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UNITED STATES DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

High-resolution seismic-reflection data collected on R/V S.P. LEE: L9-84-CP, Marshall Islands to Hawaii

by

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The U.S. Geological Survey (USGS) R/V S.P. LEE (cruise L9-84-CP) left Majuro, Radak chain of the Marshall Islands on July 28, 1984, cruised over the Mid-Pacific Mountains, and reached Hawaii on August 15, 1984 (Figs. 1 and 2). The main objectives of the cruise were to study the distribution and composition of ferromanganese-oxide crusts in the Marshall Islands and to retrieve a current meter/sediment trap mooring deployed in October 1983 on Horizon Guyot, Mid-Pacific Mountains (USGS L5-83-HW cruise). The quality of the geophysical data collected is generally good. However, the declivity of some seamount, atoll, and guyot flanks are too large to allow high-quality resolution from the surface-towed systems that were used.

The navigation system used was an integrated satellite-navigation/LORAN-C (in Mid-Pacific Mountains)/dead-reckoning system that was updated by radar when possible. A total of 5410 km of 12-kHz and 3.5-kHz seismic-reflection data and 730 km of 80-in^3 to 148-in^3 airgun seismic-reflection data were collected. The original records can be seen and studied at the USGS offices at Woods Hole, MA 02543. Microfilm copies of the seismic-reflection data can be purchased only from the National Geophysical Data Center, NOAA/EDIS/NGDC, 325 Broadway, Boulder, CO 80303.

This report is preliminary and has not been reviewed for conformity with the U.S. Geological Survey editorial standards and stratigraphic nomenclature.

1. Woods Hole, Mass.

1984

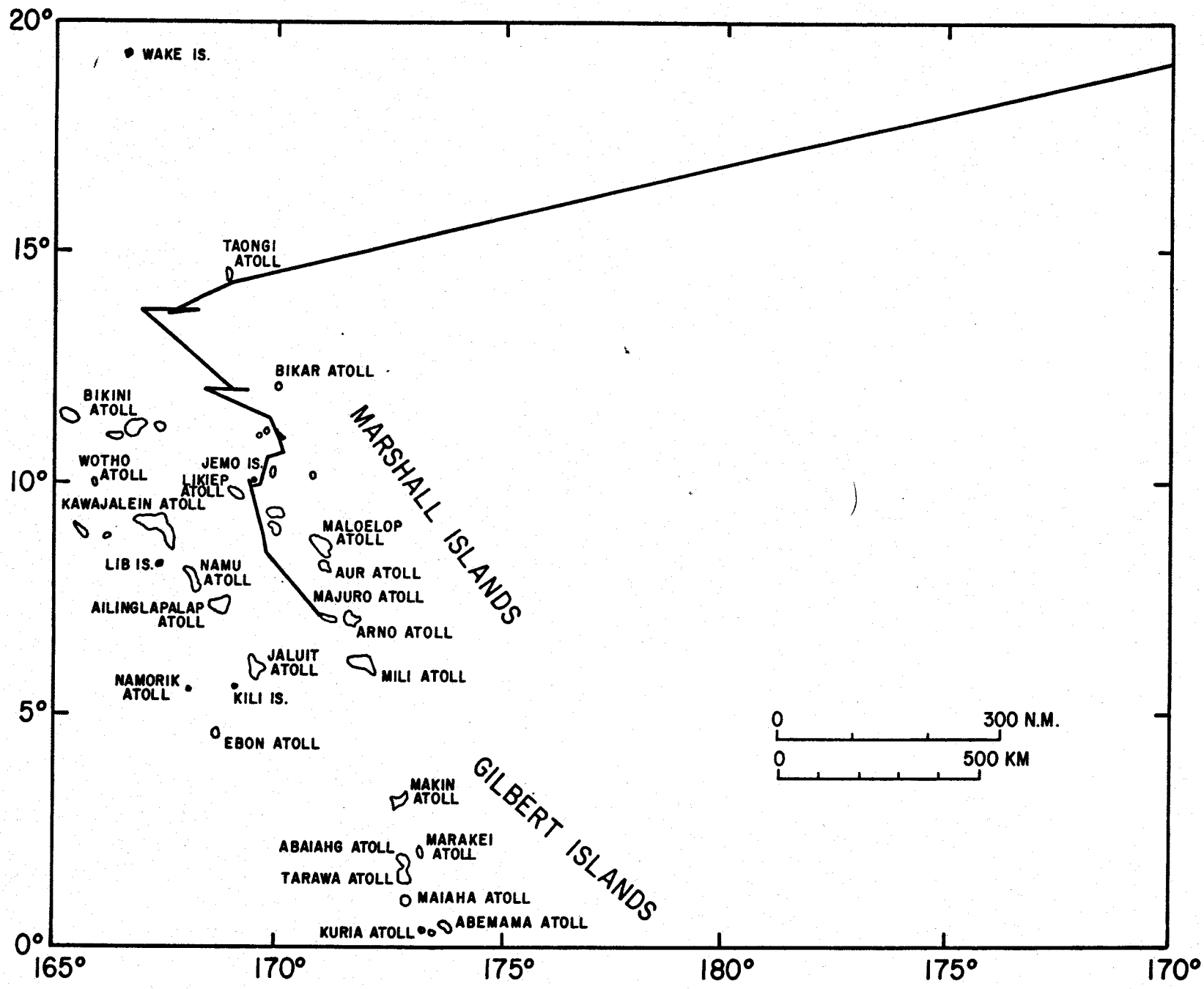

Figure 1.--Ship trackline map: western portion of the study area.

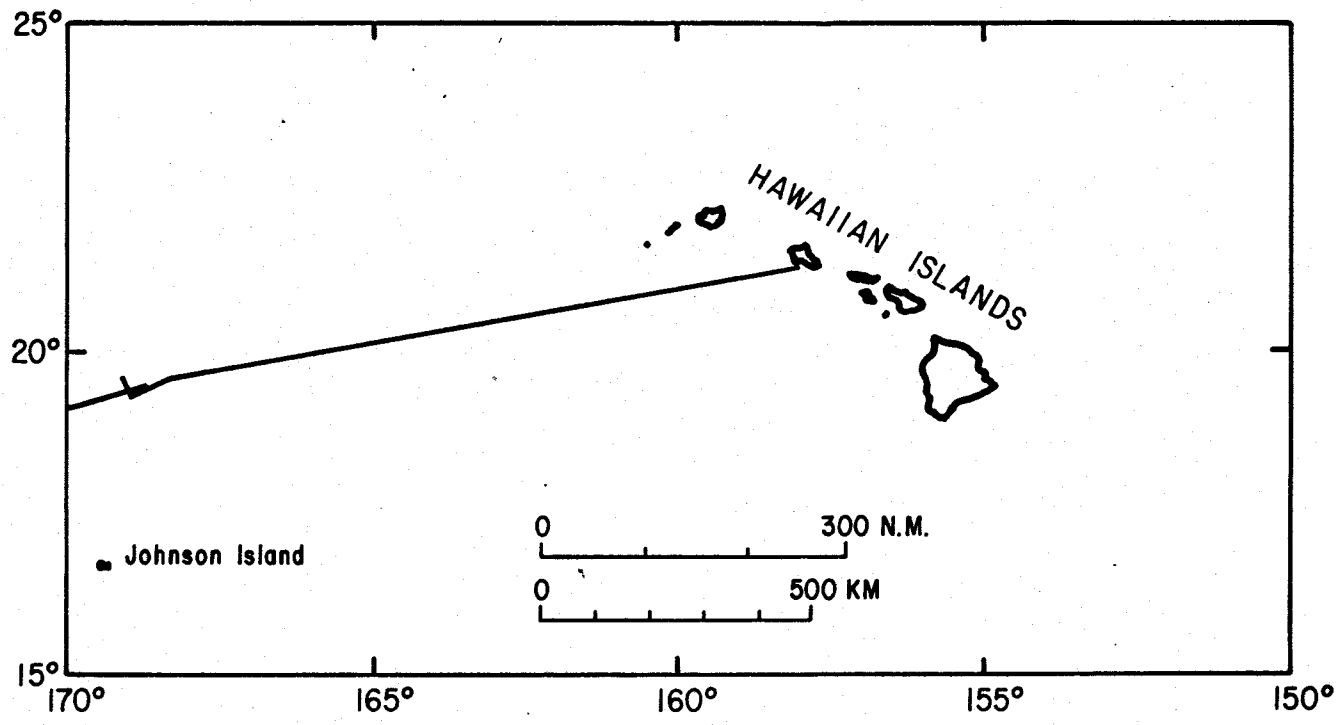

Figure 2.--Ship trackline map: eastern portion of the study.