

Rec'd FEB 17 1989

In NEWCRU

88004

CRUISE PLAN  
FOR  
MMS CRUISE CAMP 3-3  
21-28 FEBRUARY 1989  
CALIFORNIA OCS PHASE II MONITORING PROGRAM

BY  
David Drake and David Cacchione  
USGS  
345 Middlefield Rd. MS-999  
Menlo Park, CA 94025

Brad Butman  
USGS  
Woods Hole, MA

Cheryl Ann Butman  
Woods Hole Oceanographic Inst.  
Woods Hole, MA

February 1, 1989

**CRUISE PLAN**  
**FOR**  
**MMS CRUISE CAMP 3-3**  
**21-28 FEBRUARY, 1989**

Cruise CAMP 3-3 is the third of four major cruises scheduled for Year Three of the MMS California Phase II Monitoring Program (MMS Contract No. 14-12-0001-30262). This program is designed to monitor potential environmental changes at a series of regional stations and at two arrays of site-specific stations near oil production platforms in the Western Santa Barbara Channel and Santa Maria Basin region of the California OCS. Platform Hidalgo (Lease P-0450) off Point Arguello was selected for hard-bottom, site-specific monitoring, and Platform Julius (Lease P-0409) off Point Sal was selected for soft-bottom, site-specific monitoring. Specific objectives of the program are:

1. To detect and measure potential long-term (or short-term) changes in the marine environment adjacent to oil and gas platforms; and
2. To determine whether changes observed in the marine environment during the monitoring period are caused by drilling-related activities or are a product of natural processes.

To accomplish these objectives, we are looking closely for potential biological changes and concomitant chemical or physical changes that can be linked to specific drilling events. An overall objective of Cruise CAMP 3-3 is to provide environmental data to help make these kinds of correlations and inferences.

The M/V Farnella will be the support vessel for the cruise.

### Objectives

This cruise is devoted primarily to the recovery of instruments deployed during CAMP 3-2 to measure sediment-transport processes under winter conditions. Box cores also will be collected at selected sites to provide material for detailed sediment analyses

(grain size, radioisotope profiles, food quality of sediments from phytoplankton inputs, and bioturbation measurements.). The specific objectives are to:

1. Conduct side-scan surveys at project sites R-8, PJ-1, and R-9;
2. Recover two surface guard buoys at each of the above sites;
3. Recover 3 subsurface current-meter moorings at the above sites;
4. Recover 2 GEOPROBE tripods at R-8 and PJ-1;
5. Collect box cores for detailed sediment analyses; and
6. Collect hydrographic and suspended matter samples.

#### Participating Personnel

Dave Cacchione	USGS, Menlo Park
Dave Drake	USGS, Menlo Park
Jim Nicholson	USGS, Menlo Park
George Tate	USGS, Menlo Park
Rick Vail	USGS, Menlo Park
Mike Torresan	USGS, Menlo Park
Kevin O'Toole	USGS, Menlo Park
Joanne Thede	USGS, Menlo Park
Kaye Kinoshita	USGS, Menlo Park
Leda Beth Pickthorn	USGS, Menlo Park
Brad Butman	USGS, Woods Hole
Bill Strahle	USGS, Woods Hole
Rick Rendigs	USGS, Woods Hole
C.A. Butman	USGS, Woods Hole
Rose Petrecca	Woods Hole Oceanographic Institution
Charlotte Fuller	Woods Hole Oceanographic Institution
2 scientists	Office of Naval Research

#### Major Equipment List

CTD System	USGS, Menlo Park
GEOPROBES (2)	USGS, Menlo Park
Guard Buoys (6)	USGS, Woods Hole
VACM Moorings (3)	USGS, Woods Hole
Side Scan System	USGS, Menlo Park
Box Core	Battelle Ocean Sciences
Box Core	USGS, Menlo Park

#### Cruise Plan

CAMP 3-3 will be one part of a seven-day cruise on M/V FARNELLA during 21-28 February 1989. One day at the end of the

cruise will be devoted to operations in northern California that are funded separately by the Office of Naval Research.

21 FEB	0900	Depart RWC
	2400	Arrive CAMP site R-8; box core and side-scan sonar.
22 FEB	0600	Recover surface buoys, current meter mooring and GEOPROBE at R-8.
22 FEB	1600	Recover surface buoys at CAMP site PJ1.
22 FEB	2000	Box core and side-scan sonar at PJ1.
23 FEB	0600	Recover mooring and GEOPROBE at site PJ1.
23 FEB	1300	Recover surface buoy and mooring at CAMP site R9.
23 FEB	1800	Box core and side-scan sonar at site R9, and near R8.
24 FEB	0600	Box core at site R8.
	0900	CTD/LED and water sample transect through R8-R7.
	2100	Box core at CAMP site R7.
25 FEB	0200	CTD/LED and water sampling on transect south of R8-R7 line.
25 FEB	1200	Additional box cores at CAMP sites, as needed.
	1800	CTD/LED profiles on north transect.
	2200	Depart CAMP region.
26 FEB	1800	Arrive northern California STRESS program area. Box core at site C3.
	2100	Side-scan sonar site C3.
27 FEB	0600	Recover GEOPROBE at nearshore site.
	0900	Side-scan sonar at near-shore site.
	1400	Box cores at nearshore sites.
	1700	Deploy GEOPROBE at nearshore site.
	1900	Box cores, as needed.

28 FEB

2300  
1200

Depart for RWC.  
Arrive RWC.

Questions regarding this cruise should be directed to Dave Drake,  
USGS, (415) 354-3097.