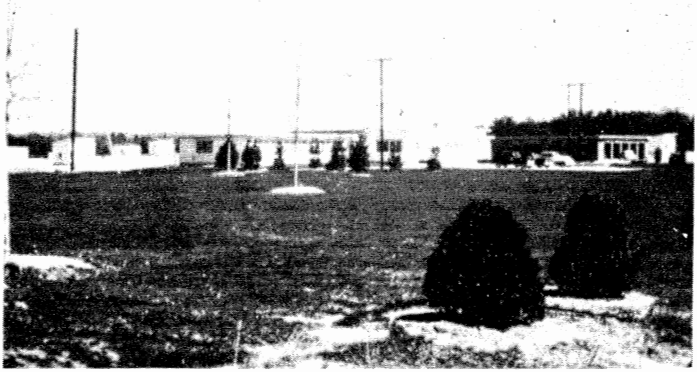
# U. S. DEPARTMENT OF COMMERCE

# COAST & GEODETIC SURVEY



## Fredericksburg Magnetic Observatory and Laboratory

Corbin, Virginia

Dedication Ceremony

May 23, 1956

2:00 p.m.

On the occasion of its dedication, the Fredericksburg Magnetic Observatory and Laboratory assumes a very serious mission on behalf of America. In addition to modern installations and magnificant proportions, it has also the heritage of a great tradition established by its predecessor, the Cheltenham Magnetic Observatory. During its long life as a key station in the American geomagnetic observatory network, Cheltenham has functioned as a truly international center. It has maintained the primary magnetic standard established by the Carnegie Institution of Washington. It has compared and calibrated innumerable domestic and foreign instruments. It is truly unfortunate that the physical limitations of the site at Cheltenham have prevented modernization and badly-needed expansion, without which the old station cannot continue to fulfill its function. It is fitting to pay tribute to the vision and foresight of those who planned and carried out the work of Cheltenham, foremost among whom is the distinguished American scientist John A. Fleming.

The Fredericksburg Magnetic Observatory now takes over after a period of overlapping operation necessary for relating future observations here with those of the past at the old location. This new station will answer many long-felt needs that could not be met at Cheltenham. In addition to greatly expanded observational facilities, the new station includes well-equipped laboratories for development work on all kinds of new magnetic instruments--an important modern factor in this specialized type of work. It will also undertake a wide variety of special observations associated with various geomagnetic investigations.

The site contains about 180 acres of land obtained from the A. P. Hill Military Reservation. By reason of its location, there is no foreseeable danger of commercial interference capable of introducing disturbing magnetic forces.

The variation buildings used for photographic recording of the varying magnetic forces of the earth have heavy thermal insulation to provide uniform temperatures. Numerous small buildings used for basic measurements or the testing of instruments are separated to provide the necessary isolation. Low temperature facilities are provided in certain buildings and one unique structure contains the world's most modern arrangement of coils for controlling the magnetic field in a test area. Here the calibration and adjustment of instruments can be performed to fit them for use in the magnetic field conditions existing in any part of the world.

The administration building includes a library and conference room, a small laboratory, and working space for the staff and for visiting scientists. Seven attractive dwellings will accommodate the professional staff, geophysicists assigned here for training, and other workers.

Plans and specifications were prepared in 1954 by the Public Buildings Service of the General Services Administration in collaboration with Coast and Geodetic Survey officials. The buildings embody features of advanced design, and have been meticulously constructed for the prevention of even the smallest amounts of magnetic disturbance.

The first Observer-in-Charge is Robert E. Gebhardt, Geophysicist, Coast and Geodetic Survey, who will direct a staff eventually numbering about 13 geophysicists and technicians.