

## HAWAII UNDERSEA RESEARCH LABORATORY

### QUICK LOOK REPORT MISSION NO. P5-464

#### MISSION STATUS

**Location:** Pisces Pinnacle north of French Frigate Shoals, NWHI

**Mission Date:** 9/19/01

**Maximum Depth:** 1435 meters

**Project Title:** HURL Program Enhancement

**Principal Investigator:** Alex Malahoff

**Address:** Hawaii Undersea Research Laboratory

**Phone:** 956-6802

**Observer 1:** John Smith

**Observer 2:** Christopher Kelley

**Address:** HURL

**Address:** HURL

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

The primary objective of this mission was to acquire new data from a previously unexplored pinnacle north of French Frigate Shoals in the NWHI. This was the first deep (1000+ m) dive made by HURL in the NWHI and will be used as a preview of the type of terrain and animals expected to be encountered during the 2002 OEI project. Our techniques were straightforward: one side of the pinnacle was first mapped using HURL's Sea Beam system to identify a suitable dive site. The submersible then descended to the selected site which was at approximately 1000 m. Once on the site, the submersible gradually surveyed downslope along a ridge to a maximum depth of 1,435 m. During the survey, observers recorded both video and audio observations of the substrate and animals encountered. In addition, twenty invertebrate specimens, 2 sediment samples, and ? rock samples were obtained. Fish species recorded on the site included an unknown macrourid, a halosaurid, a synphobranchid eel tentatively identified as *Synphobranchus kaupā*, and a small fast moving dark colored fish. Invertebrates included sponges (i.e., *Corbitella* sp, *Crateromorpha* sp, *Walteria* sp 2, *Farrea occa*, *Caulophacus* sp 3?, and an unidentified hexactinellid), cnidarians (i.e. *Paragorgia dendroides*, *Iridogorgia superba*, *Corallium ducale?*, *Ellisella* sp?, *Lepidisis* sp, *Plumarella* sp, *Narella* sp 4, *Umbellula* sp, an unidentified pennatulid, *Corallimorpha* sp),

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urchins (i.e., *Aspidodiadema arcitum*, unidentified urchin), ophiuroids (i.e., *Astroscema* sp.?), seastars (i.e., two unidentified species), and crabs (i.e., a previously unrecorded species of *Uroptychus* sp, and an unidentified white galatheid).

**MISSION EVALUATION:**

**Limitations, failures, or operational problems noted:**

None

**Recommendations for corrective action or improvement:**

None

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

Yes, this was the first very deep dive (over 1000 m) made in the NWHI. The primary objective was to acquire new data from a previously unexplored pinnacle north of French Frigate Shoals. This was accomplished. The two observers, both a geologist and biologist from HURL, made substrate, invertebrate, and fish observations of the site. Twenty invertebrate specimens, two sediment samples, and ? rock samples were collected during the dive.

**List specimens or samples collected on the mission.**

**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 \_\_\_\_\_ (project title)

held on \_\_\_\_\_ (date) in the following way:

- a. CTD data by \_\_\_\_\_ (date)
- b. voice transcripts, video, and still camera film by \_\_\_\_\_ (date)
- c. other \_\_\_\_\_ (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