CRUISE REPORT

SHIP UTILIZATION DATA

UNOLS
REV. 5/7

SHIP NAME OCEANUS	OPERATING INST. W.H.O.I.	PARTICIPATING PERSONNEL
CRUISE (LEG) NO. 27	DATES 8 Jun - 14 Jun 1977	
AREA OF OPERATIONS: North Atlantic Ocean (Woods Hole - Woods Hole)	PORT CALLS: PLACE / DATES	
DAYS AT SEA 7 / DAYS IN PORT 0		

CODE	NAME	TITLE	AFFILIATION
1.	Mr. David Twichell	Oceanographer	USGS
2.	Mr. Timothy Bishop	Geological Field Asst.	"
3.	Ms. Diane Eskenasy	" " "	"
4.	Ms. Deborah Hutchinson	Geologist	"
5.	Mr. Charles Paull	Geophysicist	"
6.	Ms. Stephanie Pfirman	Geological Field Asst.	"
7.	Mr. Alan Goodman	Technician	"

(8 Jun-14 Jun 77)

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)
"USGS Sediment Dynamics" Dr. Bradford Butman	USGS	14-08-0001-15615	1 - 10

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 David C. Twichell DATE Aug 25, 1977

CHIEF SCIENTIST - David Twichell

(Continue personnel and project listings on reverse if additional space needed)

ATTACH PAGE SIZE CRUISE TRACK

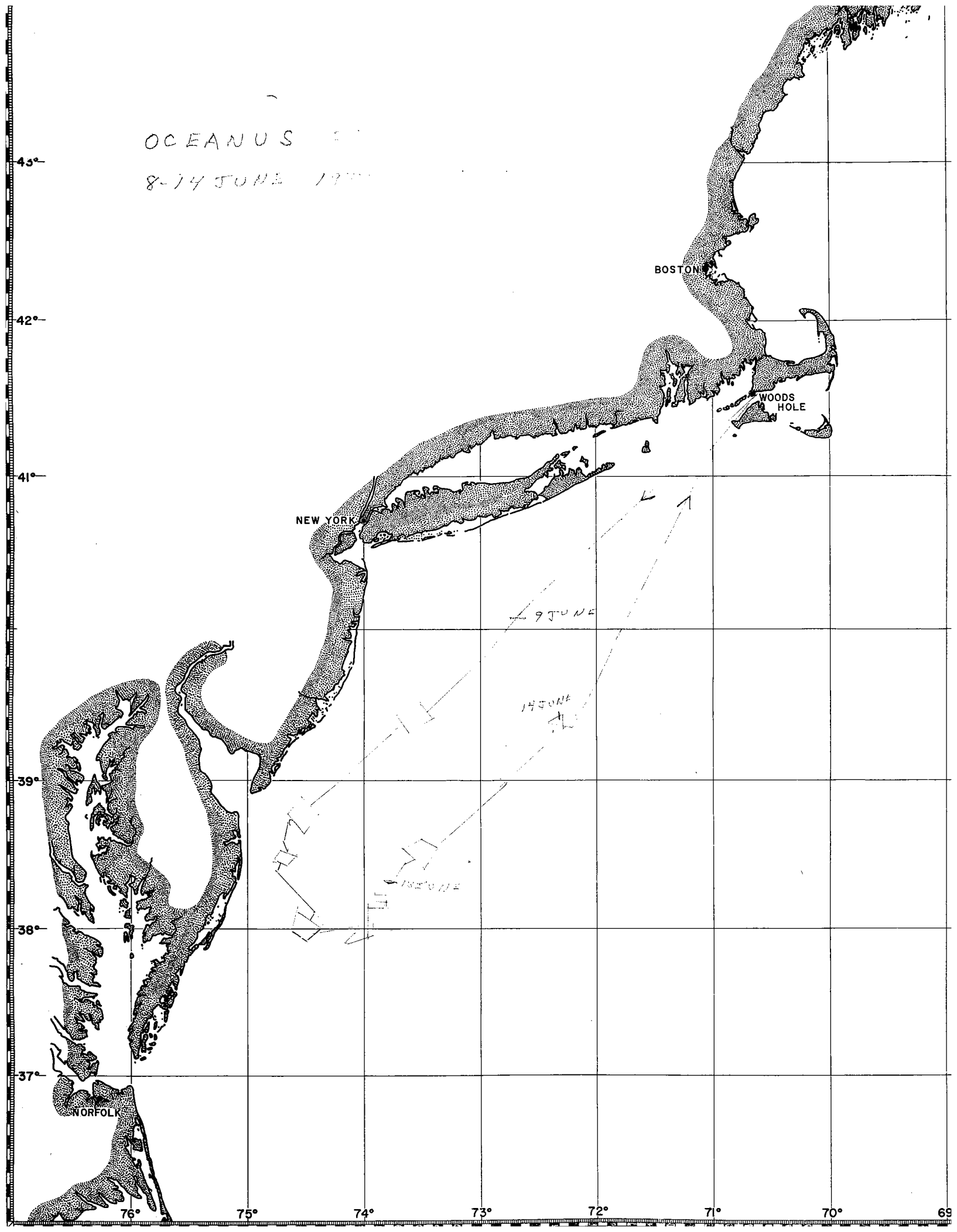
COST ALLOCATION DATA

DAYS CHARGED	AGENCY OR ACTIVITY CHARGED	GRANT OR CONTRACT N
7	U.S. Geological Survey	14-08-0001-15615

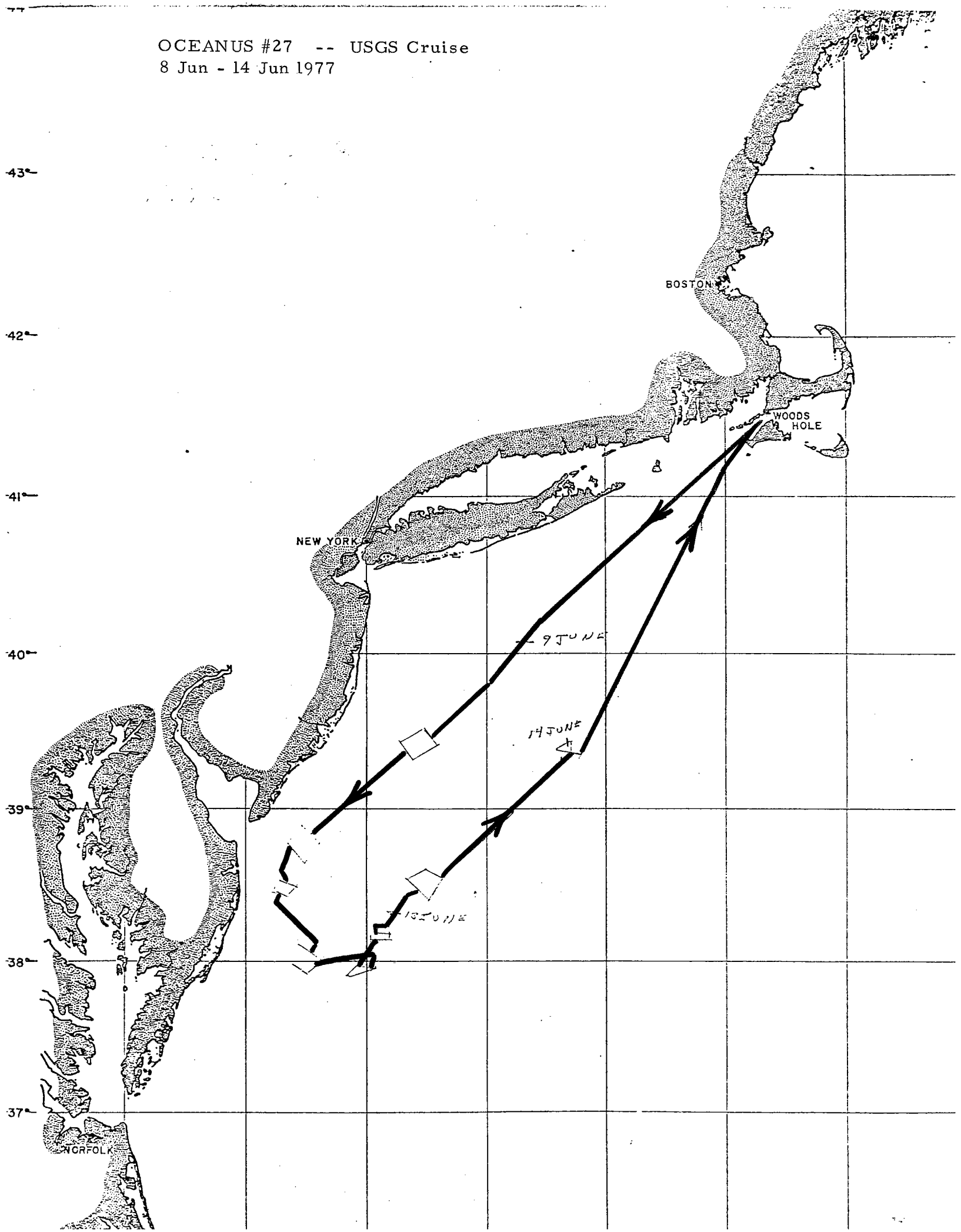
SIGNATURE R. P. Dinsmore DATE 8/30/77

Institution Official R. P. Dinsmore

8. Mr. Nicholas Lefteriou	Technician	USGS
9. Mr. Gerard McCarthy	"	"
10. Mr. John Cowles	"	Ocean Research Equipment, Inc.


OCEANUS
8-14 JUNE
43°
42°
41°
39°
38°
37°
BOSTON
WOODS HOLE
NEW YORK
NORFOLK
9 JUNE
14 JUNE
76°
75°
74°
73°
72°
71°
70°

OCEANUS #27 -- USGS Cruise
8 Jun - 14 Jun 1977



WOODS HOLE OCEANOGRAPHIC INSTITUTION
WOODS HOLE, MASSACHUSETTS 02543

Phone (617) 548-1400
TWX 710-346-6601

6 June 1977

Captain Paul C. Howland
Research Vessel OCEANUS
Woods Hole, Massachusetts

Dear Captain Howland:

On or about 8 June 1977, your vessel being ready for sea and weather permitting, you will depart Woods Hole, Mass., on Voyage #27. The scientific work of this cruise, under the direction of Mr. David C. Twichell, Chief Scientist, United States Geological Survey, consists of high resolution geophysical work on the Continental Shelf off the coasts of New Jersey, Delaware and Maryland, in the area of approximately 38° N - 39° 45' N and 72° 30' W - 75° W. If time permits, a survey of a feature off Southern Georges Bank will be made.

The scientific personnel are:

OCEANUS

Voyage #27
Woods Hole - Woods Hole
8 June - 14 June

Mr. David C. Twichell, Chief Scientist, U.S.G.S.
Miss Deborah Hutchinson, U.S.G.S.
Mr. Charles Paul, U.S.G.S.
~~Mr. Kevin C. King, U.S.G.S.~~
Miss Diane M. Eskenasy, U.S.G.S.
Miss Stephanie Phirman, U.S.G.S.
Mr. Timothy Bishop, U.S.G.S.
Mr. Nicholas Lefteriou, U.S.G.S.
Mr. Alan Goodman, U.S.G.S.
Mr. Gerald McCarthy, U.S.G.S.
Mr. John Cowles, O.R.E.

Please advise the Port Office of all personnel changes prior to departure, and maintain twice daily SSB schedules with KXC713 on assigned frequencies.

I wish you a pleasant and successful voyage.

Yours very truly,

David C. Twichell
David C. Twichell
Chief Scientist

Paul C Howland
Paul C. Howland
Captain

R S Edwards
R.S. Edwards
Marine Superintendent

FORM APPROVED: OMB NO. 41-R2765 - EXPIRES : 12-31-79

NOAA FORM 24-23
(1-76)

U. S. DEPARTMENT OF COMMERCE
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION
ENVIRONMENTAL DATA SERVICE
NATIONAL OCEANOGRAPHIC DATA CENTER

A00 DATA CENTER

A40 REFERENCE NUMBER

OCEANOGRAPHY - GENERAL CRUISE INVENTORY
(ROSCOP - II)

A01 EXPEDITION/PROJECT

A11 CRUISE NUMBER OR NAME: 027

A02 SHIP OR PLATFORM: OCEANUS

A12 PLATFORM TYPE: R.V.

A03 COUNTRY: U.S.

A04 ORGANIZATION: U.S. Geological Survey

A05 CHIEF SCIENTIST(S): David Twichell

	YES	NO	PART
A91 Declared national program?		✓	
A81 Exchange restricted?		✓	
A92 Co-operative program?		✓	A72 NAME
A82 Co-ordinated internationally?		✓	A62 BY WHOM?

A06 NAME AND ADDRESSES OF ORGANIZATIONS AND PERSONS

WHOM TO QUERY	FINAL DISPOSITION OF DATA
A1 David Twichell	A2 U.S. Geological Survey
B1	B2
C1	C2
D1	D2
E1	E2

DATE	DAY	MONTH	YEAR
A07 FROM	08	06	77
A17 TO	14	06	77

A08 GENERAL OCEAN AREAS: Middle Atlantic Continental Shelf - U.S.

A09 TYPE(S) OF MARINE ZONE(S)

GEOGRAPHIC AREA

If all data were collected at a fixed station, fill in the co-ordinates

A10 LATITUDE ° ' " N/S

A20 LONGITUDE ° ' " E/W

A15 FEDERAL SUPPORT: B.L.M.

A25 REMARKS

DISCIPLINE AND TYPE OF MEASUREMENTS	Index 10° x 10° Qc	L	G	G	INDEX 1° x 1°	DISCIPLINE AND TYPE OF MEASUREMENTS	Index 10° x 10° Qc	L	G	G	INDEX 1° x 1°
A B						A B					
A B						A B					
A B						A B					
A B						A B					
A B						A B					
A B						A B					
A B						A B					

G – GEOLOGY GEOPHYSICS

GL MEASUREMENTS MADE AT A SPECIFIC LOCATION	NUMBER	i	l	FORMAT
G01 Dredge				
G02 Grab				
G03 Core rock *(no. of cores)*				
G04 Core–soft bottom *(no. of cores)*				
G05 Sampling by divers				
G06 Sampling by submersible				
G07 Drilling				
G08 Bottom photography				
G09 Sea floor temperature *(≤ 1 m from bottom)*				
G10 Accoustical properties of the sea floor				
G11 Engineering properties of the sea floor				
G12 Magnetic properties of the sea floor				
G13 Gravimetric properties of the sea floor				
G14 Radioactivity measurements				
G70 Other measurements				

GU MEASUREMENTS UNDERWAY				
G21 Motion picture of sea floor *(No. of nautical miles)*				
G22 Bathymetry-wide beam *(no. of nautical miles)*				
G23 Bathymetry-narrow beam *(no. of nautical miles)*				
G24 Side scan sonor *(no. of nautical miles)*	422	A1	A2	3
G25 Seismic reflection *(no. of nautical miles)*	366	A1	A2	3
G26 Seismic refraction *(no. of nautical miles)*				
G27 Gravimetry				
G28 Magnetism				
G29 Other measurements				

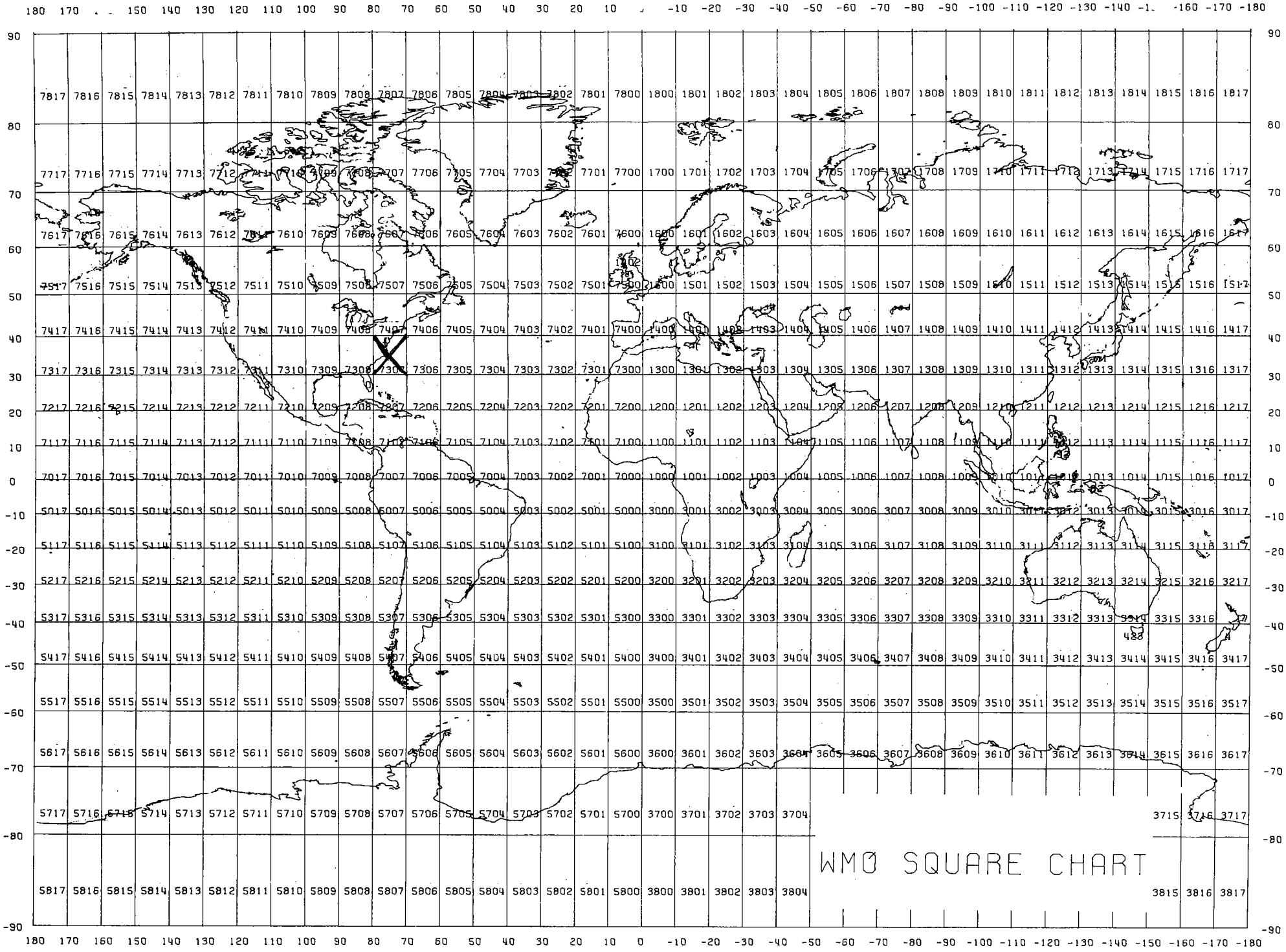
G – GEOLOGY GEOPHYSICS *(Continued)* GS TYPES OF STUDIES	NUMBER	i	l	FORMAT
G31 Physical analysis of sediments				
G32 Chemical analysis of sediments				
G33 Paleothermy				
G34 Paleomagnetism and rock magnetism				
G35 Paleontology				
G36 Geothermy				
G37 Geochronology				
G38 Mineral and fossil resources				
G39 Litteral zone studies				
G90 Other measurements				

D – DYNAMICS

D01 Current meters *(no. of stat.)*				
D02 Current meters *(Average duration of measurement days)*				
D03 Currents measured from ship drift				
D04 GEK				
D05 Drifters *(number)*				
D06 Swallow floats *(number)*				
D07 Drift cards *(no. released)*				
D08 Bottom drifters *(no. released)*				
D09 Tidal observation *(duration)*				
D10 Sea and swell *(no. of observations)*				
D90 Other measurements				

M – METEOROLOGY

M01 Upper air observations				
M02 Incident radiation				
M03 Air–sea interface studies				
M04 Ice observations				
M05 Occasional standard measurements				
M06 Systematic standard measurements				
M90 Other measurements				


WMO SQUARE CHART

R/V OCEANUS Voyage # 027

PARTICIPATING SCIENTISTS

NAME (in full) Dr./Mr./Rank	NAT'L.	ON DATE	ON PORT	OFF DATE	OFF PORT	FUNCTION ACADEMIC, ADMIN. OR PROFESSIONAL POSITION/TECH./GUEST OBSERVER/TECH. REP./STUDENT/ETC.	AFFILIATION LAB./COMPANY/SERVICE/COLLEGE/GOVERNMENT/ETC.
Mr. David Twichell	U.S.A.	8 June, 77	W.H.	14 June, 77	WH	Chief Scientist	USGS
Mr. Timothy Bishop	USA	"		"		Scientist	"
Miss. Diane Eskenasy	USA	"		"		"	"
Miss Deborah Hutchinson	USA	"		"		"	"
Mr Charles Paull	USA	"		"		"	"
Miss Stephanie Pfierman	USA	"		"		"	"
Mr. Alan Goodman	USA	"		"		Technician	"
Mr. Nickolas Lefteriou	USA	"		"		"	"
Mr. Gerard McCarthy	USA	"		"		"	"
Mr John Cowles	USA	"		"		"	ORE

UNITED STATES GOVERNMENT

memorandum

DATE: 6 June 1977

REPLY TO ATTN OF: David Twichell, USGS, Woods Hole, Ma

SUBJECT: USGS departure on OCEANUS

TO: WHOI Port Office

We will be leaving from Woods Hole on June 8, 1977 aboard the OCEANUS and will return to Woods Hole June 14, 1977. High resolution geophysical work will be conducted on the continental shelf off New Jersey, Delaware, and Maryland in the area approximately bounded by 38°00'N and 39°45'N latitude and 72°30'W and 75°00'W longitude. There is a possibility we will survey a feature off southern Georges Bank as well if time permits.

The sceintific party on board the OCEANUS will include:

David C. Twichell, Chief Scientist		USGS
✓Deborah Hutchinson	B.	USGS
Charles Paul		USGS
Kevin King		USGS
✓Diane Eskenasy	M.	USGS
Stephanie Phirman		USGS
Tim Bishop	Timothy	USGS
Nick Lefteriou	Nicholas	USGS
Al Goodman	Alan	USGS
Jerry McCarthy		USGS
John Cowles	Gerald	ORE

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OPTIONAL FORM NO. 10
(REV. 7-76)
GSA FPMR (41 CFR) 101-11.6
5010-112