

## **WEST CUMBRIA BSAC – INKOSI EXPEDITION**



### **REVIEW**

What we'd planned to do was to depart from Whitehaven Harbour, with a party of ten people on two RHIB's, safely execute an exploratory dive on the wreck of the SS Inkosi before returning to Whitehaven.

What we actually did was depart from Whitehaven Harbour, with a party of ten people on two RHIB's, safely execute an exploratory dive on the wreck of the SS Inkosi and return to Whitehaven.

### **ENCOURAGE**

It was great, the sun was shining, the sea was flat, nobody fell out and we brought everyone back in one piece.

### **APPRAISE**

Well there were a few things that could have gone better: Contingency planning did not consider a breakdown of the harbour gates, slack water was actually an hour and a half later than planned, the video camera broke, the side-scan sonar developed a fault, recovering the true cost of the trip from individuals would have made value for money very poor, and our expectation of what could be seen of the wreck was way off the mark.

### **PLANNING FOR NEXT TIME**

We'll definitely go back and won't change too much of the original plan. Putting four divers on one RHIB will make the expedition easier to manage and reduce costs. A little more consideration for positioning the shot and studying the wreck plan will make navigation and orientation a bit simpler. Further development and out-of-expedition practice with both the video and side-scan equipment will assist with on-site surveying.

## **DETAILED REPORT**

### **PREPARATION FOR THE EVENT**

Planning for this expedition began in November 2009 when the initial idea was discussed between a couple of West Cumbria BSAC Divers and the draft expedition plan distributed to a number of likely candidates. Applications were received and the team finalised early in the New Year.

A few key skill development requirements were identified and plans put in place to deliver these well before the proposed expedition date. These included: construction and deployment of a decompressions trapeze, a diver tagging system, survey techniques, etc.

There's plenty of talk about deco' trapeze and lots of ideas about how they should look but there's no detailed plans to be found anywhere. Needs must and swift work with a hacksaw and drill had the kids garden swing dismantled and refashioned into something that resembled a set of deco-trapeze. A quick trial one Sunday afternoon proved the trapeze easy to deploy and ready for action. (At some point during the winter months, construction drawings will be produced and distributed).

Two weeks before the expedition saw trials of the Starfish sonar system undertaken from the club RHIB. A known site and two unknown areas were scanned as understanding of the system was tested and some baseline settings determined. The Vee-Cam video camera had been trialled on a number of occasions previously and a simple head mounting system proved the most useable, leaving hands free for other tasks and providing video footage of roughly what the eyes look at.

In the week running up to the expedition, weather and tide information was checked and attendees confirmed. One last test of the second RHIB, just to make sure everything was OK, resulted in a catastrophic failure of an engine and a last minute search for a replacement boat. A kind offer a loan of his boat, from Dave Taylor, put the expedition back on track.

Friday afternoon saw both boats, fully fuelled and moored in the harbour, ready to go. All preparations were in place.

### **DAY OF THE EVENT**

Driving towards Whitehaven harbour, looking out to sea, the conditions were unbelievable; not a hint of wind, warm sunshine, and the much overused phrase... "the sea was like a sheet of glass". This could be the perfect day.

Walking through the pedestrian access to the marina, there's a hand written note stuck to the fence, "HARBOUR GATES OUT OF ACTION, MAINTENANCE CREW CALLED, SORRY FOR ANY INCONVENIENCE. 5.30am Harbour Master."

Yeah, yeah, like we're going to be fooled by that one. A quick call to the harbour master confirmed the gates were really out of action and there was no indication when the maintenance crew would arrive or how long repairs might take.

Not surprisingly, the rest of the crew, now assembled on the slip as planned, weren't going to be fooled either and it took another call to the harbour master to convince them. Nowhere in the contingency plan did we allow for not being able to get out of the harbour.

A quick discussion has us all agreed to recover the boats from the harbour and launch from a public slip a few miles down the coast. Whilst everyone collected their equipment and prepared to relocate it became apparent that the trailer keys were "on the kitchen table". Recovering the keys involved a 30 minute round trip and started to eat into the already dwindling "float" in the schedule. Next sheepish whisper came shortly after the van was despatch to collect the keys... "I've left my dry-suit at home". Fortunately, this was only a 15 minute round trip and both the trailer keys and dry-suit arrived back just in time for the harbour master to declare the gates repaired and operational.

Calm, relaxed and only half an hour behind schedule, two XS RHIBS left Whitehaven harbour to put some ripples in the "sheet of glass". Conditions what they were, and some exuberant cox'ing, saw us arrive at the site half an hour ahead of schedule. Locating the wreck proved to be very easy, due to its size, but deploying the shot was a bit more of a task. "Shot away" saw the 25kg weight disappear below the surface, quickly followed by 50 plus metres of rope, quickly followed by the buoy. Two boats full of divers staring at each other, in silence, is a rare sight but quite funny.

Contingency plans were starting to look pretty weak as we'd made no provision for losing a shot; we had plenty of sandwiches but no spare shot weight. An anchor in a shopping bag and a few pieces of rope lashed together and we were operational again, although it did take a couple of attempts before we had a good shot on the wreck; experts eh?

Currents were running higher than predicted but their direction showed that the tide had not turned and we hadn't missed slack water. There was some chuntering, finger pointing, and suggestions of "who forgot to add an hour for BST" but also an acceptance that we'd have to wait.

We used the time to do a bit of side-scan sonar surveying. Previous trials had been done in around 20m of water and the system settings proved unsuitable for the 50m being recorded around the site. The central dead band was around 90m wide and the quality of the picture more than 60m either side of the boat was very poor. This gave us a useable image in a strip around 15m wide. Limited time prevented us experimenting with too many settings and the survey was abandoned as divers prepared to enter the water.

Preparing the Vee-Cam unit identified a fault in the camera head. The picture was initially distorted and ultimately failed. It appears camera cable may have been damaged in transit, rendering the unit unusable. The side-scan and video camera were "nice to haves" and, although they would help with later analysis of the wreck, were not considered essential to the exploratory dive.

An hour and a quarter later than predicted the current fell away and divers prepared to enter the water. Interestingly, as the current dropped, the buoy from the original shot-line broke the surface confirming the conditions were improving and becoming diveable.

We had two pairs of rebreather divers and a pair of open-circuit divers. As expected, the open-circuit guys were ready first and melting under the blistering sunshine. Despite knowing that the plan, for good reason, had the rebreather divers in first, we dropped the open-circuit boys on the shot before they overheated and exploded. A good few minutes later saw the rebreather pairings in the water and descending the shot.

With the divers at play, the surface crew assembled and deployed the trapeze then set about the sandwiches. The dive plans had everyone back on the trapeze after 45 minutes so it was a little surprising to see the open-circuit pair arrive shortly after the half-hour mark. It's interesting being a diver in the surface team, wondering what's going on underwater and

desperately wanting to be there and it's a relief when all divers make it back to the shot. With the trapeze detached and drifting, it's just a matter of waiting for the divers to surface.

As expected, the open-circuit pair surfaced first followed shortly afterwards by the rebreather teams. With everyone back on the boats, equipment stashed and sandwiches being devoured, it was obvious there was a lack of enthusiasm in the discussions about the dive. General feeling was that it hadn't lived up to expectations.

Visibility was very poor, 2 to 3 metres, with large particulate in the water, making it almost impossible to achieve orientation on the wreck. The ongoing construction of the Robin Rigg wind-farm was considered the most likely culprit for the particulate and something no-one had considered in the planning phase. The consensus was that the shot was positioned somewhere between the bridge and the bow, determined from some determinable features from photo's of the ship. Much discussion took place between the divers but the surface team quickly formed the opinion that they had not really enjoyed the experience.

The final task before leaving the site was to recover the shot and it quickly became apparent that the makeshift weight, anchor in a bag, was stuck fast. Much time was spent and various techniques applied but ultimately a snapped rope resulted in the anchor being left on the wreck and the expedition cost increasing by around £80.

The journey back was as exhilarating as the trip out, the flat sea encouraging both high speed and high fuel consumption; great fun.

Back in Whitehaven harbour, the equipment was unpacked and the boats loaded onto the trailers before everyone departed and prepared for the evening debrief, (drinking), session. Following a fantastic curry and a few beers, the mood had changed and there were more positive discussions taking place about the days diving. There was a lot of talk about the next phase of the expedition showing that maybe the experience hadn't been all bad.

## **THE NEXT DAY**

With a number of divers staying over we decided to take one boat to another relatively undived wreck in the Solway, slightly closer to home, the GA Savage. A hastily constructed plan saw a shot deployed on a very large sonar shadow, on another flat sea under blistering sunshine. Again the current was running much faster than expected and there was much time spent waiting for the current to drop off, but maybe not enough time.

When we finally got the divers in the water, it wasn't long before we got them out again. Although the surface current looked acceptable, as the divers descended the shot, the current was too high and they all agreed to abort the dive. Sense overriding desire!

Although disappointing from a diving point of view, all agreed it had been a great weekend and much had been learned.

## **EXPEDITION 2 and 3 - Planned for the 6<sup>th</sup> June and 20<sup>th</sup> June**

Given the problems experienced previously with the side-scan sonar, a pre-expedition exercise was organised to trial the equipment on a known but unidentified wreck around 20 miles outside Whitehaven. Shortly after leaving the harbour the club boat developed an over-heating problem and had a challenging journey back Whitehaven.

With the RHIB out of action and unable to scrounge a replacement boat, the planned expeditions 2 and 3 had to be postponed.

## **TRY AGAIN**

The next realistic date, given tides and timings, was the 23<sup>rd</sup> September and meant taking time off work for a number of the expedition members. It was decided to do a further exploratory dive with a single boat and a smaller team. Plans were well under development until the long-range weather forecast showed horrendous weather due. Surprisingly, the forecast proved to be understated and the expedition was regrettably but sensibly postponed.

## **WHAT NEXT**

There's still an enthusiasm in the team to complete the objectives of the original expedition plan but there's now a clearer understanding of the enormity of the task. The concept that we could develop a wreck guide after only three dives was a massive under estimation. This is supported by the activities of the Newton Stewart club. The Inkosi is relatively close to their base and they dive it frequently, seeing 10 metres visibility on some dives! They've constructed a detailed guide for the stern section of the wreck over a series of many dives but the sheer size and inaccessibility of the wreck has restricted further development.

It's unlikely the winter months will allow further trips to the wreck and the plan is to make a start later in the New Year. We'll take every opportunity to build experience of the side-scan and video equipment and be better prepared for future expeditions.

## **CONCLUSION**

We had a great idea and spent a lot of time planning this expedition but ultimately proved that even a well managed execution won't always deliver the desired results. Things will go wrong and even the best contingency plans won't cover every eventuality.

The positive outcome is that we've still the enthusiasm to go back and complete the expedition objectives and we'll be better prepared next time. This has also generated an interest in diving other unknown sites in the Solway. The hydrographic charts show numerous sites local to Whitehaven and we've not given much thought previously to diving them.

Overall, everyone had a good weekend, we all returned safely and we'd all go back. And, to finish, we've a new term to describe a particular sea state, it's called INKOSI FLAT!

