DEPARTMENT OF THE INTERIOR
UNITED STATES GEOLOGICAL SURVEY

U.S. GEOLOGICAL SURVEY
OPEN FILE MAP
OF-77-168-F

Base map from the National Atlas of the United States of America, U.S. Geological Survey, 1970.

ACKNOWLEDGMENTS

This map was compiled under the direction of J.E. Case and Andrew Griscom, U.S. Geological Survey. The data for Mount Wrangell and McGrath profiles was computer reduced by Jack D. Barnes to answer to display the profiles in map format without unnecessary overlap.

This map is a compilation of the available aeromagnetic data from central Alaska; no attempt has been made to establish a common datum or to resolve boundary differences between adjacent surveys. The map is intended to show large scale magnetic anomaly patterns and to aid the regional geologic interpretation of Alaska. Details of the original aeromagnetic data for a particular area is referred to the original data.

SOURCES AND EXPLANATION OF DATA

1. Texas Instruments, Inc., 1975, Airborne geophysical survey--Copper River and Seward-Selwik areas, Alaska: U.S. Energy Research and Development Administration report GJO-1013, scale 1:500,000.

   Profile amplitude: 1/4 inch = 1000 gammas. Index numbers are hundreds of gammas.
   Datum: total intensity profiles, not reduced to a common datum.
   Flight line spacing and direction: 6.25 miles east-west with 25 mile north-south tie lines.
   Flight elevation: normalized to 400 feet above ground level.
   Magnetometer: G-803 proton.
   Year flown: 1975.

2. Texas Instruments, Inc., 1976, Aerial gamma-ray and magnetic survey of the Bethel and Yukon areas, Alaska: U.S. Energy Research and Development Administration report GJBX-1 (77), scale 1:500,000.

   Profile amplitude: variable; index numbers are hundreds of gammas.
   Datum: profiles reduced to a common datum, updated to 1976.
   Flight line spacing and direction: 6.25 miles east-west with 25 mile north-south tie lines.
   Flight elevation: normalized to 400 feet above ground level (air speed 150 miles per hour; data sampling at 1.017 second intervals).
   Value of magnetometer: G-803 proton.
   Year flown: 1976.

3. U.S. Geological Survey, 1977, Aeromagnetic profiles, McGrath area, Alaska: unpublished data, scale 1:250,000.

   Profile amplitude: 1/4 inch = 500 gammas. Index numbers are hundreds of gammas.
   Datum: profiles reduced to a common datum, 1977 compact, updated to 1977.
   Flight line spacing and direction: variable (see map).
   Flight elevation: 1000 feet above ground level.
   Year flown: 1977.

4. U.S. Geological Survey, 1959, Total intensity aeromagnetic profiles of the Mitchumina area, Alaska: U.S. Geol. Survey open-file report 60-8, scale 1:250,000.

   Profile amplitude: 1/4 inch = 500 gammas. Index numbers are hundreds of gammas.
   Datum: 1959.
   Flight line spacing and direction: variable (see map).
   Flight elevation: between 2500 and 4500 feet above sea level.
   Year flown: 1956.

PRELIMINARY AEROMAGNETIC PROFILES OF CENTRAL ALASKA

COMPILED BY

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1977

This map is preliminary and has not been reviewed for conformity with U.S. Geological Survey standards and nomenclature.