HAWAI'I UNDERSEA RESEARCH LABORATORY

QUICK LOOK REPORT DIVE: P4-101

MISSION STATUS

Location: Maro Reef, NWHI

Latitude: 25°29.3342 **Longitude:** 170°21.0635

Mission Date: 9/17/2003 **Duration:** 8 h 21 min

Maximum Depth: 1012 m

Project Title: Canyon & Scavenger Communities of the Main & Northwestern Hawaiian Islands

Principal Investigator: Craig Smith & Eric Vetter

Address: University of Hawaii, Dept of Oceanography
1000 Pope Rd, MSB 205
Honolulu, HI 96822

Phone:

Observer 1: Craig Smith **Observer 2:**

Address: same as above **Address:**

Pilot 1: Terry Kerby **Pilot 2:** Max Cremer

Scientific Data Acquired: Prepare an abstract outlining your objectives, techniques, findings, etc.

Objectives:
1) Dive to 1000 m in open slope of Maro Reef and:
- deploy marker & baited trap
- deploy 3 kg bait & observe for 1/2 hour
- conduct 2-4 10 min surveys along 1010, 900, and 970 m contours
2) Proceed up slope to 650 and conduct above tasks, plus collect 408 core samples for macrofauna at random locations.

We dove to 1012 m on the open slope of Maro Reef. We then proceeded upslope and deployed one marker, baited trap and bait station. 1/2 hour of observations on the station revealed no scavengers. We conducted four 10 minute video surveys along the 990, 1010, & 970 m contours and observed low abundances but relative high diversity of fish and invertebrates. At one point on the open slope we encountered 20-30 demersal fish of many species resting on the seafloor or hanging in the water column (reason unknown). We then went upslope to 650 and deployed marker trap and bait. The bait attracted 5 squalid shards a six-gill

shark and a 2 m long ray (Plesiobatis daviesi) which carried off the bait. We conducted 2 fish surveys and then collected 8 cores, and returned to the surface.

Species List:
Please mark whether -single; -few (2-10); -many (11-100); -abundant (>100)
(e.g., Symphysanodon maunaloae-many)

Coelorhynchus sp.-many
Hydrolagus pupurescens-few
Plesiobatis daviesi-single
Hexanchus griseus-single
Nettastoma parviceps-many
Coryphaenoides longicirrhus-many
Squalus mitsukurii-few
Ventrifossa sp?-many
Congrid-few
Synaphobranchids
Sladenia remiger-single
Satyrichthes engyoceros-few
Aldrovandia phalacra-many
Aldrovandia verticalus-many
Polymixia sp.

MISSION EVALUATION:

Limitations, failures, or operational problems noted:

It was difficult to conduct quantitative video surveys without knowing the speed or distance traveled over the seafloor.

Recommendations for corrective action or improvement:

I recommend that the Pisces IV and V acquire a Doppler current meter system that allows recording of speed and elevation over the seafloor during bottom surveys.

In your opinion, did the mission essentially achieve its purpose? Compare actual work accomplished with the work that was expected to be accomplished.

The mission achieved all of its goals, with the exception of collecting all the desired tube cores.

List specimens or samples collected on the mission.

Six push core samples (fixed for macrofauna) from the 650 m slope site.

DATA RELEASE

Data may be retained by the project leader for up to 2 years after the mission date with the following exception. NOAA may request to use photos for publication or publicity purposes at any time.

Fill in the appropriate statement below and sign this form.

I hereby release the data archived by HURL for public consumption following mission

_ Canyon & Scavenger Communities of the Main & Northwestern Hawaiian Islands

(project title)

held on__ 9/17/2003 _____(date) in the following way:

a. CTD data by____9/17/2005_____(date)

b. voice transcripts, video, and still camera film by___9/17/2005____(date)
c. other___9/17/2005_____(date)

d. I will give my written consent to individuals wishing to use these data prior to the above dates depending on the nature of the request(s).

_____Principal Investigator