Supporting Ferry Command – the Atlantic "Weather Ships"

(by Robert G Pelley, 2023/07/22)
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Flying across the Atlantic in the early days could be risky under the best of circumstances. In the winter, storms on the Atlantis made things even more dangerous. Even later during the year, the remnants of hurricanes up from the warm waters of south could case difficulties. Information on both on current conditions and longer-term weather patterns were essential to safe ocean travel, both on the water and, more importantly, in the air.

An article on the website explains the development of weather facilities in Gander during the war years. The article turns to a particular aspect of how this weather information was actually provided. It is the story of "weather boats".

The use of weather boats was not a new phenomenon suddenly invented for the war. In fact, the first attempts were made by the British in the 1860s. In certain places lightships replaced lighthouses. They tried connecting some of these by undersea cable for the purposes of receiving weather information. In the early 1880s, there was a project thought up to put a cable-connected boat in the mid-Atlantic. The difficulty of using undersea cables with bobbing boats put paid to that idea. One could argue that the arrival of decent ship-to-shore wireless telegraphy was as much an impetus for weather ships as the war itself.

In 1927, the year that Lindberg flew solo across to Paris, an aircraft designer by the name of Grover argued that the use of seaplanes and a string of weather ships "would result in regular ocean flights within ten years". The use of flying boats though Botwood was proof that he was headed in the right direction. During 1936 and 1937, the British Met Office installed a meteorologist aboard a North Atlantic cargo steamer to take special surface weather observations and release PiBALs (pilot balloons) to measure the winds aloft at 00h00, 060h0, 12h00, and 18h00 Greenwich Mean Time..

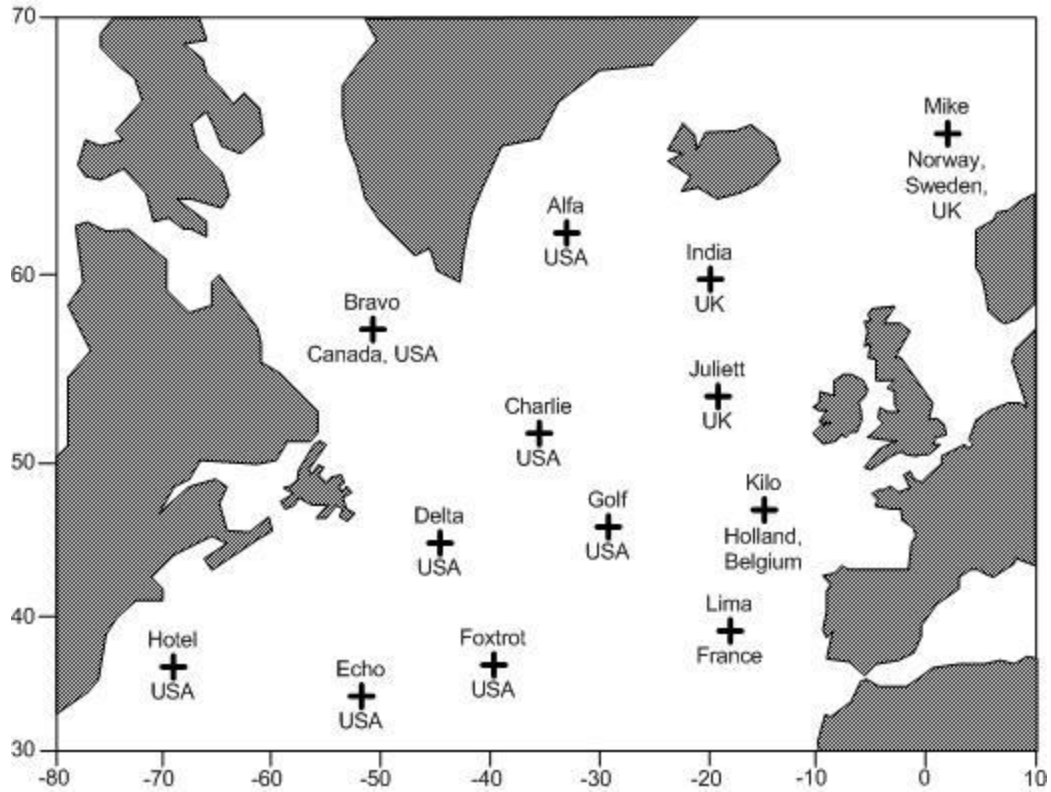
In 1938 and 1939, France, though not involved with transatlantic flights, established its own merchant vessel as the first stationary weather ship. It was kept in operation during the war but placed off the coast of Spain, after being replaced by a Belgian Equivalent.

Due to the crash of a Pan-American Clipper in the Pacific 1938, US Coast Guard vessels started to be used as weather ships. On January 25, 1940, the US Atlantic Weather Observation Service was authorized by President Franklin Delano Roosevelt.

For the first year this was done by two 100-meter-long US Coast Guard Cutters. But because these cutters were required elsewhere, in late 1942, they were replaced by six cargo ships carrying radar, two deck guns, anti-aircraft guns, and depth charges, but had no SONAR to spot submarines. It for that reason that one of them, with a crew of 121 was lost in the autumn of 1942. By the end of the war, sixteen weather boats were deployed in the North Atlantic (with more along the southern route and in the Pacific).

The following map, from the Ferry/Transport Command 1944 "Route Book" show the general disposition of these weather ships:

Another map, closer to the end of the war, gives the position names and nationality:



As can be seen, most of these weather ships were operated by the Americans, with one operated by the French, one by the Belgians, two solely by the UK and another jointly with the Norwegians. Canada was surprisingly little involved in this weather reporting. It shared one position with the Americans, namely "Bravo" (called earlier Baker, roughly between Labrador at Greenland, not too far offshore from Makavik.

It might be of interest that the Germans also tried their hand at weather ships as well. Their desire for met information was obviously not based on the ferrying of aircraft across the Atlantic. They had though two other very good reasons. Firstly, knowing what the weather would be like might help predict convoy movement and the best submarine attack angles. Secondly, knowing the weather patterns over the Atlantic might provide clues as to the timing of Allied operations, not the least being a landing in Northern Europe.

They deployed four substantial weather ships around May of 1940 but by late fall, three of them had been sunk, forcing the Germans to use fishing boats. These boats did not code their weather reports but used their highly secret Enigma code machine, the same as that used on the U-boats. These weather ships were for all intents and purposes unable to defend themselves. British authorities therefore planned therefore to mount one or more operations to capture a German weather ship. Two such actions were carried out, where boarding parties seized very valuable documents including the precious Enigma code books. The weather ships were then sunk by gunfire and radio messages sent to give the idea that the ship had been sunk before any boarding party could have gone aboard.

As for the Allied weather ships, it was believed that the weather information was not picked and used directly by the Met office in Gander. It would appear that this information was collated by the RAF met specialists in Dorval and then forwarded to local airports.

After the war, the utility of weather ships became even more apparent with the arrival of commercial transatlantic flights. As a result, the International Civil Aviation Organization (ICAO) established a global network of weather ships in 1948, with 13 to be supplied by Canada, the United States and several European countries.

Canada and the US continued to share responsibility for station Bravo until mid-summer 1950. At that point, Canada took over responsibility for station "Papa" about 900 miles west of Esquimalt (Victoria). This station was cancelled in 1981. The global agreement expired in 1985.

Today this collect of weather information is done either by cheaper automatic radio-bouys or by satellite, no more need to spend a month at sea on the stormy, cantankerous Atlantic!