

HAWAI'I UNDERSEA RESEARCH LABORATORY

**QUICK LOOK REPORT
DIVE: R-396**

MISSION STATUS

Location: Brooks Bank, NWHI

Latitude: 23° 58.514'N

Longitude: 166° 45.721'W

Mission Date: 10 Nov 07

Duration: 3 hours 23 mins

Maximum Depth: 675 m

Project Title: Deep sea coral research activities in Papahānaumokuākea Marine National Monument (Monument permit # PMNM-2007-050)

Principal Investigator: Dr. Robert B. Dunbar

**Address: Geological and Environmental Sciences
Stanford University
Stanford, CA 94305-2115**

Phone: 650-725-6830

e-mail: dunbar@stanford.edu

**Observer 1: Chris Kelley
Address: HURL**

**Observer 2: Jane Culp
Address: HURL**

Pilot 1: Dan Greeson

Pilot 2: Pete Townsend

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

Objectives: The main objective for this ROV dive was to survey for target deep sea corals to be collected by submersible on Nov 11 during P5-699. We wish to collect deep sea corals such as *Dendrophyllia*, *Leiopathes*, *Gerardia*, *Corallium*, and Bamboo spp. from a depth transect at Brooks Bank. This ROV transect was suppose to run from 700 meters up to 500 meters. We actually ran from 675 to 534 m.

Observations, findings, etc:

This ROV transect started out at 675 m on a terrain of carbonate hardground covered in some areas with a veneer of carbonate sand and in other areas by large boulders. In general, the boulders occurred in clusters. The boulder fields support diverse and abundant epifaunal communities of deep sea corals. In some areas the veneer of sediment on the hardground was thin enough such that corallium communities were abundant even between boulder fields.

A key observation on this dive was the existence of extensive Dendrophyllid beds between 650 and 600 meters. These will be sampled during P5-699.

Species list:

Dendrophyllia
Poliopogon
Benthysicymus
Histocidaris variabilis
Macrourids
Hexactinellids
Coralimorpha
Enallopsammia
Isidid
Nezumia
Heterocarpus laevigatus
Beryx decadactylus
Anthomastus fisheri
Chrysogorgia geniculata
Thouarella typical
Paramuriceid
Calytrophora Clarki
Bathypathes conferta
Corallium (secundum?)
Chlorophthalmus
Antipatharian
Keroides pallida
Goniasterid
Hormathiid
Leiopathes
Paragorgia

See attached list by observers Chris Kelley and Jane Culp, HURL. They, not Dunbar are the true identifiers.....

MISSION EVALUATION:

Limitations, failures, or operational problems noted:

Everything worked fine. However, with the set of current and wind we were obliged to run a bit more northerly than we wished and therefore were not able to run up to 500 m.

Recommendations for corrective action or improvement:

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

Yes, the mission was successful.

List specimens or samples collected on the mission.

None

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 10 Nov 07 (date) in the following way:

- a. CTD data by immediately (date)
- b. video and images by immediately (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).

Robert B. Dunbar Principal Investigator