



INDEX MAP SHOWING AREA COVERED BY THE TRANSCONTINENTAL GEOPHYSICAL SURVEY AREA OF THIS MAP SHADED

EXPLANATION

Magnetic contours
In hundreds of gamma. Dashed where incomplete, contour interval 100 gamma; datum arbitrary. Main magnetic field of the earth, supplied by the U.S. Coast and Geodetic Survey and based on Epoch 1955, has been removed from all aeromagnetic data.

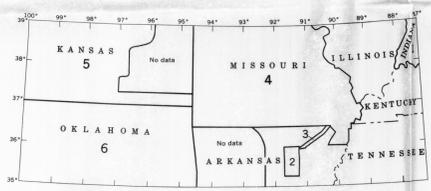
Magnetic contours showing area of lower magnetic intensity

Flight path
Showing location of individual flight lines and exception to standard elevation



Modified base assembled from U.S. Coast and Geodetic Survey World Aeronautical Charts, scale 1:1,000,000 Lambert conformal conic projection

Compiled in 1966-67



INDEX MAP SHOWING SOURCES OF DATA

SOURCES OF DATA

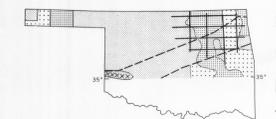
- All contours not identified by area on the accompanying source map are total intensity contours based on airborne traverse lines flown between 5,000 and 8,000 feet above sea level by the U.S. Naval Oceanographic Office and the U.S. Geological Survey.
1. Total intensity aeromagnetic contours based on one mile spaced lines flown at 1,000 feet above ground from U.S. Geological Survey Professional Paper 318, plate 4.
 2. Total intensity aeromagnetic contours based on 0.5 mile spaced lines flown at 1,000 feet above ground by the U.S. Geological Survey; from U.S. Geological Survey map GP-376.

3. Total intensity aeromagnetic contours based on 2 mile spaced lines flown at 1,000 feet above ground by the U.S. Geological Survey; from U.S. Geological Survey map GP-376.
4. Vertical intensity magnetic contours from Magnetic map of Missouri published by the State of Missouri, 1943. The spacing of ground magnetic observations is shown on the index map below. Arbitrary datum for contour values; corrected for normal variation.

5. Vertical intensity contours supplied by Humble Oil and Refining Company based on 2 mile spaced ground observations.
6. Vertical intensity contours from Vertical-intensity magnetic map of Oklahoma by V. L. Jones and Paul L. Lyons, Geophysical Society of Tulsa, 1964. The kind and quality of magnetic control are shown on the index map below. Arbitrary datum for contour values; corrected for normal variation.



MAP SHOWING MAGNETIC CONTROL IN MISSOURI



MAP SHOWING MAGNETIC CONTROL IN OKLAHOMA

- Contours taken directly from maps based on detailed vertical intensity ground surveys
- Contours drawn from magnetic values on the quadrangle magnetic grid (values based on detailed ground surveys and/or overlapping airborne surveys)
- Contours partly calculated owing to sparse control
- United States Naval Oceanographic Office high-level aeromagnetic traverse (Profile used by permission)
- United States Geological Survey aeromagnetic traverse (Profile intensity profiles of these traverses were used to derive vertical intensity control points)
- Contour interval, 200 gamma

**TRANSCONTINENTAL GEOPHYSICAL SURVEY (35°-39° N)
MAGNETIC MAP FROM 87° TO 100° W LONGITUDE**

By
Isidore Zietz and John R. Kirby
A CONTRIBUTION TO THE UPPER MANTLE PROJECT

