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

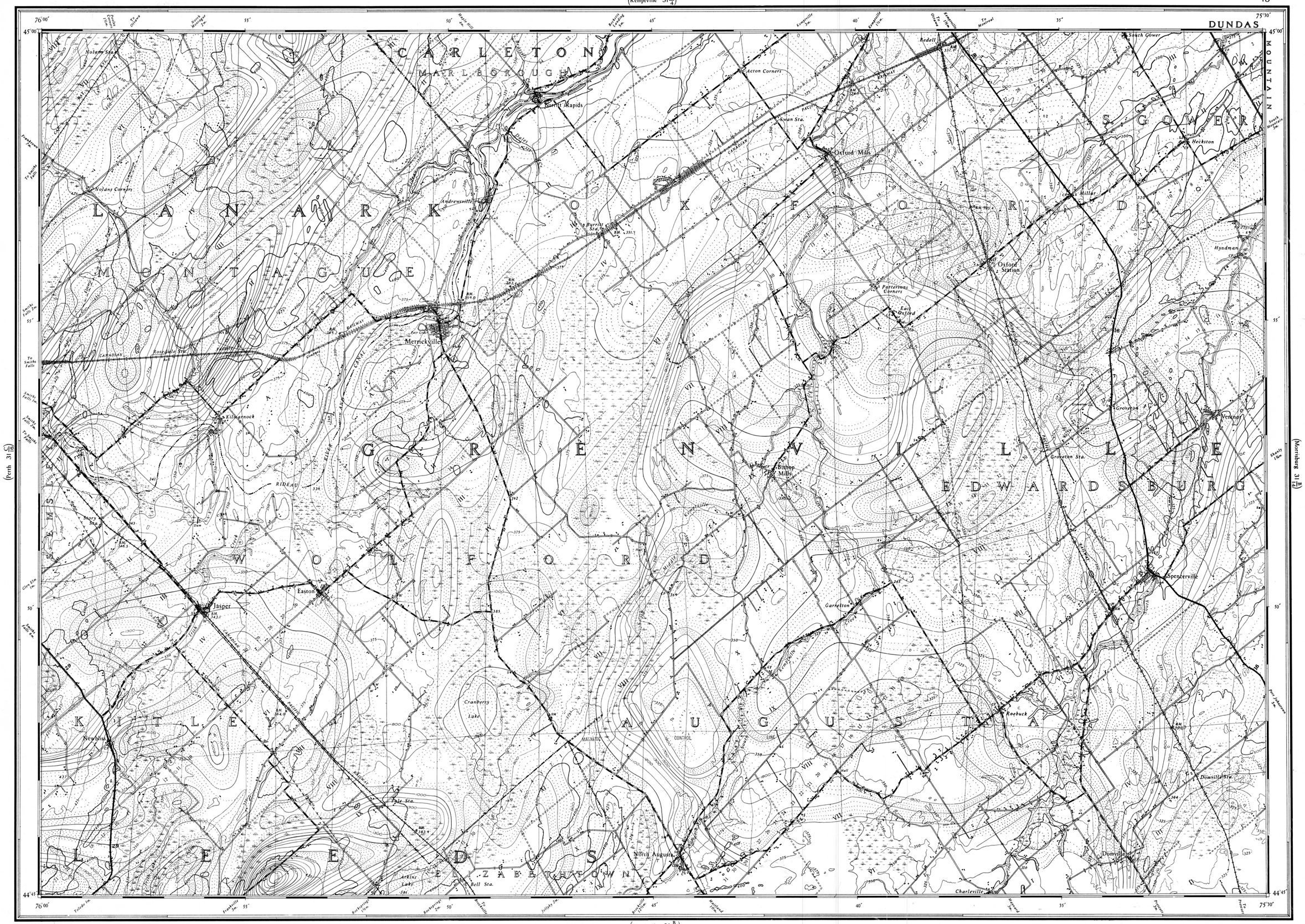
AEROMAGNETIC SERIES

NATIONAL TOPOGRAPHIC SERIES

DEPARTMENT OF NATIONAL DEFENCE
GEOGRAPHICAL SECTION, GENERAL STAFF

(Kemptville 31 G/4)

CANADA, SHEET 31 B/13



Surveyed and Reproduced by the Geographical Section, General Staff.
DEPARTMENT OF NATIONAL DEFENCE.

Original Survey 1905.
Resurveyed 1938, with aerial photographs taken by R.C.A.F.
Reprinted 1940.
Magnetic Declination 9°55′W. at centre of sheet, 1939.

REFERENCE

Main Highway (wide)	Paved / Gravel	Boundaries Provincial	
Secondary " (narrow)	Paved / Gravel	" County	
Other Roads	Gravel / Wagon or Unused	" Township	
Path		Electric Power Lines	On Steel Towers
Highway Route Numbers	16		On Wood Poles
Railways Double Track	Principal Station	Culvert	Tunnel
Railways Single Track	Station	Cutting	Embankment
Along Road			
Post Office	P	Triangulation Station	
Telegraph or Telephone Trunk Route		Cemetery	C
Telegraph Office	T	Telephone Exchange	T
Survey Monument	185		

Magnetic survey, November 1947 and March 1948, 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, Arnprior, Ontario.

MERRICKVILLE
ONTARIO

Scale 1 mile to 1 inch or 1:63,360

1 ¾ ½ ¼ 0 1 2 3 4 5 Miles
1,000 0 1,000 2,000 3,000 4,000 5,000 6,000 7,000 8,000 9,000 Yards

Contour interval 25 Feet
All Elevations in Feet above Mean Sea Level.

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

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.

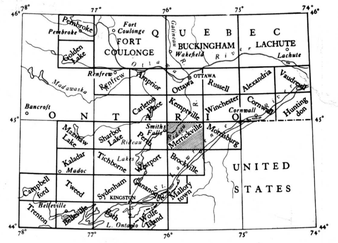
The absolute magnetic intensity at the base station (latitude, 45° 25′; longitude, 76° 22′) on August 26-27, 1947, was 58,362 gammas; for convenience in the present magnetic compilation, the magnetic datum has been taken at this station as 1,200 gammas.

REFERENCE

House		Church with Spire	(Centre of circle is centre of Spire)
Barn		" " Tower	
Mill Saw	SM	" without either	
Mill Grist or Flour	GM	School	
Mill Cheese	CF	Marsh	
Mill Other Mill or Factory		Contours Altitudes	247
Quarry		Contours Bench Marks	B.M. 247.1
Sand or Gravel Pit		Contours Elevation	175
Woods, Deciduous		Contours Depression	200 / 225
" Coniferous		Orchard	

Rapids; Swing Bridge; Ford; Cliff; Bridge (C) concrete (S) stone (I) or (W) iron or wood; Dam; Ferry; Lighthouse; W. L. 241; Submarine Contours (in Fathoms); Locks; Canal

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.



NOTE: On the above index the sheets published are shown tinted green.

Copies of these maps may be obtained from the Surveyor General, Department of Mines and Resources, Ottawa. Price 25 cents.

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