



TRUE NORTH
MAGNETIC NORTH
APPROXIMATE MEAN
DECLINATION, 1949

Base developed from maps, surveys, and charts by: U.S. Geological Survey, Skagway B-1 quadrangle 1963; U.S. Coast and Geodetic Survey Hydrographic Surveys H-6945 and H-6946, 1943, and U.S. National Ocean Survey Chart 8303, 1971

SCALE 1:9 600
800 400 0 400 800 1200 1600 FEET
200 100 0 100 200 300 400 METERS
Land contour interval 100 feet, dashed supplemental interval 20 feet (below 100 feet alt only); datum—mean sea level. Bathymetric contour interval 20 feet datum—mean lower low water. Diurnal tidal range 16.7 feet

U.S. Geological Survey
OPEN FILE REPORT
This map is preliminary and has not been edited or reviewed for conformity with Geological Survey standards or nomenclature.
Surficial geology mapped 1965, 1968. Bedrock geology after Barker (1952) and Christie (1959)

FIGURE 5.—RECONNAISSANCE GEOLOGIC MAP OF SKAGWAY AND VICINITY, ALASKA

EXPLANATION

SURFICIAL DEPOSITS

Qd
Glacial drift deposits
Consists of: (1) till, a mixture of unsorted, unstratified, loose to compact gravely silt, sand, and some clay, cobbles, and boulders; or (2) stratified drift, generally sorted and stratified, loose, gravely sand, sand, and minor amounts of cobbles. Stones subrounded to subangular. Thickness probably less than 20 ft; locally discontinuous. Overlies bedrock. May be overlain by colluvium or elevated marine and beach deposits (see note 4) too small to map

Qf
Manmade fill
Intermixed gravel, sand, cobbles, and some boulders and broken rock including riprap; some refuse and garbage. Generally loose. Maximum thickness probably 30 ft. Overlies alluvial and deltaic deposits. Stippled pattern, mostly refuse and garbage

Qam **Qat**
Alluvial deposits of the Skagway River
Gravel, sand, and some cobbles, boulders, and silt. Loose, well bedded; some beds well sorted. Stones generally subrounded. Ranges in thickness from 15 to 35 ft and averages 25 ft. Overlain irregularly by patches of manmade fill too small or thin to map. Grades shoreward into deltaic deposits (Qi). Commonly underlain by sand and some fine gravel, possibly the offshore part of former delta Qam, modern flood-plain alluvium Qat, terrace alluvium. Surface 5-10 ft higher than Qam

Qb
Beach deposits
Chiefly cobbles, gravel, sand, and boulders; some concentrations of shell fragments and driftwood. Gravel and cobbles generally subrounded. Loose and well sorted locally. Thickness probably 5 to 10 ft. Overlies bedrock

Qi
Deltaic deposits of the intertidal zone
Sandy gravel, gravely sand, and cobbles; some small boulders, shell fragments, sand and silt. Stones mostly subrounded. Loose to dense. Sorting generally good. Ranges in thickness from about 10 to 50 ft and averages 30 ft. Overlies sand or sand and fine gravel of offshore part of earlier delta. Overlain locally by thin manmade fill. Grades onshore into alluvial deposits. Grades offshore into unmapped sediments of the delta front

Qca **Qci**
Colluvial deposits
Mixtures of: (1) cobble- to boulder-sized rubble in a sandy to gravely silt matrix, or (2) gravel, cobbles, sand, and some silt and clay; locally may contain high percent of silt and organic material. Stones generally angular, some subrounded. Generally loose and unsorted material that has moved downslope or is moving downslope under the influence of gravity. Some crude bedding. Possibly as much as 50 ft thick; locally discontinuous. Overlies bedrock and possibly drift. Composed of talus and various types of landslide deposits, probably including rockfalls, rockslides, earthflows, and avalanche debris; locally includes glacial drift and possibly elevated marine and beach deposits (see note 4). Grades into alluvial fan deposits Qca, actively accumulating and probably creeping downslope; locally composed of boulder-sized rubble; mostly unvegetated Qci, presumably inactive, but in part may be creeping downslope; thickly vegetated

BEDROCK

KJi
Intrusive rocks
Mostly medium gray, medium-grained quartz diorite and granodiorite; includes some basalt and aplite dikes, and some metamorphic rocks, chiefly schist, phyllite, gneiss, marble, and quartzite. Normally hard and massive, but locally quartz diorite and granodiorite are fragmented and weathered to depths of as much as 20 ft. Overlain locally by colluvial, alluvial, drift, and possibly elevated marine and beach deposits (see note 4) too small to map

Notes: (1) Mean lower low waterline is the lower limit of mapping. (2) Map units shown are considered to be comprised of materials at least 5 ft thick. (3) Surficial deposits and bedrock may be covered by a few feet of silty organic material. (4) At altitudes within several hundred ft of sea level, small remnants of elevated fine-grained marine deposits and coarse-grained beach deposits of Pleistocene and Holocene age may be present. (5) Grain-size classification used is as follows: clay, less than .00015 in.; silt, .00015-.0025 in.; sand, .0025-.079 in.; gravel, .079 to about 2 1/2 in.; cobbles, about 2 1/2 to 10 in.; boulders, greater than 10 in. (Natl. Research Council, 1947)

QUATERNARY

----- Contact—long dashed where approximately located, short dashed where inferred or gradational

✖ Quarry

✖ Gravel, sand, or fragmented-rock pit

x BM, bench mark

●● Storage tanks, water or petroleum products (representational)

■ Building, wharf or dock (representational)

..... Higher high waterline about 1897

----- Mean lower low water (lower limit of mapping)

----- Mean higher high water

----- Centerline of former wharf, now removed

----- Supplemental contour segment, datum mean sea level (modified from Hubbell and Waller, 1953)

----- Margin of possible subaqueous slide, based upon interpretation of data from U.S. Coast and Geodetic Survey (1943)

----- Course of former stream

----- Escarpment near rim of valley wall; general locality possibly susceptible to future rockfalls and earthflows

▨ Area of large inferred landslides (airphoto interpretation only)

① Approximate area of inferred subaqueous slide in 1899

② Approximate area of subaqueous slide in 1966

HOLOCENE

PLEISTOCENE

QUATERNARY

JURASSIC AND CRETACEOUS