UNITED STATES DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

BULLETIN 1271-F
PLATE 1

EXPLANATION

Exposed sedimentary rocks and surficial deposits
In Yukon-Tanana Upland include rhyolite flows and may include some metamorphic rocks. Precambrian to Holocene in age

EXPOSED CRYSTALLINE ROCKS	CONCEALED CRYSTALLINE ROCKS INFERRED FROM MAGNETIC DATA
gim — Granitic intrusive rocks and migmatite. *Mostly Mesozoic and Tertiary in age; Paleozoic(?) in Romanzof Mountains and at Porcupine River (Old Crow Granite of Baadsgaard and others, 1961)*	gir — Granitic intrusive rocks
mie / Tv — Mafic intrusive and extrusive rocks; greenschist where within areas of schist. *Includes basalts in the Tindir Group, Fossil Creek, Woodchopper, and Circle Volcanics, and Rampart Group. Mostly Paleozoic or Mesozoic; some Precambrian and Tertiary in age. Tv, Tertiary basalt flows locally distinguished*	m / N — Mafic intrusive and extrusive rocks. N, *negatively magnetic dikes*
s — Serpentine. *Paleozoic(?) in age*	sp — Serpentine pods in schist and sedimentary rocks
mr — Metamorphic rocks. *Include Birch Creek and Totatlanika schists, Nerukpuk Formation, and unnamed schists. In southern Brooks Range include schist and interlayered phyllite and greenschist in marginal facies. Paleozoic and Precambrian(?) in age*	sc — Schist
	br — Basement rocks of Precambrian(?) age or deep intrusive rocks

Contact — *Queried where doubtful*

Boundary of magnetic rock unit

Boundary of metamorphic facies

Fault — *Inferred from surface data*

Fault — *Inferred from magnetic data*

Hot spring — *Queried where uncertain*

LINE OF AIRBORNE MAGNETOMETER TRAVERSE

82 — Elevation 5000 feet above sea level where possible. *Dashed where location very doubtful*

15 — Elevation 2500 feet above sea level where possible

6A — Elevation 4000–8000 feet above sea level where possible

(5) — Location of magnetic rock feature described in text

INDEX MAP OF ALASKA SHOWING AREA OF PRESENT REPORT (RULED PATTERN) AND LOCATION OF PREVIOUS AEROMAGNETIC SURVEYS (STIPPLED PATTERN)

1. Naval Petroleum Reserve No 4 and adjoining areas (Woolson and others, 1962)
2. Tanana Lowland survey (Andreason and others, 1964)
3. Yukon Flats-Kandik survey (Andreason, 1960b)
4. Brooks Range survey (Andreason, 1960a)
   Location of six northwest-trending profiles (Andreason, 1960b) shown in black

Base map compiled by U.S. Geological Survey from uncontrolled mosaic of Alaska Topographic Series 1:250,000 scale quadrangle maps

SCALE 1:1 000 000

25 0 25 50 75 100 MILES

25 0 25 50 75 100 KILOMETERS

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Geology compiled from: W. C. Mendenhall, (1902); A. G. Maddren, (1913); H. M. Eakin, (1916); J. B. Mertie, Jr., (1937); M. G. White, (1952); W. P. Brosgé and H. N. Reiser, (1960, 1962 a and b, and unpub. data); H. L. Foster and H. R. Schmoll, (1963); J. R. Williams, (1962); E. E. Brabb and Michael Churkin, Jr., (1964, 1965); F. R. Weber and others, (1964); E. H. Lathram, (1965); Troy Péwé, Clyde Wahrhaftig, and F. R. Weber, (1966)

GEOLOGIC MAP OF NORTHEASTERN ALASKA INTERPRETED FROM GEOLOGIC AND AEROMAGNETIC DATA