DEPARTMENT OF THE INTERIOR
UNITED STATES GEOLOGICAL SURVEY

GEOPHYSICAL INVESTIGATIONS
MAP GP-934

NO DATA

NO DATA

NO DATA

EXPLANATION

MAXIMUM INTENSITY

11,500
11,400
11,300
11,200
11,100
11,000
10,900
10,800
10,700
10,600
10,500
10,400

MINIMUM INTENSITY

MAGNETIC CONTOURS

Showing total intensity magnetic field of the earth in gammas relative to an arbitrary datum. Hachured to indicate closed areas of lower magnetic intensity; dashed where data are incomplete. Main magnetic field of the earth from Fabiano and Peddie (1969) has been removed. Contour intervals 20 and 100 gammas

SCALE 1:1 000 000

25 0 25 50 75 MILES

25 0 25 50 75 100 125 KILOMETERS

LAMBERT CONFORMAL CONIC PROJECTION

INDEX MAP SHOWING SOURCES OF DATA. THE DIRECTION, ALTITUDE, AND SPACING OF FLIGHT LINES ARE LISTED BELOW

A. East-West, 7,000 feet barometric, 2 mile (USGS, 1973b)
B. East-West, 11,000 feet barometric, 2 mile (USGS, 1973a)
C. East-West, 7,000 feet barometric, 1 mile (Kleinkopf and others, 1972)
D. East-West, 9,000 feet barometric, 2 mile (USGS, 1969)
E. Northeast-Southwest, 9,000 feet barometric, 2 mile (Kleinkopf and Mudge, 1972)
F. North-South, 7,500 feet barometric, 1 mile (Douglas, 1971)
G. North-South, 11,000 feet barometric, 1 mile (USGS, 1972a)
H. East-West, 10,500 feet barometric, 2 mile (Johnson and others, 1965)
I. East-West, 15,000 feet barometric, 5 mile (Zietz and others, 1971)
J. East-West, 12,000 feet barometric, 2 mile (USGS, 1975b)
K. East-West, 12,500 feet barometric, 5 mile (USGS, 1972b)
L. East-West, 12,000 feet barometric, 1 mile (USGS, 1973c)
M. East-West, 12,000 feet above sea level, 2 mile (USGS, 1975a)
N. East-West, 500 feet above ground, 0.5 mile (Davis and others, 1965)
O. North-South, 1,000 feet above ground, 0.5 mile (Balsley and others, 1957b)
P. North-South, 1,000 feet above ground, 0.5 mile (Balsley and others, 1957c)
Q. North-South, 1,000 feet above ground, 0.5 mile (Balsley and others, 1957a)
R. North-South, 1,000 feet above ground, 0.5 mile (Balsley and others, 1957d)
S. East-West, 500 feet above ground, 0.25 mile (Johnson, King, and Long, 1963)
T. East-West, 500 feet above ground, 0.25 mile (Johnson, King, and Hawkins, 1963)
U. East-West, 500 feet above ground, 0.25 mile (Johnson, King, and Petrafeso, 1963)
V. East-West, 500 feet above ground, 0.25 mile (Johnson, King, and Page, 1963)
W. East-West, 7,000 feet barometric, 2 mile (USGS, 1973a)
X. East-West, 9,000 feet barometric, 1 mile (Kleinkopf and Mudge, 1972)

REFERENCES CITED

Balsley, J. R., Jr., Gilbert, F. P., Mangan, G. B., and others, 1957a, Aeromagnetic map of part of the Centennial Mountain quadrangle, Bearpaw Mountains, Montana: U.S. Geological Survey Geophysical Investigations Map GP-152.

_____1957b, Aeromagnetic map of the Laredo quadrangle, Bearpaw Mountains, Montana: U.S. Geological Survey Geophysical Investigations Map GP-150.

_____1957c, Aeromagnetic map of the Shambo quadrangle, Bearpaw Mountains, Montana: U.S. Geological Survey Geophysical Investigations Map GP-151.

_____1957d, Aeromagnetic map of part of the Warrick quadrangle, Bearpaw Mountains, Montana: U.S. Geological Survey Geophysical Investigations Map GP-153.

Davis, W. E., Kinoshita, W. T., and Robinson, G. D., 1965, Bouguer gravity, aeromagnetic, and generalized geologic map of the eastern part of the Three Forks Basin, Broadwater, Madison, and Gallatin Counties, Montana: U.S. Geological Survey Geophysical Investigations Map GP-498.

Douglas, J. K., 1971, Total intensity aeromagnetic map of a portion of the Montana lineament: Missoula, Montana, University of Montana.

Fabiano, E. B., and Peddie, N. W., 1969, Grid values of total magnetic intensity, IGRF–1965: U.S. ESSA, Technical Report 38, 55 p.

Johnson, R. W., Jr., Henderson, J. R., and Tyson, N. S., 1965, Aeromagnetic map of the Boulder batholith area, southwestern Montana: U.S. Geological Survey Geophysical Investigations Map GP-538.

Johnson, R. W., Jr., King, E. R., and Hawkins, D. R., 1963, Aeromagnetic map of the Chinook quadrangle, Blaine County, Montana: U.S. Geological Survey Geophysical Investigations Map GP-383.

Johnson, R. W., Jr., King, E. R., and Long, C. L., 1963, Aeromagnetic map of the Yantic quadrangle, Blaine and Hill Counties, Montana: U.S. Geological Survey Geophysical Investigations Map GP-382.

Johnson, R. W., Jr., King, E. R., and Page, E. E., 1963, Aeromagnetic map of part of the Cleveland quadrangle, Blaine County, Montana: U.S. Geological Survey Geophysical Investigations Map GP-385.

Johnson, R. W., Jr., King, E. R., and Petrafeso, F. A., 1963, Aeromagnetic map of part of the Lloyd quadrangle, Blaine and Hill Counties, Montana: U.S. Geological Survey Geophysical Investigations Map GP-384.

Kleinkopf, M. D., Harrison, J. E., and Zartman, R. E., 1972, Aeromagnetic and geologic map of part of northwestern Montana and northern Idaho: U.S. Geological Survey Geophysical Investigations Map GP-830.

Kleinkopf, M. D., and Mudge, M. R., 1972, Aeromagnetic, Bouguer gravity, and generalized geologic studies of the Great Falls-Mission Range area, northwestern Montana: U.S. Geological Survey Professional Paper 726-A.

U.S. Geological Survey, 1969, Aeromagnetic map of the Cut Bank-Hungry Horse Reservoir area, northwestern Montana: U.S. Geological Survey open-file map–289.

_____1972a, Aeromagnetic map of parts of the Hamilton and Elk City 1° by 2° quadrangles, Idaho-Montana: U.S. Geological Survey Geophysical Investigations Map GP-832.

_____1972b, Aeromagnetic map of southeastern Idaho and part of southwestern Montana: U.S. Geological Survey open-file map–388.

_____1973a, Aeromagnetic map of parts of the Kalispell and Cutbank 1° by 2° quadrangles, Montana: U.S. Geological Survey open-file map–293.

_____1973b, Aeromagnetic map of parts of the Okanogan and Sandpoint 1° by 2° quadrangles, Washington-Idaho-Montana: U.S. Geological Survey open-file map–294.

_____1973c, Aeromagnetic map of Yellowstone National Park and vicinity, Wyoming-Montana-Idaho: U.S. Geological Survey open-file map–304.

_____1975a, Aeromagnetic map of the southeastern part of the Billings 1° by 2° quadrangle, Montana: U.S. Geological Survey open-file map 75–656.

_____1975b, Aeromagnetic map of southwestern Montana and east-central Idaho: U.S. Geological Survey open-file map 75–655.

Zietz, Isidore, and others, 1971, Interpretation of an aeromagnetic strip across the northwestern United States: Geological Society of America Bulletin, v. 82, no. 12, p. 3347–3372.

AEROMAGNETIC MAP OF MONTANA: IN COLOR

By

Isidore Zietz, Francis P. Gilbert, and Stephen L. Snyder

1980

Base from U.S. Geological Survey, 1966

INTERIOR—GEOLOGICAL SURVEY, RESTON, VA.—1980—G80056

For sale by Branch of Distribution, U.S. Geological Survey, Box 25286, Federal Center, Denver, CO 80225