HAWAI'I UNDERSEA RESEARCH LABORATORY

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

DIVE: PIV-200

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

MISSION STATUS

Location: Keyhole Pinnacle, West Maui

Latitude: 21° 56.416 **Longitude:** 156° 45.561

Mission Date: 12/08/2007 **Duration:** 6 hours 47 mins

Maximum Depth: 208.5 meters

Project Title: Comparing Hawaii's Deep Reef Coral Communities

Principal Investigator: Montgomery/Rooney/Boland/Parrish/Pyle

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Observer 1: Tony Montgomery
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Observer 2: Raymond Boland
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Pilot 1: Max Cremer

Pilot 2:

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

Objectives:

Collect *Antipathes* samples for genetic, taxonomic, and histology sampling and measure *Antipathes* trees. Conduct fish surveys. Collect samples of algae and rubble samples.

Observations, findings, etc:

Conducted two 20 minute fish transect surveys. On video “Leahi” and “Wahanui” are misidentified, the correct identification is *Aphareus rutilans*. On video “Pearlfish” is misidentified, the correct identification is *Gunnellichthys curiosus*. On video “Fishers angel” is misidentified, they were juvenile *Centropyge potteri*. Collected nine *Antipathes* samples for collection. Collected an algal sample. Collected rubble samples.

Observed Species list:

Distromium flabellatum
Halimeda opuntia
Antipathes dichtoma
Antipathes grandis
Myriopathes ulex
Panulirus marginatus
Eurypatagus ovalis
J shaped sponge
Synodus capricornis
Mypristes berndti
Mypristes chryseres
Sargocentron spinosissimum
Anthias hawaiiensis
Odontathias fuscipinnis
Pseudantihas hawaiiensis
Pseudanthias thompsoni
Lipropoma aurora
Oxycirrihtes typus
Decapterus macarellus
Aphareus rutilans
Lutjanus kasmira
Mulloidichthys vanicolensis
Parupeneus multifasciatus
Parupeneus porphyreus
Chaetodon fremblii
Chateodon klenii
Chaetodon miliaris
Chaetodon multicinctus
Forcipiger longiristris
Apolemichthys arcuatus
Centropyge potteri
Genicanthus personatus
Chromis leucura
Chromis verator
Dascyllus albisella
Bodianus albotaeniatus
Cirrhilabrus jordani
Oxycheilinus bimaculatus
Pseudocheilinus evanidus
Anampses chrysocephalus
Labroides phthirophagus

Scarus rubroviolaceus
Bryaninops ampulus
Trimma taylori
Gunnellichthys curiosus
Zanclus cornutus
Acanthurus dussmieri
Acanthurus olivaceus
Acanthurus thompsoni
Ctenochaetus strigosus
Zebrasoma flavescens
Naso hexacanthus
Naso maculates
Naso unicornis
Canthigaster jactator
Arothron hispidus

MISSION EVALUATION:

Limitations, failures, or operational problems noted:
Low battery power near end so unable to collect specimens

Recommendations for corrective action or improvement:
Try to collect specimens earlier in order to account for low power situations.

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 dive accomplished all major goals except specimen collecting. Important black coral samples were collected, but other plate corals and invertebrates were not collected.

List specimens or samples collected on the mission:

P4-200-1
sponge- yellow/brown long branches
sponge- bright red/orange thin encrusting
small gastropod- Cerithid?
small bryozoan- Crisna radians
unknown hydroids- 2 species
other encrusting bryos (on Halimeda)

P4-200-3
sponge-pale yellow sticky gooey amorphus
bryozoans- Disporella sp.
small boring bivalves in rocks
polychaete- Eunicid
unknown nemertean
red encrusting bryozoans
other encrusting bryos (on Halimeda)

P4-200-1-3
bivalve on black coral- Pteria brunnea
bryozoans- Crisna sp.?
small clear bubble tunis w/ red dot

Black Corals:

2 Antipathes dichotoma
2 Antipathes grandis –pale
3 Antipathes grandis –red

Algae

Halimeda sp. (opuntia or distorta)
Peyssonnelia sp.
Dictyota sp.
Distromium flabellatum
Portieria hornemannii
Filamentous red epiphyte
Cryptonemia sp.?
Distromium flabellatum
Portieria hornemannii
Nongeniculate coralline algae

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 12/8/2007 (date) in the following way:

a. CTD data by 12/9/2007 (date)

b. Video and images by 12/9/2007 (date)

c. Other 12/9/2007(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).

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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: _____

_____

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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