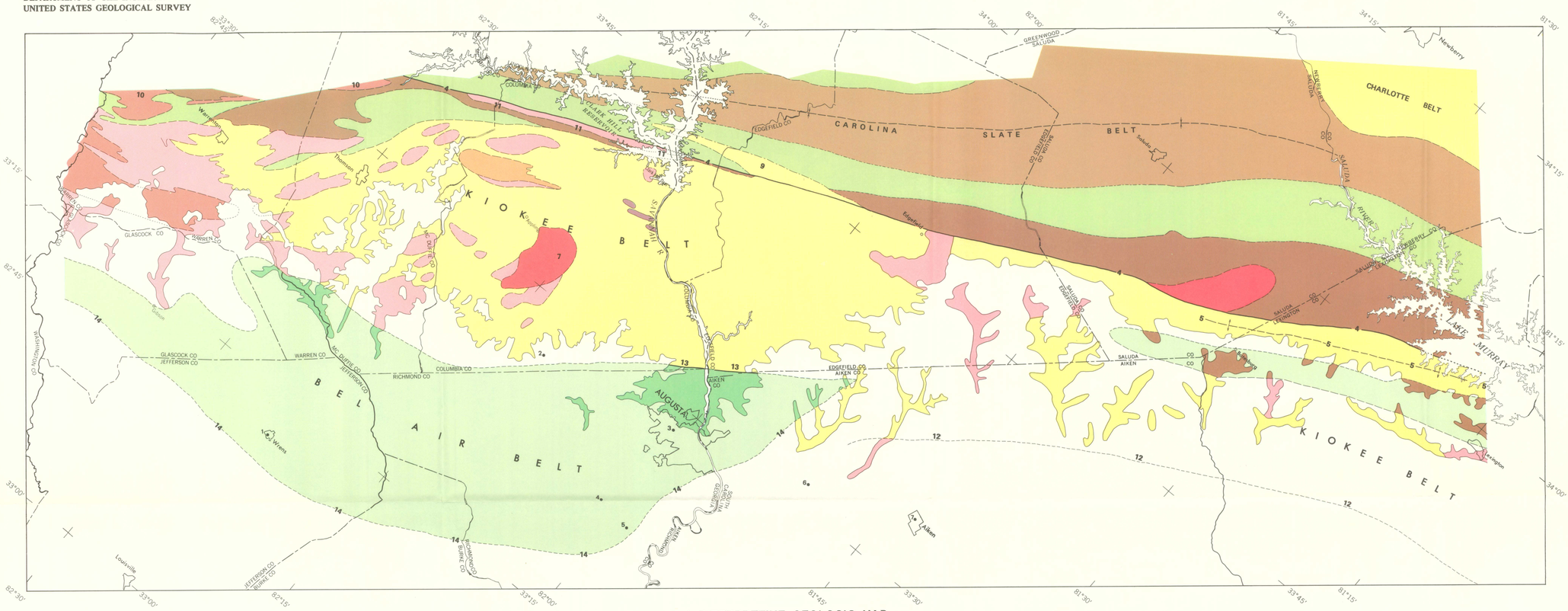
DEPARTMENT OF THE INTERIOR
UNITED STATES GEOLOGICAL SURVEY

GEOPHYSICAL INVESTIGATIONS
MAP GP-893 (SHEET 1 OF 3)



A. INTERPRETIVE GEOLOGIC MAP

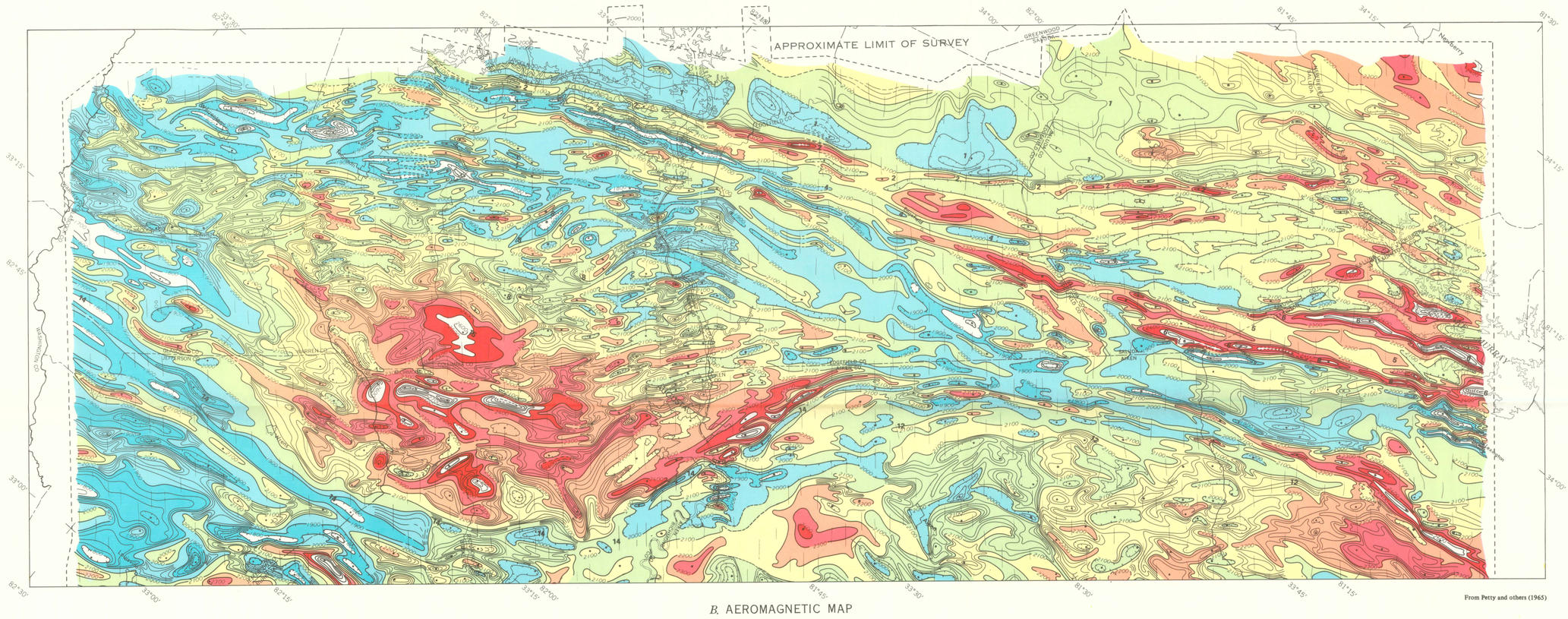
EXPLANATION

Arrangement of units in explanation does not imply stratigraphic relations

- COASTAL PLAIN SEDIMENTARY ROCKS
- Undifferentiated low-grade metamorphic rocks and granitic rocks
- Upper metasiltstone
- Metavolcanic rocks (felsic and mafic)
- Lower metasiltstone
- CHARLOTTE BELT AND KIOKEE BELT ROCKS – Orthogneiss and paragneiss, amphibolite, and migmatite
- HORNBLENDE GNEISS
- GRANITE
- PORPHYRITIC GRANITE
- PORPHYROBLASTIC GNEISS
- ULTRAMAFIC ROCKS
- Low-grade metamorphic rocks beneath Coastal Plain sedimentary rocks

LOW-GRADE METAMORPHIC ROCKS OF CAROLINA SLATE BELT AND BELAIR BELT

Contacts
- Coastal Plain
- Adapted from geologic sources – Dotted where inferred
- Interpreted from aeromagnetic map
- Interpreted from aeromagnetic and aeroradioactivity maps
- Interpreted from aeroradioactivity map and geologic sources
- Fault – Interpreted from geologic and geophysical data
- Anticline – Trace of axial plane interpreted from geologic and geophysical data
- Syncline – Trace of axial plane interpreted from geologic and geophysical data
- 7• Well striking basement – See table 1 for description
- 14 Feature discussed in text



B. AEROMAGNETIC MAP

From Petty and others (1965)

EXPLANATION

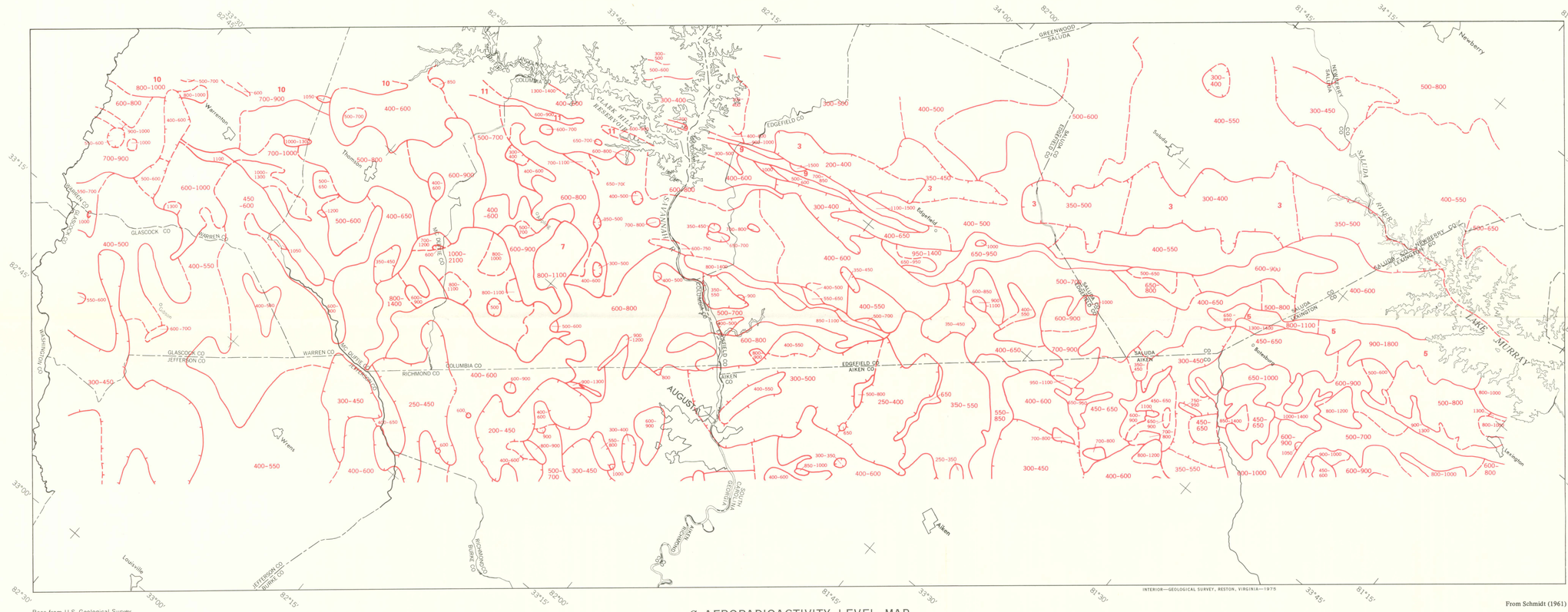
2600 GAMMAS
2500
2400
2300
2200
2100
2000
1900
1800
1700
MAGNETIC INTENSITY

MAGNETIC CONTOURS – Showing total intensity magnetic field of the earth in gammas relative to arbitrary datum. Hachured to indicate closed areas of lower magnetic intensity; dashed where data are incomplete. Contour intervals 20 and 100 gammas

• LOCATION OF MEASURED MAXIMUM OR MINIMUM INTENSITY WITHIN CLOSED HIGH OR CLOSED LOW

FLIGHT PATH – Showing location and spacing of data. NW-SE flight lines at one-mile spacing; 500 feet above ground

10 FEATURE DISCUSSED IN TEXT



C. AERORADIOACTIVITY LEVEL MAP

Base from U.S. Geological Survey

From Schmidt (1961)

EXPLANATION

700–900

RADIOACTIVITY BOUNDARY – Dashed where transitional. Hachures indicate areas of lower intensity. Values in counts per second. NW-SE flight lines at one-mile spacing; 500 feet above ground

3 FEATURE DISCUSSED IN TEXT

SCALE 1:250 000

5 0 5 10 15 20 25 MILES

5 0 5 10 15 20 25 30 35 KILOMETRES

GEOLOGIC INTERPRETATION OF GEOPHYSICAL MAPS, CENTRAL SAVANNAH RIVER AREA, SOUTH CAROLINA AND GEORGIA

By
David L. Daniels

1974

INTERIOR—GEOLOGICAL SURVEY, RESTON, VIRGINIA—1975

For sale by U.S. Geological Survey, Reston, Virginia 22092 price $1.75 per set
Explanatory pamphlet accompanies map