C Ø P Y.
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HOTEL ROYAL AQUILA,
GENOA,
I T A L Y.

25th November, 1932.

Vickers-Armstrongs Ltd,
al Construction Works,
BARROW*IN*FURNESS.

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We have now completed all possible trials for the Gyro-
rs on board the "CONTE DI SAVOIA", and until we encounter
s on the way across from Genoa to New York, we shall have
o have the final trials and tests.

We have had various tests up to date, and many demonstration
notable people including the Crown Prince of Italy and staff,
with the ship from Naples to Genoa.

The final and acceptance trials of the stabilisers were
ide of Genoa Harbour, with the ship at anchor in still water,
g worked splendidly and the "ITALIA" engineers were satisfied
results. The quenching power was slightly in excess of 4.7,
specified.

Here is a summary of the tests.

All three stabilisers rotors spinning at 800 r.p.m.

Rolled ship with Nos.2 & 3 stabilisers = $8\frac{1}{2}^{o}$

" " " " 1;2 & 3 " = $16\frac{1}{2}^{o}$

" " " " 2 & 3 " = 13^{o}

Stabilised after rolling with No.1

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Rolled ship with Nos.2 & 3 Stabilisers = $14\frac{1}{2}^{o}$

Stabilised with no.1

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Rolled ship with Nos.2 & 3 Stabilisers = $15\frac{1}{2}^{o}$

Stabilised with No.1

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Rolled ship with No.1 & 2 Stabilisers = 16^{o}

Stabilised with No.3

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Rolled ship with Nos. 1 & 2 Stabilisers = $15\frac{3}{4}^{o}$

Stabilised with No.3

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Rolled ship with Nos.1 & 2 Stabilisers = 14¾°

Stabilised with No.3

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Rolled ship with Nos.1 & 3 Stabilisers = 15½°

Stabilised with No.2

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Rolled ship with Nos.1 & 3 Stabilisers = 15½°

Stabilised with No.2

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Rolled ship with Nos.1-2-3 Stabilisers = 18°

Stabilised with Nos. 1-2-3 "

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The readings in degrees are from an inclinometer but they d with the readings on the roll and pitch recorder, and represent l degrees of roll.

In one test previous to these we rolled the ship with all three ers spinning at 800 R.P.M. to 22 degrees total.

Mechanically up to date everything is perfect and the highest ures we have had during any tests have been 105 f., this was from rn oil from the bearings.

This ship has had exhaustive machinery trials including a .e trial on the way from Trieste to Naples, during this trial she ed 110,000 S.H.P. the 4 shafts running at 230 R.P.M. and with an speed of 28.6 knots.

On a 9 hour full power trial she developed 130,000 S.H.P. with .M. (average) and 29.5 knots average. They were hoping to reach s but up to date have not done so.

During the full power trial everything was opened full, the were designed for 105,000 H.P. and are Yarrows.

We leave Genoa on Wednesday, November 30th, and expect to be fork on December 6th, leaving again on December 14th and reaching ecember 22nd, in which case I shall just manage to be home for e, unless we have a serious breakdown with the gyros, and then gkinson would like me to stay to open up. I am not anticipating able because up to date all three gyros have run so well, and I eat confidence in the whole job.

Mr Hodgkinson Has approved of the figures I have sent, and to be remembered to all at the Barrow Works.

Yours faithfully.

Signed:- J.F. Wickham.