

## PICTURE OF THE MONTH

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This ESSA 2 APT photograph (fig. 1) was taken at 1400 GMT, May 2, 1967. The main feature is a long multilayered frontal band extending from a low center (D) north of the Great Lakes, southward through the Mid-Atlantic States and the Gulf of Mexico.

The low sun angle at this time of the morning permits

one to distinguish between the high and low clouds of multilayered system. The sun highlights cirrus and tall cumulus clouds from the east, while the western edges of clouds cast easily detectable shadows on the lower clouds.

The surface analysis at 1200 GMT with the 1345 GMT radar summary superimposed (fig. 2) shows a prefrontal

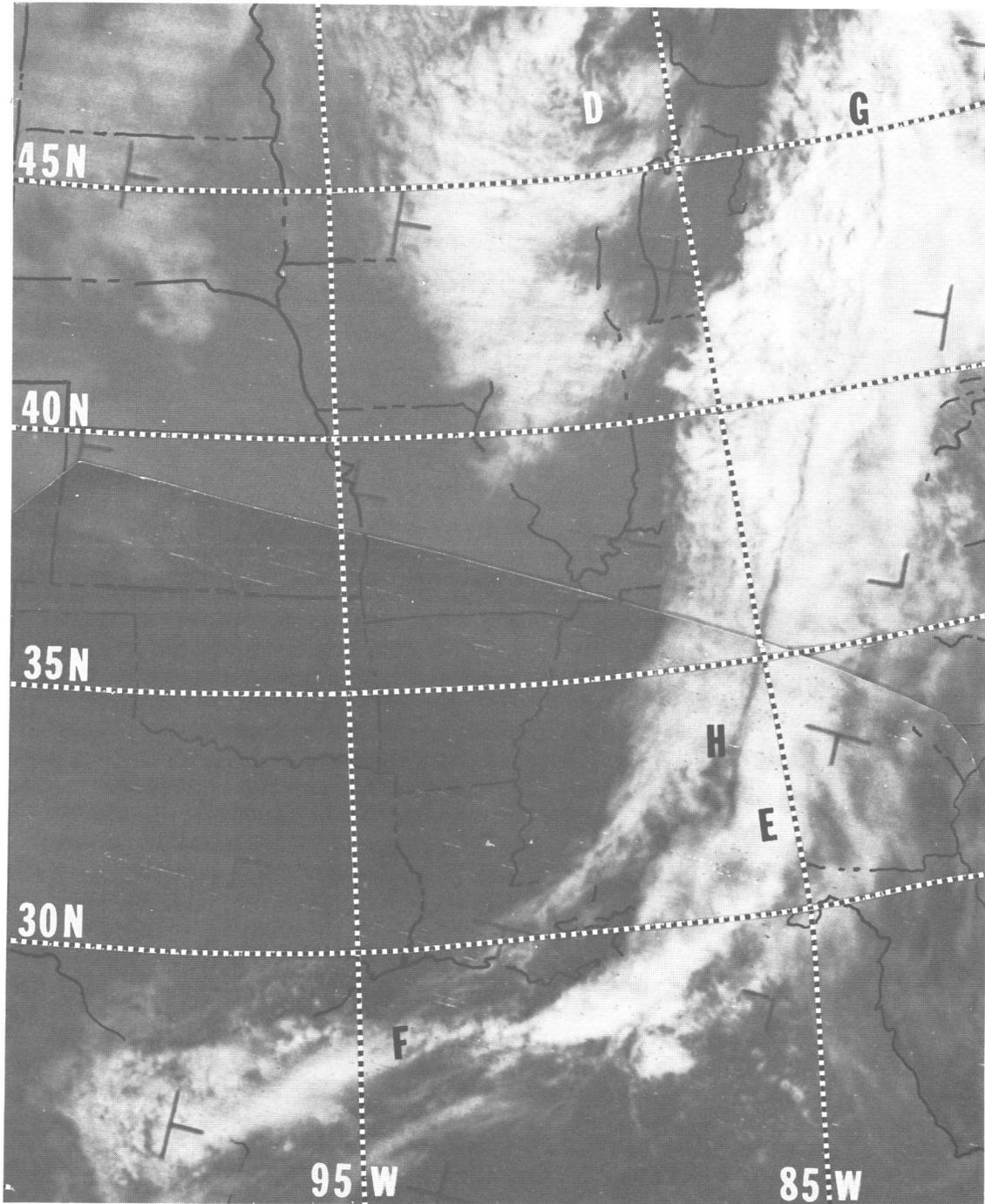


FIGURE 1.—ESSA 2, APT, Pass 5429, 1400 GMT, May 2, 1967.

squall line extending from eastern Georgia southwestward over the Gulf of Mexico. A few of the cumulonimbi, with tops reported as high as 25,000 ft., can be seen along the squall line (E-F, fig. 1).

Of particular interest are the cumulonimbus cells imbedded in the frontal band between 37°N. and 45°N. just east of 85°W. Their 18,000–20,000 ft. tops cast well-

pronounced shadows westward onto the stratiform cloud layer below.

Farther to the east, a long and continuous shadow (G, H) marks the western edge of a long cirrus layer. The variations in brightness of the cirrus layer result from the absence of lower clouds in the darker areas (south of 40°N.) and the presence of lower clouds in the brighter areas (north of 40°N.).

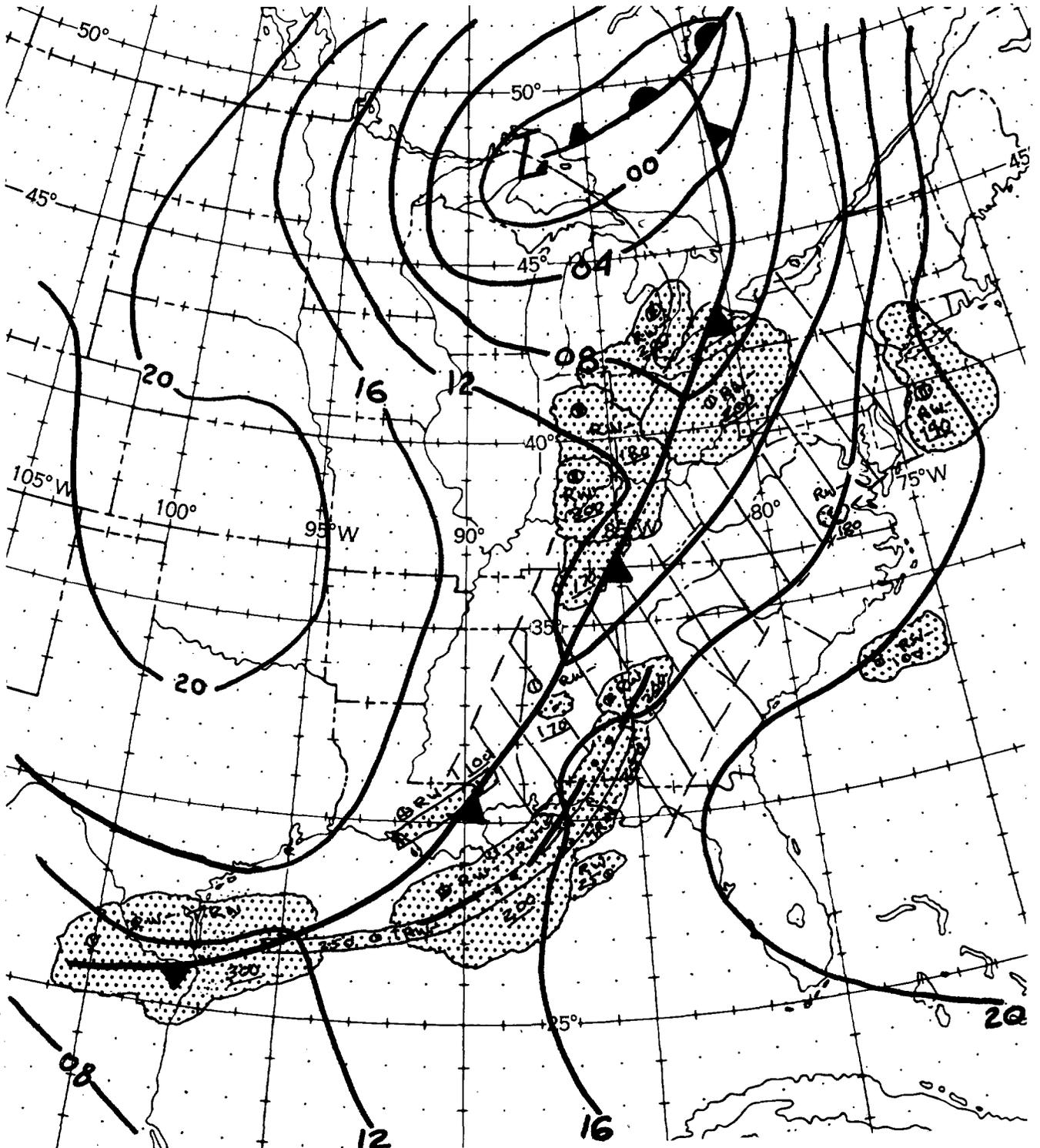


FIGURE 2.—Surface analysis, 1200 GMT, with superimposed 1345 GMT radar summary, May 2, 1967. The stippled areas represent actual radar reports, the hatched areas represent cloud and precipitation data based on surface reports.