

HAWAI'I UNDERSEA RESEARCH LABORATORY

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

DIVE: P5-726

(Extend length of sections as needed/appropriate)

MISSION STATUS

Location: __South of Pearl Harbor, Oahu, Hawaii

Latitude: [REDACTED]

Longitude: [REDACTED]

Mission Date: __16Mar09_____ **Duration:** _7_ hours ___ mins

Maximum Depth: __527_ meters

Project Title: __Hawaii Undersea Military Munitions Assessment (HUMMA)

Principal Investigator: __Margo Edwards_____

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Observer 1: _____Tim Blades_____ **Observer 2:** __Christopher Kelley__

Address: _____ECBC_____ **Address:** _____HURL_____

Pilot 1: __Max Cremer_____ **Pilot 2:** _____

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

Objectives: The Pisces 5 will survey an east-west speckle trail in the southern study area that has not been examined previously. After following the trail and determining the nature of the speckles, the submersible will move southwest through 2 dredge spoil areas toward the upper side of an apparent drowned reef terrace. At that point, the submersible will turn east, then northeast along several small faint speckle trails. None of these areas have been previously surveyed. Two sets of sampling containers will be taken down and sampling will take place near suspected chemical ordnance, if found or conventional ordnance, if not.

Observations, findings, etc:

The Pisces V landed near the target speckle trail and found a number of depth charges. As the submersible surveyed west along the trail, it encountered primarily depth charges but also several cylindrical objects that were of undetermined nature. These did not appear to be chemical in nature, therefore no sampling was conducted. The submersible then turned southwest, passed through a dredge spoil area with scant ordnance present, then arrived at the edge of the carbonate feature which appeared to be a severely eroded drowned reef structure mixed with what appeared to be conglomerated sediment formations clearly showing layering. Much of the substrate at this location was hard with a relatively thin dusting of sediment which would have made sampling difficult. Only a few dispersed pieces of conventional ordnance were observed at this location so no sampling was attempted. The submersible then continued to the east and arrived at a field of incendiary cluster bombs in deeper sediment. Since it was 1 pm already, the decision was made to sample at this site, which was identified as the Marker 19 site. A complete set of water and sediment samples was taken along with a single pushcore. Sampling was completed at approximately 3:15pm. The submersible then continued to survey to the east for a short distance through the end of the cluster bomb field, then turned north and located an 50 caliber ammo box field. This completed the dive.

Observed Species list:

Fishes included *Ventrofossa atherodon*, *Malacocephalus laevis*, *Plesiobatis daviesi*, *Squalus mitsukurii*, *Chlorophthalmus proridens*, *Coelorinchus aratum*, *Chascanopsetta crumenalis*, *Synagrops argyrea*.

Cnidarians included a grey anemone, hormathiid anemones, several sea pens including *Lituaria* sp, *Funiculina* sp 2, *Kophobelemnion stelliferum*, and *Pennatula flava*, at least one gorgonian (*Thourella* typical).

Echinoderms included the urchins *Histocidaris variabilis*, *Stereocidaris hawaiiensis*, *Caenopedina hawaiiensis*, *Aspidodiadema hawaiiensis*, and *Chaetodiadema pallidum*. One seastar, *Brisinga panopla*, was abundant and typically perched on pieces of ordnance. Only one other seastar was observed, which was probably *Plinthaster ceramoides*. Two crinoids included a yellow *Antenodon* sp and a brown comatulid.

Regadrella sp1 was the only sponge observed. Mollusks included the seaslug *Koonsia* sp, and the squid *Nototodarus hawaiiensis*. Crabs included *Sympagurus dofleini* with its commensal anemone *Stylobates aenus* and *Paramunida hawaiiensis*.

MISSION EVALUATION:

Limitations, failures, or operational problems noted:

None

Recommendations for corrective action or improvement:

None

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

Yes, we surveyed the intended targets and obtained a complete sample suite at a piece of ordnance.

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):

___ Hawaii Undersea Military Munitions Assessment (HUMMA)_____

Held on _____ 16Mar09 _____ (date) in the following way:

- a. CTD data by _____ 31Dec09 _____ (date)
- b. Video and images by ___ 31Dec09 _____ (date)
- c. Other _____ 31Dec09 _____ (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