TSAC Boat Preparation Guidelines

These guidelines are not intended to be a comprehensive set of instructions on how to prepare a boat for towing, but simply to highlight the main points that need to be considered.

These can be split into 3 main categories:

- 1. Preparing for towing
- 2. Equipment
- 3. Before you Leave & On Return

Preparing for Towing



The Shogun keys and electronics are in the white cupboard by the workbench. The petrol tanks are kept under the seat of each boat. Check they are both full, and, if necessary, send someone off with the Shogun to get fuel.



The two boats have the same types of fuel can, shown in the foreground. There are also spare cans used for carrying extra fuel for long trips/expeditions, as shown in the background.



There's also a Jetcard which can be used to buy diesel for the Shogun and petrol for the boats (unleaded) – this will only work in the Jet garage round the corner at Shinner's Bridge.



The boats have trickle chargers which need to be disconnected before moving the boats. Make sure that the door to the battery compartment is locked in place once the charger cable has been disconnected – you just need to separate the connector block.



Both boats have isolator switches fitted. These need to be turned-on when you arrive, or you won't be able to raise the engine. It is vital that the switches are left in the off position when the boat is left unattended for any length of time, or when the boat is returned to the boatshed, or the battery may go flat. This is the isolator on the old boat.....



and this is the new boat. When charging the two outer (red) switches will be vertical and the central (yellow) one horizontal. Switch them over as shown to power-up the boat. You also need to disconnect the Shogun charger.



Check the boat tubes are fully inflated and give them a pump if required – **do this before** attaching the straps.



The arrow in the last photo is to the valve where the pump is inserted.



Also check that the rollers on the trailer are lying against the hull and providing support – this is really a check for recovery and boat preparation for towing after diving.



Make sure that the boat is fully wound against the trailer stop roller and that the winch strap is tight. It is also worth making sure that the winch is geared to wind and not unwind.



The keel of the boat should be central to the roller stop. If it isn't, loosen the winch and straps and get some help to move it into the correct position.



Avoid twists in the winch strap as this will weaken the strap over time.



The boat should also be strapped down to the trailer for towing. The front strap should go across the seat to stop it blowing off. The straps should go under the grab lines, so they don't get forced into the tubes, and they shouldn't be twisted (unlike the photo!)



Once the boat is winched in position, tie the painter to the trailer, as a back-up in case the winch or strap fails. Make sure the winch strap is tight (not loose as shown in this photo). It also minimizes any tendency for the front of the boat to bounce during towing. This is the new boat.....



and this is the old boat – note the different type of bracket and tying arrangement.



The straps are attached to the trailer using special fixing points – this is the front of the trailer for the new boat.



This is the front of the trailer for the old boat.



Note that the strap has to go under the trailer bar on the other side to stop the ratchet rubbing on the tube



This is the rear of the trailer for the new boat – note also the securing screw for the trailer bar. Make sure they are tightened before leaving!



This is the rear of the trailer for the old boat – note there are two securing screws for the trailer bar on this boat.



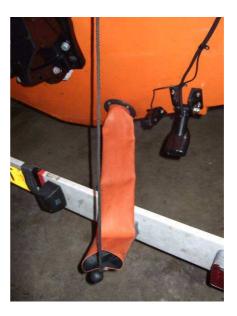
The boat engine needs to be raised a little before you pull it out of the boat shed to avoid it striking the ground by the door, and then raised fully. There is a "rest" that the engine should be lowered onto before trailing – see the shiny metal "L" in the middle of the picture of the engine.



On the old boat the "rest" looks a little different, but the idea's the same.



Once the engine is on the "rest", put the propeller cover on and tie it back to the transom.



However, when you've been diving and are leaving the launch site, leave the "elephant's trunk" down to allow the hull to drain on the way home.



Make sure that the trailer board is securely attached to the trailer bar – the new boat has a double bungee.



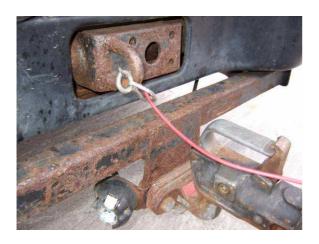
The old boat only has a single bungee.



Make sure that the jockey wheel is up (the wheel support bar fits into a pair of slots in the bottom of the sleeve) and locked in place before moving off......



and that the handbrake is off —the handbrake cable should be hanging loosely and not taut



The emergency brake cable should be secured to a "hard" point on the towing vehicle – it pulls the handbrake on should the tow coupling fail.



Remember to plug in the trailer electrics, and make sure the cable isn't doesn't drag on the ground, but there needs to be enough slack to allow for cornering.

Equipment



Make sure the boat key is in the ignition – it has happened.....



Always clamp the trailer when you leave it unattended (except in the boatshed) – we're not insured if the trailer isn't clamped.



There are two clamps and they are both kept in a carrying case like the one shown above. Make sure you have the correct one (the cases are labelled) and that the key is in the case.



The old boat has a separate echo sounder (shown above) which is kept in the key cupboard. Don't forget the handheld radios (check that they are charged).



The oxygen kits are kept on hooks at the back of the boatshed.



Check that the cable tie is intact as this means that the unit hasn't been opened since it was last checked.



This is the console of the new boat. The chartplotter is permanently mounted and the protective white cover (shown) should be kept in place for travelling.



The new boat has a switch panel beneath the steering wheel. All switches should be in the off (up) position when the boat is not in use.



The two switches on the right are for the chartplotter and radio and need to be turned on before use. It is essential that the units are turned on and off using their individual power buttons and not by using the switch panel.



This is what the console of the old boat should look like once the echo sounder (on the right) is in place – the unit is put on once you arrive at the launch site and not before. We now have a separate gps on the old boat. The cable is now glued in position and the unit (on the left) shouldn't be removed.



Make sure you have a pump, a funnel and an anchor and that the anchor is tied in. You will also need a shot – the Dive Manager (DM) will advise the length required. (Note – the new boat has an anchor locker, so the anchor isn't immediately visible when you look at the bows)



The fire extinguisher is kept in a special holder behind the boat handler.



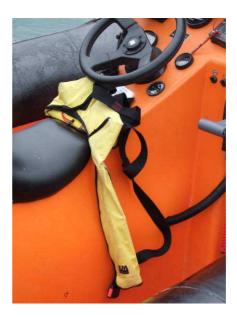
Make sure you have an A-flag and radar reflector in each boat. The reflector is transported in the boat when on the road, to avoid hitting car park barriers, etc, ...



and put up once the boat is ready for launching – use the sleeve behind the boat handler for the reflector. The reflector must be taken down again once the boat is back on the trailer.



Each boat should have a lifejacket in it for the boat handler. This should be clipped around the bottle rack when the boat is being trailed, to avoid it blowing away.....



and not left lying over the seat like this!



If you are bringing spare fuel make sure the cans are tied in securely before towing. Always use the "boat" type fuel cans in preference to the jerry cans. All the cans (including those under the seat) should be transported with the bleed screws closed to avoid spilling fuel in the boat.



However, once on the water the bleed screw on the tank in use should be opened. They should be checked periodically to make sure they haven't vibrated shut.



The spare wheel on the new boat has been padlocked in place (see photo on left) - the key to the barrier also fits this. In order to remove the spare wheel from its bracket you need a 15/16" ring spanner and a 15/16" socket spanner, both of which are kept in the Shogun, so if you are towing with your own vehicle don't forget to get them out In addition, you also need a 1 1/16" socket to remove the wheel nuts from the road wheel - this is also in the Shogun.

Before you leave



The tower should give the boat a quick check over to make sure everything is as it should be before leaving, including a check that the trailer board lights are working properly – they're the one who gets the points on the licence if anything is wrong!



Lower the barrier and padlock it and leave the signs out to make sure that the parking bays remain unoccupied until you return.

On Return



If there are members of the public around when you bring the boats back, we are required to put up a barrier so that no-one tries to walk behind the boat when we are reversing it. The barrier rope should be hanging-up just inside the pedestrian door to the boat shed.



It simply clips to the fence on one side and to a ring on the wall on the other.



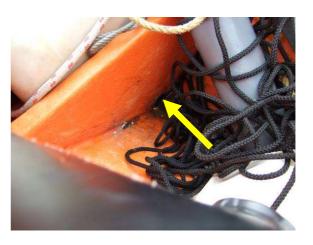
Give the boat a thorough washing down with the hose both inside and out. Also rinse the rear of the Shogun and the chassis.



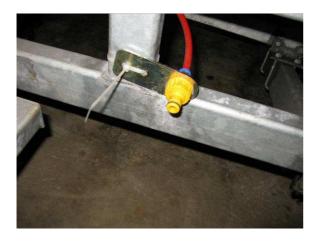
Remove the hull bungs – old boat only (anchor well and bilge), then turn the bilge pump on and lower the "elephant trunk" after washing down to allow the water to drain out of the boat.



The bilge is under a timber plate like this in the old boat



The arrow points to the bung hole in the anchor well



The wheel hubs should also be rinsed – each boat now has a special washing system – all you need to do is to connect the hose to the connector and turn the water on for a minute or two. Note that the new boat only has a single washing point, but there's one each side on the old boat.



Give the bearings on the new boat a grease when you get back (and check/grease them before you leave the shed before going diving).



There are 2 hoses just inside the boatshed door. 1 has a nozzle end and is used for washing down and the other is connected to the "ears" (see arrow) which fit over the engine water intake.



This is how the "ears" should be positioned.



The section with the attached metal rod has to be threaded through the bottom of the engine as shown.



Give the engine a thorough rinse with fresh water – let the engine run for at least 5 minutes – but never run the engine without the water turned on.



The "ears" on the new boat are a bit different and they separate into two pieces.



The second piece then fits onto the other side and is locked in place with the metal spring clip. The ears must be pushed really tight to the engine to form a seal. Always check for the telltale when the engine is running.



When you put the boats in the shed, lower the engines once you're about half way in, so they don't hit the rear wall (the skeg should just be clear of the ground). The engine on the new boat also needs to be rotated to starboard (right) so that the boat fits in the shed.



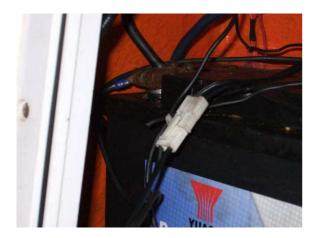
Once the boat is fully in position (there are paint marks on the floor to indicate where the wheels should be) chock the wheels.



Loosen off the winch strap and boat straps once the boat is back in the shed as they will shrink as they dry and this could damage the tubes.



Turn off the isolator switches once the boats are back in the shed. The new boat isolators should be left as shown above.



Once the isolators are turned off, reconnect the boat chargers. The connector should only go in one way. Turn the charger back on at the wall once connected – this will reset it to charge mode in the case of the old boat.



This is the charger for the new boat. The blue button at the end (left in photo) should be pressed twice to get the light next to the car illuminated as shown.



Also reconnect the Shogun charger.....



Remove the white cover from the new boat's chartplotter before washing the boat down and leave it off when it is in the shed to allow it to dry. Give the old boat's echo sounder a quick rinse and put it back in the white cupboard with the Shogun keys.



It's black to black and red to red.



Sort out any shots or spare lines that have been used and hang them up to dry out ready for the next use.

Finally, don't forget to put the signs back in the boatshed, lower the barrier and lock-up when you leave.

Please let the Dive Manager know of any equipment faults so they can let the Diving Officer and Equipment Officer know.