

## NRC'S FLYING LABORATORY

Scientists at the National Aeronautical Establishment of the National Research Council of Canada have converted an aging four-engined aircraft into a flying laboratory to probe for secrets hidden beneath the earth's surface.

Years of effort by aeromagnetic project engineers of NAE'S Flight Research Section have gone into "marrying" a rugged *North Star* plane to a highly sophisticated instruments system whose "heart" is a pair of high-resolution magnetometers. One is located in a 25-foot tail "sting" and the second in a "bird" capable of being towed up to 300 feet behind the aircraft.

The system makes use of the fact that all natural materials are magnetized to some degree and that some are sufficiently so to cause distortion in the earth's magnetic field.

Housing the system in the *North Star* enables its operators to skim the earth's surface aboard an airborne platform, detecting, recording, mapping and interpreting such distortions. These can be caused by anything from a huge mineral deposit far underground to the magnetized hull of a submarine cruising just below the surface of the ocean.

## USE IN OIL SURVEYS

Great developments are foreseen for Canada as a result of the possibility of improved aeromagnetic surveying through use of the high-resolution magnetometer system. There is hope that these sensitive instruments will prove useful for oil surveying, because of their ability to detect changes in the structure or composition of the slightly magnetic sedimentary rock in which the oil is found. These small magnetic variations cannot be detected by the less sensitive magnetometer, according to E.A. Godby, in charge of the aeromagnetic research.

Mr. Godby said flight tests have been conducted to assess the advantages of high-resolution aeromagnetic surveying over conventional methods and to see if these advantages make up for the added costs of high resolution aeromagnetic surveying.

## STRATFORD THEATRE ON TOUR

For its first tour the recently-created Stratford National Theatre of Canada will present Shakespeare's *A Midsummer Night's Dream* in Montreal, Ottawa and Ann Arbor, Michigan, it was announced recently by Jean Gascon and John Hirsch, associate artistic directors. Featured in the large production are Douglas Rain as Bottom and Martha Henry as Titania.

Mr. Hirsch, who has just returned from New York, where he staged the highly successful *Saint Joan* at Lincoln Centre, will direct *A Midsummer Night's Dream*. Settings and costumes will be created by the noted British designer, Leslie Hurry. Stanley Silverman of New York will compose the music.

## ORIGIN OF NATIONAL THEATRE

The Stratford National Theatre of Canada came into being last October following an agreement between

the National Arts Centre of Ottawa and the Stratford Shakespearean Festival Foundation of Canada. The agreement provides for year-round operation for the Stratford Festival Company, with six months at Stratford, Ontario, where it has flourished for the last 15 years – the remainder of the year being devoted to Canadian and international tours and a season at the National Arts Centre, Ottawa, when the new theatre there is completed.

The tour, made possible by a grant from the Canada Council, opens on March 13 at Montreal's Theatre Maisonneuve, where it continues until March 24. The Company plays at Ottawa's Capitol Theatre from March 26 to 30 and at the Lydia Mendelssohn Theatre, University of Michigan, Ann Arbor, from April 1 to 6.

Douglas Rain has the distinction of being the only actor to have appeared in all the Stratford Festival seasons. During the memorable 1953 opening season, he appeared in both productions. Among his Stratford creations have been Iago in *Othello*, Prince Hal in both parts of *Henry IV*, the title role in *Henry V*, Sir Toby Belch in *Twelfth Night*, and many other characters. He appeared with the Stratford Company on its appearances at the Edinburgh Festival and at Chichester, England.

Miss Henry has appeared in six previous seasons at Stratford and was featured as Viola in *Twelfth Night*, Joan of Arc in *Henry VI*, and Cordelia in *King Lear*, among other leading roles. She played Rosaline with the company on its English appearance in *Love's Labour's Lost*.

## STAMP TELLS WEATHER HISTORY

A 5-cent meteorological stamp, which is to be issued by the Canada Post Office on March 13, will commemorate the two-hundredth anniversary of Canada's first long-term, fixed-point weather observations.

The new stamp, which is horizontal in format, measures 40 mm. x 24 mm. It is produced by the four-colour lithographic printing process in yellow, light blue, indigo-blue and ochre. A left panel incorporates an authenticated section of a recent weather-map prepared by the Meteorological Branch of the Canadian Department of Transport. Yellow is used as a background for the map area. Lettering on the top left of the stamp is "Canada"; at the bottom left appear the denomination "5" and "Météorologie". The wording in this portion is indigo on a light blue background. The right panel of the stamp consists of a composite of weather instruments surmounted by "Meteorology"; at the lower right are the dates "1768-1968". Lettering on the right panel is printed in white on an indigo background. Indigo and ochre shades are used for the radar antenna and the anemometer superimposed on a weather balloon that is mostly white.

## EARLIEST INSTRUMENT DATA

The weather readings commemorated by this stamp were begun at Fort Prince of Wales, Manitoba, by William Wales and Joseph Dymond on September 10,