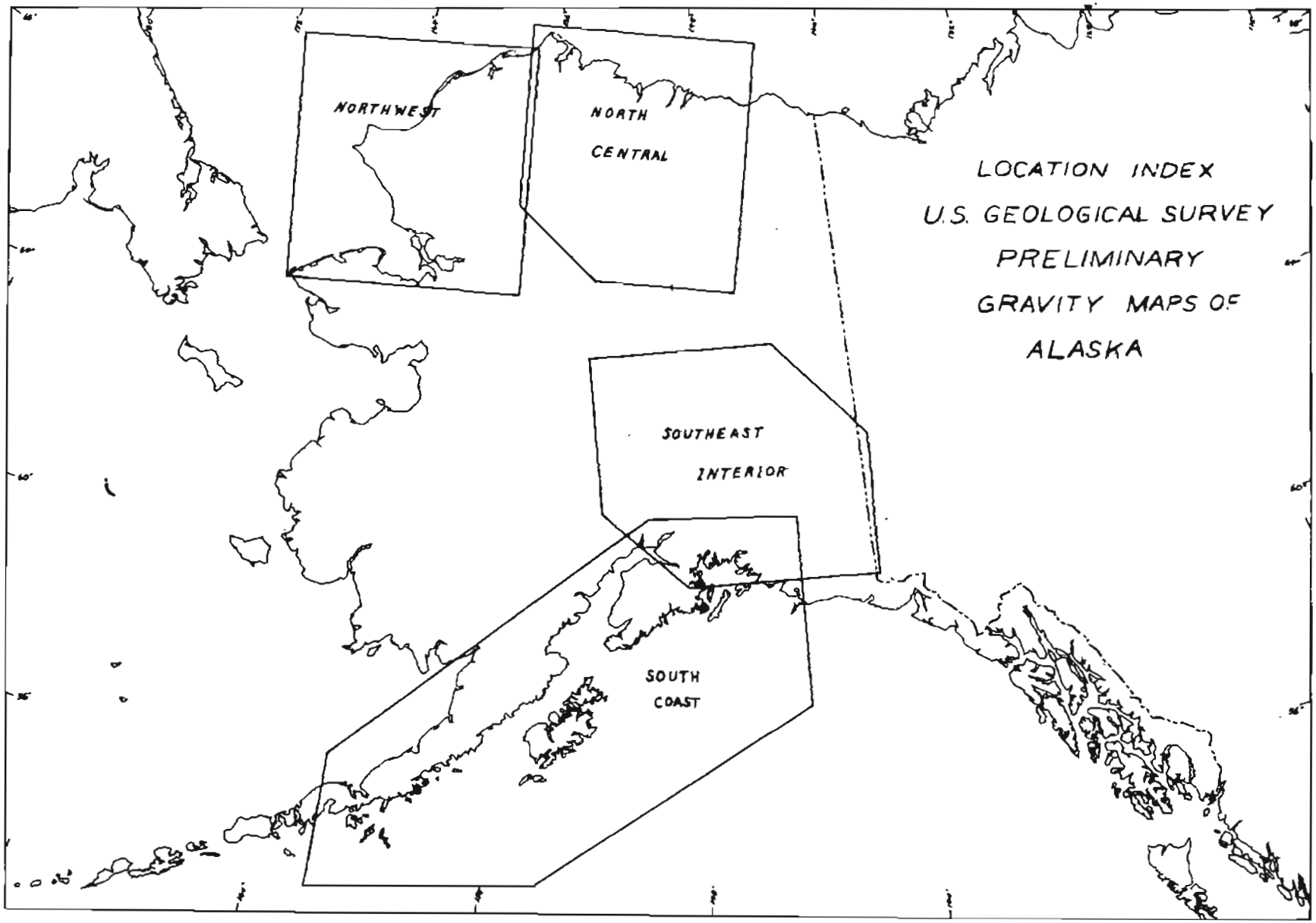
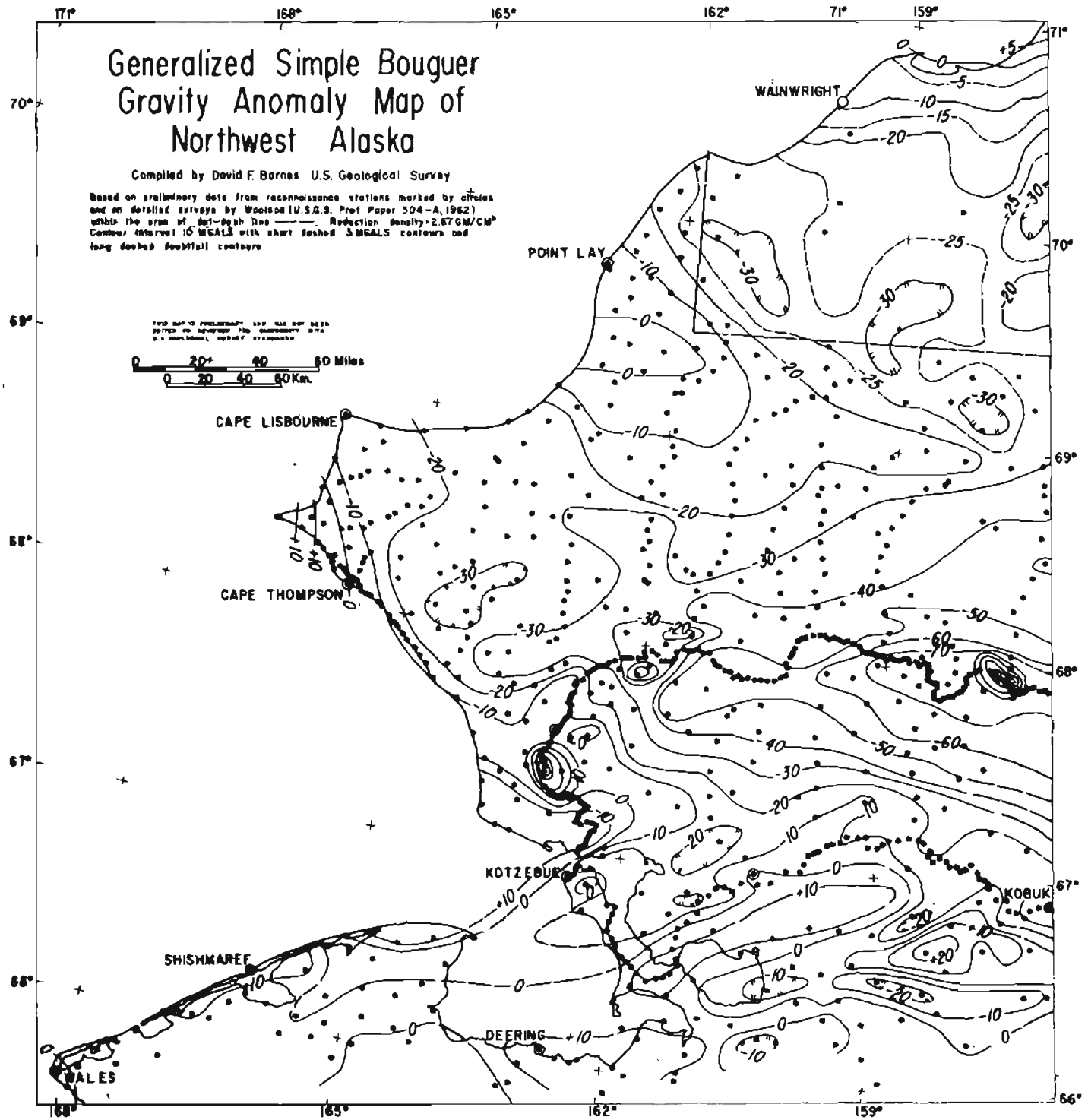
FOUR PRELIMINARY GRAVITY MAPS OF PARTS OF ALASKA

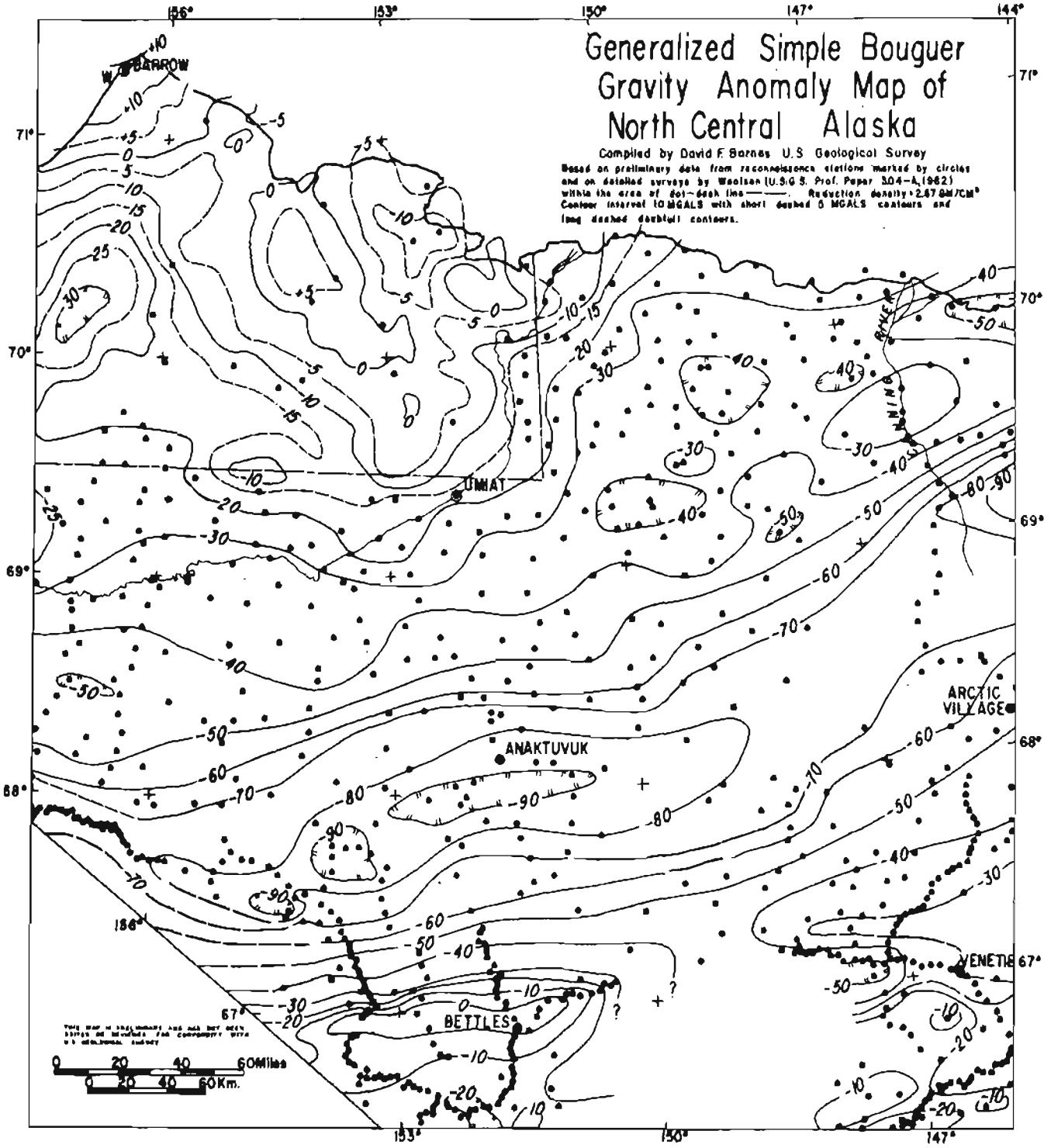
by

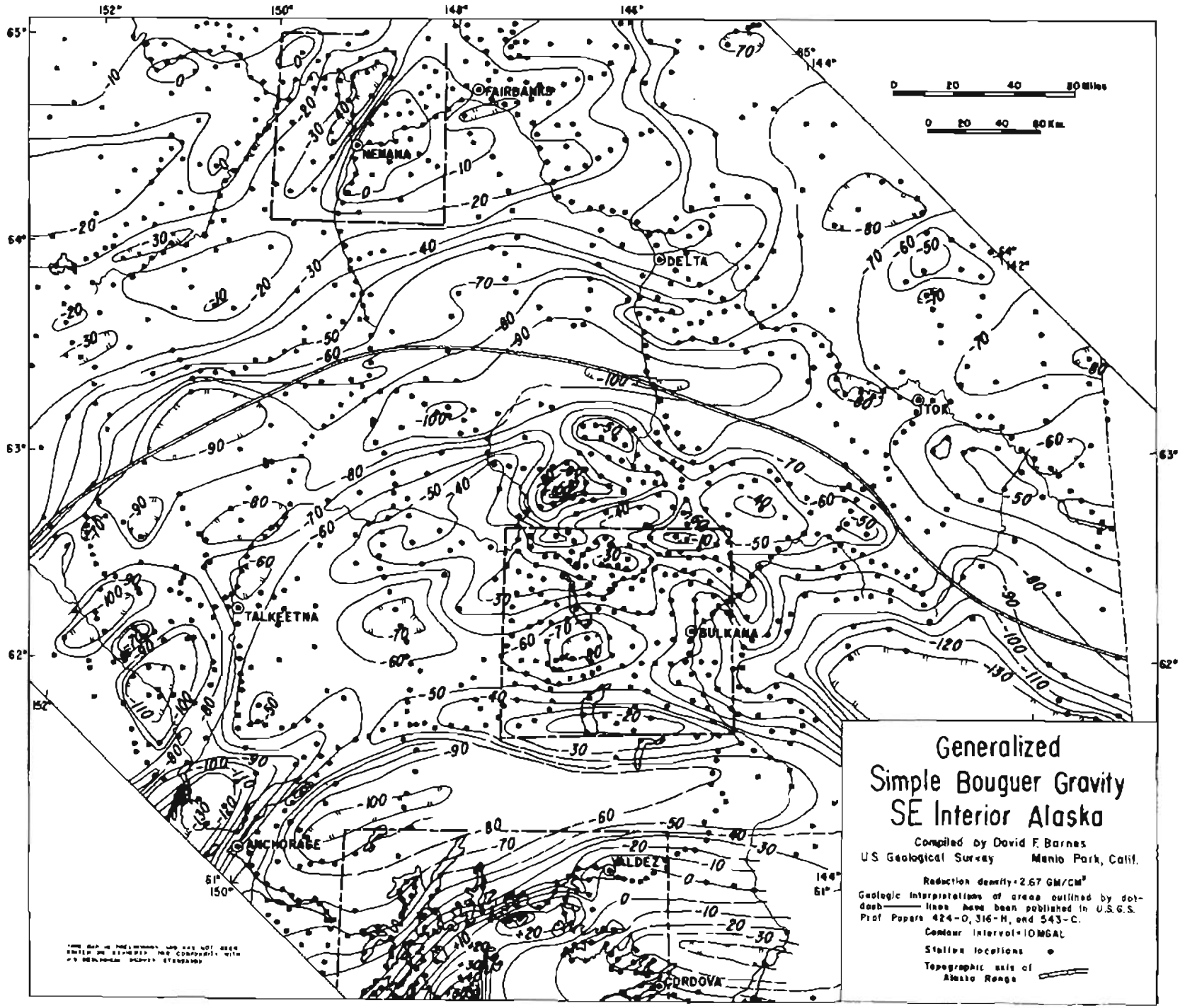
DAVID F. BARNES

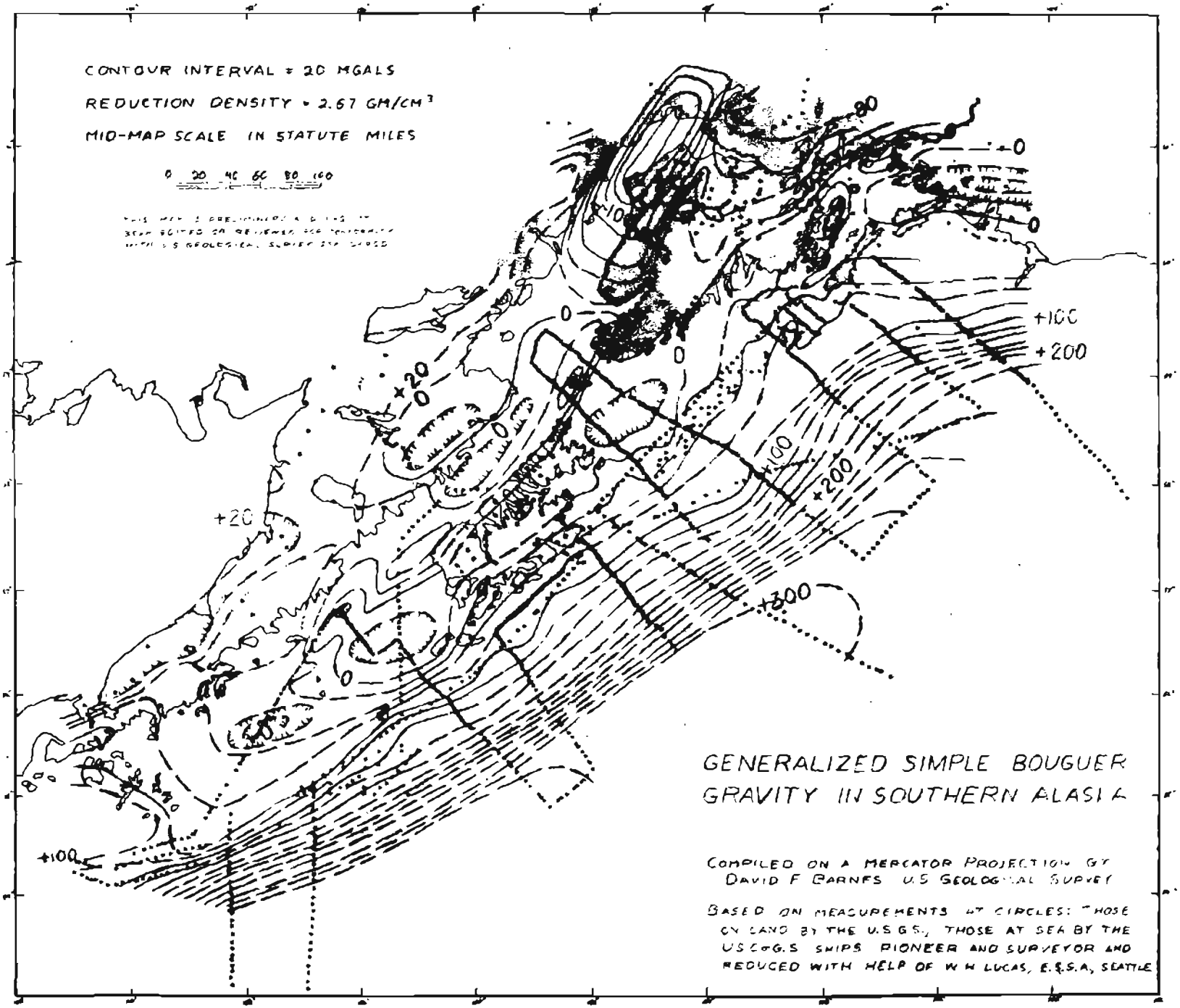
UNITED STATES GEOLOGICAL SURVEY
OPEN FILE REPORT


NORTHWEST
NORTH
CENTRAL
SOUTHEAST
INTERIOR
SOUTH
COAST
LOCATION INDEX
U.S. GEOLOGICAL SURVEY
PRELIMINARY
GRAVITY MAPS OF
ALASKA


Generalized Simple Bouguer Gravity Anomaly Map of Northwest Alaska
Compiled by David F. Barnes U.S. Geological Survey
Based on preliminary data from reconnaissance stations marked by circles and on detailed surveys by Woollard (U.S.G.S. Prof. Paper 304-A, 1962) within the area of last-depth line. Reduction density = 2.67 GM/CM³
Contour interval 10 MGALS with short dashed 5 MGALS contours and long dashed foothill contours
0 20 40 60 Miles
0 20 40 60 Km.
WAINWRIGHT
POINT LAY
CAPE LISBOURNE
CAPE THOMPSON
KOTZEBUE
KOBUK
SHISHMAREF
DEERING
WALES
171°
168°
165°
162°
159°
71°
70°
69°
68°
67°
66°


Generalized Simple Bouguer Gravity Anomaly Map of North Central Alaska
Compiled by David F. Barnes U.S. Geological Survey
Based on preliminary data from reconnaissance stations marked by circles and on detailed surveys by Woollard (U.S.G.S. Prof. Paper 304-A, 1962) within the area of dot-dash line ——·——. Reduction density = 2.67 GM/CM³
Contour interval 10 MGALS with short dashed 5 MGALS contours and long dashed doubtful contours.
156°
153°
150°
147°
144°
71°
70°
69°
68°
67°
BARROW
UMIAT
ANAKTUVUK
BETTLES
ARCTIC VILLAGE
VENETIE
BIRCH CREEK
0 20 40 60Miles
0 20 40 60Km.


Generalized
Simple Bouguer Gravity
SE Interior Alaska
Compiled by David F. Barnes
U.S. Geological Survey Menlo Park, Calif.
Reduction density = 2.67 GM/CM³
Geologic interpretations of areas outlined by dot-dash lines have been published in U.S.G.S. Prof. Papers 424-D, 316-H, and 543-C.
Contour interval = 10 MGAL
Station locations
Topographic axis of Alaska Range
0 20 40 80 Miles
0 20 40 80 Km.
FAIRBANKS
NENANA
DELTA
TOK
TALKEETNA
SULKANA
ANCHORAGE
VALDEZ
CORDOVA
152°
150°
148°
146°
144°
142°
65°
64°
63°
62°
61°


CONTOUR INTERVAL = 20 MGALS
REDUCTION DENSITY = 2.67 GM/CM³
MID-MAP SCALE IN STATUTE MILES
0 20 40 60 80 100
+80
+0
+10
0
+100
+200
+20
+300
GENERALIZED SIMPLE BOUGUER GRAVITY IN SOUTHERN ALASKA
COMPILED ON A MERCATOR PROJECTION BY DAVID F BARNES U.S GEOLOGICAL SURVEY
BASED ON MEASUREMENTS AT CIRCLES: THOSE ON LAND BY THE U.S.G.S., THOSE AT SEA BY THE U.S.C.&G.S. SHIPS PIONEER AND SURVEYOR AND REDUCED WITH HELP OF W.H. LUCAS, E.S.S.A., SEATTLE