UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

STATE OF MINNESOTA
IRON RANGE RESOURCES AND REHABILITATION COMMISSION

THE CASCADES QUADRANGLE
MINNESOTA—ONTARIO
7.5 MINUTE SERIES (TOPOGRAPHIC)

89°52′30″ 48°07′30″ — 89°45′ 48°07′30″

Pine Lake

L. Whitefish River

ARROW RIVER

ARROW RIVER

ARROW RIVER

The Cascades

PIGEON RIVER

CANADA
UNITED STATES

ONTARIO
MINNESOTA

THUNDER BAY DISTRICT
COOK CO

Site of Fort Charlotte

GRAND PORTAGE NATIONAL MONUMENT

INDEFINITE BOUNDARY

(MINERAL CENTER)
8079 IV NE

(FARQUHAR PEAK)
8079 IV NW

8080 III SW
(SOUTH FOWL LAKE)

(GRAND PORTAGE)
8079 I NW

(GRAND PORTAGE)
8079 I NW

T. 64 N.
R. 5 E.

2 790 000 FEET — 2 810 000 FEET

600 000 FEET

570 000 FEET

Mapped, edited, and published by the Geological Survey

Control by USGS, USC&GS, and International Boundary Commission

Topography from aerial photographs by photogrammetric methods
Aerial photographs taken 1957. Field check 1960
Canadian portion copied from Pigeon River West quadrangle
(1:50 000) 1959, Army Survey Establishment, RCE

Polyconic projection. 1927 North American datum
10,000-foot grid based on Minnesota coordinate system, north zone
1000-meter Universal Transverse Mercator grid ticks,
zone 16, shown in blue

Revisions shown in purple compiled from aerial photographs taken 1976. This information not field checked. Canadian portion not revised

GN MN
2°05′ 37 MILS
1° 18 MILS
UTM GRID AND 1976 MAGNETIC NORTH DECLINATION AT CENTER OF SHEET

SCALE 1:24 000

1 0 1 MILE
1000 0 1000 2000 3000 4000 5000 6000 7000 FEET
1 .5 0 1 KILOMETER

CONTOUR INTERVAL 20 FEET
CONTOUR INTERVAL IN CANADIAN AREA 50 FEET
NATIONAL GEODETIC VERTICAL DATUM OF 1929

THE U.S. PORTION OF THIS MAP COMPLIES WITH NATIONAL MAP ACCURACY STANDARDS
FOR SALE BY THE U.S. GEOLOGICAL SURVEY, RESTON, VIRGINIA 22092
A FOLDER DESCRIBING TOPOGRAPHIC MAPS AND SYMBOLS IS AVAILABLE ON REQUEST

MINN.
QUADRANGLE LOCATION

ROAD CLASSIFICATION
Light-duty ——— Unimproved dirt - - - - - -

THE CASCADES, MINN.—ONT.
N4800 — W8945/7.5

1960

INTERIOR—GEOLOGICAL SURVEY, RESTON, VIRGINIA—1978

MAP AND AIR PHO
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