

Weather Note

HURRICANE GINNY'S "TAIL"

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Along the Maine coast the strongest winds associated with hurricane Ginny occurred when the center was over Nova Scotia, about 200 mi. to the northeast. These winds were in a rather sharp meso-trough which evidently extended southwestward like a tail from the storm center and moved northward in the face of quite strong northerly surface winds. At 500 mb. the flow was still strong from the south.

The first indication of the trough, or "tail", was noted at Nantucket at 1200 EST, October 29, 1963, when the pressure was reported as *falling* rapidly. At this time Ginny was over 200 mi. to the east-northeast of Nantucket. A similar report came from Providence one hour later. By 1400 EST, pressures were again rising rapidly over Rhode Island and eastern Massachusetts, and winds

at Brunswick and Portland, Maine (see fig. 1 for location of stations) shifted from northeast to northwest. If these are related phenomena, then the trough must have been moving at about 60 kt., or about 15 kt. faster than the hurricane center.

The barograph trace from East Boothbay (fig. 2) shows a sudden drop of over 0.20 in. Hg in a matter of minutes. This drop brought the pressure well below the analyzed field at the time. The pressure returned to synoptic scale values in about one hour. Similar falls and rises within one hour were reported from Rockland (0.24 in. beginning at 1400 EST) and from Bangor (about 0.20 in. beginning at 1500 EST).

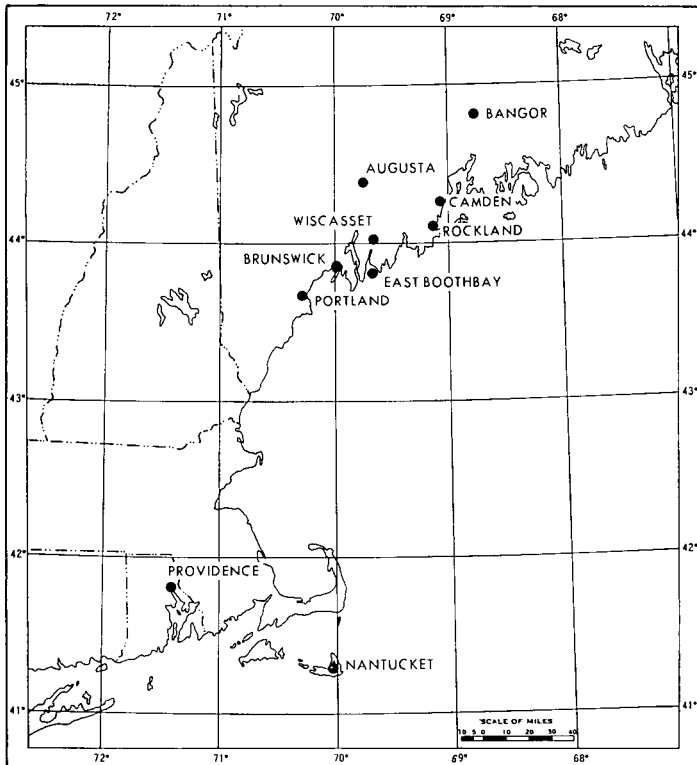


FIGURE 1.—Location of stations mentioned in the text.

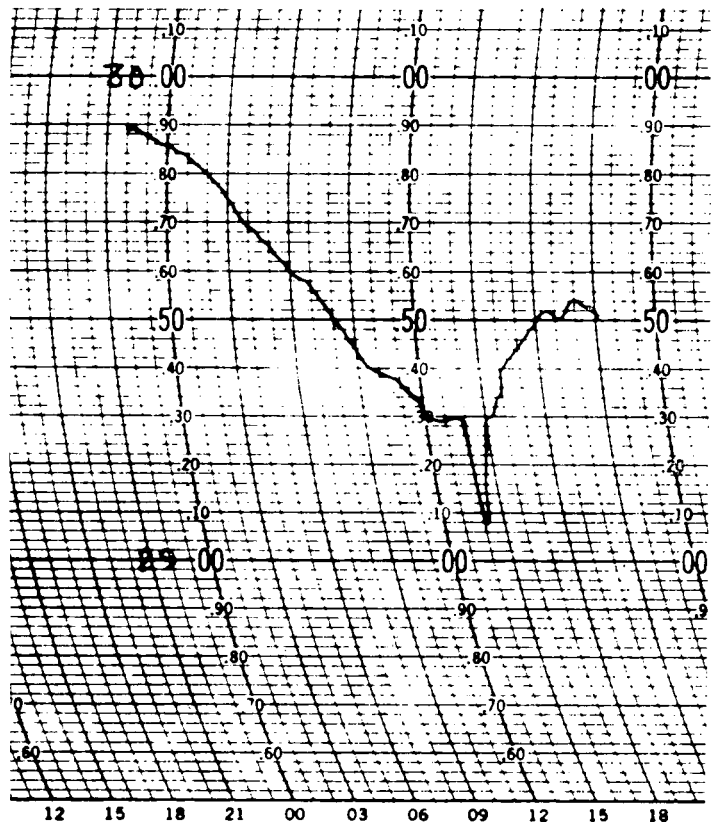


FIGURE 2.—Barograph trace, East Boothbay, Maine, October 29, 1963. Courtesy of Mr. William S. Danforth.

The highest winds were reported as follows:

<i>Time (EST)</i>	<i>Location</i>	<i>Speed</i>
1415-1430-----	Wiscasset-----	"Tornadic"
1426-----	Augusta-----	Gust to 72 kt.
1430-----	Rockland-----	Gust to 87 kt.
1445-----	Camden-----	Gust to 74 kt.

An observer at Boothbay, an experienced seaman, reported a cyclonic circulation in the clouds at about 1430 EST.

It is interesting to note the similarity to the trough reported by Pierce [1] in connection with the New England hurricane of 1938. It is not suggested that this is a New

England peculiarity, but it may be associated with strong southerly upper winds which are almost a prerequisite to hurricanes affecting New England. Perhaps such meso-scale troughs are associated with tornadoes accompanying hurricanes.

REFERENCE

1. C. H. Pierce, "The Meteorological History of the New England Hurricane of September 21, 1938," *Monthly Weather Review*, vol. 67, No. 8, Aug. 1939, pp. 237-285.

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CORRECTION

May 1964 issue, pp. 251 and 252: In the legends to figures 1 and 2, the date should be September 12, 1961.