DIY dan buoy

Safety kit doesn't have to cost a lot, as Andrew Poyner shows

ABOVE Pull the red dowel to release the dan buoy
LEFT Dan buoy float is ply and polystyrene

It has always seemed to me that, in a MOB emergency, being able to deploy a life ring, dan buoy, drogue and light quickly and easily could be a lifesaver. My system does just that.

The dan buoy is made of an odd bit of rectangular domestic plastic ducting about 11 x 5.5 x 40cm stuffed with expanded polystyrene and capped with bits of ply. The pole is a hollow fibreglass one I bought from a beachside store, about 2.5m long, and would normally have a spinny fish or something similar at the top.

The telescopic sections are epoxied together, a flag fixed to the top, and the whole thing epoxied to the wooden caps in the float. The weight is lead, about 4cm diameter x 4cm high, cast from scrap in a tomato purée tin with a bit of 15mm copper tube in the middle, both held on a wooden base during the casting.

The frame is made of odds and ends of UPVC fascia board, but could easily be ply (though UPVC needs no varnishing!).

The life ring rests on two small ledges and is held in place by the dan buoy which in turn is held in place by a tight double loop of bungy cord. The bight of this pokes through a hole to the inboard side, and has a short dowel (red in the photo) through the loop. The stem of the dan buoy above the float locates in a half circle cutout on a sort of shelf, and the light is fixed under this and out of the way. The drogue lives in a length of domestic plastic waste pipe, and is tied to the lifering as are the dan buoy and light with short lengths of line. None of the dimensions are critical, though the dan buoy should lie flat on the lifering so as to grip it well.

COST £5

In an emergency, you pull the dowel out by its string and the weight of the dan buoy pulls the whole lot over the stern into the sea. When 'rearming' the thing, a short piece of line tied to the bungy loop makes poking it back through the hole a lot easier.

Mine seems to work well, though fortunately I have never needed to use it for real.

The cost was about £5 for the pole, and the rest was odds and ends I had lying around.

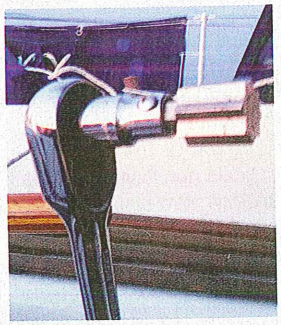
Easy winching

Rick Bowen gets a handle on it

PROJECT OF THE MONTH

I have been sailing my current boat, the Westerly Longbow *Vicki-D*, for over 20 years around the south coast, the West Country, northern France and the Channel Islands from Hayling Island Sailing Club.

I'm most likely to be found sailing single handed, with the spray hood up and, on longer trips, with my trusty Autohelm 2000 steering us through the waves and spray and me keeping a good lookout in the cockpit.



Star drive bit was bolted to a socket and ratchet handle

With the spray hood up I have found that when winching the genoa the handle is limited to about 100° movement as the hood restricts the full use of the geared Lewmar winch.

Ungeared and using a standard Lewmar handle, the load on the genoa sheet is very heavy and when geared the amount gained each time is minimal. This is especially difficult when close-hauled as the winches aren't self-tailing, though the use of Winchers makes it a little easier when sailing single handed.

So I searched online for a suitable commercially-made handle that would help – but to no avail. I even toyed with the use of a battery-operated drill, but they were all too heavy and cumbersome.

As the arthritis in my hands has become more advanced and painful over the years I had wondered about how I could make it easier without the huge expense of installing powered winches.

Winch handle extension bar works a treat

COST £36.50

A few months ago I was helping my son with some adjustments to his classic Mini using my engineering socket set when I realised that I could modify a ratchet socket wrench to operate the winches on the boat.

A new long handled, ½in ratchet wrench from Halfords (£25) was glued and fitted to a turned down and drilled out 300mm hardwood rolling pin (£1.50 from Wilkinsons) and several coats of varnish were applied. A matching star drive bit (£10 from a boat jumble) that fitted in the top of the winch was mated with a suitable socket and locked in place with a stainless steel nut and bolt.

Under sail I can now winch the genoa in tight with the new handle and with a flick of the thumb can change the gearing, operating within the 100° of angle I have to work in. After a long beat up the Solent or a channel crossing my hands are relatively pain free and my sail trim is much more seamanlike. PBO