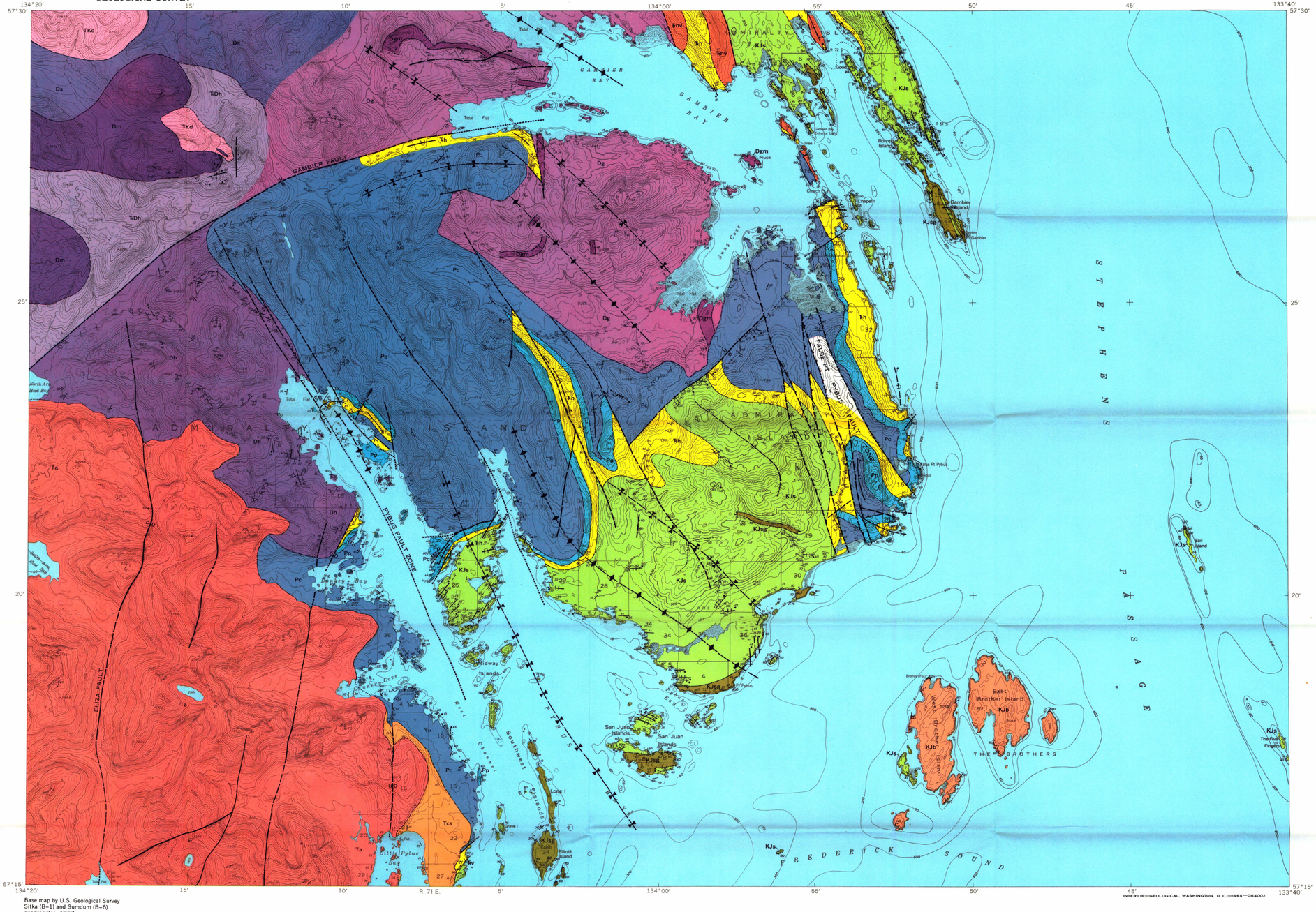


Base map by U.S. Geological Survey Sitka (B-1) and Sumdum (B-6) quadrangles, 1957

GEOLOGY OF THE PYBUS-GAMBIER AREA, ALASKA

SCALE 1:63 360

1 ½ 0 1 2 3 MILES

1 .5 0 1 2 3 KILOMETERS

CONTOUR INTERVAL 100 FEET
DATUM IS MEAN SEA LEVEL

INTERIOR—GEOLOGICAL, WASHINGTON, D. C.—1964—G64002

EXPLANATION

BEDDED ROCKS

TERTIARY

Eocene and Oligocene

Ta — Admiralty Island Volcanics

Eocene

Tcs — Conglomerate and sandstone

ANGULAR UNCONFORMITY

JURASSIC AND CRETACEOUS

Upper Jurassic and Lower Cretaceous

KJb — Brothers Volcanics

KJs / KJsg — Seymour Canal Formation
KJs, *argillite and graywacke*
KJsg, *conglomerate and graywacke*

UNCONFORMITY

TRIASSIC

Upper Triassic

Ŧhv / Ŧh — Hyd Formation
Ŧhv, *volcanic member*
Ŧh, *breccia, limestone, and argillite members*

UNCONFORMITY

PERMIAN

Pp — Pybus Dolomite

Pc — Cannery Formation

ANGULAR(?) UNCONFORMITY

NORTHWEST OF PYBUS BAY

DEVONIAN AND DEVONIAN(?)

Dh — Hood Bay Formation
Probably correlative with Gambier Bay Formation. Age, Devonian (?)

Dg / Dgm / Dg — Gambier Bay Formation
Dg, *greenschist, phyllite, and metachert*
Dgm, *marble*
Age, Middle (?) Devonian

ROCKS IN NORTHWEST PART OF AREA MAPPED ONLY BY RECONNAISSANCE

INTRUSIVE ROCKS

CRETACEOUS OR TERTIARY

TKd — Diorite
Hornblende-andesine diorite

METAMORPHIC ROCKS

DEVONIAN(?) TO TRIASSIC

ŦDh — Hornfels
May include metamorphic equivalents of rocks from Devonian (?) to Triassic in age

DEVONIAN(?)

Ds / Dm / Ds — Greenschist, marble, and phyllite
Ds, *greenschist and phyllite*
Dm, *marble*
May be equivalent of Gambier Bay Formation

GEOLOGIC SYMBOLS

Contact
Dashed where approximately located; dotted where concealed

Trace of conspicuous marker bed

Fault, showing dip
Dashed where approximately located; dotted where concealed

Fault, showing relative movement
U, *upthrown side;* D, *downthrown side. Dashed where approximately located; dotted where concealed*

Thrust or reverse fault
Sawteeth on side of upper plate; dashed where approximately located; dotted where concealed

Fault or shear zone
Showing dip

Overturned anticline
Showing trace of axial plane, direction of dip of limbs, and trend and plunge of axis; dashed where approximately located

Overturned syncline
Showing trace of axial plane, direction of dip of limbs, and trend and plunge of axis; dashed where approximately located

Synform, approximate location
Showing trace of axial plane

Antiform, approximate location
Showing trace of axial plane

Plunge of minor anticline

Plunge of fold axes

Horizontal fold axes

Plunge of axes of overturned folds

Beds right-side up — *Top of beds unknown* — *Estimated from distance*

Vertical 90 indicates top of beds — *Vertical Top of beds unknown*

Overturned — *Horizontal*
Strike and dip of bedding

Inclined — *Vertical*
Generalized strike and dip of crumpled beds

Inclined — *Vertical*
Strike and dip of foliation
Northwest part of area only

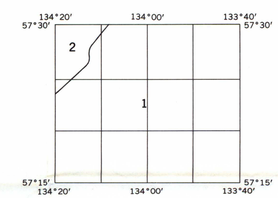
Inclined — *Vertical*
Strike and dip of foliation
Gambier Bay Formation only

Inclined — *Vertical*
Strike and dip of cleavage

Trend and plunge of lineation
Northwest part of area only

First generation — *Second generation* — *Third generation*
Trend and plunge of axes of successive generations of folds and lineations
Gambier Bay Formation only

TRUE NORTH — MAGNETIC NORTH
APPROXIMATE MEAN DECLINATION, 1964



GEOLOGIC COMPILATION DIAGRAM

1 Geology by R. A. Loney, 1958–59
2 Reconnaissance geology by R. A. Loney assisted by H. C. Berg, J. S. Pomeroy, and D. W. Hinckley, 1959