Thought

Somewhat inconvenient, occasionally dirty and often smelly but bunkering is always necessary. Michael Howorth looks at some of the do's and don'ts of securely loading fuel oil on board superyachts.

The task of taking on fuel aboard a superyacht is, in seamanlike terminology referred to as bunkering. Thus a yacht taking on fuel is bunkering and a fuel agent is the term often called a bunkers agent who arranges for the supply of fuel to ships and superyachts alike.

The process is somewhat inconvenient, occasionally dirty and often smelly but always necessary. As such it becomes routine and as with any shipboard routine it can be viewed as a monotonous, somewhat boring and uninteresting task. Yet because fuel is flammable and the gas it gives off explosive the task has to be performed taking great care and utilizing great vigilance.

Watch and learn

It is not a task that should be delegated downwards to those who might not fully understand what is going on. Instead junior crew should watch and learn from their seniors how it is done what is undertaken in the way of safety noting all the precautions taken. Senior crews should encourage such observation and should take the time to explain what they are doing and why.

The dangers are two fold. Firstly there is the risk of fire and or explosion that could lead to damage, injury and, in the worst case, death. The second huge risk is spillage and that can give rise to charges of pollution, which in turn can result in fines, vessel detainment and even in the most extreme cases the removal of certificates from competent officers.

The decision to take bunkers is generally made by the yacht’s Master, her engineer or manager or by all three discussing the matter together. Whoever makes the decision to order fuel should do so using companies that know and understand the process of bunkering yachts.

Superyachts are not the same as commercial ships when it comes to taking fuel and suppliers who think otherwise are best avoided. Superyachts frequently have smaller tanks and are less able to take fuel at speeds supplied to commercial ships. Not all superyachts have secure and safe ways of containing a spill should one occur.

The most senior of on board engineers should always be appointed to co-ordinate and take charge of the bunkering operation. He should devise and utilise a loading plan and use the yacht’s bunkering checklist that he has devised or been given by the yacht’s Master or Manager. All crew members involved in the exercise should be fully conversant with the specification and quantity of fuel to be lifted, the yacht’s fuelling and tank sounding arrangements. Good crews practice what to do if the alarm system sounds and a fuel loading sequence goes wrong.

Emergency response

Needless to say it is of primary importance that everyone on board should be made aware of the intention to take bunkers so that the yacht’s emergency response plan can be activated without delay in the event of a spillage or fire. This means that day workers or contractors should also be told. Well-run superyachts tend not to have either day workers or contractors on board when bunkering is taking place.

Roland Bourgeaud, Yacht Fuel Services
It should never be forgotten that, no matter how well the yacht is prepared for the task of taking on fuel, the bunkering facility itself might become the instigator of a spill. It pays to have contingency arrangements in place should this occur and the possibility should be checked and discussed by all involved beforehand.

Clear and detailed drawings of the yacht’s bunkering system should be available for use by members of the bunkering crew during the operations. Well-run yachts have their piping diagrams in locations suitable for easy reference by anyone in the crew. As well as aiding the routine checking of pipeline configurations, access to such diagrams may prove indispensable in an emergency. It is really important that those involved in bunkering talk about communications before they start. What systems will be used, who will monitor which system and who is responsible for communicating information to the relative parties if the task goes pear shaped.

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Well-run yachts set up meetings between those crew that will take part in the bunkering process and they should discuss amongst other matters the following: Which tanks are to be filled, the sequence order of the tanks to be filled and how much fuel is to be taken into each of them. This is the time to run through the emergency procedure in case an oil spill occurs, detailing the responsibilities of each crew member and what they should do.

The next tasks involve the physical checks needed and the first is to record on a checklist the tank soundings taken before bunkering begins along with the yacht’s draught readings fore and aft. All deck scuppers and save-all trays need to be plugged and the fuel hoses have been secured into place. Make sure valves that need to be closed are closed and those that must be open are left that way. The conscientious officer in charge eyeballs each of these personally rather than rely on being told it has been done. Check that the overflow tank is empty and ensure that adequate lighting at the bunker and sounding stations has been provided. The No Smoking notice should be in position and the red Bravo flag, or at night a red light, has been hoisted for all to see. At this point it makes sense to check that all equipment in the SOPEP (shipboard oil pollution emergency plan) locker has been checked and found to be in place.

During the course of bunkering, representative fuel samples should be taken and retained in line with regulatory requirements. The duty officer should keep in close contact with the bunker team throughout. Deck officers should tend the yacht’s mooring lines to ensure that the movement of the yacht is restricted to a minimum and that she is as far as practicable, kept upright and on an even keel.

**Calculate and check**

Before bunkering the engineer in charge should calculate and check which fuel oil tanks are to be filled. He should do this after he receives confirmation concerning the amount of fuel to be received. If the yacht does not have the capacity to take it all now is the time to say so, not when the tanks begin to overflow. It is good practice to necessarily make a physical check of tank spaces. Today’s computerised fuel gauges are very good but mistakes can happen. It might be necessary to empty some tanks and transfer the oil from one tank to another. This is maybe necessary so as to prevent mixing fuel from two different suppliers together thus preventing incompatibility between the previous and the new supply.

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