HAWAI'I UNDERSEA RESEARCH LABORATORY

QUICK LOOK REPORT (QLR) for *Pisces* and *RCV-150*

DIVE: _P4-201_____

(*Extend length of sections as needed/appropriate*)

MISSION STATUS

Location: __Auau Channel, 5 mi. west of Olowalu, Maui.

Latitude: 20° 49' N **Longitude:** 156° 43' W

Mission Date: 12/09/2007 **Duration:** ___8_ hours ___7_ mins

Maximum Depth: __107 meters

Project Title: ____ Comparing Hawaii's Deep Reef Coral Communities____

Principal Investigator: _ Montgomery/Rooney/Boland/Parrish/Pyle_____

Address: 1151 Punchbowl Street Rm 330

Honolulu, HI 96813

_____

Phone: _____

Observer 1: John Rooney **Observer 2:** Thierry Work

Address: _NOAA Pacific Islands
Fisheries Science Center
2570 Dole St.___
Honolulu, HI 96822
_____

_____

Address: USGS

Honolulu, Hawaii 96813
_____

Pilot 1: Terry Kirby_ **Pilot 2:** NA _____

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

Objectives: Stain a Leptoseris sp. coral colony with Alizarin Red stain for subsequent harvest to measure colony growth rates. Deploy high-resolution thermistor to enable the development of ocean temperature records from specimens of this coral species. Conduct video transects of coral communities.

QLR continued
Observations, findings, etc:

The substrate observed on much of this dive featured rocky outcrops in depth ranges that were found to have high density coral reefs on submersible and ROV dives to the east and west of it. This area, however, lacked the thick growths of coral and featured a few scattered colonies. This negative result may potentially be useful for helping to understand what controls the distribution of these reefs.

Observed Species list:
Antipathes grandis, Halimeda opuntia or discoidea, Leptoseris hawaiiensis, Leptoseris mycetoseroides, Leptoseris papyracea, Montipora capitata, Pocillipora meandrina, Porites lobata

MISSION EVALUATION:

Limitations, failures, or operational problems noted:
Considerable time was spent looking for a suitable coral colony for staining when the density of corals at this site turned out to be much less than expected. A location known from previous submersible of ROV dives to have high coral densities would have made the dive more efficient and productive.

Recommendations for corrective action or improvement:
Choose a site with known characteristics for future dives featuring extensive equipment deployments.

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

This dive did accomplish its primary purpose, although better site selection would have left more time to complete additional coral video transects

List specimens or samples collected on the mission:

Leptoseris hawaiiensis
Leptoseris papyracea

Montipora capitata
Halimeda sp.

QLR continued

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):

Comparing Hawaii's Deep Reef Coral Communities

Held on 12/9/2007 (date) in the following way:

a. CTD data by 12/10/2009 (date)

b. Video and images by 12/10/2009 (date)

c. Other 12/10/2009 (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

ANNUAL/FINAL REPORT

NOAA's Office of Undersea Research
Submersible Science Program

Report Status: _____ Final or Continuing _____

Date of Report: _____ Dive Numbers: _____

Inclusive Dates of Mission: _____

Project Title: _____

_____

Principal Investigator: _____ Signature: _____

Names of Co-Investigators: _____

_____

_____

_____

I. Abstract of Mission Results: Please include diagrams or figures as appropriate.

II. Please discuss the following:

A. Significance of the mission in relation to your research goals.
B. Scientific contributions of the mission in terms of species, patterns, and processes observed or measured. Were the initial hypotheses addressed; were any new ones posed as a result of the mission? Was the methodology and/or technology utilized successful and repeatable by others?
C. For continuing status reports, indicate the extent of data analysis or manuscript preparation completed to date.
D. Advantages of NOAA's Undersea Research Program to your research investigations.
E. Plans for use of the data gathered on this mission and the applications, products and/or benefits to NOAA.

III. Please include any comments on the following operational details, where applicable:

A. Weather and water conditions affecting operations
B. Safety problems and/or concerns
C. Dive management and personnel cooperation
D. Logistics and support activities