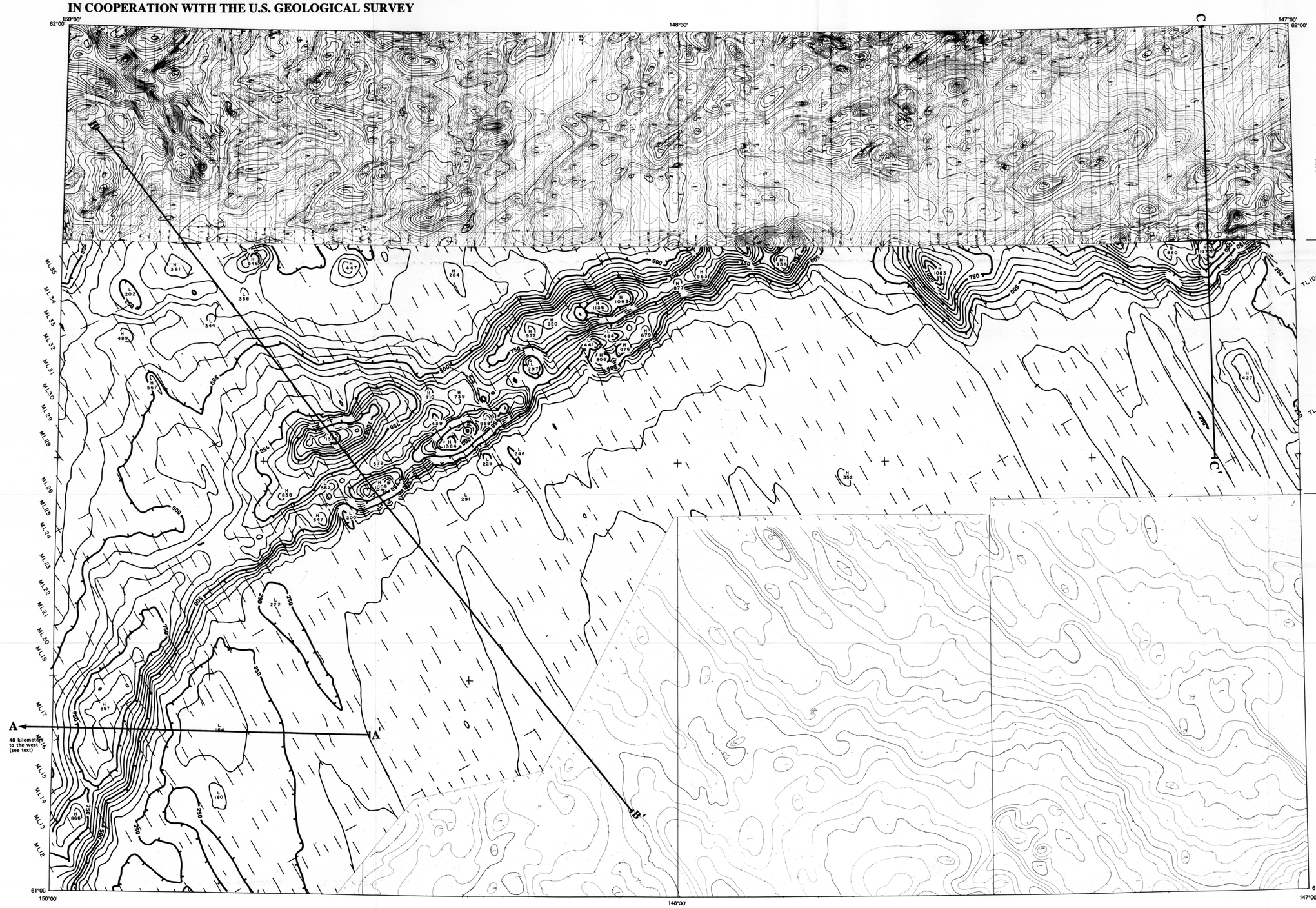
ALASKA DIVISION OF GEOLOGICAL & GEOPHYSICAL SURVEYS
IN COOPERATION WITH THE U.S. GEOLOGICAL SURVEY

RI94-5-SH1

REPORT OF INVESTIGATIONS 94-5
Burns and Winkler (1994), sheet 1 of 2



SECTION A

Responsible Agency: Alaska Division of Geological & Geophysical Surveys (DGGS)
Flight and data collection operator: Lockwood, Kessler, and Bartlett, Inc., Pasadena, California, 1972

Contour interval
10 gammas
20 gammas
100 gammas
500 gammas

Magnetic high or low

Magnetic low

Flight line direction—N.-S.
Flight spacing—3/4 mile
Flight altitude—1,000 feet above ground
Grid interval—unknown
Instrumentation—fluxgate
Sampling interval—unknown
Sensitivity—unknown
Regional magnetic field sheet center—56,030 gammas in center of sheet
Regional field removed—field increases approximately 5.4 gammas/mile, N. 47° E.
Approximate field inclination—75.1°

Source: Alaska Division of Geological & Geophysical Surveys staff, 1973, Aeromagnetic map, Anchorage Quadrangle: Alaska Division of Geological & Geophysical Surveys, Alaska Open-File 21, 1 sheet, scale 1:250,000.

SECTION B

Responsible Agency: U.S. Geological Survey
Flight and data collection operator: Diversified Technical Services, Inc. (DTSI), Arlington, Texas, May-December 1982

Contour interval
50 gammas
250 gammas

Magnetic high or low

Magnetic low

Flight line direction—N. 30° W.-S. 30° E.
Flight spacing—1 mile
Flight altitude—1,000 feet above ground
Grid interval—1/2 mile
Instrumentation—proton magnetometer
Sampling interval—1 second
Sensitivity—0.25 gammas
Regional field removed—IGRF, updated 1975 version

Source: U.S. Geological Survey, 1984, Aeromagnetic map of part of the Anchorage 1° x 3° Quadrangle, Alaska: U.S. Geological Survey Open-File Report 84-352, 1 sheet, scale 1:250,000.

SECTION C

Responsible Agency: U.S. Geological Survey
Flight and data collection operator: LKB Resources, Inc., Huntington Valley, Pennsylvania, June 1979

Contour interval
5 gammas
25 gammas

Magnetic high or low

Magnetic low

Flight line direction—N.50°W.-S.50°E.
Flight spacing—1 mile
Flight altitude—1,000 feet above ground
Grid interval—300 meter NW.-SE., 300 meter NE.-SW.
Instrumentation—Flux Gate ASQ10, modified
Sampling interval—1 second
Sensitivity—0.1 gamma
Constant added to data—57,000
Regional field removed—IGRF, 1975, updated to 1979

Source: U.S. Geological Survey, 1980, Aeromagnetic map of the Chugach area, Alaska: U.S. Geological Survey Open-File Report 80-58, 1 sheet, scale 1:250,000.

QUADRANGLE LOCATION

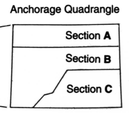
SCALE 1:250000

5 0 5 10 15 20 25 MILES

5 0 5 10 15 20 25 KILOMETERS

CONTOUR INTERVAL 200 FEET
DATUM IS MEAN SEA LEVEL

Anchorage Quadrangle



SURVEY HISTORY

Diagram to the left shows areas of different geophysical surveys. The areas were flown over by different operators at different times. The survey teams used different instrumentation, flight direction and spacing, and techniques to process data for graphic presentation. Note that the map sections use different contour intervals.

AEROMAGNETIC MAP OF THE ANCHORAGE QUADRANGLE, ALASKA

by
L.E. Burns and G.R. Winkler
1994