



In part two of this article we will consider what to look at when choosing a boat to refurbish, once the hulls have checked out. As with the hulls, the significance of the condition of the other components will depend on the intended use for the finished project.

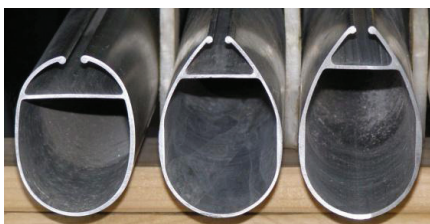
A lot of fun can be had just sailing or learning to race a PT that has a fairly ordinary sail and pretty basic equipment and foils (centreboards and rudders). However, if competitive racing at state or national level is the intended goal, the future cost of upgrading critical components such as the sail, mast and foils, which may have seen better days, should be considered.

The following comments address what to look for when considering a boat for general use as well as its suitability for racing.

The Mast

PTs started out with a mast that was fairly small in cross section and very flexible. Over time, masts have become bigger in section and stiffer (see below).

If a mast is overstressed it can become bent. If the bend is a smooth curve over a reasonable length, it can



usually be carefully straightened out, although the resultant bend characteristics of the mast will be detrimentally effected to some degree. A kinked or dented mast cannot be fixed.

To check the mast, lay it flat on the ground on its side, then bend down and look along it. It should be straight or close to it. Any bend will most likely be where the boom pushes against the mast. Also look for damage to the sail track at this point caused by a poorly fitting gooseneck (boom attachment fitting).

Then roll the mast over so the sail track is uppermost. Lift one end up so the mast is only touching the ground at the other end and look along the sail track. Again, it should be straight or close to it. Any bend will most likely show up around the lower hounds (stay attachment fitting). Roll the mast to the left and right to check that it sags the same amount both ways. A bent mast is useable (unless the bend is significant) but it would affect racing performance and, therefore, would need correction and possibly replacement of the mast in the foreseeable future.

Check for corrosion. A mast used in a saltwater environment, which is not thoroughly washed, can suffer severe corrosion under and around any stainless steel fittings, which will weaken and ultimately ruin it.

Check for loose or cracked fittings as these will need to be refastened (unless due to severe corrosion) or replaced. Also check for broken or rusty strands on the rigging wires as these indicate they are on the way out.

Check that all the wires have shackles or adjusters to attach them to the boat. Rope adjusters are not really satisfactory and are best replaced with stainless steel fittings.

Check the halyard rope for wear or UV deterioration.

A 'spare' mast may prove useful at some stage.

The Sail

As the sail is rolled out on the ground, the first thing to note is the softness of the cloth. New sails are 'crispy', but soften with use. Long exposure to UV light will also deteriorate the cloth and stitching. Plain woven cloth lasts longer than see-through or shiny plastic materials.

Look for worn spots where the sail battens rub against the wire shrouds (readily patched), failed stitching (readily re sewn) and creases or splits in 'plastic' sails (a new sail is probably not far off). Look for rust stains on the cloth (removable) and corroded metal eyelets (replaceable) as this may indicate that the sail has been

stored wet with salt water (not good). Mould will also indicate that the sail has been stored wet.

Then check that all seven battens are included and fit the sail.

As the mast size changed over time, the sails were cut differently to suit the bend characteristics of each change. If the mast/sail combination is not matched correctly (i.e. one or other has been changed over time) racing performance will be effected. Unless the owner knows the history, this may not be easy to check without consulting the sail maker.

Some sails are 'cross cut' (parallel sided cloth panels run across the sail), while others are 'radial cut' (triangular panels radiate from the corners). Top performing skippers will swear by either type, so what really matters is the condition (unless a particular version of a type was known to be a poor performer).

'Spare' sails are rarely useful, except to give to someone less fortunate.

The Centreboards

PT centreboards were originally wide, square ended and made of timber. As time passed they were also made of fibreglass (or carbon)/foam composite and changed in width, length and profile. The changes were mainly aimed at improving racing performance, but all types are currently in use.

Check for damage to the part of the foil that extends below the bottom of the boat, as this affects performance. Most damage is repairable, but any cracking across the width of the board is bad news (especially with fibreglass or carbon fibre).

Upend the board and look along the bottom edge, or from end on. The shape should be symmetrical (i.e. same curve both sides of the centreline). If the shape twists to one side, this will adversely affect racing performance and cannot be fixed.

Production foils can be pricey. However, a competent handyman can make relatively inexpensive foils.

The Rudders

PT rudders started out similar in design to the centreboards and slid up and down in wooden rudder cases. Like the centreboards, over time they changed in the materials used and their shape. Now they are usually mounted in aluminium or carbon fibre cases and pivot, rather than lift vertically.

As with the centreboards, check for damage, twist and

cracks across the board, especially just below the rudder case.

If the cases are aluminium, check for cracks and corrosion, especially around stainless steel fastenings and under paint or powder coating. If the steering components (crossbar and extension) are connected with flexible plastic fittings, check for splits in the plastic.

Check that the rudder lifting system operates effectively.

The Hull Beams

These were briefly addressed in Part 1 and should be checked for the damage mentioned. It would be unusual for the beams to be bent, although the front beam may appear curved up in the middle as a result of jumper strap (front beam brace) tension. This is OK.

Check for corrosion, especially where the jumper strap/dolphin striker/mast step assembly is attached.

Jumper Strap Assembly

There are many variations of this assembly using relatively small section stainless steel strap or large section aluminium. Both are effective, but stainless steel is more likely to cause significant corrosion where it contacts the aluminium beam.

Check for cracks in the strap at the attachment bolts and where it bends at its centre. Check the size of the bolts holding the strap to the beam. These should be substantial enough to sustain significant loads (i.e. at least 8 - 10mm). Check for damage to, or bending of, the vertical dolphin striker assembly.

Centre Beam

Depending on the cross section of this beam, it may have bent under the skipper's weight or mainsheet tension. This isn't necessarily a problem.

Check for corrosion or cracks, especially at the mainsheet block attachment point.

Trampoline

Depending on the age of the trampoline, it may be laced to deadeyes, slide into tracks (or a combination of both) or be suspended by wire.

Check for obvious stress damage (especially around eyelets), or failure where the cloth rubs against the tracks. This sort of damage needs to be repaired or it can quickly lead to more serious failure. Stitching may wear through or deteriorate over time, particularly where the skipper slides across it, but it can be restitched.

The trampoline material is usually quite durable but can wear through, especially where it contacts the centre beam. Once the mesh starts to break up, serious patching is required, but the tramp's life is probably limited.

Toe Straps

Toe straps are usually made of nylon webbing and can be long lived. However, severe fading may indicate UV damage. The attachment of the belts to the boat is usually the weak point.

Check for worn stitching at the strap ends (including underneath the strap), frayed attachment ropes and loose or cracked attachment fittings.

The Boom

Booms are usually, though not always, made from the small aluminium mast section mentioned earlier.

Check for corrosion where stainless steel fittings are attached. Check that the gooseneck, to attach the boom to the mast, is included and that it fits. Check that the mainsheet system (rope and pulleys) to control the boom is complete.

There should be a vang system (more rope and pulleys) included that attaches to the mast base and to a point part way along the boom to hold it down. If the boat is to be raced, an outhaul (a sliding system on the outer end of the boom, which allows that corner of the sail to be adjusted whilst on the water) is advantageous.

Other Systems

Other systems which can be beneficial while racing are a downhaul, which adjusts the tension applied to the front

edge of the sail, a leech line, which adjusts tension applied to the rear edge of the sail, and an adjustable lower forestay which adjusts support to the lower mast. However, these can be added later if desired.

Braided polyester ropes last well, even when they look a bit 'used', but ropes with a central core tend to 'fail' more readily once the outer sheath is damaged.

Basic pulleys and jamb cleats are adequate to operate the boat and are generally robust. A touch of polish and some lubricant should bring them back to life and keep them going. Sometimes good discarded gear can be sourced from other skippers.

However, if the boat is to be raced, consider that upgrading to new gear such as ball bearing pulleys and cam cleats at a later date may consume significant dollars. It may be a wiser option to pay a bit more now for a boat with better quality second hand gear.

In Closing

The final decision to drive away with a 'new' pride and joy in tow may depend on a range of factors other than those covered above. The inclusion of a good trailer and maybe even beach rollers (quite handy), for instance, may have swung the deal.

Whatever the reasons, hopefully now the buyer will be more informed as to what they are taking on. There's not much that can't be fixed or, if necessary, replaced, and replacement can often be a staged process over many years.

Don't be reluctant to seek advice from those who have been there before as they will usually be only too pleased to assist.

Ralph Skea - *PT3065 Solitaire* 

APTCA AGM 2014 – Summary

Summary of the Annual General Meeting of the APTCA, held during the Nationals at Portarlinton, Vic.

- Members feel that some rules need simplification. APTCA will compile a list of ones that might be considered.
- PTCIA now issuing plans and sail numbers.
- 2015 Nationals – To be hosted by Lauderdale Yacht Club, Tasmania.
- 2016 Nationals – Scheduled for NSW. Venue yet to be determined.
- 2015 Internationals:
 - Victoria not willing to host.
 - NSW investigating options. Proximity to

shipping ports is a priority to reduce costs.

- South Australia offered Arno Bay.
- NSWPTCA given until March to derive options for hosting the event.

Office Bearers elected:

President	Bruce Rose	(Tas)
Vice President	Sean Keady	(Tas)
Secretary	Tony Hastings	(NSW)
Treasurer	Russell Jolly	(SA)
National Measurer	Russell Jolly	(SA)
International Measurer	Garry Williams	(NSW)
Publicity Officer	David Stumbles	(NSW)