

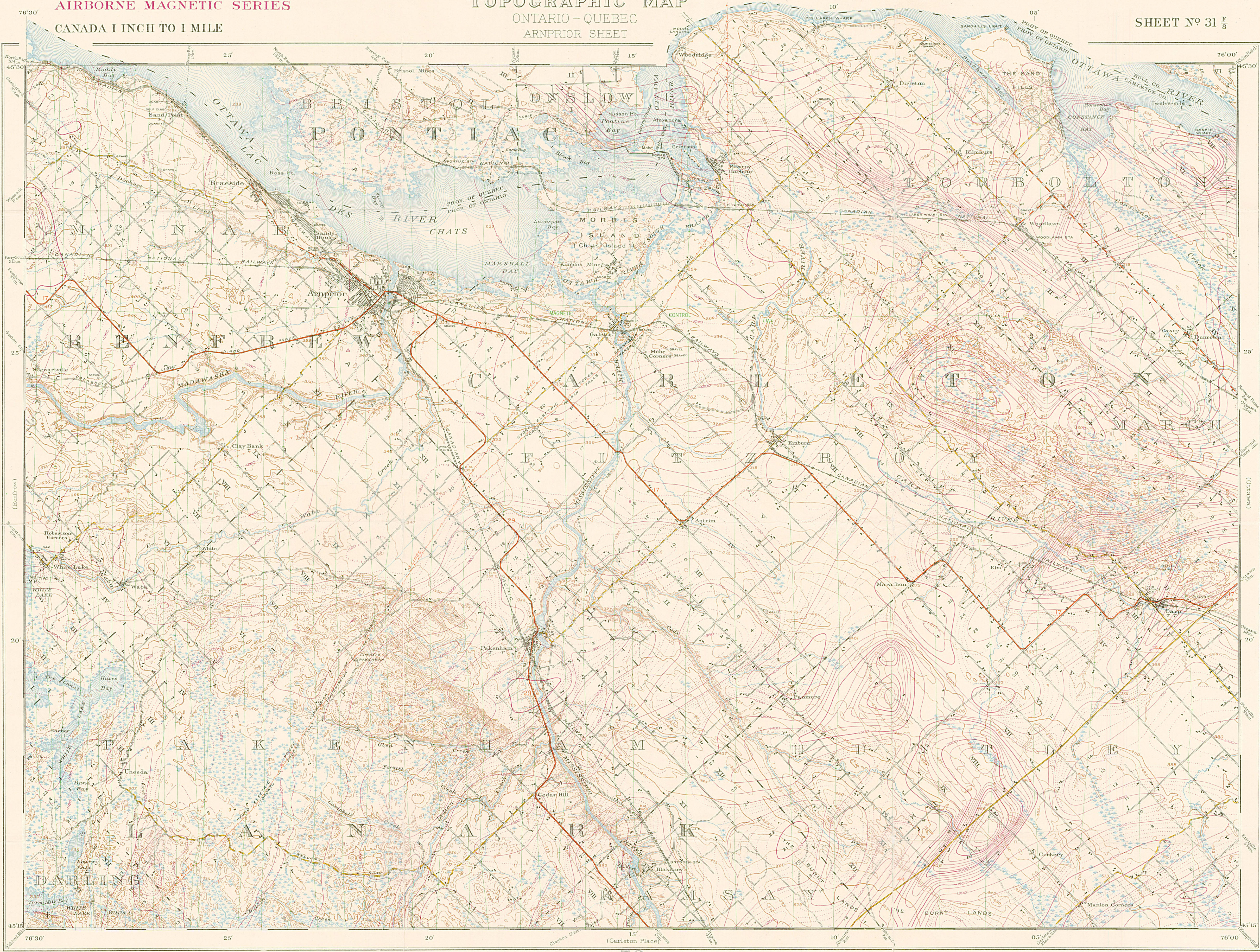
CANADA
DEPARTMENT OF MINES AND RESOURCES
MINES, FORESTS AND SCIENTIFIC SERVICES BRANCH
GEOLOGICAL SURVEY OF CANADA

AIRBORNE MAGNETIC SERIES

CANADA 1 INCH TO 1 MILE

TOPOGRAPHIC MAP
ONTARIO - QUEBEC
ARNPRIOR SHEET

SHEET N° 31 F 8



Published by the Geographical Section, General Staff,
Department of National Defence 1929.
Reprinted 1943.

Magnetic Declination, 12° 56' W., at Antrim, 1938.
Polyconic Projection.
Elevations in feet above Mean Sea Level.
Surveyed in 1927 by the Geographical Section, G.S., with aid of
aerial photos by the Royal Canadian Air Force.

Magnetic survey, August 1947, by Geophysics Section, Geological Survey
of Canada, Mines, Forests and Scientific Services Branch, Department of
Mines and Resources, in collaboration with the Royal Canadian Air Force.
Flights made through the courtesy of the Flight Research Section, National
Research Council, Amnrior, Ontario.

- Provincial Boundary
County
Township
Railways { Single Track
Double
Cutting
Embankment
Road, Paved
Improved
Other
Wagon or Unimproved Road
Path
Canal and Locks
Bridges { Masonry
Steel or Iron
Wood
Swing Bridge (Steel or Wood)
Dam (Wood or Masonry)
Wagon Ford
Ferry
Cliff
Quarry
Sand or Gravel Pit

- Magnetic contour intervals (total field)
500 gammas
100 gammas
20 gammas
Magnetic depression contour
Flight line
Magnetic base station
Flight altitude: 1,000 feet above ground level

Scale 1 inch to 1 Mile
Contour interval 25 Feet

INDEX TO ADJOINING SHEETS

WAKEFIELD	OTTAWA
ARNPRIOR	KEMPVILLE
CARLETON PLACE	

PRICE 25 CENTS

No correction has been made for regional variation;
this increases at the rate of 3.5 gammas per mile from
east to west and 3.0 gammas per mile from south to
north.
The absolute magnetic intensity at the base station
(latitude, 45° 25'; longitude, 76° 22') on August 26-27,
1947, was 58,362 gammas; for convenience in the
present magnetic compilation, the magnetic datum has
been taken at this station as 1,200 gammas.

- Railway Station
Post Office
Church
Mill
School
Blacksmith shop, Garage
Hotel or tavern
House, Barn
Telegraph or Telephone Line
Office
Telephone Exchange
Lighthouse
Cemetery
Triangulation Station
Altitude
Bench Marks
Mare
Woods
Coniferous
Deciduous
Elevation
Depression
Submarine (in Fathoms)
Electric Power Lines on Steel Towers
Wood Poles

ONTARIO - QUEBEC 76°00'-45°15'
Highway Routes...17 etc.

The magnetic data superimposed on this topographic map were compiled
from information recorded along the flight lines shown. The anomalies expressed
by the magnetic contours are dependent on the variable magnetic intensities
of the underlying rocks, and may be due to conditions near, or at unknown
depths below, the surface. High magnetic anomalies normally indicate the presence
of basic rocks, such as diabase, gabbro, or serpentine, which have a relatively high
iron content; but in special instances may be due, or partly due, to concentrations
of magnetic ore minerals. By means of the magnetic anomalies, various rock
bodies or structural features, such as faults or folds, may be traced by the
geologist into, or across, areas of few or no outcrops. In many instances,
however, no present interpretation of particular anomalies may be possible.