FORTS CONT

LAMONT GFOLOGICAL OBSERVATORY Columbia University Palisades, New York

Double of the second of the se

Nonr-266(82),

ARPA Order 218-61

(11) 30 Jun 65,

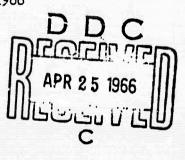
Contractor: Columbia University Contract Date: | April 1961

Contract Amount: \$360,178 Contract Number: 1000 266(82)

Contract Expiration Date: 31 Warch 1966 Project Scientist: Kenneth Hunkins

oject Scientist: Kemmeth Hunkins
Filmwood 9-2900

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



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

Tiemann and C. Wilkins operated the geophysical program during most of this period. They were relieved in early June by the summer crew: Fric 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 O.1 to 100 cps.

.

## 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. NORTH IND on its cruise across the north of Eurasia.