

HAWAI'I UNDERSEA RESEARCH LABORATORY

**QUICK LOOK REPORT
DIVE: R-390**

MISSION STATUS

Location: Twin Banks, NWHI

Latitude: 23 ° 8.081'N

Longitude: 163° 8.606

Mission Date: 2 Nov 07

Duration: 1 hours 28 mins

Maximum Depth: 521 m

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

Principal Investigator: Dr. Robert B. Dunbar

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**Observer 1:
Address:**

**Observer 2:
Address:**

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 continue estimating deep sea coral abundances and distributions at Twin Banks. This dive was the 4th ROV dive at Twin Banks and these serve as the shallow water complements to a series of 4 Pisces V dives conducted by the Kelley and Dunbar groups. This ROV dive began close to the endpoint for the November 2 Pisces V dive (and at the same depth = 520 m) and extended the transect up to 370 meters.

Observations, findings, etc:

The ROV transect started out on carbonate sand exhibiting ripples at cm spacing as well as megawaves at 5 to 10 m spacing. Limestone floatblocks and some possible outcrops began to appear above 500 meters. By 400 m the bottom was mostly limestone. In general, the abundance of attached benthic organisms followed bottom characteristics with larger numbers of organisms associated with the hard substrate of the limestone.

Species list:

Malacocephalus
Bathypathes
Big blood red urchins
Macroalgal (free floating – derived from shallow bank top)
Corallium (secundum?) at 481 and again at 484 m
Beryx decadactylus
Little white seastar
Setarches guntheri
Dead attached Gerardia at 381 m

See attached list by observers Chris Kelley and Jane Culp, HURL.

MISSION EVALUATION:

Limitations, failures, or operational problems noted:

This was a short ROV dive. Everything worked beautifully.

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. We did not observe a large standing stock of deep sea corals but we have a complete transect from 1800 to 370 meters now for estimating actual numbers.

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 2 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