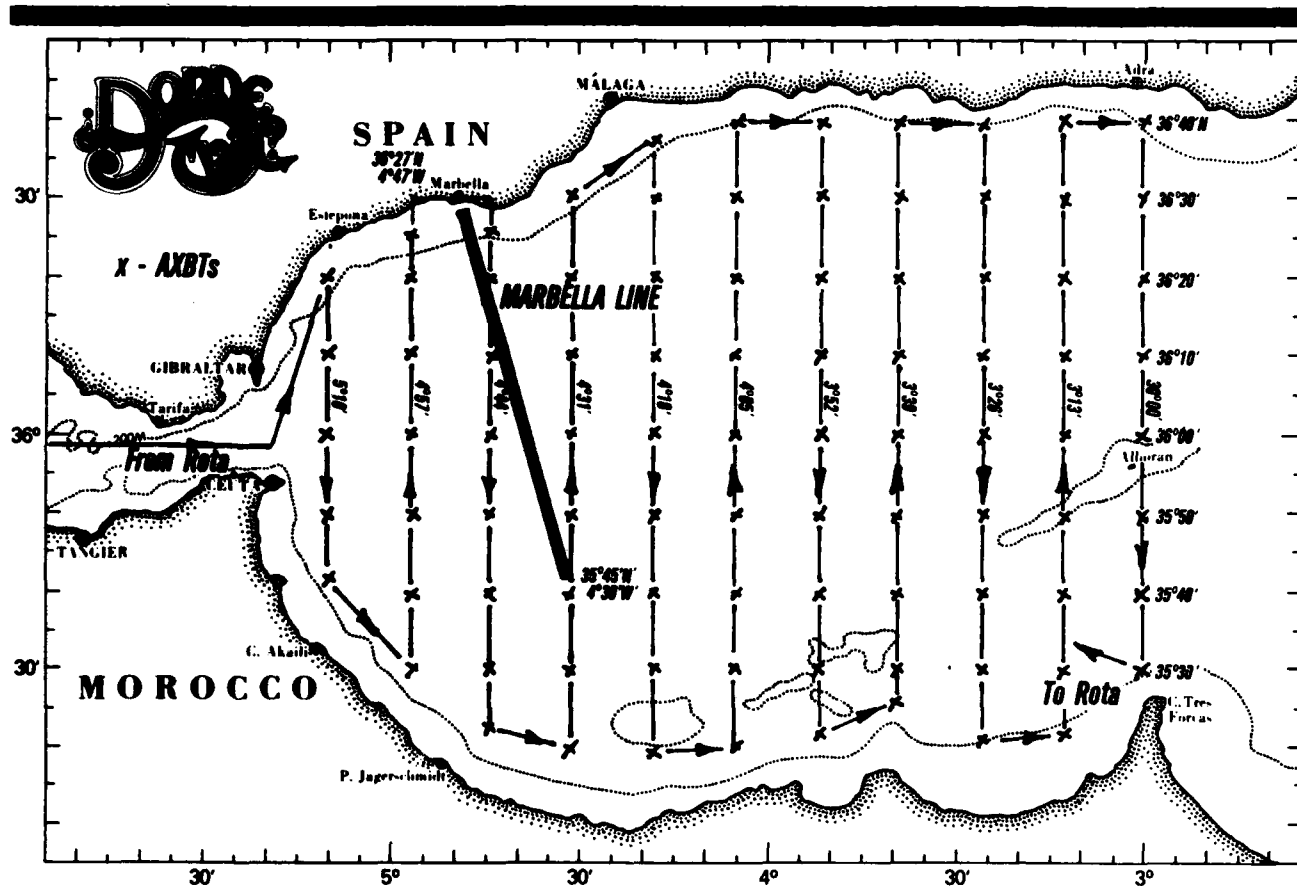
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NORDA Technical Note 222

Naval Ocean Research and Development Activity  
NSTL, Mississippi 39529



# An Analysis of Aircraft Data Collected in the Alboran Sea During *¿Donde Va?*, 6 Through 18 October 1982



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July 1983

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ABSTRACT

During the period 6-18 October 1982, a U.S. Navy aircraft flew a series of oceanographic survey flights over the Alboran Sea as part of a multi-platformed international experiment called Donde Va? The purpose of the flights was to measure the surface and subsurface temperature distribution, the short-term surface flow, and the atmospheric conditions during the period of the intensive field investigations.

This technical note describes these flights and presents the analyses of the Precision Radiation Thermometer (PRT-5), the Airborne Expendable Bathythermograph (AXBT), the sonobuoy drift, and the Inertial Navigation System (INS) wind data. *A*

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ACKNOWLEDGMENTS

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AN ANALYSIS OF AIRCRAFT DATA COLLECTED IN THE ALBORAN SEA  
DURING DONDE VA?, 6 THROUGH 18 OCTOBER 1982

by

Paul E. La Violette

and

Jeffrey L. Kerling\*

I. GENERAL

During the period 6 through 18 October 1982, a U.S. Navy aircraft flew a series of oceanographic survey flights over the Alboran Sea as part of a multi-platformed international experiment called Donde Va?\*\*. The purpose of the flights was to measure the surface and subsurface temperature distribution, the short-term surface flow, and the atmospheric conditions during the period of the intensive field investigations.

This Technical Note describes these flights and presents the analyses of the Precision Radiation Thermometer (PRT-5), the Airborne Expendable Bathythermograph (AXBT), the sonobuoy drift, and the Inertial Navigation System (INS) wind data.

Position information during the flights were recorded simultaneously from the three navigation systems listed in Table A. These systems were updated several times during each flight by radar fixes and landmark overflights. A post-flight navigation accuracy assessment was made to determine each systems' overall performance. Additional corrections were applied to each fix based on inertial drift rates in order to plot the most accurate position for individual survey events. (Inertial navigation system (INS) #2 showed overall best performance during the study.) Wind speed was computed continuously by all navigation systems and recorded in the navigator's logs at the time of each major event.

The aircraft oceanographic and meteorological equipment are described in Tables B and C, respectively. The dew point hygrometer malfunctioned at the start of the mission and no humidity data is available.

Surface temperatures were obtained using a PRT-5. A study of the differences between the PRT and AXBT temperature values is presented in Table D (the PRT measures the radiation temperature of the water, whereas the AXBT measures the sensible water temperature at a depth of approximately one meter). The study was made by determining the daily mean of differences obtained by subtracting the PRT temperature value from the AXBT surface temperature value at each AXBT drop point.

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\*\*This portion of Donde Va? was sponsored under a contract with Office of Naval Research, Code 422, Coastal Sciences. The primary objective of Donde Va? was to measure the velocity and hydrographic structure of the incoming flow of Atlantic water. A full description of data collection approach to the experiment can be found in the "Donde Va? Operation Plan." A limited number of copies are available for individual requestors.

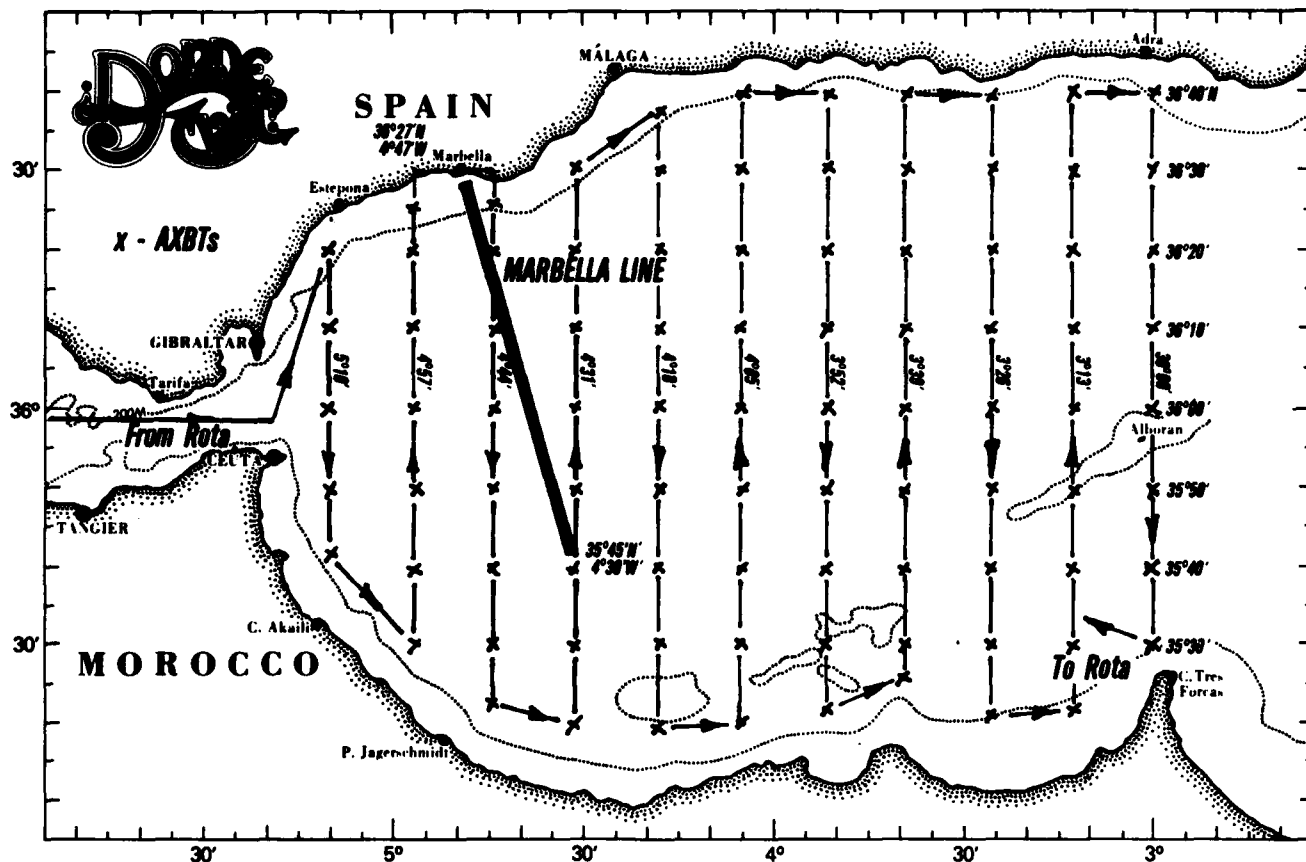


Figure 1. Mapping (A-B) and Marbella Line (C-D) generalized flight tracks from the Donde Va? operation plan. During the mapping flights AXBTs were dropped every 20 km along longitudinal lines spaced every 13 minutes of longitude. The inshore AXBTs on the longitudinal lines on each side of the longitudinal Marbella Line were dropped at 36° 25' latitude. AXBTs on the southern extremes of the lines were dropped just outside the Moroccan 22 km territorial limit.

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Table A. NAVOCEANO SEASCAN AIRCRAFT

Type - RP-3A, four-engine, turbo prop.

Crew - Five scientists - 13 Navy flight crew.

Agency - Technical Control: U.S. Naval Oceanographic Office, National Space  
Technology Laboratories, Mississippi

Operational Control: Oceanographic Development Squadron Eight,  
(VXN-8), NAS, Patuxent River, Maryland

Operation Performance

- Operation range: approximately 5,185 km (with 3-engine loiter)

- Operation speeds: plane can operate with one engine loitering depending on  
weather and survey requirements - speeds for this survey  
are as follows:

Operation area - 333-444 km/hr (3 engines)

Enroute op. area - 555 km/hr (4 engines)

- Max. operation altitude: 3,280 m (unpressurized)

- Min. operation altitude: 60 m

- Navigation: - Two inertial Navigation System (LTN, 51) -  $\pm 0.19$  km (relative  
accuracy)

- One GNS-500 VLF Comm/Omega

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Since the standard deviation of these daily measurements are relatively small, a simple adjustment may be made to any single day's PRT data to make them comparable to that days AXBT data. For example, the PRT surface temperature analysis for 11 October can be made compatible with the AXBT data by subtracting  $0.4^{\circ}\text{C}$  from the isoline values.

Surface drift estimates were obtained by deploying SSQ-57A sonobuoys at equally spaced intervals along a linear track, then relocating each buoy later in the flight using the aircraft's sonobuoy tracking system. The variation between their initial drop points and new position, after drifting over a period of four to five hours, provided the data for deriving individual buoy drift speeds and directions. Sonobuoy specifications are detailed in Table E.

On several occasions the entire line of sonobuoys was tracked twice, with the first tracking occurring two hours after the sonobuoys were dropped. On these occasions, the results of both trackings showed linearity in direction and speed. Thus, only the longer drift measurements are used to compute the drift rates and directions presented here. However, the positions of both the first and second drift locations can be found in the navigator's log also presented in this Technical Note. Thus, the reader may replot the various drifts to get the total drift vector. All times listed in figures and navigator's logs are Greenwich Mean Times.



TABLE B - OCEANOGRAPHIC EQUIPMENT ABOARD SEASCAN AIRCRAFT

INSTRUMENT TYPE/MANUF/MODEL	PARAMETER	MEASUREMENT TECHNIQUE	RANGE	ACCURACY	RESPONSE TIME
Airborne Radiation Thermometer Barnes Engineering Co. Model PRT-4A	Radiometric sky temperature	A thermister bolometer bridge circuit detects in the 8.0-14.0 micron region.	-60 to +20°C Can adjust to wider range for measurement of sky temperature.	+0.55°C under Laboratory conditions	1 sec
Precision Radiation Thermometer Barnes Eng. Co. Model PRT-5	Radiometric surface temperature	Same as above except uses 9.5 - 11.5 micron region.	-30°C to +80°C 2° field of view	+2°C when Below 1000 feet and after environmental corrections.	Selectable: 5 msec 50 msec 500 msec
Infrared Scanner Texas Instruments RS-310	Radiometric surface temperature	Energy received in the 8-14 micron region is focused on Mg Cd Te detector and is translated to modulate the intensity of a light spot focused on film.	120° field of view.	+0.1°C theoretical thermal resolution with 3 milli-radiad detector. +0.011°C theoretical thermal resolution with 3 milli-rad detector.	
Laser Profilometer Spectra-Physics, Inc. Model 3A Geodolite	Surface wave heights and terrain profiles.	Amplitude-modulated helium-neon laser beam is reflected from the target, received, and converted to a range value	Typical operating altitude is 500 to 1000  Range Steps: 10; 100; 1000; 10,000; and 100,000 ft.	+3 inches during operation in the range of 500 to 1000 feet.	Selectable for 1, 3, 5, 10, 20, 50, or 100 msec.
Airborne Expendable Bathythermograph (AXB) Selected Govt. Contractors Model AN/SSO-36	Water temperature vs depth profile	Frequency modulated signal containing temperature data radioed to the aircraft where signals are converted to temperature values.	-2°C to +35°C 0 to 400 meters (0 to 1312 feet)	+0.5°C off-the-shelf. +0.15°C with recalibration. 5% of depth.	5 sec
Still Picture, Aerial Camera Wilde Herburg RC-8	Visual	2448 color positive, film 8"x8" format.	73 44' field of view. Coverage at 10,000 approx. 15,000.	60 lines/MM (AWAR)	Shutter speed 1/1000 sec Frame Speed 1 per sec.

TABLE C - METEOROLOGICAL EQUIPMENT ABOARD SEASCAN AIRCRAFT

<u>INSTRUMENT TYPE/MANUF/MODEL</u>	<u>PARAMETER</u>	<u>MEASUREMENT TECHNIQUE</u>	<u>RANGE</u>	<u>ACCURACY</u>	<u>RESPONSE TIME</u>
Dew Point Hygrometer Cambridge Systems, Inc. Model 137-C3-S3	Dew Point	Stainless steel mirror is cooled to air saturation (dew point) temperature utilizing a thermoelectric cooling technique. An optical system senses the dew and controls the mirror temperature at dew point.	-50° to +50°C	+1°C below 0°C +0.5°C above 0°C	3°C/sec when at nominal depressions.
Pressure Transducer Rosemount, Inc. Model 1301A	Absolute barometric pressure	Variable capacitance proportional to pressure.	370 to 1035 mb	+1 mb	25 msec
Quartz Crystal Thermometer Hewlett Packard Model 2801A	Outside air temperature also used for flight calibrating of PRT-5	Indicates temperature as a consequence of frequency changes exhibited by temperature sensitive quartz crystals used as sensing elements.	-80° to 250°C	+0.02°C	Less than 0.2 sec

Table D. Variation between PRT and AXBT (surface) Temperature Values

<u>Date Oct (1982)</u>	<u>Number of Comparisons</u>	<u>Mean Difference (AXBT-PRT)</u>	<u>Standard Deviation</u>
6	88	(+)0.03	0.27
11	63	(-)0.38	0.65
13	15	(+)0.23	0.26
15	54	(-)0.23	0.50
18	*	*	*

\* No AXBT data available

TABLE E. SSQ-57A Sonobuoy Specifications

- o Description and function.....Passive, omni directional measurement of underwater acoustical energy
- o Transmission channels & power.....31 channels 1 watt
- o Length (freeboard), width, and weight.....91.4 cm (15-20 cm) 12.4 cm, and 6.8 Kg
- o Operating depth of hydrophone.....18 m (selected)
- o Operating life.....8 hours (selected)
- o Antenna.....Whip

Table F. RP-3A Data Collection during Donde Va?

<u>Flight No.</u>	<u>Date</u>	<u>Type Flight</u>	<u>Buoys Deployed</u>			<u>INS Winds &amp; Air Temp</u>
			<u>PRT</u>	<u>AXBT</u>	<u>Sonobuoys</u>	
1	6 Oct	Mapping	Yes	88	0	Yes
2	9 Oct	Marbella Line	Yes	0	15	Yes
3	11 Oct	Mapping	Yes	79	15	Yes
4	13 Oct	Marbella Line	Yes	17	25	Yes
5	15 Oct	Mapping	Yes	75	15	Yes
6	18 Oct	Mapping	Yes	0	40	Yes

## II. SURVEY DESCRIPTION

The RP-3A aircraft staged from Rota, Spain and normally entered and departed the study area via the Strait of Gibraltar. During the study period six flights were conducted, four of which were mapping flights over the entire Alboran Sea west of Alboran Island (Figure 1). During these flights, the aircraft dropped AXBTs approximately every 20 km to provide a grid of subsurface temperature data to a depth of 300 m. (Atlantic water is restricted to the upper 200 m, thus, these temperature data include all of the inflowing water.) Normally the aircraft flew at an altitude of 300 meters except where noted in the analyses. PRT temperatures were collected along all flight lines.

Sonobuoys were dropped during these flights along the longitudinal line 4°45'W from a point near Marbella on the Spanish coast to a distance 30 km north of the Moroccan coast. This line and another sonobuoy drop line originating at Marbella and situated at a slight angle to the 4°45'W line have been termed the Marbella Lines (Figure 1).

The remaining two flights were special flights whose flight tracks were limited to the Marbella Line. AXBTs were dropped on only one of these two flights, whereas sonobuoys were dropped on both flights. A listing of all of the flights, their purpose, and the instruments used is presented in Table F.

## III. DATA PRESENTATION FORMAT

Part I, horizontal analyses and flight history will be presented in chronological order and will follow a standard format for each mapping flight:\*

- navigator's log
- 300 m INS wind analysis
- sonobuoy drift
- surface temperature (PRT) analysis
- 20 m temperature (AXBT) analysis
- 50 m temperature (AXBT) analysis
- 100 m temperature AXBT analysis
- depth of the 18° isotherm

The sonobuoy drift data for the Marbella Line flights of 9 and 13 October is also presented in chronological order with the mapping flight data.

The vertical analyses in Part II will present one figure for each day that will include the INS winds, current (i.e., sonobuoy drift) analyses and the vertical temperature distribution along the Marbella Line and, in the case of 18 October, a generally east-west line.

## IV. AIRCRAFT SCIENTIFIC AND TECHNICAL PERSONNEL

Paul E. La Violette, Chief Scientist	(NORDA)
Jeffrey Kerling, Aircraft Scientific Coordinator	(NAVOCEANO)
Norbert Schmidt, Electronics Engineer	(NORDA)
Phil Parrot, Electronics Engineer	(NAVOCEANO)
Ramon Andre Oriol, Technician	(CSC)
Michele Champagne Philippe, Scientist (France)	(CMS)
Heinz van der Piepen, Scientist (Germany)	(DFVLR)

\*Note that no sonobuoys were dropped on 6 October and no XBTs were dropped on 18 October.

PART I  
HORIZONTAL ANALYSES AND FLIGHT HISTORIES  
6 OCTOBER 1982

NW0 280000  
AT LANDING

VLF 15  
#1 1000  
#2 900

FB 1-6 LTN#2  
occurrence 0 to 3.0 NM  
to south

NAVIGATOR'S FLIGHT RECORD

A/C CHOR	NAVLTIC DEPART	NAVLTIC	DOPART	SNR	M/R	K/R	L/A/N	TC	DA	TH	GS	WIND DIR/VEL	TRACK			TAS	ALT	DIST +TOT	DIST REM	ETE	ETA ATA	REMARKS
													05-1-83	#1	#2							
TIME	N/S	E/W	L/T/N#1	VLF	ENS	W/M/T/E	L/T/N#2															
0838	N																					ENG
0842	W																					TAXI
0850																						TOT
0853			26.23.2	26.23.0	26.33.2		240	4L		244	27.5	231	230	1,000								NMNL CENBZ R=1
0901			6.28.7	6.20.4	6.29.8		145	L		146	25.1	216	216	✓								AH PAX HT
0906			6.59.1	6.59.2	6.59.3		092	24R		090	25	200	242	✓								AH P9 C
0908			35.57.3	35.57.4	35.57.1		079	4R		075	22.5	213	215	✓								AH P9 B
0910			6.45.6	6.45.3	6.45.8		078	6R		022	22.7	272	219	✓								AH P-2000T
0912			35.56.3	35.56.3	35.56.1																	OT #1
0914			5.44.4	5.44.6	5.44.6																	OT #2
0916			25.59.9	35.58.8	35.59.7																	OT #3
0918			5.21.5	5.21.4	5.21.8																	OT #4
0920			36.05.1	36.03.9	36.04.9																	OT #5
0922			5.16.9	5.16.2	5.17.2																	OT #6
0924			36.08.4	36.07.2	36.08.2																	OT #7
0926			5.14.9	5.12.8	5.15.1																	OT #8
0928			26.20.2	26.19.5	26.20.1																	OT #9
0930			5.08.0	5.06.0	5.08.2																	OT #10
0932			26.10.2	26.09.4	26.10.0																	OT #11
0934			5.09.4	5.07.6	5.09.7																	OT #12
0936			26.00.3	26.00.0	26.00.1																	OT #13
0938			5.09.7	5.07.7	5.09.9																	OT #14
0940																						OT #15

NAVIGATOR'S FLIGHT RECORD

TIME	A/C CMDR		NAV		SNR		AIRCRAFT BUONO				TRACK				FROM		TO		DATE	REMARKS	# OF
	N/S	EW	LTO#H	VLF	LTO#2	VLF	TC	DA	TH	GS	WIND DIR/VEL	TAS	ALT	DIST + TOT	DIST REM	ETE	ETA ATA				
0941	N		25-40.9	25-40.7	35-40.5	4-54.6	103	102	172	226	221	2500								12T#6	
42			4-56.5	4-54.6	4-56.8																
0945			35-50.4	35-49.5	35-50.0	359	8R	351	218	272	223	✓								12T#4	2-4
152			4-56.7	4-54.7	4-57.0																
48			26-00.4	25-59.5	26-00.0															12T#8	
21			4-56.8	4-54.9	4-57.0															12T#9	
51			26-10.4	26-09.2	26-09.9	360	7R	353	213	281	221	1500									
12			4-56.8	4-55.1	4-57.0																
54			36-20.5	26-19.5	26-20.0		✓	✓	✓		✓	✓								12T#10	
05			4-56.8	4-55.3	4-57.0																
56			26-25.6	26-24.5	26-25.1																
40			4-56.8	4-55.2	4-57.0																
1000			26-24.7	26-22.8	26-24.0																
41			4-42.4	4-43.2	4-42.7	182	5L	188	223	270	221	✓								12T#11	A/H 180T
01			26-20.4	26-19.6	26-19.7	181	10L	191	224	282	210	✓								12T#12	0-4
52			4-43.7	4-43.6	4-44.0																
04			26-10.2	26-09.3	26-09.3	180	11L	191	224	272	221	✓								12T#13	
39			4-43.8	4-43.4	4-44.1																
07			26-01.0	26-00.2	26-00.1																
03			4-42.8	4-44.0	4-44.2	180	9L	189	227	282	229	✓								12T#14	
09			25-51.0	25-50.2	25-50.0		✓	✓	226	270	221	2500								12T#15	
07			4-42.8	4-42.9	4-44.2																
12			25-41.0	25-39.9	25-39.9																
20			4-43.9	4-44.0	4-44.4																
17			25-34.7	25-33.9	25-32.5	105	11	101	246	279	202	1000								12T#16	
58			4-42.5	4-42.5	4-44.0															12T#17	A/H 181

OCEANDEVON EIGHT 3760/1 (REV 81)

2 may 62/4 3 March 83 LuV

NAVIGATOR'S FLIGHT RECORD

A/D CMDR		NAV		SMR		AIRCRAFT BURO										TRACK			FROM			TO		DATE	OF			
TIME	N/S E/W	#1	VLF	#2	TC	DA	TH	GS	WIND DIR/VEL	TAS	ALT	DIST + TOT	DIST REM	ETE	ETA ATA	REMARKS												
016	N	35-31.7	35-30.2	35-20.5	353	9R	344	219	263	221	1,000					BT#18 Q=4												
135	W	4-30.8	4-32.0	4-31.3					27																			
17		25-41.8	25-40.5	25-40.6	359	9R	350	221	273	229	V					BT#19												
26		4-30.3	4-29.9	4-20.9					32																			
22		35-51.2	35-49.8	35-50.0	360	10R	350	V	277	232	V					BT#20												
12		4-20.4	4-28.8	4-31.0					40																			
24		36-01.3	35-59.8	26-00.1	V	9R	351	218	279	228	V					BT#21												
56		4-30.4	4-29.8	4-31.0					25																			
27		36-11.1	36-09.6	26-09.9	V	7R	353	216	269	218	V					BT#22												
40		4-30.4	4-29.6	4-31.0					29																			
30		26-21.2	26-19.4	26-19.9	V	4R	356	218	266	220	V					BT#23												
24		4-26.3	4-29.4	4-31.0					18																			
37		36-31.3	36-29.4	26-30.1	359	2R	357	225	216	260	V					BT#24												
09		4-30.2	4-29.3	4-30.9					05																			
37		26-25.2	26-24.0	26-34.0	176	4L	180	242	218	216	V					BT#25												
14		4-18.2	4-17.2	4-19.0					29																			
38		36-28.8	36-27.2	36-27.5	179	5L	184	243	210	225	V					BT#26												
51		4-17.2	4-16.4	4-18.1					18																			
40		36-20.8	36-19.2	26-19.5	180	6L	186	247	257	214	V					BT#27												
53		4-17.1	4-16.2	4-18.0					21																			
42		26-11.3	26-09.7	26-10.0	V	9L	189	224	274	222	V					BT#28												
20		4-17.0	4-16.4	4-18.0					25																			
46		36-01.2	35-59.4	25-59.9	V	8L	188	224	271	225	V					BT#29												
10		4-17.0	4-16.2	4-18.0					21																			
48	V	35-51.4	35-49.7	35-50.0	179	9L	188	222	278	226	600					BT#30 Q=4												
57	V	4-17.0	4-16.2	4-18.1					24		600																	

OCEANDEVON EIGHT 3760/1 (REV 81)



NAVIGATOR'S FLIGHT RECORD

A/C CMDR		NAV		SNR		AIRCRAFT BUND				TRACK				FROM		TO		DATE	OF
TIME	N/S E/W	#1	#2	WF	#2	TC	DA	TH	GS	WIND DIR/VEL	TAS	ALT	DIST +TOT	DIST REM	ETE	ETA ATA	REMARKS		
1051	N	35-41.4	35-39.6	35-39.6	35-39.9	180	9L	189	270	277/37	219	1,000					BT#31		4
42	W	4-16.9	4-16.3	4-16.3	4-18.0					284/42	272	V					BT#32		
51		35-31.5	35-29.6	35-29.6	35-29.9	179	10L	185	278	284/42							BT#33		
23		4-16.9	4-16.0	4-16.0	4-18.0					286/44		V					AH#34		
65		35-28.3	35-26.3	35-26.3	35-26.8												BT#34		
12		4-16.9	4-16.3	4-16.3	4-18.0												AH#34		
58		25-22.8	25-20.4	25-20.4	25-21.2	008	10R	358	214	284/25	228	V					BT#35		
13		4-05.1	4-04.5	4-04.5	4-06.2												AH#35		
1101		25-43.9	25-41.6	25-41.6	25-42.3	360	10K	350	215	282/29	225	V					BT#36		
20		4-04.0	4-02.9	4-02.9	4-05.0												AH#36		
03		35-51.6	35-49.3	35-49.3	35-50.0	V	V	V	218	281/34	222	V					BT#37		
28		4-04.0	4-02.7	4-02.7	4-05.0												AH#37		
06		36-01.6	35-59.1	35-59.1	36-00.0	V	9K	351	220	277/40	229	V					BT#38		
10		4-04.0	4-02.7	4-02.7	4-05.0												AH#38		
08		36-11.7	36-09.2	36-09.2	36-10.0	V	V	V	224	272/27	229	V					BT#39		
54		4-04.1	4-02.8	4-02.8	4-05.0												AH#39		
11		36-21.7	36-19.1	36-19.1	36-20.0	360	5K	355	222	273/23	228	V					BT#40		
26		4-04.1	4-02.9	4-02.9	4-05.1												AH#40		
14		36-21.2	36-18.7	36-18.7	36-19.5	V	8K	352	261	209/41	230	V					BT#41		
15		4-04.2	4-03.0	4-03.0	4-05.1												AH#41		
17		36-41.0	36-39.2	36-39.2	36-40.0	355	6K	244	264	275/24	223	V					AH#42		
22		4-04.3	4-03.2	4-03.2	4-05.2												BT#42		
22		26-42.1	26-39.8	26-39.8	26-40.1	159	6L	165	242	275/27	220	V					AH#43		
03		3-49.5	3-48.8	3-48.8	2-56.5												BT#43		
24		36-32.1	36-29.6	36-29.6	36-30.0	181	7L	188	240	279/31	227	V					AH#43		
46		3-50.8	3-50.2	3-50.2	2-51.9												BT#43		

NAVIGATOR'S FLIGHT RECORD

A/C CMDR		NAV LOG DEPART		SNR		MIL KETTLES		AIRCRAFT BUNO		TRACK		FROM		TO		DATE		OF	
TIME	N/S	#1	VLF	#2	DA	TC	TH	GS	WIND	TAS	ALT	DIST	DIST	ETA	REMARKS				
EMT								DIR/VEL	+TOT	REM	ATA								
1127	N	36202	3617.5	3617.9	8L	175	182	237	277	229	1000				BT#44				
43	W	3509	3504	3521	102	179	189	225	281	219	✓				AMM ANNOU SHIP				
29		36124	36099	36100	✓	180	190	228	280	224	✓				BT#46				
44		3509	3502	3521					281										
22		36023	35997	35998					280										
30		3587	3580.3	3582.0					280										
35		35526	35501	35500					281										
01		3506	3504	3520	102	180	190	229	281	225	✓				BT#47				
37		35427	35401	35400					281										
27		3505	3503	3520	✓				281										
29		35350	35326	35322					281										
27		3500	3498	3515					281										
42		35352	35318	35321	072	072	066	261	284	270	✓				BT#49				
02		3378	3390	3394					283										
14		35429	35298	35400					288										
25		3373	3369	3389					288										
47		3529	35496	35500	102	359	349	202	288	221	✓				BT#50				
19		3394	3380	3390	✓				287										
50		36028	35994	36000					287										
09		3373	3369	3390	✓				277										
52		36128	36094	36100					276										
56		3373	3369	3390	✓				276										
55		36228	36193	36200					285										
41		3373	3369	3390	7R	360	353	214	285	229	✓				BT#51				
58		36328	36292	36300					289										
32	✓	3373	3371	3391	8K	360	350	205	289	218	✓				BT#52				

NAVIGATOR'S FLIGHT RECORD

A/C CMDR		NAV		SNR		AIRCRAFT BUONO										TRACK			FROM			TO		DATE	OF						
TIME	N/S E/W	#1	VF	#2	TC	DA	TH	GS	WIND DIR/VEL	TAS	ALT	DIST +TOT	DIST REM	ETE	ETA ATA	REMARKS															
1201	W	36.432	36.40.0	36.40.3	260				232		1,000					RT #57 AH #58															
22	W	3.27.3	3.26.6	3.39.1					18																						
05		26.42.3	26.28.9	26.29.3	132	0	132	238	37	211	V					RT #58 AH #180															
30		3.25.0	3.24.7	3.26.9					21																						
07		26.32.9	26.29.3	26.29.9	180	9L	189	234	188	225	V					RT #59															
54		3.24.0	3.24.0	3.26.0					34																						
10		26.23.1	26.19.4	26.20.0	V	V	V	V	280	228	V					RT #60															
26		3.23.9	3.24.0	3.26.0					87																						
13		26.13.1	26.09.7	26.10.0	V	V	V	226	272	228	V					RT #61															
02		3.22.9	3.22.8	3.26.2					87																						
15		26.03.5	25.59.7	26.00.3	V	V	V	222	277	219	V					RT #62 RT #142/146.5 / 191/144															
40		2.23.8	2.22.7	3.26.0					35																						
16		25.53.1	25.49.1	25.49.8	V	112	191	216	286	223	V					RT #63															
28		3.23.8	3.23.8	3.26.0					45																						
21		25.43.3	25.39.4	25.40.0	V	V	V	232	292	219	V					RT #64															
03		3.22.7	3.23.9	3.26.0					48																						
23		25.33.4	25.29.4	25.30.0	V	V	V	237	295	226	V					RT #65															
36		3.23.7	3.23.7	3.26.0					47																						
28		25.43.5	25.39.0	25.40.0	006	11R	282	205	282	220	V					RT #66 AH #147															
42		3.11.4	3.11.4	3.13.7					40																						
31		25.52.5	25.49.1	25.49.9	260	12R	248	266	281	224	V					RT #66 AH #147															
36		2.10.7	2.10.3	3.13.0					46																						
34		26.03.7	25.59.4	26.00.0	V	12R	V	212	273	220	V					RT #68															
26		3.10.7	3.10.4	3.12.0					45																						
12	V	26.12.7	26.09.1	26.10.0	V	10R	250	217	267	222	V					RT #69															
19		3.10.7	3.10.4	3.12.0					38																						

OCEANVIRON EIGHT 3780/1 (REV 81)

20 MIN

NAVIGATOR'S FLIGHT RECORD

TIME	A/C CMDR	NAV		SNR	AIRCRAFT BUONO				TRACK				FROM	TO	DATE	REMARKS
		#-1	VLF		DA	TC	TH	GS	WIND DIR/VEL	TAS	ALT	DIST + TOT				
1240	U	26.238	26.19.0	36.200	260	11R	349	216	279	231	1100'					PST#70
102	W	3.10.8	3.10.5	3.12.0	V	10K	350	208	281	232	V					PST#71 080/22
42		26.339	26.29.1	26.30.0	355			211	277	220	V					PST#72 (ARRIVED IN AHI) 73 (ARRIVED IN AHI) 73 (ARRIVED IN AHI) 73
51		3.10.8	3.10.8	3.12.1	175	9L	184	217	271	215	V					PST#73
45		26.44.0	26.29.2	26.40.0	180	V	189	215	288	210	V					A/H 180
45		3.10.8	3.10.9	3.13.1	V			200.6	271	215	V					PST#74
50		26.46.2	26.41.7	26.39.7	V	10L	190	230	271	228	V					PST#75
13		2.58.2	2.58.4	2.00.6	V			2.00.0	271	226	V					PST#76
52		26.26.6	26.32.0	26.30.0	V	V	189	215	288	226	V					PST#77
56		2.57.4	2.58.3	2.00.0	V			2.00.0	270	222	V					PST#77
55		26.26.8	26.19.5	26.20.0	V	V	190	230	273	228	V					PST#78
35		2.57.3	2.58.3	2.00.0	V			2.00.0	270	222	V					PST#77
58		26.16.9	26.12.4	26.10.0	V	V	191	221	268	226	V					PST#78
14		2.57.2	2.58.2	2.00.0	V			2.00.0	270	222	V					PST#77
1300		26.07.0	26.02.3	26.00.0	V	V	11L	222	270	222	V					PST#77
56		2.57.1	2.58.2	2.00.0	V			2.00.0	270	222	V					PST#77
04				35.54.4	35		25.56.0				V					UPBT 1NE (3M 1)
46				3.01.4	35		3.02.0				V					MUS IS
04		25.56.6	25.50.9	25.50.0	176	12L	188	229	285	219	V					PST#70
16		2.56.9	2.58.1	3.00.6					290		V					PST#79
06		25.47.7	25.42.4	25.42.0					290		V					PST#79
21		2.56.3	2.57.7	3.00.1					290		V					A/H 1 KEKUMI #23
20		26.19.4	26.14.2	26.13.6	320	6R	314	198	276	224	V					POSIT
25		3.28.4	3.29.7	3.22.5	315	4R	211	199	276	229	V					PST#80
23		26.25.7	26.20.6	26.20.0	315	4R	211	199	276	229	V					PST#80
05		3.35.1	3.36.6	3.29.1					281	229	V					PST#80

OCEANDEVRON EIGHT 3760/1 (REV 81)

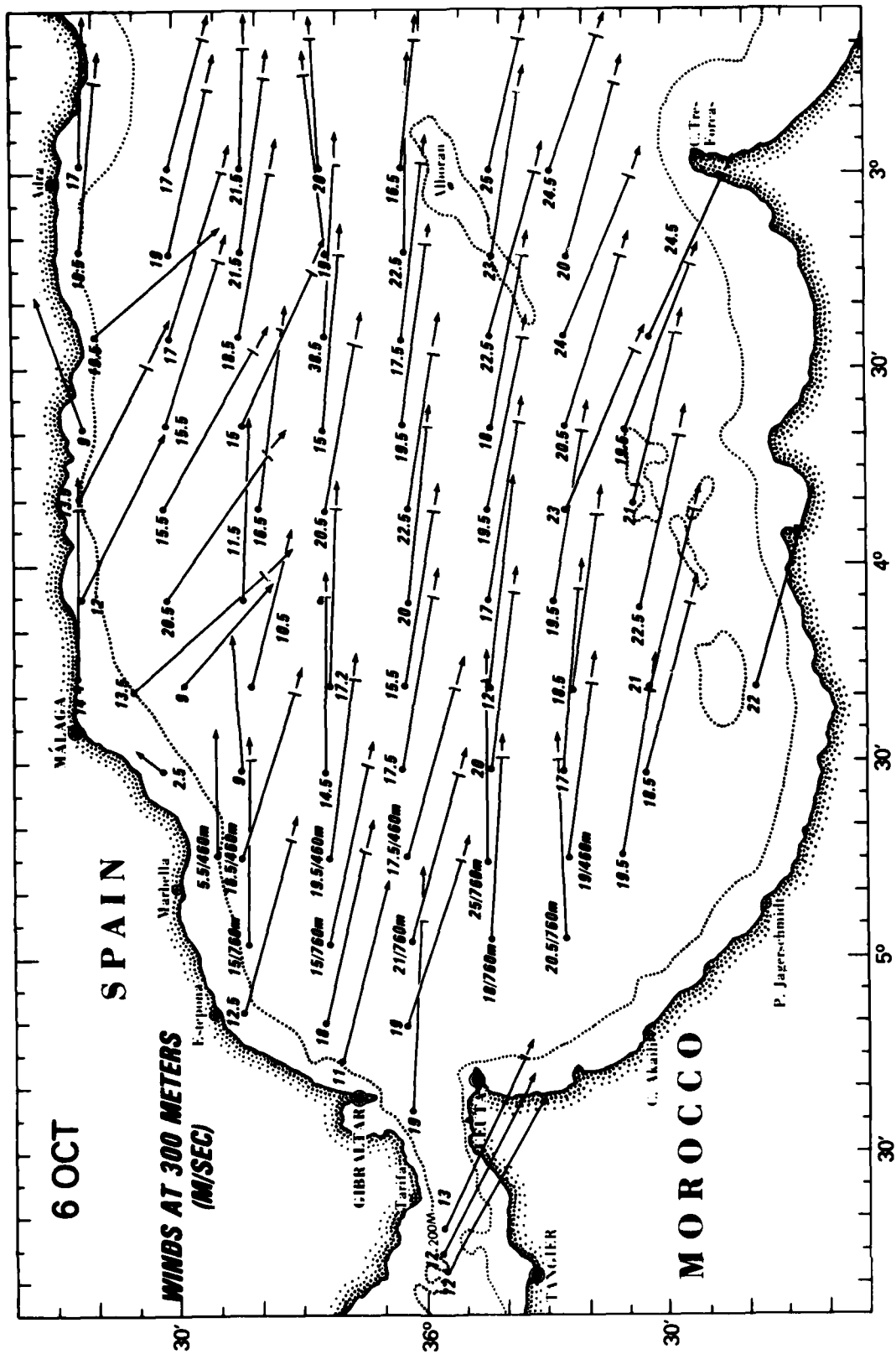
100 200 300 400 500 600 700 800 900 1000 1100 1200 1300 1400 1500 1600 1700 1800 1900 2000 2100 2200 2300 2400 2500 2600 2700 2800 2900 3000 3100 3200 3300 3400 3500 3600 3700 3800 3900 4000 4100 4200 4300 4400 4500 4600 4700 4800 4900 5000 5100 5200 5300 5400 5500 5600 5700 5800 5900 6000 6100 6200 6300 6400 6500 6600 6700 6800 6900 7000 7100 7200 7300 7400 7500 7600 7700 7800 7900 8000 8100 8200 8300 8400 8500 8600 8700 8800 8900 9000 9100 9200 9300 9400 9500 9600 9700 9800 9900 10000

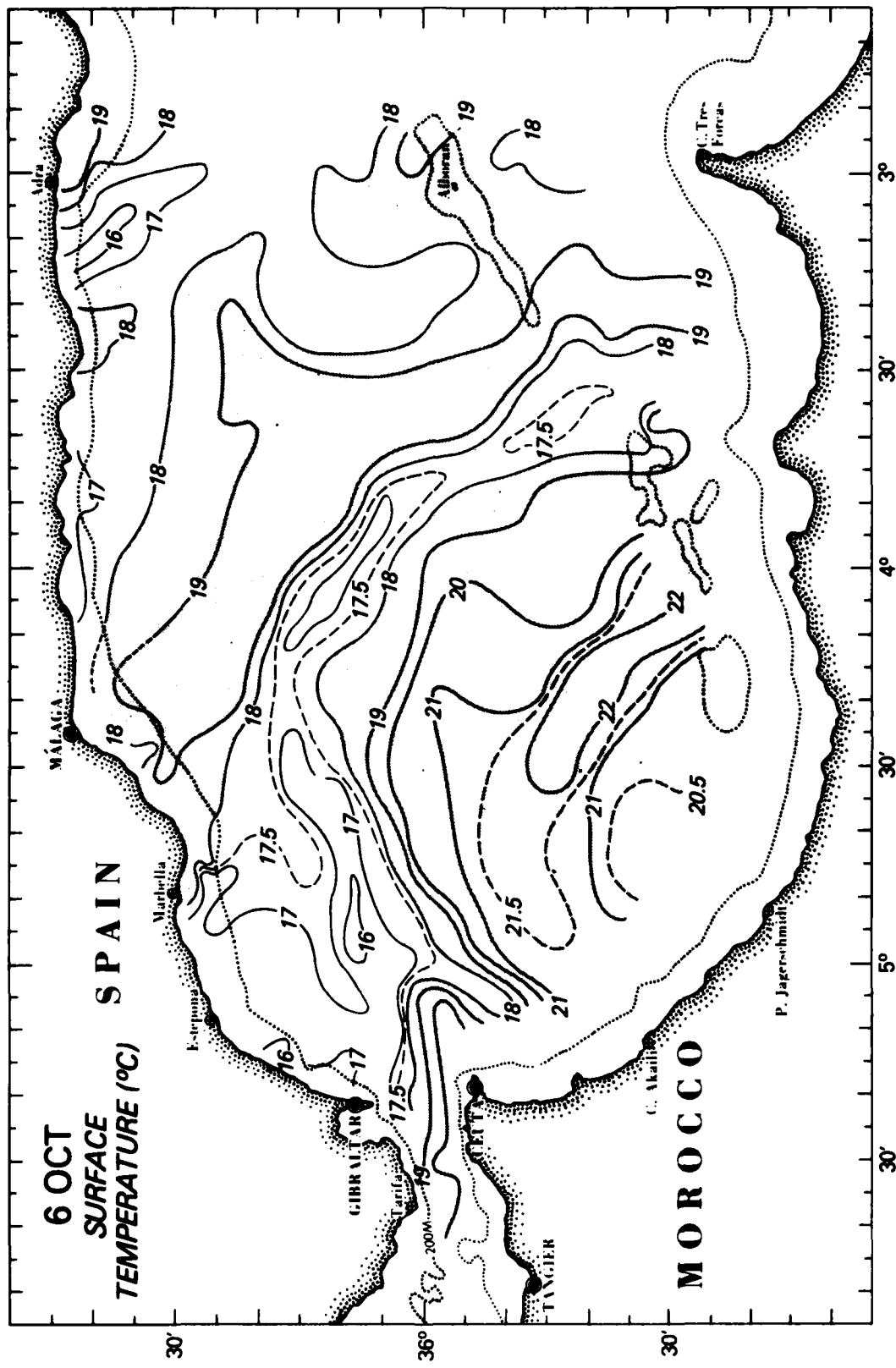
NAVIGATOR'S FLIGHT RECORD

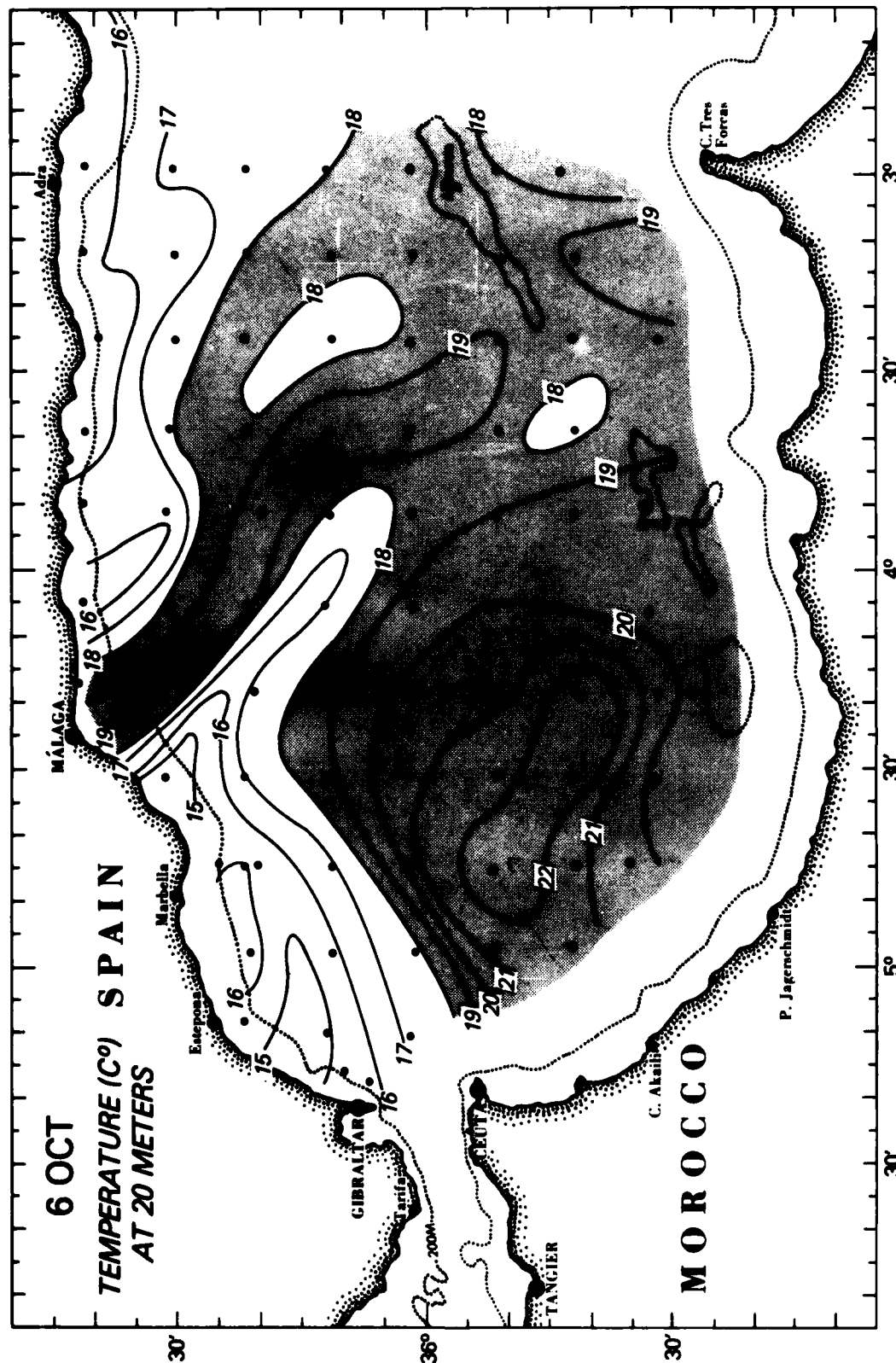
A/C CMDR		NAV		SNR		AIRCRAFT BUINO				TRACK				FROM			TO		DATE	P OF	REMARKS
TIME	N/S E/W	#1		VLF		TC	DA	TH	GS	WIND DIR/VEL	TAS	ALT	DIST + TOT	DIST REM	ETE	ETA ATA					
1327	N	36-354		26-299		274	2R	211	197	280	226	1000						60282	2	PST#81	
30	W	3483		3502						29										A/H D#82	
30	I	36-358		36-299		270	6L	275	199	302	227	✓								BT#82	
36	I	4008		4-03.1		✓				30											
32	I	36-359		36-299			4L	274	201	303	219	✓								PST#83	
26	I	4-13.5		4-15.5						22										A/H 260T	
26	I	26-45.9		26-295		00L	6R	360	209	214	229	✓								ET#84	
41	I	4-14.0		4-16.8						29										A/H D#85	
45	I	36-26.0		36-194		224	5L	279	212	270	233	✓								WTSUR	
45	I	4-29.7		4-27.0						29										A/H D#85	
48	I											✓								A/H D#85	
51	I											✓								A/H D#85	
52	I	36-07.3		26-00.8		264	0	266	183	267	224	✓								UPDATE VLF TP	
26	I	454.9		459.2						37										LNAL	
79	I	36-06.5		36-00.1		260	3L	263	183	279	232	✓								A/H D#85	
58	I	5-15.1		5-19.2						34										A/H D#85	
1404	I			35-56.6		266	3L	269	198	286	280	✓								42" (WMO ACC	
110	I			5-42.2						24										< 25 NM)	
04	I			35561						24										BT#86	
58	I			5460						24										BT#87	
06	I			35560		270	3L	273	199	299	272	✓								BT#88	
26	I			548.3						24											
118	I	26-03.2		3556.9		✓	✓	✓	213	290	278	✓								A/H D# 260/40	
29	I	6-29.2		6-43.4						13										C-1	
1425	I	36-21.4		26-15.1					226		240	✓								PHO RV'S	
1447	I	6540		658.2																	

LAND 1504, 1510, 1516

OCEANVIEW EIGHT 37801 (REV 81)

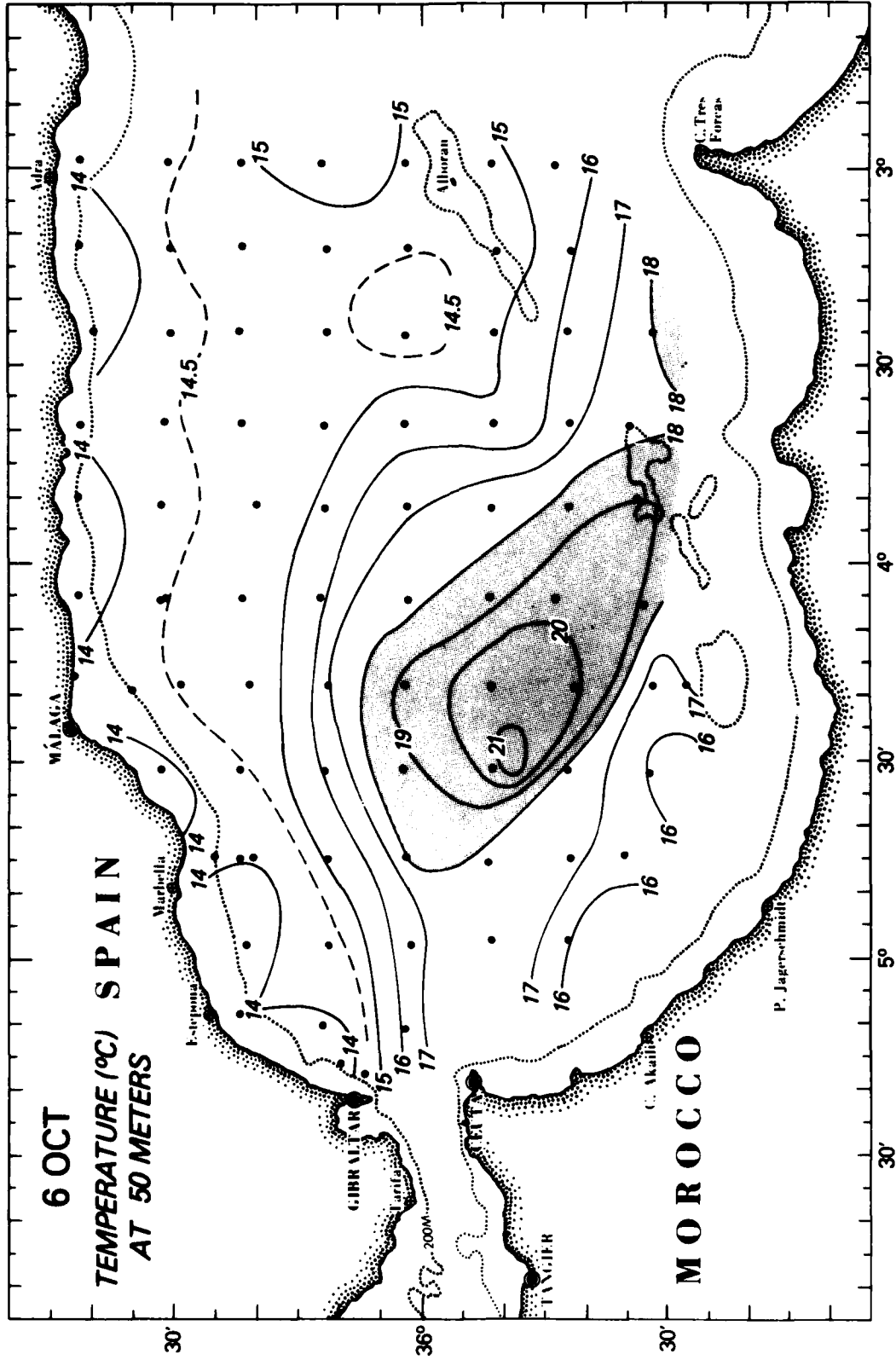




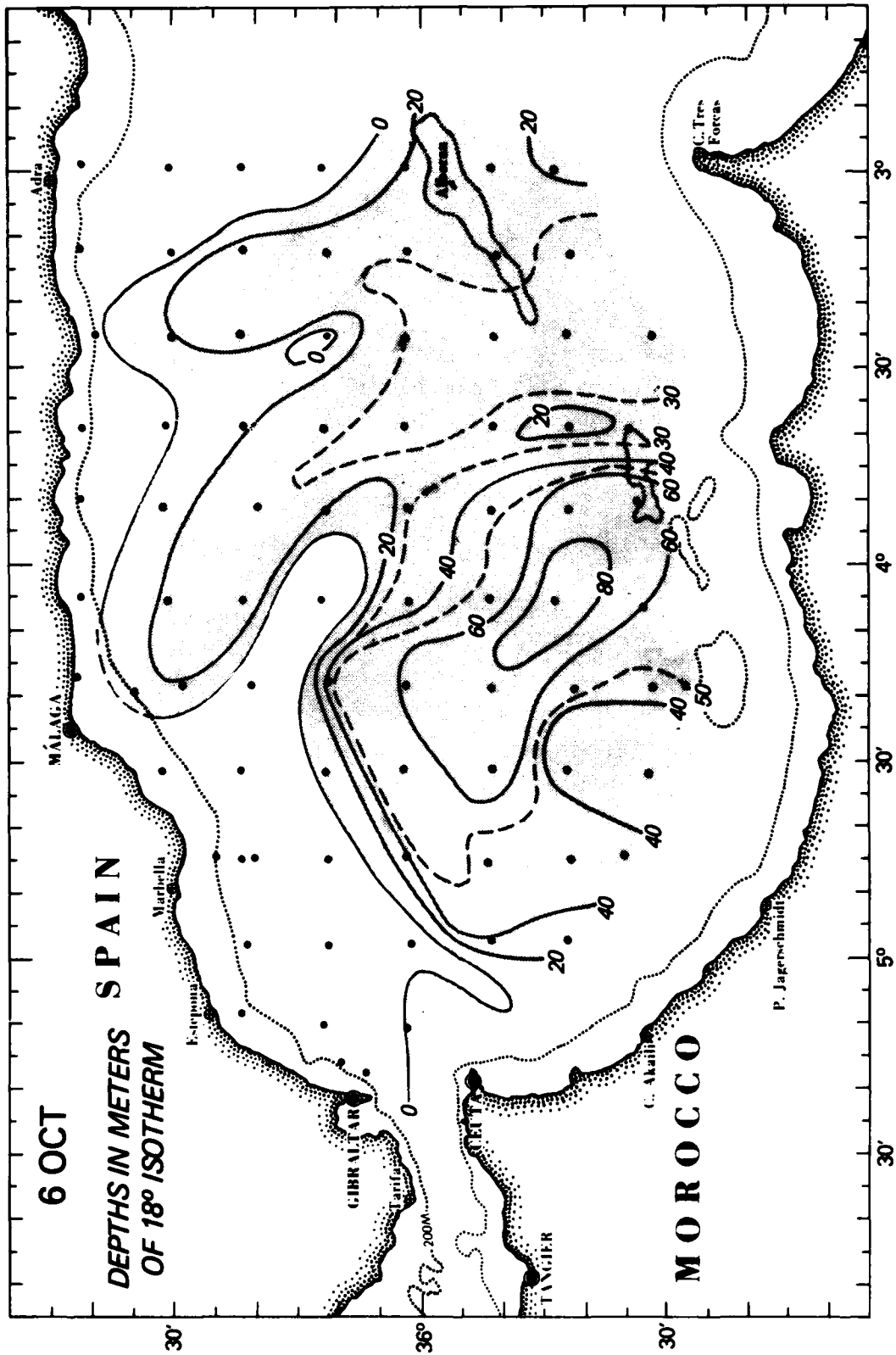


**6 OCT**  
**TEMPERATURE (C°) SPAIN**  
**AT 20 METERS**









9 OCTOBER 1982

105 # 2 Ave. 0.5 Nm. —  
 WHO Agency of Ave. 0.7 Nm. —  
 NAVIGATOR'S FLIGHT RECORD

A/C CNDR	NAVIGATOR'S FLIGHT RECORD		AIRCRAFT BUND		TRACK			FROM			TO			DATE							
	INSTR	EMTIME	HAIRREIL	HAIRREIL	TIME	DATE	TC	DA	TH	GS	WIND DIR	WIND VEL	TAS	ALT	DIST + TOT	DIST REM	ETE	ETA	ATA	REMARKS	
2905																					# 2 ACCEPT INDS
2906																					ENGINE STAR
2907																					TAXI
2908																					T/O
2909																					13 DMS TACAN
2910																					NAVL
2911																					A/H
2912																					A/A → C
2913																					A/A → B
2914																					NAVT #1
2915																					NOT W. 16 30.2 45.2
2916																					UPDATE
2917																					POST
2918																					PARALLEL
2919																					#1 UDT → #2
2920																					INB #1
2921																					30° OFF TRACK
2922																					20 MK OFF GS

think this should read 4.32.0 (m/s)

NAVIGATOR'S FLIGHT RECORD

A/C CMDR		NAV LTJG DODSON		SNR		AIRCRAFT BU NO			TRACK			FROM		TO		DATE		OF			
LCDR HARTZEL		EAS WHITE		MR		RELIANCE			147663			05-1-83		LE127		LE127		9 OCT 82		2	
TIME	N/S E/W	VLF	#2	TC	DA	TH	GS	WIND DIR/VEL	TAS	ALT	DIST +TOT	DIST REM	ETE	ETA ATA	REMARKS						
1006	N	36.046	26.03.4	164	4L	168	252	283 / 20	275	1,000					Posit						
25	W	4.379	4.38.9	✓			229	267 / 20	218	✓					Posit						
09		35.547	35.52.5				12	/		✓					A/H						
15		4.346	4.35.5												set						
15		36.515	35.50.6	352			12	/							OK 12.11						
23		4.328	4.34.4												SRE #1						
25		35.457	35.45.0	362		348	181	202 / 14	187	✓											
41		4.311	4.30.0																		
46		35.488	35.48.0	345			176	285 / 15	184	✓					#2						
19		4.220	4.33.8																		
27		35.523	35.51.5	✓	4R	341	178	271 / 14	183	✓					#3						
31		4.229	4.34.9	✓																	
28		35.546	35.53.8	✓		✓	✓	274 / 16	182	✓					#4						
20		4.227	4.35.6																		
29		35.573	35.56.4	344		340	177	278 / 17	183	✓					#5						
46		4.346	4.36.5	✓		✓															
30		36.001	35.59.2	✓		✓	176	278 / 16	183	✓					#6						
17		4.356	4.37.5	✓																	
31		26.036	26.02.8	✓		✓	170	267 / 11	180	✓					#7						
13		4.268	4.38.7	✓		✓															
13		26.060	26.05.2	✓		✓	171	282 / 13	181	✓					#8						
22		4.375	4.39.5	✓		✓															
22		35.620	35.60.2	✓		✓	✓	282 / 12	180	✓					#9						
33		26.088	26.07.9	✓		✓	✓	282 / 12	180	✓											
42		4.384	4.40.4	✓		✓															
34		26.117	26.10.9	✓		✓	✓	278 / 10	181	✓					#10						
27		4.395	4.41.4	✓		✓	175	278 / 10	181	✓											

OCEANDEVRON EIGHT 3760/1 (REV 81)

2 Probab 3324 R

NAVIGATOR'S FLIGHT RECORD

A/C CMDR	NAV	SNR		AIRCRAFT BUNO				TRACK				FROM			TO		DATE	OF	REMARKS
		#	VLF	TC	DA	TH	GS	WIND DIR/VEL	TAS	ALT	DIST + TOT	DIST REM	ETE	ETA	ATA				
1001		#2	VLF	342	2R	342	181	258	186	1000								#11	
1002																			
36		#2	VLF	342	0	342	189	100	190	1000								#12	
37																		#13	
38																		#14	
39																		#15	
40																		#16	
41																		ATL	
42																		AXPM	
43																		#1	
44																		POSIT	
45																		#2	
46																		POSIT	
47																		#3	
48																			
49																			
50																			
51																			
52																			
53																			
54																			

NAVIGATOR'S FLIGHT RECORD

A/C CMDR	NAV	SNR		AIRCRAFT BUNO				TRACK			FROM		TO		DATE	REMARKS	OF
		VLF	#2	TH	GS	WIND DIR/VEL	TAS	ALT	DIST + TOT	DIST REM	ETE	ETA	ATA				
1054		36.605	35.59.1	171	199	273/30	194	200'							0 OCT 80	POEIT	1
		4.32.3	4.28.4														
55		35.57.2	35.55.7		198	275/22	192	V								#4	
27		4.35.2	4.36.3														
57		35.52.1	35.52.6			283/21		V								POEIT	
03		4.33.4	4.34.5														
57		35.49.2	35.47.7	171	202	275/22	196	V								#5	
54		4.32.5	4.32.6													ORBIT C	
1107		35.46.1	35.44.8	342	220	300/10	240	1300'								#6	
26		4.31.1	4.32.6														
09		35.53.6	35.52.4	343	238	298/11	245	V								#7	
25		4.33.6	4.35.1													POEIT	
10		35.56.8	35.55.6	V	238	287/14	245	V								#7	
16		4.34.8	4.36.2														
12		36.05.7	36.04.5	342	229	303/10	240	V								#8	
41		4.37.7	4.39.3														
14		36.12.6	36.11.4	345	232	022/0	234	V								#9	
33		4.40.0	4.41.7														
16		36.20.3	36.19.2	345	242	114/06	240	V								#10	
35		4.42.6	4.44.3														
18		36.27.6	36.26.6	V			242	V								#11	
27		4.45.0	4.46.9													A/H	
																MAX ALTITUDE	
																PIER INS&2 GOOD	
25		36.24.1	36.22.5	163	241	218/03	244	1700'								POEIT	
19		4.42.7	4.45.6														



NAVIGATOR'S FLIGHT RECORD

A/C CMDR	NAV 1216 DEPART		SNR		MIL. KNOTS		AIRCRAFT BUANO		TRACK		FROM				TO		DATE	REMARKS
	#1	VLF	#2	TC	DA	TH	GS	WIND DIR/VEL	TAS	ALT	DIST +TOT	DIST REM	ETE	ETA	ATA			
1127 N		36.15.7	36.14.6	164	1L	165	71k	241	245	1700						#12 AXPM		
150 W		4.40.5	4.42.5	164	2L	166	71k	241	245	✓						#13		
29		36.07.9	35.06.2	164	2L	167	71k	241	245	✓						#14		
47		4.27.7	4.29.8	165	3L	168	71k	241	245	✓						REIT		
31		36.01.1	35.59.4	✓	1	✓	✓	✓	✓	✓						REIT A/H		
27		4.35.4	4.37.5	344	1R	340	242	242	242	2600						REIT		
23		35.54.4	35.52.9	344	2R	342	237	237	245	✓						PSIT		
00		4.32.1	4.35.3	344	1R	344	241	241	246	✓						PSIT		
24		35.48.2	35.46.6	344	1R	344	241	241	246	✓						PSIT		
32		4.30.9	4.33.2	344	1R	344	241	241	246	✓						PSIT		
39		35.42.7	35.41.5	344	1R	344	241	241	246	✓						PSIT		
39		4.28.4	4.31.2	344	1R	344	241	241	246	✓						PSIT		
41		35.49.1	35.48.0	344	1R	344	241	241	246	✓						PSIT		
23		4.31.0	4.33.7	344	1R	344	241	241	246	✓						PSIT		
43		35.56.4	35.55.2	344	1R	344	241	241	246	✓						PSIT		
16		4.33.3	4.36.1	344	1R	344	241	241	246	✓						PSIT		
45		36.04.1	36.03.1	344	1R	344	241	241	246	✓						PSIT		
11		4.36.0	4.38.8	344	1R	344	241	241	246	✓						PSIT		
47		36.11.2	36.10.3	344	1R	344	241	241	246	✓						PSIT		
67		4.38.4	4.41.3	344	1R	344	241	241	246	✓						PSIT		
49		36.19.4	36.18.4	344	1R	344	241	241	246	✓						PSIT		
Vip		4.41.2	4.44.1	344	1R	344	241	241	246	✓						PSIT		

OCEANVIRON EIGHT 3760/1 (REV 81)

NAVIGATOR'S FLIGHT RECORD

A/C CMDR		NAV	SNR		AIRCRAFT BUINO		TRACK			FROM	TO	DATE	OF				
TIME	N/S E/W	# 1	U/L/F	H 2	TC	DA	TH	GS	WIND DIR/VEL	TAS	ALT	DIST + TOT	DIST REM	ETE	LEPT	ETA ATA	REMARKS
1151	0		36.27.3	36.26.4	342	1L	343	248	152	240	2600						A/H C ✓
15	0		4.43.8	4.46.8	342			248	004	240							PSIT
✓58			36.20.0	36.20.0						NS							MOT PIER
56			4.51.5	4.52.8													36.20.2 4.52.3
1201			36.22.2	36.25.9	163	4L	167	237	267	230	5100						PSIT
102			4.44.5	4.46.7	164	4L	168	261	017	256	5100						PSIT
03			36.18.9	36.17.4	164	5L	169	225	270	220	✓						PSIT
17			4.41.6	4.43.7	164	5L	169	225	018	220	✓						PSIT
05			36.08.8	36.07.4	164	5L	169	225	287	230	✓						PSIT
17			4.38.3	4.40.2	164	5L	169	225	018	220	✓						PSIT
07			36.102.9	36.01.4	164	5L	169	237	280	230	✓						PSIT
39			4.36.3	4.38.2	164	5L	169	226	280	230	✓						PSIT
07			35.55.6	35.52.5	164	5L	169	237	280	230	✓						PSIT
09			4.32.3	4.35.2	164	5L	169	237	258	230	✓						PSIT
50			35.47.3	35.43.9	162	4L	166	239	019	237	✓						A/H Inm PSIT
18			4.29.5	4.32.5	162	4L	166	239	287	237	✓						PSIT
52			35.43.3	35.42.0	344	2R	342	226	009	233	✓						PSIT
20			4.28.5	4.30.3	344	2R	342	228	278	233	✓						PSIT
20			35.50.0	35.48.8	344	2R	342	228	009	233	✓						PSIT
45			4.30.9	4.32.6	344	2R	342	228	307	240	✓						PSIT
22			35.57.5	35.56.2	344	2R	342	231	010	240	✓						PSIT
42			4.33.4	4.35.1	344	2R	342	231	302	234	✓						PSIT
24			36.04.6	36.03.3	344	2R	342	226	009	234	✓						PSIT
42			4.35.9	4.37.6	344	2R	342	226	009	234	✓						PSIT
✓21			36.	36													PSIT
50			4.	4.													PSIT SLG

NAVIGATOR'S FLIGHT RECORD

A/C CMDR	NAV EWS	SNR	AIRCRAFT BUINO		TRACK		FROM		TO		DATE	REMARKS
			TC	DA	TH	GS	WIND DIR/VEL	TAS	ALT	DIST +TOT		
1206			VLF #2									
53	3612.5	36.11.1	345	1R	344	225	294					
53	4.38.5	4.40.3	345	1R	344	224	323					PSIT
53	36.18.5	36.18.5	345	1R	344	224	323					PSIT
53	4.41.1	4.42.8	345	1R	341	220	332					PSIT
53	26.30.4	36.26.7	342	1R	341	220	332					PSIT
53	4.45.9	4.45.6	342	1R	341	220	332					PSIT
53	26.27.6	36.25.9	153	2L	156	229	303					PSIT
53	4.47.0	4.48.8	164	3L	167	229	301					PSIT
53	36.17.5	36.17.7	164	3L	167	229	301					PSIT
53	4.43.4	4.45.2	164	3L	167	231	262					PSIT
53	36.12.6	36.10.8	164	3L	167	231	262					PSIT
53	4.41.0	4.40.8	164	3L	168	230	270					PSIT
53	36.05.1	36.03.3	164	4L	168	230	270					PSIT
53	4.38.4	4.40.2	164	4L	168	230	270					PSIT
53	25.58.4	35.56.6	164	V	V	281	278					PSIT
53	4.35.9	4.27.9	V	V	V	V	15					PSIT
53	35.50.1	35.48.2	V	V	V	V	274					PSIT
53	4.32.9	4.35.0	V	V	V	V	17					PSIT
53	35.44.3	35.42.4	V	V	V	229	269					PSIT
53	4.30.9	4.32.0					51					PSIT
53	35.48.9	35.47.3										PSIT
53	4.29.4	4.32.0										PSIT
53	35.48.6	35.47.0	324									PSIT
53	4.28.9	4.31.9										PSIT
53	35.50.1	35.49.0										PSIT
53	4.29.8	4.32.0										PSIT

OCEANDEVON EIGHT 3780/1 (REV 81)

dot 450 182

NAVIGATOR'S FLIGHT RECORD

A/C CMDR	N/S E/W	NAVIGATOR DEPART		SNR	AIRCRAFT BUINO				TRACK				FROM	TO	DATE	REMARKS
		VLF	#		TH	GS	WIND DIR/VEL	TAS	ALT	DIST +TOT	DIST REM	ETE				
1258	N			35.533	35.515		470	200	183	260'					90123	MOT #3
136	W			4.327	4.35.6	215	188	277	190	✓						MOT #4
159				35.55.1	35.53.9		182	15	183	✓						MOT #5
146				4.23.4	4.26.3											
1200				35.57.6	35.56.0		188	20	183	✓						MOT #6
01				4.33.1	4.36.1											
01				35.58.7	35.57.7		194		189	✓						MOT #8
02				4.33.6	4.35.3											MOT #7
02				36.02.5	36.01.2											
14				4.21.4	4.24.6		185	205	186	✓						MOT #9
02				36.04.5	36.02.5											
59				4.31.7	4.33.8		190	205	185	✓						MOT #10
05				36.07.3	36.05.9	002										
46				4.30.0	4.32.3											
04				36.09.9	36.08.7	016	171	204	186	✓						MOT #11
42				4.29.8	4.32.9											
06				36.14.2	36.12.6	300	183	204	187	✓						MOT #12
46				4.31.4	4.37.8											
08				36.18.2	36.16.6	335	172	204	189	✓						MOT #13
14				4.36.8	4.40.2											
09				36.20.7	36.19.2	303	185	246	184	✓						MOT #14
31				4.40.4	4.43.7											
10				36.23.9	36.22.3	340										
39				4.41.8	4.45.3		179	243	183	✓						MOT #15
11				36.27.0	36.25.7	320										
56				4.43.8	4.47.3											

36 05  
4.39

NAVIGATOR'S FLIGHT RECORD

TIME	A/C CHORD	NAV LOG REPORT	SMR	TC	DA	TH	GS	WIND DIR/VEL	TRACK			ETA	REMARKS
									AIRCRAFT BUINO	FROM	TO		
1312	N	VLF	383				192	242	188	260			MOT #16
54	W	36.30.0	36.28.8					08					AH R
1317		4.44.5	4.47.8										MOT PIER
40		26.30.5	36.29.4										36.30.5/4.52.3
		4.51.1	4.53.1										
1323													
38		26.25.9	26.24.9	164	52	169	245	267	240	240	10,000		POST
21		4.45.2	4.46.3					19					
45		26.21.8	26.20.6	165	V	170	220	275	275	V			POST
26		4.43.7	4.44.8					20					
20		26.15.4	26.14.0	V	V	V	233	277	276	V			POST
28		4.41.8	4.42.5					21					
00		26.09.7	26.08.4	164	V	169	V	269	268	V			POST
29		4.40.0	4.40.6					21					
30		26.04.1	26.02.7	V	62	170	231	265	278	V			POST
31		4.38.1	4.38.7					26					
00		26.58.7	26.57.2	V	72	171	V	260	261	V			POST
22		4.36.3	4.36.8					28					
40		26.52.2	26.51.0	165	V	172	228	260	227	V			POST
35		4.34.1	4.34.6					26					
19		26.43.4	26.42.0	162	82	170	225	259	225	V			POST
43		4.21.7	4.21.9					28					
19		35.44.5	35.43.2					254					
45	V	4.21.7	4.21.9	345	5R	339	231	019	233	V			POST
18		35.51.8	35.50.6					251					
		4.31.7	4.32.1	345	5R	340	233	017	233	V			POST

NAVIGATOR'S FLIGHT RECORD

A/C CMDR	NAV LTJG DEPT	NAV LTJG POS	SNR	AIRCRAFT BUINO			TRACK			FROM			TO			DATE	REMARKS
				VLF	LN#	LN#	TC	DA	TH	GS	WIND DIR/VEL	TAS	ALT	DIST +TOT	DIST REM		
1346	NAV	149667	149667	35.52.0	35.50.1	345	4R	341	234	245	233	10,000				9 Oct 80	PSIT
148	NAV	149667	149667	36.02.8	36.01.5	345	2R	343	235	277	239						PSIT
149	NAV	149667	149667	4.33.6	4.33.9	345	2R	343	236	271	238						PSIT
150	NAV	149667	149667	4.35.5	4.35.7	345	2R	343	235	287	239						PSIT
151	NAV	149667	149667	36.07.3	36.06.1	345	2R	343	236	287	239						PSIT
152	NAV	149667	149667	4.36.9	4.37.3	345	2R	343	236	287	239						PSIT
153	NAV	149667	149667	36.12.5	36.11.4	345	2R	343	236	287	239						PSIT
154	NAV	149667	149667	4.38.7	4.39.1	345	2R	343	235	292	239						PSIT
155	NAV	149667	149667	26.17.2	26.16.2	345	2R	343	234	300	239						A/H
156	NAV	149667	149667	4.40.3	4.40.7	345	2R	343	233	300	239						PSIT
157	NAV	149667	149667	36.27.8	36.26.7	345	2R	343	233	275	239						PSIT
158	NAV	149667	149667	4.43.7	4.44.2	345	2R	343	233	275	239						PSIT
159	NAV	149667	149667	36.28.2	36.26.7	150	3L	153	232	275	227						PSIT
160	NAV	149667	149667	4.49.8	4.50.1	165	4L	169	235	269	234						PSIT
161	NAV	149667	149667	36.22.9	36.21.5	165	4L	169	235	269	234						PSIT
162	NAV	149667	149667	4.47.4	4.47.8	164	4L	168	240	269	239						PSIT
163	NAV	149667	149667	36.15.9	36.14.5	164	4L	168	240	267	239						PSIT
164	NAV	149667	149667	4.44.9	4.45.5	164	3L	167	241	267	239						PSIT
165	NAV	149667	149667	36.08.0	36.06.6	164	4L	168	240	267	239						PSIT
166	NAV	149667	149667	4.42.1	4.42.7	164	4L	168	240	267	239						PSIT
167	NAV	149667	149667	35.57.9	35.58.6	164	4L	168	240	257	241						PSIT
168	NAV	149667	149667	4.39.2	4.40.0	164	4L	168	240	257	241						PSIT
169	NAV	149667	149667	35.50.4	35.49.1	166	5L	237	237	237	246						PSIT
170	NAV	149667	149667	4.35.5	4.36.7	166	5L	237	237	237	246						PSIT
171	NAV	149667	149667	35.41.7	35.40.7	196	4L	230	230								A/H

NAVIGATOR'S FLIGHT RECORD

A/C CMDR	NAVLTJG DWARF	SNR	MR KERLING		DA	TH	GS	WIND DIR/VEL	TRACK		FROM	TO	DATE	OF
			VLF	#					TC	DA				
1416	WAS	10	35.45.4	25.44.6			274		05-1-83	#2	LEAT	LEAT	9 OCT 82	11
1417	WAS	15	4.30.7	4.32.6	36	343	227	010	227	3800				PSIT
1418	WAS	17	35.55.0	25.54.1			224							PSIT
1419	WAS	21	4.33.7	4.35.7	20	343	222	009	228					PSIT
1420	WAS	21	<del>35.01.3</del>	<del>25.00.6</del>			275							PSIT
1421	WAS	02	4.25.5	4.37.9	20	343	219	006	222					PSIT
1422	WAS	22	36.08.0	36.05.4			322							PSIT
1423	WAS	24	4.32.1	4.39.6	10	344	221	007	227					PSIT
1424	WAS	22	36.10.6	36.09.8			322							PSIT
1425	WAS	40	4.38.7	4.41.1	10	343	219	006	226					PSIT
1426	WAS	25	36.15.3	36.14.0			322							PSIT
1427	WAS	01	4.40.2	4.42.5	0	344	219	009	226					PSIT
1428	WAS	28	36.26.9	36.26.3			351							PSIT
1429	WAS	10	4.44.0	4.46.8	0	344	217	010	225					PSIT
1430	WAS	10	36.30.8	36.30.4						3100				PSIT
1431	WAS	1435	4.52.1	4.53.3										PSIT
1432	WAS	03	36.26.0	36.25.9			287							PSIT
1433	WAS	14	4.46.4	4.46.7	20	165	244	014	240	3100				PSIT
1434	WAS	37	36.17.2	36.16.9			278							PSIT
1435	WAS	14	4.43.3	4.43.5	30	168	253	016						PSIT
1436	WAS	38	36.10.9	36.10.6			275							PSIT
1437	WAS	47	4.41.2	4.41.3	20	166	245	013	236					PSIT
1438	WAS	40	36.02.9	36.02.6			285							PSIT
1439	WAS	60	4.38.6	4.38.6	30	167	241	016	233					PSIT
1440	WAS	42	35.56.4	35.55.9			275							PSIT
1441	WAS	36	4.36.4	4.36.3	40	169	239	018	233					PSIT

1407 PIER  
DEPART 2630.2/14.313

OCEANDEVRON EIGHT 3780/1 (REV 81)

NAVIGATOR'S FLIGHT RECORD

A/C CMDR	NAV LTJG DUFFY	SNR	AIRCRAFT BUNO		TRACK			FROM	TO	DATE	REMARKS					
			149 667	149 667	05-1-83 #2	ETA	ETE					CERT				
UZR	MARTLELL	ENS WHITE	VLV	LN#2	TC	DA	TH	GS	WIND DIR/VEL	TAS	ALT	DIST +TOT	DIST REM	ETA	ATA	CERT
144	N	35504	4:34.2	35498	165	4L	169	238	273/19	220	3100					POST
08	U	4:34.2	4:34.2													
45		35459	4:22.9	35453	165	V		246	201/19	226	V					POST
19		4:22.9	4:22.9													
46		35423	4:21.7	35418					275/17		V					POST
10		4:21.7	4:21.7													
51		35480	4:32.1	35479	029	6K	023	194	287/23	195	250'					MOT #1
20		4:32.1	4:32.1													
51		35492	4:30.7	35490							V					MOT #2
54		4:30.7	4:29.4													
54		35510	4:26.9	35504	200			169	285/25	190	V					MOT #3
22		4:26.9	4:25.5													
58		35510	4:26.5	35505	277			159	287/26	184	V					MOT #3
07		4:26.5	4:25.2													
59		35537	4:37.4	35527	304			166	284/26	190	V					MOT #4
00		4:37.4	4:26.4													
1500		35556	4:27.7	35553	044			197	277/23	185	V					MOT #5
04		4:27.7	4:25.1													
00		35568	4:32.4	35564	035			194	271/24	179	V					MOT #6
26		4:32.4	4:33.6													
01		36004	4:28.2	35598				187		182	V					MOT #7
53		4:28.2	4:30.9													
02		36022	4:28.1	36019	045			205	269/28	187	V					MOT #8
43		4:28.1	4:28.8													
03		36017	4:28.7	36011	023			200	267/28	187	V					MOT #9
30		4:28.7	4:27.1													



NAVIGATOR'S FLIGHT RECORD

A/C CMDR 1524	NAV USEG DEPART	SNR	MIL KELLINX		AIRCRAFT BUNO		TRACK		FROM		TO		DATE	REMARKS
			TC	DA	TH	GS	WIND DIR/VEL	TAS	ALT	DIST + TOT	DIST REM	ETE		
1504 N	VLF	(42)	005		190	264	185	600'					9 OCT 82	MOT #10
28 W	36-07.8 4-27.5	36-07.2 4-26.3	005		190	264	185	600'						
06	36-12.4 4-33.5	36-11.2 4-32.4	095		161	258	185	✓						MOT #11
55	36-16.9 4-27.0	36-15.6 4-35.8	340		175	255	189	✓						MOT #12
08	36-19.7 4-42.9	36-18.6 4-41.4	305		169	250	187	✓						MOT #13
42	36-22.8 4-44.5	36-21.7 4-43.8	340		175	257	184	✓						MOT #14
10	36-26.3 4-47.2	36-25.3 4-46.2	325		177	265	182	✓						MOT #15
26	36-20.8 4-48.2	36-28.1 4-47.1	355		181	070	183	✓						MOT #16
11														A/H PD MATHA
54														LAND
13														MULTI-STEP
17														TAXI
✓14														
16														
527														
1539														
1550														
1556	36-25.2 4-34.6	36-25.7 4-34.0	221	22	263	012	230	5000						T10
1604	35-57.3 5-03.4	35-57.8 5-02.5	221	22	262	010	230	5000						NAVL
1602	35-56.4	35-56.5	258	12	259	008	259	5000						A/H
08	5415	5407	259	42	263	13	251	✓						ET#92

NAVIGATOR'S FLIGHT RECORD

A/C CMDR	NAV JT-6 DEPART		SMR	MR BERLING		AIRCRAFT BIND		TRACK		FROM		TO		DATE	PAGE	OF
	LCDR HARTZELL	ENS WHITE		#2	TC	DA	TH	GS	WIND DIR/VEL	TAS	ALT	DIST +TOT	DIST REM			
1612	N	35562	35562	268	3L	271	246	316	258	5000						127A93
1614	W	5449	5439	270	3L	273	246	300	✓	✓						RET#?
1617		35563	35560					16								
24		35568	35560					273								
21		6.44.4	6.43.2	324	1R	323	246	010	265	4500						A/H
1636		36.14.1	36.12.7					249		N						P2L
1640		6.58.1	6.57.9	052	2R	056	253	007	253							P2L
1651																LAND
																LAND
																END STOP

Scam H White, ens USNR

11 OCTOBER 1982

NAVIGATOR'S FLIGHT RECORD

A/C CMDR LCLC	TIME	N/S E/W	NAV GATE	NAV GATE	SNR #	AIRCRAFT BUND		TRACK		FROM		TO		DATE	REMARKS	L OF	
						TH	GS	WIND DIR/VEL	TAS	ALT	DIST + TOT	DIST REM	ETE				ETA ATA
	0830	N	VUF	#2													
	0900	M															
	0905																
	0915																
	0930		36.297	36.293	36.295	1R	073	260	262	5,000							
	0935		6.274	6.279	6.277	V	063	260	260	✓							
	0950		36.152	36.149	36.148												
			6.590	6.588.9	6.59.4												
			25.519	25.577	25.57.4												
			6.45.7	6.44.8	6.44.1												
	0958		25.56.6	25.55.6	25.56.1												
	1000		6.00.9	6.00.4	6.01.4												
	41		35.56.6	35.55.6	35.56.1												
	50		5.44.8	5.44.1	5.45.2												
	41		25.59.1	25.57.8	25.58.5												
	49		5.28.8	5.28.5	5.29.2												
	46		26.00.7	25.59.3	26.00.1												
	41		5.19.3	5.18.8	5.19.7												
	53		26.21.7	26.20.7	26.21.2												
	40		4.59.1	4.57.6	4.59.5												
	55		26.21.2	26.20.1	26.20.7												
	00		4.52.1	4.50.5	4.52.5												

OCEANDEVON EIGHT 3760/1 (REV 81)

NAVIGATOR'S FLIGHT RECORD

A/C CMDR	NAV LTG COPIES		SNR	PERLINGS		AIRCRAFT BUENO		TRACK		FROM		TO		DATE	REMARKS
	NAV	LTG		COPIES	PERLINGS	TH	GS	WIND DIR/VEL	TAS	ALT	DIST + TOT	DIST REM	ETE		
0956	#1	VF	#2	181	2R	179	248	125	254	6,000				11 OCT 82	20F
17	26.46.3	36.266	4.426	✓	✓	✓	✓	✓	✓	✓					START TRACK
1001	4.42.1	4.426	4.42.1	✓	✓	✓	✓	✓	✓	✓					POBIT
00	26.15.5	36.165	36.15.4	✓	✓	✓	✓	✓	✓	✓					POBIT
02	4.42.9	4.424	4.42.9	✓	✓	✓	✓	✓	✓	✓					POBIT
00	26.07.1	36.073	26.07.0	✓	✓	✓	✓	✓	✓	✓					POBIT
00	4.44.0	4.42.7	4.44.0	✓	✓	✓	✓	✓	✓	✓					POBIT
05	35.66.6	35.56.8	35.56.4	✓	✓	✓	✓	✓	✓	✓					POBIT
20	4.44.0	4.43.9	4.44.0	✓	✓	✓	✓	✓	✓	✓					POBIT
08	35.46.3	35.46.4	35.46.0	✓	✓	✓	✓	✓	✓	✓					POBIT
00	4.42.9	4.44.0	4.44.0	✓	✓	✓	✓	✓	✓	✓					POBIT
10	25.28.1	25.28.2	25.27.8	✓	✓	✓	✓	✓	✓	✓					POBIT
00	4.43.9	4.44.0	4.44.0	✓	✓	✓	✓	✓	✓	✓					POBIT
17	25.23.4	25.22.5	25.22.9	✓	✓	✓	✓	✓	✓	✓					POBIT
15	4.42.6	4.42.9	4.43.7	✓	✓	✓	✓	✓	✓	✓					POBIT
18	25.29.1	25.29.1	25.28.6	✓	✓	✓	✓	✓	✓	✓					POBIT
42	4.42.9	4.42.1	4.44.0	✓	✓	✓	✓	✓	✓	✓					POBIT
19	25.42.0	25.41.9	25.41.5	✓	✓	✓	✓	✓	✓	✓					POBIT
32	4.44.0	4.43.7	4.44.0	✓	✓	✓	✓	✓	✓	✓					POBIT
20	35.45.2	35.45.1	35.44.8	✓	✓	✓	✓	✓	✓	✓					POBIT
22	4.44.0	4.42.8	4.44.0	✓	✓	✓	✓	✓	✓	✓					POBIT
21	25.50.5	25.50.3	25.50.0	✓	✓	✓	✓	✓	✓	✓					POBIT
45	4.44.0	4.44.1	4.44.0	✓	✓	✓	✓	✓	✓	✓					POBIT
23	25.55.6	25.55.2	25.55.0	✓	✓	✓	✓	✓	✓	✓					POBIT
03	4.44.0	4.44.1	4.44.0	✓	✓	✓	✓	✓	✓	✓					POBIT
12	26.00.6	26.00.3	26.00.0	✓	✓	✓	✓	✓	✓	✓					POBIT
12	4.44.0	4.42.9	4.44.0	✓	✓	✓	✓	✓	✓	✓					POBIT

OCEANDEVRON EIGHT 3760/1 (REV 81)

NAVIGATOR'S FLIGHT RECORD

A/C CMDR	LDR	MARELL	NAV LTG REPORT		SNR	KERICING		AIRCRAFT BUJO			TRACK			FROM			TO			DATE	REMARKS
			#1	VLF		#2	TC	DA	TH	GS	WIND DIRVEL	TAS	ALT	DIST TOT	DIST REM	ETE	ETA	ATA	LEAT		
1025	U	36-055	36-05.2	36-04.9		360	2L	007	218	051	215	1,000								11 OCT 82	#8
40	N	4-440	4-43.9	4-44.0		V	1L	001	213	030	217	V									#99
27		36-10.5	36-10.2	36-09.9		V	V	V	217	050	218	V									#9
28		36-15.7	36-15.2	36-15.0		V	V	V	217	050	218	V									#10
28		4-43.9	4-43.8	4-43.9		V	V	V	219	040	221	V									#100
29		36-20.6	36-20.3	36-20.0																	#11
50		4-43.9	4-43.8	4-43.9																	#101
31		36-25.8	36-25.2	36-25.1																	#12
15		4-44.0	4-43.9	4-44.0																	RT#102
35		36-30.1	36-28.8	36-29.3		160	2R	158	219	034	215	V									RT#103
06		4-32.1	4-22.3	4-22.2																	VLF DR
39		36-20.8	36	36-19.9		180	V	178	244	028	232	V									RT#104
25		4-30.8	4	4-21.0																	RT#105
40		36-10.8	36-09.6	36-09.8		V	0	180	246	020	242	V									RT#106
02		4-30.5	4-29.8	4-21.0																	RT#107
42		36-01.1	35-59.5	36-00.0		V	V	V	245	008	V										
25		4-20.7	4-20.0	4-21.0																	
44		35-51.1	35-49.8	35-50.0		V	V	V	241	104	244	V									
53		4-30.7	4-29.9	4-21.0																	
47		35-41.3	35-39.7	35-40.0		V	1R	179	247	108	V										
21		4-30.6	4-29.9	4-21.0																	
49		35-21.4	35-20.1	35-20.1		V			241	123	V										
50		4-30.6	4-29.8	4-21.0																	
52		35-21.4	35-20.6	35-20.1																	
05		4-18.2	4-18.4	4-18.7		258	1L	258	243	090	242	V									

NAVIGATOR'S FLIGHT RECORD

A/C CMDR	NAV (TIG) DEPART	SNR	TC	DA	TH	GS	WIND DIR/VEL	TAS	ALT	DIST REM	DIST +TOT	FROM	TO	DATE	REMARKS
TIME	N/S E/W	#1	#2	VLF	MR KER (IR) G	149667	05-1-63	05-1-63	05-1-63	05-1-63	05-1-63	05-1-63	05-1-63	05-1-63	05-1-63
1455	N 35 41.3	35 39.4	35 40.0		360	244	164	242	1000					11 OCT 63	BT # 110
36	W 4.17.6	4.17.0	4.18.1			248	187	243							BT # 111
37		35 49.4	35 50.0			247	180	246							BT # 112
38	W 36.01.3	36.01.9	36.00.0			245	357	244							BT # 113
39	W 4.17.6	4.16.7	4.18.0			244	358	244							BT # 114
40	W 36.21.3	36.19.2	36.20.0			244	086	244							BT # 115
41	W 4.17.5	4.16.6	4.18.0		2L	244	090	244							BT # 116
42	W 36.31.2	36.29.1	36.30.0			228	100	241							BT # 117
43	W 4.17.5	4.16.5	4.18.0			233	017	241							BT # 118
44	W 36.40.9	36.38.0	36.37.6			241	058	241							BT # 119
45	W 4.17.0	4.17.1	4.17.5			243	034	243							BT # 120
46	W 36.41.0	36.39.4	36.39.7			243	003	243							BT # 121
47	W 4.03.0	4.04.5	4.05.5			242	200	245							BT # 122
48	W 4.04.4	4.03.2	4.05.0			242	007	244							BT # 122
49	W 4.04.4	4.03.2	4.05.0			242	007	244							BT # 122
50	W 36.11.5	36.09.3	36.10.0			243	034	243							BT # 122
51	W 4.04.4	4.03.2	4.05.0			243	200	245							BT # 122
52	W 36.01.5	35.59.7	36.00.0			242	002	245							BT # 122
53	W 4.04.4	4.03.2	4.05.0			242	002	245							BT # 122
54	W 35.15.16	35.14.8	35.50.0			242	007	244							BT # 122
55	W 4.04.4	4.03.2	4.05.0			242	004	244							BT # 122

OCEANDEVON EIGHT 3760/1 (REV 81)

NAVIGATOR'S FLIGHT RECORD

A/C CNDR LCN#	NAME	NAV C/PG DEPART		SNR	AIRCRAFT BUNO				TRACK			FROM			TO		DATE	REMARKS	OF
		#	VLF		FMOS	WHITE	TH	GS	WIND DIR/VEL	TAS	ALT	DIST + TOT	DIST REM	ETE	ETA	ATA			
1127	N	35.49.7	35.30.8	35.40.0															
132	W	4.04.3	4.03.2	4.05.0	180	12												DT # 123	
27		35.32.2	35.30.5	35.30.5														A/H	
36		4.03.9	4.14.6	4.04.6														DT # 124	
37		35.34.7	35.31.7	35.32.9														DT # 125	
40		3.51.4	3.50.8	3.51.5	356													<del>DT # 124</del> SRW	
41		35.41.7	35.39.1	35.40.0														DT # 126	
43		3.51.3	3.49.8	3.52.0	360														
47		3.51.8	3.54.2	3.55.0.6														DT # 127	
49		3.51.1	3.49.9	3.52.0		12													
51		26.11.8	35.59.0	36.00.6															
50		3.51.4	3.49.8	3.52.0		12												DT # 128	
41		36.11.8	36.09.0	36.10.0															
48		3.51.4	3.49.8	3.52.0														DT # 129	
42		36.21.9	36.19.7	36.19.9														VLF INTO DR	
50		3.51.4	3.49.4	3.52.0														DT # 130	
46		36.21.9	36.29.7	36.30.0															
54		3.51.4	3.52.0	3.52.0		12												DT # 131	
45		36.42.0	36.39.4	36.40.0															
25		7.50.5	3.52.6	3.51.0														DT # 132	
58		36.41.6	36.39.4	36.39.4															
61		7.38.4	3.38.3	3.35.0	180													DT # 133	
54		36.22.3	36.30.3	36.30.0															
21		3.38.2	3.39.2	3.38.9	181													DT # 134	
56		36.22.4	36.20.4	36.20.0															
54		3.38.2	3.39.1	3.39.0	180													DT # 135	

OCEANDEVRON EIGHT 3760/1 (REV 81)



NAVIGATOR'S FLIGHT RECORD

A/C CMDR (LOR)	NAV LTJG WHITE	DOMEST SNR	MC FEALINE		TC	DA	TH	GS	WIND DIR/VEL	TRACK			DATE	6 OF		
			VLF	# 2						FROM	TO	DATE				
TIME	INR E/W	# 1	VLF	# 2	TC	DA	TH	GS	WIND DIR/VEL	TAS	ALT	DIST + TOT	DIST REM	ETE	ETA ATA	REMARKS
11:55	N	36.12.4	36.10.5	36.09.9					023							
12:01	N	3.38.2	3.39.2	3.39.0	180	✓	180	246	004	243	1000					BT # 137
14:5		36.02.6	36.01.1	36.00.0	✓	✓	✓	248	005	243	✓					VLF INTO VLF BT # 137
04		35.22.7	35.50.5	35.50.0	✓	✓	✓	356	007	244	✓					BT # 138
09		3.38.0	3.39.4	3.39.0	✓	✓	✓	250	007	244	✓					BT # 139
16		35.42.8	35.40.7	35.40.0	✓	✓	✓	048	007	244	✓					BT # 140
34		3.37.9	3.39.4	3.39.0	✓	✓	175	247	007	244	✓					BT # 141
08		35.34.9	35.39.9	35.32.0	✓	✓	✓	055	007	242	✓					BT # 142
33		3.37.0	3.38.6	3.38.1	✓	✓	✓	247	007	242	✓					BT # 143
11		35.33.4	35.20.3	35.30.5					095		✓					BT # 144
02		3.25.2	3.28.0	3.26.3	030				009		✓					BT # 145
13		35.42.4	35.39.9	35.40.0			001		152		✓					BT # 146
32		3.24.8	3.26.4	3.26.0	360		3538 W 243		003	242	✓					BT # 147
16		35.52.9	35.50.0	35.50.0	✓	✓	✓	187	003	242	✓					BT # 148
00		3.24.8	3.26.5	3.26.0	✓	✓	360	243	003	242	✓					BT # 149
18		36.02.9	35.59.9	36.00.0	✓	✓	✓	164	003	243	✓					BT # 150
27		3.24.8	3.26.4	3.26.0	✓	✓	✓	159	003	243	✓					BT # 151
20		36.13.0	36.09.8	36.10.0	✓	✓	✓	245	603	242	✓					BT # 152
54		3.24.8	3.26.3	3.26.0	✓	✓	✓	167	002	244	✓					BT # 153
23		36.23.0	36.19.8	36.20.0	✓	✓	✓	002	002	244	✓					BT # 154
22		3.24.8	3.26.5	3.26.0	✓	✓	✓	151	005	244	✓					BT # 155
25		36.33.0	36.29.8	36.30.0	✓	✓	001		151		✓					BT # 156
47		3.24.7	3.26.4	3.26.0	✓	✓	3538 W 247		005	244	✓					BT # 157
28		36.43.0	36.39.6	36.40.0					050		✓					BT # 158
12	✓	3.24.7	3.26.5	3.25.9					004	244	✓					BT # 159

NAVIGATOR'S FLIGHT RECORD

A/C CMDR	NAV LTJG DEPART		SNR	AIRCRAFT BUINO		TRACK			FROM			TO		DATE	REMARKS
	#1	VLF		#2	TC	DA	TH	GS	WIND DIR/VEL	TAS	ALT	DIST + TOT	DIST REM		
1539	36.43.1	36.40.4	36.40.0	177	2R	179	241	103	244	1000				11 OCT 82	BT # 149
1539	3.12.0	3.13.5	3.13.3	180	2R	182	243	006	243						BT # 150
35718	36.33.1	36.30.4	36.30.0	✓	1R	181	241	086	244	✓					BT # 151
4725	3.11.6	3.13.2	3.13.0	✓	1R	179	245	063	244	✓					BT # 152
36	36.23.2	36.20.3	36.20.0	✓	✓	✓	247	042	✓	✓					BT # 153
14	3.11.5	3.13.1	3.13.0	✓	✓	✓	246	074	246	✓					BT # 154
38	36.13.0	36.10.1	36.09.7	✓	✓	✓	247	042	✓	✓					BT # 155
47	3.11.5	3.12.2	3.13.0	✓	✓	✓	246	074	246	✓					BT # 156
41	36.03.4	36.00.4	36.00.1	✓	✓	✓	247	042	✓	✓					BT # 157
08	3.11.4	3.13.1	3.13.0	✓	✓	✓	246	074	246	✓					BT # 158
43	35.53.1	35.50.1	35.49.7	✓	✓	✓	247	059	✓	✓					BT # 159
39	3.11.4	3.13.1	3.13.0	✓	✓	✓	246	074	246	✓					BT # 160
46	35.42.6	35.40.4	35.40.1	✓	✓	✓	247	059	✓	✓					BT # 161
00	3.11.4	3.12.9	3.13.0	271	1L	272	254	047	245	✓					BT # 162
50			35.36.9					047		✓					BT # 163
00			2.21.0					12		✓					BT # 164
51	35.40.6	35.34.9	35.37.0							✓					BT # 165
45	3.28.3	3.40.3	3.40.0							✓					BT # 166
59	35.41.6	35.37.8	35.37.8	280	1L	281	249	059	246	✓					BT # 167
11	4.16.3	4.18.1	4.18.0							✓					BT # 168
304	35.40.5	35.26.5	35.26.5							✓					BT # 169
54	4.44.1	4.46.6	4.45.8							✓					BT # 170
67	35.46.8	35.42.0	35.42.8	010			270	045	273	✓					BT # 171
11	4.41.4	4.44.6	4.43.1							✓					BT # 172
08	35.50.1	35	35.46.1							✓					BT # 173
16	4.41.4	4	4.42.1							✓					BT # 174

NAVIGATION  
ERRORS

VLF 1.5  
LITMEL 80 100  
LITMEL 1.0 TONE

PHASES 4-10 (after Manuela updates)  
set at ~ 06 PM from Unit  
add. ^ .6 to LOG6.

NAVIGATOR'S FLIGHT RECORD

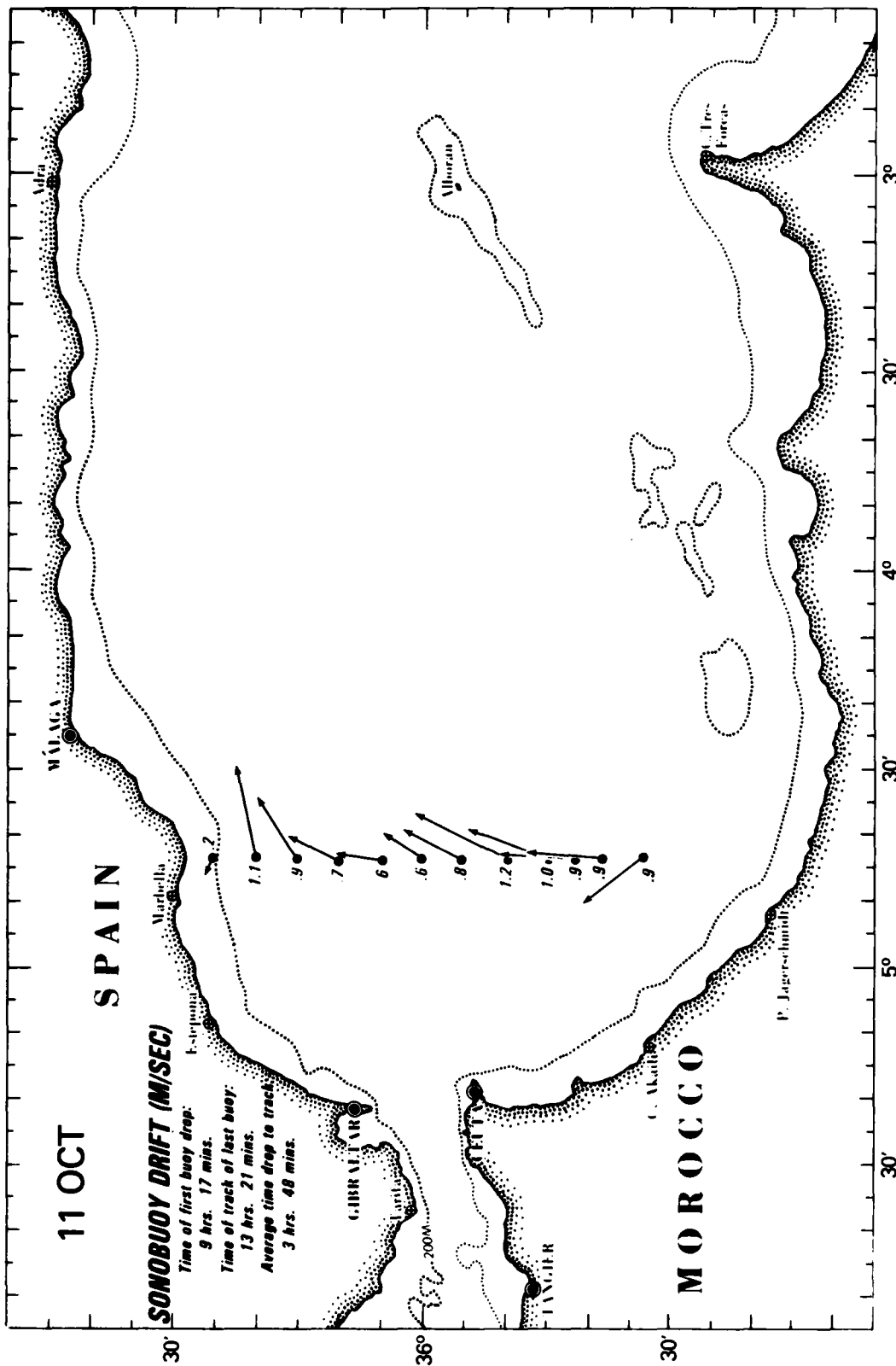
A/C CMDR	NAV	VLF	VLF #2	SNR	TC	DA	TH	GS	WIND DIR/VEL	TRACK			ETA ATA	REMARKS
										TAS	ALT	DIST + TOT		
TIME	N/S E/W	#1	#2							FROM	TO	DATE	OF	
1309	N	35.532	35.483	35.491										
1322	W	4.293	4.424	4.410										
11		35.594	35.546	35.552	625			219	060	272	V	600		SE#4
22		4.383	4.402	4.400					280		V			SE#5
12		36.026	35.583	35.587					1		V			SE#6
10		4.295	4.409	4.413							V			SE#7
13		36.064	36.017	36.023							V			SE#8
22		4.407	4.426	4.425					070		V			SE#9
14		36.121	36.075	36.079					5		V			SE#10
55		4.421	4.438	4.438							V			SE#11
16		36.174	36.123	36.132							V			SE#12
28		4.401	4.430	4.418							V			SE#13
17		36.219	36.168	36.177					150		V			SE#14
52		4.267	4.399	4.385					5		V			SE#15
18		36.257	36.207	36.215							V			SE#16
58		4.350	4.373	4.368							V			SE#17
21		36.305	36.260	36.262					113		V			SE#18
19		4.431	4.451	4.450					10		V			SE#19
23											V			SE#20
20		4.501	4.527	4.521							V	1000'		SE#21
25		36.244	36.202	36.200	180	12	179	247	49	244	V	1000'		SE#22
22		4.550	4.573	4.570					5		V			SE#23
27		36.145	36.101	36.099							V			SE#24
48		4.549	4.573	4.570							V			SE#25
20		36.046	36.001	36.000			180	251	011		V			SE#26
15		4.548	4.575	4.570					7		V			SE#27

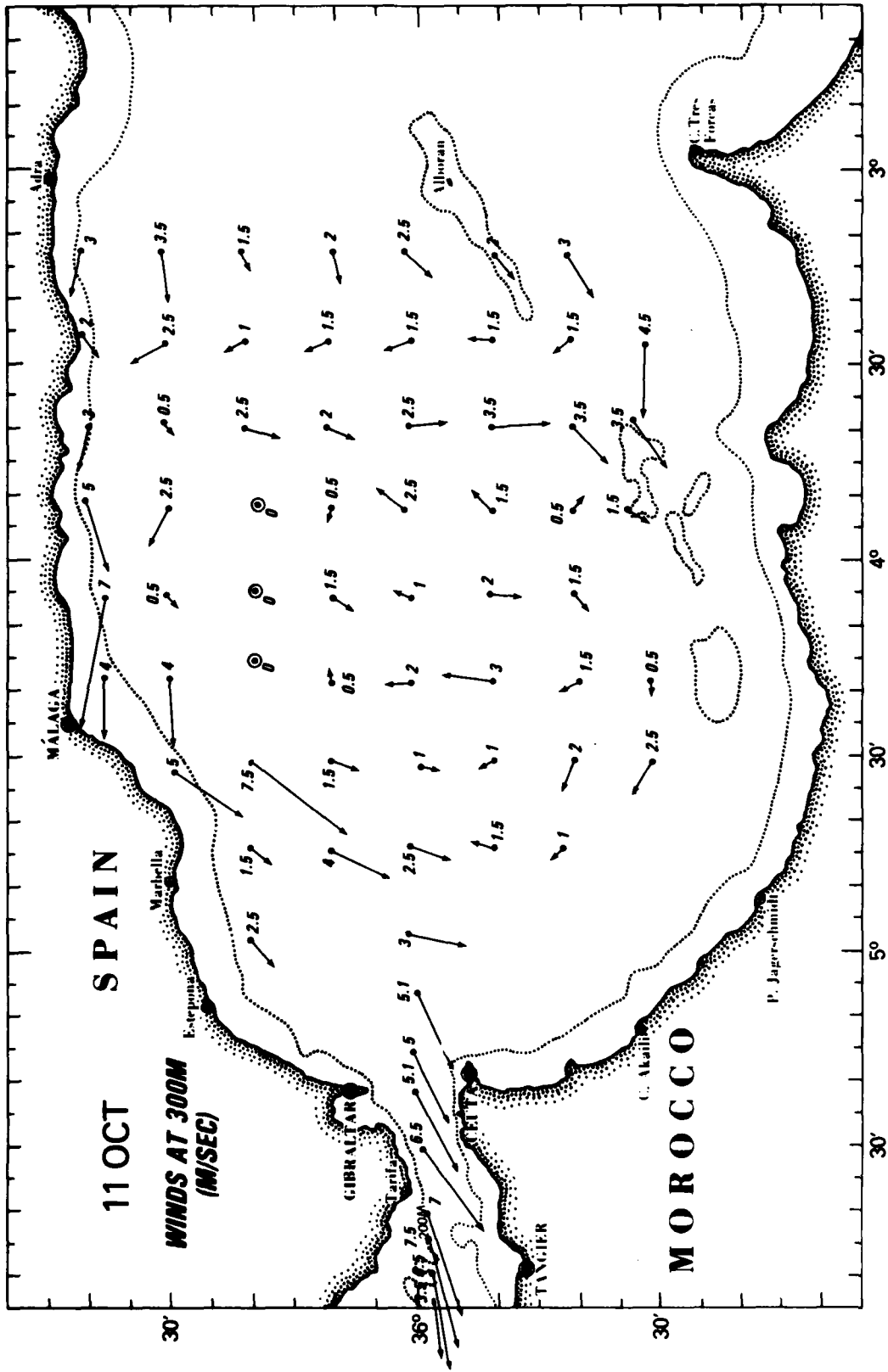
NAVIGATOR'S FLIGHT RECORD

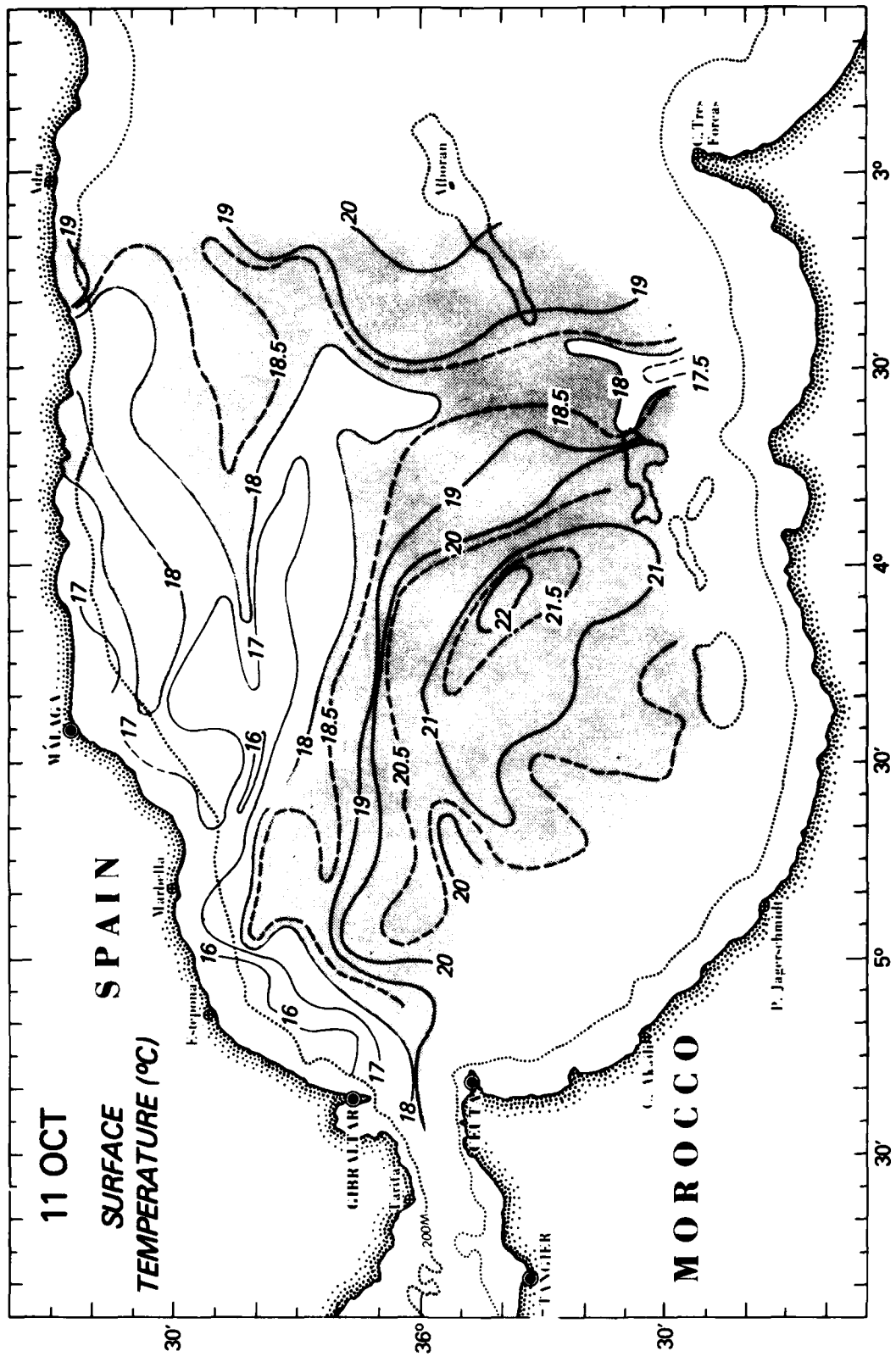
A/C CNDR LDLW	N/S E/W	TIME	NAV LEG DEPARTED		SNR	MIR		KERRLINE	AIRCRAFT BUIND				TRACK				DATE	REMARKS
			#1	VLF		#2	MIR		TC	DA	TH	GS	WIND DIR/VEL	TAS	ALT	DIST +TOT		
332	N	26-044	25-59.9	507.4	25-59.7	273	11	274	251	084	244	1,000'					ETA#160	
36	W	5-044	5-07.4	5-06.7						11							ETA#161	
37		36-047	35-59.9	36-00.0	36-00.0	276	22	272	252	066	246	V					ETA#162	
17		5-13.1	5-16.6	5-15.4						10							ETA#163	
35		36-043	35-59.4	35-59.5	35-59.5	260	11	261	256	065	V	V					ETA#164	
31		5-19.6	5-23.6	5-22.0						11							ETA#165	
37		26-03.0	25-58.2	25-58.3	25-58.3	250	11	259	258	088	V	V					ETA#166	
08		5-27.8	5-31.7	5-29.2						13							ETA#167	
38		26-01.5	25-58.7	25-56.5	25-56.5	263	0	263	259	074	V	V					ETA#168	
58		5-37.2	5-41.2	5-41.1						14							ETA#169	
40			35-56.2	35-56.1	35-56.1	269	11	270	260	080	V	V					ETA#170	
39			5-49.0	5-47.8						15							ETA#171	
41		26-00.9	25-56.3	25-56.0	25-56.0	270	0	270	261	086	246	V					ETA#172	
15		5-49.3	5-53.2	5-51.9						13							ETA#173	
✓ 12		26-00.9	25-56.4	25-56.0	25-56.0	✓	0	✓	260	084	251	V					ETA#174	
22		5-55.3	5-59.5	5-57.9						077							ETA#175	
1361		36-01.0	25-56.3	25-56.0	25-56.0												ETA#176	
00		6-40.9	6-44.6	6-42.0													ETA#177	
1353		26-06.7	26-02.2	26-01.7													ETA#178	
		6-46.7	6-50.2	6-49.5													ETA#179	
1357		36-22.2	36-17.0	36-17.1													ETA#180	
		6-55.7	7-00.0	6-58.6													ETA#181	
1419																	ETA#182	
																	ETA#183	
																	ETA#184	
																	ETA#185	
																	ETA#186	
																	ETA#187	
																	ETA#188	
																	ETA#189	
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																	ETA#198	
																	ETA#199	
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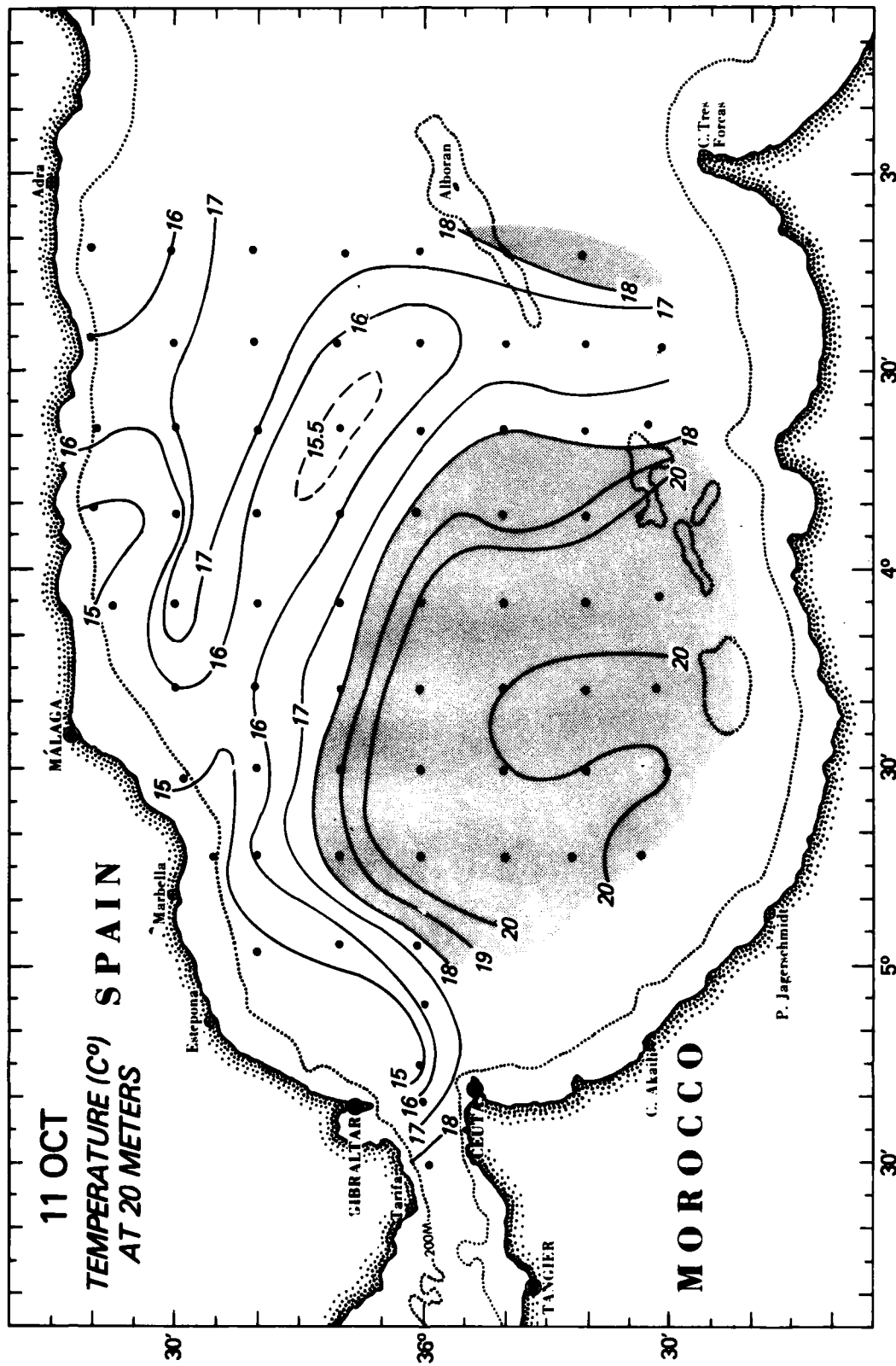
OCEANVIEW EIGHT 3780/1 (REV 81)

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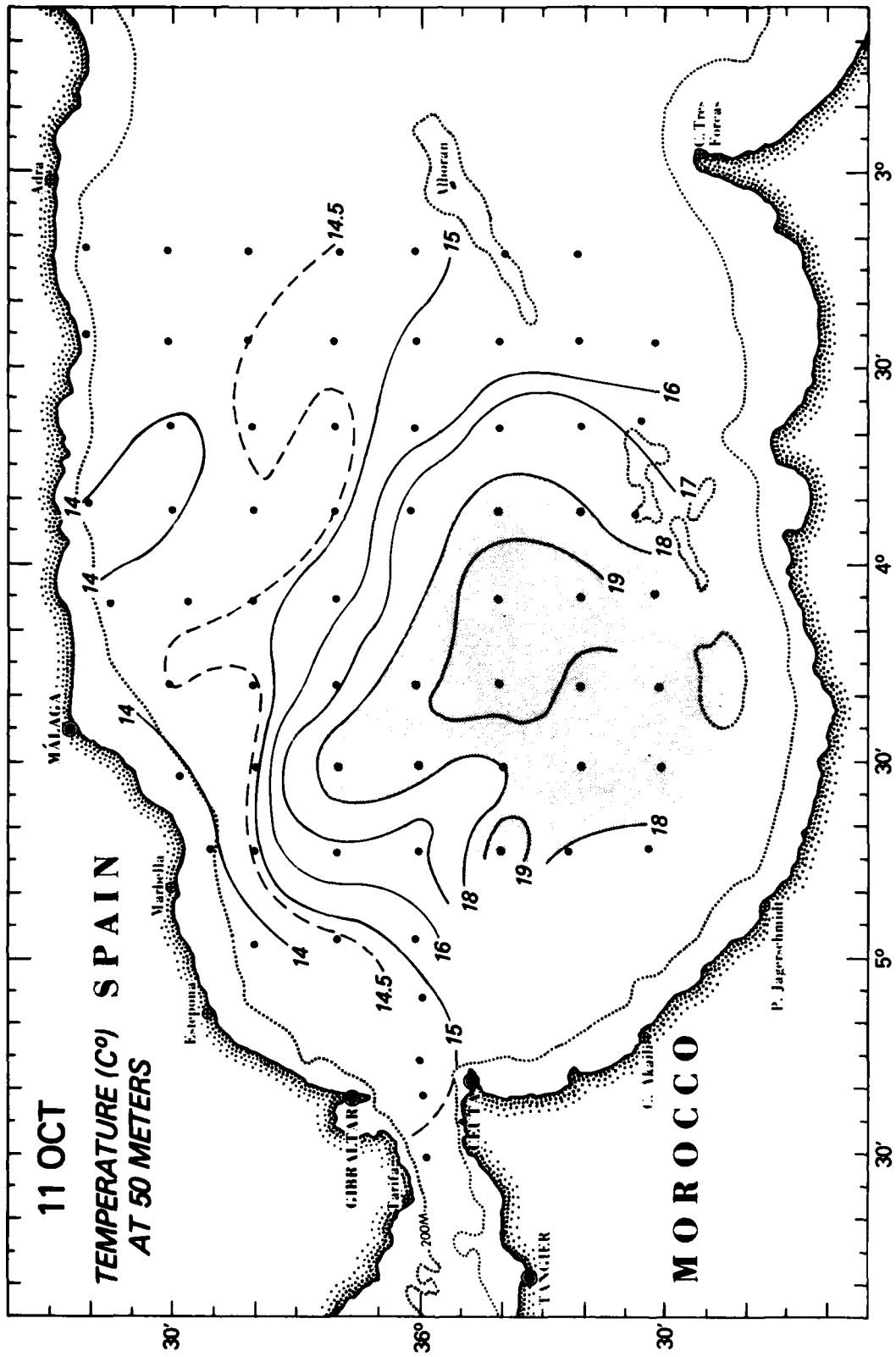


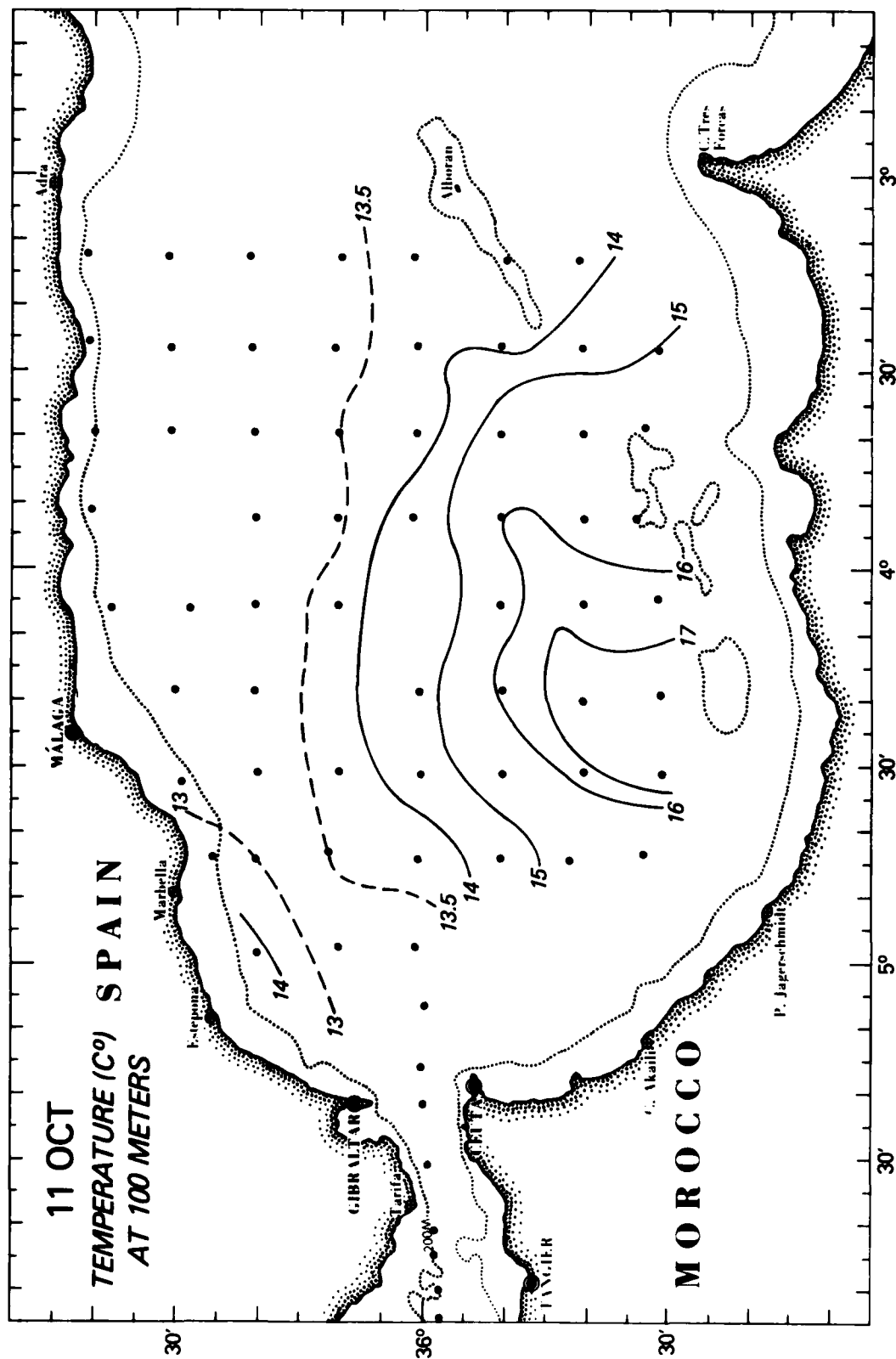


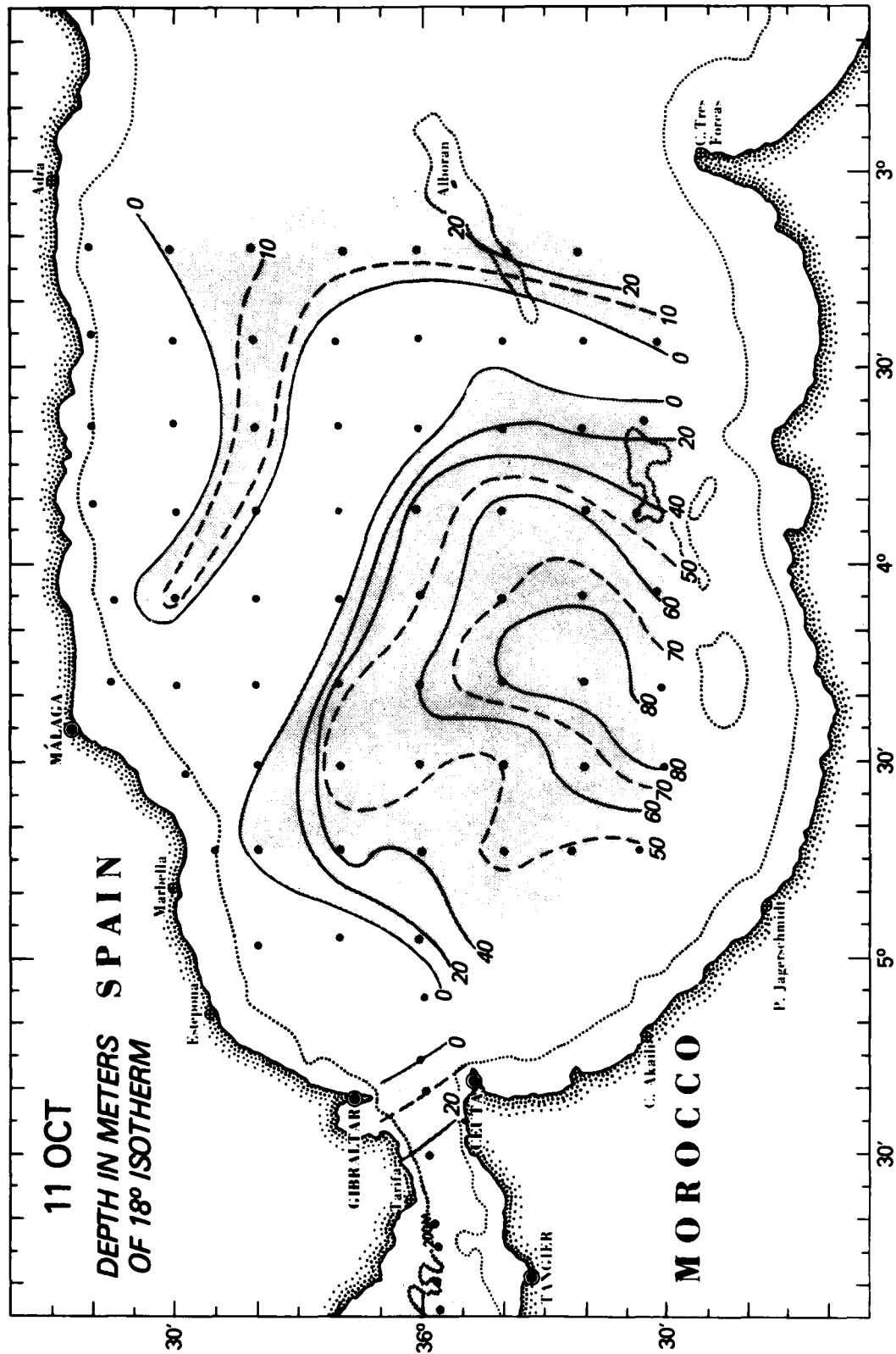












11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60 61 62 63 64 65 66 67 68 69 70 71 72 73 74 75 76 77 78 79 80 81 82 83 84 85 86 87 88 89 90 91 92 93 94 95 96 97 98 99 100

13 OCTOBER 1982

NAVIGATOR'S FLIGHT RECORD

A/C CMDR	NAV LTJG DEPART	SNR	AIRCRAFT BUNO	TRACK	FROM	TO	DATE	OF						
LCDR HARTZELL	ENS WIZITE	MIR KEBLZJG	149667	OS-183 #4	LEIRT	LEIRT	13 OCT 82	1						
TIME	VLF	#	TC	DA	TH	GS	WIND DIR/VEL	TAS	ALT	DIST +TOT	DIST REM	ETE	ETA	REMARKS
0828		2												INS ACCEPT
0840														ENOG START
0844														TAXI
0854														TOFF /LEIRT
0859	36.28.2	36.28.5	36.29.2	32	225	254	273	282	6000					NAVL
0910	6.36.6	6.37.6	6.36.2	32	225	252	016	268	DV					PSIT
0914	36.08.4	36.07.9	36.08.4				271							PSIT
0915	7.06.5	7.07.8	7.06.8	32	225	252	303	268						PSIT
0917	35.57.6	35.57.8	35.57.5				012	243	1000					PSIT
0917	6.45.6	6.45.2	6.46.0	4	147	251	308	254	1000					PSIT
0921	35.56.0	35.55.7	35.56.1				009	251	1000					PSIT
0921	6.08.9	6.09.5	6.09.3	20	088	259	282	251	1000					PSIT
0926	35.56.2	35.55.8	35.56.3				014	251	1000					PSIT
0926	5.43.0	5.43.4	5.43.4	12	089	262	257	251	1000					PSIT
0931	36.00.9	36.00.2	36.01.0				031	251	1000					PSIT
0931	5.16.2	5.16.3	5.16.6	40	041	264								PSIT
0931	26.20.6	26.20.1	26.20.8											WRT (UPPER)
0931	4.54.6	4.54.1	4.53.1											WHERE PIER
0940	26.26.7	26.26.9	26.26.2	63	169	250	278	244	1000					TRMPT WARRA
0940	4.46.9	4.45.9	4.46.9	62	79	250	22							LINE
0942	26.19.0	26.19.0	26.19.0	165	72	260	240	252						POST
0946	4.44.4	4.42.4	4.44.2											

OCEANDEVROM EIGHT 3760/1 (REV 81)

NAVIGATOR'S FLIGHT RECORD

A/C CHDR L.C.DR	A/C NO	NAV/TSG OPS	DOP/RT SITE	SNR	AIRCRAFT BUNO 149667		TRACK 05-1-83 #4		FROM LENT		TO LENT		DATE 11 OCT 82	REMARKS		
					TH	GS	WIND DIR/VEL	TAS	ALT	DIST +TOT	DIST REM	ETE			ETA ATA	
TIME	NW E/W	#	VLF	#	TC	DA	TH	GS	WIND DIR/VEL	TAS	ALT	DIST +TOT	DIST REM	ETE	ETA ATA	REMARKS
0944		36-11.1	36-11.5	36-11.1	165	BL	172	263		251	1,000					POSIT
10		4-414	4-41.0	4-41.5	V	72	172	269	205 34	255	V					POSIT
46		36-03.3	36-03.6	36-03.2	V	V	V	V	288 37	254	V					POSIT
00		4-28.9	4-28.1	4-28.8	V	V	V	V	290 26	253	V					POSIT
48				35-51.1	V	V	V	V	276 20	186	V					POSIT
00				4-25.7	V	V	V	V	277 20	185	V					90/270
50				35-44.9	346	9R	337	169	276 20	186	V					SEMI
14				4-32.6	345	V	326	167	277 20	185	V					POS. LHR MKRS
51				35-41.1	V	7R	338	V	275 23	182	V					SEMI
10				4-31.1	V	9R	335	171	278 21	190	V					SEMI
57		35-42.1	35-43.3	35-42.8	344	9R	335	171	278 21	190	V					SEMI
42		4-21.8	4-21.1	4-22.0	345	V	326	167	277 20	185	V					SEMI
58		35-46.4	35-46.6	35-46.1	V	V	V	V	275 23	182	V					SEMI
55		4-22.9	4-22.2	4-23.0	V	7R	338	V	275 23	182	V					SEMI
59		35-49.0	35-49.2	35-48.7	V	7R	338	V	275 23	182	V					SEMI
53		4-23.7	4-23.1	4-22.9	V	9R	335	171	278 21	190	V					SEMI
1000		35-51.9	35-52.1	35-51.6	344	9R	335	171	278 21	190	V					SEMI
57		4-31.7	4-31.1	4-31.9	345	V	324	168	273 28	182	V					SEMI
02		35-54.9	35-55.2	35-54.6	V	V	V	V	275 23	182	V					SEMI
02		4-25.7	4-25.3	4-25.9	V	V	V	V	275 23	182	V					SEMI
03		35-57.8	35-57.9	35-57.5	V	V	V	V	275 23	182	V					SEMI
08		4-26.7	4-26.2	4-26.9	V	V	V	V	275 23	182	V					SEMI
04		26-00.6	26-00.6	26-00.2	344	V	335	V	273 27	182	V					SEMI
09		4-37.7	4-37.1	4-37.8	V	V	V	V	273 27	182	V					SEMI
05		26-02.6	26-02.7	26-03.2	V	V	V	V	273 27	182	V					SEMI
15		4-28.7	4-28.2	4-28.8	V	V	V	167	273 27	184	V					SEMI

NAVIGATOR'S FLIGHT RECORD

A/C CMDR LCDR HARTILL	NAV LTG PORT EOSTOFTS	NAV LTG DEPT #2	SNR #2	MORNING		AIRCRAFT BUINO 149667		TRACK OS-1-83 #4				FROM LETT		TO LETT		DATE 13 OCT 82	REMARKS
				TC	DA	TH	GS	WIND DIR/VEL	TAS	ALT	DIST +TOT	DIST REM	ETE	ETA ATA			
1006	26-06.4	26-06.5	26-06.0	344	10K	324	167	275	184	1,000'							SER #9
118	4-39.6	4-39.1	4-39.8	V	11R	333	V	280	V	V							SER #10
07	26-09.3	26-09.4	26-08.9	V	10R	321	165	269	180	V							SER #11
22	4-40.6	4-40.2	4-40.8	V	V	V	171	268	183	V							SER #12
08	26-12.2	26-12.1	26-11.8	V	V	V	172	255	182	V							SER #13
27	4-41.6	4-41.2	4-41.8	V	V	V	175	261	184	V							SER #14
09	26-15.1	26-15.1	26-14.7	V	V	V	178	268	180	V							SER #15
22	4-42.6	4-42.3	4-42.8	V	V	V	178	268	180	V							NOO SER #16
10	26-18.1	26-17.9	26-17.7	V	V	V	175	261	184	V							AH
27	4-43.6	4-43.2	4-43.8	V	V	V	178	268	180	V							SER #16
11	26-21.0	26-20.8	26-20.6	V	9R	335	V	268	180	V							POCIT
39	4-44.6	4-44.0	4-44.8	V	7R	357	V	268	180	V							SER #16
17	26-23.8	26-23.6	26-23.4	V	V	V	V	268	180	V							POCIT
28	4-45.5	4-44.9	4-45.7	V	V	V	V	268	180	V							POCIT
14				V	V	V	V			V							POCIT
00				V	V	V	V			V							POCIT
19	26-26.2	26-26.1	26-25.8	164	7L	171	278	256	224	200'							POCIT
11	4-46.7	4-47.3	4-47.0	V	8L	172	284	254	241	V							POCIT
21			26-19.1	V	7L	172	284	254	241	V							POCIT
00			4-44.3	V	7L	172	284	254	241	V							POCIT
23	26-12.0	26-11.8	26-11.5	165	7L	172	284	254	241	V							POCIT
00	4-41.3	4-41.7	4-41.7	165	V	V	245	277	237	V							POCIT
25	26-04.3	26-04.1	26-03.7	165	V	V	245	277	237	V							POCIT
00	4-38.6	4-39.0	4-39.0	165	V	V	245	277	237	V							POCIT
27	25-36.3	25-36.1	25-35.7	165	V	V	250	289	237	V							POCIT
00	4-35.8	4-36.5	4-36.3	165	V	V	250	289	237	V							POCIT

OCEANDEVIRON EIGHT 3760/1 (REV 81)

NAVIGATOR'S FLIGHT RECORD

A/C CMDR	NAV LTJG	DORR	SNR	REARLINEG		AIRCRAFT BUNO		TRACK		FROM		TO		DATE	# OF	
				TC	DA	TH	GS	WIND DIR/VEL	TAS	ALT	DIST + TOT	DIST REM	ETE			ETA ATA
LEAD	TRAIL	#1	VLF	#2	TC	DA	TH	GS	WIND DIR/VEL	TAS	ALT	DIST + TOT	DIST REM	ETE	ETA ATA	REMARKS
1029	N	35481	35479	35475	164	5L	169	250	200/32	238	200'					POEIT
00	W	4330	4325	4325		/	/	/	/	/	/					POEIT
20		35423	35422	35417		/	/	/	/	/	/					POEIT
17		4311	4315	4315		/	/	/	/	/	/					POEIT
47		35431	35427	35422	347	1R	346	250	262/06	254	10,000'					POEIT
47		4317	4321	4323		/	/	/	/	/	/					POEIT
50		35519	35517	35517	345	2R	342	244	240/9	247						POEIT
00		4344	4346	4349		/	/	/	/	/	/					POEIT
52		35597	35596	35596	344	3R	341	242	245/10	246						POEIT
00		4370	4373	4376		/	/	/	/	/	/					POEIT
54		36075	36074	36074		/	/	/	/	/	/					POEIT
00		4297	4399	4403		/	/	/	/	/	/					POEIT
56		36	36	36.152		/	/	/	/	/	/					POEIT
00		4	4	4.430		/	/	/	/	/	/					POEIT
56		26168	26165	26168		/	/	/	/	/	/					X FRONT
00		4429	4430	4435		/	/	/	/	/	/					POEIT
58		36223	36228	36223		/	/	/	/	/	/					POEIT
00		4451	4452	4457		/	/	/	/	/	/					POEIT
59		36276	36271	36276	345	3R	342	251	258/14	254						POEIT
07		4466	4466	4473		/	/	/	/	/	/					POEIT
1105		36254	36250	36253	164	6R	130	245	267/27	245						POEIT
07		4477	4476	4484		/	/	/	/	/	/					POEIT
07		36171	36165	36169	164	7L	171	220	267/30	236						POEIT
40		4447	4447	4455		/	/	/	/	/	/					POEIT
00		36085	36080	36082	165	6L	171	247	271/026	255						POEIT
00		4416	4418	4425		/	/	/	/	/	/					POEIT

OCEANDEVRON EIGHT 3760/1 (REV 81)



NAVIGATOR'S FLIGHT RECORD

A/C CMDR	CDR	HARTRELL	NAVLTG BOMBR	FOSS WHITE	SNR	AIRCRAFT BUND				TRACK				DATE	REMARKS		
						TC	DA	TH	GS	WIND DIR/VEL	TAS	ALT	DIST + TOT			FROM	TO
1112	N	36.000	35.58.4	35.57.6	#2	165	6L	171	247	273	241	10000	#4	CEPT	CEPT	13 OCT 63	5 OF
12	W	4.38.6	4.38.4	4.38.5						277							POSIT
1108					THE												CAT E F 107
14		35.50.4	35.49.8	35.49.9						289							
34		4.35.3	4.35.2	4.36.2		165	5L	170	248	274	243	10000					POSIT
16		35.42.6	35.42.0	35.42.1						277							AIM
32		4.32.6	4.32.5	4.33.5			✓	170	241	223	244	✓					POSIT
24		35.43.3	35.42.5	35.42.5						256							
31		4.28.7	4.28.5	4.29.8		344	2R	321	237	608	238	✓					POSIT
26		35.49.3	35.48.5	35.48.5			✓			262							
06		4.30.7	4.30.6	4.31.9				✓	233	007	240	✓					POSIT
28		35.57.5	35.56.8	35.56.6			✓			257							
30		4.33.4	4.33.4	4.34.1				3R	234	011	✓						POSIT
30		36.05.9	36.04.9	36.04.8						254	243	✓					
24		4.26.2	4.26.1	4.27.4		344	✓		232	011	268	✓					POSIT
32		36.11.9	36.10.9	36.10.6						250							
00		4.38.3	4.38.2	4.39.4		345		4R	240	015	245	✓					POSIT
34		36.20.3	36.18.7	36.18.6						250							
02		4.41.1	4.40.9	4.42.2			✓	3R	236	013	239	✓					POSIT
35		36.27.9	36.25.7	36.25.7						244							A/M
59		4.43.7	4.43.4	4.44.6		344		4R	241	015	244	✓					POSIT
28		36.33.9	36.30.4	36.30.5													NOT PIERCED
50		4.51.6	4.51.6	4.52.2													36.30.2
✓42		26.22.4	26.17.1	26.16.9	164												4.52.3
55V		4.48.6	4.42.2	4.42.6													TO 5. ENP MINE

OCEANDEV FROM EIGHT 3780/1 (REV 81)

ASSEMBLY MAN  
KID

OK

NAVIGATOR'S FLIGHT RECORD

A/C CMDR LEON WARTRELL	NAV LOG		BOFART		SMR #2	MIL KENCING		AIRCRAFT BUNO 149663	TRACK 05-1-63 #4		FROM LENT	TO LENT	DATE 13 OCT 63	OF 6		
	#1	VLF	ENDS	DOTS		TC	DA		TH	GS					WIND DIRVEL	TAS
1106N	25 549	25 44.2	25 41.2	25 41.2	010			196	291							MOT SB#1
102W	4 34.2	4 30.7	4 31.8	4 31.8	225				276							125 #110 6800 !
56	25 580	25 474	25 47.3	25 47.3					28							26 #2
59	4 23.6	4 29.9	4 31.1	4 31.1					283							
57	26 00.5	25 50.2	25 49.8	25 49.8	210				282							28 #3
56	4 25.0	4 31.0	4 32.3	4 32.3					271							28 #4
58	26 02.6	25 53.3	25 53.1	25 53.1	014			206	20							
59	4 35.0	4 30.9	4 32.2	4 32.2					20							
V59	26 07.0	25 56.5	25 56.4	25 56.4	356			196	267							28 #5
59	4 35.3	4 31.0	4 32.3	4 32.3					267							
1201	26 10.3	25 59.9	25 59.7	25 59.7	256			199	264							28 #6
00	4 26.0	4 31.5	4 32.9	4 32.9					264							
01	26 13.0	26 02.9	26 02.5	26 02.5	350			198	26							28 #67
55	4 37.0	4 32.3	4 33.8	4 33.8					26							
02	26 15.6	26 05.6	26 05.2	26 05.2	329			189	255							28 #78
55	4 29.3	4 34.4	4 35.9	4 35.9					26							
03	26 18.0	26 08.0	26 07.7	26 07.7				206								28 #89
46	4 40.5	4 35.6	4 37.1	4 37.1												
04	26 21.0	26 11.1	26 10.8	26 10.8					246							28 #910
40	4 41.4	4 36.4	4 37.9	4 37.9					35							
05	26 24.0	26 14.0	26 12.9	26 12.9	012			249								28 #1011
36	4 41.2	4 36.3	4 37.5	4 37.5												
06	26 26.9	26 16.6	26 16.7	26 16.7	356				212							28 #1112
23	4 41.2	4 36.6	4 37.9	4 37.9				213	213							
07	26 27.3	26 19.6	26 19.5	26 19.5												28 #1213
24	4 43.4	4 38.0	4 39.4	4 39.4												

OCEANDEVRON EIGHT 37601 (REV 81)

NAVIGATOR'S FLIGHT RECORD

A/C CMDR LESLIE WANTSZELC	NAV 556 DOPPLRT ENS WHITE	SNR MR	FERC 106	AIRCRAFT BUNO 149662				TRACK CS-1-83 #4				DATE 13 OCT 83	Z OF		
				TC	DA	TH	GS	WIND DIR/VEL	TAS	ALT	DIST TOT			FROM LEAT	TO LEAT
TIME	#1	VLF	#2	TC	DA	TH	GS	WIND DIR/VEL	TAS	ALT	DIST TOT	FROM LEAT	TO LEAT	ETA ATA	REMARKS
1208	26.213	26.215	26.216	271	6R	765	169	241	202	500					20#1214
1495	4.418	4.427	4.436					34							
09	36.341	36.244	36.245	007				33							20#1415
41	4.485	4.429	4.441					34							
10	36.361	36.267	36.266												20#1516
20	4.490	4.421	4.445												AH C-1
15	26.296	36.299	36.206												WOT PIERL UPDATING NAV UNIT
40	4.503	4.518	4.523							500					26.202/4.52.3
17	36.255	36.259	36.255	162	7L	169	240	270	235						1-OSIT
30	4.475	4.465	4.468					21							
19	36.17.6	36.17.6	36.17.6	164	7L	171	247	271	245						POSIT
50	4.45.2	4.43.5	4.43.8					031	245						
12:18															2 Late Entry
21	36.08.8	36.09.1	36.08.9												
40	4.43.1	4.40.6	4.40.8	164	7L	171	245	271	240						POSIT
23	36.01.3	36.01.5	36.01.3					268							
40	4.41.3	4.38.1	4.38.2	165	7L	172	240	268	240						POSIT
25	35.53.3	35.53.7	35.53.5					267							
42	4.39.4	4.35.4	4.35.5	164	8L	172	240	270	238						POSIT
27	35.46.8	35.42.0	35.42.0					274							
24	4.37.9	4.33.1	4.33.3					231	234						POSIT
28	35.41.0	35.41.5	35.41.3					271							A/H
55	4.36.5	4.31.3	4.31.4					232	235						POSIT
35	35.39.9	35.42.0	35.42.0					262							
54	4.40.1	4.32.7	4.32.9	345	5R	340	230	262	237						POSIT

NAVIGATOR'S FLIGHT RECORD

A/C CMDR LCDR HARTZELL	NAV LTJF WOPART EPOS WHITE	SNR		MARELLIANG		AIRCRAFT BUNO 149663			TRACK 05-1-83 #4			FROM LE RT		TO LE RT		DATE 13 OCT 83	OF 8	REMARKS	
		U/LF	H2	TC	DA	TH	GS	WIND DIR/VEL	TAS	ALT	DIST +TOT	DIST REM	ETE	ETA ATA					
1238	U 35.48.8	35.51.7	35.51.7																
32	W 4.43.9	4.36.0	4.36.2	744	5R	339	232	244	235	5000								POSIT	
40		35.54.1	35.52.5																
10		4.46.2	4.38.1																POSIT
42		36.01.0	36.05.1																
10		4.44.0	4.40.7																POSIT
44		36.18.4	36.13.0																
17		4.51.9	4.43.0																POSIT
46		36.19.3	36.24.5																
10		4.56.0	4.47.4																A/H
50		36.18.5	36.23.9																POSIT
56		4.51.3	4.43.6	180	8L	188	235	276	231										POSIT
52		36.14.6	36.17.2																
39		4.50.0	4.42.2	166	7L	173	245	271	239										POSIT
54		36.05.1	36.10.2																
20		4.47.5	4.39.8	165	7L	172	238	279	231										POSIT
56		35.56.9	36.02.6																
39		4.44.2	4.37.0	164	7L	171	238	276	232										POSIT
58		35.49.6	35.53.2																
36		4.41.1	4.34.4																POSIT
1300		35.43.1	35.48.3																
12		4.28.3	4.22.1	165	8L	173	234	272	230										POSIT
		35.36.8	35.42.3																A/H
		4.35.6	4.30.0																POSIT
14		35.55.8	35.43.5																
06		4.30.8	4.29.9	344	5R	339	233	261	240	5000									POSIT

NAVIGATOR'S FLIGHT RECORD

A/C CHDR CPT. HANDELL	NAV LTG DOPRT E.O.S. WHITE	SNR	AIRCRAFT BUINO 149662			TRACK 05-1-83 #4			FROM LENT		TO LENT		DATE 13 OCT 82	REMARKS
			TC	DA	TH	GS	WIND DIR/VEL	TAS	ALT	DIST +TOT	DIST REM	ETA ATA		
TIME E/W	VLF	#2	TC	DA	TH	GS	WIND DIR/VEL	TAS	ALT	DIST +TOT	DIST REM	ETA ATA	REMARKS	
13 10	35.43.5	35.51.7	344	5R	339	329	260	236	5000				POSIT	
11	4.32.8	4.33.5	344	5R	339	220	258	230	✓				POSIT	
18	35.49.5	35.57.9	344	5R	339	223	266	232	✓				POSIT	
06	4.34.4	4.35.5	344	5R	339	223	266	232	✓				POSIT	
20	35.58.7	36.05.8	344	5R	339	223	266	232	✓				POSIT	
13	4.36.4	4.37.4	344	5R	339	223	266	232	✓				POSIT	
22	36.03.1	36.12.6	✓	✓	✓	224	267	233	✓				POSIT	
11	4.38.3	4.40.7	✓	✓	✓	224	267	233	✓				POSIT	
24	36.09.9	36.19.8	✓	✓	✓	215	283	224	✓				POSIT	
16	4.41.4	4.43.2	✓	4R	340	215	016	224	✓				POSIT	
✓ 25	36.16.5	36.26.7	155	5C	160	249	270	236	✓				POSIT	
00	4.42.5	4.45.6	155	5C	160	249	018	236	✓				A/H	
1332			FMS	#1		WATER			4000	INP#4			✓	
33	36.16.5	36.16.3					272							
01	4.43.7	4.43.4	164	6L	170	257	033	246	4000				POSIT	
35	36.08.7	36.08.6					287							
09	4.39.9	4.40.7	164	7C	171	264	033	251	✓				POSIT	
36	36.01.3	36.01.3					280							
39	4.37.6	4.38.2	165	7L	172	260	033	251	✓				POSIT	
38	35.53.5	35.53.7					270							
31	4.35.1	4.35.6	164	8L	172	256	036	254	✓				POSIT	
41	35.42.1	35.42.1		✓	✓		266							
17	4.31.1	4.31.7	✓	✓	✓		033	254	✓				A/H	
✓ 49	35.42.0	35.42.2	346	7K	329	247	206	251	✓				POSIT	
42	4.31.3	4.31.9	346	7K	329	247	32	251	3000				POSIT	

OCEANDEVON EIGHT 3780/1 (REV 81)

NAVIGATOR'S FLIGHT RECORD

A/C CMDR LDO MARTRELL	N/S EM	NAV LTJG DONAT ENDS WAFETC	SNR FJ	AIRCRAFT BUNO 149667			TRACK OS-1-83 BY			FROM LEAT			TO LEAT			DATE 12 OCT 82	PAGE 12 OF
				TC	DA	TH	GS	WIND DIR/VEL	TAS	ALT	DIST +TOT	DIST REM	ETE	ETA ATA	REMARKS		
1351	W	35494	35494	7R	345	338	230	264	245	3000							
130	W	4328	4342	BR	V	337	234	262	244	V							POSIT
53		35561	35563														POSIT
20		4261	4365														POSIT
54		26022	26024	V	344	336	235	270	249	V							POSIT
30		4383	4386														POSIT
56		36027	36081	7R	V	337	233	271	247	V							POSIT
20		4401	4405														POSIT
58		26133	26137	BR	V	336	230	278	250	V							POSIT
00		4420	4424														POSIT
1401	30	26188	26191	4R	V	340	278	287	242	V							POSIT
30		4439	4443														POSIT
1401	30	36254	36260	V	V	/	/	280		V							POSIT
06		4462	4467														POSIT
32		26301	26313														POSIT
07		4529	4519														POSIT
46		36275	36271	BL	152	160	232	271	224	V							POSIT
09		4467	4475														POSIT
16		26217	26215	BL	164	173	246	270	238	V							POSIT
09		4447	4451														POSIT
10		26157	26155														POSIT
45		4427	4430														POSIT
13		26101	26098	V	V	172	250	279	243	V							POSIT
08		4407	4411														POSIT
13		26041	26040	9L	V	173	282	282		V							POSIT
40	V	4385	4391		V	V	257	287	245	V							POSIT

NOT PIETD  
36202/4522  
APM #1  
PM #2  
PM #3  
PM #4  
PM #5

NAVIGATOR'S FLIGHT RECORD

A/C CMDR		NAV CRB DEPART		SNR		AIRCRAFT BUINO				TRACK				FROM		TO		DATE	REMARKS
TIME	N/S E/W	ULF	#2	TC	DA	TH	GS	WIND DIR/VEL	TAS	ALT	DIST + TOT	DIST REM	ETE	ETA	ATA	DATE	REMARKS		
1451	N	35.587	35.584	164	8L	172	259	281 / 40	247	2000						13 Oct 62	PM #6		
15	W	4.367	4.372	V	V	V	257	289 / 28	246	V							PM #7		
16		35.529	35.526	V	V	V	254	278 / 27	245	V							PM #8		
17		4.347	4.352	V	V	V	249	278 / 27	241	V							PM #9		
17		35.461	35.456	V	V	V	249	278 / 27	241	V							AM		
18		4.324	4.329	V	V	V	249	278 / 27	240	V							Posit		
19		35.406	35.403	348	5R	343	229	276 / 22	240	1150							Posit		
19		4.304	4.310	348	6R	329	228	273 / 27	243	V							Posit		
20			35.346	345	7R	338	229	265 / 27	240	V							Posit		
21			4.294	V	V	V	229	267 / 30	244	V							Posit		
21		35.393	35.390	V	V	V	229	267 / 30	244	V							Posit		
21		4.289	4.307	V	V	V	229	265 / 27	240	V							Posit		
22		35.458	35.454	V	V	V	229	267 / 27	244	V							Posit		
23		4.215	4.328	V	V	V	229	267 / 27	244	V							Posit		
24		25.524	35.520	V	V	V	233	267 / 27	244	V							Posit		
24		4.340	4.350	V	V	V	233	267 / 27	244	V							Posit		
25		35.598	35.594	V	V	V	229	276 / 27	244	V							Posit		
26		4.365	4.375	V	V	V	229	274 / 27	239	V							Posit		
27		36.071	36.067	344	6R	329	226	260 / 27	239	V							Posit		
28		4.390	4.400	V	V	V	226	260 / 27	235	V							Posit		
29		26.125	36.121	V	V	V	225	260 / 27	242	V							Posit		
29		4.408	4.419	V	V	V	225	260 / 27	242	V							Max		
30		26.185	36.182	V	V	V	232	263 / 23	242	V							Posit		
30		4.429	4.440	V	V	V	232	263 / 23	242	V							Ship		
31		36.277	36.270	V	V	V	232	265 / 26	240	V							AM		
32		4.457	4.470	V	V	V	232	265 / 26	240	V							AM		

WOT PIER 1440 (LUS VDT)

NAVIGATOR'S FLIGHT RECORD

A/C CMDR	NAV 1386 DEPART		SNR	AIRCRAFT BU NO		WIND DIR/VEL	TRACK			FROM	TO			DATE	REMARKS				
	TIME	N/S E/W		WF	#2		TH	DA	TC		GS	TH	DA			TC	TAS	ALT	DIST + TOT
1411	W	WF	36.276	36.273	168	9L	159	241	263	240	1000'								BT#168
11	W	WF	4.469	4.476	172	V	163	244	268	241	V								BT#169
42		WF	36.220	36.217	173	V	164	246	271	242	V								BT#170
39		WF	4.445	4.452	172	V	164	246	271	242	V								BT#171
44		WF	26.163	26.159	172	V	164	246	271	242	V								BT#172
86		WF	4.426	4.432	172	V	164	246	271	242	V								BT#173
45		WF	36.104	36.100	172	V	164	246	271	242	V								BT#174
36		WF	4.405	4.411	172	V	164	246	271	242	V								BT#175
47		WF	36.046	36.042	172	V	164	246	271	242	V								BT#176
80		WF	4.385	4.392	172	V	164	246	271	242	V								BT#177
48		WF	35.587	35.583	172	V	164	246	271	242	V								BT#178
29		WF	4.265	4.271	172	V	164	246	271	242	V								BT#179
49		WF	35.529	35.525	172	V	164	246	271	242	V								BT#180
54		WF	4.246	4.252	172	V	164	246	271	242	V								BT#181
51		WF	35.463	35.462	172	V	164	246	271	242	V								BT#182
27		WF	4.224	4.220	172	V	164	246	271	242	V								BT#183
52		WF	35.405	35.400	172	V	164	246	271	242	V								BT#184
59		WF	4.203	4.209	172	V	164	246	271	242	V								BT#185
1000		WF	35.425	35.430	172	V	164	246	271	242	V								BT#186
20		WF	4.314	4.320	172	V	164	246	271	242	V								BT#187
01		WF	35.491	35.487	172	V	164	246	271	242	V								BT#188
55		WF	4.334	4.339	172	V	164	246	271	242	V								BT#189
63		WF	35.549	35.546	172	V	164	246	271	242	V								BT#190
104		WF	4.255	4.259	172	V	164	246	271	242	V								BT#191
105		WF	36.009	36.005	172	V	164	246	271	242	V								BT#192
13		WF	4.277	4.279	172	V	164	246	271	242	V								BT#193



NAVIGATOR'S FLIGHT RECORD

TIME	A/C CMDR	NAV AIRCRAFT		SNR		AIRCRAFT BUNO		TRACK				FROM		TO		DATE	REMARKS
		N/S E/W	WF	#2	TC	DA	TH	GS	WIND DIR/VEL	TAS	ALT	DIST + TOT	DIST REM	ETE	ETA ATA		
1506	N		WF	#2	344	8R	336	221	260	241	800'					13 OCT 82	RTN 181
145	W								33								
08									235	239	✓						RTN 182
18									33								
09									234	241	✓						RTN 183
51									36								
11									249	240	✓						RTN 184
26									37								ALT
14											✓						MOT PIER 2
50																	UT LOW 845
16																	PERIT
26									262	231	500'						
18									42								
00									257	241	✓						PERIT
19									39								
45									265	242	✓						PERIT
21									41								
45									268	240	✓						PERIT
21									41								
45									281	241	✓						PERIT
23									41								
20									290	238	✓						PERIT
25									42								
10									299	238	✓						PERIT
26									40								PERIT
45											✓						PERIT
32																	DTPI MGT
32											✓						SE #1

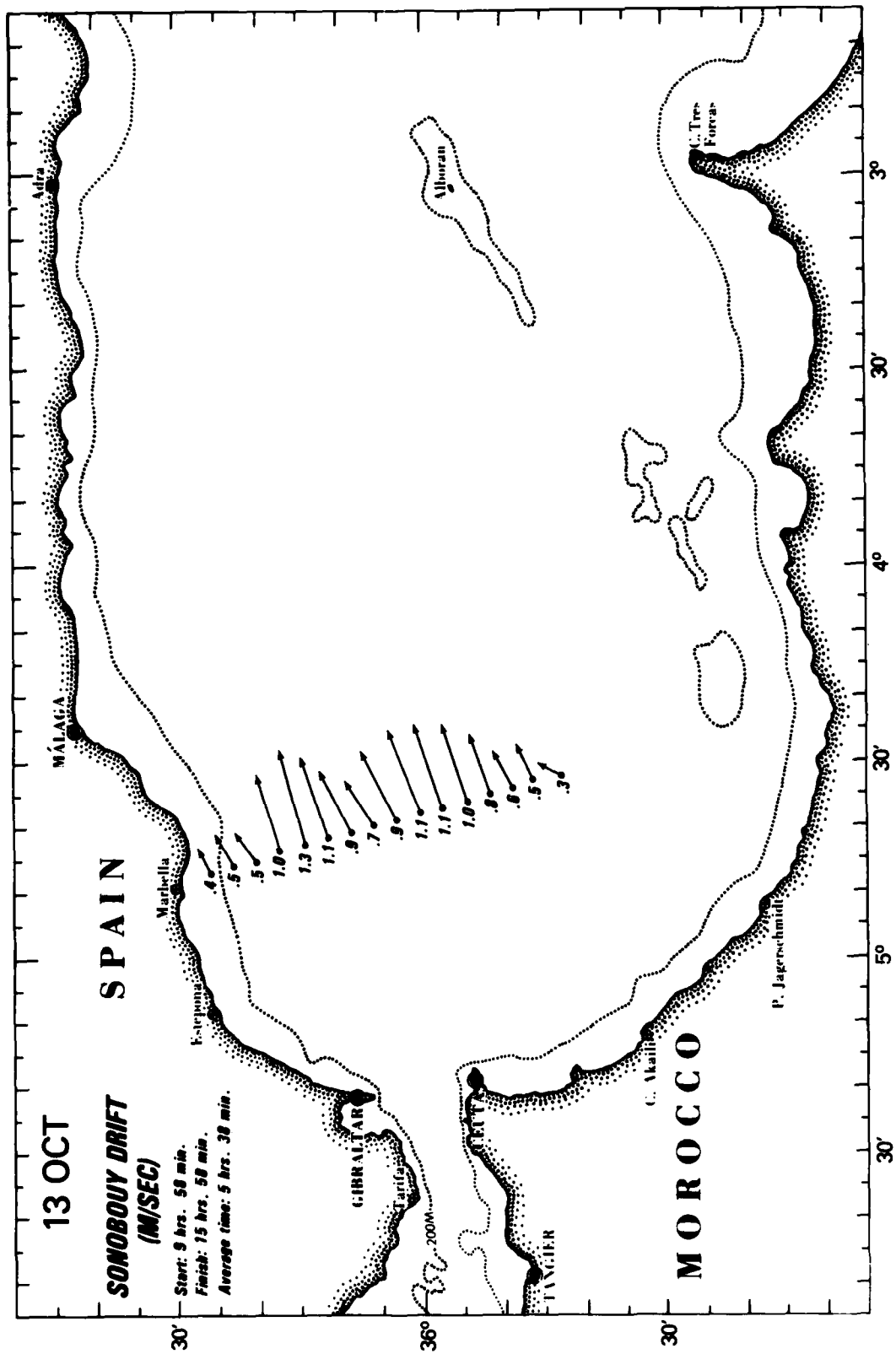
OCEANDEVIRON EIGHT 3760/1 (REV 81)

NAVIGATOR'S FLIGHT RECORD

A/C CMDR	NAV LTG LOG		SNR		AIRCRAFT BUNO							TRACK				DATE	OF	
	N/S	E/W	VLF	LTN	TC	DA	TH	GS	WIND DIR/VEL	TAS	ALT	DIST + TOT	DIST REM	ETE	TO	ETA	REMARKS	
1538	N		35.483	35.182	315			190	/	225	5001				LERT	LERT	130000	14
100	W		4.274	4.269					/									
38			35.510	35.513	010			216	/	228	✓							
34			4.277	4.273					/									
39			35.537	35.544					/									
51			4.261	4.251					/									
40			35.567	35.574					/									
42			4.245	4.225					/									
41			36.007	36.012	010			225	262	223	✓							
43			4.222	4.229					32									
42			36.027	36.040					/									
37			4.241	4.229					/									
44			36.072	36.073	311			202	262	227	✓							
01			4.288	4.284					32									
45			36.098	36.099					/									
08			4.321	4.318					/									
45			36.125	36.129	025			249	242	228	✓							
57			4.315	4.309					32									
46			36.145	36.152					/									
41			4.294	4.281					/									
47			36.173	36.180	023			249	246	225	✓							
33			4.265	4.256					11									
49			36.203	36.207					/									
09			4.310	4.305					/									
15			36.231	36.234	292			197	154	220	✓							
36			4.402	4.398					38									

NAVIGATOR'S FLIGHT RECORD

A/C CHOR	NAV	SNR	AIRCRAFT BUNO		TRACK				FROM		TO		DATE	OF	
TIME	NO	NR	TC	DA	TH	GS	WIND DIR/VEL	TAS	ALT	DIST + TOT	DIST REM	ETE	ETA	ATA	REMARKS
1556	W	VF	35	26	26.268	227	240	224	5000						SE#16
1570	W	VF	301	4	4.40.6	203	41	226	✓						A/H D/A: C ↗
1574	W	VF					249	226							A/H
1606		VF					35								A/H
1610		VF	270				273	245	4000						A/H
1615		VF	270				235	245	✓						A/H
1618		VF	259	26	26.41.5	204	274	237	✓						A/H
1630		VF					208	257							PSIT
1634		VF					274	255	✓						A/H
1638		VF	270	11	27.04.5	229	279	258	✓						PSIT
1648		VF	270	φ	27.04.5	229	272	258	✓						A/H
1654		VF	270	6	27.06.8	238	265	258	✓						NAVL
1658		VF	270	6	27.06.8	238	265	258	✓						LAND
1700		VF					209	258							END SCOP
		VF	Sea R White, Enr						PSNR						



15 OCTOBER 1982

NAVIGATOR'S FLIGHT RECORD

A/C CNDR	NAV LOG DEPT	NAV LOG ARR	TC	DA	TH	GS	WIND DIR/VEL	TAS	ALT	DIST +TOT	FROM	TO	DATE	L OF
LEDK	HARTILL	ENDS WHITE	MR	MR	149667								15 Oct 82	
TIME	#1	VLF	#2										REMARKS	
0820					08 NM	VLF	VLF	280	6000				405 ALT 1521/2 41. WIND 2/19 (normal) JAS ACCEPTED	
0830					10 NM								ENDG	
0840													TAXI	
0850													T/O	
0900													NMUL	
0910													LEVEL	
0920													A/H	
0930													LEVEL	
0940													SCDD	
0950													A/H	
1000													ASCIT	
1010													ASCIT 6102'	
1020													A/H 1520	
1030													ASCIT	
1040													ASCIT	
1050													ASCIT	

NAVIGATOR'S FLIGHT RECORD

A/C CMDR	NS ENR	NAV	SNR		AIRCRAFT BUENO				TRACK				FROM	TO	DATE	REMARKS	# OF	
			TC	DA	TH	GS	WIND DIRVEL	TAS	ALT	DIST + TOT	DIST REM	ETE						ETA
0912	N	HV	VLF	#2	3610.7	007	0	700	276	190	223	000					BT#186	1
104	W		5087	5096						04								
14			3619.2	2618.4			1	050	236	200	239	V					BT#187	1
24			5074	5078						03							ATT	1
16			3624.2	3624.5					242			V					BT#188	1
51			4577	4575														1
16			3620.2	3620.0			1	195	V	237	242	V					BT#189	1
24			4544	455.7						50								1
20			2610.4	2609.9			0	180	252	346	242	V					BT#190	1
53			4553	457.0						08								1
23			3600.4	3600.1			2	187	252	200	249	V					BT#191	1
13			4554	457.0						11								1
25			3549.4	3549.2			2	183	252	207	242	V					BT#192	1
46			4554	457.0						14								1
27			3541.5	3541.1			2	121	251	299	231	V					BT#193	1
41			4550	456.9						21							ATT	1
31			3532.8	3522.0						24								1
08			441.6	444.1						24								1
34			3526.0	3525.7			4	352	199	267	202	V					BT#194	1
40			441.1	442.7						12								1
36			2540.3	2540.2			2	356	203	257	209	V					BT#195	1
40			441.1	444.0						12								1
37			3545.7	3544.9			4	356	302	286	205	V					BT#196	1
24			441.2	444.0						13								1
38			3550.1	3549.9			2	358	200	207	204	V					BT#196	1
54			441.2	444.0						7								1

OCEANDEVON EIGHT 3760/1 (REV 81)

NAVIGATOR'S FLIGHT RECORD

A/C CMDR	TIME	N/S E/W	NAV		SNR		AIRCRAFT BUENO				TRACK			FROM			TO		DATE	REMARKS
			#1	VLF	#2	VLF	TC	DA	TH	GS	WIND DIR/VEL	TAS	ALT	DIST +TOT	DIST REM	ETE	ETA ATA	LEPT		
0940	N		#1	VLF	#2	360	1K	39	200	223/01	201	1000						150702	3#6	
0941	W			35.55.1	35.54.9															
41				4.41.2	4.44.0															
54				36.00.0	36.00.0															
42				4.41.2	4.44.0															
22				36.01.5	36.01.5															
43				4.41.2	4.44.0															
21				36.04.9	36.04.9															
44				4.41.1	4.44.0															
05				36.07.4	36.07.5	360	1L	001	V											
44				4.41.2	4.44.0															
44				36.10.0	36.10.1															
51				4.41.2	4.44.0															
45				36.12.4	36.12.4															
32				4.41.3	4.44.0	360														
46				36.15.1	36.15.1															
20				4.41.3	4.44.0															
47				36.19.9	36.19.9															
48				4.41.3	4.44.0															
49				36.24.7	36.24.9															
19				4.41.3	4.44.0															
54				36.29.9	36.20.4															
55				4.50.7	4.52.4															
57				36.26.6	36.26.2	176	1L	177	349	305/06	246	V								
00				4.44.3	4.44.7															
59				36.17.0	36.17.0	180	V	181	252	291/06	252	V								
00				4.42.9	4.44.0															

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NAVIGATOR'S FLIGHT RECORD

A/C CMDR		NAV		SNR		AIRCRAFT BUENO				TRACK				FROM		TO		DATE	REMARKS
TIME	N/S EMP	#1	VLF	#2	VLF	TC	DA	TH	GS	WIND DIR/VEL	TAS	ALT	DIST +TOT	DIST REM	ETE	ETA ATA			
1001	N		36.08.6	35.08.5	36.08.5	180	2L	182	253	275/09	214	500						15 APR	POEIT
00	W		4-44.1	4.44.0															
1003			36.00.4	36.00.2		180	2L	182	247	258/13	250	✓							POEIT
05			4-44.2	4.44.0															
00			35.52.1	35.51.9		✓	4L	184	244	267/18	245	✓							POEIT
00			4-44.4	4.44.0															
07			35.47.1	35.43.8		✓	5L	185	240	257/21	246	✓							POEIT
00			4-44.4	4.44.0															
09			35.26.1	35.25.8		✓	4L	184	239	251/19	250	✓							POEIT
00			4-44.5	4.44.0															
09			35.33.3	35.33.0		098	2L	101	229		222	✓							A/H 21
41			4-44.5	4.43.9															
12			35.30.7	35.30.4		040			242			2500							13TH 201
35			4-22.8	4.21.1															A/H
15			35.40.4	35.40.0		360	3R	357	225	275/12	228	1000							13TH 202
18			4-21.4	4.21.0															
15			35.50.2	35.50.0		✓				249/003	✓	✓							
00			4-21.7	4.21.0			1R	359	228										BT# 203
20			36.00.0	36.00.0		✓				208/000	✓	✓							
32			4-22.0	4.21.0			4	360	241		242	✓							13TH 204
33			36.10.0	36.10.0		✓				151/003	✓	✓							
00			4-21.9	4.21.0			✓	✓	244		243	✓							13TH 205
25			36.20.1	36.20.0		✓				139/004	✓	✓							
36			4-22.0	4.21.0		✓			245		244	✓							BT# 206
27			36.30.1	36.30.1						133/006	✓	✓							BT# 207
59			4-21.4	4.20.7		003	2L	005	246		244								A/H SRW

NAVIGATOR'S FLIGHT RECORD

A/C CMDR L.C.DR. HADREY	NAV LTJG DOPART E.O.S. WHITE	SNR INT. FERLEDE	AIRCRAFT BUNO 149667		TRACK 05-18245		FROM LEKI	TO LEKI	DATE 15 OCT 67	PAGE 5 OF					
			TH	GS	TAS	ALT					DIST +TOT	DIST REM	ETA ATA	REMARKS	
TIME	M/S E/W	#1	VLF	#2	TC	DA	TH	GS	WIND DIR/VEL	TAS	ALT	DIST +TOT	DIST REM	ETA ATA	REMARKS
1031	N		36.39.2	36.39.4					285						BT# 208
1058	W		4.18.7	4.16.9	180				001	244	1000				A/H
34			36.30.1	36.30.0					311						
35			4.18.1	4.17.8	182	22	184	245	006	240	✓				BT# 209
37			36.17.6	36.17.5					007						
40			4.18.0	4.18.0	180	0	180	247	005	246	✓				BT# 210
39			36.10.2	36.10.0	✓	12	181	✓	315	✓	✓				BT# 211
30			4.18.0	4.18.0	✓				007						
41			36.00.3	36.00.0	✓				323	✓	✓				
55			4.17.8	4.18.0	✓				008	✓	✓				BT# 212
44			35.50.3	35.50.0	✓				315	✓	✓				
19			4.17.7	4.18.0	✓	22	182	✓	009	✓	✓				BT# 213
46			35.40.3	35.40.0	✓				293						
43			4.17.8	4.18.0	✓	32	183	250	016	✓	✓				BT# 214
49			25.30.2	35.50.0	✓				289						
07			4.17.8	4.18.0	✓	22	182	247	009	✓	✓				BT# 215
50			35.26.3	35.25.9					247						A/H
10			4.16.7	4.17.0					009	✓	✓				BT# 216
53			35.30.4	35.30.8					286						
02			4.16.6	4.05.0	356				007	✓	✓				BT# 217
55			35.40.1	35.40.0					277						
18			4.04.2	4.05.0	360	20	358	244	007	245	✓				BT# 218
✓ 57			35.50.0	35.50.0	✓				277						
45			4.04.3	4.05.0	✓	12	359	✓	003	244	✓				BT# 219
1100	✓		35.59.9	36.00.0	✓				299						
12			4.04.4	4.05.0	✓				004	244	✓				BT# 220

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NAVIGATOR'S FLIGHT RECORD

A/C CMDR L. D. M. J. IRELL	NAV LTG DC/MAT E. S. WHITE	SNR #42	AIRCRAFT BUND 149667			TRACK 05-18345			FROM LBT			TO LBT			DATE 15 APR 68	PAGE OF 6
			TC	DA	TH	GS	WIND DIR/VEL	TAS	ALT	DIST TOT	DIST REM	ETE	ETA ATA	REMARKS		
11 02																
43	W	VLF	360	ψ	360	244	340	244	1000							DT# 221
05			✓		359	241	310	245	✓							DT# 222
08			✓		358	240	288	242	✓							DT# 223
07			✓				229									A/H
37					360		003	240	✓							DT# 224
10							180		✓							A/H
06							001	242	✓							DT# 225
14							315		✓							
09			180			245	006	241	✓							DT# 226
16			181	1L	182	245	333		✓							
25			181	1L	181	251	012	243	✓							DT# 227
14							330		✓							
59			180	1L	181	253	013	244	✓							DT# 228
21			✓				302		✓							
30						252	010	246	✓							DT# 229
27			✓				269		✓							
38			✓			244	010	244	✓							DT# 230
26							271		✓							
03			✓			245	014	242	✓							DT# 231
28			✓				260		✓							A/H
30			✓			254	013	241	✓							DT# 232
36			✓				252		✓							A/H
30			✓			090	010	242	✓							DT# 233
33	✓						252									
11							010	242	✓							

NAVIGATOR'S FLIGHT RECORD

A/C CMDR	NAV. JT-6	DOPART	SNR	AIRCRAFT BUNO		TRACK		FROM		TO		DATE	OF			
				EMAS	WHITE	NR	FER	LR	LR	LR	LR			LR	LR	
TIME	INS	EM	VLF	DA	TC	DA	TH	GS	WIND	TAS	ALT	DIST	DIST	DIST	ETA	REMARKS
									DIR/VEL			+TOT	REM	ATA		
11 34	N		35.40.3	212	359	212	357	241	271	242	1000					BT # 234
150	W		3.39.3	18	360	18	359	241	009	244	✓					DT # 235
37			35.50.3	✓	✓	20	358	239	290	245	✓					BT # 236
20			3.39.4	✓	✓	4	360	236	005	✓	✓					BT # 237
39			36.00.2	✓	✓	15	337	238	301	241	✓					BT # 238
42			3.39.6	✓	✓	360	360	236	008	245	✓					REMARKS NR2
42			36.10.2	✓	✓	360	360	236	350	✓	✓					BT # 239
19			3.39.5	✓	✓	360	360	236	064	241	✓					BT # 240
44			36.20.1	✓	✓	360	360	236	006	241	✓					BT # 241
52			3.39.5	✓	✓	360	360	236	103	242	✓					BT # 242
47			36.20.0	✓	✓	360	360	236	102	242	✓					BT # 243
21			3.39.5	✓	✓	360	360	236	102	242	✓					BT # 244
49			36.40.1	✓	✓	360	360	236	180	241	✓					BT # 245
49			3.39.5	✓	✓	360	360	236	102	241	✓					BT # 246
53			36.41.4	✓	✓	360	360	236	149	241	✓					BT # 247
24			3.27.0	✓	✓	360	360	236	112	241	✓					BT # 248
55			36.20.7	✓	✓	360	360	236	100	241	✓					BT # 249
56			3.26.5	✓	✓	360	360	236	080	241	✓					BT # 250
58			36.20.3	✓	✓	360	360	236	080	241	✓					BT # 251
30			3.26.7	✓	✓	360	360	236	5	241	✓					BT # 252
1301			36.11.6	✓	✓	360	360	236	318	241	✓					BT # 253
101			3.25.6	✓	✓	360	360	236	12	241	✓					BT # 254
02			36.03.7	✓	✓	360	360	236	311	241	✓					VLF → DR
15			3.25.4	✓	✓	360	360	236	17	241	✓					BT # 255
59			35.49.9	✓	✓	360	360	236	141	241	✓					VLF VLT → R2
36			3.26.0	✓	✓	360	360	236	13	241	✓					BT # 256

NAVIGATOR'S FLIGHT RECORD

A/C CMDR (CDU) HADFIELD	NAV LT JG D PART RCS WIFE	SNR #2	AIRCRAFT BUNO 144667		TRACK OS-1-83 #5		FROM LENT		TO LENT		DATE 15 OCT 82	OF 8
			TC	DA	TH	GS	WIND DIR/VEL	TAS	ALT	DIST TOT		
1208 N	VLF	#2	180	3L	183	248	282	246	1000			BT #247
1000 W	35.404	35.400	V	✓	V	247	278	✓	✓			BT #248
10	3.258	3.260	046	2K	044	252	261	244	✓			A/H
27	35.203	35.200	360	4R	356	244	268	✓	✓			BT #249
14	3.250	3.261	V	✓	✓	✓	14	✓	✓			A/H
18	35.325	35.400	V	2K	358	243	293	248	✓			BT #250
16	3.144	3.136	V	2L	002	244	268	241	✓			RJ #251
16	35.499	35.500	V	2L	003	247	293	✓	✓			BT #252
44	3.124	3.130	V	3L	002	244	293	✓	✓			BT #253
19	35.598	36.000	V	3L	003	247	109	✓	✓			BT #254
12	3.125	3.130	360	✓	✓	✓	12	244	✓			BT #255
31	36.097	36.100	V	✓	✓	✓	117	244	✓			BT #256
40	3.126	3.130	V	✓	✓	✓	12	✓	✓			A/H
31	36.196	36.200	V	✓	✓	✓	126	✓	✓			BT #257
06	3.128	3.120	360	✓	✓	✓	11	243	✓			BT #258
26	36.295	36.300	V	✓	✓	✓	140	243	✓			BT #259
31	3.128	3.130	V	✓	✓	✓	09	245	✓			A/H
08	36.396	36.40.1	V	✓	✓	✓	116	244	✓			BT #258
56	3.128	3.12.8	125	1L	126	234	140	243	✓			BT #259
32	36.401	36.39.9	181	2K	179	241	116	245	✓			A/H
16	3.007	3.00.5	180	✓	✓	✓	07	244	✓			BT #258
24	36.204	36.20.5	V	✓	✓	✓	07	244	✓			BT #259
42	2.597	2.59.7	V	✓	✓	✓	07	243	✓			A/H
37	36.200	36.20.0	180	✓	✓	✓	07	244	✓			BT #258
20	3.00.0	3.00.0	V	✓	✓	✓	02	243	✓			BT #259
39	36.10.1	36.10.1	V	✓	✓	✓	02	243	✓			A/H
46	3.00.1	3.00.0	V	✓	✓	✓	02	243	✓			BT #258

NAVIGATOR'S FLIGHT RECORD

A/C CMDR	TIME	N/S E/W	NAV		SNR		AIRCRAFT BUND				TRACK				DATE	REMARKS
			VLF	M2	TC	DA	TH	GS	WIND DIR/VEL	TAS	ALT	DIST +TOT	DIST REM	ETA ATA		
	1242	0	35.00.0	35.59.9	180	3L	153	242	270	241	1000				150182	9 of 9
	17	W	3.00.4	3.00.0					17							
	43		35.56.3	35.56.1												
	17		3.00.5	3.00.0												
	44		35.50.0	35.50.0	173	4L	177	244	271	242						
	49		3.00.7	3.00.5					17							
	46		35.41.2	35.41.8												
	58		3.02.1	3.01.4												
	48		35.40.8	35.41.2	203	1R	202	278	280	240						
	52		3.10.1	3.08.7					11							
	52		35.48.8	35.48.4	297	0	297	279	293	240						
	54		3.25.8	3.25.1					10							
	57		35.56.5	35.56.2					7							
	60		3.44.6	3.44.0					372	240						
	1300		26.01.7	26.01.4					342	239						
	00		3.57.5	3.56.8					03							
	04		26.10.1	26.09.7					215	241						
	43		4.18.2	4.17.3					02							
	07		26.00.2	26.00.1	162	1L	163	279	285	237						
	15		4.18.6	4.18.3					6							
	11		35.49.6	35.50.0	204	1L	205		5							
	31		4.21.5	4.20.1					11							
	20		35.28.3	35.28.9					11							
	03		4.45.6	4.44.0					11							
	22		35.44.9	35.45.3	256				3							
	04		4.43.0	4.42.2					3							

OCEANDEVON EIGHT 3760/1 (REV 81)

4-11-6

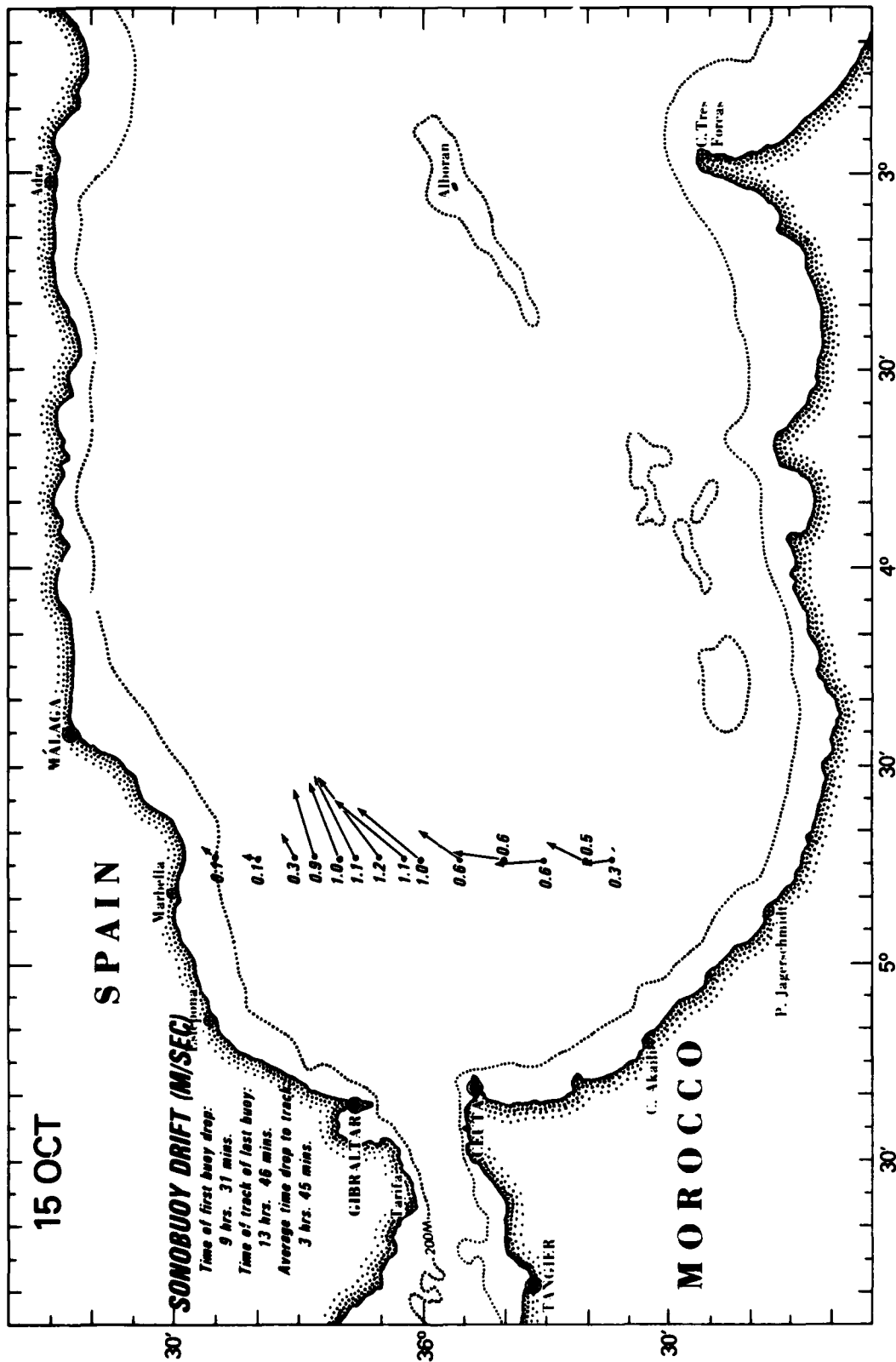
NAVIGATOR'S FLIGHT RECORD

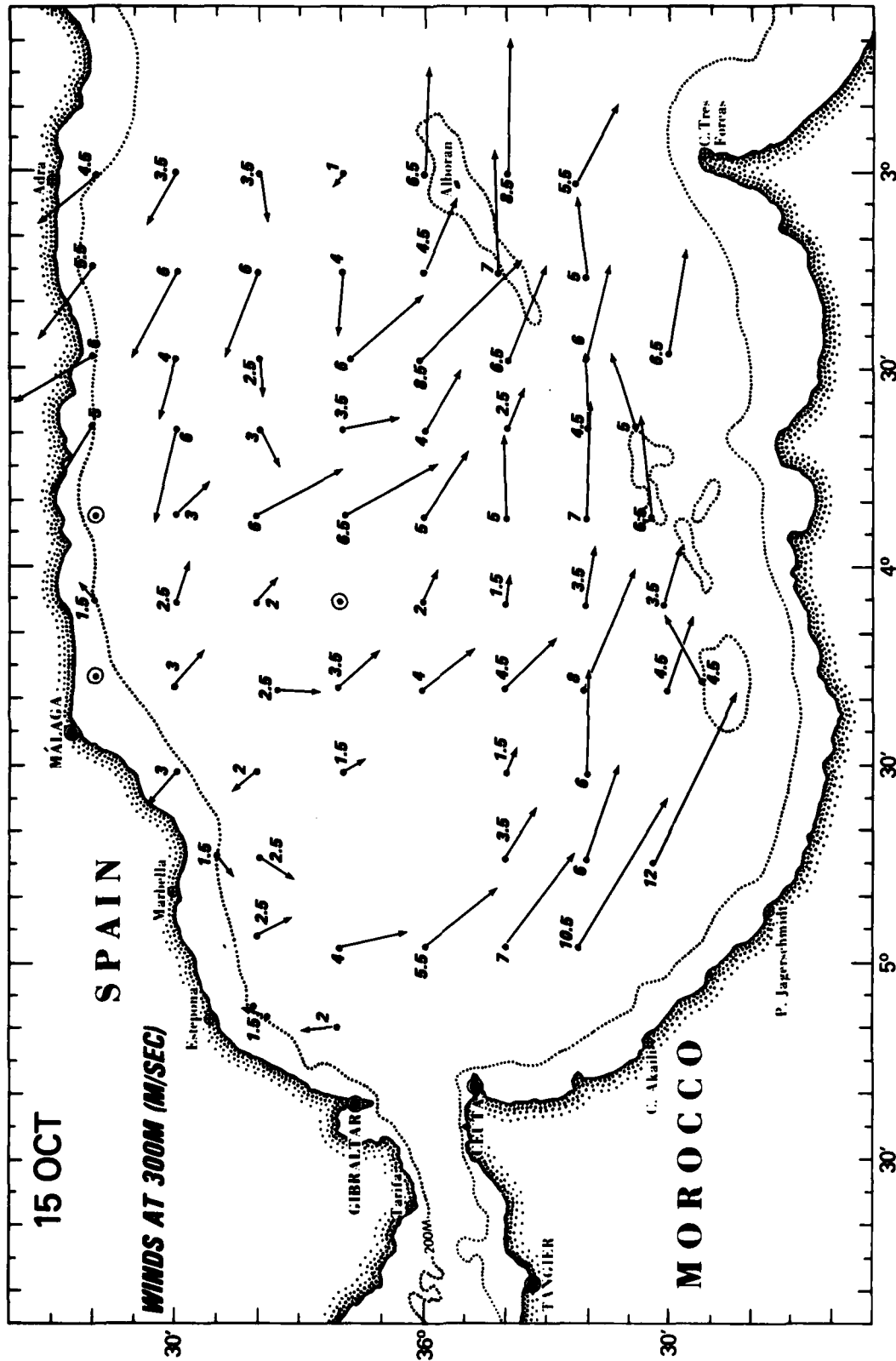
A/C CMDR	NAV		SWR		AIRCRAFT BURO				TRACK				FROM	TO	DATE	OF
	N/R	E/R	VLF	#2	TC	DA	TH	GS	WIND	TAS	ALT	DIST	DIST	ETA	REMARKS	
TIME									DIR/VEL			+TOT	REM	ATA		
1323	N		3549.9	35501	246	1K	345	217	270	283	600'				#4	
27	N		444.3	1.447					5		✓				#5	
34			3552.4	35540	035			227	150	225	✓				#6	
36			443.4	4.429				✓	235	✓	✓				#7	
25			3557.7	35583	016				8	✓	✓				#8	
49			4.415	4.413					233	229	✓				#9	
27			26.044	26.051	016			229	6	✓	✓				#10	
40			4.388	4.387						✓	✓				#11	
28			26.066	26.071						✓	✓				#12	
16			4.377	4.375						✓	✓				#13	
29			36.092	36.098	027			230	213	226	✓				#14	
67			4.358	4.352					8	✓	✓				#15	BT #266
32			26.108	26.115						✓	✓				#16	A/H
00			4.351	4.346						✓	✓				#17	BT #267
37			26.127	26.121	030			221	220	✓	✓				#18	
28			4.346	4.351						✓	✓				#19	
41			26.136	26.142						✓	✓				#20	
55			4.369	4.366						✓	✓				#21	
43			26.157	26.162	275			202	201	203	✓				#22	
26			4.428	4.425						✓	✓				#23	
45			26.217	26.218						✓	✓				#24	
12			4.427	4.445						✓	✓				#25	BT #266
46			26.255	26.261	021			217	201	210	✓				#26	A/H
26			4.429	4.432					12	✓	✓				#27	BT #267
✓52			26.196	26.200						✓	✓				#28	A/H
18			5.073	5.064						✓	✓				#29	A/H

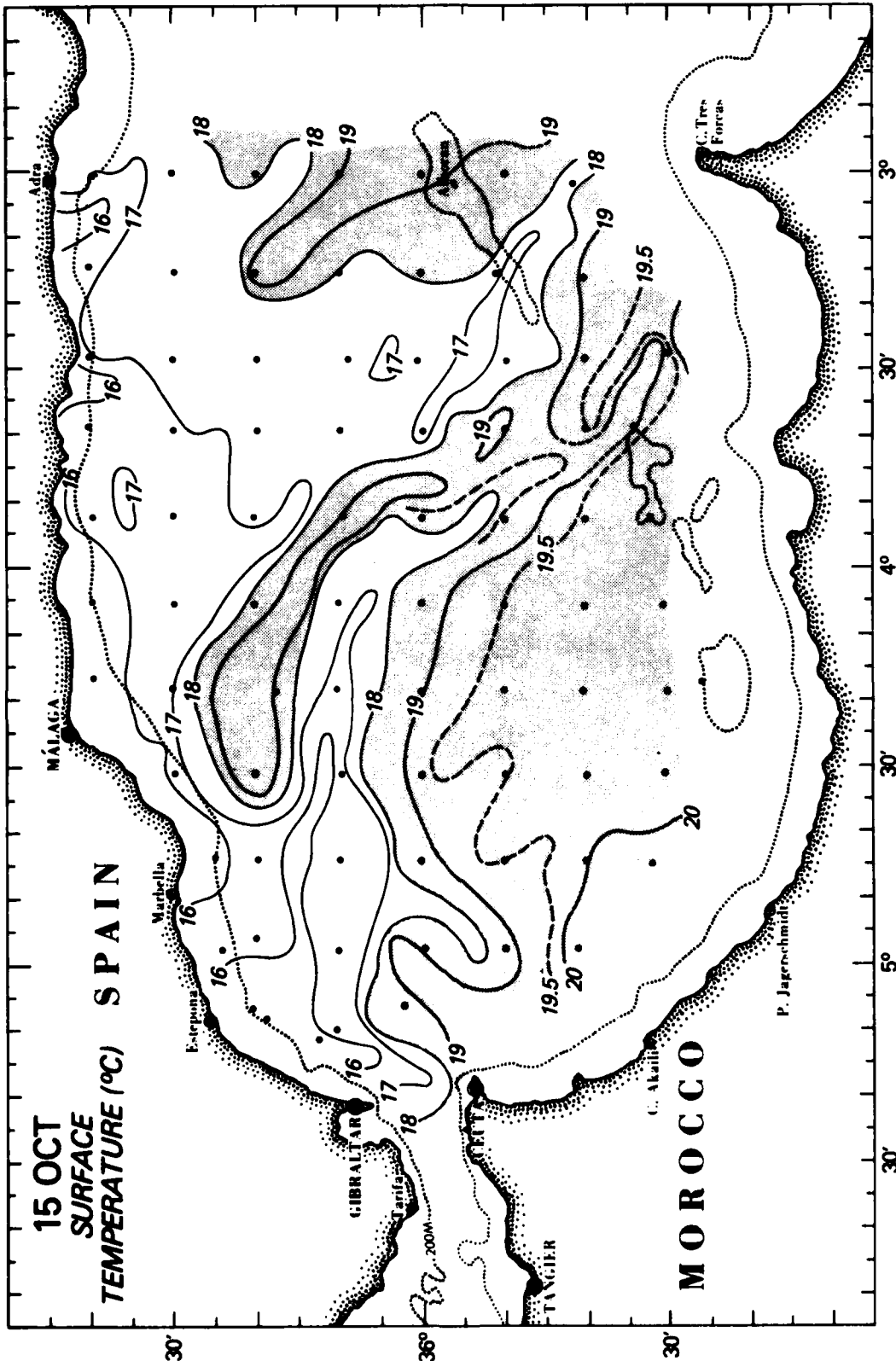
NAVIGATOR'S FLIGHT RECORD

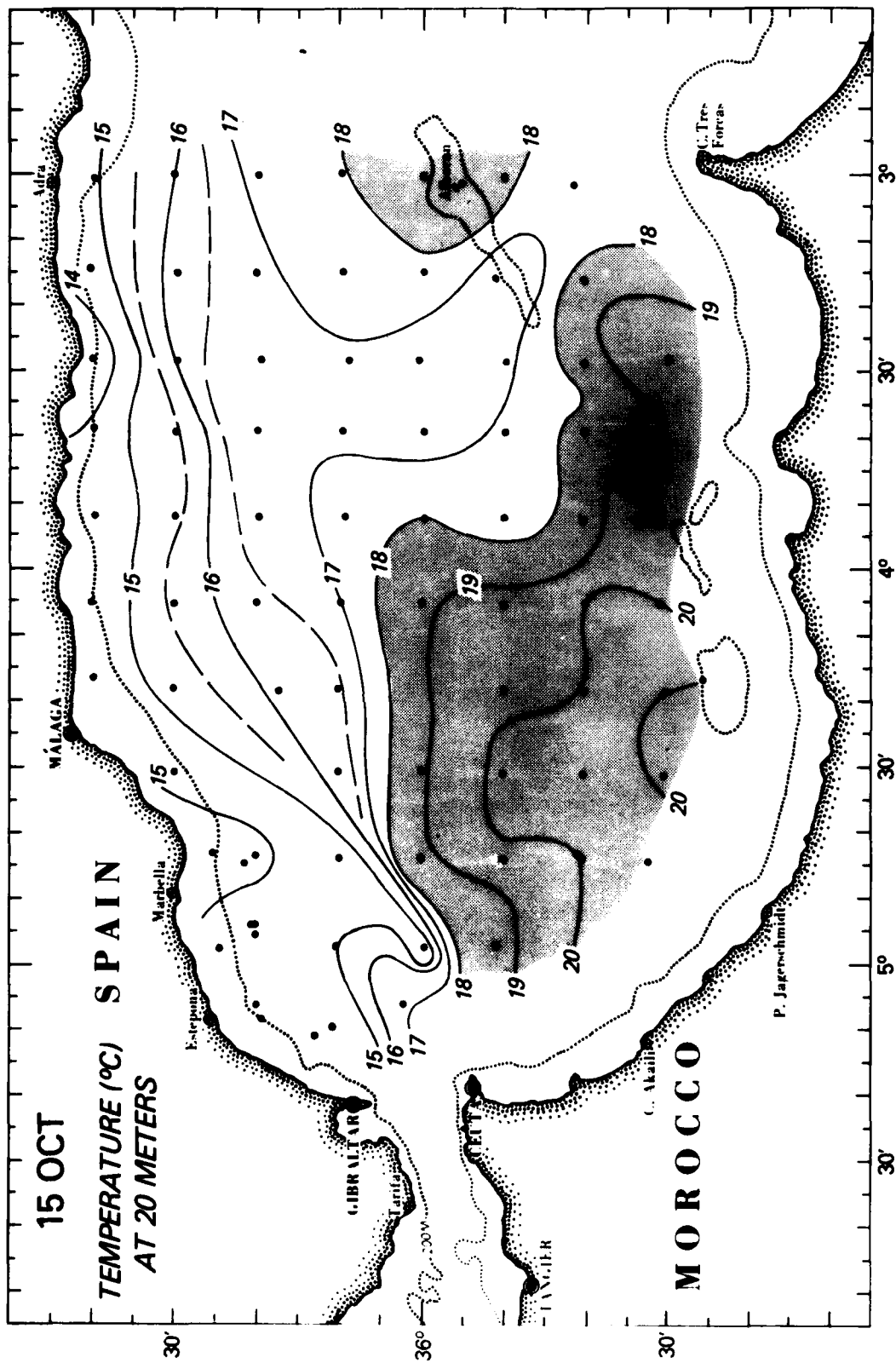
A/C CMDR		NAV		SNR		AIRCRAFT BUND				TRACK				DATE		REMARKS			
TIME	N/S E/W	VLF	#2	TC	DA	TH	GS	WIND DIR/VEL	TAS	ALT	DIST +TOT	DIST REM	ETE	TO	FROM	TO	FROM		
1354	N	36-12.5	36-130											LEPT	LEPT	16 OCT 69	4	OF	
K	W	5-11.6	5-10.9							1000									BTM 269 C
1358		35-59.7	35-59.9	257	12	258	259	322	265	5000									13"
20		5-22.1	5-22.1					7	269	PTI									A/HI B>C C
1402		35-56.2	35-56.2	269	12	270	269		269	4000									A/HI B>A X BT
28		5-45.7	5-44.0						269										POST LOWER
1407		35-56.5	35-56.1	270	12	273	262	347	269										POST
13		6-09.1	6-07.8					12	262	V									A/HI B>A 260/40
1414		35-56.7	35-56.2	325	12	306	256	336	262										POST
03		6-15.8	6-14.1					9	256	C									A/HI B>A 260/40
1418		36-12.3	36-11.6	327			247		256										POST PHN
35		6-58.0	6-57.3																A/HI B>A 260/40
1432																			LAND
																			LEPT
																			STOP



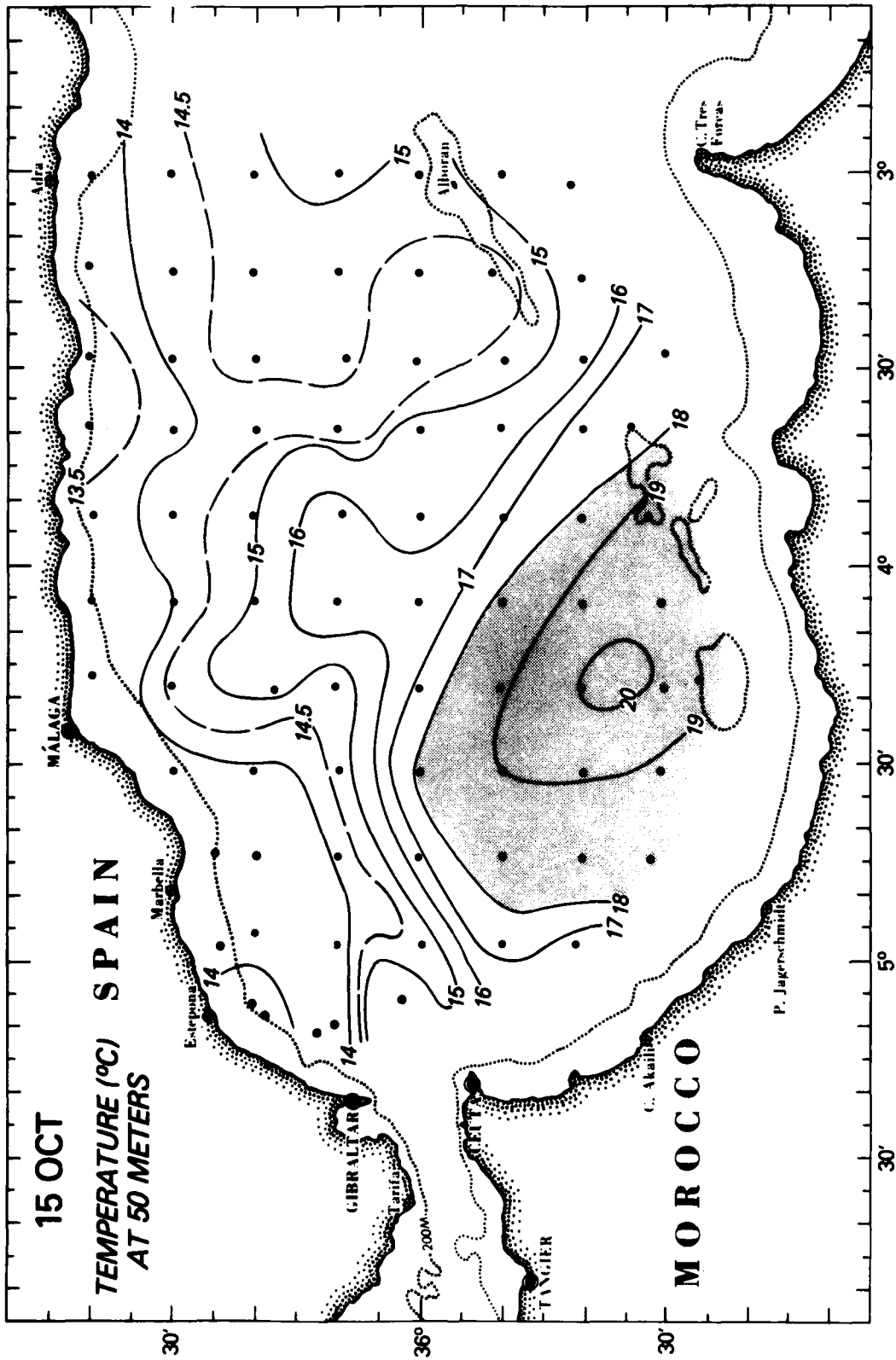


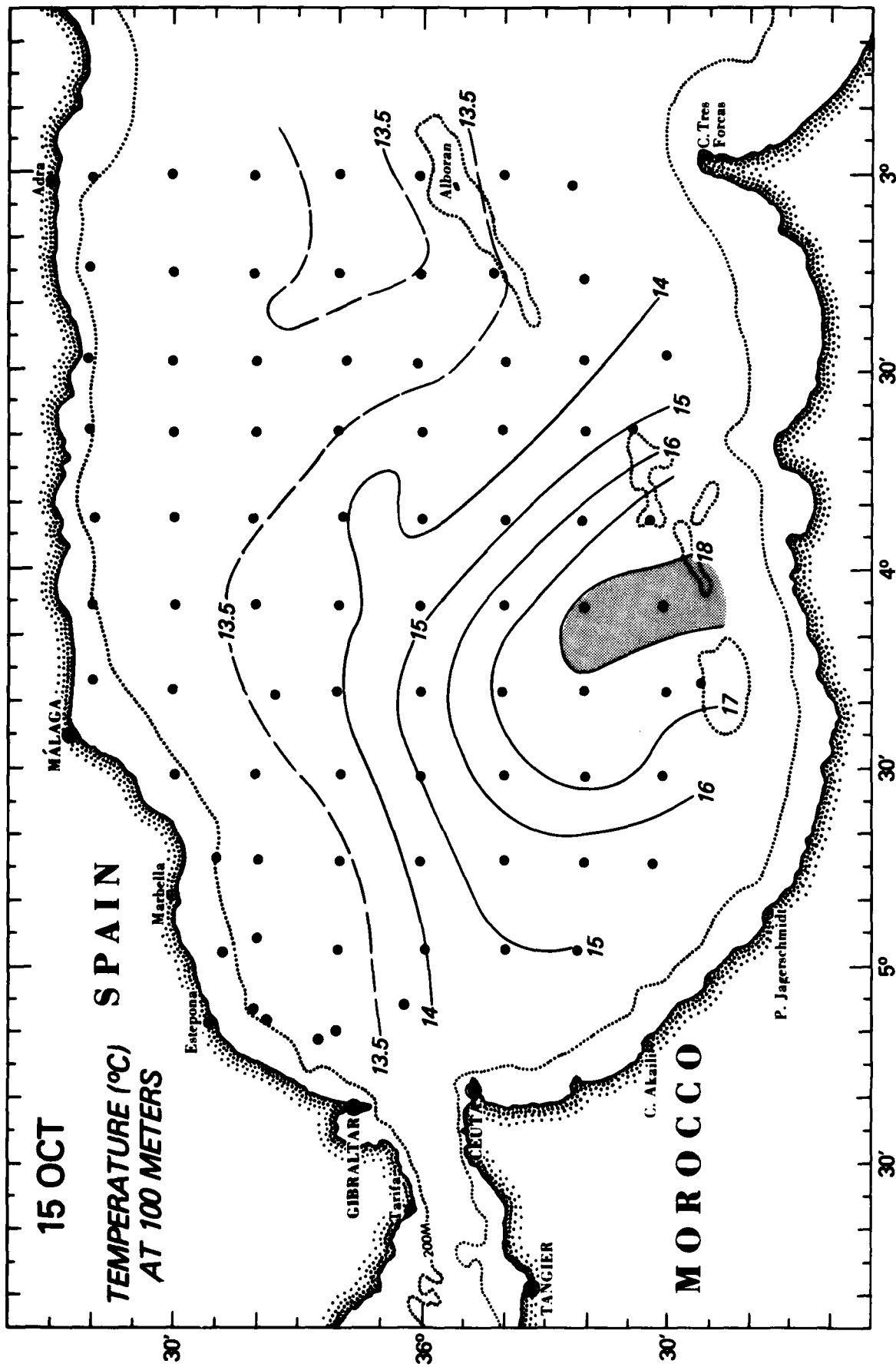


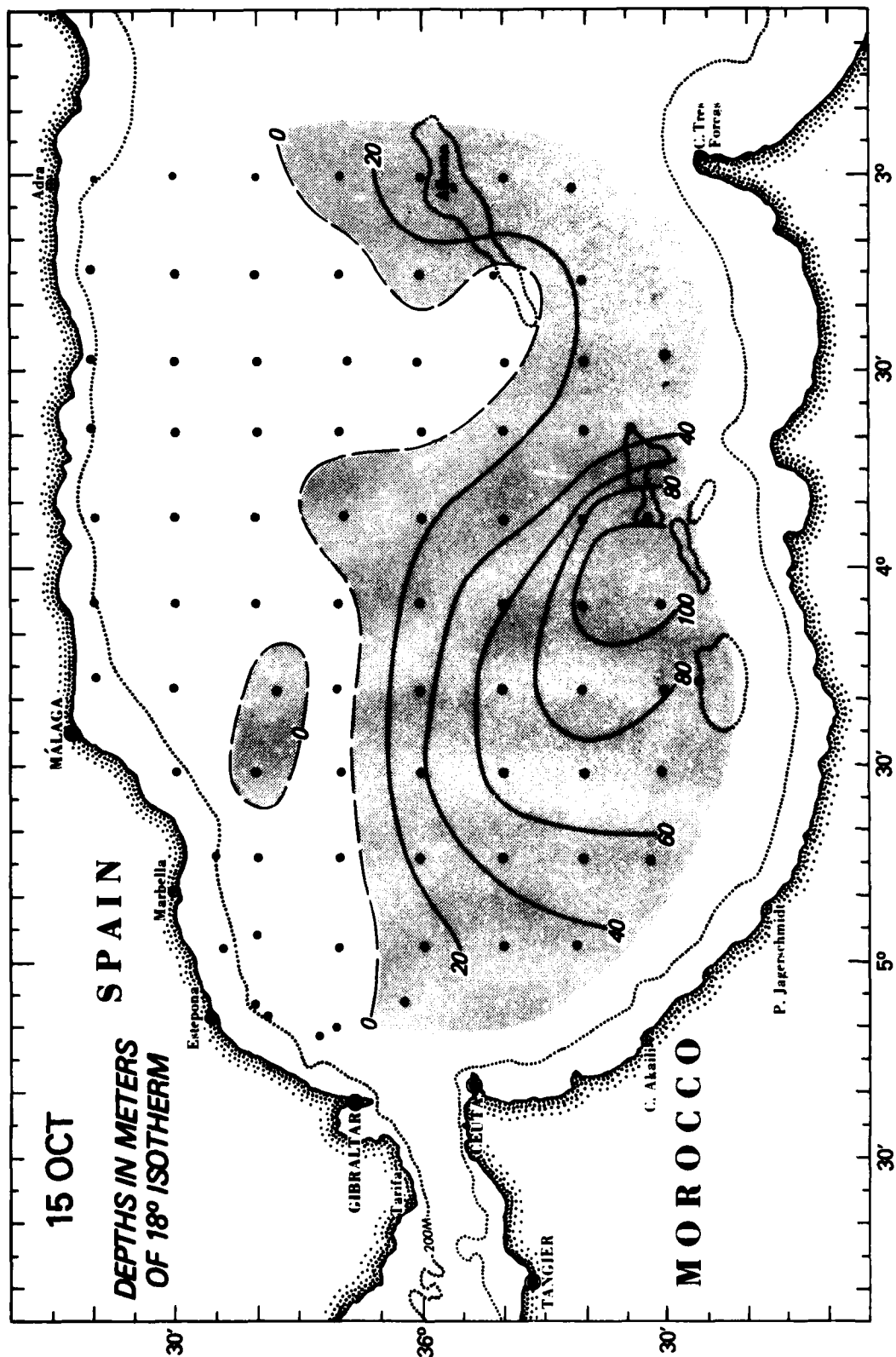


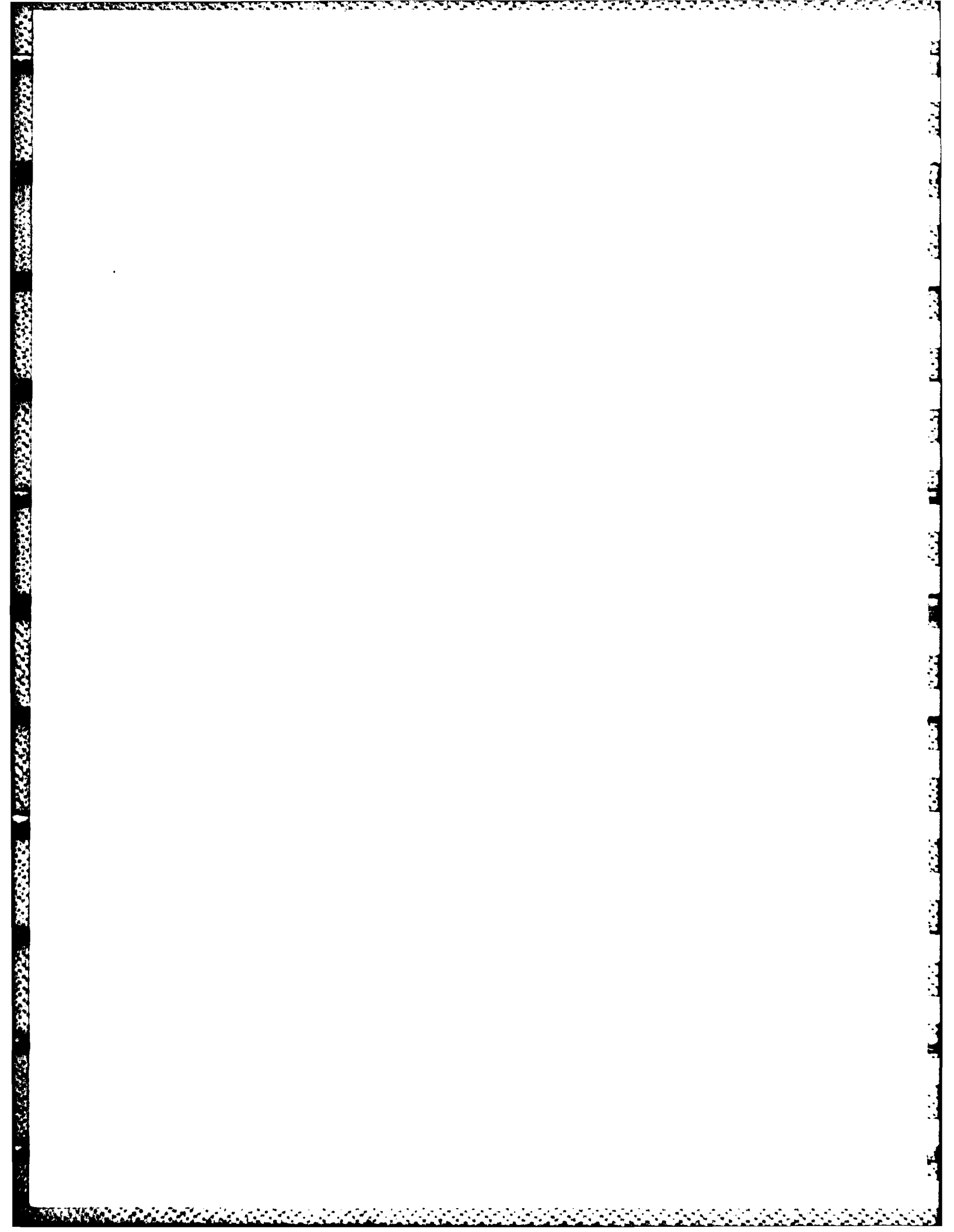


NOV 1955 10 1955 11 1955 12 1955 1 1956 2 1956 3 1956 4 1956 5 1956 6 1956 7 1956 8 1956 9 1956 10 1956 11 1956 12 1957 1 1957 2 1957 3 1957 4 1957 5 1957 6 1957 7 1957 8 1957 9 1957 10 1957 11 1957 12 1958 1 1958 2 1958 3 1958 4 1958 5 1958 6 1958 7 1958 8 1958 9 1958 10 1958 11 1958 12 1959 1 1959 2 1959 3 1959 4 1959 5 1959 6 1959 7 1959 8 1959 9 1959 10 1959 11 1959 12 1960 1 1960 2 1960 3 1960 4 1960 5 1960 6 1960 7 1960 8 1960 9 1960 10 1960 11 1960 12 1961 1 1961 2 1961 3 1961 4 1961 5 1961 6 1961 7 1961 8 1961 9 1961 10 1961 11 1961 12 1962 1 1962 2 1962 3 1962 4 1962 5 1962 6 1962 7 1962 8 1962 9 1962 10 1962 11 1962 12 1963 1 1963 2 1963 3 1963 4 1963 5 1963 6 1963 7 1963 8 1963 9 1963 10 1963 11 1963 12 1964 1 1964 2 1964 3 1964 4 1964 5 1964 6 1964 7 1964 8 1964 9 1964 10 1964 11 1964 12 1965 1 1965 2 1965 3 1965 4 1965 5 1965 6 1965 7 1965 8 1965 9 1965 10 1965 11 1965 12 1966 1 1966 2 1966 3 1966 4 1966 5 1966 6 1966 7 1966 8 1966 9 1966 10 1966 11 1966 12 1967 1 1967 2 1967 3 1967 4 1967 5 1967 6 1967 7 1967 8 1967 9 1967 10 1967 11 1967 12 1968 1 1968 2 1968 3 1968 4 1968 5 1968 6 1968 7 1968 8 1968 9 1968 10 1968 11 1968 12 1969 1 1969 2 1969 3 1969 4 1969 5 1969 6 1969 7 1969 8 1969 9 1969 10 1969 11 1969 12 1970 1 1970 2 1970 3 1970 4 1970 5 1970 6 1970 7 1970 8 1970 9 1970 10 1970 11 1970 12 1971 1 1971 2 1971 3 1971 4 1971 5 1971 6 1971 7 1971 8 1971 9 1971 10 1971 11 1971 12 1972 1 1972 2 1972 3 1972 4 1972 5 1972 6 1972 7 1972 8 1972 9 1972 10 1972 11 1972 12 1973 1 1973 2 1973 3 1973 4 1973 5 1973 6 1973 7 1973 8 1973 9 1973 10 1973 11 1973 12 1974 1 1974 2 1974 3 1974 4 1974 5 1974 6 1974 7 1974 8 1974 9 1974 10 1974 11 1974 12 1975 1 1975 2 1975 3 1975 4 1975 5 1975 6 1975 7 1975 8 1975 9 1975 10 1975 11 1975 12 1976 1 1976 2 1976 3 1976 4 1976 5 1976 6 1976 7 1976 8 1976 9 1976 10 1976 11 1976 12 1977 1 1977 2 1977 3 1977 4 1977 5 1977 6 1977 7 1977 8 1977 9 1977 10 1977 11 1977 12 1978 1 1978 2 1978 3 1978 4 1978 5 1978 6 1978 7 1978 8 1978 9 1978 10 1978 11 1978 12 1979 1 1979 2 1979 3 1979 4 1979 5 1979 6 1979 7 1979 8 1979 9 1979 10 1979 11 1979 12 1980 1 1980 2 1980 3 1980 4 1980 5 1980 6 1980 7 1980 8 1980 9 1980 10 1980 11 1980 12 1981 1 1981 2 1981 3 1981 4 1981 5 1981 6 1981 7 1981 8 1981 9 1981 10 1981 11 1981 12 1982 1 1982 2 1982 3 1982 4 1982 5 1982 6 1982 7 1982 8 1982 9 1982 10 1982 11 1982 12 1983 1 1983 2 1983 3 1983 4 1983 5 1983 6 1983 7 1983 8 1983 9 1983 10 1983 11 1983 12 1984 1 1984 2 1984 3 1984 4 1984 5 1984 6 1984 7 1984 8 1984 9 1984 10 1984 11 1984 12 1985 1 1985 2 1985 3 1985 4 1985 5 1985 6 1985 7 1985 8 1985 9 1985 10 1985 11 1985 12 1986 1 1986 2 1986 3 1986 4 1986 5 1986 6 1986 7 1986 8 1986 9 1986 10 1986 11 1986 12 1987 1 1987 2 1987 3 1987 4 1987 5 1987 6 1987 7 1987 8 1987 9 1987 10 1987 11 1987 12 1988 1 1988 2 1988 3 1988 4 1988 5 1988 6 1988 7 1988 8 1988 9 1988 10 1988 11 1988 12 1989 1 1989 2 1989 3 1989 4 1989 5 1989 6 1989 7 1989 8 1989 9 1989 10 1989 11 1989 12 1990 1 1990 2 1990 3 1990 4 1990 5 1990 6 1990 7 1990 8 1990 9 1990 10 1990 11 1990 12 1991 1 1991 2 1991 3 1991 4 1991 5 1991 6 1991 7 1991 8 1991 9 1991 10 1991 11 1991 12 1992 1 1992 2 1992 3 1992 4 1992 5 1992 6 1992 7 1992 8 1992 9 1992 10 1992 11 1992 12 1993 1 1993 2 1993 3 1993 4 1993 5 1993 6 1993 7 1993 8 1993 9 1993 10 1993 11 1993 12 1994 1 1994 2 1994 3 1994 4 1994 5 1994 6 1994 7 1994 8 1994 9 1994 10 1994 11 1994 12 1995 1 1995 2 1995 3 1995 4 1995 5 1995 6 1995 7 1995 8 1995 9 1995 10 1995 11 1995 12 1996 1 1996 2 1996 3 1996 4 1996 5 1996 6 1996 7 1996 8 1996 9 1996 10 1996 11 1996 12 1997 1 1997 2 1997 3 1997 4 1997 5 1997 6 1997 7 1997 8 1997 9 1997 10 1997 11 1997 12 1998 1 1998 2 1998 3 1998 4 1998 5 1998 6 1998 7 1998 8 1998 9 1998 10 1998 11 1998 12 1999 1 1999 2 1999 3 1999 4 1999 5 1999 6 1999 7 1999 8 1999 9 1999 10 1999 11 1999 12 2000 1 2000 2 2000 3 2000 4 2000 5 2000 6 2000 7 2000 8 2000 9 2000 10 2000 11 2000 12 2001 1 2001 2 2001 3 2001 4 2001 5 2001 6 2001 7 2001 8 2001 9 2001 10 2001 11 2001 12 2002 1 2002 2 2002 3 2002 4 2002 5 2002 6 2002 7 2002 8 2002 9 2002 10 2002 11 2002 12 2003 1 2003 2 2003 3 2003 4 2003 5 2003 6 2003 7 2003 8 2003 9 2003 10 2003 11 2003 12 2004 1 2004 2 2004 3 2004 4 2004 5 2004 6 2004 7 2004 8 2004 9 2004 10 2004 11 2004 12 2005 1 2005 2 2005 3 2005 4 2005 5 2005 6 2005 7 2005 8 2005 9 2005 10 2005 11 2005 12 2006 1 2006 2 2006 3 2006 4 2006 5 2006 6 2006 7 2006 8 2006 9 2006 10 2006 11 2006 12 2007 1 2007 2 2007 3 2007 4 2007 5 2007 6 2007 7 2007 8 2007 9 2007 10 2007 11 2007 12 2008 1 2008 2 2008 3 2008 4 2008 5 2008 6 2008 7 2008 8 2008 9 2008 10 2008 11 2008 12 2009 1 2009 2 2009 3 2009 4 2009 5 2009 6 2009 7 2009 8 2009 9 2009 10 2009 11 2009 12 2010 1 2010 2 2010 3 2010 4 2010 5 2010 6 2010 7 2010 8 2010 9 2010 10 2010 11 2010 12 2011 1 2011 2 2011 3 2011 4 2011 5 2011 6 2011 7 2011 8 2011 9 2011 10 2011 11 2011 12 2012 1 2012 2 2012 3 2012 4 2012 5 2012 6 2012 7 2012 8 2012 9 2012 10 2012 11 2012 12 2013 1 2013 2 2013 3 2013 4 2013 5 2013 6 2013 7 2013 8 2013 9 2013 10 2013 11 2013 12 2014 1 2014 2 2014 3 2014 4 2014 5 2014 6 2014 7 2014 8 2014 9 2014 10 2014 11 2014 12 2015 1 2015 2 2015 3 2015 4 2015 5 2015 6 2015 7 2015 8 2015 9 2015 10 2015 11 2015 12 2016 1 2016 2 2016 3 2016 4 2016 5 2016 6 2016 7 2016 8 2016 9 2016 10 2016 11 2016 12 2017 1 2017 2 2017 3 2017 4 2017 5 2017 6 2017 7 2017 8 2017 9 2017 10 2017 11 2017 12 2018 1 2018 2 2018 3 2018 4 2018 5 2018 6 2018 7 2018 8 2018 9 2018 10 2018 11 2018 12 2019 1 2019 2 2019 3 2019 4 2019 5 2019 6 2019 7 2019 8 2019 9 2019 10 2019 11 2019 12 2020 1 2020 2 2020 3 2020 4 2020 5 2020 6 2020 7 2020 8 2020 9 2020 10 2020 11 2020 12











18 OCTOBER 1982

NAVIGATOR'S FLIGHT RECORD

A/C CMDR	NAV TRACK	SNR	AIRCRAFT BLNO	TRACK	FROM	TO	DATE	OF							
N/S E/W	TIME	1/1/F	TC	DA	TH	GS	WIND DIR/VEL	TAS	ALT	DIST +TOT	DIST REM	ETE	LEPT	ETA ATA	REMARKS
11															ACCEPT ILOS
0832															E/D/C
0835															INSID 40 SPRT INTRK TAXI
0844															T/O LEPT
0904			158												NAVL APG SMO: 74
19	26-28.4	26-27.4	26-27.2	143	6L	268		246	FL 120 24						PAV ON STATION
20	4-27.8	4-28.8	4-28.3	167	8L	232	206 22	223	5800'						MANTO-FUEL STRAUT
26	26-11.3	26-08.4	26-08.9	164	7L	250	283 22	246	2500'						OUTCHECK
10	4-27.0	4-28.3	4-28.6	165	7L	246	286 21	239	2200'						REPT
28	26-02.0	26-00.5	26-00.6	165	6L	177	270 23	229	V						REPT
15	4-24.3	4-26.5	4-26.2	165	7L	237	257 27	241	V						REPT
30	35.540	35.51.2	35.51.5	V	8L	173	263 26	228	V						NAH
30	4-21.0	4-23.4	4-23.1	165	7L	237	245 25	223	V						REPT
32	25.459	25.42.0	25.42.4	165	7L	237	245 25	223	V						REPT
30	4-28.2	4-30.6	4-30.5	V	8L	172	263 26	228	V						REPT
34	25.293	25.26.4	25.26.8	165	7L	237	245 25	223	V						REPT
15	4-26.0	4-28.2	4-28.3	V	8L	172	263 26	228	V						REPT
25	35.242	35.21.3	35.21.7	V	8L	172	263 26	228	V						REPT
25	4-24.2	4-26.1	4-26.6	V	8L	172	263 26	228	V						REPT
37	25.25.2	25.21.8	25.22.7	165	7L	237	245 25	223	V						REPT
15	4-17.9	4-20.9	4-22.3	165	7L	237	245 25	223	V						REPT

AD-A133 995

AN ANALYSIS OF AIRCRAFT DATA COLLECTED IN THE ALBORAN  
SEA DURING DONDE VA. (U) NAVAL OCEAN RESEARCH AND  
DEVELOPMENT ACTIVITY NSTL STATION M5.

2/2

UNCLASSIFIED

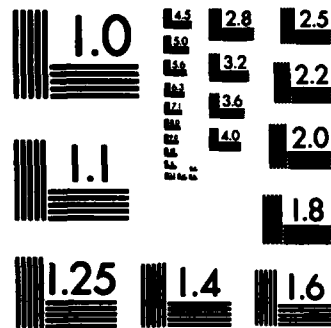
P E LA VIOLETTE ET AL. JUL 83 NORDA-TN-222 F/G 8/10 NL

END

FILED

SEP 83

FBI



MICROCOPY RESOLUTION TEST CHART  
NATIONAL BUREAU OF STANDARDS-1963-A

NAVIGATOR'S FLIGHT RECORD

A/C CMDR L... 4...	NAV LOG (DOTM) SNR EAS COM TIC	AIRCRAFT BUINO 14966		TRACK 05-1-83 F6		FROM LEIT		TO LEIT		DATE 18 OCT 82	OF 2	
		TH	GS	WIND DIR/VEL	TAS	ALT	DIST + TOT	DIST REM	ETE			ETA ATA
0929	25.41.3	35.37.6	25.28.8	3R	053	050	282	282	229	2200		POSIT
30	4.09.4	4.12.6	4.12.7	V	V	050	287	287	229			POSIT
41	25.45.2	35.41.4	35.42.7	V	V	048	287	287	216			POSIT
43	25.52.1	35.48.4	35.49.6	V	V	049	287	287	211			POSIT
45	25.55.6	35.51.9	35.53.2	V	V	047	287	287	211			POSIT
15	24.6.2	3.48.7	3.50.3	V	V	049	287	287	224			POSIT
47	25.59.8	35.56.1	35.57.3	V	V	047	287	287	219			POSIT
00	3.29.5	3.41.8	3.42.4	V	V	049	287	287	224			POSIT
08 49	26.04.6	36.00.8	36.02.1	V	V	049	287	287	216			POSIT
00	2.21.7	2.23.9	2.25.5	V	V	048	287	287	219			POSIT
51	26.09.5	36.05.6	36.07.0	V	V	049	287	287	214			POSIT
00	2.22.8	2.26.0	2.27.4	V	V	049	287	287	216			POSIT
53	26.14.3	36.10.2	36.11.7	V	V	051	287	287	216			POSIT
00	2.16.0	2.17.6	2.19.5	V	V	051	287	287	216			POSIT
√55	26.19.9	36.15.3	36.17.2	V	V	051	287	287	216			POSIT
15	2.07.1	2.09.0	2.10.3	V	V	051	287	287	216			POSIT
1000	26.21.2	36.17.0	36.18.2	V	V	049	287	287	216			POSIT
39	2.05.0	2.06.0	2.08.0	V	V	049	287	287	216			POSIT
01	26.15.9	36.11.3	36.15.7	V	V	049	287	287	216			POSIT
49	2.09.5	2.11.0	2.12.5	V	V	049	287	287	216			POSIT
02	26.16.7	36.11.9	36.12.6	V	V	049	287	287	216			POSIT
51	2.12.5	2.15.4	2.16.4	V	V	049	287	287	216			POSIT
√05	26.14.5	36.09.6	36.11.3	V	V	049	287	287	216			POSIT
55	2.17.3	2.19.1	2.20.2	V	V	049	287	287	216			POSIT

NAVIGATOR'S FLIGHT RECORD

TIME	A/C CMDR	HARRIS		NAVY TO CC: ST		SNR	NO. REF. LOG		AIRCRAFT BUND		TRACK		FROM		TO		DATE	REMARKS
		N/S	E/W	EDS	WHITE		TC	DA	TH	GS	WIND DIR/VEL	TAS	ALT	DIST + TOT	DIST REM	ETE		
1005		#1		VF	#2		231	SL	239	208	270	227	1000	SUBTRACT			20#5	
1014				36.07.2	36.08.9						270			0.7 from			20#6	
06				36.10.0	36.06.6						✓			UNATTENDED			20#7	
13				3.25.3	3.28.1						✓						20#8	
07				36.07.7	36.04.2						✓						20#9	
22				2.09.3	2.22.1						✓						20#10	
08				36.05.4	36.01.8						✓						20#11	
20				3.33.3	3.36.1						✓						20#12	
09				36.03.1	35.57.8						✓						20#13	
40				3.39.3	3.29.2						✓						20#14	
10				36.00.9	35.55.3						✓						20#15	
48				3.41.2	3.43.6						✓						20#16	
12				35.58.4	35.54.4						✓						20#17	
02				3.45.5	3.47.9						✓							
13				35.56.2	35.50.6						✓							
09				3.49.3	3.52.0						✓							
14				35.54.0	35.48.2						✓							
15				3.53.2	3.55.9						✓							
15				35.51.7	35.45.8						✓							
19				3.57.1	3.59.8						✓							
16				35.49.4	35.43.4						✓							
27				4.01.0	4.03.7						✓							
17				35.47.1	35.42.5						✓							
26				4.05.0	4.07.7						✓							
18				35.44.8	35.38.5						✓							
44				4.08.9	4.11.6						✓							

OCEANDEVON EIGHT 3760/1 (REV 81)

11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60 61 62 63 64 65 66 67 68 69 70 71 72 73 74 75 76 77 78 79 80 81 82 83 84 85 86 87 88 89 90 91 92 93 94 95 96 97 98 99 100

NAVIGATOR'S FLIGHT RECORD

A/C CMDR	NAV LTG DOMEST		NAV LTG INTL		AIRCRAFT BU NO		TRACK				FROM		TO		DATE	REMARKS	# OF
	LDG	LDG	LDG	LDG	TH	GS	WIND DIR/VEL	TAS	ALT	DIST +TOT	DIST REM	ETE	ETA	ATA			
1019	N	35 42.3	25 36.0	4 15.8	240	270	283	236	1000						20010		
54		4 12.0	4 16.0	4 15.8			28										
21		35 46.0	25 33.7	25 25.2			290		✓						20019		
01		4 16.8	4 19.6	4 19.5			27										
22		35 37.8	35 31.4	35 22.9			296										
08		4 20.6	4 23.3	4 23.3			23										
25		35 34.1	35 28.0	35 20.1			278	206	✓						20020		
16		4 21.8	4 23.9	4 24.5	324	195	14								A14		
26		25 36.5	25 30.6	25 21.4			268	210	✓						20021		
28		4 25.2	4 26.9	4 27.8			17										
27		35 29.3	35 23.6	35 14.3			208	207	✓						20022		
24		4 26.7	4 28.1	4 29.3	349	198	20										
28		35 42.3	35 36.5	35 27.2			266		✓						20023		
21		4 27.9	4 29.2	4 30.4			27										
29		35 45.2	35 39.3	35 30.1			262		✓						20024		
16		4 28.9	4 30.3	4 31.4			29										
30		35 47.9	35 41.9	35 32.5			260		✓						20025		
06		4 29.8	4 31.1	4 32.3			32										
31		35 51.0	35 45.0	35 35.9			261		✓						20026		
05		4 30.9	4 32.1	4 33.2			22										
21		25 52.9	25 47.8	25 38.8			252		✓						20028		
58		4 21.8	4 23.0	4 24.3			23										
22		35 56.8	35 50.7	35 41.7			251		✓						20029		
50		4 22.8	4 23.9	4 25.2			23										
23		35 59.8	35 53.6	35 44.7			274		✓						20020		
49	✓	4 32.9	4 34.8	4 36.2			24										

NAVIGATOR'S FLIGHT RECORD

TIME	A/C CMDR	NAV		SNR		AIRCRAFT BUONO				TRACK				FROM CENT	TO CENT	DATE	REMARKS	
		#1	#2	VLF	#2	TC	DA	TH	GS	WIND DIR/VEL	TAS	ALT	DIST +TOT					DIST REM
1034																		
41		25-02.6	35-51.4	4-36.7	4-37.1	345	612	339	195	261	208							20#21
35		4-34.8	4-36.7	4-36.7	4-37.1					251								20#22
38		36-05.6	35-59.5	4-36.6	4-38.1					281								20#23
36		4-35.9	4-36.6	4-36.6	4-38.1					283								20#23
36		26-08.3	26-02.2	26-02.2	26-02.2					281								20#23
29		4-26.9	4-27.6	4-27.6	4-29.0					283								20#24
37		26-11.3	26-05.2	26-05.2	26-06.1					254								20#24
23		4-37.9	4-38.6	4-38.6	4-40.0					23								20#25
38		26-14.2	26-08.0	26-08.0	26-09.0					252								20#25
16		4-28.9	4-29.5	4-29.5	4-41.0					22								20#26
39		36-17.2	26-11.0	26-11.0	26-12.0					200								20#26
18		4-38.9	4-40.4	4-40.4	4-42.0					23								20#27
40		26-20.1	26-12.9	26-12.9	26-14.8					262								20#27
05		4-40.9	4-41.4	4-41.4	4-42.9					23								20#27
41		26-23.2	26-16.8	26-16.8	26-17.8					261								20#28
21		4-42.0	4-42.4	4-42.4	4-42.9					24								20#28
31		26-26.2	26-19.7	26-19.7	26-20.8					256								20#29
55		4-43.1	4-42.4	4-42.4	4-44.9					18								20#29
47		26-28.9	26-22.4	26-22.4	26-23.5					200								20#40
45		4-44.0	4-44.0	4-44.0	4-45.8					20								20#40
46		26-26.7	26-29.6	26-29.6	26-30.9					15								20#40
22		4-50.8	4-51.1	4-51.1	4-52.4													20#40
40		26-24.6	26-24.1	26-24.1	26-24.2													20#40
55		4-56.4	4-56.2	4-56.2	4-56.2					295								20#40
34		26-03.0	26-02.1	26-02.1	26-01.6					30								20#40
24		4-57.4	4-56.6	4-56.6	4-57.0													20#40



NAVIGATOR'S FLIGHT RECORD

TIME	A/C CMDR	NAV		SNR		AIRCRAFT BUNO				TRACK				FROM		TO		DATE	REMARKS
		TI	ULI	H2	TC	DA	TH	GS	WIND DIR/VEL	TAS	ALT	DIST +TOT	DIST REM	ETE	LEPT	ETA ATA	LEPT		
1056		35.55.9	35.54.8	35.54.2	180	62	186	246	207	233	2500							16 OCT 83	PSIT
107		4.57.5	4.56.0	4.57.0					210										
109		35.44.0	35.42.6	35.41.9					207	1									PSIT
110		4.57.7	4.56.0	4.57.0					214										A/H
1102		35.35.7	35.34.2	35.33.3	178	32	131	282	285	251									PSIT
107		4.46.9	4.44.8	4.46.1					34										A/H
108		35.55.5	35.52.1	35.52.7	200	62	254	240	280	233									PSIT
107		4.45.0	4.42.5	4.44.6					26										A/H
110		36.04.1	36.01.8	36.01.3					264	243	10000								PSIT
105		4.45.1	4.42.4	4.44.6					24										A/H
114		21.17.2	36.14.5	36.14.3					260										LANER
106		4.45.1	4.42.5	4.44.0					245	247									PSIT
116		36.26.9	36.24.0	36.23.9					273										PSIT
107		4.44.9	4.42.3	4.43.9					211	241									A/H
119		36.32.3	36.28.9	36.29.2					284										PSIT
136		4.31.1	4.28.8	4.30.3					003	240									A/H
122		36.20.1	36.16.8	36.16.8					276										PSIT
152		4.31.3	4.29.7	4.31.0	181	82	189	242	032	244									PSIT
126		36.03.9	36.00.2	36.00.3					288										PSIT
158		4.30.8	4.29.7	4.31.0	180	72	187	241	027	238									PSIT
130		35.49.6	35.45.8	35.45.9					298										PSIT
132		4.36.3	4.29.5	4.31.0					028	239									PSIT
134		35.34.1	35.30.4	35.30.4		62	186	240	305										A/H
117		4.29.3	4.29.5	4.30.7					039	235									PSIT
136		35.30.0	35.26.4	35.26.5					278										A/H
144		4.16.3	4.17.4	4.18.0					026	247									PSIT

NAVIGATOR'S FLIGHT RECORD

A/C CMDR		NAV		SNR		AIRCRAFT BUNO										TRACK		FROM		TO		DATE		OF	
N/S	E/W	II	I	U/F	#	TC	DA	TH	GS	WIND	TAS	ALT	DIST	DIST	DIST	DIST	DIST	ETA	ETA	REMARKS					
TIME										DIR/VEL			→TOT	REM				ATA							
11	39	10	35.38.7	35.35.0	35.35.4	356	6R	356	237	285	249	1000								PSIT					
23	W	4.15.6	4.16.1	4.17.7						266															
41		35.48.3	35.44.7	35.45.2						266															
51		4.15.7	4.16.5	4.18.1	360			354	247	298	251	✓								PSIT					
43		36.03.6	36.00.2	36.00.8						259															
57		4.15.2	4.16.5	4.18.0	✓	7R	353	257	230	230	257	✓								PSIT					
49		36.21.9	36.18.7	36.19.4						277															
56		4.14.8	4.16.4	4.18.0	✓	5R	355	245	219	277	252	✓								PSIT					
53		36.39.9	36.37.3	36.37.3						306											A/H				
38		4.13.9	4.15.5	4.17.3	090					202	235	✓									PSIT				
56		36.42.1	36.38.1	36.39.3						276											A/H				
✓ 58		4.01.3	4.05.0	4.04.9	180					207	233	✓									PSIT				
1202		36.29.1	36.25.6	36.25.7						303															
38		4.01.1	4.03.8	4.04.9	181	7L	184	242	242	015	240	✓									PSIT				
66		36.05.9	36.00.7	36.01.3						279															
55		4.01.0	4.03.4	4.05.0	180	6L	186	240	240	223	242	✓									PSIT				
146		35.51.8	35.46.3	35.46.5						276															
35		4.01.0	4.03.3	4.05.0	✓			✓	242	019	244	✓									PSIT				
14		36.36.4	35.30.3	35.30.5						306											A/H				
52		4.00.7	4.03.0	4.04.6	080					246	231	✓									PSIT				
17		35.38.1	35.31.7	35.32.1						298											A/H				
10		3.48.9	.52.1	3.52.7	360					242		✓									PSIT				
21		35.55.0	35.48.7	35.49.0						269															
45		3.48.5	3.49.7	3.52.0	✓	7R	353	233	233	289	238	✓									PSIT				
✓ 28		36.20.7	36.14.8	36.15.0						266															
07		3.49.0	3.49.9	3.52.0	✓	6R	354	250	250	024	251	✓									PSIT				

OCEANDEVRON EIGHT 3760/1 (REV 81)

NAVIGATOR'S FLIGHT RECORD

TIME	A/C CMDR	NAV		SNR		AIRCRAFT BUNO				TRACK			FROM		TO		DATE	REMARKS	
		N/S E/W	Alt	ULC	F 2	TC	DA	TN	GS	WIND DIR/VEL	TAS	ALT	DIST +TOT	DIST REM	ETE	ETA ATA			LEPT
1234		36.45.6	36.39.7	36.40.1														180762	
23		3.49.2	3.50.2	7.52.0	090			236	280	245									A/H PSIT
37		36.44.5	36.38.7	76.38.9	180			253	271	235	✓								A/H PSIT
50		3.35.5	3.36.7	7.38.4															
41		36.29.2	36.23.9	36.23.5					282										
45		3.35.9	3.37.4	3.38.9	181	5L	186	238	229	236	✓								PSIT
48		36.03.6	35.57.2	35.57.8					261										
10		3.35.3	3.37.6	3.39.0	150	8L	188	235	234	245	✓								PSIT
54		35.36.8	35.31.1	35.31.7					276	238	✓								A/H PSIT
46		3.33.4	3.26.5	3.27.9	099				039	240	✓								A/H PSIT
57		35.35.2	35.30.0	35.30.5					278										A/H PSIT
50		3.21.2	3.25.0	7.25.9	260				630	240	✓								
1302		35.55.7	35.51.6	35.52.6					245										
53		3.20.7	3.24.6	3.26.0	✓	8R	352	277	032	232	✓								PSIT
07		36.13.7	36.10.5	36.11.6					258										
35		3.20.3	3.24.8	3.26.0	✓	8R	352	244	030	244	✓								PSIT
14		36.41.8	36.28.9	36.40.4					253										A/H PSIT
41		3.18.4	3.23.9	3.24.5	090				024	241	✓								PSIT
16		36.41.2	36.28.6	36.39.6					277										A/H PSIT
44		3.07.1	3.13.0	3.13.3	180				029	241	✓								PSIT
27		36.17.8	36.13.6	36.14.8					272										
05		3.06.3	3.12.2	3.13.0	✓	8L	188	240	033	242	✓								PSIT
27		35.59.9	35.54.5	35.55.5					084										
57		3.05.9	3.11.9	3.13.0	✓	✓	✓	237	033	236	✓								PSIT
31		35.45.2	35.39.1	35.39.7					290										A/H PSIT
52		3.04.6	3.10.7	3.11.8	080				269	238	✓								PSIT

NAVIGATOR'S FLIGHT RECORD

A/C CMDR	NAV		SNR		AIRCRAFT BUNO				TRACK				FROM		TO		DATE	REMARKS
	#	VLF	#	#	TC	DA	TH	GS	WIND DIR/VEL	TAS	ALT	DIST +TOT	DIST REM	ETE	ETA	ATA		
1334	35.48.1	35.41.0	35.42.2					286	286								A/H	
10	2.53.2	3.00.6	3.00.5	360				042			1000						1751T	
37	26.63.9	25.56.8	35.57.5															
10	2.53.2	2.58.7	3.00.6															
41	26.11.3	26.10.9	26.10.9	360	712	353	248	250	242								1230T	
50	2.59.9	2.59.9	2.00.0															
45	26.24.6	26.24.0	26.23.9		602	264	245	250	243									
00	2.59.9	2.59.8	2.00.0															
48	26.40.9	26.38.6	26.38.6		712	353	246	249	241								A/H	
53	2.59.9	2.59.8	2.00.1															
056	26.19.2	26.16.7	26.16.6	180				271										
24	3.05.2	3.05.6	3.05.6															
58	26.16.7	26.12.4	26.12.9					279										
01	3.11.2	3.12.8	3.11.5	237				28										
√59	26.14.4	26.10.9	26.11.4	230				278										
01	3.16.0	3.17.5	3.16.2					26										
1400	26.12.5	26.09.1	26.09.5					296										
21	2.19.4	3.20.7	3.19.5	274				22										
01	26.11.1	26.07.6	26.08.0	244				276										
22	2.23.3	3.24.5	3.23.4					32										
03	26.06.2	26.02.7	26.03.0	202				273										
14	3.26.2	3.29.1	3.28.1					281										
04	26.04.5	26.01.0	26.01.3	255				274										
33	2.32.4	3.34.1	3.32.0					22										
√05	26.03.1	25.58.6	26.00.0	210				259										
27	3.37.0	3.37.6	3.36.4					19										

KEANDEVRON EIGHT 3760/1 (REV 81)

NAVIGATOR'S FLIGHT RECORD

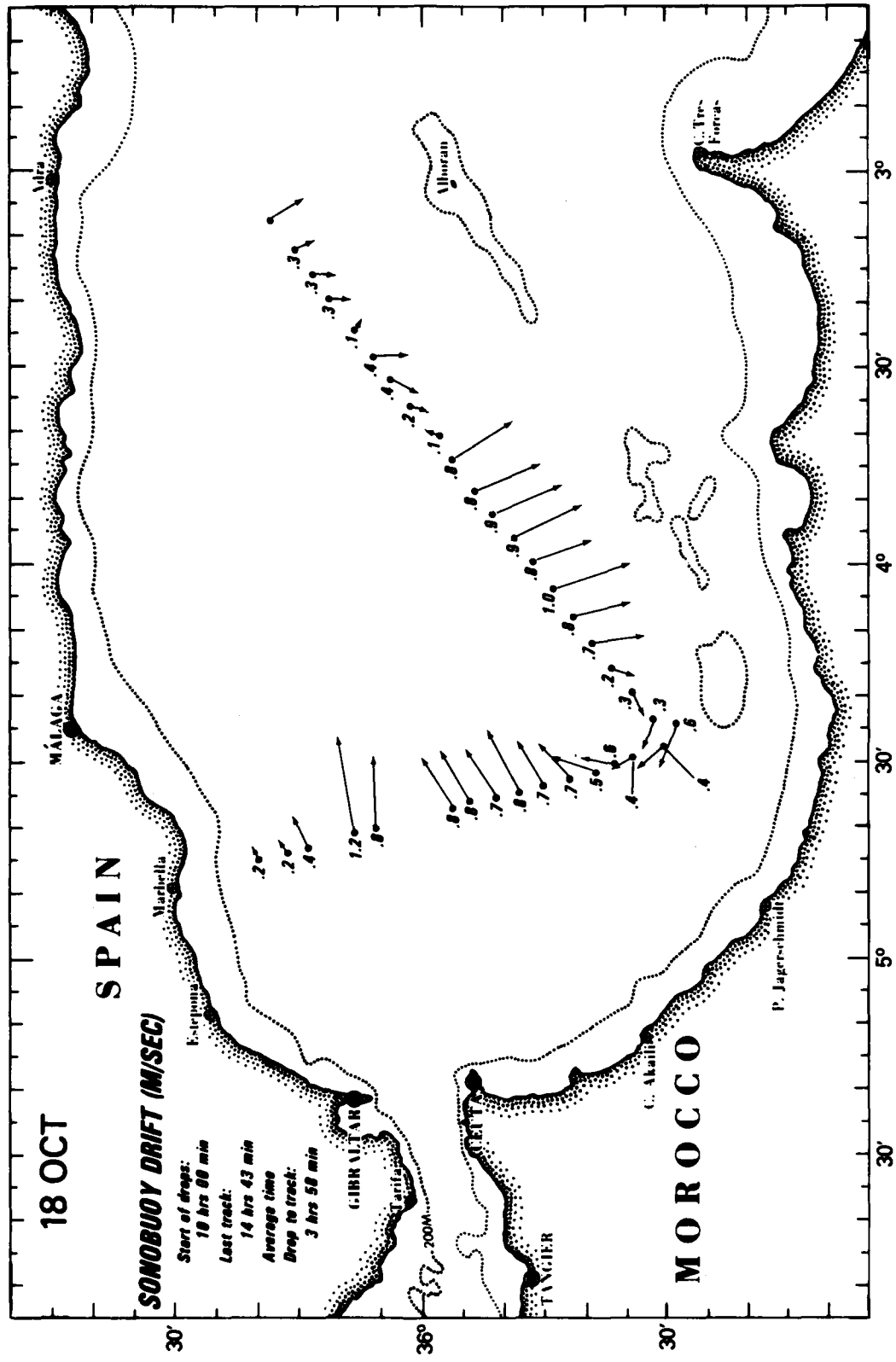
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		U	I	VLF	#	TC	DA	TH	GS	WIND DIR/VEL	TAS	ALT	DIST + TOT	DIST REM	ETE	ETA	ATA	LE RT	LE RT			LE RT	10 OF
1406	U	36.027	35.59.3	35.59.6	278				206	280													50#9
17	W	3.40.6	3.40.8	2.29.9					235	277													50#10
09		35.50.4	35.50.7	35.50.5	162				202	276													50#11
07		3.41.0	2.29.7	3.29.6					212	282													50#12
10		35.50.1	35.47.1	35.47.5	260				202	276													50#13
56		3.47.3	3.46.9	2.45.4					202	276													50#14
12		35.47.3	35.44.0	35.44.9	277				216	289													50#15
00		3.50.8	3.50.5	3.48.5					214	285													50#16
12		35.46.0	35.43.3	35.43.8	273				207	281													50#17
58		3.54.6	3.53.6	3.52.0					207	281													50#18
14		35.42.9	35.40.3	35.41.0	272				207	281													50#19
21		3.59.9	3.58.5	3.56.7					207	281													50#20
15		35.38.1	35.36.1	35.36.7	217				207	281													50#21
56		4.04.9	4.02.5	4.01.0					207	281													50#22
17		35.36.7	35.35.4	35.35.8	275				207	281													50#23
13		4.10.6	4.07.5	4.06.1					207	281													50#24
18		35.35.5	35.34.5	35.35.0	264				207	281													50#25
27		4.16.2	4.12.6	4.11.1					207	281													50#26
19		35.34.3	35.33.7	35.34.3	272				207	281													50#27
55		4.23.0	4.18.7	4.17.1					207	281													50#28
21		35.32.9	35.32.7	35.32.4	251				207	281													50#29
07		4.28.6	4.23.8	4.22.1					207	281													50#30
22		35.31.8	35.32.1	35.32.8	262				207	281													50#31
10		4.32.6	4.28.1	4.26.4					207	281													50#32
23		35.28.8	35.29.8	35.30.2	268				207	281													50#33
14	✓	4.27.1	4.31.1	4.29.5					207	281													50#34

NAVIGATOR'S FLIGHT RECORD

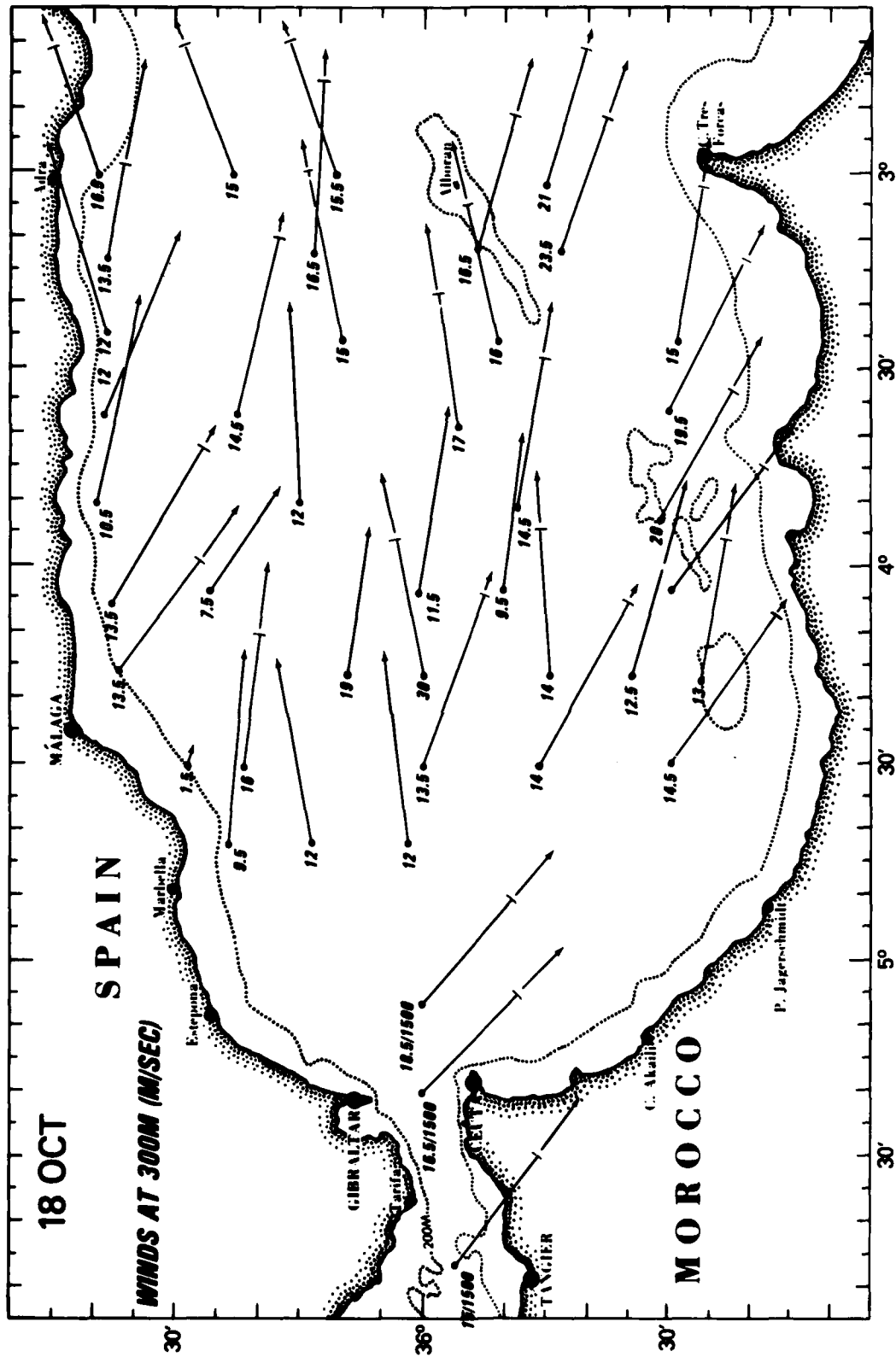
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TIME	N/S E/W	#1	WF	#2	TC	DA	TH	GS	WIND DIR/VEL	TAS	ALT	DIST + TOT	DIST REM	ETE	ETA	ATA				
1421	W	35-215	35-332	35-336	015			250	276		1000						190219	20#22		
143	W	4-29.2	4-31.5	4-30.3				211	24		✓							20#23		
25		35-344	35-367	35-36.9	001			217	26		✓							20#24		
26		35-373	35-398	35-40.2	014			211	28		✓							20#25		
28		4-39.8	4-30.5	4-29.7	350			272	33		✓							20#26		
28		35-399	35-42.7	35-42.3	050			198	26		✓							20#27		
28		4-40.1	4-30.1	4-29.3				221	30		✓							20#28		
28		35-418	35-44.8	35-45.5	050			221	28		✓							20#29		
16		4-29.1	4-29.0	4-27.7				187	24		✓							20#30		
27		35-44.7	35-48.3	35-48.9	320			215	27		✓							20#31		
32		4-29.7	4-28.7	4-27.4				197	21		✓							20#32		
30		35-47.3	35-51.1	35-51.9	016			207	28		✓							20#33		
24		4-39.9	4-28.2	4-27.0				215	23		✓							20#34		
31		35-49.6	35-54.1	35-54.6	290			197	24		✓							20#35		
37		4-42.2	4-30.6	4-29.6				207	23		✓							20#36		
32		35-51.8	35-56.4	35-57.1	015			207	23		✓							20#37		
32		4-43.8	4-31.0	4-29.5				207	23		✓							20#38		
33		35-54.0	35-59.1	35-59.7	330			207	23		✓							20#39		
40		4-45.3	4-31.6	4-30.3				207	23		✓							20#40		
			36	36	010			207	23		✓							20#41		
			4	4				207	23		✓							20#42		
36		35-59.9	36-05.3	36-06.2							✓							20#43		
41		4-48.3	4-33.4	4-31.7							✓							20#44		

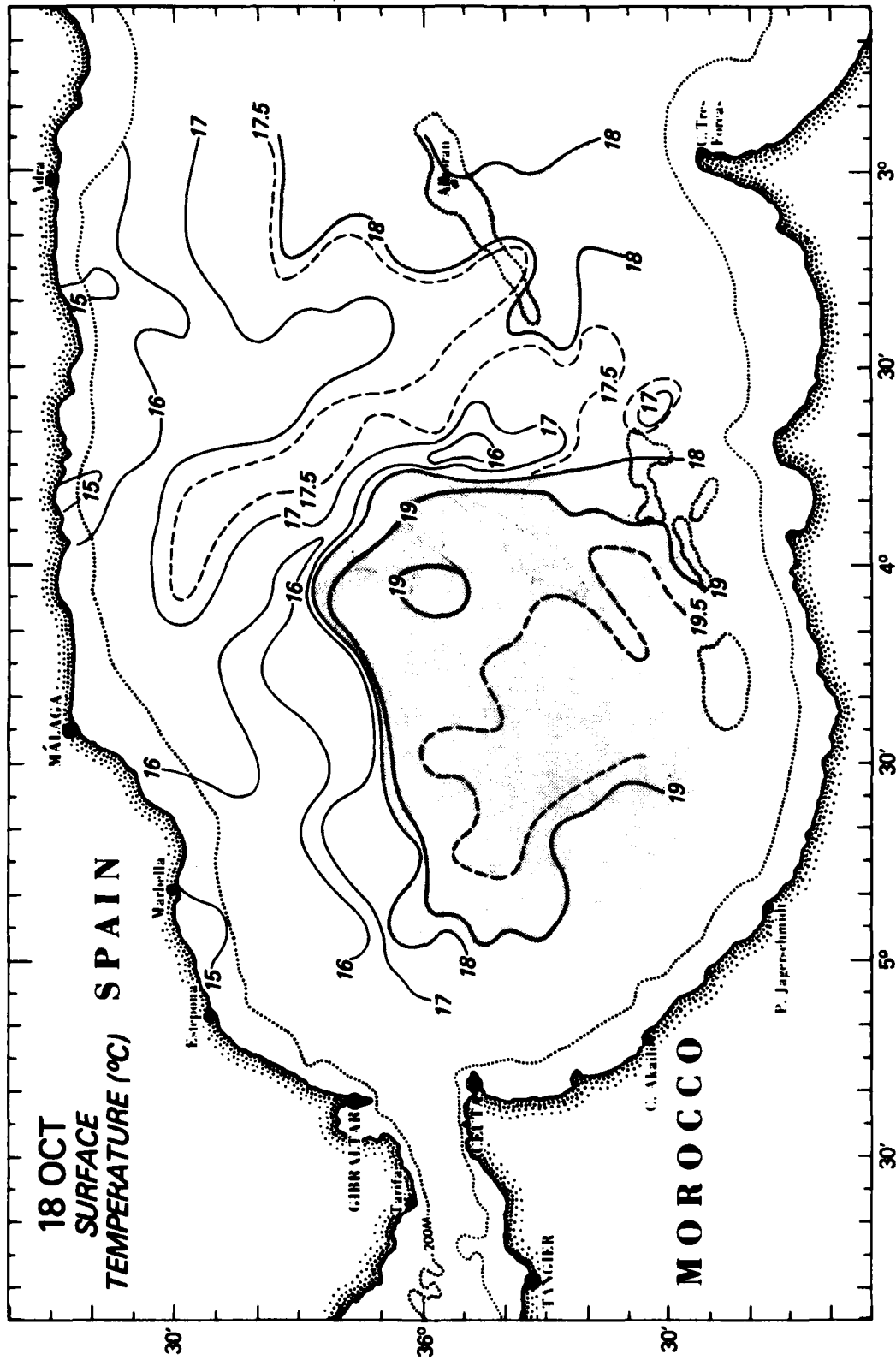
NAVIGATOR'S FLIGHT RECORD

A/C CMDR		NAV		SNR		CRAFT BUND				TRACK			FROM		TO		DATE	REMARKS
TIME	N/S E/W	#1	VLF	VLF	#2	TC	DA	TH	GS	WIND DIR/VEL	TAS	ALT	DIST + TOT	DIST REM	ETE	ETA ATA	12	OF
1437	N	26-038	26-09.2	26-10.2	26-10.2	096			225			1000'					12/2/52	26-25
30	W	4-466	4-30.8	4-29.3	4-29.3				210									26-26
		26	26	26	26													26-27
		4-	4-	4-	4-													26-28
1441		26-09.2	26-14.8	26-15.8	26-15.8	221			187	209								26-29
29		4-584	4-41.2	4-29.3	4-29.3					22								26-30
1442		26-11.3	26-17.2	26-17.8	26-17.8	228			196	271								26-31
31		5-019	4-43.5	4-42.3	4-42.3					22								26-32
1443		26-14.2	26-20.1	26-20.6	26-20.6	250			203									26-33
28		5-030	4-44.1	4-43.1	4-43.1													26-34
																		26-35
1447		26-06.3	36-10.6	26-11.4	26-11.4	273						1000'						26-36
30		5-074	4-50.0	4-48.2	4-48.2													26-37
1452		25-522	25-55.5	26-00.1	26-00.1	269	79	270	270	210	258	5000'						26-38
20		5-254	5-06.2	5-04.5	5-04.5					37								26-39
1455		25-587	25-59.7	26-00.0	26-00.0	270	92	270	270	215	247							26-40
22		5-291	5-19.9	5-18.4	5-18.4					33								26-41
1501		25-582	25-55.8	26-56.2	26-56.2	258	✓	263	274	206	249	✓						26-42
		6-036	5-45.7	5-43.7	5-43.7					30								26-43
1510		26-042	25-36.0	26-56.0	26-56.0	270	41	274	280	225	249	✓						26-44
		6-564	6-29.1	6-27.3	6-27.3					22								26-45
																		26-46
1531																		26-47



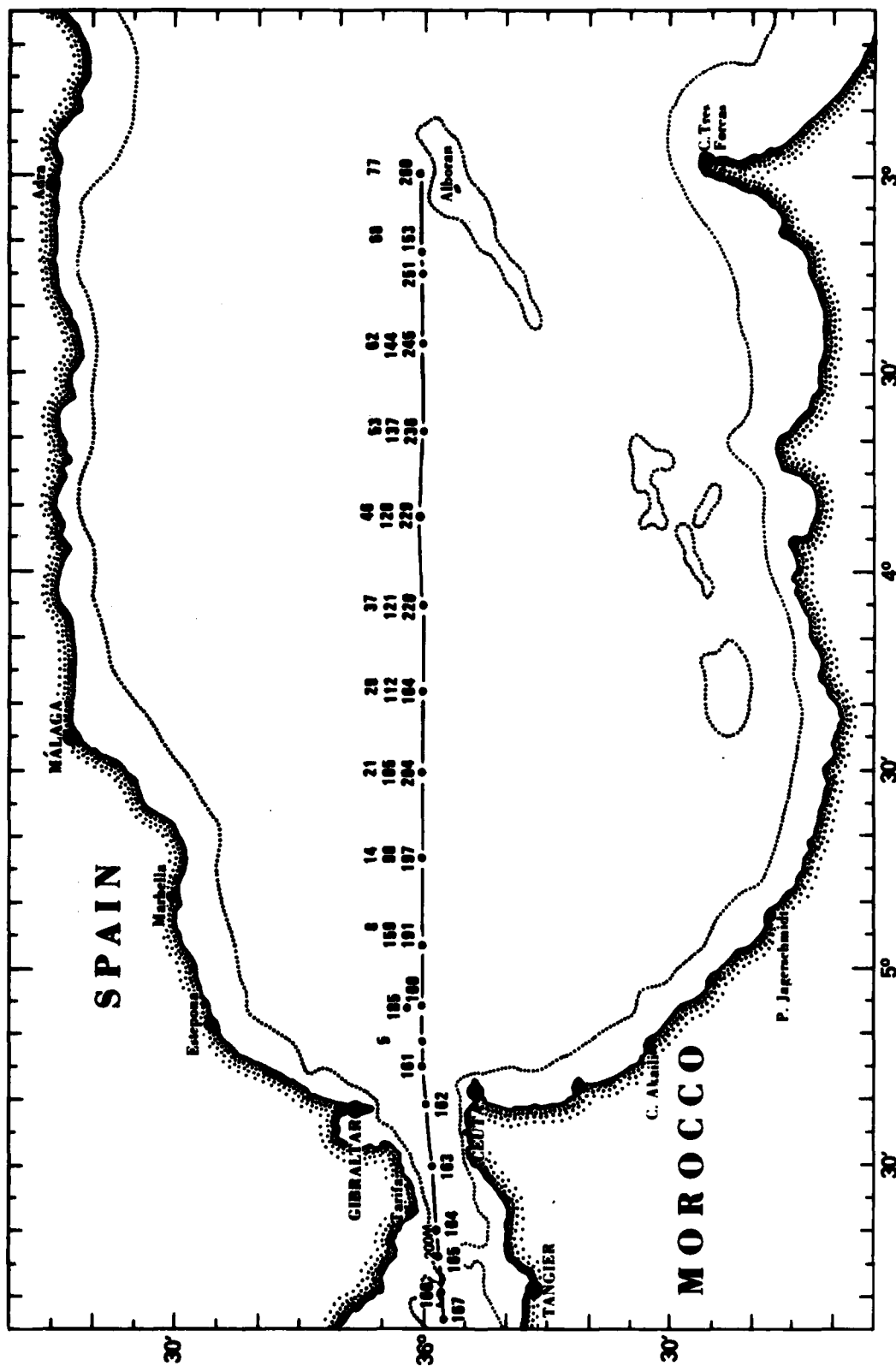




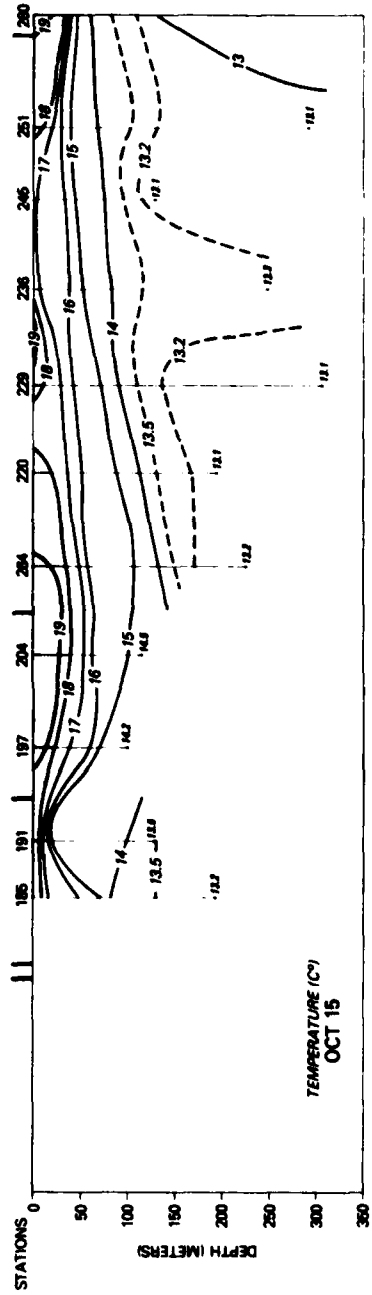
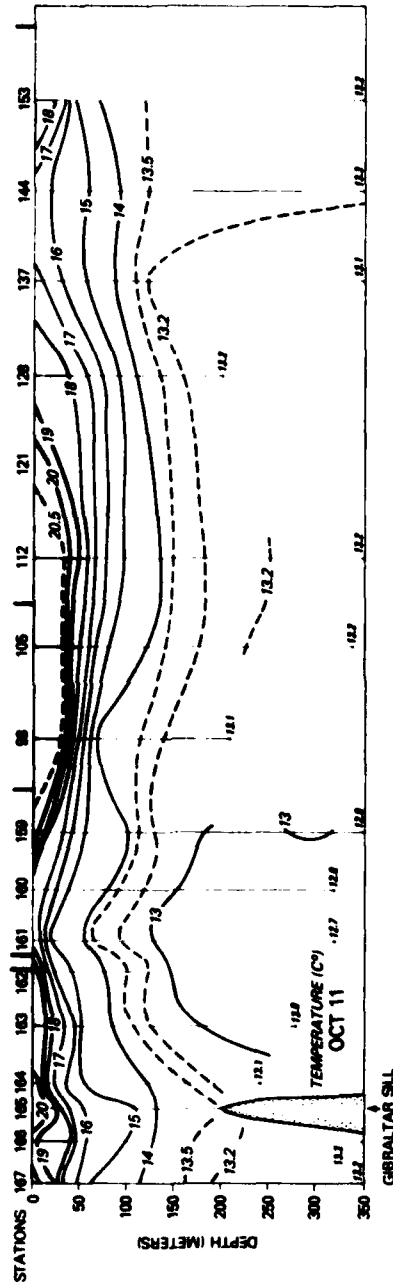
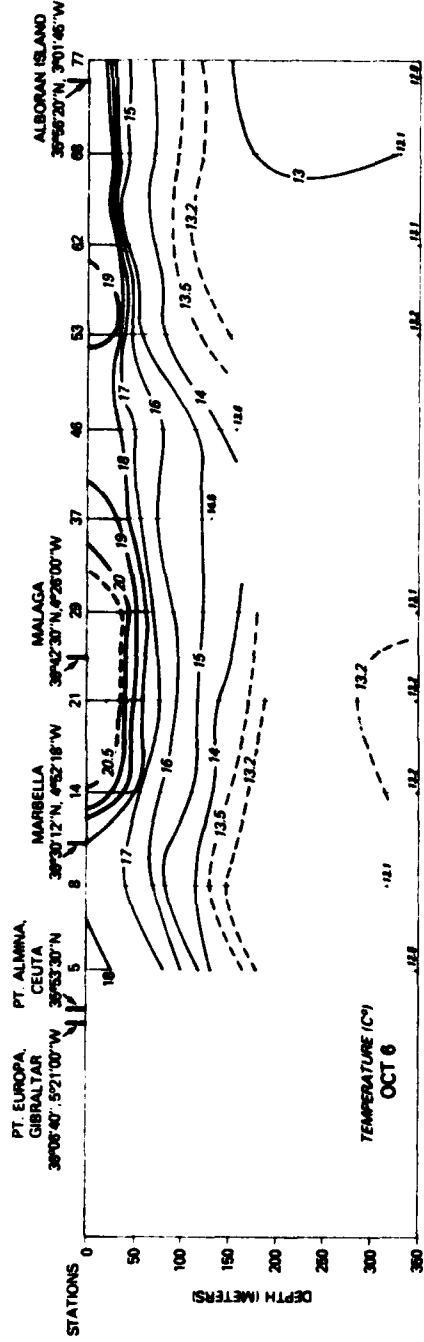


**PART II**  
**VERTICAL ANALYSES**

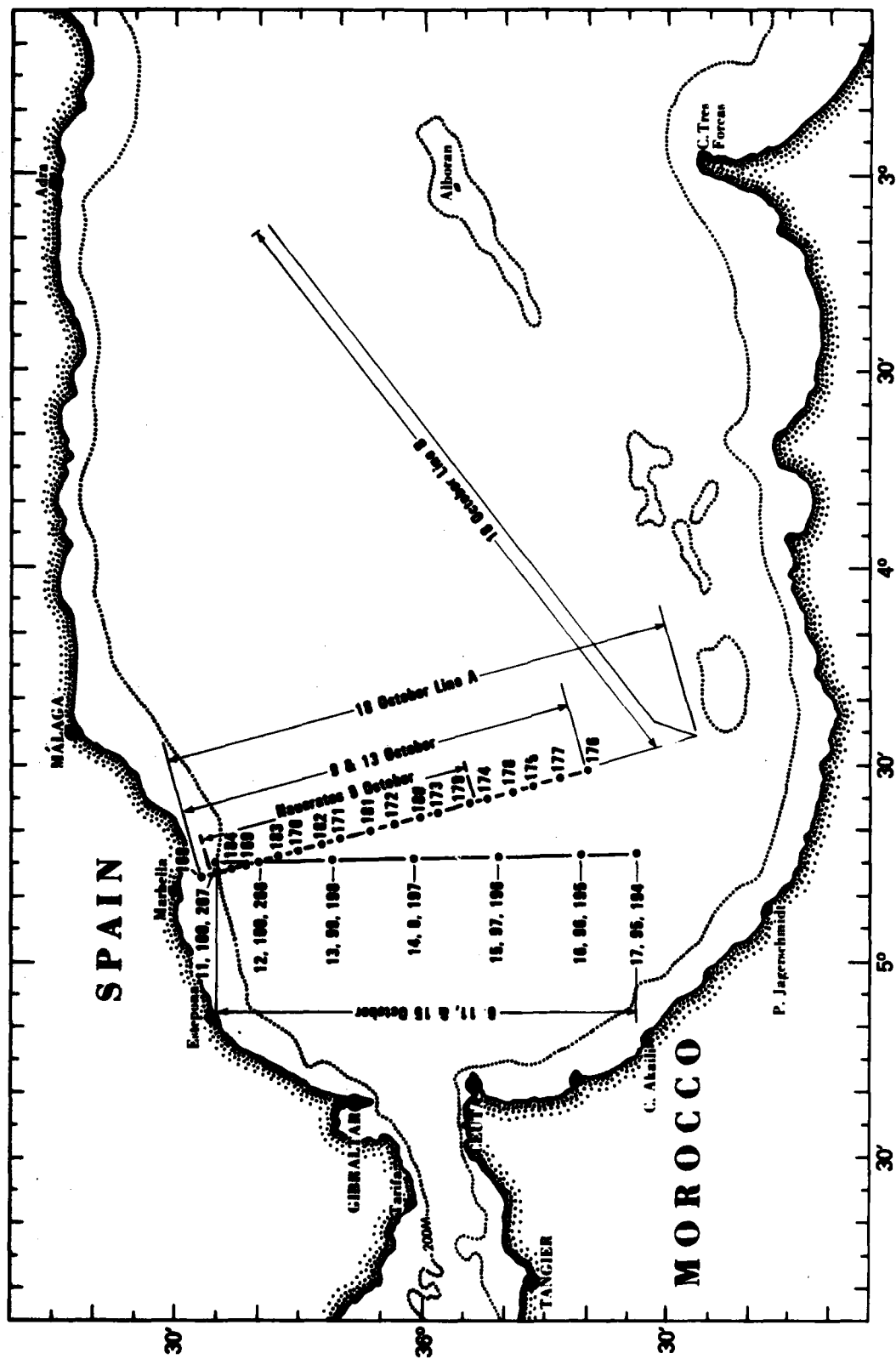
**A. The 36° Latitude Vertical Sections**



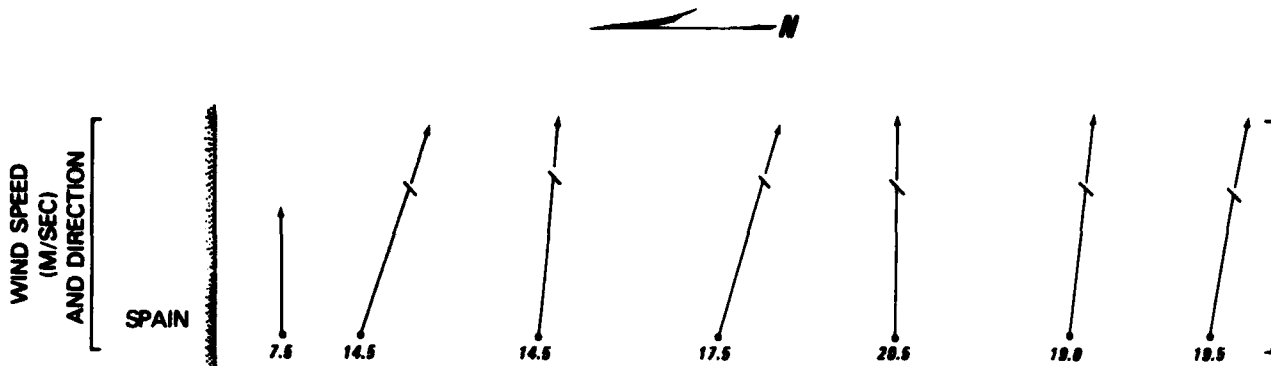
Location plat for 36°N latitude vertical temperature analyses



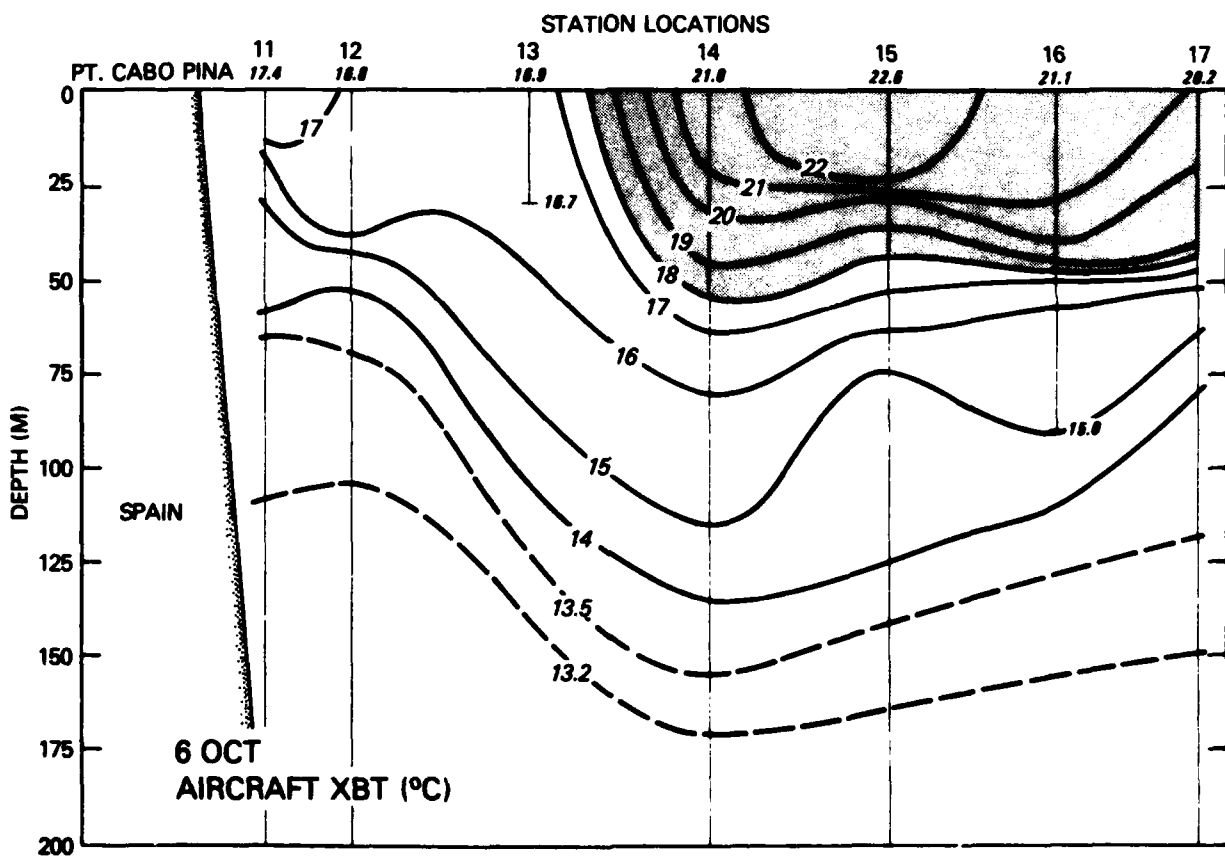
**B. The Marbella Line Vertical Sections**



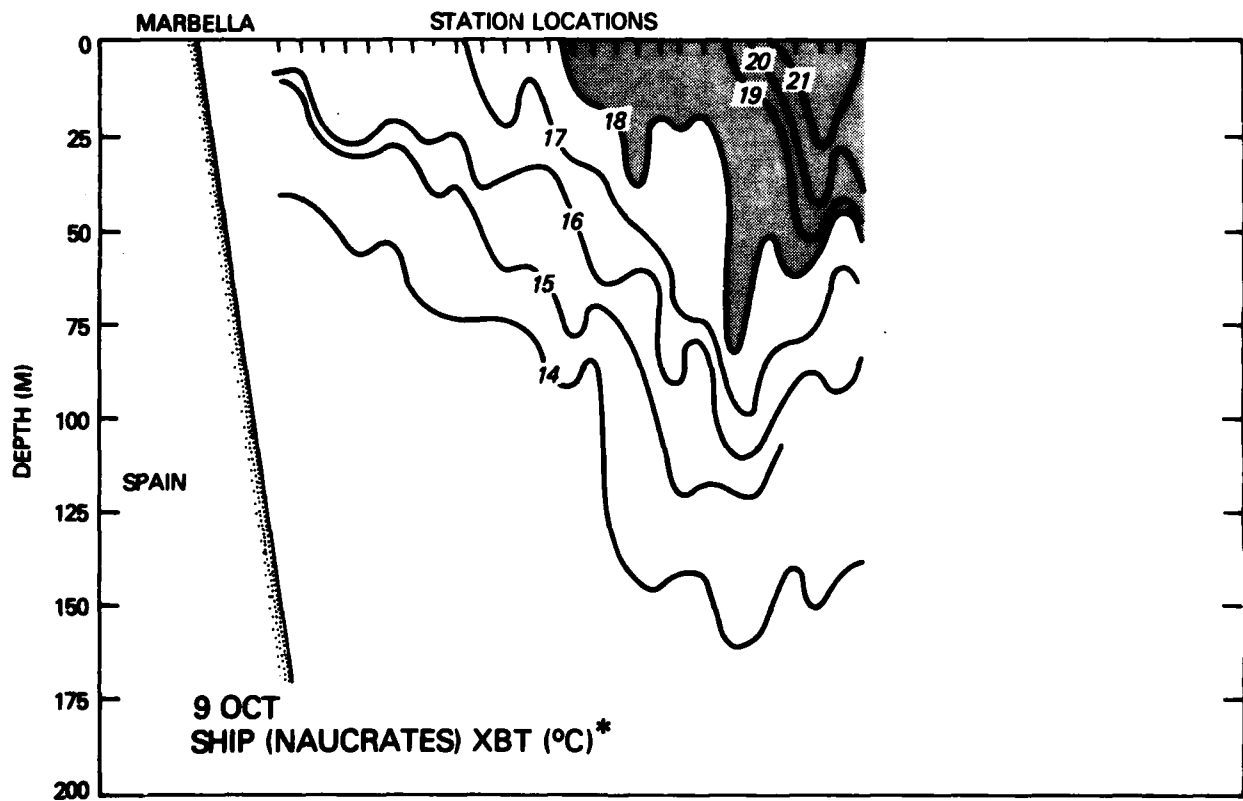
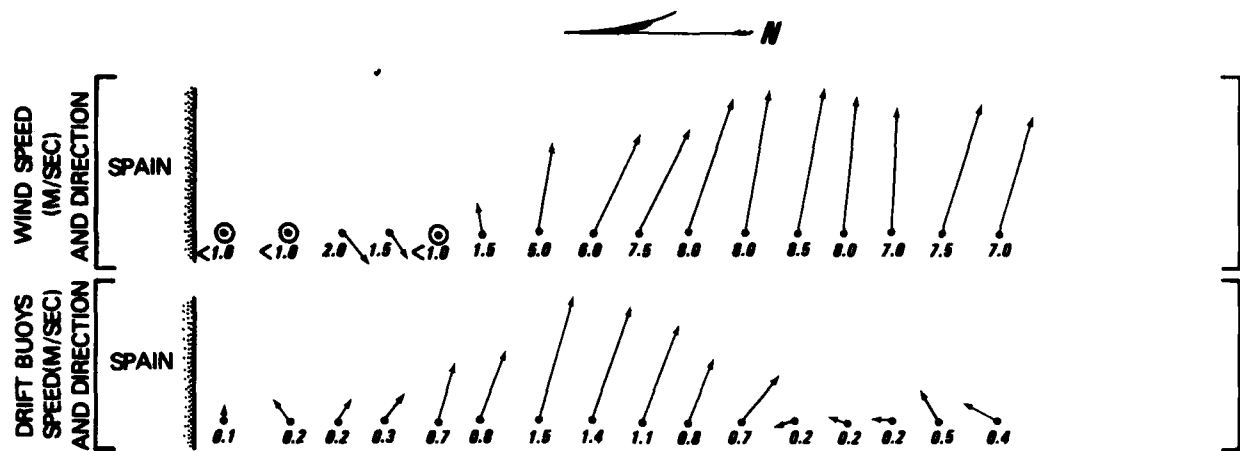
Location Plat for Marbella Lines INS winds, sonobuoy drifts, and vertical temperature analyses



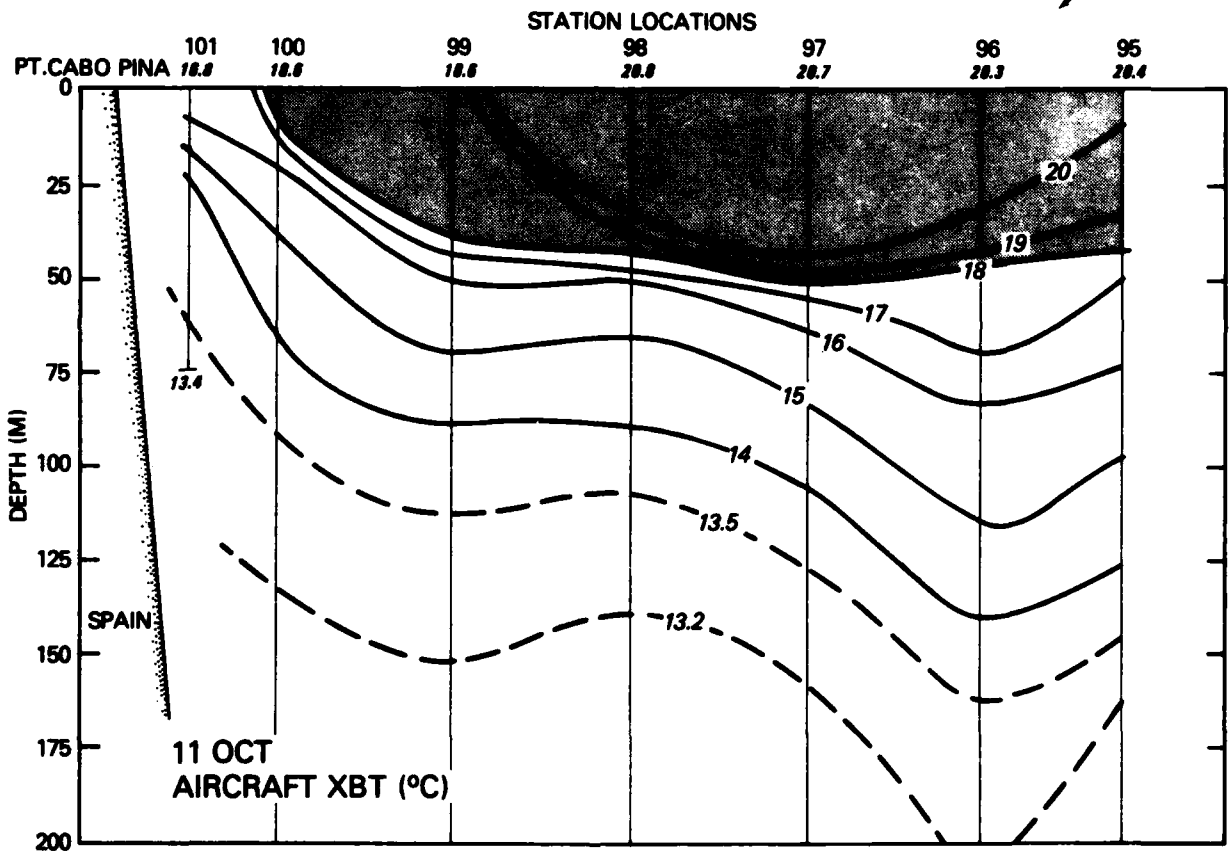
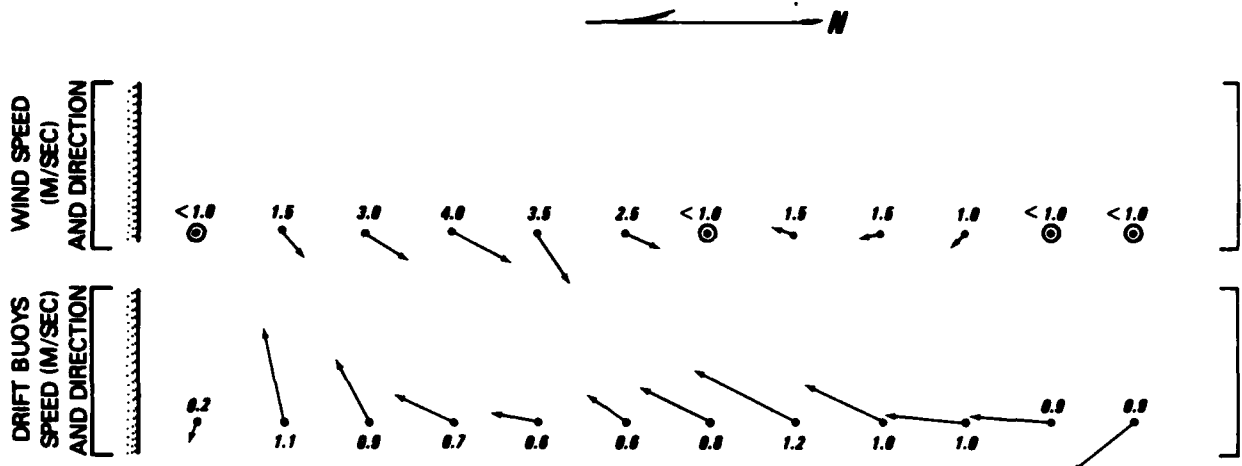
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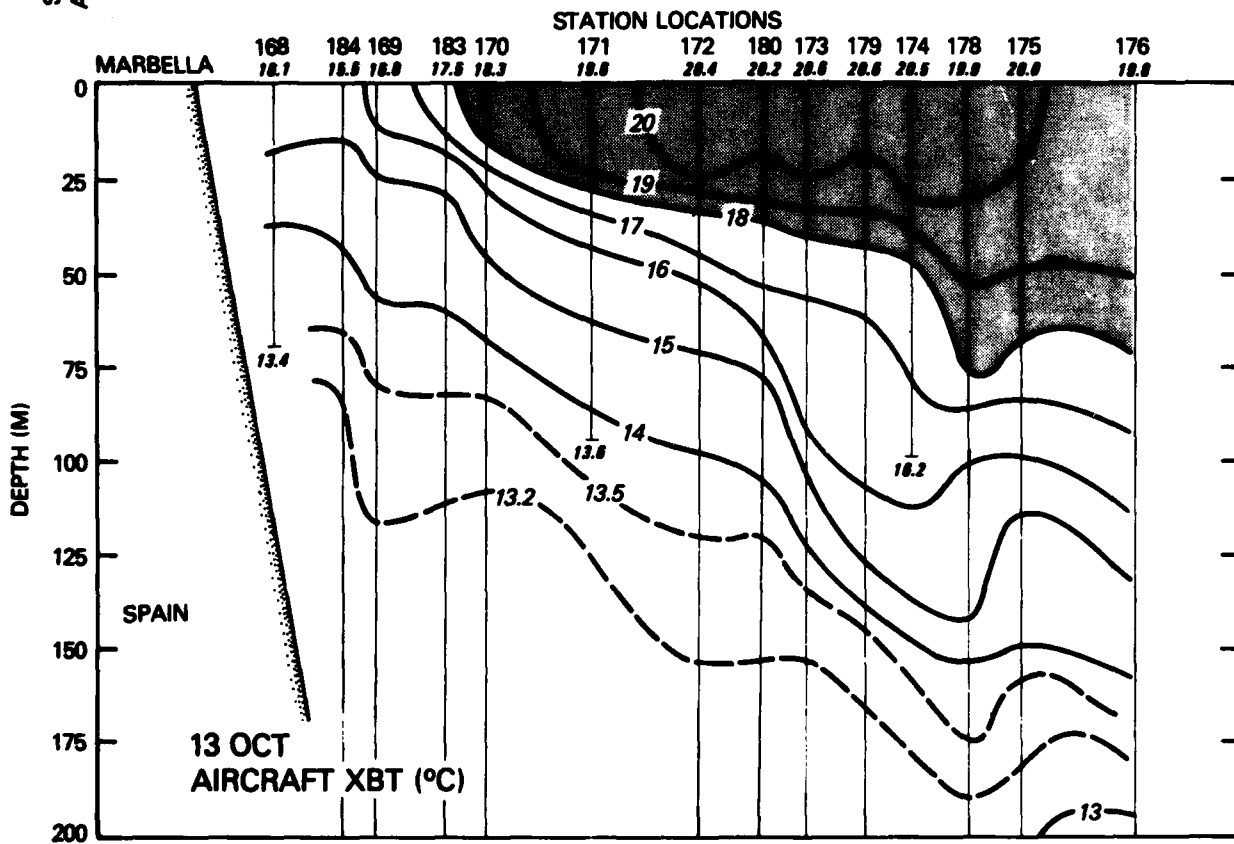
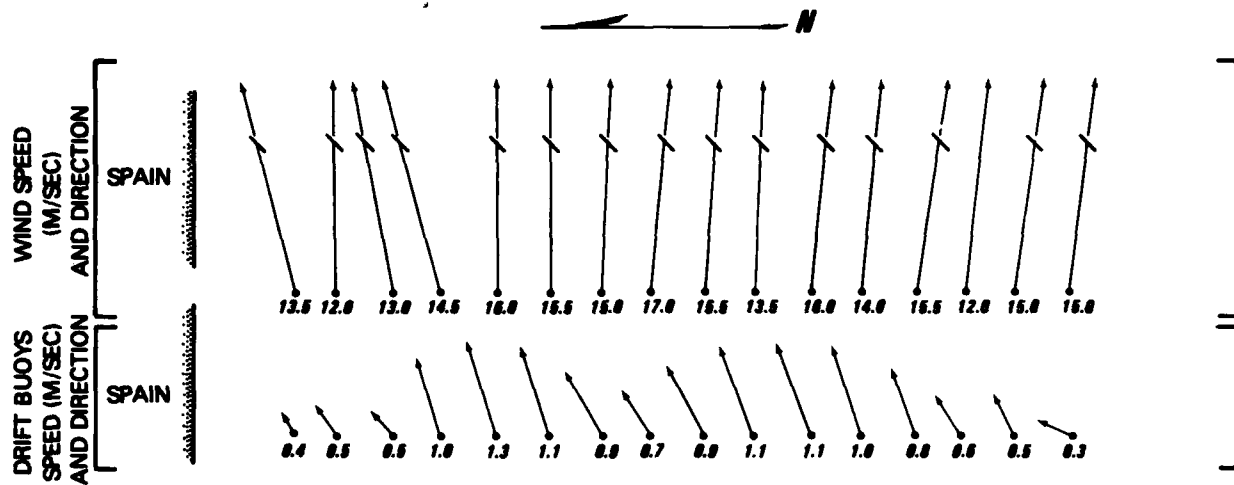




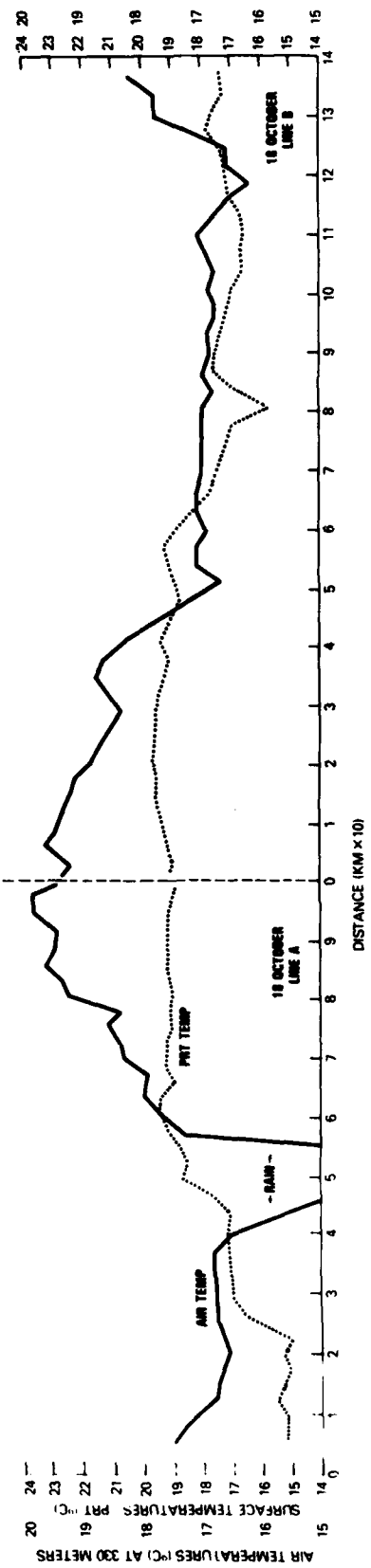
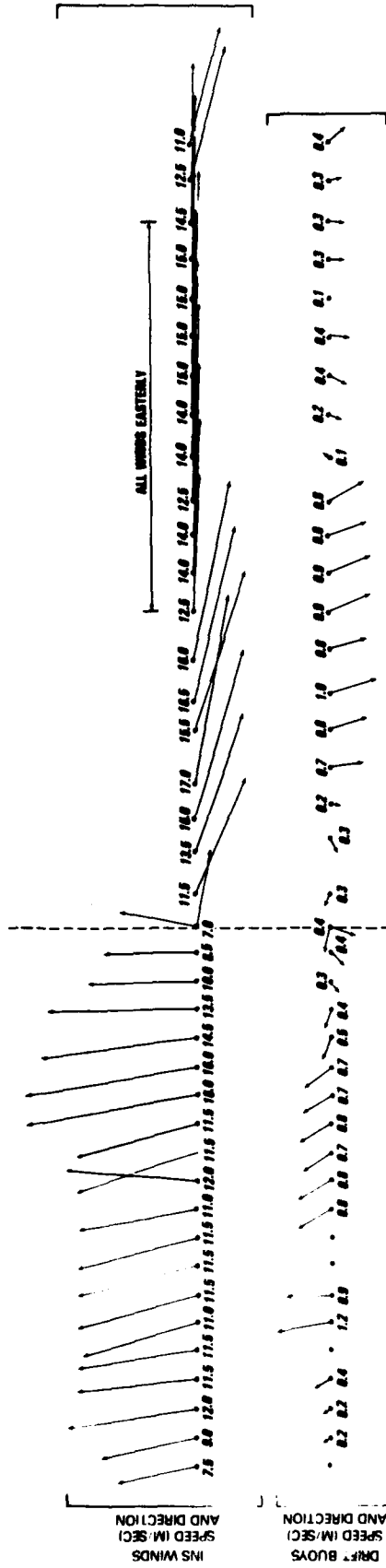


\* SHIP XBT DATA WERE COLLECTED DURING THE PERIOD 23:10 HRS 8 OCT THROUGH 03:19 HRS 9 OCT. AIRCRAFT DATA WERE COLLECTED DURING THE PERIOD 10:25 HRS THROUGH 15:13 HRS 9 OCT.









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4. TITLE (and Subtitle) An Analysis of Aircraft Data Collected in the Alboran Sea During Donde Va?, 6 Through 18 October 1982	5. TYPE OF REPORT & PERIOD COVERED Final	
	6. PERFORMING ORG. REPORT NUMBER	
7. AUTHOR(s) Paul E. La Violette Jeffrey L. Kerling	8. CONTRACT OR GRANT NUMBER(s)	
9. PERFORMING ORGANIZATION NAME AND ADDRESS Naval Ocean Research and Development Activity NSTL, Mississippi 39529	10. PROGRAM ELEMENT, PROJECT, TASK AREA & WORK UNIT NUMBERS 61153N	
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19. KEY WORDS (Continue on reverse side if necessary and identify by block number) remote sensing sea surface temperature sonobuoy drift factors		
20. ABSTRACT (Continue on reverse side if necessary and identify by block number) During the period 6 through 18 October 1982, a U.S. Navy aircraft flew a series of oceanographic survey flights over the Alboran Sea as part of a multi-platformed international experiment called Donde Va? The purpose of the flights was to measure the surface and subsurface temperature distribution, the short-term surface flow, and the atmospheric conditions during the period of the intensive field investigations.  This technical note describes these flights and presents the analyses of the		

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(continued from Block 20)

Precision Radiation Thermometer (PRT-5), the Airborne Expendable Bathythermograph (AXBT), the sonobuoy drift, and the Inertial Navigation System (INS) wind data.

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