

## BROOKE MARINE LIMITED

## REPORT ON ROUND BRITAIN POWER BOAT RACE 1969

Total number of starters	43
Number of craft finished	24
Placing of Ocean Pirate	7th
Prize allocation to Ocean Pirate	Second in the Concours d'Elegance class. First prize for best prepared and presented entry

Final placings and times, together with average speeds are as listed below :-

P.		Hr. Min. Sec	Average Speed M.P.H.
1.	350 Avenger Too	39. 09. 37.7	36
2.	123 U.F.O.	41. 13. 52.1	34 : 50
3.	808 Ford Power —	43. 03. 01.1	33 : 00
4.	707 Ford Sport —	43. 35. 05.5	32 : 75
5.	606 Sea Spray —	45. 39. 06.7	31 : 50
6.	009 Fidulia	47. 22. 53.4	30 : 00
* 7.	323 Ocean Pirate	48. 36. 26.9	29 : 30
8.	600 Pulsar	49. 24. 51.3	28 : 00
9.	655 Miss Sixienoff	51. 20. 46.6	27 : 75
10.	423 Foamflyer	51. 33. 28.2	27 : 50
11.	143 Translucent	53. 07. 44.6	26 : 75
12.	909 Ford Speed —	53. 30. 15.9	26 : 50
13.	239 Grand Espoir	53. 38. 29.3	26 : 50
14.	205 Tornado	54. 38. 33.0	26 : 25
15.	290 Miss Bovril II	54. 43. 00.1	26 : 00
16.	139 Horatia —	56. 35. 02.8	25 : 00
17.	563 Bani Yas	59. 08. 56.4	24 : 25
18.	022 Foxie	59. 31. 29.1	24 : 00
19.	343 Psychedelic	61. 54. 19.8	23 : 00
20.	224 Sand Grounder	65. 20. 54.9	21 : 75
21.	440 Iroquois G.T.	70. 52. 10.6	20 : 00
22.	515 Romany Lass	76. 36. 48.8	18 : 75
23.	334 Sun Power	76. 53. 10.2	18 : 50
24.	430 Willick II	85. 11. 30.4	16 : 75

Total Milage = 1.403

The Pirate's position in each leg, together with running times and average speeds are as follows :-

Leg No.	Position	Port (From and To)	Time	Average Speed M.P.H.
1.	16th	Portsmouth to Falmouth	5. 38. 53	30. 8
2.	17th	Falmouth to Milford Haven	5. 06. 39.0	28. 5
3.	20th	Milford Haven to Isle of Man	5. 40. 25.4	29. 0
4.	11th	Circuit of Isle of Man	2. 17. 50.8	27. 5
5.	16th	Isle of Man to Oban	5. 57. 18.3	28. 0
6.	7th —	Inverness to Dundee	5. 57. 24. —	31. 3 —
7.	2nd	Dundee to Whitby	5. 50. 37.2	26. 5 —
8.	12th	Whitby to Gt. Yarmouth	5. 01. 01.8	30. 0
9.	11th	Great Yarmouth to Ramsgate	2. 56. 24.5	28. 5
10.	13th	Ramsgate to Portsmouth	4. 09. 52.9	28. 5 ←

## COMMENTS

1. In general weather conditions were such as to allow the light fast boats to use their near maximum speeds except for Leg No. 4, where approximately 3/4 hours of rough weather was encountered.

Leg No. 6. was run during foggy conditions, which benefited the Pirate and other craft with radar.

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Leg No. 7 was run under rough weather conditions, and the Pirate was positioned second, lead only by 2 minutes, this shortly being established due to (a) an oil leak problem on the Pirate's engines, and (b) due to the weather conditions easing considerably near Whitby.

- 2. The overall position of seventh put the Pirate in with the smaller lighter boats, resulting in her leading the cruiser type craft competing.
- 3. Mechanical troubles with the Pirate were confined to (a) fractured gearbox pipe fitting prior to the race, (b) one broken turbo charger stud and (c) leaking oil seals at forward end of crankshaft on both engines.

The broken turbo charger stud in no way interfered with the running of engines, and a special clamp was made at Inverness to affect a temporary repair.

Oil seal leaks on forward end of crankshafts resulted in the R.P.M., having to be dropped approximately 100 revs, during the Dundee/Whitby run, and although the new seals did not affect a complete cure, it was never necessary to reduce engine R.P.M., as a result of further leakage from these seals.

No other mechanical problems were experienced during the race, except for a damaged starboard propeller, occasioned by striking floating timber approximately 1 1/2 hours from the finish at Portsmouth. This sustained damage resulted in a lowering of the engine R.P.M., to avoid excessive vibration.

All other mechanics operated efficiently during the race, and no problems were encountered with sterngear, rudders, controls, or steering gear, etc.,

- 4. Cummins engineers were in attendance at every port, and were most helpful, three of them working all through the night at Whitby in an attempt to completely cure the oil seal leakage referred to above.
- 5. Radio operation on M/F, VHF and aircraft equipment proved most satisfactory, the M/F equipment requiring only attention at Inverness.

Radar operation was extremely good, the set only requiring some attention at Whitby.

- 6. Particular reference must be made to the Securitor/Pyc equipment, the service and equipment operating extremely well during the whole race period, and the service provided by Securitor, the interest by their operators, and the helpful attitude generally proved extremely useful.

A list of the areas concerning reception at sea will be produced by C. H. M. Dowsett, but generally speaking reception over the whole course was extremely good, barring some areas in Scotland.

GENERAL DAMAGE TO PIRATE:

The fendering on the port side of the Pirate was damaged during mooring at Falmouth and Milford Haven, this damage resulting generally in the barnacle covered piling, general confusion and the fact that many boats moored outside the Pirate for scrutineering purposes, also the fact that Race Organisation was extremely woolly during the period immediately following the finish of any given leg.

A washboard fitted to the wheelhouse top in way of radar scanner was split, resulting apparently from the heavy weather conditions of the Dundee/Whitby leg.

Hull damage was sustained during the Dundee/Whitby leg, resulting in shell fractures around the periphery of the fresh water double bottom tank.

These fractures could not be repaired at Whitby due to tide/slip conditions. However, a temporary repair was made in order to support the shell plating in order to allow the craft to proceed to Brooke-Marine for repairs during the following leg.

Shell fractures were not traced during an ultrasonic test of the hull bottom prior to race commencing. It is obvious, therefore, that these fractures resulted from fatigue due to running time and sea conditions during the race.

Effective repairs were carried out at Brooke Marine and no further signs of damage were apparent at the end of the race or on the return of the craft to Lowestoft.

From examination it would appear that the fractures were due to fatigue resulting from panel movement coupled with the fact that re-welding of the various tank members was carried out prior to the race when the fresh water tank was built into an original void space.

For future construction an additional stringer extension would be advisable, extending through the tank instead of stopping against it.

When the craft is removed from the water, further examination will be carried out with regard to this hull problem and a full report will be issued.

Underwater paint was stripped from the forebody and although quickly re-painted at Lowestoft showed signs of deterioration on return to the Yard.

The echo sounder timber fairing pad was found to have been stripped off during the race, this timber pad was fastened to an alloy doubler, which in turn was welded to the hull. The alloy pad was still attached to the hull without signs of movement, and only the timber had been stripped away. In view of the fact that the timber pad was not important to the operation of echo sounder, this pad was not replaced at Lowestoft.

Handling of the *Pirate*, particularly in bad weather appeared to be good, and the running angle was also good. There was, however, a tendency for the *Pirate* to heel to port when encountering cross currents or the wake from other craft, and there is little doubt that this effect is caused by water flow against the docking skeg.

No comments were made regarding this particular feature during the Whitby or Dundee pre-race trials, although there has been a slight tendency for this heel to take place, which seems to be accentuated by the increase in boat speed from the original top speed of 27 knots.

Obviously as a cruiser the docking skeg is a feature worthy of retention, however, should other races be considered, it would be worthwhile to remove this skeg, (a) to increase the speed and (b) to delete the heeling tendency during cross water flow conditions.

Although two types of compass were fitted to the *Pirate*, one at steering position and one at navigator's position, each of them being a different type, they still were not ideal for the conditions experienced, although many craft were fitted with the smaller type as fitted to our navigator's position. By investigation of compasses fitted to other competitors boats small Gyros or American Constellation compasses appeared to be steady, and well worth future consideration.

#### SHORE SERVICE TEAMS.

The four vans taking part in shore servicing were split as planned into two teams, the A team covering 2,670 miles and the B team covering 2,396 miles, and on each occasion managed to arrive at the various check points and locate the craft reasonably easily.

The general organisation of servicing teams appeared to work fairly well, and the benefit of Pye/Securicor radio equipment proved extremely useful.

## CONCLUSIONS.

In the writer's opinion the following conclusions are worthy of mention:-

By and large the performance of the Pirate was good, bearing in mind the weather conditions experienced.

Performance of the Pirate would have been improved by removing the skeg, however, this could have proved troublesome if the craft had to be slipped.

Crew reports suggest that a slight increase in rudder area would have been of benefit.

Weight reduction would have proved beneficial to boat's speed, however, as much spare equipment as possible was removed from the craft at various legs of the race.

Broadly speaking all equipment and/or fittings of the boat appeared to remain in good working order, with the exception of the log underwater unit which was damaged by a submerged object.

More careful stowage of oil containers would have avoided an electrical short during the final race leg.

In conditions such as were experienced during this particular race, the crew numbers could have been reduced, however, if heavy weather was met during the major race length, the six in number crew would have been ideal.

Race organisers organisation by and large appeared to be rather woolly, information from them difficult to obtain, lack of sign posting to race control, mooring areas, etc., was virtually non-existent, and these spaces were often remote from one another.

A very large number of boats were removed from the water and some frequently for rudder, sterngear and hull attention, particularly during the void day at Inverness and another at Dundee. Many craft were worked on throughout the night period and it is generally felt that if weather conditions had been more usual the list of finishers would have been greatly shortened, particularly in the light faster boat group.

The Ford team appeared to have exceptionally good backing and the use of a helicopter to lead their craft and mark buoy positions was most unpopular with other competitors, but the rules contained nothing which could have banned the use of their aircraft.

It would appear that a team entry such as the Ford group will dominate any such future races, and although perhaps unsportsmanlike, will obviously tend to bag most of the prizes.

It would seem that for such future races a team would ensure some prizes, particularly if a heavy weather and a light weather boat were included. The number of entrants considered a team would depend on future rules, and it would appear that three or four boats would be minimum considered as a team entry.

Should future racing be considered a possibility by the Company, it would seem prudent to consider using the same hull form, but modifying the weight and power at least for one version to give a boat speed of approx. 40 knots, using a hull fitted out with minimum accommodation, etc., just sufficient to comply with the race rules, etc.,