

# December 2004

## To all fellow Bobcat and Catalac sailors

Dear Fellow Members, How the time flies even in winter. The committee and I,

### Wish you a Merry Christmas and a prosperous New Year.

When you receive your 2005 diaries don't forget to log in the 'Rallies' and the 'Meet and Eats' starting with the first of the new season on

## 29<sup>th</sup> January, at midday

To be held in

### 'The Gun' at Keyhaven, near Lymington.

Please also utilise the winter nights to keep your contributions to the Newsletter coming.

Why not follow up the November issue with your own favourite anchorage not forgetting to say how you get there?

With Easter being the traditional time for getting boats back in the water remember that it is early this year (**27**<sup>th</sup>. **March**) but it gives you a whole month to prepare for the first rally on the May Bank holiday weekend to be held at **Bembridge I.O.W.** 

Please don't forget your B.C.C.A. subs. £25.00 by Post...£20.00 by e.mail are now due for 2005.

## Jeremy Bretherton,

Commodore. BCCA."

Nigel Ladd replies to Terry Secretan CL 8.74 "Norma Ann" regarding Yanmar injector removal.

Taking out an injector is easier than changing the fine fuel filter. First undo the fuel line on injector, follow the pipe and undo the union at the other end by using two open ended spanners so as not to remove the pump connector. Next remove the fuel leak off pipe and finally undo the two retaining nuts on injector. Take care not to loose copper washers. I took mine to a local garage they charged me  $\pm 35.00$  to test. Hope this helps.

Nigel Ladd. (Cl.(9.220 Ard-na-greine)

Many Thanks Nigel, ED.

#### Leading a Donkey (iron) to water

The last two or three issues of the BCCA Newsletter have featured, among other things, an exchange of views and opinions on appropriate engine sizes for the Catalac range. May I offer another slant? Although other considerations play their part, in my view there are just three major points to consider when planning an engine change or a new installation. They apply equally to Multihull or Mono.

The first, and to my mind, the least important of the three, deals with the length of the boat's waterline. As you will see from the accompanying power table, the longer the waterline the less power needed to propel the boat at a chosen speed.

As most of us cannot change our waterline length, the second point to consider assumes an even greater importance. Whether we like it or not, most of our trips are made either under power or a combination of sail and power – that is, motorsailing. So, an awareness of fuel consumption and noise which, taken together make up my second point, should be foremost in our minds. Most, if not all engine manufacturers quote performance figure usually expressed as curves on a graph. No doubt you have, like me, wondered why manufacturers quote power (HP) as a product of peak RPM. For example, Volvo quote the Volvo 2010, as fitted to my Catalac 900, as delivering 10HP at 3600 RPM. This might be correct on a bench in a factory, but fitted in a boat, by the time you take into account the power required to drive the alternator, flywheel, gearbox and the attendant friction drain, what you get at the propshaft could be far less than 10HP. To my mind, the HP available should be calculated at say, 2600 RPM. This appears to be the RPM setting favoured by most yachties.

This setting, according to some manufacturers published data and backed up by my personal experience, offers best economic fuel consumption and in terms of noise causes least offense to our ears! What then is the answer?

It would appear to be an engine that subject to my third point which is weight, offers an abundance of power at peak RPM and thereafter when throttled back to economic cruise RPM, say 2600 RPM, gives sufficient horsepower at the propshaft enabling us to deal with a spring ebb or flood whilst sipping fuel without the need for earplugs. Does such a paragon exist? Yes, but there aren't many of them.

When considering replacing my twin cylinder 10HP Volvos which although adequate in still water or in combination with a bit of drive from the sails, would not, on their own, cope very well with a spring tide or, enable me to cover a reasonable distance in daylight under power, unless operating at an ear shattering RPM whilst gussling fuel. I checked out two other makes; Beta and Yanmar. The engine sizes I looked at were in the 15HP twin and 20HP triple cylinder range and coupled to saildrives. The weight of the Beta 14HP (actually 13.5) at 89KG with the gearbox was much less than my existing 10HP Volvos.

The 20HP Beta at 106KG including gearbox was less weight than the Volvos. The 15 and 20HP Yanmars were both heavier than my Volvos. The truly significant difference lay in what all the new engines could deliver at 2600RPM according to their published power and fuel consumption curves. The bigger Yanmar, stated to be 20HP at 3600HP, delivered a staggeringly low 8HP at 2600RPM, coupled to a fuel consumption of 2 litres per hour. The Yanmar 15HP was rated at a mere 6HP at 2600RPM, with a fuel consumption similar to the 20HP. By contrast, the 20HP Beta rated at 3600RPM delivered 17HP at 2600RPM with a fuel consumption of 4 litres per hour. The Beta 13.5HP rated at 3600RPM delivered 11HP at 2600RPM and a fuel burn of under 2 litres per hour.

The conclusion to draw is that when looking at the engine options available, do your research carefully. No two engines are alike, nor do they deliver anything like similar performance figures. If my wallet will run to it, my preferred choice of engine replacement will be the Beta 722 20HP, but, I expect I'll wait for the next boat show in the hope of getting the best price!

I have no connection with the products or manufacturers mentioned.

Finally, treat the manufacturers published performance curves with some questioning. Yanmar quote three different figures for power: Propellor, Crankshaft and Propshaft power curves. The Yanmar Crankshaft power figures are seemingly as good as any. Beta say that they measure at the flywheel/crankshaft so would anticipate a small percentage power loss through the gearbox.

John Green. Cl. 9.906 "Madeleine of Netley"

Thank you John,

I haven't seen the info on the engines you are comparing.

Power: with marine engines the power output is quoted in HP and this is achieved at near peak revs. The more important figure is the torque this is what gives the thrust. Some engines do give a much flatter curve and as such are more suitable for marine or commercial use. The more economical 2600RPM will normally be the point near where the maximum torque is developed. As a general rule the larger the cubic capacity the flatter the power curve but the larger the cubic capacity the suitable for the power curve but the larger the cubic capacity the suitable for the power curve but the larger the cubic capacity the suitable for the power curve but the larger the cubic capacity the more fuel that will be used.

Noise: the four stroke, three cylinder engines will normally require a balancer shaft to make them run smoothly. Without one the engines will shake and vibrate causing increased noise.

The prop size and pitch is equally important. To ensure the maximum hullspeed at the lower engine revs of 2600RPM. Will mean that the engine will be running at it's more economical speed. Doing this will I feel not allow the engine to reach maximum revs of 3600. What speed does your boat do with both engines in calm conditions at 2600 and 3600 and how does that speed relate to the maximum hull speed of the 9.meter. **ED**.

#### A Christmas Ghost Story

Though further along the coast, in an area not well known to them, for some time now, the trip had been planned. Matthew the diving master, accompanied by Mark, Luke and John, all inshore fishermen and members of the local diving club, had completed most of the arrangements.

The idea was to wreck dive during Advent week just before Christmas on a wreck that had been discovered towards the end of last summer. The wreck, a passenger liner named the SS Three Kings, had been torpedoed during the Great War and lay in comparatively shallow water about five miles off

the peninsular, at the end of which stood the 19<sup>th</sup> century lighthouse called Gabriels Horn. High pressure was well established early that Saturday morning as the divers prepared to load the RIB. High cloud, no wind, flat sea and some lurking mist that should soon disperse, made for ideal diving weather. Hand to hand, they passed into the RIB supplies for the trip. Luke's mum had provided some loaves of bread and some fish to make sandwiches. John's dad had - reluctantly it must be said - given his son some of his stock of home brewed wine to celebrate the end of a hopefully successful dive, and Mark had brought a few bottles of mineral water. Unable to find the more familiar brand names, he had settled for one called Galilee water.

Air cylinders and hoses were checked and loaded. Marker buoys, anchor and line and 'diver down' flags were all packed as neatly as the impatience of four young men, eager to be off, would allow. A departure call was make on the handheld VHF to the Coastguard as they were leaving the harbour. At twenty knots it would take them about one hour to reach the dive site. Matthew looked around the RIB. His mates were typical of their fishing community. Hard working - when the opportunity arose - liking a beer or three; some played for the local rugby club, Matthew himself, was a part time Methodist lay preacher at his local church; The Church of the Sermon on the Mount. This was a standing joke amoung his many friends given his fondness for booze, fags and birds or, as some would have it, not necessarily in that order.

With half an hour to run to the wreck site, the thin grey mist, hanging like scrawny, emanciated fingers seemed to reach out and wrap them in a shadowy embrace. Drifting across an oily swell, they could hear the muffled clang of a bell buoy. John shivered slightly, tucked his balaclava more emphatically into his fleece collar and turned to check the engine panel. All was well, with no coloured lights flashing at him, though the amp meter needle was fluctuating in a slightly uncharacteristic fashion. John considered. He dismissed it as no more than the natural consequence of a RIB that had not been used for about two weeks, plus the possible effects of the damp and misty conditions of the moment.

Luke checked the GPS. The co-ordinates were correct; they had arrived. They would be diving to just over one hundred feet so would have a reasonable time on the wreck. Matthew lowered the anchor and then prepared the buoy and diving flag. He would 'buddy' with Mark. Luke and John would pair up. Each checked each other's gear; valve, straps, gauges. Matthew and Mark would dive first, stay their allotted time, then Luke and John. A nod at each other and Matt and Mark were in the water. A few bubbles and a swirl of water at the surface and they were gone. As they descended, visibility was somewhat poorer than usual. Whether or not due to the influence of some unknown current or eddy, progress to the wreck seemed slow and difficult; grudging and reluctant.

Through the silent murk, the outline of the wreck appeared, looking like some upturned prehistoric beast lying wounded yet defiant on it's side. They had timed the dive for arrival at low water so as not to be disturbed by excessive turbulence. The pair approached slowly. They were aware that many people had died during the sinking and so were anxious to show their respect by not being too intrusive. They swam towards a section of the stern surmounted by an intact portion of the guard rail. In spite of their determined exertions they were frustrated in their attempts to make contact, by what seemed to be a strong, unrelenting, unseen flow of water that acted like a curtain around the stern.

Mark caught Matt's attention. He tapped his watch. They started the ascent. On the surface, that morning's soft thin mist had thickened to a point that, even if it did not worsen, it would make the return trip along an unfamiliar part of the coast, difficult. Matthew briefed Luke about conditions on the bottom. Checking their gear, John and Luke disappeared into the gentle swell. They began to understand Mark and Matthew's frustration. Thinking to approach from a different direction and thus remove themselves from the adverse current around the stern, they swam down the starboard side of the upturned hull, some twenty feet away. Luke motioned John forward. As they tried to close the gap, they both felt increasing resistance. Try as they might, propelled with all the vigor of young, powerful muscles assisted by big dive fins, they could not close the short distance to the rail. It was as if some invisible but non malevolent barrier was raised between them and the side of the sunken vessel.

With one mind, they stopped all effort. Instantly, they were removed backwards by an irresistible, intangible force. Back some twenty to thirty feet. Back, to where they were when they commenced their approach. They looked at each other. John shook his head. It was pointless. Luke facing John held up his watch. John nodded and both headed for the RIB.

Mark's unspoken prediction about the morning mist was self evident. Un-noticed during the dive preparations, the mist had increased to the density of fog. Water vapor dripped from the still, wet air condensing in rivulets on the RIB's surfaces. The divers helped each other out of their gear; few words were said. The RIB moved gently on the swell. Luke suggested a sandwich and a glass of something to cheer them. The slightly tense silence between the four was broken as they compared their experiences. What was going on? All four were seasoned divers but admitted that they had never before felt such a powerful force or surge, blocking and denying all further progress. Each came to the same and only conclusion; some unknown, unscheduled powerful bottom current had firmly prevented contact with the wreck.

They changed into warm, dry clothing. That, plus some food and a beaker of John's dads vino had, in spite of the wrap around fog and patchy visibility, improved their sense of comfort and well being. Matthew checked his watch; they really should be off. Daylight was in short supply at this time of the year. He reached across to the ignition. Nothing. He tried again and again. His muttered swearing attracted the others. John remembered the outbound fluttering amp meter. Luke lifted the lid to the battery compartment and checked the terminals. Again, Matt turned the key, silence.

Although without prospect of power for the GPS, radio and nav lights, they could start the engine on the cord. Whether the tiny alternator was still working or indeed could power up the service battery remained to be seen. Check fuel on; choke on, Luke gave a steady pull on the start cord, the engine fired and settled into its usual melodic hum. Nothing though on the charging meter. Not a flicker of the needle. Matthew helped by Mark retrieved the anchor, dive buoy and flag. Although without means of electronic navigation, they had a hand bearing compass and instinct. In dismal fog with a visibility of about twenty to thirty yards, there was little point in hanging around. They know that the tide turned to the east going flood about now. Using the compass and dead reckoning they could set off, carrying the flood in the general direction of the harbour. At sometime, the fog would, perhaps, thin or lift.

At a little over idling speed, they felt their way through the fog. In another hour it would be dark. All four maintained a lookout, anxious to hear any engine noises. They were on an easterly heading. Luke was the first to sense an increase in visibility from ahead. The curtain of fog lifted - for how long, they later could not recall - and there hanging low in the Eastern sky was a bright star. Like a luminous beacon of hope - it beckoned. John said that it was probably Venus, but they were uncertain. Luke estimated that they had covered about ten miles, they needed a bearing or preferable two at a coarse angle to their track. An exclamation from Matthew gained their attention. They followed Matt's stare. The fog was thinning, much as they thought it might. On the port quarter could be seen, quite dimly, a flashing white light. It could only be the light on the Gabriels lighthouse. Mark asked if anyone knew the phasing of the light. No one was certain. Luke took a compass bearing. On the landward side, off the port bow, could be seen through the rapidly vanishing fog, the outline of high cliffs. John said that he recognized the outline. Luke took another bearing and plotted both onto their estimated position line. They had a dead reckoning fix. If it was correct, all they had to do was to maintain the Gabriels light dead astern, this would bring them to the fairway buoy, one mile from the entrance to their harbour. And so it happened. About one hour later, they were tied up, unloaded and standing in the crowded and noisy saloon bar of the 'Stable and Donkey' pub. Many of the regulars know where they had been and gueried their navigational guesswork enabling them to return in dense fog. The divers laughed

at the suggestion. Guesswork? We didn't need guesswork, we had the Gabriel light as a reference – after the fog lifted. The bar chat and laughter stopped. Surprised, the divers looked around. Simon the barman said with a hint of scoff in his voice that everyone know that the Gabriel light had been discontinued about eight years ago when the resident keepers were withdrawn after many complaints about the annual disturbances of screaming and panicking voices that were clearly heard echoing across a calm sea at night. All eyes followed Simon's gaze to the bar calendar. It was the exact anniversary of the date of the sinking.

Spike Marlin 2004

Xmas bargains for sale

#### Catalac 9m Catamaran "Nemra" No 9.110.

A well established safe catamaran suitable for family use. The vessel has been completely refurbished with the hulls having been "peeled" and replaced using International Gelshield 200 epoxy, professionally carried out, November 2000 – June 2001. The interior of the cabins have been relined. The rigging was been replaced, cushions and mattresses recovered and reconditioned 2 Volvo 2001 diesel engines with "S" drives installed. To all intents and purposes a "new boat" at a reasonable price. GB25,000.



Constructed: GRP 1976 by Westfield Engineering, Poole, Colour: Grey/White. Certificate of British Registry: 366783 VAT Not applicable too old. Length: 9mt (29'3") Beam: 4.1mt (13'9") Draught:.75mt(2'6") Registered tonnage:: 7.12 tonnes. Sail area: 420 sq. feet.

Last Survey: March 2002.

**INVENTORY:** 

Anodised mast and boom with: Roller reefing Genoa Halyard winches 2 Bottom handle sheet winches Lower navigation lights. Steaming light No. Tricolour and Anchor masthead light. Running rigging: Main & Jib halyards Burgee & signal halyards Topping lift and kicker Main & jib sheets with all blocks and stops 2 Spinnaker poles Slab Reefing.

#### 2 Forstays and 2 Backstays

1 Shrouds and 3 lower ones

1 Jib furling gear

#### Sails:

1 Mainsail, white – new. Jib - Blue Genoa. Ghoster – orange & white. Storm Jib – dark blue.

#### Life saving equipment:

Fire extinguishers – inspected March 2002.. 1 Horseshoe lifebelt and floating handling line.. Life jackets various. Harnesses various sizes.

#### **Other equipment:**

Hose pipe. 2 Mains supply 12-volt battery chargers 1 Mains shore power line. 1 VHF DSC radio – new. New boat compass and depth

#### Sleeping accommodation:

Double cabin forward.
Single Cabin forward.
Single Cabin in stern.
Single berth under navigation table in saloon.
Double bed in saloon.
berths in total. All mattresses recently recovered.
Toilet Jabsco new 2001.and basin in separate Cabin.
All cabins have storage
Lighting throughout 12v newly installed.
Mains electric circuit installed.

#### **Engines:**

2 Volvo 1995 Diesel engines series 2001 with "S" drives and Morse controls. Fitted March 2002.

1 Outboard engine 5hp Mariner with petrol tank.

3 x 12volt batteries, 2 for engines and 1 for domestic use.

2 Built in 23lt Fuel Tanks. 2 Spare plastic 30lt each fuel tanks

Extensive supply of tools.

#### Hulls:

Hulls have been "peeled" and replaced using International Gelshield 200 epoxy, professionally carried out, November 2000 – June 2001.

#### Other items not covered above:

All mattresses recently recovered. Main saloon seating renewed. Cockpit seating recently purchased. Cockpit Dodger – new. Zodiac Dinghy with davits on stern. Roof linings all replaced.

#### All rigging renewed March 2002.

#### **Equipment:**

- 2 Anchors one with warps, one with chain. (COR & Plough) 1 small dinghy anchor. 4 Mooring bollards 1 Anchor bollard 6 Fenders – various. Mooring warps - various. Bathing/boarding ladder Emergency tiller 2 Buckets. 2 Gas Bottles. 1 Hand petrol pump. 2 Boat Hooks. 1 Radar reflector. **Interior equipment:** 1 12/220 volt electric Refrigerator 1 Gas cooker with 2 burners, grill and oven.
  - 2 25gallon plastic water tanks
  - 1 Car Radio/Cassette.
  - 1 Clock.
  - 1 Barometer.
  - 1 Wheelhouse back cover new..
  - Sail battens.
  - Fishing gear.

#### Asking price: GB£25, 000

VAT exempt because of boat age. "Age Rate Relief" classified

Nemra is berthed in the Canet Marina near Perpignan in France.

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