

- EXPLANATION**
- UNCONSOLIDATED DEPOSITS**
- Qa** Floodplain and low terrace alluvium. Well-rounded gravel, sand and silt in stratified deposits; boulders abundant in places; local surface accumulations of organic material.
 - Qac** Alluvium and colluvium of small stream valleys, alluvial fans, and broad slopes. Silt, sandy silt, and carbonaceous silt containing layers and lenses of sand and gravel. Scattered boulders and local deposits of organic material. Material angular to well rounded; unstratified to stratified; unsorted to sorted.
 - Qc** Colluvium and residual material on mountain slopes and ridges. Unsorted and angular debris ranging from coarse rubble to silt size. Includes some windblown silt and ash and residual rock debris.
 - Qt** High terrace alluvium of larger streams. Massive to poorly stratified layers and lenses of sand, gravel, and silt; boulders present in places. Mostly well sorted.
- IGNEOUS ROCKS**
- Tmv** Mafic volcanic rocks. Dominantly dark-colored andesitic lava, tuff, tuff-breccia, and breccia.
 - Tfv** Felsic volcanic rocks. Dominantly light-colored rhyolite and dacite tuff, lapilli tuff, tuff-breccia, breccia, volcanic conglomerate, and lava. Welded tuff is abundant. Triangular overprint; volcanic rocks without quartz phenocrysts and less siliceous than surrounding volcanic rocks.
 - Tg** Granite. Pink fine- to coarse-grained equigranular and porphyritic granitic rock.
 - Ts** Syenite of Mount Fairplay intrusive. Equigranular to coarsely porphyritic hornblende-biotite syenite. Locally monzonite or adamellite in composition. Coarse-grained porphyritic phase. Dotted overprint, same as which rock texture grades from coarse-grained intrusive type to fine-grained extrusive type.
- SEDIMENTARY ROCKS**
- Kr** Detrital rocks. Interbedded conglomerate, sandstone, shale, siltstone, tuff, and carbonaceous shale. Local chert and lignite.
 - Jg** Granodiorite of the Taylor Mountain batholith. Medium- to coarse-grained equigranular granodiorite. Locally includes quartz diorite and diorite.
- METAMORPHIC ROCKS**
- PpCb** Metamorphic rocks of the West Fork vicinity. White and pink marble, impure quartzite, and quartz-biotite schist.
 - BpCb** Birch Creek Schist. Quartz-biotite gneiss and schist, augen gneiss, amphibolite, spotted gneiss, quartz schist, tremolite-actinolite schist, and mica schist. Intense network of small dikes.
- Geological Symbols:**
- Contact: Long-dashed where approximately located or inferred; quartered where doubtful; short-dashed where gradational.
 - Fault: Long dashed where approximately located; quartered where doubtful. U, upthrown side; D, downthrown side.
 - Minor folds, axes horizontal.
 - Minor folds showing plunge of axes.
 - Strike and dip of beds.
 - Horizontal beds.
 - Strike and dip of foliation.
 - Horizontal foliation.
 - Strike and dip of joint.
 - Strike of vertical joints.
 - Dike.
 - Pingo or pingos. Number locates specific pingos mentioned in text.
 - Outcrop of augen gneiss.
 - Terrace scarp.
 - Ice-wedge polygons.
 - High altitude alluvial fan.

GENERALIZED SECTION ALONG LINE A-B-C
(Thin alluvium and colluvium not shown)

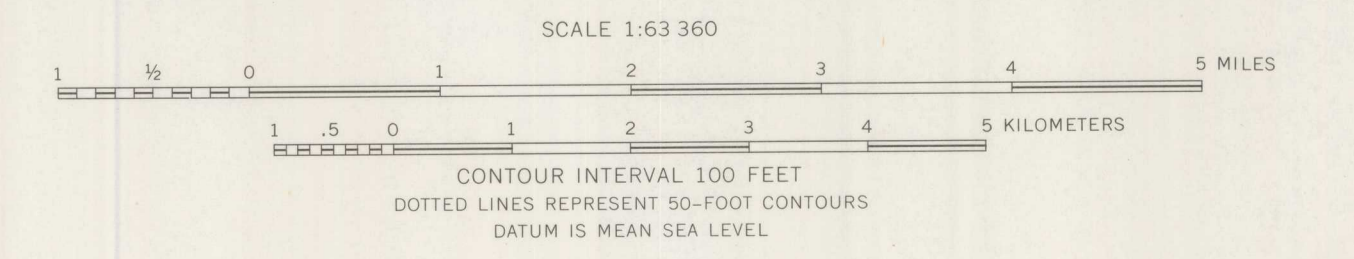
Mount Fairplay
T. 22 N. R. 16 E. S. 18 E.

Vertical exaggeration X 2

South
6000'
5000'
4000'
3000'
2000'
1000'

63°30' 142°30' 142°00' 63°00'

GEOLOGIC MAP OF MOUNT FAIRPLAY AREA, ALASKA



Base from U.S. Geological Survey planimetric quadrangles, Tanacross (C-3) and Tanacross (D-3), Alaska, 1956

Geology by Helen L. Foster, 1961-63, assisted by Mona Carpenter, 1961-62, and by Beverly Walters, 1963

