



**Search and Recovery
Norwich
11 August 2001**

[Trip Report Index](#)

Trip Report by David Martin

Divers:

- David Martin
- Paul Atkinson

Surface Coordinator:

- Pete Huxley

Place:

River Yare by entrance to north channel to Rockland Broad. (Norfolk)

Background

The Norfolk broads are an ideal place for boating, but yet not known for their diving. The reason for this probably has something to do with depths not exceeding 6m and vis not exceeding 6". CUUEG were asked to send in a dive team to look for 'a 2ft yellow box' lost whilst sampling the sediment by Stephen Muller, of the Zoology department. Stephan's PADI qualification made him think of the dive club, but also volunteer to drive the boat. Clearly he already knew something that the rest of us did not...

The 'yellow box' description was to be updated as we got to the dive site. The grab had 15" square base, with scoop, buried in the mud; all we could hope to find were 2 arms, each 1.5" diameter sticking out of the mud...

Planning

The BSAC Maxim '*Plan the dive, dive the plan*' seems to exist only so far as Club Diver lectures. We were able to plan the kit in advance, and to some extent the search pattern, but these would be governed by factors we would only find out later. Our first problem was working out how much kit to take. 9 names were on the list, with a couple due to drop out, and others likely to have only expressed the merest hint of interest, we chose optimistically to fill 8 cylinders. When the kit was packed, it seemed likely that we would only have 2 divers, so hoping for another, or in the event of kit failure we took 3 sets of kit. This coupled with over 50kg of lead, anchors, O₂ kit, A-flags, and every piece of rope, line, DSMB, SMB buoy etc owned by CUUEG/Stephan, as well as Paul's tool kit, David's climbing kit and much more, was to fill the 22' workboat.

Saturday

We were off to a bad start. Pete was late for the rendezvous, David was still asleep when he was meant to be in the car, and oblivious to Paul knocking on the door. Clearly having had navigations from Richard in the Farnes, and starting the jokes about the ability to find something, David managed to miss the local road turning towards the village near the dive site. It wasn't until he realised that they were on the other half of the map that we turned around. Within 10 minutes we were at the staithe. Just 15min later we were on the dive-site, greeted by water-skiers. We had been informed that slack water was likely to be at low water at 1pm, so planned to dive 12-2. Saturday 11-2 is water-ski time. Flag-A seemed unrecognised, but we were able to plead with one abusive man who had managed to lose his tow within shouting distance of our boat. 4 SMBs weighted with 8lbs lead would mark off the area, helped by the boat with its, mud anchor, CUUEG anchor, and 2 buoys between it and the bank. We felt rather vulnerable in the water, and were grateful for the best efforts of Pete and Stephan to keep the boats out of our cordoned off area, whilst taking great care not to stray out of it. With little else to do, Stephan used idle minutes to write down the registration numbers of speedboats not towing skiers, this apparently being frowned upon.

We realised whilst marking the area out that the visibility would be appalling, and that to be effective we would need to use rope signals to communicate. David would be at the end of a circular exploration line keeping it taught, with Paul holding it just inside, with no overlap (the object was large enough that even a 6" gap between divers was likely to find it, so a no-gap policy would effectively cover the search area. We agreed on a simple rope signal set. 1 pull - OK, 2 pulls come closer, more than 2 - help. With a predicted max depth of 3-4m, the abort plan for almost every scenario was to surface. The entry was none too easy, needing to negotiate a cleat, an anchor rope on the boat, and a current to push you under the boat in the water. David almost went under the boat, and Paul managed to cause a loud crack, which we found

to be the DSMB between his legs breaking its bungee.

The search pattern was to start with a circular search, from a 'best guess' buoy. This buoy would be the site of all ascents and descents, with the divers measuring their distance from it by a marked exploration reel. Plans to find direction by compass were thwarted by the vis, and fining a datum was ruled out o hitting the bottom. The first plan was a snag search. This calls for a long length of line to be pulled out to try to snag the object above the flat bottom. We used 5m of line, and were unsuccessful. On returning to the centre, we noticed that the snag line was well above the bottom, so the snag was repeated with the line attached to a loop on the weights, about 2" above the bottom. This again was negative. Whilst watching our bubbles Pete and Stephan decided we needed to move the 'best guess' marker more mid-channel. Following the 2 sweeps we decided to surface to talk to them about a better plan.

We moved the best guess buoy on the surface, battling against an incoming stream. It seemed peculiar that a river could flow upstream before low water, but it appeared to, and the flow just increased throughout the day. Another failed snag search followed. Our next plan was a circular search by touch, moving slowly round the centremark, initially with Paul touching it with his left hand, after each circuit moving out, so that there was about 1' overlap between circuits. We were fortunate in having the reel marked out for this, with the vis being so poor, it would have been very hard to make any accurate guess of distance without it. On the second sweep David found a metal embedded object. Initial excitement soon subsided; we had found an engine-mounting bracket, which was more rust than metal. The search continued. Without the benefit of eyes, the hard shells of mussels were often temporarily confused with steel. We also found a bag of frozen vegetables. (A nameless computer scientist back at college asked if they were still frozen.).

On our third descent we moved the buoy again, in the same direction as before. This was to prove annoying. We had spent the previous 2 searches in what was thought to be the wrong location. This time we opted to move the shot line underwater, to stop movement and allow a taut exploration line, we had almost 20lbs of lead on this buoy, moving it was by saltation (lifting and dropping). Our only new find was large amount of rubber, it was about 1cm thick, 15-20cm wide, with markings one side, rather like tyre grooves, but no side walls. There were several meters of it. Once we had checked the grab wasn't caught on it we continued on. The next circuit was to bring a surprise. We seemed to be turning not quite as expected, this became clear when Paul found that we had regained our initial line. We had snagged on something, and it was strong enough to allow us to pull the line through 180degrees. Sadly it was only the black rubber. We had been snagging occasionally on bits of branch also. At 7m, we had reached the limit we could search in the no-vis conditions.

At Pete's suggestion we got out of dive kit on the boat, getting 2' out of the water, with no ladder, was slightly undignified, but hey, its not like there were any tourists there wondering what on earth was going on. Stephan, got onto a kid's inflatable with 2hp engine, and went to move the best guess. He declared that if not near the buoy now it was lost. We repositioned the markers, taking up almost 2/3 of the river width, much to the annoyance of new sailors. By waving a red flag (there are many uses for such a versatile safety device) they were coaxed around us.

We had all I think decided that the day was drawing to a close, and were starting to accept the likelihood of not finding the grab, whilst wanting to hold onto the possibility that Stephan had dropped the best guess buoy right on the site. (The previous positions were made by Paul and David, under instruction from the boat, with the obvious difficulty of confirming transects when your eyes are mere cm above the water.)

We decided to use a datum line again, as it had been increasingly hard to tell how much of a circle we had gone. The problem of it being hard to find, was to a solved by using a 3l white can, with a tiny amount of air, and mainly water in, to lift itself and the line clear of the bottom, to be bumped into. Within 10minutes of descending on the new site, David found the grab, right at the edge of his search radius, and signalled to Paul, albeit rather too vigorously for the agreed signals. We clipped the spare reel which Paul had onto the grab, David probably overcomplicating what Paul could have achieved in half the time without 'help'. David returned the exploration reel to the best guess line, then we returned to the grab, which was still there. Despite all the best efforts at we could not quite equate it with the surface descriptions, but it appeared to be a sediment collector with arms, in the right place - and how likely was it that there were 2? Due to the silt, it was still impossible to detect any colour other than 'lightish'. Back topside Paul stayed attached to the grab, finning against the current, whilst David returned to the boat to arrange for its pickup. David took down a length of strong rope, one end of which had been closed, with a screwgate carabina through the eye, and another DSMB. We removed Paul's line from the grab, and attached the carabina. Then sent the DSMB up the rope. Having spent so long looking for it, we wanted to be with the grab as it was brought up, partly in case it fell again, and partly just because it felt the right thing to do. After posing for a photo by the boat, we then cleared the river of all our bits and pieces. The returned to the staithe for a pint or two (those drinking shandy shall remain nameless).

The diving was not 'enjoyable' in the usual sense, there is little to recommend the site to anyone. However the diving was incredibly satisfying, and the point at which we first saw the sampling grab, and then got it onto the boat were very rewarding. It was a palaver and we were very overkitted, but at the end of the day, we found the lost object, in only twice the planned time, with the only costs being a length of bungee, and a few cable ties, in addition to the air and petrol, many times cheaper than replacing the object.