**CRUISE REPORT\(^1\)**

**VESSEL:** Townsend Cromwell, Cruise 99-03 (TC-241)

**CRUISE PERIOD:** 6-18 March 1999

**AREA OF OPERATION:** Northwestern Hawaiian Islands (Figure 1)

**TYPE OF OPERATION:** Support field camps and transport personnel of the Protected Species Investigation (PSI) Marine Mammal Research Program (MMRP), and the U. S. Fish and Wildlife Service (USFWS).

**ITINERARY:**

<table>
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<tr>
<th>Date</th>
<th>Event</th>
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<tr>
<td>10 March</td>
<td>Arrived at Laysan Island at 0800. Off-loaded equipment and supplies and on-loaded recyclables, garbage, and empty water jugs. Disembarked Safina, Wegman, and Woodward. Becker, Boland, and Gibson conducted beach survey of marine debris from camp to north shore. Departed for Lisianski Island at 1600.</td>
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<tr>
<td>11 March</td>
<td>Arrived at Lisianski Island at 1100. Off-loaded equipment and supplies and established PSI Lisianski field camp.</td>
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\(^1\)This is a combined Cruise and Narrative Report.

13 March - Becker, Bertilsson-Friedman, and Gummeson assisted with camp setup. Boland and divers from the Townsend Cromwell conducted underwater surveys of marine debris on Neva Shoals and around island. Departed Lisianski Island at 1800.


MISSIONS AND RESULTS:

A. Transport PSI personnel, equipment, and supplies to Laysan and Lisianski Islands and establish PSI field camps for Hawaiian monk seal studies.

PSI field camps were successfully established at Laysan and Lisianski Islands.

B. Resupply and transport personnel from the USFWS field camp at Laysan Island.

Supplies and USFWS personnel were successfully deployed at Laysan Island.

C. Transport equipment and supplies for PSI and USFWS to the field station at Tern Island, FFS.

All equipment and supplies were transported to and from Tern Island, FFS.

D. Conduct reef surveys for marine debris at Lisianski Island and Neva Shoals.

Survey covered 0.30 km² of both Lisianski and Neva Shoals shallow reef habitat.
SCIENTIFIC PERSONNEL:

Brenda Becker, Chief Scientist (March 6-March 14), National Marine Fisheries Service (NMFS), Southwest Fisheries Science Center (SWFSC), Honolulu Laboratory (HL)
Raymond Boland, Chief Scientist (March 14-March 18), Joint Institute of Marine and Atmospheric Research (JIMAR), University of Hawaii (UH)
Petra Bertilsson-Friedman, Cooperating Scientist, JIMAR
Russell Bradley, Cooperating Scientist, U.S. Fish and Wildlife Service (USFWS)
Dorothy Dick, Cooperating Scientist, JIMAR, UH
Lara Gibson, Cooperating Scientist, JIMAR, UH
Sheila Gummeson, Cooperating Scientist, JIMAR, UH
Amber Pairis, Cooperating Scientist, JIMAR, UH
Michelle Reynolds, Cooperating Scientist, USFWS
Carl Safina, Cooperating Scientist, USFWS
Patty Scifres, Cooperating Scientist, USFWS
Christina Sulzman, Cooperating Scientist, USFWS
Mark Vekasy, Cooperating Scientist, USFWS
Alex Wegman, Cooperating Scientist, USFWS
Rebecca Woodward, Cooperating Scientist, USFWS

Submitted by:  ____________________________
Raymond Boland
Chief Scientist

Approved by:   _____________________________
R. Michael Laurs
Director, Honolulu Laboratory

Attachment