HAWAI‘I UNDERSEA RESEARCH LABORATORY

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

DIVE: P-5 737

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

MISSION STATUS

Location: Au‘au Channel between Maui and Lana‘i

Latitude: 20 ° 44.52N **Longitude:** 158 ° 39.32W

Mission Date: 6 April 2009 **Duration:** 4 hours 10 mins

Maximum Depth: 171 meters

Project Title: CRES (2007) Investigating the Deep (50-100 m) Coral Reefs in Hawaii

Principal Investigator: Richard Pyle

Address: Natural Sciences Department

Bishop Museum

1525 Bernice Street, Honolulu, Hawaii 96817

Phone: (808) 848-4115

Observer 1: John Rooney **Observer 2:** Brian N. Popp

Address: JIMAR **Address:** University of Hawaii

1680 East-West Road 1680 East-West Road

Honolulu, Hawaii 96822 Honolulu, Hawaii 96822

Pilot 1: Terry Kirby **Pilot 2:**

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

Objectives:

Our primary objective was to recover a camera sled lost on a July 2008 CRES cruise from a NOAA ship. We had approximate coordinates of the lost sled. *Pisces V* was launched approximately 200 m north of the target site and our dive plan included a transit to the target site and systematic survey of the area as necessary. The sled was equipped with a location device (pinger) that had unfortunately failed to operate. The sled was eventually found in approximately 131 m of water in the general target region and recovered undamaged.

Observations, findings, etc:

Pisces V landed in 171 m on gently sloping carbonate mud-covered sediment with sparse wire coral (*Cirrhipathes* sp.?) and small unidentified white stony coral (20°44.524'N, 156°39.217'W). Up-slope we encountered a large carbonate-rock outcrop (20°44.486'N, 156°39.279'W) sparsely covered with the unidentified small white stony corals and a 0.5 m high black coral that is potentially a new genus/species for the main Hawaiian Islands. We transited up-slope towards the target site along fairly steep carbonate mud-covered slope with extensive burrows and intermittent carbonate-rock outcrops. At approximately 135 m we began to encounter a few small (2-4 cm diameter) individuals of the coral *Leptoseries* sp. At the top of the slope at approximately 116 m water depth, a hard carbonate ridge was found with sparse *Leptoseries* sp. Eventually a systematic survey of the top of the ridge revealed the lost camera sled in approximately 131 m of water. The sled had >100 m of umbilical cable that was coiled around the sled which presented a minor obstacle to the sub. The pilot maneuvered the submarine close enough to the sled that the cable could be cut and the sled loaded on the science grating for return to the surface. The camera sled was recovered undamaged.

Observed Species list:

In addition to the recovered sled, numerous fish species were observed including: bigeyes (*Priacanthus* sp.), jacks (*Seriola* sp.), ulua (*Caranx ignobilis*), lizardfish (*Synodus capricornis*?), razorfish (*Iniistius* sp.), unicornfish (*Naso* spp.), soldierfish (*Myripristis*?), butterflyfish (*Chaetodon*), flounder, eel (*Conger oligoporus*?), and mahi (*Coryphaena*).

MISSION EVALUATION:

Limitations, failures, or operational problems noted:

No operational problems were encountered.

Recommendations for corrective action or improvement:

No recommendations.

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

The mission was an overwhelming success. The lost camera sled was found and recovered without damage.

List specimens or samples collected on the mission:

No specimens were collected.

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 _____4/6/2009_____ (date) in the following way:

a. CTD data by __4/6/2011____ (date)

b. Video and images by _4/6/2011____ _ (date)

c. Other ___4/6/2011____ _ (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).

_____John Rooney_____
Principal Investigator