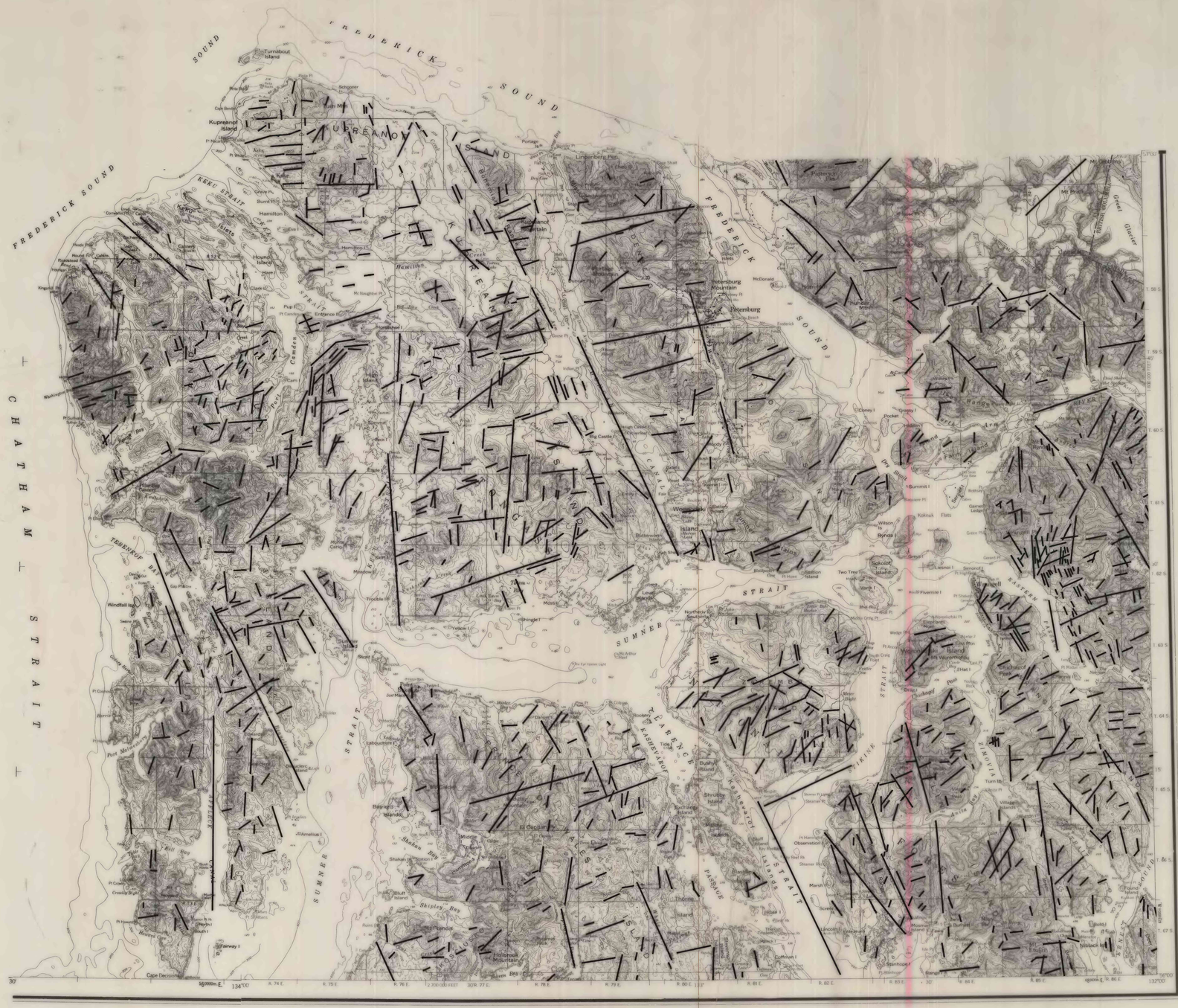
DEPARTMENT OF THE INTERIOR
UNITED STATES GEOLOGICAL SURVEY

OPEN-FILE REPORT 81-799

SHEET 1 OF 2



BASE FROM U.S. GEOLOGICAL SURVEY, 1951, 1960

SCALE 1:250000

5 0 5 10 15 20 25 MILES

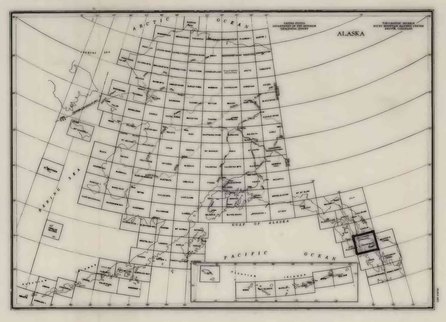
5 0 5 10 15 20 25 KILOMETERS

CONTOUR INTERVAL 200 FEET
DATUM IS MEAN SEA LEVEL

EXPLANATION

—— Lineament

LINEAMENT MAP



INDEX MAP SHOWING LOCATION OF THE PETERSBURG AREA

DISCUSSION

These maps are a presentation of numerous lineaments and circular and arcuate features observed on Landsat imagery of the Petersburg quadrangle (and vicinity). The method of lineament identification (depiction) used closely follows that employed by Raines (1978). Republication of these maps compiled with generalized geologic base maps (David A. Brew and others, unpub. data, 1981)---for utilization in a proposed interpretative report on the Landsat features shown herein---is planned as part of a folio of maps on the Petersburg quadrangle (and vicinity).

REFERENCES CITED

Albert, N.R.D., and Steele, W.C., 1976a, Interpretation of Landsat imagery of the McCarthy quadrangle, Alaska: U.S. Geological Survey Miscellaneous Field Studies Map MF-773-H, scale 1:250,000, 3 sheets.

———, 1976b, Interpretation of Landsat imagery of the Tanacross quadrangle, Alaska: U.S. Geological Survey Miscellaneous Field Studies Map MF-767-C, scale 1:250,000, 3 sheets.

Condit, C.D., and Chavez, P.S., Jr., 1978, Basic concepts of computerized digital image processing for geologists: U.S. Geological Survey Bulletin 1462.

Raines, G.L., 1978, Porphyry copper exploration model for northern Sonora, Mexico: U.S. Geological Survey Journal of Research, v. 6, no. 1, p. 51-56.

TABLE OF IMAGERY USED IN OBSERVATIONS

Scenes used for computer- and photo-optical enhancement are 2931-18571 and 2931-18573, taken August 10, 1977; 1358-19264, taken July 16, 1973; and, 5866-17554, taken September 1, 1977. Computer compatible tapes were processed by Pat S. Chavez, Jr. and Ellen Sanchez, U.S. Geological Survey, Flagstaff, Arizona; for a description of this type of enhancement (simulated natural color), see Albert and Steele (1976a, b) and Condit and Chavez (1978). All imagery is available from EROS Data Center, Sioux Falls, SD 57198 (specify PAD number when ordering).

IMAGE TYPE	COMPUTER-ENHANCED	BANDS AND COLORS USED	PROJECTION	PAD NUMBER	SCENE ID NUMBER	TRANSPARENCY SCALE	PRINT SCALE
Simulated natural color	Yes	4 Green 5 Red Syn Blue	Orthographic	E-1271-56CT	Composite (2931-18571, 2931-18573)	1:1,065,000	1:250,000
False-color (PGE) - north	No	4 Blue 5 Green 7 Red	Space Cylindrical	E-1272-77CT	2931-18571	1:1,005,000	1:250,000
False-color (PGE) - south	No	4 Blue 5 Green 7 Red	Space Cylindrical	E-1273-77CT	2931-18573	1:1,005,000	1:250,000
False-color (PGE) - central	No	4-Blue 5 Green 7 Red	Space Cylindrical	E-1274-77CT	1358-19264	1:997,500	1:250,000
False-color (PGE) - BC	No	4 Blue 5 Green 7 Red	Space Cylindrical	E-1275-77CT	5866-17554	1:997,500	1:250,000

PGE = photo-optically enhanced

LANDSAT FEATURES MAPS OF THE PETERSBURG QUADRANGLE AND VICINITY, SOUTHEASTERN ALASKA

by

James R. Le Compte

1981

This report is preliminary and has not been reviewed for conformity with U.S. Geological Survey editorial standards