

INVESTIGATION INTO THE CAUSE OF CORRODED RIVETING
AND PLATING OF THE S.S. NAUSICAA

5005 Tons Gross, Owners Cia. Auxiliare de Navegation.
Built 5, 1922 by North of Ireland Shipbuilding Co.

Plates used made by :- Stewart & Lloyds
Consett
Phoenix, Dusseldorf.

Launched 11th May 1922, completed 26th May 1922.

1st. Dry-docking January 1923 at Antwerp.

The Antwerp Surveyors reported a number of plates (35 more or less affected) and the points of a large number of rivets found to be corroded. The Owners proposed to again dry-dock in about 2 months time for further examination and repairs and the Antwerp Surveyors placed a Subject on the Class for this to be done, mainly with a view to protecting the Owner's interests in their intended claim against the Builders.

The Classing Committee desired that an investigation be made into the causes of the reported corrosion.

As a preliminary step the ports at which the vessel had called during the period between launching and dry-docking was ascertained from the Owners and enquiries made at each regarding the quality of the water at each - the files do not give the result of this enquiry except in the case of Londonderry at which the vessel had layed for 85 days compared with a week or less at other ports. The Londonderry water was stated to be deep and clean.

In March 1923 the vessel was examined in dry-dock at Nantes by representatives of the Owners, Builders and Underwriters. 18 plates starboard and 7 port found affected the worst being E 6, 8 & 9 (Upper turn of bilge) Starboard side. The corrosion on plates c 13 & 14 starboard and B 3, C 3 and D 2 port were local and located where shores and launching cradle have been.

Nothing done at this time except special cleaning and coating, and also the taking of sample drillings ~~were-taken~~ from plates E8 & E9 for analysis.

The Owners proposed a further examination in dry-dock in about 8 months time.

In July 1923 the Builders received a report from the Owners on the investigation made by the "Ecole des Arts et Meteurs", Paris and sent a copy, attached to this report. From this report from Paris all the steel used is subject and a reflection is cast on the sufficiency of Lloyd's tests.

Reports and correspondence sent to Dr. Milton

WS18-0231 (112)

C is not relative
to case

- B (then retired) for his comments, his reply is attached.
He considered the cause was lack of paint combined with
the time elapsed between launching and dry-docking -
steel composition normal. A copy of Dr. Milton's report
was sent to the builders who forwarded copies to the Owners
and in due course was answered by the "Ecole des Arts et
D Meteurs" of Paris who maintained their findings and
conclusions. Dr Milton was requested to give his further
E comments on this corrosion problem and these are attached.
Concluding he states :- " All steels will corrode if
exposed to water or weather if the surface is not protected.
that the chemical composition of the steel is not at fault
is shown by the iron rivets being attacked, by the fact
that there is no difference in the chemical composition of
the plates where they are not attacked and where the
corrosion has been most intense and also by the position of
most of the defects being on strakes most likely to be
E affected by outside influences." Copy attached.

In March 1924 it was proposed by the Builders
to invite representatives of each steelworks to examine the
ship in dry-dock or alternatively that the Society ask the
Steelworks to nominate one Chemist to represent them. The
Society refused but agreed to send their own representative
to attend any conference arranged.

- F A letter from Sir George Hunter and London's
reply are attached.

- G The Owners were advised of the Society's
attitude and wrote the attached letter expressing a lack
of confidence in Lloyd's Register.

In May 1924 the vessel again dry-docked
and was examined by the following :-

Dr Milton & Mr. Laws - Consultants L.R.
Toyne and Nicolas - Surveyors L.R.
Also representatives of Owhars , Builders, Consett Steel,
and French Underwriters.

- J Interim report by Mr, Laws and report by Mr Nicholas attached.
L & K Sir Robert A. Hadfield's report attached commenting.
M Final Report by Society's Consultants dated 7th August 1924
attached.

NO FURTHER CORRESPONDENCE

NO REPAIRS WERE CARRIED OUT AT ANY TIME DUE TO
ABOVE CORROSION.

Sunk by aircraft 5.38
(Spanish Civil War)



Lloyd's Register
Foundation
8.12.61.

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