

INFORMAL REPORT AND INDEX OF
NAVIGATION, DEPTH, MAGNETIC AND SUBBOTTOM PROFILER DATA
(Issued April 1989)

ROUNDAABOUT EXPEDITION

LEG 12

=====

R/V Washington

Majuro, Marshall Islands (31 December 1988)
to
Majuro, Marshall Islands (9 January 1989)

Chief Scientist:

T. Shipley - University of Texas, Austin

Resident Marine Technician - Gene Pillard

Post-Cruise Processing and Report Preparation
by Geological Data Center, Scripps Institution of Oceanography

Data Collection and Processing Funded by NSF
Grant Number OCE86-16368

NOTE: This is an index of underway geophysical data edited and processed after the completion of the cruise leg and is intended primarily for informal use within the institution. This document is not to be reproduced or distributed outside Scripps without prior approval of the chief scientist or the Geological Data Center, Scripps Institution of Oceanography, La Jolla, California 92093.

GDC Cruise I.D.# 239

INFORMAL REPORT AND INDEX OF NAVIGATION
AND UNDERWAY GEOPHYSICAL DATA

Processed by the Geological Data Center
Scripps Institution of Oceanography

Contents:

Index Chart - gives track of cruise leg, dates, ports, and mileage of each type of data collected.

Track Charts - annotated with dates and hour ticks.

Profiles - depth, magnetic anomaly and gravity free air anomaly vs. distance. Sections of track having subbottom profiles (airgun or watergun) records have a wide black line along the bottom of the profile. Sections having Sea Beam are indicated by a narrow black line.

Sample Index - list of beginning and end times and positions of all underway records as well as all other samples and measurements (geology, biology, physical oceanography, etc.) collected on the cruise leg.

NOTE: One or more of the underway data types may not be collected on a given cruise leg.

For information on the availability and reproduction costs of data in the following forms, contact S. M. Smith, Curator, Geological Data Center, Scripps Institution of Oceanography, La Jolla, CA 92093. Phone (619)534-2752.

1. Navigation listing with times and positions of course and speed changes, fixes and drift velocity.
2. Depth compilation plots - compilation plots at the traditional scale of 4in/degree longitude (1:1,000,000) are no longer produced for Sea Beam cruises. Custom plots may be requested of vertical beam (2 $\frac{2}{3}$ degree beam width) depths retrieved at one minute intervals of ship time.
3. Plots of depths, magnetics or gravity profiles along track - custom plots at various map and profile scales on Mercator projection may be requested.
4. Separate time series files of navigation, depth, gravity and magnetics as well as these data merged in the MGD77 Exchange format on magnetic tape.
5. Microfilm or Xerox copies of:
 - a. Echosounder records - 12 and 3.5 kHz frequency
 - b. Subbottom profiler records
 - c. Magnetometer records
 - d. Underway data log book

SIO Sea Beam Data *

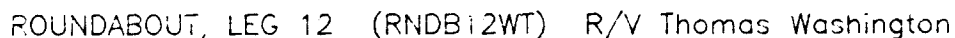
The following forms are available, subject to approval of the cruise leg chief scientist:

- 1) Archive copy of contour swath books generated in real time on board ship available for inspection at the data center.
- 2) Microfilm (35mm flowfilm) containing swath books plus, for some cruises, the Sea Beam monitor record and navigation list.
- 3) Sea Beam merged tapes - Sea Beam data merged with navigation. (Navigation is edited to the extent that DR courses and speeds are edited and poor fixes are removed after inspection of drift vectors between fix pairs. No editing is done on the basis of adjusting to overlapping Sea Beam swaths.)
- 4) Archive contour plots - 16"/degree chart scale, with contour interval nominally 50m, are generated for all transit lines. Some survey areas are plotted at appropriate scales as well. Available for inspection at data center; additional copies may be generated from plot files stored on tape.
- 5) Custom generated plots of Sea Beam swaths on Mercator projection in four colors at variable plot scales and contour intervals. There are provisions to adjust positions of individual track lines and to edit out beams (bad data or overlapping data on inside of turns).

revised October 1986

* NOTE: Sea Beam data collection and processing were not funded by extramural grants on this leg. Instead, they have been collected and processed in "transit mode" by the SIO Shipboard Technical Support group as part of an experimental program to optimize ship usage and to increase the amount of available Sea Beam data. At this time, policies for accessing these data are under review. For more information, contact the Geological Data Center curator.

April 1989

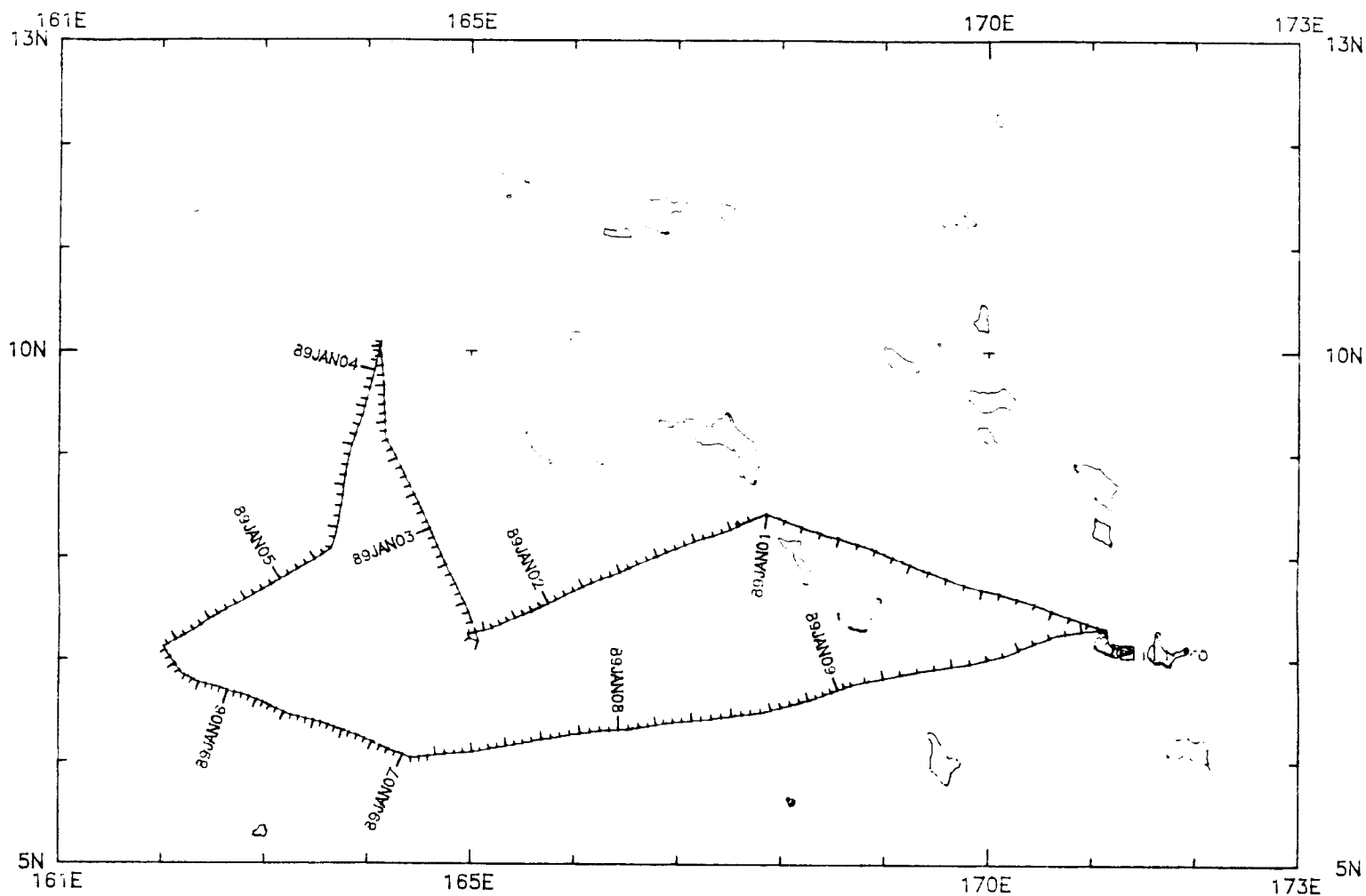


CHIEF SCIENTIST:

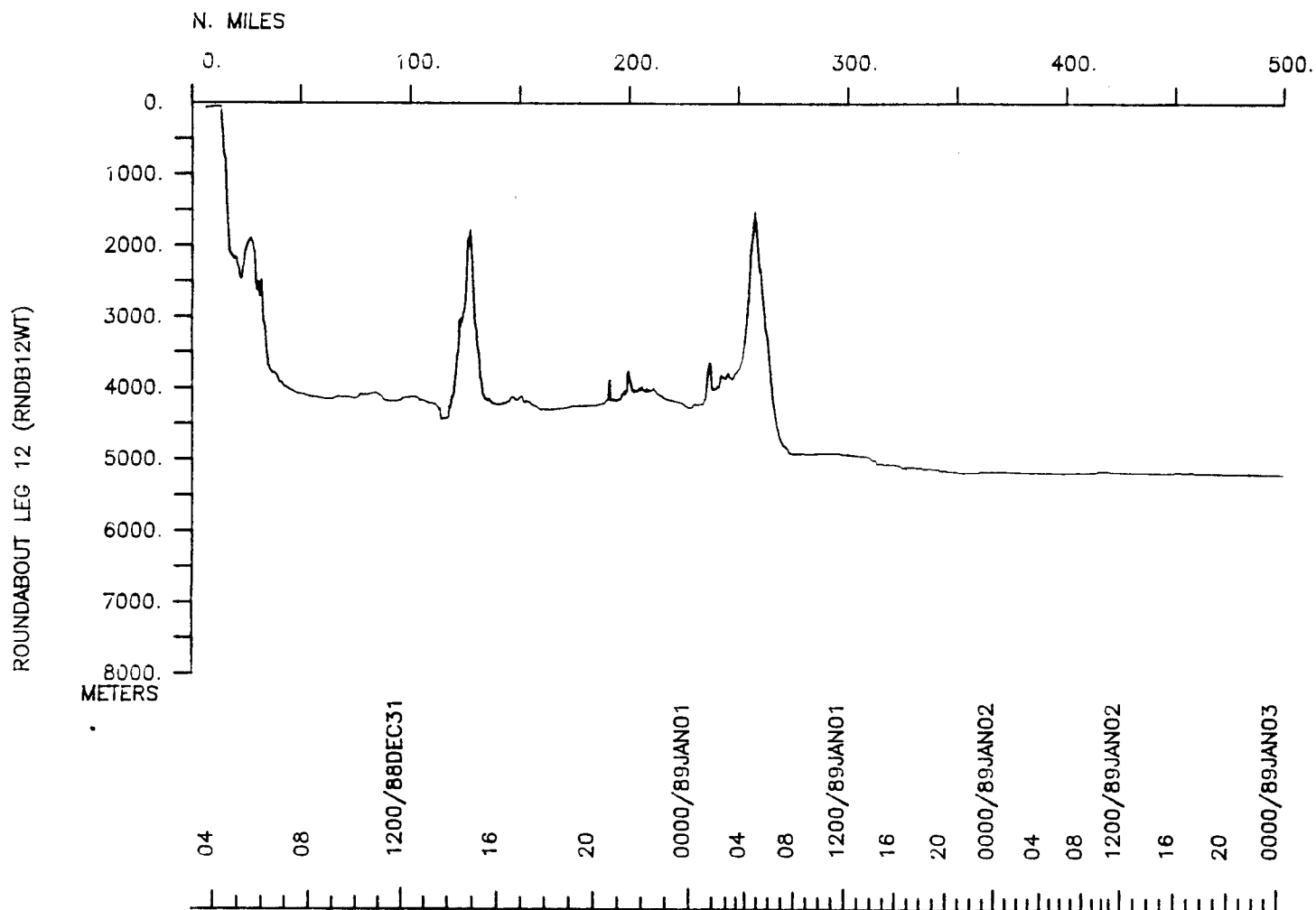
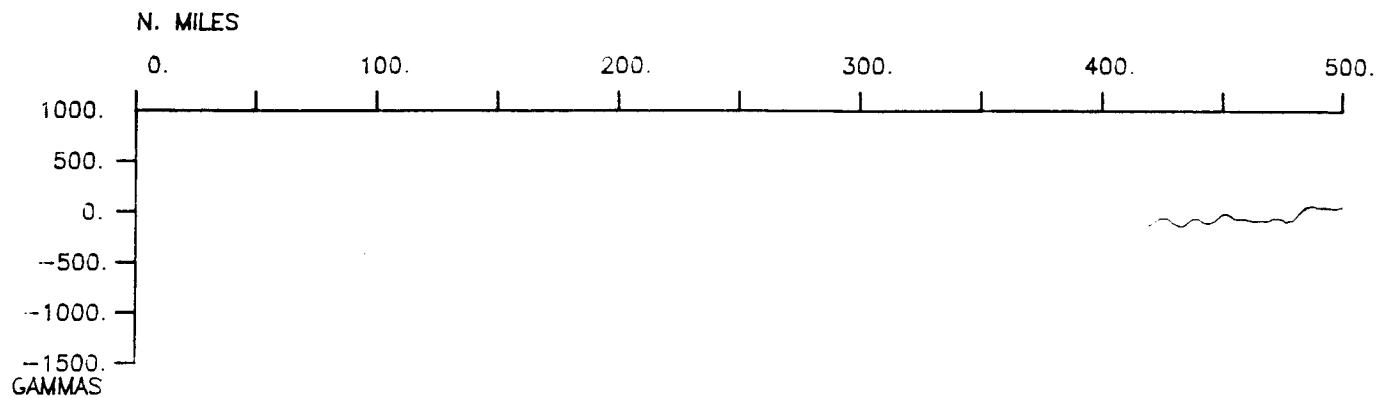
PORTS: Majuro - Majuro, Marshall Islands

SHIP: R/V T. Washington

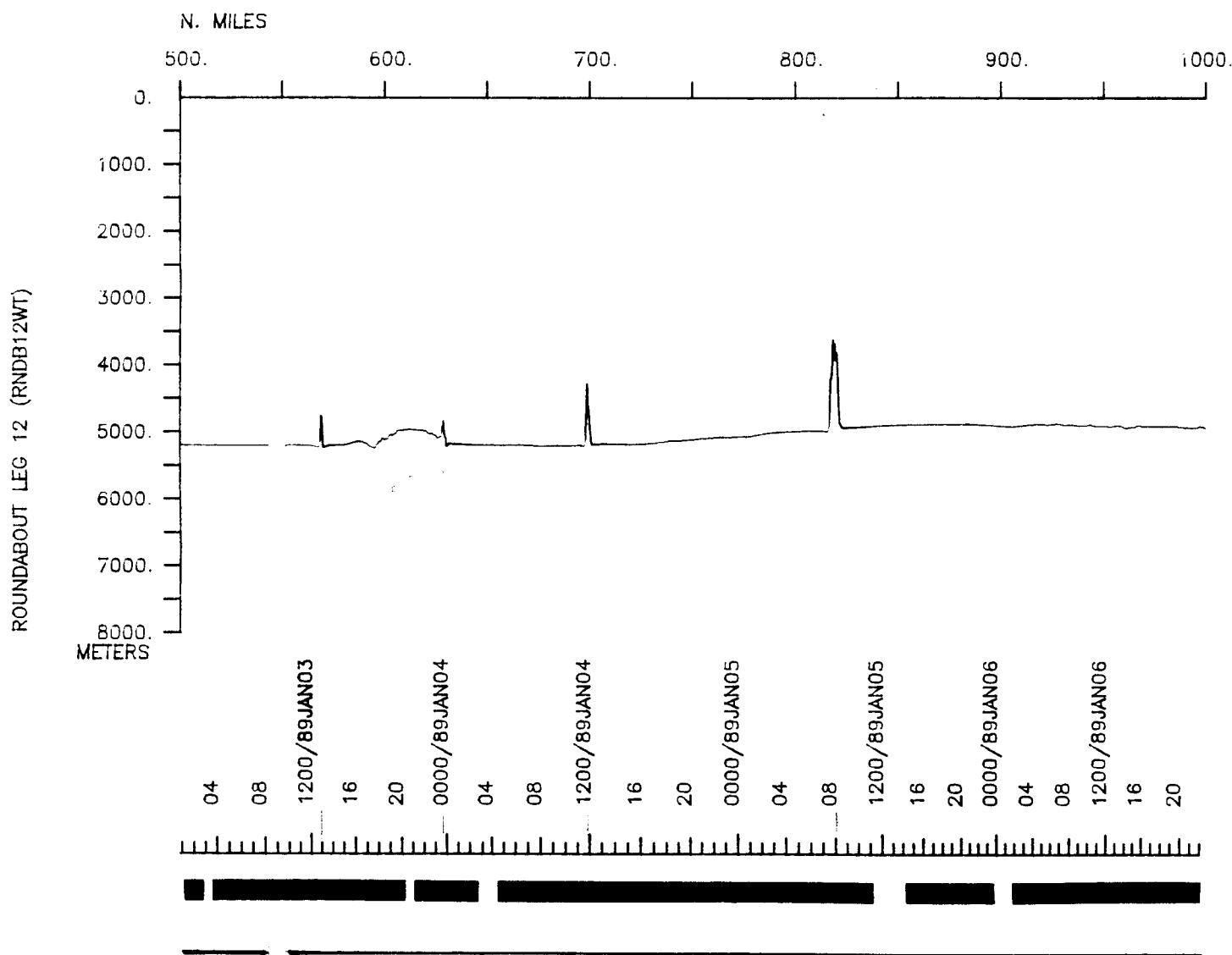
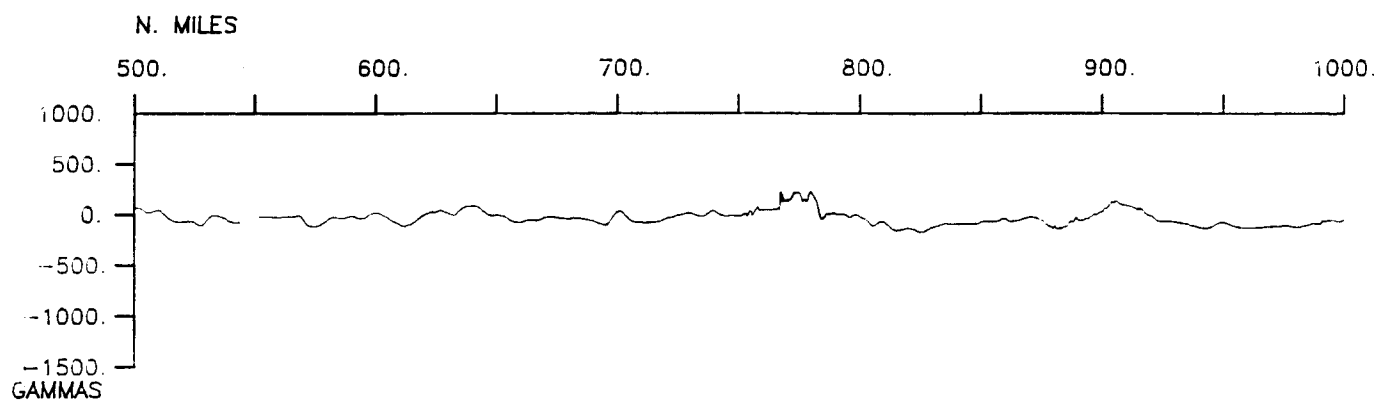
- 1) Cruise - 1442 miles
- 2) Bathymetry - 1427 miles
- 3) Magnetics - 846 miles
- 4) Seismic Reflection - 962 miles
- 5) Gravity - collected but not processed
- 6) Sea Beam - 1427 miles (transit mode - contact GDC)

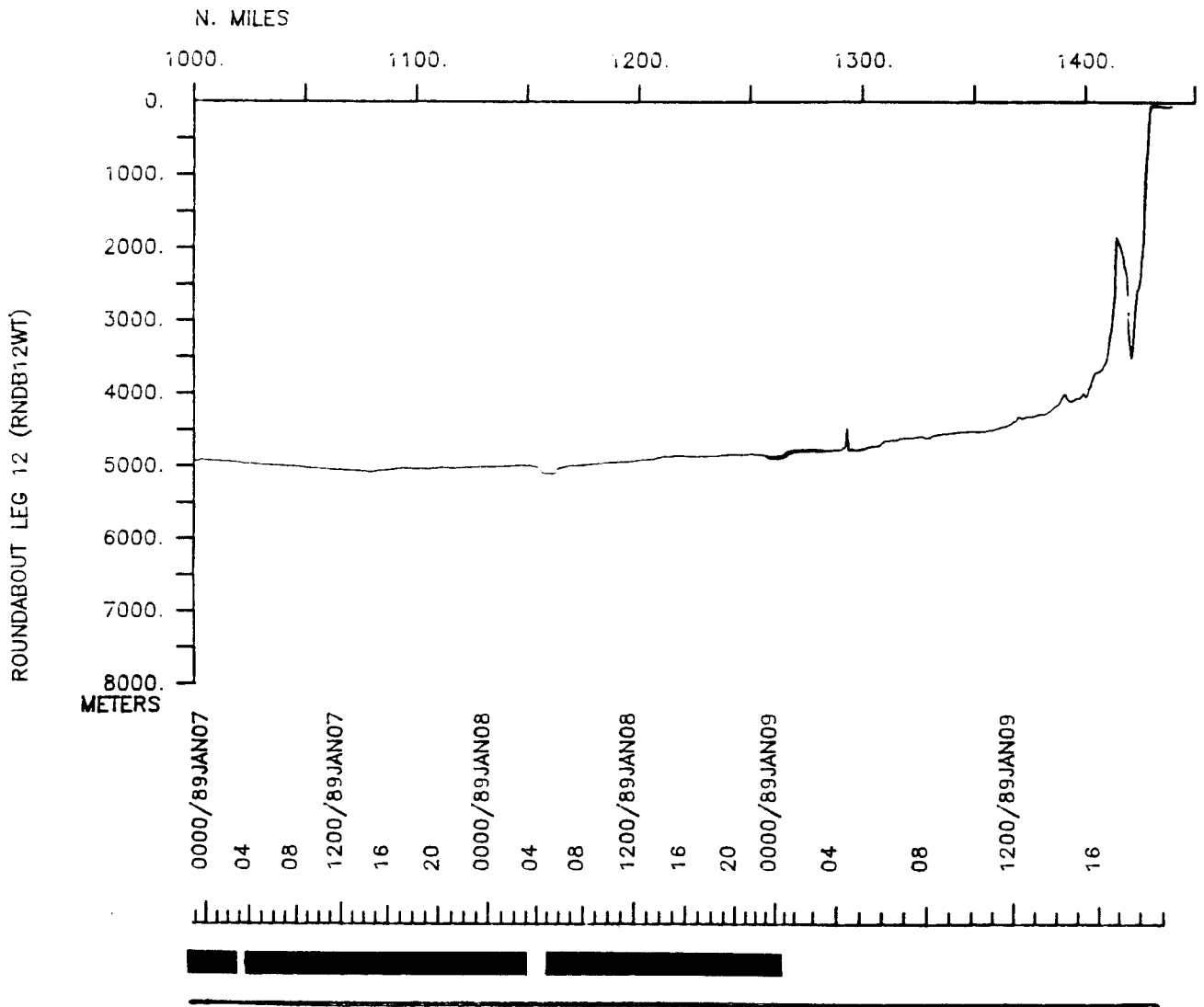
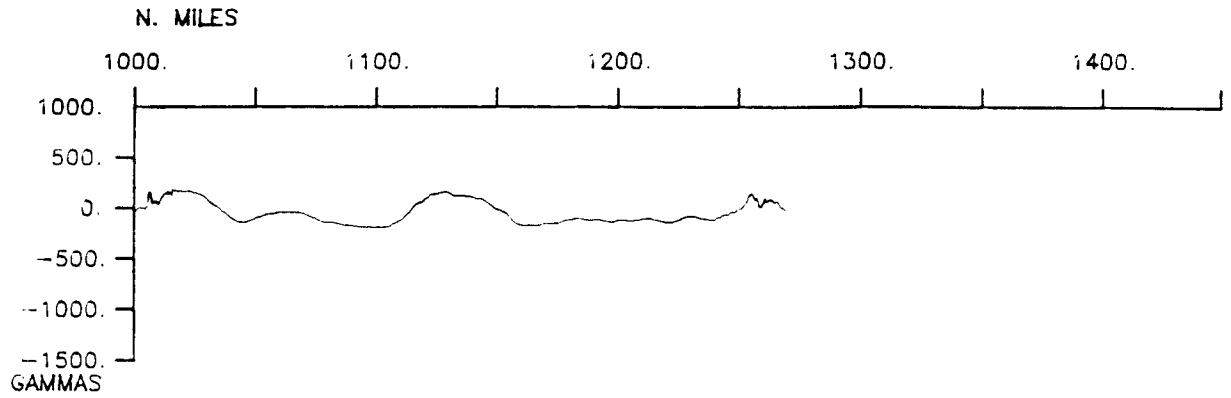


ROUNDAABOUT LEG 12 (RNDB12WT)
TRACK (1 of 1)



SEABEAM





S.I.O. SAMPLE INDEX

(Issued April 1989)

ROUNABOUT EXPEDITION

Leg 12

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R/V T. Washington

Majuro, Marshall Islands (31 December 1988)
to
Majuro, Marshall Islands (9 January 1989)

Chief Scientist:

T. Shipley (University of Texas)

The Sample Index is a first level interdisciplinary listing of time, position, sample identification and disposition of all samples, records and measurements collected on this cruise leg. The index data are encoded at sea by the resident marine technician and processed on shore by the S.I.O. Geological Data Center shortly after the completion of the cruise leg.

Positions are interpolated on the basis of sample time by comparison to a single, edited navigation file. Samples beginning at one time and position and ending at another are entered on two consecutive lines. Disposition and sample type are represented by three and four character codes to permit further computer searches on these parameters. (Listings defining these codes are available from the Geological Data Center.)

GDC Cruise I.D.# 239

*** PORTS ***

0200 311288	LGPT B MAJURO, MARSHALL ISLANDS	7-06 N 171-15 E	frNDB12WT
2000 090189	LGPT E MAJURO, MARSHALL ISLANDS	7-06 N 171-15 E	frNDB12WT

PERSONNEL

	NAME	***TITLE***	***AFFILIATION***	**CRID**
PECS UOT	SHIPLEY, T.	CHIEF SCIENTIST	UNIVERSITY OF TEXAS	RNDB12WT
PEST URI	ABRAMS, L.	GRAD STUDENT	UNIV. OF RHODE IS.	RNDB12WT
PEST PMC	BASSINOT, F.	GRAD STUDENT	PIERRE & MARIE CURIE	RNDB12WT
PEAT STS	CRAMPTON, P.C.	AIRGUN TECHNICIAN	SCRIPPS INSTITUTION	RNDB12WT
PESP UOT	DEAN, D.	TECHNICIAN	UNIVERSITY OF TEXAS	RNDB12WT
PEST PMC	FROGER, V.	GRAD STUDENT	PIERRE & MARIE CURIE	RNDB12WT
PEST URI	GRINDLAY, N.	GRAD STUDENT	UNIV. OF RHODE IS.	RNDB12WT
PESP PMC	LANCELOT, Y.	DIR. OF RESEARCH	PIERRE & MARIE CURIE	RNDB12WT
PECT STS	MOE, R.	COMPUTER TECH	SCRIPPS INSTITUTION	RNDB12WT
PEST GRD	WAASBERGEN, R.	GRAD STUDENT	SCRIPPS INSTITUTION	RNDB12WT
PESP UOT	WIEDERSPAHN, M.	SYSTEM ANALYST	UNIVERSITY OF TEXAS	RNDB12WT
PERT STS	PILLARD, E.G.	RESIDENT TECH	SCRIPPS INSTITUTION	RNDB12WT
PEBO STS	SMITH, S.	SEABEAM OPERATOR	SCRIPPS INSTITUTION	RNDB12WT

NOTES

#AN 'X' IN THE (B)EGIN/(E)ND COLUMN FOLLOWING THE SAMPLE CODE INDICATES NO
#SAMPLE OR DATA RECOVERED. A 'C' INDICATES CONTINUATION OF DATA COLLECTION
#FROM BEFORE THE BEGINNING OR AFTER THE END OF A PARTICULAR LEG. (MOORED
#BOTTOM INSTRUMENTS, FOR EXAMPLE.) THE NUMBER APPEARING IN THE COLUMNS
#BETWEEN THE SAMPLE IDENTIFIER AND THE DISPOSITION CODE, FOR MANY SAMPLE
#ENTRIES, IS THE WATER DEPTH IN CORRECTED METERS. POSITIONS ARE IN TENTHS
#OF MINUTES.

#GMT	DDMMYY	LOC T	SAMP	SAMPLE	DISP				CRUISE
#TIME	DATE	TIME Z	CODE	IDENTIFIER	CODE	LAT.	LONG.	LEG-SHIP	

**** UNDERWAY DATA CURATOR - S. M. SMITH EXT. 42752

**** LOG BOOKS ****

1951	311288		LBUW B	UNDERWAY WATCH LOG	GDC	8-105N	168-348E	sRNDB12WT
0230	090189		LBUW E	UNDERWAY WATCH LOG	GDC	6-459N	168-437E	sRNDB12WT

**** ECHOSOUNDER RECORDS ****

0451	311288		MBMR B	SEABEAM MONITOR R-01	GDC	7-157N	171-079E	sRNDB12WT
0722	090189		MBMR E	SEABEAM MONITOR R-01	GDC	6-552N	169-327E	sRNDB12WT

2016	311288		DPR3 B	3.5 KHZ R-01	GDC	8-118N	168-303E	sRNDB12WT
0439	020189		DPR3 E	3.5 KHZ R-01	GDC	7-226N	165-229E	sRNDB12WT

0510	020189		DPR3 B	3.5 KHZ R-02	GDC	7-216N	165-207E	sRNDB12WT
2144	040189		DPR3 E	3.5 KHZ R-02	GDC	7-530N	163-207E	sRNDB12WT

2154	040189		DPR3 B	3.5 KHZ R-03	GDC	7-525N	163-198E	sRNDB12WT
0721	090189		DPR3 E	3.5 KHZ R-03	GDC	6-552N	169-326E	sRNDB12WT

**** MAGNETICS (EARTH TOTAL FIELD) RECORDS ****

1053	020189		MAGNETIC	ANALOG R-01	GDC	7-124N	164-591E	sRNDB12WT
1010	050189		MAGNETIC	ANALOG R-01	GDC	7-160N	162-175E	sRNDB12WT

**** GRAVITY RECORD CONTINUOUS COMPUTER LOG ****

1330	311288		GVCR B	GRAVITY RECORD	GDC	7-457N	169-412E	sRNDB12WT
1800	090189		GVCR E	COMPUTER LOGGED	GDC	7-143N	171-095E	sRNDB12WT

**** THERMOGRAPH RECORDS ****

0300	311288		TGRC B	THERMOGRAPHS 1-5	GDC	7-051N	171-220E	sRNDB12WT
1800	090189		TGRC E	THERMOGRAPHS 1-5	GDC	7-143N	171-095E	sRNDB12WT

**** BATHYTHERMOGRAPHS ****

0210	010189		BTXP	XBT 0001 PROBE T-4	GDC	08-187N	167-371E	fRNDB12WT
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#GMT	DDMMYY	LOC	T	SAMP	SAMPLE	DISP			CRUISE
#TIME	DATE	TIME	Z	CODE	IDENTIFIER	CODE	LAT.	LONG.	LEG-SHIP

*** SEISMIC REFLECTION RECORDS ***

0447	010189			SPRF	B FAST SEISMICS R-01	GDC	8-146N	167-268E	sRNDB12WT
0100	090189			SPRF	E FAST SEISMICS R-01	GDC	6-436N	168-366E	sRNDB12WT
0447	010189			SPRF	B FAST SEISMICS R-01	GDC	8-146N	167-268E	sRNDB12WT
0100	090189			SPRS	E SLOW SEISMICS R-01	GDC	6-436N	168-366E	sRNDB12WT

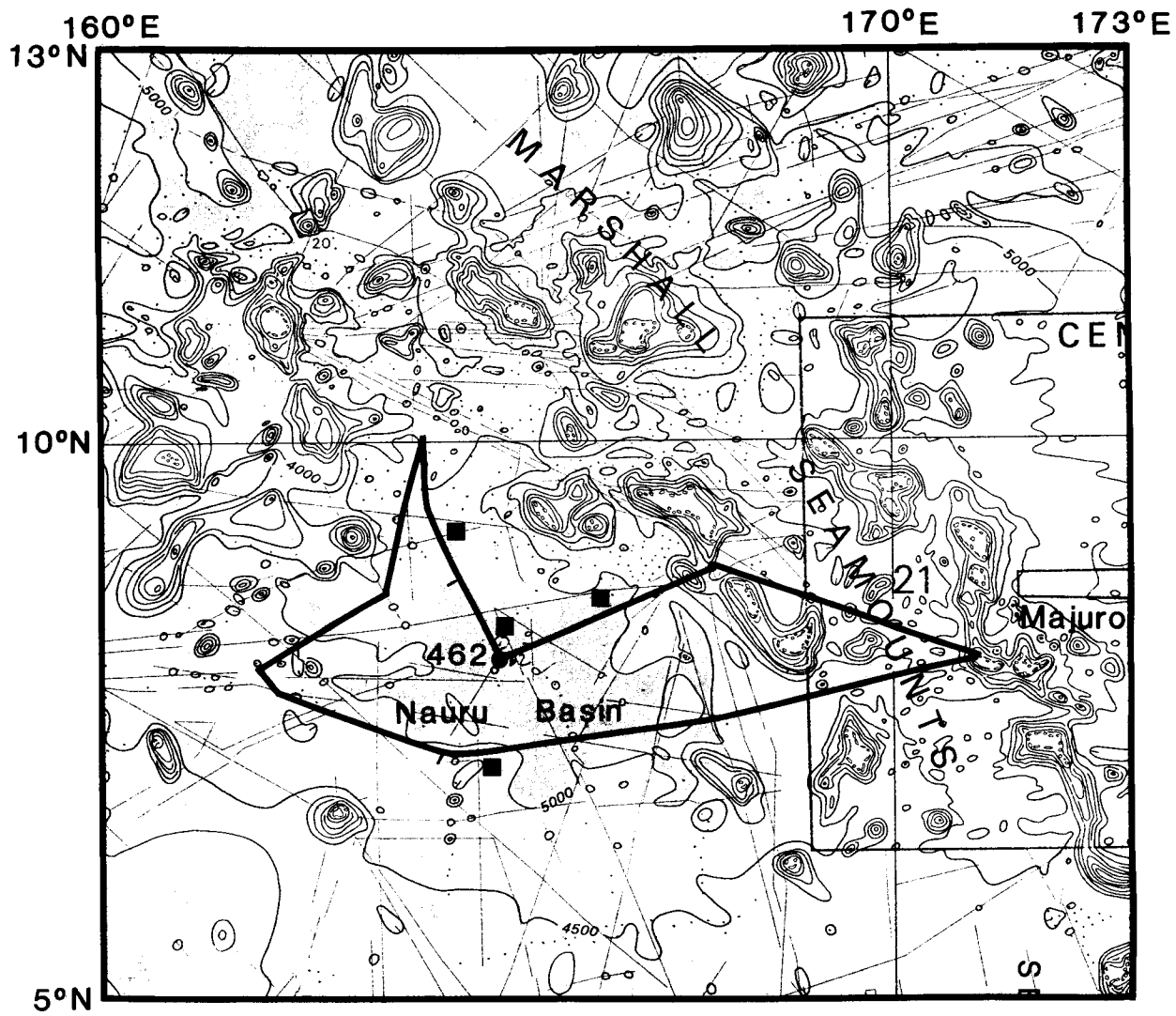
*** MULTI-CHANNEL SEISMIC REFLECTION DIGITAL TAPE ***

0447	010189			SPRF	B FAST SEISMICS R-01	UOT	8-146N	167-268E	sRNDB12WT
0100	090189			SPMT	E UR,AG,SD,TA,AN,DG	UOT	6-436N	168-366E	sRNDB12WT

*** SEISMIC RUN SINGLE SONOBOUY ***

1919	010189			SRSS	B SEISMIC RUN SONOBOUY	GDC	7-438N	166-086E	sRNDB12WT
0801	070189			SRSS	E ANALOGUE RECORD -01	GDC	6-054N	165-008E	sRNDB12WT
1824	010189			SBSD	X RNDB12 SONOBOUY 02	UOT	7-458N	166-138E	sRNDB12WT
1919	010189			SBSD	B RNDB12 SONOBOUY 03	UOT	7-438N	166-086E	sRNDB12WT
0008	020189			SBSD	E RNDB12 SONOBOUY 03	UOT	7-322N	165-444E	sRNDB12WT
1256	020189			SBSD	B RNDB12 SONOBOUY 04	UOT	7-152N	165-027E	sRNDB12WT
1900	020189			SBSD	E RNDB12 SONOBOUY 04	UOT	7-494N	164-480E	sRNDB12WT
0415	030189			SBSD	B RNDB12 SONOBOUY 05	UOT	8-372N	164-264E	sRNDB12WT
1004	030189			SBSD	E RNDB12 SONOBOUY 05	UOT	9-077N	164-108E	sRNDB12WT
0455	070189			SBSD	B RNDB12 SONOBOUY 06	UOT	6-041N	164-447E	sRNDB12WT
0801	070189			SBSD	E RNDB12 SONOBOUY 06	UOT	6-054N	165-008E	sRNDB12WT

*** END SAMPLE INDEX



revised
24 Mar 89

0545

record no.	tape no.	Time of record (JD/GMT)	record length	filter pass (Hz)	hscale (tr/i)	vscale (in/s)	source
NOTE: all Julian days recorded here are one (1) day behind true Julian Day (the Masscomp didn't know about leap year).							
1	utig1	351/1045 - 351/2047	5 - 7 s	70 - 250	30	10	80 ci watergun
2	utig2	351/2110 - 352/0402	5 - 7 s	70 - 250	30	10	80 ci watergun
3	utig3	352/0816 - 352/2000	5 - 7 s	70 - 250	30	10	80 ci watergun
4	utig3	352/2000 - 353/0900	5 - 7 s	70 - 250	30	10	80 ci watergun
5	utig4	353/1033 - 353/1624	5.5 - 7.5 s	70 - 250	30	10	2000 c.i. airgun
6	utig5	353/1749 - 354/0456	5 - 7 s	70 - 250	30	10	80 ci watergun
7	utig6	354/0522 - 1322/354	5 - 7 s	70 - 250	30	10	80 ci watergun
8	utig6	354/1321 - 354/2102	4.2 - 6.2 s	70 - 250	30	10	80 ci watergun
9	utig7	354/2112 - 355/0440	3.5 - 5.5 s	70 - 250	30	10	80 ci watergun
10	utig7	355/0440 - 355/1247	2.8 - 4.8 s	70 - 250	30	10	80 ci watergun
11	utig8	355/1254 - 355/2200	2.7 - 4.7 s	70 - 250	30	10	80 ci watergun
12	utig8	355/2200 - 356/0547	3.1 - 5.1 s	70 - 250	30	10	80 ci watergun
13	utig9	356/0610 - 356/1108	3.2 - 5.2 s	70 - 250	30	10	80 ci watergun
14	utig10	356/1733 - 357/0146	3.3 - 5.3 s	70 - 250	30	10	80 ci watergun
15	utig11	357/0237 - 357/1317	4 - 6 s	70 - 250	30	10	80 ci watergun
16	utig12	357/1321 - 358/0155	4 - 6 s	70 - 250	30	10	80 ci watergun
17	utig13	358/0159 - 358/0227	4 - 6 s	70 - 250	30	10	80 ci watergun
18	utig14	358/0432 - 358/0858	4 - 6 s	70 - 250	30	10	80 ci watergun
19	utig15	358/1814 - 359/0100	3.8 - 5.8 s	70 - 250	30	10	80 ci watergun
20	utig15	359/0100 - 359/0604	3.8 - 5.8 s	70 - 250	30	10	80 ci watergun
21	utig16	359/1303 - 359/2356	3.8 - 5.8 s	70 - 250	30	10	80 ci watergun
22	utig18	360/0614 - 360/1855	4.5 - 6.5 s	70 - 250	30	10	80 ci watergun
23	utig19	360/1902 - 361/0731	5 - 7 s	70 - 250	30	10	80 ci watergun
24	utig20	361/0730 - 361/1630	5 - 7 s	70 - 250	30	10	80 ci watergun
25	utig21	361/1652 - 362/0000	5 - 7 s	70 - 250	30	10	80 ci watergun
26	utig21	362/0000 - 362/0712	5 - 7 s	70 - 250	30	10	80 ci watergun
27	utig22	362/0716 - 362/2207	5 - 7 s	70 - 250	30	10	80 ci watergun
28	utig23	362/2212 - 363/0953	5.5 - 7.5 s	70 - 250	30	10	80 ci watergun
29	utig24	363/0952 - 363/2308	5 - 7 s	70 - 250	30	10	80 ci watergun
30	utig9	356/0610 - 356/1108	3.2 - 5.2 s	30 - 250	30	10	300 c.i. airgun
31	utig10	356/1733 - 357/0146	3.3 - 5.3 s	30 - 120	30	10	300 c.i. airgun
32	utig11	357/0237 - 357/1317	4 - 6 s	20 - 120	30	10	300 c.i. airgun
33	utig12	357/1321 - 357/2250	4 - 6 s	20 - 120	30	10	300 c.i. airgun
34	utig12	357/2250 - 358/0155	4 - 6 s	20 - 120	30	10	300 c.i. airgun
35	utig15	358/1814 - 359/0100	4 - 6 s	20 - 120	30	10	300 c.i. airgun
36	utig4	353/1033 - 353/1624	1 - 15 s	20 - 50	30	10	refraction
37	utig4	353/1033 - 353/1624	1 - 15 s	5 - 30	30	10	refraction
38	utig4	353/1033 - 353/1624	5 - 13 s	5 - 20	30	10	refraction

CRUISE REPORT

UNOLS
Rev. 4/83

SHIP UTILIZATION DATA

SHIP NAME R/v T. Washington		OPERATING INST. SIO		PARTICIPATING PERSONNEL		AFFILIATION	
CRUISE (IEG) NO. 12		DATES 12/31/88-1/10/89		CODE NAME		TITLE	
AREA OF OPERATIONS:		PORT CALLS:		1.		SEE ATTACHED	
		PLACE DATES		2.			
		Majuro		31 Dec. 88			
		Majuro		10 Jan. 89			
DAYS AT SEA		DAYS IN PORT		4.			
10		1					

Use Reverse If Additional Space Required.

WAS RESEARCH CONDUCTED IN FOREIGN WATERS? Yes COUNTRY: Republic of Marshall Islands

PRIMARY PROJECTS (those which govern the principal operations, area and movements of the ship)

PROJECT TITLE AND PRINCIPAL INVESTIGATOR	SPONSORING ACTIVITY	GRANT OR CONTRACT NUMBER	PARTICIPATING PERSONNEL (AS CODED ABOVE)
Thomas H. Shipley Cretaceous Volcanic Sequences and Jurassic Crust in the Western Pacific: A Seismic Reflection Study	NSF	OCE-8613641	See Attached
DISCIPLINE MG & G			

ANCILLARY PROJECTS (which are accomplished on a not-to-interfere basis and contribute to the overall effectiveness of the cruise)

PROJECT TITLE AND PRINCIPAL INVESTIGATOR	SPONSORING ACTIVITY	GRANT OR CONTRACT NUMBER	PARTICIPATING PERSONNEL (AS CODED ABOVE)

SIGNATURE		DATE	
CHIEF SCIENTIST			
TOTAL SCIENTISTS 2	TOTAL TECHNICIANS 6		
TOTAL GRAD STUDENTS 5	TOTAL STUDENTS/OBSERVERS 5		
ATTACH PAGE SIZE CRUISE TRACK			
SIGNATURE Institution Official		DATE	

COST ALLOCATION DATA

DAYS CHARGED	AGENCY OR ACTIVITY CHARGED	GRANT OR CONTRACT NO.