4.0 CRUISE REPORT
MMS CRUISE CAMP 2-2
Sediment-Transport Instrument-Retrieval Cruise
28-31 July, 1987

4.1 Objectives

The objectives of this cruise were to:

1. Recover USGS moorings and GEOPROBE tripods at sites R-8 and R-9;

2. Obtain box cores and CTD profiles at selected sites; and

3. Navigate mooring locations for future recovery of anchors.

4.2 Activities

The M/V Aloha departed Ventura, CA at about 0100, 29 July for transit to site R-8. We arrived in the area of R-8 about 1000, 29 July. The winds were moderate (15 kts.) from the NW.

The mooring and GEOPROBE were interrogated and responded properly. We made preparations for precise navigation of the mooring position. The mooring was navigated using the Miniranger and acoustic transponder - 1100 to 1300, 29 July.

The wind speed continued to increase in early afternoon and it was felt that a recovery attempt would be dangerous to equipment and personnel. The winds were steady at 20-25 knots with higher gusts. Box coring was not feasible due to seas and the low stern freeboard of the M/V Aloha.

Operations were suspended until 0100, 30 July when it was believed that the strong coastal winds would diminish. Unfortunately, the "usual" early morning calm never materialized; winds continued to be greater than 20 knots from the NW and, by now, the seas were 8-12 ft and steep.

At 0900, 30 July, the weather forecasts indicated a continuation of strong winds and small craft warnings were posted for the Point Sal area. We decided, after discussion with Jeff Hyland, Program Manager, to check conditions at R-8 once more and if conditions were still unsuitable for safe work, we would return to Ventura.

Conditions at R-8 had not changed and, therefore, we continued to Ventura, CA arriving at about 0400, 31 July 1987.

Summary

Although weather conditions were not good, they were not unusual for this season off central California. Due to the low freeboard on the stern, the M/V Aloha does not provide a safe working environment under adverse and extreme weather conditions .

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

OCEANOGRAPHY – GENERAL CRUISE INVENTORY
(ROSCOP – II)

A40 REFERENCE NUMBER

A01 EXPEDITION/PROJECT
California Phase II Monitoring Program

A11 CRUISE NUMBER OR NAME
CAMP 1-3, LEG 4, CAMP 2-1 and 2-2

A02 SHIP OR PLATFORM
M/V ALOHA HO-8579

A12 PLATFORM TYPE

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

A03 COUNTRY: USA

A04 ORGANIZATION: Battelle/Kinnetics

A05 CHIEF SCIENTIST(S): J. F. Campbell, Battelle
D. Hardin, Kinnetics

A06 NAME AND ADDRESSES OF ORGANIZATIONS AND PERSONS WHOM TO QUERY

A1 J. L. Hyland, Battelle, Ventura, CA
B1 P. D. Boehm, Battelle, Duxbury, MA
C1 E. Crecilius, Battelle, Sequim, WA
D1 P. Kinney, Kinnetics, Santa Cruz, CA
E1

FINAL DISPOSITION OF DATA

A2 J. L. Hyland
B2 Program Manager
C2 Battelle Ocean Sciences
D2 1431 Spinnaker Drive
E2 Ventura, CA 93001

DATE	DAY	MONTH	YEAR
A07 FROM	13	07	87
A17 TO	31	07	87

A08 GENERAL OCEAN AREAS: 57A NE Pacific Ocean 121°W

A09 TYPE(S) OF MARINE ZONE(S): 07, 08

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: U.S.D.I. - Minerals Management Service

A25 REMARKS

GU - Measurements underway. All photographs and motion pictures were taken by cameras attached to a Remotely Operated Vehicle (ROV).

Sediment Collection

7 stations sampled with $0.1m^2$ grab.

Cruise CAMP 2-2 was weathered-out, no samples collected.

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 GU,GS,P,B,BS B	7	3	1	2		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)* 10 km	9	D 1	A 1	8
G22 Bathymetry-wide beam *(no. of nautical miles)*				
G23 Bathymetry-narrow beam *(no. of nautical miles)*				
G24 Side scan sonor *(no. of nautical miles)*				
G25 Seismic reflection *(no. of nautical miles)*				
G26 Seismic refraction *(no. of nautical miles)*				
G27 Gravimetry				
G28 Magnetism				
G29 Other measurements				
Bottom Photographs	9	D 1	A 2	8

G – GEOLOGY GEOPHYSICS *(Continued)*

GS TYPES OF STUDIES	NUMBER	i	l	FORMAT
G31 Physical analysis of sediments	7	D 1	A 2	9
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				

B – BIOLOGY

	NUMBER	i	l	FORMAT
B01 Primary productivity				
B02 Phytoplankton pigments				
B03 Seston				
B04 Particulate organic carbon				
B05 Particulate organic nitrogen				
B06 Dissolved organic matter				
B07 Bacterial and pelagic micro–organisms				
B08 Phytoplankton				
B09 Zooplankton				
B10 Neuston				
B11 Nekton				
B12 Invertebrate nekton				
B13 Pelagic eggs and larvae				
B14 Pelagic fish				
B15 Amphibians				
B16 Benthic bacteria and micro–organisms				
B17 Phytobenthos				
B18 Zoobenthos	6	A 1	A 2	9
B19 Commercial demersal fish				
B20 Commercial benthic molluscs				
B21 Commercial benthic crustacean				
B22 Attached plants and algae				
B23 Intertidal organisms				
B24 Borers and foulers				
B25 Birds				
B26 Mammals and reptiles				
B27 Deep scattering layers				
B28 Acoustical reflections on marine organisms				
B29 Biologic sounds				
B30 Bioluminescence				

	NUMBER	i	l	FORMAT
B31 Vitamin concentrations				
B32 Amino acid concentration				
B33 Hydrocarbon concentrations				
B34 Lipid concentrations				
B35 ATP–ADP–AMP concentrations				
B36 DNA–RNA concentrations				
B37 Taggings				
B80 Other measurements				
B5 TYPES OF STUDIES				
B51 Identification	6	A 1	A 2	9
B52 Spatial and temporal distribution	6	A 1	A 2	9
B53 Monitoring and surveillance	6	A 1	A 2	9
B54 Biomass determination				
B55 Description of communities	6	A 1	A 2	9
B56 Food chains energy transfers				
B57 Population and environments	6	A 1	A 2	9
B58 Population structures	6	A 1	A 2	9
B59 Taxonomy, systematics, classification	6	A 1	A 2	9
B60 Physiology				
B61 Behaviour				
B62 Pathology, parasitology				
B63 Toxicology				
B64 Gear research				
B65 Exploratory fishing				
B66 Commercial fishing				
B67 Aquaculture				
B90 Other measurements				

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H– HYDROGRAPHY

HS SURFACE	NUMBER	i	l	FORMAT
H01 Continuous temperature recording				
H02 Continuous salinity recording				
H03 Discrete temperature measurements				
H04 Discrete salinity measurements				
NEAR SEA FLOOR (≤ 10 m)				
H05 Continuous temperature recording				
H06 Continuous salinity recording				
H07 Discrete temperature measurements				
H08 Discrete salinity measurements				
HP PHYSICAL				
H09 Classical oceanographic stations				
H10 Vertical profiles (STD/CTD)				
H11 Sub–surface measurements underway				
H12 Mechanical bathythermograph (No. of drops)				
H13 Bathythermograph–expendable (No. of drops)				
H14 Sound velocity stations				
H15 Acoustic stations				
H16 Transparency				
H17 Optics				
H18 Diffusion (Dynamic)				
H80 Other measurements				
HC CHEMICAL				
H21 Oxygen				
H22 Phosphates				
H23 Total–P				
H24 Nitrates				
H25 Nitrites				

HC CHEMICAL	NUMBER	i	l	FORMAT
H26 Silicates				
H27 Alkalinity				
H28 pH				
H29 Chlorinity				
H30 Trace elements				
H31 Radioactivity				
H32 Isotopes				
H33 Dissolved gases				
H90 Other measurements				

P – POLLUTION

P01 Suspended solids				
P02 Heavy metals in sediment	1	C 1	A 2	9
P03 Petroleum residues in sediment	1	B 1	A 2	9
P04 Chlorinated hydrocarbons				
P05 Other dissolved substances				
P06 Thermal pollution				
P07 Waste water: BOD				
P08 Waste water: Nitrates				
P09 Waste water: Microbiology				
P10 Waste water: Other				
P11 Discolored water				
P12 Bottom deposits				
P13 Contaminated organisms				
P90 Other measurements				