HAWAII UNDERSEA RESEARCH LABORATORY

QUICK LOOK REPORT MISSION NO. P5-295

MISSION STATUS

Location: Submarine north flank of Molokai

Mission Date: September 5, 1996

Maximum Depth: 1957 m

Project Title: Extent and depth of landsliding, north flank of Molokai

Principal Investigator: Robin T. Holcomb

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Observer 1: Robin Holcomb

Address: same

Observer 2: Juan Carlos Carracedo (port)

Address: Canary Islands Volcano Observ.
Tenerife, Canary Islands
Spain

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

Objective was to reconnoiter and collect samples from stratigraphic units along the east wall of a canyon between Papalaua and Halawa submarine canyons, near its mouth. We wanted to describe the basic stratigraphy and compare it with that seen in other nearby canyons to the west, and further document the environment from which samples had been collected previously during Sea Cliff dive #927. We landed on the floor of the valley, at its mouth, and traversed in a zigzag manner up its east wall to the crest of the ridge at a depth of 1425 meters, crossing a large number of agglomerates, massive lava flows, columnar flows, a carbonate-rich layer, more columnar basalts and a thick capping sequence of fine-grained marine sediment.

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, it did achieve its purpose very well. We found a well-defined stratigraphic sequence that was quite comparable to what we had found in other areas, and added details to some parts of the general sequence. In the broader view, however, we were not able to test the 3 hypotheses (stated in our proposal) as directly as we had expected, since the anticipated units are not exposed. After reviewing our results, however, we do think that we can argue for a choice among the hypotheses, using data that were collected during this cruise.

List specimens or samples collected on the mission.

P5-295 --- 1 Tabular piece of basalt; oriented
P5-295 --- 2 Block from a very thick lava flow, possibly andesitic
P5-295.--- 3 2 blocks from a basaltic column; one piece oriented
P5-295.--- 4 Vesicular basalt from a possible bedded scoria
P5-295.--- 5 Carbonate cobble, apparently a weathered coral head
P5-295.--- 6 2 blocks of friable claystone
P5-295.--- 7 Fragment from top of a columnar basalt
P5-295.--- 8 Friable claystone with burrows
P5-295.--- 9 Friable clayey block, possibly reworked, in a conglomerate of such blocks
P5-295.--- 10 Friable claystone with burrows.

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

Extent and depth of landsliding, submarine north flank of Molokai (project title)

held on September 5, 1996 (date) in the following way:

a. CTD data by 9-30-96 (date) (none collected)

b. voice transcripts, video, and still camera film by 9-30-97 (date)

c. other 9-30-97 (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).

Robin T. Holcomb Principal Investigator