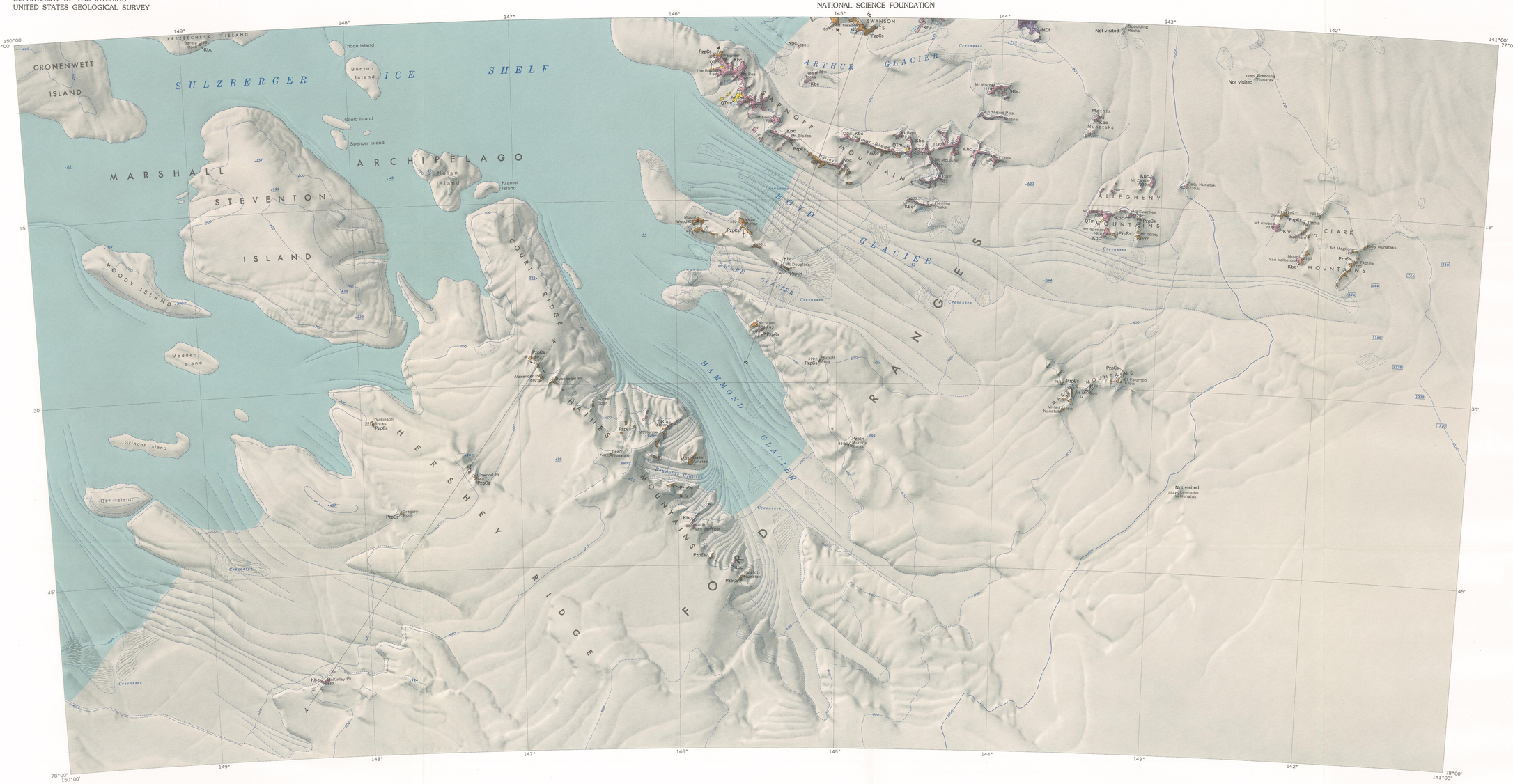
DEPARTMENT OF THE INTERIOR
UNITED STATES GEOLOGICAL SURVEY

ANTARCTIC RESEARCH CENTER, THE MUSEUM
TEXAS TECH UNIVERSITY
UNDER THE AUSPICES OF THE
NATIONAL SCIENCE FOUNDATION

U.S. ANTARCTIC RESEARCH PROGRAM
BOYD GLACIER QUADRANGLE
ANTARCTIC GEOLOGIC MAP A–6



Base from U.S. Geological Survey, 1972

Geology mapped in 1911 by K. Prestrud; in 1940 by F. A. Wade; in 1966-1967 by F. A. Wade, V. L. Yeats, and L. V. Klimov

CORRELATION OF MAP UNITS

QTm	QUATERNARY AND TERTIARY
Unconformity	
Kbc	CRETACEOUS
Unconformity	
MDf	MISSISSIPPIAN AND DEVONIAN
Unconformity	
PzpEs	LOWER PALEOZOIC AND PRECAMBRIAN

DESCRIPTION OF MAP UNITS

QTm MORAINE

Kbc BYRD COAST GRANITE—Biotite granite, leucogranite, and alaskite, equigranular to porphyritic, marginal and local foliation, magmatic origin. Includes associated pegmatites and aplites, and mafic dikes. Intrudes Swanson metasedimentary rocks and Ford Granodiorite. Radiometric ages mainly 100±10 m.y.; age of about 140 m.y. on adamellite (quartz monzonite) at Mt. Atwood, Clark Mountains

MDf FORD GRANODIORITE—Biotite-hornblende granodiorite. Probably two generations of plagioclase; oligoclase-andesine and younger albite. Includes associated pegmatite, aplite, and rhyolite dikes; and mafic dikes. Intrudes Swanson metasedimentary rocks. Radiometric ages mainly 345±11 m.y. Name from Ford Ranges

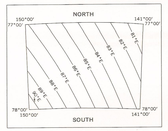
PzpEs SWANSON FORMATION—Sequence of metamorphosed sedimentary rocks with total thickness estimated to be in excess of 4000 m. Degree of metamorphism seldom exceeds greenschist facies. Metagraywacke dominates sequence with lesser amounts of quartzite, biotite schist, phyllite, and slate. Upper Precambrian-lower Paleozoic age based upon achitarch assemblages (Bichenko, 1972). Name from Swanson Mountains

- Contact
- Axis of syncline
- Parallel folds, showing plunge
- 45 Strike and dip of beds
- Vertical beds
- 60 Strike and dip of foliation
- Vertical foliation
- Base of measured stratigraphic section

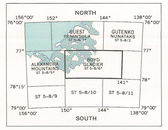
SCALE 1:250,000

5 0 5 10 15 20 Statute Miles
5 0 5 10 15 20 25 30 Kilometers
5 0 5 10 15 Nautical Miles

Lambert Conformal Conic Projection—Standard Parallels 78°40' and 79°20'
CONTOUR INTERVAL 200 METERS—DATUM IS MEAN SEA LEVEL
Elevations and depths in meters



Compiled from U.S.N.O.O. Chart 1706 S, 1965
ISOGONIC LINE DIAGRAM



Sheet numbering system based on International Map of the World
INDEX TO ADJOINING SHEETS

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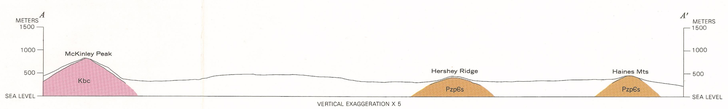

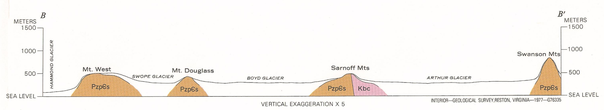

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RECONNAISSANCE GEOLOGIC MAP OF THE BOYD GLACIER QUADRANGLE, MARIE BYRD LAND, ANTARCTICA

By
F. Alton Wade, Carl A. Cathey, and Jerry B. Oldham

1977

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