

"The nominal horsepower of a ship's engines is determined from the formula

$$\text{h.p.} = \frac{D^2 + D1^2 + D2^2 + \dots}{30} \text{ where } D, D1, D2, \text{ etc., are the diameters of the}$$

respective cylinders in inches, the number of cylinders according with the number of expansions given the steam; that is, the nominal horsepower is the sum of the squares of the cylinder diameters in inches, divided by 30. The figure resulting from the application of this formula is of little or no value in arriving at a determination of the actual power of a ship's engines but is merely of use as a reference for appraisal or similar purposes.

"The actual power of a ship's engines, or the indicated horsepower, is determined by applying the well-known formula  $\frac{p \cdot l \cdot a \cdot n}{33,000} = \text{h.p.}$  to each cylinder, and adding the results. In this formula,  $p$  is the mean effective pressure in lb. per sq. in., as established by the indicator cards,  $l$  the length of the stroke in feet,  $a$  the area of the piston face in square inches, and  $n$  the number of single strokes of the piston per minute (revolutions of the engine per minute -Ed.).

"While nominal horsepower is used by the Marine and Fisheries Department in its list of shipping (and Lloyd's Register used it too -Ed.), the actual or indicated horsepower of any ship's engines should appear on the registry certificate."

We hope that this will lift a veil of darkness from the eyes of "Scanner" readers and help resolve the puzzle which horsepower figures have long caused for non-engineer historians.

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### THE RUNNING DEER

Last issue, we featured as our Ship of the Month No. 246, the steamer MOHAWK DEER, (a) L. C. WALDO (16), (b) RIVERTON (44). We took nine pages to tell the story of this ship which we had covered (albeit grossly inadequately) in just over two pages back in November of 1970. We hoped that our updated history of the ship would stir up a flurry of activity amongst our members, and you have NOT disappointed us! In fact, so many of you have responded with so much additional information, and so many invaluable photos of the ship, particularly views of her before her lengthening and during her salvage on Lake Superior after The Great Storm of 1913, that we will be able to run a full-length follow-up feature in the next issue. Yesssssss!!! That's the kind of response we wish our Ship of the Month features could always stir up!

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### MORE LAY-UPS

We are indebted to George Lee and Gerald Hutton, who faxed us the following information which, unfortunately, was delayed in reaching us.

**Hamilton:** JOHN B. AIRD, ALGONTARIO, ALGOPORT, ALGORIVER, ALGOWEST, CANADIAN EXPLORER (hull without stern), CANADIAN LEADER, CANADIAN MINER, CANADIAN NAVIGATOR, CANADIAN PROVIDER, ECOSSE (tug), HAMILTON ENERGY, JAMES NORRIS, PETITE FORTE (tug), PROVMAR TERMINAL, PROVMAR TERMINAL II, ST. MARYS CEMENT III (barge).

**Port Lambton:** HAMMOND BAY (excursion), NANCY A. LEE (tug).

**Sarnia:** ALGONORTH, ALGORAIL, ALGOSOO, ALGOWAY, CAPT. HENRY JACKMAN, DUC d'ORLEANS (excursion), MENASHA (tug), PATERSON.

We regret the fact that these lists are not in sequence with the rest of our lay-up report on pages 11 through 13.

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