S.S. "DANIEL WEBSTER"

Dimensions:- 439.5' x 60.0' x 36.66'

Scantling Nos. 16110 & 42500

Proportions: Length = 11.98 depths to upper deck

This vessel, built in 1919, is of the shelter deck type with scantlings increased for deep loading, and is framed longitudinally, with poop, bridge, and forecastle. She was originally classed 100A1 "Shelter Deck with Freeboard". The class was withdrawn in 1921 at Owners' request and (...) inserted.

A letter has now been received from Mr.French forwarding plans of midship section, typical bulkhead plan, and general arrangement in connection with the proposed reclassification of the vessel and conversion from a general cargo carrier to a bulk oil carrier. These plans have been submitted by Mr.Geo.B.Drake, of New York, and have been approved by Mr.French for the class 100A1 "Carrying Petroleum in Bulk".

The plans have been examined and it is found that in several respects they are not in accordance with, or equivalent to the practice of the Committee for vessels of this type, and class and the following modifications should be complied with:-

1. No particulars of the lengths of the tanks are indicated on the plans, and if these exceed 30 feet the scantlings of the webs on the transverse bulkheads should be increased in the ratio of the length of the tank over 30 feet.

2. It would appear that the engines are to be moved from amidships to the after end, and the space amidships arranged as oil compartments. If, however, this is not the case, and the machinery is to be retained amidships, suitable scarphing arrangements should be made at this part.

athwartship

3. At least 30" of continuous tank top plating should be retained at each floor to provide the necessary top member of these girders, and the connection of the ~~same~~ girders to the bottom shell plating should be reinforced by electric welding for three spaces at the margin and at each side of the centre line.

4. The stress on the side transverses is in excess of that usually accepted by the Committee in such cases, and it will be necessary either to increase the vertical dimensions of the new brackets which are to be fitted or, alternatively, to fit a ~~rider~~ plate to the face angles.

5. The brackets which are to be fitted to reduce the span of the side longitudinals should be increased from 21" to 36" excepting at the 12" channels at the upper part of the ~~bulkhead~~ bilge. The brackets should be flanged on the face.

6. An athwartship shelf plate should be fitted to support the transverse bulkheads on the second deck level where these bulkheads come in way of the existing hatchways. A suitable fore and aft shelf plate should also be fitted in way of the hatchways.

7. Brackets should be fitted top and bottom to alternate vertical stiffeners on the 'tweendeck transverse bulkheads.

8. The top plates on the centre line bulkhead should be 7/16" and 3/8" respectively.

9. The holes in the longitudinal wash bulkhead should be kept as small as possible, so as to provide the maximum amount of longitudinal material.

10. The welding should be to the Surveyors' satisfaction, and the electrodes used for all important parts should comply with the requirements of Clauses 1 - 7 of the Rules for the Application of Electric Arc Welding to Ship Construction.

11. On account of the large hatchway openings which are fitted in this vessel, the longitudinal strength in way of the wells is not equal to that of vessels to which the deeper

loading for tankers under the Load Line Regulations is permitted, and therefore a freeboard corresponding to a full scantling cargo ship only could be assigned.

If the above deeper loading is required, it will be necessary for a substantial doubling plate to be fitted to the strake of plating alongside the hatchways, the doubling plate to extend from within the poop to within the after end of the bridge, and from within the fore end of the bridge to the three-fifths length forward.

20.6.36.

Rd. 5.6.36.
Answd. 22.6.36.
2 plans returned.