



Daily Express Photograph

# “TRAMONTANA”

## First home at Torquay

AT the time of the Boat Show this year Mr. R. S. Wilkins asked Vosper, Ltd., to design and build a boat with the object of having a shot at winning the Offshore Power Boat Race, and “Tramontana” was the result.

The maximum waterline length limit for the event is 40 ft. and as, regardless of other factors, the greater this dimension the less the wave-making resistance and the greater the speed, Vospers chose to approach the maximum—the actual length being 39 ft. 2 in. Naturally, though, speed is also allied to power, weight and hull form and considerable thought was given to these three considerations.

For the engines, the company decided on twin C.R.M.183 ADs. These engines are based on the Isotta-Fraschini petrol units much used in Italian M.T.B.s and similar fast craft. Each delivers 1,150 b.h.p. at 2,000 r.p.m.

### Propeller design

Coupled with power output is propeller design and Vospers used their cavitation tunnel to design propellers with fully cavitating blade backs. For these to be efficient, the engine revolutions had to be increased from 2,000 to 3,000 at the propellers. The motors are mounted aft and the step-up in revolutions is achieved through Vosper vee-drives.

A homogeneous, light structure was aimed at and achieved by the use of techniques employed by the company in building patrol boats. Basically the method is to use glue joints on skin, frames and floors wherever possible, so that the areas of

local stress caused by normal metal fastenings are avoided.

As to the form of the boat, tank tests were carried out on a number of hull forms, including the high deadrise type which was so successful last year, but the one finally selected is very much in line with most modern Vosper craft. That is, it has a high chine forward; the deadrise gradually dying away to, perhaps, five or six degrees at the transom. This form has proved efficient in both theory and practice.

Those who followed the race last year will remember that the steering positions on the two American boats were right at the stern. This year the trend has spread and a number of other craft have appeared in imitation. There are reasons for this right aft position; the principal one being that there is less vertical movement there for the helmsman than in any other part of the boat. On the other hand the position tends to be rather perilous in some of the craft, in that, if the engines fail, a following sea could pour straight over the transom, causing something of a mess. Furthermore, the visibility from right aft is very poor in any sort of a sea. Vospers have not drifted with fashion; the wheel is in its traditional place, just aft of amidships.

As “Tramontana” is almost a pure racing boat, there is little accommodation, but there are two berths, settees and a toilet to provide some comfort in harbour and for those below.

### Principal Dimensions

Length o.a.	42 ft. 3 in.
Length w.l.	39 ft. 2 in.
Beam (moulded)	13 ft. 0 in.
Depth (moulded)	6 ft. 7 in.

A profile view

