

HOW NORTH ATLANTIC STEAMER TRACKS MAY BE MADE SAFER AND SIMPLER

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When steamers began to supersede sailing vessels in the North trans-Atlantic trade there was, at first, no attempt to regulate their track. Captains made their own tracks, according to their own judgment, and there was a very wide variation in their judgment. The loss of the United States mail steamer *Arctic* with the lives of 300 men, women and children, in collision in fog with a French vessel 40 or 50 miles east off Cape Race in October 1854, first appalled the public mind with its enormity and then aroused it. Primarily, it aroused Maury, who by February, 1855, had developed, published and recommended for adoption steam lanes to and from Europe, some features of which are in effect this day, month and year, with some important variations. There was no power of enforcement, except the force of reason and of public opinion. In 1891 five of the principal transatlantic steamship companies made a track agreement and formally adopted specified routes to be followed by *vessels of their lines*, which routes were in their most essential features what had been recommended by the United States Hydrographic Office for four years past. Tracks had been shown on the Pilot Chart since May, 1884.

These routes are compulsory only as regards vessels of companies party to the agreement, and even then are not always strictly adhered to; individual captains departing therefrom as judgment, interest, or disregard of authority may dictate. When there are repeated departures from an agreed-upon route, it would seem to indicate that there is something wrong in the route, the company or the captains. Of course, there is nothing to compel the vessel of a company *not* party to the Track Agreement to follow a particular route, except good judgment and good sense.

The Hydrographic Office has made it a practice to show tracks on the Monthly North Atlantic Pilot Chart, as adopted by the North Atlantic Track Conference, in addition to others not within the scope of the conference. The number of these tracks has increased from time to time since their first appearance, and their arrangement has undergone numerous variations. The most important factor affecting the latter is the movement of ice on the Grand Banks, though the presence of fog and fishing vessels, Gulf Stream and Labrador current are also considered.

The North Atlantic Lane Routes are divided into two classes by the Track Conference, *viz.* United States and Canada. There are eighteen or nineteen lines parties to the former, and about ten to the latter. They are English or Continental lines, except that the New Zealand Shipping Company is a party to both. The Cunard and White Star Line in Liverpool, during the ice season, decide on shifting tracks; on general track matters the Cunard acts for the English lines and Hamburg-America Line for Continental lines. Seven tracks have been agreed

upon, lettered A to G; no track is given for the North of Scotland or South of the English Channel, presumably because these lines have no vessels regularly engaged in that trade.

Track "C" crosses the 50th meridian, in latitude 42° eastbound and 43° westbound until February 1st, when it changes to Track "B" crossing the 47th meridian in latitude 40°30' N. eastbound and 41°30' N. westbound. Track "E" crosses the 50th meridian in latitude 45°25' N. eastbound and 45°55' N. westbound until February 15th, when it changes to Track "D" crossing the 47th meridian in latitude 42° N. westbound and 43° N. eastbound. Note that the southern track of "E" is eastbound and of "D" westbound.

The foregoing is given to form a clear picture of the authority and purpose of the North Atlantic Steamer Routes, their location and the dates they become effective. Tracks "C" and "E" are used in the month of January, and it is with reference to these, in particular, and with Tracks "B" and "D" that by a change in arrangement the tracks may be made *simpler* and *safer*.

The present arrangement as to Tracks "C" and "E", as given on the Pilot Charts are well known and it will be noted that there are sixteen points where eastbound and westbound tracks cross between the 20th and 50th meridians.

The figure shows an arrangement whereby these crossings may be reduced from *sixteen* to *two*. Furthermore, the westbound tracks are grouped inside of the eastbound tracks, giving more freedom of movement to both, which is of material benefit during the stormy weather months when these tracks are in use. That east and westbound vessels, at present, have difficulty in keeping off opposing tracks, is well known to mariners, and the *arrangement* is primarily responsible for it.

The means by which the number of crossings are reduced are as follows :

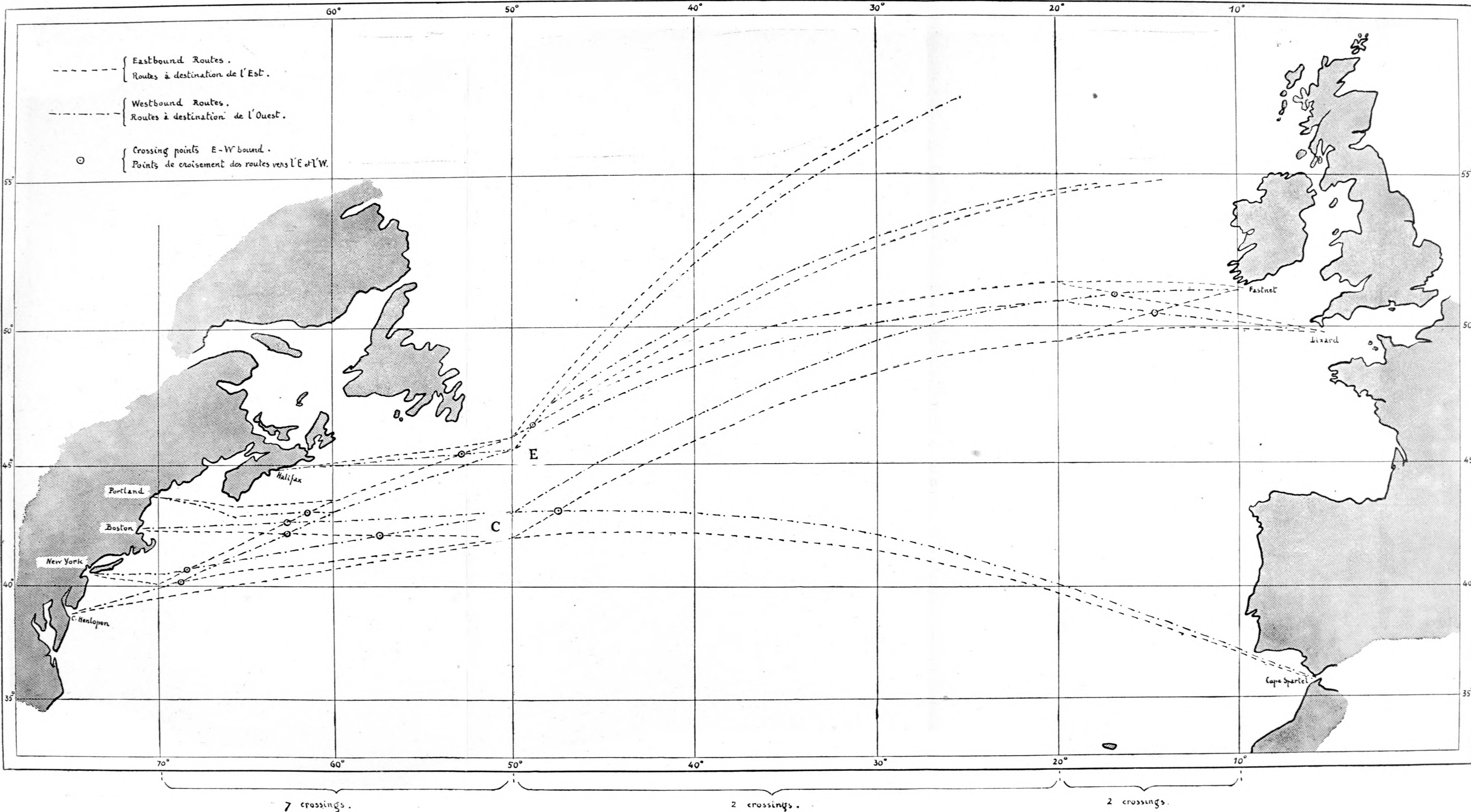
First.— On Track "C" there is but one eastbound and one westbound track between the 50th and 20th meridians. The former forks or divides at the 20th meridian for traffic to the English and Irish Channels, and traffic *from* these two channels unite at the 20th meridian.

Second.— The Southern track of "E" is made *westbound* the same as "D" and (for the same reason) as by being next to a westbound track just south of it, it naturally follows that a crossing of east and westbound tracks is eliminated.

Third.— The "North of Scotland" or Pentland Firth is reversed (that is, the south track made *westbound* for the same reason as applies to "D" and "E" again eliminating unnecessary crossing).

Fourth.— Tracks going in the same direction belonging to *adjacent* tracks are *joined* before coming to a track going in opposite direction. This not only reduces crossing points, but localizes them so that masters of vessels may know where to expect to meet oncoming vessels.

The traffic—both cargo and passenger—between the English and Irish Channels and United States ports is the heaviest and most important in number and tonnage of vessels, and is now on Tracks "C" and "E". The effect of this change of arrangement of Track "C" alone may be briefly stated as follows. Assuming that 20 miles between opposite tracks constitutes a collision danger zone, this zone is reduced some 1,200 miles in a round trip from New York to the English Channel: some 1,600 miles in a round trip to the Irish Channel, the *crossing point* of east and westbound traffic is moved some 900 miles inshore and the collision danger zone due to crossing tracks reduced from 515 to 131 miles. A similar advantage applies to Tracks "E" and to the North of Ireland and North of Scotland tracks. In addition, as stated before, the number of crossings is reduced from sixteen to two between the 20th and 50th meridians, and most of them are in a heavy fog area. A vessel westbound from the English Channel to New York would cross no eastbound track between the 15th and 58th meridians on Track "C" or between the 15th and 62nd meridians on "E". Besides she would have all the sea room between the eastbound tracks of "C" and "E" in case of bad weather, and would have a clear track for over 1,700 miles.



55°

50°

45°

40°

35°

55°

50°

45°

40°

35°

60°

50°

40°

30°

20°

10°

70°

60°

50°

40°

30°

20°

10°

New York

Boston

Portland

Halifax

C. Henlopen

Fasnet

Lizard

Cape Spartel

E

C

The lanes to and from Europe laid down by Maury seventy years ago, are a classical masterpiece in Hydrography, Seamanship and Navigation. The lane *to* Europe is essentially that of track "C", and *from* Europe that of track "E". The former, though longer, takes advantage of the Gulf Stream current; the latter takes advantage of a shorter track, avoids head currents and profits by the Labrador current.

Mariners and steamship companies are deeply concerned in safe steamer tracks, but those most vitally concerned are the travelling public, and in this matter public opinion is stronger than any agreement or any law. Let those Companies that follow the Track Agreement state on their circulars, advertisements or elsewhere the fact that they do so, then the public, travelling or shipping, can choose between safety and speed, if they wish. While a small increase in distance will result in some tracks, this is more than counterbalanced by the fact that less time will be lost in case of fog by vessels stopping on hearing fog whistles of approaching vessels. The menace of a marine disaster, by collision in fog in mid-Atlantic, exists in the present arrangements of steamer tracks. It can be largely eliminated by a change which combines simplicity with safety. It is meant to save worry, money, time and human life.

