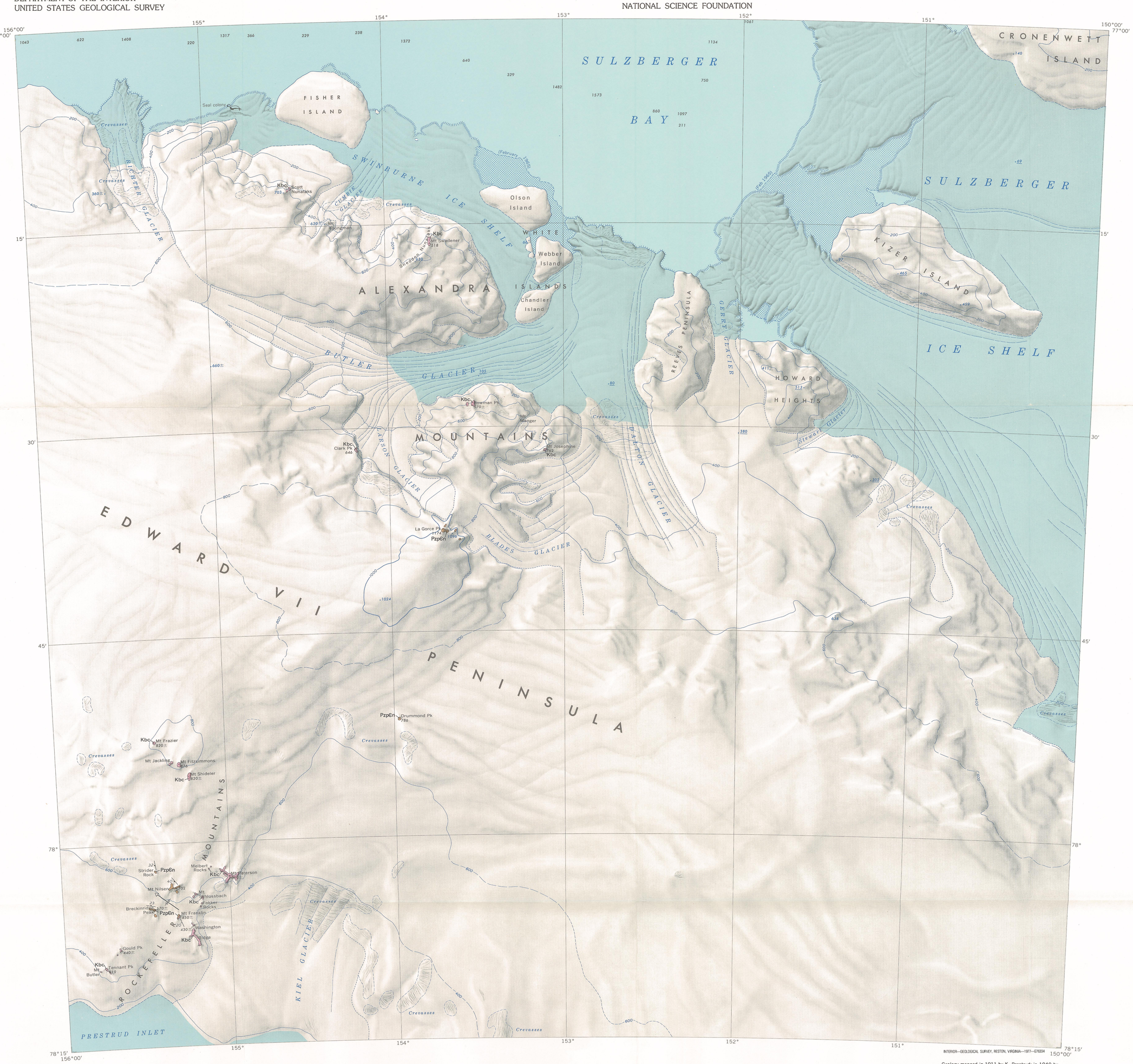
DEPARTMENT OF THE INTERIOR
UNITED STATES GEOLOGICAL SURVEY

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

U.S. ANTARCTIC RESEARCH PROGRAM
ALEXANDRA MOUNTAINS QUADRANGLE
ANTARCTIC GEOLOGIC MAP A–5



Base from U.S. Geological Survey, 1972

INTERIOR—GEOLOGICAL SURVEY, RESTON, VIRGINIA—1977—G76334

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

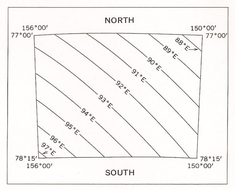
SCALE 1:250,000

5 0 5 10 15 20 Statute Miles

5 0 5 10 15 20 25 30 Kilometers

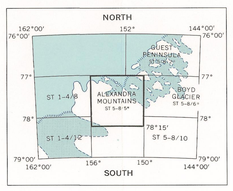
5 0 5 10 15 Nautical Miles

Lambert Conformal Conic Projection—Standard Parallels 76°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

CORRELATION OF MAP UNITS

Kbc	CRETACEOUS
Unconformity	
Pzp€n	LOWER PALEOZOIC AND PRECAMBRIAN

DESCRIPTION OF MAP UNITS

Kbc BYRD COAST GRANITE—Biotite granite, leucogranite and alaskite, equigranular to porphyritic, marginal foliation only, magmatic origin. Includes associated pegmatites and aplites, and basic dikes. Intrudes pelitic sediments at Mt. Nilsen. Radiometric ages mainly 100±10 m.y.

Pzp€n METAMORPHOSED PELITIC SEDIMENTS OF MT. NILSEN—Mostly quartz-biotite-muscovite-almandine-plagioclase schists. Younger hydrothermal minerals are principally quartz and potassium feldspar. Probably correlative with Swanson Formation in Ford Ranges to the east

Contact

Synform, showing plunge; drawn on foliation

Strike and dip of beds

Strike and dip of foliation

REFERENCES

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Wade, F. A., 1945, The geology of the Rockefeller Mountains, King Edward VII Land, Antarctica: Am. Philos. Soc., Proc., v. 89, no. 1, p. 67–77.

_____ 1969, Geologic map of Antarctica, Sheet 18, Marie Byrd Land, *in* Craddock, Campbell, and others, 1969–70, Geologic maps of Antarctica: Am. Geog. Soc., Antarctic Map Folio Ser., Folio 12, Pl. 17, 1 sheet, scale 1:1,000,000, text on map (title: Geology of Maria Byrd Land).

RECONNAISSANCE GEOLOGIC MAP OF THE ALEXANDRA MOUNTAINS QUADRANGLE, MARIE BYRD LAND, ANTARCTICA

By

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

1977

For sale by Branch of Distribution, U.S. Geological Survey, 1200 South Eads Street, Arlington, VA 22202