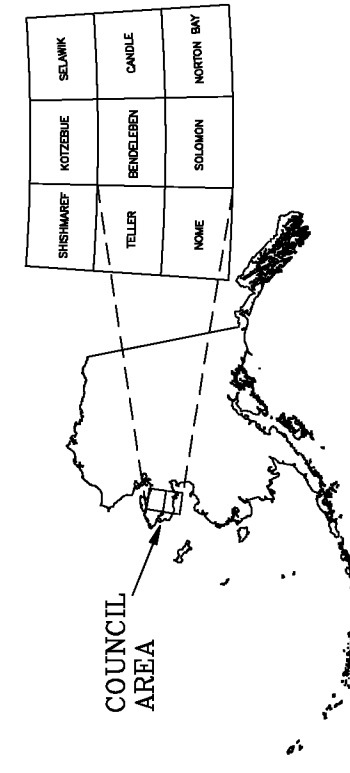
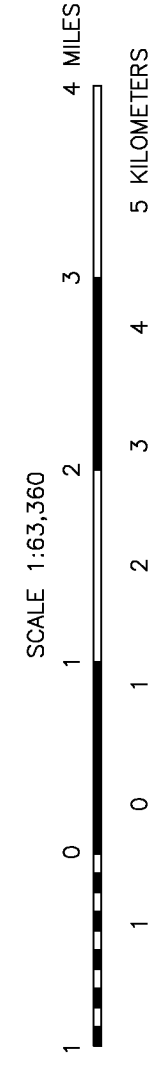


Section outline from U.S. Geological Survey Miscellaneous Publication 1-4, 1981, A-5, 1981, Bismarck 3-4, 1973, 3-1, 1973, Fairbanks, Alaska



COUNCIL AREA



SCALE 1:63,360

7200 HZ COPLANAR RESISTIVITY OF THE COUNCIL AREA, SEWARD PENINSULA, ALASKA PARTS OF BENELEBEN AND SOLOMON QUADRANGLES

2003

DESCRIPTIVE NOTES

The geophysical data were acquired with a DIGHEM[®] Electromagnetic (EM) system and a Scintrex cesium magnetometer. Both were flown at a height of 100 meters. The cesium magnetometer was a 50/60 Hz radar altimeter, GPS navigation system, 50/60 Hz magnetometer, and video camera. Flights were performed with a clearance of 200 feet along North-South (N-S) survey flight lines with a spacing of a quarter of a mile. The flight lines were spaced at intervals of approximately 3 miles.

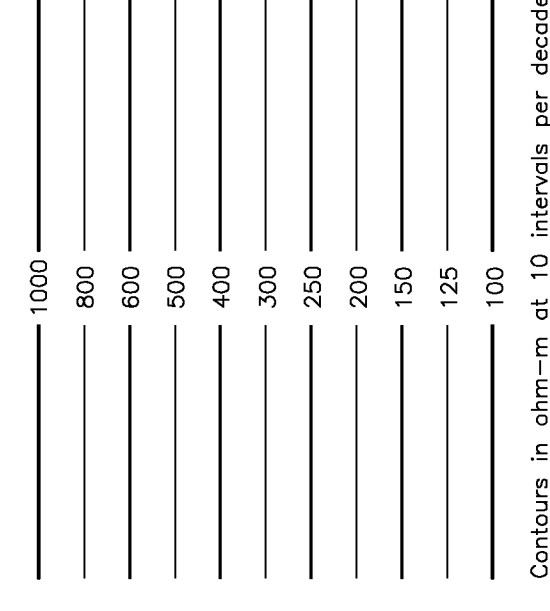
An Ahtech GQ24 NAVSTAR / GLOWASS Global Positioning System was used for navigation. The helicopter position was derived every 0.5 seconds with a relative accuracy of better than 5 m. Flight path positions were projected onto the Clarke 1866 datum using a central meridian (CM) of 165°, a north constant of 0 and an east constant of 500,000. The datum used for the UTM grid is better than 10 m with respect to the UTM grid.

RESISTIVITY

The DIGHEM[®] EM system measured inphase and quadrature components of the magnetic field. The system uses three horizontal coplanar-coil pairs operated at 900, 7200, and 5500 Hz. The EM system responds to bedrock conductors, conductive overburden, and cultural sources. Apparent resistivity is calculated from the inphase and quadrature components using the Fraser (1978) model. The data were interpolated onto a regular 100 m grid using a modified Alma (1970) technique.

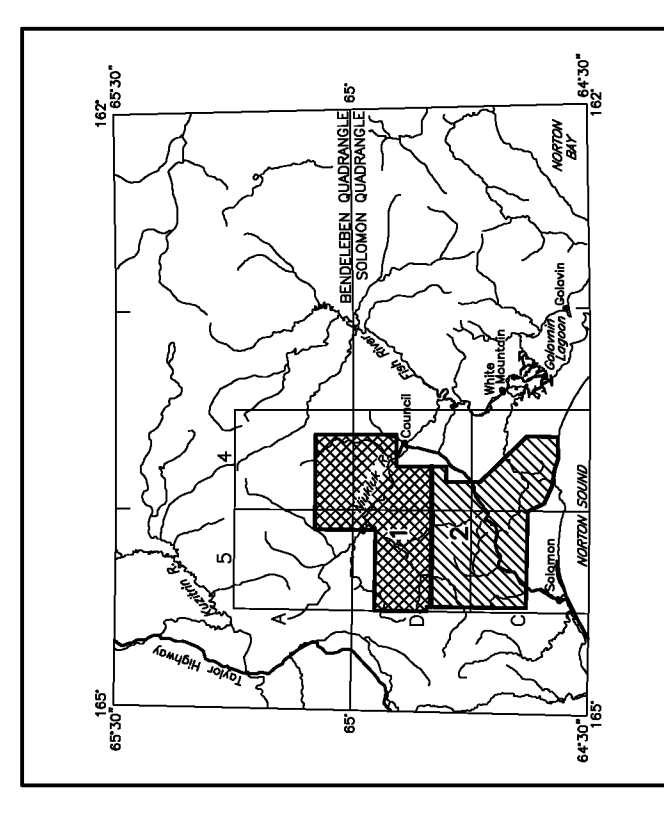
Alma, K., 1970. A new method of interpolation and smooth curve fitting. *Proceedings of the International Symposium on Geophysical Methods*, v. 17, no. 4, p. 569-602. *Geophysical Prospecting*, v. 18, no. 4, p. 441-472.

RESISTIVITY CONTOURS



..... resistivity low

LOCATION INDEX



SURVEY HISTORY

This map has been compiled and drawn under contract between the State of Alaska, Department of Natural Resources, and Stevens Exploration Management Corp. (SEMC). Geophysical data for the area were acquired by SEMC in 1998. The map was prepared by Laurel Burns, the contract manager for DGCS.

This map and other products from this survey are available from the Alaska Division of Geological & Geophysical Surveys, 200, Fairbanks, Alaska, 99703.