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LAMONT GEOLOGICAL OBSERVATORY
Columbia University
Palisades, New York

(9) Quarterly Letter Report No. 17, ~~1 Apr - 30 Jun 65~~ 1 Apr - 30 Jun 65

Nonr-266(82),

(15) ARPA Order ~~218-61~~

~~Project Order No. 8188~~

Contractor: Columbia University

Contract Date: 1 April 1961

Contract Amount: \$360,178

Contract Number: ~~Nonr-266(82)~~ ✓

Contract Expiration Date: 31 March 1966

Project Scientist: Kenneth Hamkins

~~Elwood 9-2900~~

(11) 30 Jun 65,

(12) 4p.

(6) studies in marine geophysics and underwater sound
from drifting ice stations.

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1. Fletcher's Ice Island (T-3)

W. Tiemann and C. Wilkins operated the geophysical program during most of this period. They were relieved in early June by the summer crew: Eric Rice, John Yearsley and Ed Davis. The program of gravity, magnetic, depth and navigation measurements continued. The long-period seismograph was operated during part of this period.

A new proton precession magnetometer, constructed at Lamont, was installed to replace the old Varian model.

2. Data reduction and analysis

Analysis of data collected on the ice stations was continued at Lamont. Navigational data received the most attention in terms of manpower. Other fields of study were underwater sound propagation, bathymetric contouring, ocean current observations, magnetic and gravity reductions.

3. Reports issued under this contract

Technical Report No. 4, CU-4-65-Nonr 266(82), appeared in June 1965.

Prentiss, D., E. Davis and H. Kutschale, "Natural and man-made ice vibrations in the central Arctic Ocean in the frequency range from 0.1 to 100 cps.

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4. Visitors to Lamont for consultation.

Arthur E. Molloy of U.S. Naval Electronics Laboratory visited this lab in April, 1965 to discuss Arctic Ocean bathymetry.

Marvin Weinstein and Daniel Woolston of Underwater Systems, Inc. visited Lamont in April 1965 for consultations on the Lamont acoustic listening station, which will be established on T-3 for the detection of underwater signals from bombs to be detonated by U.S.C.G. NORTHWIND on its cruise across the north of Eurasia.