

INTERPRETATION EXPLANATION*

- Probable fault (direction of probable displacement indicated).
- Selected magnetic anomaly axis.
- Very high amplitude magnetic anomalies (thin horizontal lines).
- High-amplitude, linear magnetic anomalies (contact metamorphic and/or mafic intrusive zones).
- Moderately high-intensity magnetic anomalies (probably mafic metavolcanics, and greenschist- to amphibolite-facies rocks).
- Moderate to low-intensity magnetic anomalies (patterns and amplitudes suggest felsic terrain).
- High to moderately low-intensity magnetic anomalies (patterns and amplitudes indicate small composite plutonic bodies of mostly felsic-intermediate composition).
- Projected edge of Tertiary basin.
- Area of extremely shallow to moderately shallow magnetic basement (100-750 meters (330-2475 feet)).
- Area of moderately shallow to deeper magnetic basement (500-1200 meters (1650-3960 feet)).

*Some anomaly patterns in Talkeetna quadrangle indicate evidence for reverse remanent magnetism (personal communication, Gilmore, 1973, U. S. Geological Survey, Menlo Park, Calif.).

NOTE: Geological interpretation is based on aeromagnetic anomaly data (see map, AOF-107H).

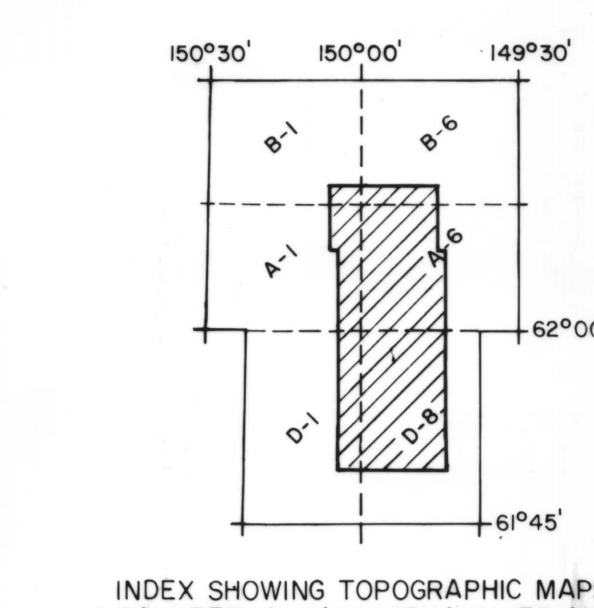
This is a preliminary publication of the Alaska Division of Geological and Geophysical Surveys and as such has not received final editing and review. The author will appreciate candid comments on the accuracy of the data, and welcome suggestions that will improve the report.
Base map from U. S. Geological Survey 1965-74.

GEOLOGIC EXPLANATION*

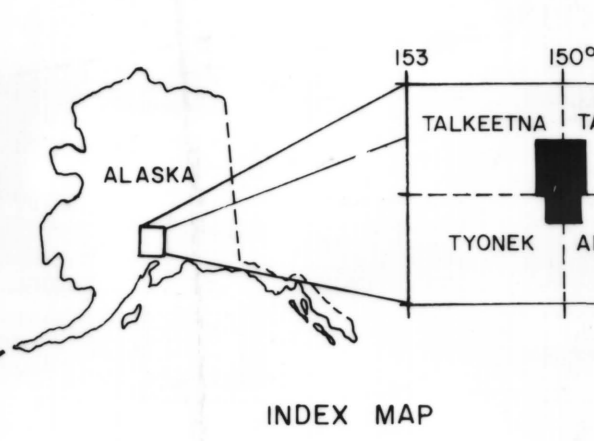
- Utc Sandstone, siltstone, claystone, minor conglomerate and coal beds. Clastic continental sedimentary rocks (upper Tertiary).
- Kms Argillite, shale, graywacke, conglomerate, lava, tuff and agglomerate-in places moderately to highly (amphibolite-facies) metamorphosed (Cretaceous).
- Tkg Tonalite, quartz diorite to granodiorite intrusive rocks [Late Cretaceous to early Tertiary].
- IPMmv Andesitic to basaltic metavolcanics and metavolcaniclastics (greenschist to amphibolite facies) with some meta-diabase stocks and sills (late Paleozoic).

*Rock unit symbols based on work by Coe (1974), Bekman (1974), and field observations by Reger, McGee, and Hackett (1976).

- geologic contact
- bedrock exposure



INDEX SHOWING TOPOGRAPHIC MAPS & TALKEETNA-KASHWITNA RIVER AREA



PRELIMINARY GEOLOGICAL INTERPRETATION (BASEMENT COMPLEX)
OF AEROMAGNETIC MAP
TALKEETNA - KASHWITNA RIVER AREA, ALASKA
BY STEVE W. HACKETT - 1978