



Club Newsletter

Christmas 2018

CONTACT US

Ingvar & Anna Svenson
Twitten House, Furners Green
Uckfield, Sussex
TN22 3RR

phone : 01825 740467
mobile: 07711 836274
e-mail: inesvenson@gmail.com

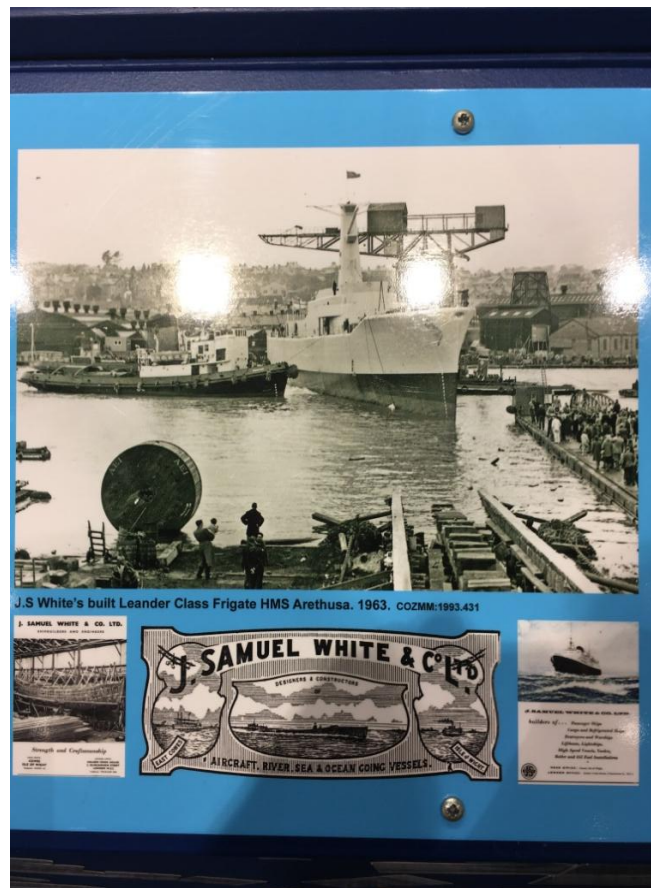
FROM THE COMMODORE

Don't forget our website aquastarclub.co.uk
Any suggestions for improvements please let me know as it is a 'joint venture' between my son and myself.

The September on-line edition of the free 'Motorboat Owner' magazine will be of interest to those Aquastar owners who are thinking about visiting London and staying at St Katharine Docks. Having spoken to the author at the Southampton boat show she recommends booking one month ahead in the summer months to guarantee a berth. Also the January edition of 'Practical Boat Owner' has a good article on Littlehampton.

Those of you who read my Christmas 2016 newsletter will remember that I enthused about the Sir Max Aitken Museum at Cowes. Well on a 10 day boating excursion over that windy part of September (why cannot sailing boats still have wooden masts - it would be much quieter sleeping beside one in a marina) I discovered another small gem in the backstreets of Cowes.

At the back of the public library in Beckford Road (off the Shooters Hill end of the High Street) is the Cowes Maritime Museum. It is well worth a small detour, and we spent well over half an hour there.



One of the many museum photographs

2018 CRUISE IN COMPANY.

Friday June 30th

Mrs Commodore decided, just before leaving home, that she wanted a mains socket fitted under the galley table outside the calorifier locker for our new coolbox before we left on the boat!

I managed to cut the hole and fix in the socket leaving the wiring up to be done later on the trip - so at least the power tools could be left in the car.

Star left Chichester marina in glorious weather to meet up with Flight at Yarmouth, who had left Chichester earlier that day (not having needed to do last minute on-board carpentry). The resident swans with their new family came to wave us off!



Alas the decision of Star to travel the whole 24 miles to Yarmouth at its most economical displacement speed of 7.5 knots had unforeseen consequences.

Not far from Yarmouth it was obvious something was not right with one of our engines. Typical boats!

The Volvo KAMD 300 engines (Volvo speak for 285 hp) have both a supercharger as well as a turbocharger, and when we bought her one of the first things I did was to add turbo boost gauges. They were to be our salvation in enabling us to do the fault finding process ourselves.

- Port engine only running = 3000 rpm maximum with normal boost pressures all the way,
- Starboard engine only = 2000 rpm maximum with no boost pressure at any part of the range,
- Both engines together the starboard boost pressure was zero until 2800 when it rose to the same as the port engine, and then both rpm's went up to over 3500 with no problem.

This meant that with the assistance of the port engine the starboard one could eventually go fast enough for its turbocharger to cut in at the high speeds. (For those interested in these engines the supercharger is powered off an engine belt with an electromagnetic clutch which disengages at about 1800 - 2000 rpm when the turbocharger takes over; and for those very interested it does not run at idling or in neutral if the engine is warm!)

Conclusion = starboard supercharger not functioning.

This meant tracing the electric cable which powered the coil of the clutch back to find the fuse. Eventually with the aid of a cheap Boots mirror and a torch this was found and extracted with great difficulty. The 7.5 amp spade fuse was blown.

Was it a faulty fuse or a faulty clutch?

The workshop manual said the resistance of the coil should be 3.4 ohms +/- 10 percent, and after disconnecting the supply cable it metered out at 3.7 ohms which is most acceptable.

A replacement fuse was inserted and the floor and carpet replaced.

Saturday 31st

Mrs Commodore discovered an unwanted residence in our galley sliding cupboard which adjoins the galley table (see adjoining photo): fortunately no one was at home and we do not know how it arrived.

Being 37 miles from Yarmouth, Flight and Star went at our normal cruising speeds and met up at Weymouth in time for the 4 p.m. bridge lift for the inner marina.

Interestingly for the 10 minutes at low speed leaving Yarmouth the superchargers behaved fine. After 2 hours at 18 knots we slowed down to 8 knots for the last 5 miles with both superchargers now working again as we had dropped to 1750rpm. However outside Weymouth the turbo boost pressure on the starboard one suddenly dropped to zero again indicating the supercharger's failure once more.



Unwanted guest

Once safe and tied up in the inner marina, and the carpet and the floor up again, I discovered the fuse had once again blown.

It surely cannot be two faulty fuses so conclusion was that the coil was most likely delaminating with the heat of operating for the original 3 hours travelling from Chichester to Yarmouth. This was most likely causing the resistance of the coil windings to decrease as it got hotter making the current increase above the fuse rating, hence sooner or later blowing the fuse.

Unfortunately one cannot order a replacement Volvo part on a Saturday, or even a Sunday, so back went the floor and the carpet.

The skipper of Flight celebrated their fault-free passage with a dip in the sea (alas no photo provided)!

Dinner was enjoyed together at the commodore's favorite Italian restaurant 'Enzo' that evening.

Sunday July 1st

After 10 a.m. the high street at Weymouth appears to be just like any other weekday with most of the shops open and mobility scooters still requiring to be dodged - even that brilliant chandlery Kingfisher Marine at 10a Custom House Quay was open.

Star did actually have a different technical challenge that day.

To work out the best time to depart taking into account the tides a brilliant program called 'PC Plotter' is sometimes used. As it does not work on an Apple/iPhone/iPad a very old mini laptop with windows XP is kept on the boat to run it.

It had not been used for well over a year and it basically refused to play.

A very smart almost new boat sized secondhand Windows 10 HP notebook was sourced in town for the reasonable price of £ 130.

It was not known if the old program would run on Windows 10 and as I had the phone number of the company that made PC Plotter I thought I would at least have nothing to lose by ringing on a Sunday. To my surprise and delight the designer answered the phone himself and could not have been more helpful and promised to send the link so the program could be downloaded together with my software key onto the replacement notebook - which I then duly purchased.

The temporary lack of computing power gave me the opportunity to work out the best time to depart, (i.e. which bridge opening to go for and hence to pass the Portland Race when it was at its least angry), using the old fashioned way with the Admiralty Tidal Stream Atlas.

Monday July 2nd

After arranging for a Plymouth based engineer to order a new electromagnetic clutch coil for the faulty supercharger, and to meet us Wednesday afternoon at Plymouth, we took the 2 pm bridge out from Weymouth.

We managed to hit the Portland race at slack tide and arrived at Torquay just after Gallant Lady arrived directly from Lymington - albeit on the other side of the bay at Brixham.



View of Torbay from the big wheel at Torquay

Wednesday July 4th

After a really smooth trip from Torquay to Plymouth, but with some areas of coastal fog, Star arrived by tea time at the Mayflower Marina, Plymouth, for the booked repair.

Flight limped in a couple of hours later with one engine closed down due to overheating (subsequently this was found to be due to a loss of the cooling water from a worn hose).

Gallant Lady having also just arrived, had to clean the contacts on a wildly fluctuating tachometer, but nevertheless was ready in time to have everyone round for drinks on board.

The 8 of us were joined for dinner at one of our most popular haunts from previous years, Jolly Jacks, by the previous owners of Fastflow and Water Bear as well as the current owners of Arabesque. By chance the new owner (by 3 weeks) of Water Bear had discovered us and also had time to join us for a drink at Jolly Jacks.

The next day was a day of tinkering on board and 'leisure' in Plymouth.

Friday July 6th

A calm and leisurely trip to Falmouth by Star and Gallant Lady was followed by Star being turned away by Falmouth Marina at its entrance, and then being told by Mylor that multi-rafting was already underway there (and that it was going to get worse the next day with another rally coming in!).

Pendennis Marina most helpfully came to our rescue and also kindly said they would make space for Flight who was coming the next day.

Sunday 8th

All three Aquastars left at 08:30 so as to arrive at the Isles of Scilly just before high tide, but secretly of more importance so that Gallant Lady could watch the Grand Prix!

Alas within sight of the Isles of Scilly Gallant Lady suffered a drop in engine revs together with a potentially expensive rattling noise in the port engine. With great regrets they had to turn back to Falmouth on one engine to investigate further. (In fact they had to return all the way to their home port of Lymington on one engine - a report is supplied by the owner under 'Commodore's Complaints' below).

That left Star leading Flight into New Grimsby Sound, where despite a French rally, and with great difficulty, they each just managed to get a buoy.

Monday 9th

Some of you will remember from previous newsletters that when we bought Star it came complete with the dreaded diesel bug, and we have been trying ever since to get the residue out of the tanks. As we had had two instances of the engines not picking up properly from mid range, we decided it was time to inspect the Racor primary filters. They were not very dirty but as half of each insert was significantly discoloured they were never the less changed.

With the domestic batteries down to 50% Star had to run the generator to recharge them. After 1/4 hour it petered out though the water filter was completely clear (very strange) so weed around the water inlet was suspected.

This necessitated a dive under the boat and sure enough a flotilla of the stuff was found caught up around the port propeller shaft and propeller. This was duly removed and the generator was happy again.

A visit to the lovely Tresco Abbey Gardens was a must for both crews. The Valhalla Museum was resplendent in the glory of the evening sun.

Meanwhile back safely at Falmouth, Gallant Lady had removed the engine rocker cover and discovered the problem. A cam rod on the camshaft had broken, the spring had popped out and the associated valve had stuck down: as there were no Yanmar dealers in the vicinity they decided to have the work done by their usual engineers at their home port of Lymington, and enjoy the rest of their holiday at a more sedate 8 - 9 knots (albeit travelling the remaining 180 miles on one engine).



Flight in New Grimsby Sound between Bryher and Tresco

Tuesday 10th

Generator stopped again after 10 minutes - oh dear - filter perfectly clear but this time it was removed and weed was actually found outside it between it and the water intake pipe!

As this is not how filters are supposed to work a closer inspection revealed that the boat had been fitted out in 2002 with the inlet and outlet pipes connected the wrong way round!

As the inlet and outlet pipes and fittings are of different sizes this would be a job for us back at the home berth. The pipe into the filter was duly disconnected and the dingy pump used to blow back and out all the weed in the pipe. Generator happy again.

Well, happy till the evening boost when we actually had to disconnect the inlet pipe back at the sea cock end and force a big screwdriver down through the seacock and hull fitting out into the Atlantic to clear the blockage.

The conclusion we came to was that it was futile to try and run the generator on this mooring at anything approaching low tide as the bottom weed reached the underside of the boat. Interestingly Flight had blockages at their adjoining mooring also near low tides.

As a diversion the crew of Star and Flight took the official ferry from Tresco to St Mary's for an outing (as we did not want to lose our buoys) where a discussion with the harbour master revealed that all the visitors moorings had been fully utilised for some time with many being doubled up and one even tripled up! Well done Gallant Lady for suggesting New Grimsby Sound.

In fact we later discovered that there were a couple of spare moorings at the neighbouring but less attractive Old Grimsby Sound.



View of our anchorage in New Grimsby Sound, taken from Tresco

Wednesday 11th

Still every visitor's buoy taken - if one comes free it does not stay so for long - one of the anchored sailing boats will up-anchor and grab it! We here been very lucky and accordingly not moved our boats from their buoys at all.

A quick trip in our respective dinghies was followed by a visit to Bryher and a short walk to the Hell Bay Hotel with Flight to enjoy the incredible view whilst sampling the delicious hotel crab sandwiches.



By the Tresco Abbey Gardens



Madam Commodore pretending it's not too cold

Thursday 12th

Day of departure. Flight and Star had a slightly more bumpy return trip to Falmouth, where some necessary refueling was carried out.

Friday 13th

Flight went to Fowey and Star went to the Dartmouth, whilst Gallant Lady had already arrived in Brixham.

Mrs Commodore suggested a walk from the Darthaven Marina up the River Dart to see the recently purchased by Premier Marinas 'Noss-on-Dart Marina'. Through not currently really suitable for visiting yachtsmen, a discussion with the marina management suggested that in two years time it could be ready to welcome visiting boats, and also probably provide a limited ferry link to Dartmouth itself to make up for its remote location.

Monday 16th

All three boats met up at Weymouth Marina so we could have a farewell supper together in the Italian restaurant Enzo on the seafront.

Interestingly because of the long period of hot and calm weather on several occasions it was even difficult to get two boats into the same marina.

Total time motored was 41 hours and total distance covered was 518 nautical miles.

PRELIMINARY PLANS FOR THE 2019 'CRUISE IN COMPANY'.

After preliminary discussions with those on this year's rally, together with a couple from previous year's ones, who have shown interest in the 2019 proposed cruise in company to France and the Channel Islands, this is our initial plan:

- Depart June 19th or 20th for a couple of nights at Cherbourg,
- Take in Alderney - only if weather is amenable, for a night or two,
- Guernsey for several days including opportunity to fuel up, do some sightseeing and check out those crab sandwiches at the Pleinmont Beach Cafe,
- Aquastar Owner's Club annual dinner on Monday June 24th, at the Guernsey Yacht Club,
- Marine & General Engineers Ltd have very kindly offered to show a group round their works, see what they do and how they do it, and give a Q&A session on boat maintenance.
- Carteret - tides permitting, and/or
- Granville -tides permitting,
- St Malo, and/or
- St Cast,
- Guernsey, to refuel, prior to returning home, (via Cherbourg for at least one boat!), by July 11th or 12th at the latest.

May I take this opportunity to repeat a couple of paragraphs from my summer newsletter:

As mentioned in the Christmas 2017 newsletter as we are now consistently getting a low numbers of boats actually turning up 'on the day' for the annual rallies, and for the commodore doing the organising it gets rather embarrassing having to contact several restaurants, clubs and marinas each and every time someone pulls out. We have accordingly agreed that it would be simpler and more efficient if we assemble a nucleus of interested boats and then inform those others who may be interested of our provisional plans giving them the option of joining us for some or all of the time, nearer the time.

Marina accommodation, revictualing, places of leisure and refuelling can then be arranged as the need arises with a minimum of pre-organising (and multiple last-minute-cancellations!).

We will however continue to alternate for the foreseeable future each year between the Channel Islands + France and the south coast of England as this was the desired consensus from the survey of members' wishes I did a couple of years ago.

Accordingly if you are potentially interested, even if it only meeting up for the annual club dinner, please let me know as soon as you know. For the club dinner itself please inform me by May 1st. I can then book a suitably sized table and send out the menu choices.

NEWS FROM 'GEOFF'S YARD'

The Aquastar Brokerage having had a very active year of sales, now need more good used Brokerage Boats to offer. We have a waiting list for 45' to 48's.

Please contact the yard if you are selling your Aquastar of any size.

The yard is now quoting for a 43' motor yacht, a new build for 2020 delivery, for the all-time classic 43'.

NEWS FROM 'M & G'S YARD'

The Summer in the Channel Islands has been the best on record with sunshine and light winds and the Summer and Autumn has been exceptionally busy for M&G with all types of work.

We have undertaken fourteen re-coating packages in the last year, these vary from a 6.4m rib through to a Princess 45 and Nordhavn 43. They were all glass-fibre boats 12 of them were slurry blasted back to the gelcoat and then recoated and two were hand sanded which were Coppercoated boats being recoated. Seven of the boats were re-coated with five coats International Gelshield and then traditional antifouling and seven were coated with Coppercoat.

Coppercoat is like Marmite (you either love it or you hate it)!

My Aquastar 48 "Marauder" which is 17 years old had flaky antifouling when I bought it ten years ago and now looks really bad; she will be slurry blasted back to the gelcoat then five coats of Gelshield and two coats of International Ultra 300. This will be done in January 2019. We will also be changing the cabin linings in the fore-cabin, the engine coolers will be stripped inspected and cleaned and the injectors will be replaced with new units. I replaced the original Raymarine nav aids last winter with Garmin. So it's a bit like the Forth Bridge.

FROM OUR TECHNICAL DEPARTMENT

1) Having been caught out by fuel bug when we purchased our Aquastar 38 'Star' 4 years ago, and as even now 4 years later I am having to change the primary Racor fuel filters more than once a year due to the residue left behind, I thought the time had come to follow the example of our previous Commodore Tony Gibley, and fit a fuel polishing system.

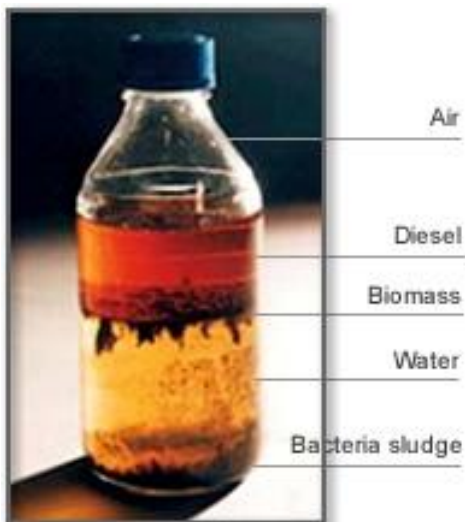
A repeat of my original article from Tony's newsletter dated September 2014 sets the scene:

Bug 'ed in Guernsey

Having just sold our Aquastar 33 and upgraded to the 38 foot grown-up model, Star - built in 2002, in spite of the very short time left we were determined to have her ready for this year's Aquastar rally (the highlight of the boating calendar in our view).

Being aware of the diesel bug horror stories going around, and the fact that even though we had the fuel and tanks of both of our previous boats cleaned soon after purchase, I made a preliminary enquiry about the cost of doing so for our new acquisition. It was not so much the uncertainty of the cost that put us off but more the fact that the company

said they would need to cut a good half a dozen holes all over the top of each of our fuel tanks in order to get to both sides of all the baffles!



Time was pressing on anyway so we just added a killer dose of Marine 16 to ensure that everything possibly present was dead before we set off from Brighton. With hindsight as the boat had been languishing for about a year and a half in a marina with a 'For Sale' sign on it and we believe had not moved, I should have done more research. Yes I might have now killed any bug but as I soon was to discover it was the dead bacterial sludge which was to come and haunt me after quite a bumpy channel crossing which of course completely churned up the bottom of the tank.

How we discovered we had the bug evolved as follows. We were still a little way to go to the Casquets lighthouse when we heard a squeak

beginning to emanate from the front of the starboard engine. As we had just had the engine serviced and the belts specially adjusted I said it must be a bearing so we decided to shut down that engine. Shortly after that the port engine started varying its speed and then completely slowed down. Oh dear - time to start the starboard engine again, squeaks and all. After a bit of coaxing we got both engines running again, though below cruising RPM, without too many squeaks, and arrived at St Peter Port safely.

The next day the nice man from the local Volvo agent 'Marine & General' came to sort out our squeak, complete with the spare idler bearing kit. To my surprise he found the problem was in fact only a loose alternator belt, not a bearing. A bit embarrassed, as only 7 hours had elapsed since it had been adjusted prior to leaving, I thought I would also mention the loss of power on the other engine to make his visit more worthwhile. I added it could not be dirty fuel as the plastic bowl below the Racor filter was completely clear. How wrong I was!

The nice man from Volvo politely suggested that despite my thoughts he would still like to look at the paper filter insert a rather more expensive 'oh dear' was the conclusion. Instead of a nice pink colour it was all black with a black treacly substance over much of it - it was the dreaded diesel bug and its sludge. He added that he was surprised that any fuel was even getting through it - we had evidently been motoring on borrowed time

The nice and helpful man from Volvo said that back in St Sampsons they actually had the specialist kit to pump the fuel out and clean it and re-circulate it back into the tanks. To ensure we actually got there on our own engines he changed the filters there and then and kindly made an appointment for us for the Monday morning.

Even though the trip to St Sampsons is a very short one, and it was extremely windy thanks to Hurricane Bertha, we played safe and only ran both engines for a few minutes for the initial manoeuvring out of our marina, until we arrived there, thus keeping one engine in reserve.

Another very nice man from M & G helped us tie up at 9 a.m. at their hammerhead and the day's work began. We were lucky as one of the jobs we had done after purchasing the boat was to have a small inspection window added at the top of each tank (I never really trust the fuel gauges). These made it possible to access the tanks easily with a pipe and swish around the contents for sucking out. The fuel was then passed through large filters, and returned through the deck fillers. Seven and a half hours later the job was complete, the fuel treated with Grotamar 82, and with 8 spare fuel filters on board we were ready to depart on the evening tide. The managing director of M & G, David

Norman, helpfully advised us that after every journey we should change the fuel filters until they no longer showed any black residue.

After the ensuing trip to Jersey they were 5/8 black, so were changed, after the return trip to Guernsey 6/8 black (a more bumpy ride) and were changed, and then after the long journey back to Cowes a most definite 100% black. Here we purchased more Racor filters at £10 each (the same ones in the blue Volvo boxes cost £ 21). Back in Brighton things are beginning to look brighter.

We have since discovered that though Grotomar 82 is brilliant at killing diesel bug, because it is only a biocide it does nothing about the water which is the cause of the diesel bug in the first place. Bearing in mind that it is unlikely we will ever see water in the clear bowl of the Racor filter until there is at least one inch of water in the bottom of the fuel tank we will therefore as well as the Grotomar, continue to use the Fuelset (which we have successfully used for over 10 years) which actually emulsifies the water so it can be removed and burnt off with the fuel.

What really goes on in your fuel tank

Diesel fuel "bugs" are actually micro-organisms comprised of fungi, yeasts and bacteria which live mostly in the diesel / water interface inside the diesel tank. The common diesel 'bug' is the fungus *Hormoconis resinae* that can produce a large biomass of mycelia (fungal matting) in a short period of time if the conditions are favourable. *Hormoconis resinae* is called "diesel bug" in the diesel fuel industry and "jet fuel fungus" in the aviation industry.

The fungal spores are carried by air and water, entering your fuel system via filling ports and vents. The air space above the fuel in tanks contains water vapour. The walls of the tanks are cool and the water vapour condenses on these surfaces. This water subsequently accumulates and sinks to the bottom of the tank creating an ideal environment for the growth of fungi.

Propagating quickly in warm, humid climates diesel bug generates acids that pass through the fuel filters and corrodes the highly polished metal surfaces found on the inside of fuel injection pumps and injectors.

This corrosion can over time lead to fuel leakage past the plungers and into the engine's oil system compromising oil viscosity. That may result in crankshaft and/or main bearing failure. These acids can also break down weaker tank material such as aluminium.

Biocides will not remove the water that the bug needs to survive. As long as water remains in the tank, the bug will re-infest.

As the diesel bug thrives at the fuel / water interface, using oxygen in the water to "breathe", if this water is removed the bug cannot take up residence or survive. A treatment such as Fuelset or Aquasolve works by removing water from the fuel, thus slowly suffocating the bug, dissolving and dispersing the dead cells so they can pass through the fuel filter.

If a biocide has already been used, an additive such as Fuelset can still be used alongside it to provide these additional benefits. The products act differently so will not cause a harmful reaction. However such an additive cannot be expected to clear up a huge mass of dead cells instantly, as its water removing, surfactant action works over time to break down the biomass.

Another method of controlling diesel "bug" growth which is reportedly used by several air forces and navies, is by the use of a magnetic unit, (Volvo market theirs as a 'QL fuel decontaminator').

Finally - old diesel fuel.

Diesel "bugs" should not be confused with the chemical sludge compounds formed as diesel fuel ages. This sludge can also cause fuel filters to block with subsequent engine malfunction, or worse still, engine stoppage.

Diesel fuel degrades with time (faster at higher ambient temperatures), often forming these insoluble asphaltene compounds through an oxidation process. The use of fresh diesel fuel reduces this possibility, which may mean keeping fuel tanks only partially full if they are not used frequently. This can be a "Catch-22" situation, as condensation (water) is more of a problem in partly full tanks. Oh dear!

Ingvar Svenson (Star).

So investigations started. A perusal of my files discovered the quotation received from the same firm who provided Tony with his kit to be £ 2,784 - and that was back in 2014!

Further enquiries produced a comparatively new and most reasonably priced alternative from Marship.

A visit was arranged to meet the developer Peter Weide and view the kit down in Tetbury.

Always grateful for additional opinions Tony himself said he would like to join us and so did the old school friend we were staying with in Gloucester, who incidentally worked as a quality control engineer in the nuclear industry.

The website which shows their 'Diesel Dipper' is:

<https://www.marship.eu/diesel-dipper>

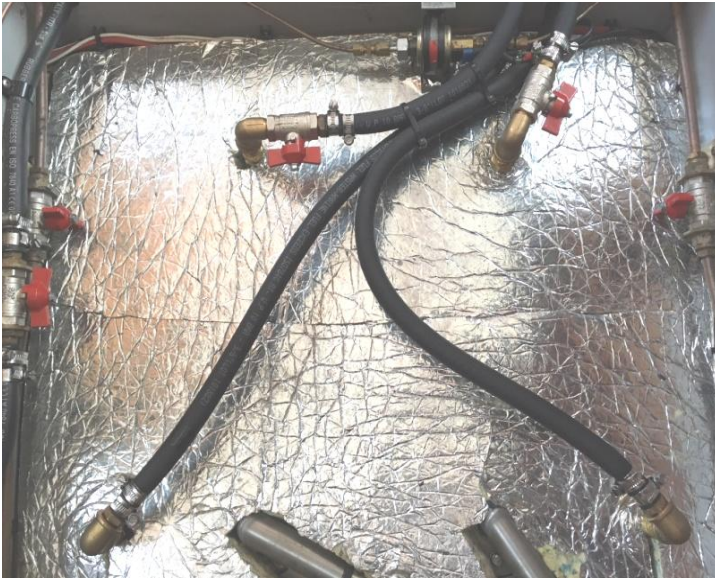
Though not as sophisticated as Tony's one, and still in the last stages of refinement, they did add 4 fixing lugs for me at my request at no additional cost (I did not like their suggestion of two television aerial style U clamps). They indicated that the 4 lugs would probably become standard in the future. The top two lugs can be seen in the photo of our installation, and you will see that I have mounted them on rubber grommets to try and reduce the vibrating effect of the pump on the mounting board, which is in turn fixed to the engine room rear bulkhead under the door to the rear cabin. This position was chosen as it is readily accessible from the rear cabin engine room hatch for the purposes of checking the filter bowl with a torch for dirt or water, and also for any subsequent draining requirements.



You will see another deviation from the standard kit as shown on the website picture. The unit works by saving any sludge, dirt or water in the main rectangular body of the unit behind the visible return fuel filter, and therefore one will not know that it requires draining without opening the tap at the bottom and inspecting what comes out. Then of course one asks how often should one do this, and of course what then shall I do with the fuel that I have removed that is perfectly all right! At my request, and for an additional £ 60, a large transparent bowl was added at the bottom of the unit and above the drain tap for these inspection purposes. This can be seen more clearly on my second photo overleaf.

The unit came with two dip tubes (one for each tank) which reach to the bottom of the tank, together with the tank mounting flange kits - as Aquastar 38s do not have fuel tank drain points. Taps were added to the take off pipe bends (centre two at top of picture below). The installation instructions suggest that the return pipes are tee'd into the engine fuel return lines but as this is most definitely not good practice a second pair of tank flange kits were purchased so the fuel could be returned directly into the tank (the two black pipes going to bottom of picture below).

The total cost of the equipment was £ 660 plus VAT.



Pipe and fittings (see my first photo) from Aquafax came to an additional £ 295 plus VAT, and a local engineer helped me do the installation. The 2 two-way valves allow me to select from which tank the fuel is sucked and also returned to. A power cable was run back to an unused switch on the dashboard from where we can turn it on and off - it

is labelled 'upper helm fridge'!

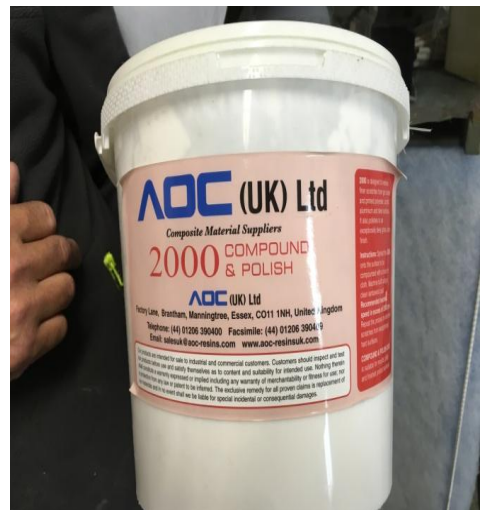
After we have used the kit for a while next year I will of course report on it.

2) In last Christmas's newsletter I mentioned the AOC compound and polish which was used and recommended by Aquastar for GRP. We purchased a tub in the spring and used it with great success when the boat was out of the water.

For the actual compounding and polishing I bought the Draper Expert 44190 230-Volt 1500-Watt 180 mm Angle Polisher, as shown below, from Screwfix.



Additional bonnets can be bought separately.



3) Those with older blue glass fibre hulls where chalking appears (on ours it is on the transom) we are advised after a good compound & polish to apply some UV protection. One of the best recommended waxes on the market is the 3M Marine Ultra Performance Paste Wax (part no 09030). We have started using this each month (when we remember) and it is very easy to apply and shine up.

4) From the November issue of the free on-line 'Motorboat Owner Magazine', ".....if you are going to be reliant on a shore electric supply to stop your boat from freezing, it is a good idea to invest in a shorepower monitor that will alert you if someone unplugs your boat, or if the power supply fails. The Envirotxt from Tekview Ltd will not only alert you to a power loss, it will also monitor temperatures on board, and alert if they fall outside of the preset parameters - tekview-solutions.com".

COMMODORE'S COMPLAINTS

1) Bottoming out on Bemberidge Bar

We are fairly happy that our (two) depth gauges are reasonably accurate.

We were therefore rather surprised to hit the bottom coming over the bar when the harbour website showed the depth of water over the bar as 1.65 metres (it is apparently updated every minute).

Our 38 has a draught of 1.1 metres and our two gauges were each showing 1.4 metres at the moment of impact (we were still going fairly fast and could therefore have been in a small trough!).

However when we escaped two days later and went over the bar rather more gingerly we found exactly the same 0.25 metre over-reading.

2) Wi-fi

With increasing demands for wi-fi from different family members, and with the reliability and quality provided at marinas seemingly continuously varying and even disappearing, (the worst one seems to be at the visitors berths at Cherbourg), we have splashed out on a wi-fi booster and hub. Not only does this boost and give a steady signal, but also gets round the one appliance limit that many marinas give, as Star now has become a wi-fi 'hot spot'!

We chose the 'Red Box' from 'Nippy Networks' as it seemed to be the most cost effective for the fairly basic system which we wanted and additionally was easy to fit oneself. Apart from a phone call to their technical person to clarify the skimp set-up instructions, early indications are that at £ 600 it is money well spent.

3) Gallant Lady's Scilly's trip engine problem - by Ray Grimwood

The port engine on Gallant Lady failed on the way to The Scillies this year which meant turning around and proceeding on one engine back to Lymington.

Thankfully the weather was fine and sea state calm which allowed us time in Falmouth, Plymouth, Brixham and Weymouth thereby salvaging part of our summer cruise.

The engines are 300 HP Yanmar STE's with approx 1100 hrs on the clock. The problem was an exhaust valve seizing in the valve guide due to an incorrect valve seal which was a faulty design having both insufficient lubrication capacity and temperature performance. Our engines were built in year 2000 and the replacement seals were circa 2002.

We had the boat from new but were not informed of this upgrade. It's surprising that the seals lasted so long. The damage caused was extensive.

The valve of course hit the piston resulting in a large hole in no.2 piston and molten aluminium welded itself to no.1 piston. No. 2 con rod was twisted.

The cylinder bores would require re-boring and liners installed. This meant a complete engine strip down as the agent (Dave Crawford Marine) became worried that the crankshaft was damaged and would need crack testing and measuring with a micrometer to ensure it was not bent. This now entailed the engine being removed from the boat.

We know of an identical Aqua Star 38 with Volvo engines that required an engine removal resulting in a hole being cut in the roof. A superb job was made cutting and making good which required a fibre glass mould being made and considerable man hours. I obtained an approximate estimate for this work and with VAT it was £20k. I have no idea how much the Aqua Star with Volvo engines paid.

The Yanmar engines are smaller than the Volvos and I hoped that the engine could be taken apart and “the bits” taken off the boat through the side door. The agent thought that this would not be possible but recognised that the cost of cutting a hole in the roof would buy a lot of labour and after careful measurement decided to give it a go. This was successful and the repairs could proceed in their workshop.

The crank shaft was crack tested and did show some signs of hair line cracks but this was not definite and even the experts admitted they were uncertain. We could have gone to a more decisive crack testing procedure using X-Rays but this is very specialised and expensive so I began to think that a new crank shaft was probably the best option.

It was suggested that a new engine may be worth considering.

The problem was that the engine could not be disassembled and still maintain the manufacturers warranty. It was ascertained however that it was permissible to take off non essential parts such as starter motor, alternator and heat exchangers without compromising the warranty – but would it go through the side door? After more measurements and with the help of a very clever crane (and driver) to get it through the back door. The door had to come off but that was a simple task.

The new engine was more expensive than rebuilding the old one but some money was available in part exchange so on balance it was an easy decision as the new engine of course came with new fuel pump, alternator, heat exchangers, turbo charger and hoses together with the warranty. It's now installed and running but the next issue is the other engine which also has the duff valve seals.

P.S. The cylinder head on the second engine was removed and the inspection showed some corrosion on the bores that was too serious to be honed out manually, although it was marginal if a complete rebore was absolutely necessary. It was clear that the injectors were playing a major role in the damage observed, with excess diesel fuel flooding the combustion chamber. A complete overhaul of the head would be required and the likely replacement of valve guides, exhaust valves and maybe inlet guides and valves.

The turbo was very wet and oily as expected by the engineer doing the inspection. A complete service and replacement of the seals would be necessary and although I did not get a quote for this, it's a specialized job with only a couple of outfits available to do the work.

The last two years we have experienced poor fuel consumption down from an average of 1 mpg to 0.8 - 0.85 mpg probably due to the large amount of fuel not being burnt due to the injectors.

The labour cost was becoming extensive but probably not quite as much as the overhaul of the port engine. The agent offered another new engine on similar terms to the first engine and, although replacement engines seemed difficult to obtain, my second engine was imported from Brussels.

The attraction of a “new everything” was tempting and would enable the starboard engine bay to be painted which would be a bonus (the port side was painted on removal of that engine).

It was suggested that it would add some value to our boat on resale which I believe Ingvar experienced on the sale of his Aqua Star Perroquet. Given all these positives we decided to go ahead and a new engine was located in Europe and delivered in about three weeks. There is still some work to be done bolting on ancillaries but I expect to carry out sea trials in December or perhaps early in the New Year.

MEMBER'S NEWS

We are pleased to welcome the following new members to the club:

Mr David Monks, Water Bear, Aquastar 33 aft cabin, berthed at Mayflower, Plymouth.

Mr Terry Dormer, Jinny, Aquastar 27 Pacesetter, berthed at Keyhaven, Hampshire.

David Monks, who has had a renaming and blessing ceremony for Water Bear, now to be known as 'Reserve', has the following message for all club members:

Next year I'm planning to take Reserve over to Ouistreham as part of the 75th Anniversary of the D-Day Landings, pre-positioning in St. Vaast between 1-3 June via SPP. Should any AOC members be in the area I'd be pleased to meet up. My email is david.c.monks@gmail.com

RON SANDFORD WRITES - WHEN AN AQUASTAR 38 BECOMES AN AQUASTAR 42

Sitting in my dentist's reception area in late 2017 waiting for a routine check up brought me in contact with a 6 month old copy of Motor Boat & Yachting. This was surprising, as most waiting rooms do not have magazines less than 2 years old! Glancing through, I saw an advert for an Aquastar 45 at what I thought was an appealing price. We had owned an Azimut 42 some 15 years ago, and before that a 1930's 30 square metre sailing sloop (picture a Dragon with a small coachroof) brought over to the UK after the war as a prize ship.

For the past few years we had the urge to get back into boating, and so I followed up on the advert only to find out that it had been sold. Bitten now by the bug, I began to research the market, attracted by the idea of a sea-worthy semi displacement hull, but also liking the idea of a roomy aft cabin.

We found an interesting 1996 Aquastar 43 , but turned that down when it transpired it had been in an argument with some rocks, resulting in the aft cabin now having a water bed (not part of the original specification I suspect!). We then followed up on an attractive Nelson 45, but were slow to make a decision and someone else got in ahead of us. Feeling in any event that it was too big for us, we investigated an Aquastar 33, which in turn we felt was a little too compact for us.



By now we thought that something around 38-40 feet would be about the right size and price. We looked at a couple of Aquastar 38s before coming across the boat we eventually bought, an Aquastar 38 that had been “stretched” at birth to 42 feet.

The original owner, from whom we bought the boat early in 2018, had previously owned a Princess planing boat, but wanted something more solid and sea worthy. At the time (1992) the largest hull produced by Aquastar was the 38, which the prospective owner felt was too small for him and his family. He liked the overall design and sea kindliness and therefore commissioned Freeman & Partners, a respected firm of naval architects, to see if it was possible to add in a 1 metre stretch, the main purpose being to enlarge the aft cabin, but also to add a few centimetres here and there. Freeman’s concluded it was not only possible, but highly desirable and effective, and plans were drawn up based on buying in a standard Aquastar 38 hull and superstructure. The resulting profile gave the yacht a more balanced look, in our view at least, and of course the longer waterline length increased speed and efficiency.

I must confess to have been a little anxious about buying a non-standard boat, but I was reassured by the pre purchase survey and the wonderful credentials of both the naval architects and the builders, as well as the care that had been lavished on the boat during its 25 year life.

The building contract was awarded to the Elephant Boatyard on the Hamble, which built HMS Elephant, Nelson’s flagship at the Battle of Copenhagen. It has been a working boatyard ever since, and has been owned by the Richardson family since 1952. Now managed by the very capable and affable Tom Richardson supported by a team of loyal shipwrights and engineers, it enjoys an enviable reputation for producing and restoring both sailing and motor yachts to the highest professional standard and quality.

Fortunately Tom still had all the original specifications and build details of the boat, and was able to answer a number of questions from me during my pre-purchase enquiries. It was reassuring to know that all the original paperwork and drawings were still available, as well as the enthusiasm and professionalism of the original builders.

The resulting boat, now renamed “Avalon” by us, was a masterpiece and testament to the art of classic boatbuilding skills but allied to modern technology with an emphasis on safety and craftsmanship.

The starting point for the project was to buy in a standard Aquastar 38 hull and superstructure, which was shipped to Elephant Boatyard . Both mouldings were meticulously checked by both Freemans and Elephant, who had previously provided Aquastar with detailed specifications of what was required, in terms of modifying the mouldings and providing the necessary strengthening for the proposed extension.



Both mouldings were then cut just ahead of the transom, and a 1 metre plug, which had been separately moulded at Elephant to Freeman’s specifications, was grafted in and faired to both hull and superstructure. The joints are now invisible, but the overall appearance is one of elegance and purpose. The sides of the superstructure were extended back at the aft helm position, so that the helm seats are now totally enclosed by the superstructure, adding a real feeling of safety and

solidity when using the outside helm. A reverse camber wind shield was incorporated into the design and finished off with wonderful solid custom built stainless steel cappings. The entire hull was then epoxied below the waterline, and my pre-purchase survey found not the slightest evidence of any osmosis, with moisture content in the hull much lower than expected.

The final design touch was a single radar mast mounted on the saloon coach roof, a departure from the standard Aquastar tubular steel radar arch mounted above the helm seats. This mast has a Nelson-look about it, carrying an open array radar and all the necessary aerials, including a satellite TV dome, but the overall look of the yacht is still unmistakably Aquastar.

The extension to the aft cabin allowed for the fitting of a large double berth, as in all Aquastar 38s, but with the bonus of much more floor space at the foot of the bed, allowing for the inclusion of a proper dressing table, and the luxury of a separate shower cubicle in the heads compartment.

Unusually at the time, it was decided to use Ford Sabre engines of 275hp, rather than the more standard Volvo powerplants favoured by Aquastar. Most Nelson yachts also used Ford engines. At the time (and many still feel this still applies) the Ford Sabre engines were considered the best available, in terms of efficiency, weight, reliability and simplicity, Underwater exhausts were fitted to the boat, (unlike the standard Aquastar 38 in the early 1990's, and only introduced by Aquastar on the Aquastar 118 several years later) and under power the engines run smoothly and quietly. The original specifications called for a minimum of 18 knots at the cruise setting of 2200rpm, and a maximum of 22 knots was achieved during acceptance sea trials. When we bought her, we achieved over 17 knots at 2200rpm, and 21.3 knots at maximum power. We cruise economically at 1800rpm which gives us around 12.5 knots and about 1.5nm per gallon (c 3 litres per nm). Not bad for a 25 year old boat!

The engineering systems were intentionally overdesigned. Twindisc hydraulic gearboxes, ZF electronic throttles, oversized Racor filters with warning lights for water contamination, raw water intake warning lights, exhaust gas temperature gauges to monitor power, oversized engine room fans, emergency engine room fire doors, fire extinguishing systems for the engine room, fuel tank areas, and galley, 24 volt electrics, back up battery power for the VHF, and so on. When we bought Avalon earlier this year, we had the engine oil analysed, and the results indicated negligible wear after over 2000 hours of use at an average of about 85 hours annually. I am told that Sabre engines are good for some 10,000 hours, so plenty of life still there.

Internally, the layout is essentially a standard Aquastar 38, with forecabin, galley with dinette opposite, deck saloon and with the bonus of that glorious extended aft cabin, all with an abundance of teak throughout. All window frames were powder coated aluminium rather than the standard bare look, and the forward saloon windows were double glazed to prevent misting up.



Although the electronics were all functioning, we decided to upgrade the chartplotter to the latest Raymarine Axiom complete with an AIS transponder, the instrumentation to Raymarine i70s displays for speed, depth, wind and AIS, and the autopilot heads to Raymarine p70Rs. The radar is still the original Furuno 1850 open array system, and we were advised to keep this as it worked well and outperforms many current radar systems. If and when it becomes uneconomic to repair, we can simply slot in a new Raymarine radar antenna to the Axiom system.

Externally, the aft cockpit has a standard double helm seat and separate navigators seat, both with lockers under and well sheltered thanks to the extended superstructure, and there are 2 beautiful custom made teak deck lockers which double as seating. The “stretch” also means that the cockpit area is much larger than in a standard Aquastar 38. The doors into the saloon from the cockpit, the side entrance door by the main helm station, and the cockpit handrail were custom made in teak to a standard more suited to a super yacht, and all have been well maintained. Both the superstructure and topsides were painted with Awlgrip from new, the latter in dark blue, and the topsides and transom have extensive teak badging, more like a Nelson than an Aquastar.

Unusually, the previous owner did not have a diesel heater fitted, preferring to install an air conditioning system with electric heating, both of which work well via either shore power or the 6kW generator.

The boat handles well, no doubt in keeping with all Aquastars. I have not been out in another 38 and so cannot compare directly, but I suspect that Avalon handles similarly, possibly with a small advantage in handling and speed due to the longer hull. However, motoring with a following sea is not an Aquastar’s best feature, and I suspect Avalon is no different in that respect.

There is one thing that niggles me about the design, in common with all Aquastars. Engine room access is a pain, with the need to roll up the carpet and lift out several floor panels just to check the engines etc before setting off. I am thinking of modifying this to a lifting hatch on hydraulic struts, much like a Nelson, but need to investigate the feasibility of this more deeply. Has anyone tried this?



As we are now both in our 70s, we hope to get 2-3 good years with Avalon before hanging up our boots. I am sure she will look after us with typical Aquastar safety and seaworthiness, and with a few or 2 nice additions thrown in.

REGALIA



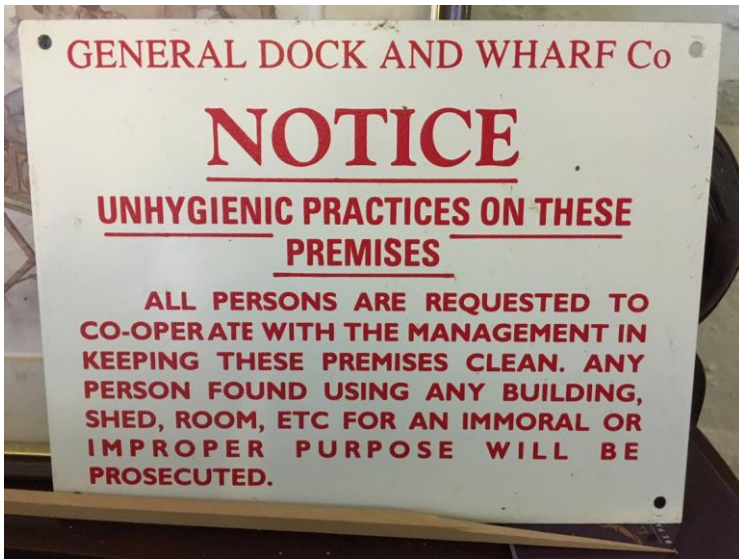
We have some very good quality club ties and these are available by post. The design is shown here and the logo is woven into a dark blue tie and is very smart. The price is £15.

Burgees are also available at £17 for the small ones (13”) and £22 for the larger ones (19”). These are also well made, sewn and come with the toggle and braid for attachment to your boat.

Payments made electronically are most convenient, and help keep our costs down. Please send an email so we know we are to expect a payment, and to what it relates, (burgee, tie etc.):

Account: The Aquastar Club;
Sort Code: 20-68-10;
Account Number: 43945057.

POINTS TO PONDER



Seen in a boat museum



Seen in a marina

Ngwen.