# USE OF A SMALL LAUNCH FOR TOWING

## Part 3 TOWING.

Persons with no experience in the technique of towing usually think this is simply a matter of tying a rope to the stem of the tug and making the other end fast to the bow of the boat to be towed. If you do try to tow in this manner you will very soon come to grief, for as mentioned earlier, you will find that the tug cannot steer. It is for this reason that tugboats have their hook situated just a little way aft of the centre of the boat. If the tow boat is set-up correctly the after towing post will automatically prevent anyone making this mistake but don't be tempted into making your tow-rope onto a cleat anywhere near the stern as a quick job, for unless the towed boat is a fair bit smaller than your launch, you will end up in a muddle.

The towrope eye should be dropped over the fore deck cleat of the boat to be towed and lead over a fairlead or bow roller. It should not be wound round the cleat in a manner that would cause any delay in casting it off quickly. If the towed craft has someone steering and turning space is limited the rope may, to advantage, be made-on to the mast, high enough up to clear the pulpit and guard-tails: this allows her greater freedom of movement independent of the tug. The rope should be made fast to the tug giving about two and a half tugboat lengths separation. It should be made onto the after post with a bargeman's hitch, sometimes called a chain hitch; this will allow the rope to be cast-off quickly or surged and thereby lengthened whilst under load.

If the towed craft has no one steering, the rope should always be lead through a bow fitting and the helm locked amidships. If you have some distance to tow and the tiller has been taken away (a fairly common occurrence), it will be found wise to tow on a short bridle. This is simply a short rope fastened to a cleat or stanchion base on either side of the foredeck and lead outside everything. Your towrope is then made on to the centre of the rope with a Sheet bend so that your tow-rope effectively becomes a Y. As the towed craft starts to take a sheer to one side or other the bridle automatically corrects it. This is very effective when towing a boat stern first or towing anything which may want to sheer about.

It may be worthwhile to mention two techniques which may be used when seeking to pull a grounded yacht off the mud. The first is to attach the looped end of the towrope to the yacht's main or spinnaker halyard, then to take up the strain up-tide and beam-on. It is possible to heel to thereby reduce the draft of the yacht, if you have positioned yourself correctly and there is sufficient water under the yacht, she will swing out into deeper water. The yacht may assist in this by running her engine ahead. A mast-head rig is strong enough to allow the yacht to be hove over past 45º but with fractional forestay configurations the tow-rope is best made on to the mast no higher than the hounds.

The second trick is a means of increasing the power of the launch in the manner of a man swigging on a halyard. A warp is run out from the grounded craft to some securely fixed point or heavy anchor and drawn up as taught as possible. The towrope is then made-on to the centre of the warp and the launch driven off at a right angle to the warp, thus exerting a greater pull than she is capable of if towing straight ahead. This is the only situation when a snatch or jerk should be attempted, never, never try it when made-on to a mast.

Before undertaking a tow some thought should be given to the wind and tide, not only to their strength but also to their relation to each other. One must have a plan in mind as to how one intends to bring the towed craft into the desired berth. Remember all the while that when towing over the stern, other than letting the craft come to a natural standstill, you have no means of stopping her. Bringing the tow head to tide is the most usual system but that won't work if you have a wind blowing that will drive the craft ahead over the tide. Use of the anchor may well be a solution in some circumstances.

Consideration should also be given to the effect of the wind on the type of rig of the towed craft or, in the case of some high-sided craft, the windage of their superstructure. For example: a ketch rigged craft, because of the windage on her mizzen will, if there is no one at the helm, seek to take up a position with the wind slightly aft of the beam. In a strong following wind it is only possible to keep her from taking a sheer by towing faster which may well be the very opposite of what you want to do. The average sloop rigged yacht with a cut-away forebody will, if left to her own devices, lay head downwind or with it slightly over her quarter. Some modern extreme fin-keel types, will, if allowed to gather enough speed, actually gradually come up to a little above a reach under the windage of their mast. Of course the head falls off to leeward if their forward way is checked.

Most small outboard-powered motor cruisers tow best backwards from a bridle made onto their quarter cleats but distance to be towed and wave conditions should be considered. Towing a multi-hull craft in a strong following wind can be difficult as they may try to overtake the tug (I have on occasions, had to hold them off with a boat-hook) A very good precaution here is to hang a couple of large car tyres over their stern; this works wonders with any kind of boat which wants to take control in a heavy wind but at the expense of towing power.

**TOWING ALONGSIDE**.

Unless the boat being towed is smaller than the tug or there is someone at it's helm to assist in the steering, towing alongside is only possible when there is no maneuvering to be done. As was stated earlier, in order to turn, a boat must be able to pivot about the centre of it's underwater plane. It is almost impossible for an 18' launch made on alongside to have the turning power to drag, say, a 30' yacht around in a circle; even if it could, the diameter of that circle would be enormous. Yet on boatyard moorings and marinas small launches regularly move 35' yachts about with ease, under full control, in restricted waters.

The explanation for this is that the launch is not made on alongside but is, in reality, pushing from the after quarter of the larger vessel and at an angle to it's fore-and-aft centre line.

In actuality the launch is made fast so that it becomes an extension to the after end of the larger craft. In deciding exactly where the launch should be made fast a simple rule of thumb is that the launch must have it's rudder further aft than that of the craft it is propelling.
The launch must be positioned so that it's bow is pointing into the side of the boat being moved making
is maintained whether going ahead or astern. Now, as the launch goes ahead it is pushing behind the
larger craft's mid-ships pivot point. If we were to be made on to the port quarter she would tend to turn to
port all the while, however, as the stern of the launch extends further aft than the larger vessel's she has a
great deal of leverage with her rudder and can easily control this bias: it is here that a larger than normal
rudder for the launch pays off. Especially so when starting off with no way on, for a short burst of power
with the helm held hard over will impart a strong turning moment almost on the spot. The other great
advantage of what we might call push-towing is that in this mode we are able to go astern and thereby
stop. Allowance must be made for the turning action this imparts but with experience it is possible to
execute a slewing stop rather in the manner of an ice skater. It will be found possible, with gentler action
making use of wind or tide, to do all that the towed craft could do under it's own engine.

Windage in the towed craft's topsides and rigging is probably the limiting factor in this

style of towing. Close-to movement of a yacht above 30’ L.O.A. should not be attempted in winds much above Force 4. when using a launch having power in the 20 H.P.range. Towing in wind strengths above this is best done over the stern bearing in mind the limitations of stopping, whilst push towing over any great distance when wave conditions may be encountered should be avoided.

As with the movement of any large bodies which may gather momentum, all actions should be slow and controlled at all times.

Ted Reddish, amended 2006