Chapter 13 Anchoring System

The reason we describe this as a 'System' is that everything has to work together, and it is only as strong as the weakest link.

Anchor

Our primary anchor is the one that came with the boat, a 44lb (20Kg) Simpson Lawrence Claw, which is a clone of the Bruce anchor(now that the Bruce patent has expired!). It has worked well for us in a variety of bottoms.

I believe that a CQR anchor is also offered as an option.

A second anchor setup is also offered as a Factory Option, consisting of:

- Windline anchor roller
- Additional hawse pipe through the deck
- Divided the chain-locker
- A 'deadman' - a loop bolted to the bulkhead to tie the bitter-end.

I added a second anchor setup (not the factory option) which is a Delta 35lb anchor. In addition, we have a Fortress FX37 in the lazarette as a stern anchor and a large Fortress FX55 in pieces) also in the lazarette as a storm anchor.

Because of liability concerns, Tomco do not install a swivel between the anchor and the chain. It is, however, a good idea to install one yourself in order to stop the chain from twisting.

I installed an Italian-made 'Kong' swivel from West Marine. I have the 8-12mm version (the middle sized of 3 - WM part number 289280) that fits the 5/16in chain on the AT34. I take it apart to clean and check it – then grease and put it back together with Locktite Blue once a year.

Chain

The AT34 comes with 275 ft of 5/16" HT chain as standard.

The Factory shackle the bitter end of the chain to a 'deadman' (a stainless steel ring) in the bottom of the anchor locker.

A better idea is to replace this with a spliced length of line, long enough to reach above deck. In an emergency, if you have put out all your anchor chain, but still need to escape an anchorage, you could cut this line to easily to dump the anchor and chain.

An expensive move, to be sure. But better than dragging onto something hard…

Windlass

We have a Lofrans Tigres electric windless.

Contact info:

http://www.lofrans.it/ or the importer http://www.imtra.com/

There is a sight-glass is on the front of the unit for checking the oil level. The recommended oil is SAE90 gear oil (the same grade as the bow thruster). There is no scheduled change interval – just check the oil level.

The Windlass is fed from the Engine Start Battery. There are thick red (positive) and yellow (negative) cables running from the Engine Starter (lower stbd side of engine) thru a 400A fuse on the stringer, then forward to the Bow Thruster. Then a slightly thinner pair of wires runs thru a 125A circuit breaker on the stbd side of the bed to the two foot switches, and then to the Windlass. There is no low-voltage control box: the foot switches control the high-current flow directly.

If there any problems with the windlass, check the fuse, then the circuit breaker then the foot-switches. Randy Guzar (AT34-095 "Heart Tug") found that bad connections on the foot switches prevented the windlass from running.

Washdown

The washdown pump is on the engine room bulkhead starboard side, and is the same pump as the fresh water system. It used to be a Shurflo - model 2088 on older AT34s and model 3901/3902 on the later ones. These have now been superseded with Whale Universal UP1815 pumps because of numerous reported problems with the later Shurflo pumps.

The microswitch gives problems on the Shurflo pumps. Rebuild kits are available.

The nifty push-down deck fitting is from Newfound Metals:

http://www.newfoundmetals.com/

It's much easier to connect the hose with the push-down connector for the washdown *before* you switch on the pump and pressurize the system. Make sure that the connection is all the way on before turning it on.

It also helps to turn off the washdown pump and bled out the water pressure before trying to remove the push-down connection.

Anchor chain markers

I've tried several methods to mark the chain over the last few years:

- Paint - which wears off pretty quickly.
- Wire ties or yarn - which the windless grinds off.
- And the winner is: Chain Rainbows.

Chain rainbows are little 'bone shaped' colored plastic knuckles that fit inside the links of the anchor chain so that you can tell how much you've let out.

In 2004 we had laid-out the chain on the dock in Seattle, and were getting ready to paint it, when a Aussie crewman from a nearby mega-yacht walked past and took pity on us.

"Crikey Mate," he said "you don't want to be bothering yerselves with that. You should use 'dogbone knuckles' like we do". He took us over to his boat to show us what he meant. Of course, his chain was many sizes larger than ours and it did take me a LONG TIME to find these things – but he was right. They have worked much better than anything else we have tried before.

They're called Chain Rainbows and they are made in Italy by a company called Osculati. We had to mail-order ours from England, but it looks like they're imported by Imtra now and are also available at a few other places as well.

The cheapest place we've found that carries them is a mail-order store called 'Ahoy Captain' that we found at the Annapolis boat show last year. Click on the Loyalty Rewards Coupons link on their home page for savings on orders. They're website is http://www.ahoycaptain.com/shop/imtra_chainmarkers.html

We've also seen them for sale by Imtra, Fisheries Supply, and Defender. Check around – the price seems to vary with the exchange rate.

The only issue we've had with them is that some of them have gotten dirty (blackened, actually) over the years and we've had to replace a couple with new ones so we can see them again.

The AT34 has 5/16" HT chain, and I think the AT41 does too. These markers are sized in Metric, and, despite what the website state, the 10mm markers worked the best for us.

They are a bit larger than the recommended size for our chain and are therefore a bit harder to get in - but after two and a half years or steady use we've never had one pop out. You need to wet them first and then use the end of a flat-bladed screw-driver to push them in.

We used a coding system on ours - green for every 10 feet, red for 50 and yellow for 100. So for example, 30 ft is marked with 3 green markers and 170 feet is marked with one yellow, one red and two greens.

This works well for us, but it took many bags to fully mark the chain. The markers were quite a bit cheaper when we bought ours than they are now. A friend of ours ended up marking every 20 feet instead which, at today's prices, will save you quite a bit.