

londondiver

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THE MAGAZINE OF BSAC LONDON NO.1 BRANCH



editorial

Please email all submissions to
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for my address details



Welcome to another issue of *London Diver*. If it scraped the paint off the edges of your letterbox before landing on your doorstep then I'm not surprised, for this is the longest, and hence the fattest, issue in my long (well it seems that way) sentence, er... I mean tenure, as editor. Twenty four glorious pages of it and barely a photo to be seen, partially because I don't have many to print but mainly because I didn't have space.

This must all be very encouraging mustn't it, especially given that membership is running on the lean side still? It would be, were it not for the fact that nearly 80% of the feature content (disregarding my own flatulent wordage) was written (unprompted, cajoled, begged, bullied or bribed, I might add) by Jamie. I won't repeat the plea in the first of these articles (see page 6), but please think on as you read them, and if you feel the need to comment, don't tell me about it, write me about it instead.

Also included with this issue is an updated Branch contact list. Please keep it in a safe place and think about maybe using it sometimes, as the 'Branch Directory Enquiries' line which doubles as my mobile phone has been somewhat jammed of late. Also, if any of your details change (and that goes for all your details including e-mail, postal address, next of kin, etc.) then please inform Megan as soon as possible in order that we can keep our membership records up-to-date.

Right, enough admin, lets talk about diving. There has actually been some for a change, which is always a good sign for a diving club. Firstly, James Astrop's annual dive holiday (a.k.a. temporary release from family duty for good behaviour) was somewhat augmented this year by a few of us that thought a week in

the Southern Red Sea sounded like a good idea too. And so it was. The diving was pretty excellent with the condition of the reefs and instances of pelagics much better than the usual fare in Sharm. I'd say I can bare witness to all of this, but I can't. Unfortunately, I had to miss a fair amount of the diving having taken along with me a particular horrible fluey plague which confined me to my cabin for the first few days. Needless to say, the one day I quite possibly could've dived but decided I needed to rest was the one day everyone saw mantas close up on every dive. Thanks in particular to James and Tobias whose never ending enthusiasm on the subject ("...omigod, did you see the.. oh I forgot, no you didn't, sorry...") really helped me feel better! Still, I did get the 'Rolls Royce treatment' from the saloon crew Ahmed and Nubi who supplied me with a near constant flow of hot lemon drinks, whether I wanted them or not.



Incidentally the cover shot of this issue was taken on said trip just off one of the reefs at Abu Dabab (James, stop singing "Mahna Mahna". Stop it right now!) and is of a wreck which until recently used to be a rather nice liveaboard (the *Heaven*) whose passengers, by all accounts, surfaced from their check-out dive just in time to watch their boat (and home for the next week) sink in a ball of flames. Not perhaps the best start to their holiday.

Shattered at the end of a week of 05:00am starts, and arriving later than expected back at Gatwick (we picked up the car at 01:30am), the sensible thing to do would obviously have been to have gone home. So, four hours later,

myself and Keith arrived in Plymouth after an interesting journey through the night taking turns at power napping then trying to drive in a straight line. We could have snatched just a few hours rest and then been back out on Percy Too for the morning dive but the batteries had completely worn out by then and neither of us surfaced until mid afternoon.

I think Keith will be mentioning the actual diving in Plymouth, however some breaking news which may be of interest to Plymouth veterans and the status of which it now seems customary to report each year. The growth in marine life on HMS Scylla? The increase in dredging spoil on the James Eagan Layne? No, I am of course referring to the girth of the proprietor of Platters fish restaurant on the Barbican. Interestingly, a Google search for "plymouth" and "platters" brings up Morgan's article from last year on *londondiver.com* as high as the fourth hit, which dutifully reported no significant change in Mr Platters' waistline from 2003. Whether this has prompted action from our favourite fish restaurateur, who can say, though I am extremely pleased to be able to report that this year, and I kid you not, he is looking positively svelte. The fish is still excellent, by the way, if you're reading this Mr P.

Slightly more related to diving, we stopped by the seaward side of the old Fort Bovisand and chatted to a RIB coming out of the harbour. It appears as if limited diving access and facilities have re-opened there with accommodation to follow soon. However, with the ease of launching and quality of the facilities at the Mountbatten Centre (yes, even the staff have nearly cottoned on to the fact that they can make money by being helpful and nice and selling things the visitors might

want), it may be a while before the Bovi trip is ever actually Bovi again.

Some thanks also to Tobias (who as I write is probably in Belize on the first leg of his holiday, sorry I mean "expedition") for organising and running the fun night in the pool in January. Unfortunately, I wasn't around to witness one of Ted's original fun nights, though from what I've heard we did him proud with old favourites such as the bag of coins game not to mention more than a little lawless cheating and near drowning. Deserving mention must go to Mel for having the gall both to fervently protest that the rules to one game weren't clear or fair and then proceed to cheat like a ..., well, like Nigel in fact!

Speaking of Tobias's jaunt round the world, I'm sure he won't mind me mentioning that you can keep up with his travels, diving reports and photos by visiting the snappily entitled www.vanvredenburghconsulting.co.uk/travels which I am assured he intends to keep updated after each leg of the journey.

Finally, we still have a fair amount of Branch merchandise left for sale. Unfortunately a recent leak in the clubroom (yes, another one) meant we had to rescue some of this. However, although now no longer in the original plastic wrapping these have been carefully washed and dried (thank you Keith, or was that Mary?) and have suffered no damage. If you have recently joined or previously agreed to buy one when I last put the order in, please support your Branch by buying a rugby top or a polo shirt, now available at cost price (£25 and £12 respectively).

Happy diving.

Joe



chairman's chatter



Another Diving season gets underway. Easter brings with it the traditional Plymouth dive (formerly known as Bovi). As this is written prior to the trip, I hope it went well. With Easter arriving early this year the water will have been a little cool, hopefully this will have kept the viz good [*er, not exactly no... Ed*].

Percy 2 will I am sure have been delivered to the dive site and performed well for those lucky enough to have attended. Lines, buoys, O₂ bottle, Plotter, VHF, not to mention the new shiny Landy having had about five months off all in place and working. How does this happen? Is it Magic? No, a group of dedicated members invade Nigel and Gillian's, winterise the boat at the end of the diving year and then prepare it for the new season. My thanks go to this group (you know who you are) without whom our hobby would be seriously curtailed. If you would like to join this group please speak with Alex and be included in his little team. Other jobs include delivering/collecting props (during reconditioning) [*let's try not to make this a regular job... Ed*], delivering/collecting bottles for testing. Technical knowledge is not a requirement.

For anyone who has not been to the Branch lately, Bernie spent a short period in hospital recently. He is now out and getting better day by day. We all wish you well Bernie and hope to see you soon.

Recently a member contacted me because he had lost his qualification record book. We are able through HQ to replace QRBs however keeping an up to date photocopy of the pages

in your book plus certificates can be useful and I would advise you all to do this if you haven't already.

Please extend a warm London Branch welcome to Paul Benson and Daryl Spelman, new members both with diving qualifications. Also a welcome back to long time members Gary Jarmon (and his cousin Leroy) good to see you in the club room, Bob Taylor and Gina Thompson, both of whom have done a lot both with and for the club over the years, and Dario Navaro, an instructor with vast photographic experience (for anyone who wants to spend loads and loads of dosh) he I'm sure can offer advice.

I spoke to Sarah last week, she is going on a long summer trip to Mexico during the school holidays. "Teaching?", said I... "Not likely", said she. So its diving and dancing for Sarah. Have a good trip. I for one will miss you on sites and social events. Thanks also for the work you did in the Club room not only behind the desk but on the notice boards. See you in September.

Please do come down to the pool and try out your kit if it's been in the loft/garage/under the stairs during the winter. Swim a few lengths, be sure you are diving fit. If you are relatively new to this diving thing (or even if you're not) come along and try out your kit especially if you have new stuff. Every minute in the pool counts towards more comfort in the sea.

Let the diving commence. Be safe.

Jim



the d.o. reports...

Hi all. The 2005 diving season has started. As usual the Easter weekend started at Plymouth, with us staying at the Mountbatten Centre. Those of you who went will know the weather was not bad on the surface, but the sea conditions here not very good. Poor visibility and a long-deep swell made the diving a bit uncomfortable especially for anyone using a surface marker buoy and not forgetting it was cold too. This was a bit of a shock for a few of us who had just returned from the Red Sea, where we were basking in balmy waters of 22-23°C . Still next time I will know better and let myself acclimatise a bit first.

On a more positive note there were good things about the weekend. It gave us a chance to iron out any problems with our equipment on the first few dives, and generally get back into diving trim for the follow season's diving. The more organised amongst you will say perhaps this should have been done earlier with a dip in the pool or somewhere like Wraysbury but not every one is that organised at the beginning of the season, something to think about for next year *[or your next dive if you haven't dived for a while, Ed]*.

Back to the positive side of the weekend, I am sure both Ian and Paul learnt a lot about their new dry suits and became more familiar with using them. I was told that they were Paul's first UK dives so that being the case I'm sure he found his first dives a bit of a struggle, with a new dry suit and the conditions. Still he managed to survive his initiation into UK diving.

Thanks again goes to Jamie, Mel and Dave for arranging and taking part in the Dive

Leader training and lifting bag exercises. I am sure the budding Dive Leaders were grateful to get training in so early in the year.

Speaking of which, congratulations to Morgan who has now been signed up as a fully fledged Dive Leader *[the club's first under the new syllabus, I believe, Ed]*. Congratulations also to Matthew who since the last issue has been signed up as an Ocean Diver.

Thanks to everyone who helped with the weekend - Morgan for marshalling, Gary and Leroy for towing the boat at such short notice, the rest know who you are.

I hope this has got those who went into diving mode for the 2005 season, and helps to enthuse the rest of us. I look forward to seeing you all enjoying your diving this summer.

As this is just the start of the season there is not much more to say except, please put your names down on the dive lists ASAP so we know if there are enough people on the dive for it to go ahead. It is not viable to go diving with the boat if there are less than eight divers. It would be a bit late to turn up on site expecting to dive only to find out that the dive was called off because there were not enough names on the list and it was cancelled at the last minute. So as soon as you are sure you would like to go on a dive, get someone if not yourself to put your name on the list. This applies to all dives so please ensure that if you would like to go on any dives to get your names on the list.

Thanks

Keith



contributions to london diver

Having waited an especially long time for the latest instalment of *London Diver* to land on my doorstep I was a tad upset to discover that yet again almost all the articles were written by the committee. Aside from Nigel's explanation of daylight robbery of not one but two unsuspecting members of the public I think I'm right in saying that mine was the only other article written but a non committee member. Admittedly it was so good it was probably worth two or maybe even three articles from the less literate amongst the club, but I refuse to believe that there is no one else out there who doesn't have at least a GCSE, CSE or 'O' level in English.

You don't need to be able to spell, as admittedly I showed last time - my excuse being it was a word with more than one syllable that also wasn't in my online spell checker (American version of course). It doesn't have to be funny (although we can't rely on the editor to add any wit) and it doesn't have to be a long article - as most members of the club prefer pictures to words anyway. It doesn't even have to be punctuated very well - I love using the '-' symbol, and anyway how many people would really know whether Joe's apostrophe checker was working correctly. But someone somewhere must have something so say.

Before writing this article I pondered what approach to take? Part of me wanted to fire off another missile whinging and moaning about apathy in the club. "It's all very well everybody saying the right things and nodding at the AGM - but you've actually got to do something..." But I moan too much already so I decided against it.

I thought about circulating malicious gossip and rumour - but then everyone already knows that there is a secret group trying to take over the club. Aside from the persistent rumours about cliques I really mean the far more insidious crew cut brigade. The first rule of the New World Order will be shaven heads for all. Trust me it doesn't work for me - I look

like a bouncer in a bad temper, instead of just looking like I am in a bad temper.

Or there is the controversy angle. I am tempted to ask the editor to explain how BSAC can publish their annual accident statistics where diving in trios is highlighted as a significant cause of accidents (see February's DIVE magazine) - yet the organisation slowly turning our editor into a clone actively promotes diving in threes (*thought I'd put some brackets and italics in here just so the extra brackets and italics I'm expecting to be added by Joe get lost*). But circulating malicious gossip, rumour and controversy in order to get people writing into the magazine only works if I don't allow people to harangue me in person and force them to publish in order to get me to take notice. And I want to be at the Percy so that I can prattle on at length about Truk.

I considered coming up with a list of suggested articles that members of the club could write. How about:

1. Write about any diving you've done outside of the club (a little obvious but a winning idea that has stood the test of time).
2. Write about 'it happened to me' (Mel and I cannot be the only people to have got lost inside a wreck and panicked).
3. Write about another adventurous activity (most of us have more than a passing interest in outdoor pursuits).
4. Write about why men make better divers than women (I will get a response even if it maims me).
5. Can't think of a 5th idea right now - goddammit just write something.

I even thought about lobbying the committee to bring in a new club bylaw - every article written by a non committee member would entitle the author to a free dive. However, I started to stumble with this idea when I considered how to define what counted as an article. Minimum number of words maybe? The thought of allowing our friendly

ever-concise lawyer/editor to draft regulations around how an article was defined gives me chills - we'd need a whole *London Diver* magazine just to cover all the clauses, sub clauses and 'pursuant to' mumbo jumbo that would inevitably result (although maybe such an interesting edition of *London Diver* would be just what is required to get pen to paper for the next time).

Finally I thought about either just writing on and on and on and on so that the magazine just seemed thicker or just writing another

interesting article. Mel and I don't plan on remaining in London for the whole year so the little ray of sunshine that is my purple prose will be disappearing from these wonderful pages. Maybe if I write a couple of final "excellent" articles (editor's description last issue not mine - note the quote marks) you will all read the issue after Mel and I have gone and realise how important it is for non committee members to contribute.

Jamie



Now I made this as concise as possible, just for you Jamie, but I'm guessing you had in mind something like this... Ed

Any Full Diving Member of the Branch who submits to the Editor for the time being of London Diver an Article for publication therein (where such submission shall comply in all respects with all requirements for an Article provided for and as defined in and by this Rule, as determined by such Editor in his or her sole and absolute discretion, acting reasonably) shall be entitled, upon reasonable written notice given to any two Branch Officers, to receive a credit note or similar instrument signed by the Branch Treasurer in respect of Branch diving fees equal in value to the cost from time to time otherwise payable in respect of one Branch dive from the Branch boat, such credit to remain valid and capable of being applied by such Member in respect of any such Branch dive undertaken by such Member within the shorter of the period during which such Member remains a fully paid-up Full Diving Member of the Branch and the twelve months following the date of such notice, providing always that for the purposes of this Rule; "Editor" shall mean any person or persons who from time to time naïvely and foolishly agree to give up their time to edit London Diver; "London Diver" shall mean the Branch publication entitled London Diver, together with any other magazine, newsletter or similar publication which may from time to time supplement or replace it, whether in hard copy or otherwise distributed via any electronic medium; and "Article" shall mean an original literary composition written by the Member applying for the benefit conferred by this Rule and submitted for publication in London Diver, but shall not include any submission which: (i) comprises or otherwise forms part of any text or report required to be written, or is ordinarily submitted, by a Branch Officer; (ii) is written at the specific request (regardless of the amount of begging required) of the Editor; (iii) has a word count such that when regularly formatted, it fails to fill one page of London Diver where "fill" for the purposes of this definition may include a page full but for the necessary addition by the Editor of a rather lame clip-art turtle; or (iv) is just plain crap.

more boat handling



February is generally a bit too cold and murky for a proper diving weekend, so a handful of London No 1-ers ventured off early this year on the next best thing: a boat handling course.

Megan, Alex, Jonny Wilmot (a.k.a. “Sicknote”) and Jon Chapper (as an ‘observer’) signed up for the RYA Level II course, which covers boat handling up to a level equivalent to the BSAC boat handling certificate. Joe, Tobias and I had already completed this course. We instead opted for the RYA Intermediate course combined with a BSAC Diver Coxswain assessment.

The weekend kicked off (as always) in the pub. Failing to find anywhere decent near our B&B in Selsey, we chose the nearest pub that had passable real ale. Unable to talk much over the pumping music we indulged in a pool competition, several pints, and a curry.

Saturday morning took us to Wittering Divers, our base for the weekend. Taking a course run in a diving shop is definitely not to be recommended. Although the standard of tuition is high, the staff are all friendly and the tea and coffee flow like water, it is nigh-on impossible to walk past rows of shiny new dive kit several times a day without feeling at least tempted. I don’t think anyone got away without buying something, and Sicknote walked out with several hundred pounds worth of new drysuit!

Our course kicked off with a few hours of theory. Since we had all completed our Day Skipper theory course (or were in the process of doing it) this was fairly straightforward. We went over our knowledge of collision regulations, lights, sounds, buoy shapes, etc. We did quite a bit of chartwork, calculating set and drift of tide, and depth of water.

The last task before lunch was to form a passage plan between two points in ‘unfamiliar waters’. We were each given a start and end point on the chart. The job was to determine a route between the two, calculating tides, depths, etc. We had to write ourselves notes adequate to navigate the

passage without resorting back to the chart. This was done by noting compass bearings, items of interest that we would see (slipways, buildings, etc), and the buoys and markers we would pass.

After lunch we went onto the water for an afternoon of practical skills. This started with a quick ‘play’ to get used to the boat, learning how she handled. We then completed the Level II assessment course (coming alongside, reversing, picking up buoys) to prove that we were competent enough for the rest of the weekend.

After that we took it in turns to follow our passage plans, one person behind the controls while someone else gave directions. I am pleased to report that we all successfully reached our destinations and all navigation (even mine!) was spot-on. The only *slight* incident was a minor argument with a sandbank, where our instructor’s final directions, “You’re getting too close. Turn to port. *Turn to port.* TURN TO PORT!!!!!!!” were misconstrued as a turn to starboard. We got off the sandbank OK though thanks to a nifty bit of boat handling by the instructor, and the whole incident was watched with wry amusement by the twenty-or-so people racing dinghies nearby.

Saturday evening was a fairly muted affair. Everyone was so shattered from their day afloat that we were all in bed shortly after dinner.

Sunday took us straight back out onto the water to complete our BSAC Diver Coxswain assessment. This consisted of various tasks culminating in locating and shooting a dive site, putting divers into the water, then retrieving them. Joe went first, using transits to find a small WWII vessel just off the South coast. The transits were fairly dodgy to say the least. One was to line up a withy [*local word for a wooden stake in the water, Ed*] with a water tower, a task not helped when the withy is about two inches wide and half a mile away

through haze. The second transit involved lining up a yellow buoy with a block of flats, only the buoy looked black on a grey sea, and was only visible every third or fourth wave.

Still, he found the wreck easily (as verified by sonar), threw in the shot and sent Tobias and I after it. That was probably not the best dive I have ever done. At two metres (never mind the bottom at 10m) visibility was down to zero. We could only communicate through touch. Luckily the only requirement for Diver Coxswain is that divers do actually submerge: no particular dive time is required. So we effectively 'bounced' off the bottom and back to the surface, thus ending Joe's exercise.

My dive site was somewhat easier, being a small drop-off in a channel near Itchenor. To find it was simply a matter of motoring out from the shore (after finding the correct point using the chart) and watching until the depth on the sonar dramatically increased.

One shot placement, however, had to be seen to be believed. Dropping a shot is quite a tricky task for the boat handler, really. You have to drive in on one transit while keeping your eyes on one or two others, watch the sonar and control the boat. It shouldn't be a surprise if at least one job gets forgotten about, so forgetting to slow the boat down and put the gears into neutral is entirely forgivable. Mind you, I wasn't the one who had to toss a large shot weight overboard while under way at 10 knots. I just wish I'd had a camera handy to capture the look on our instructor's face.

Once we had finished that exercise, had lunch, and the shotee's nerves had calmed down, we navigated some more complex passage plans. These required much more careful preparation since we journeyed up tributaries that dried out, and we were bang on low water. All went smoothly again, besides one minor surprise. The boat handling mantra of "always keep a good look-out" was forgotten by all (including the instructor). It does rather shock you when you turn around to see a vessel five times your size right behind you!

Despite our few minor mishaps, we all passed both our RYA Intermediate Powerboat certificate, and the BSAC Diver Coxswain award. Those on the Level II course all passed too. I have been assured there were no mistakes or mishaps on the other course – either they are all naturally gifted boat handlers or they have made a vow of silence to each other. I'm sure we will find out one day. You will also note that I have chosen not to name the high-speed shotters or boat grounders, in order to protect those who can't answer back for the next three months...

It was a thoroughly enjoyable weekend, for us at least – I'm not sure about our instructors. It was also very educational, and taught us a lot both about practical boat handling and general seamanship. I do however now realise why the club is not keen on us using Percy Too for boat handling courses!

Morgan

the good, the bad and the american

I'm not big on work. It's not that I'm work-shy as my grandfather would have claimed - although he did work full time in the city until he was 78. It is just that there are so many better things to be doing with my life than working - like going diving. Thankfully Melly agrees and our shared interest has now taken us to over twenty different countries (Scotland does not count as a separate country - no matter how much the tartan terrors claim that it is). So having seen quite a range of dive sites and operators I thought I'd share three of the more memorable experiences.

INDONESIA

We flew up from Medan which is on the east coast of Sumatra, towards the northern end of the Strait of Malacca. Booking the outward flight had been considerably easier than the return and upon arriving in Banda Aceh we discovered why. We had been travelling for a couple of years and had a pretty good idea of local prices - after all we were worldly wise street savvy travellers, not spotty 18 year old backpackers. The price quoted by the taxi driver was outrageous and we said so. No one pulls a fast one on us. The slight shrug and pitying look he gave us came as somewhat of a shock - shortly followed by the realisation that his was the only taxi on a really bad day for taxis. We had decided to travel on Indonesian independence day - which for the province of Aceh, which is seeking independence from Indonesia, was the annual cue for rioting, looting and major civil unrest. Somehow in our fixation to avoid paying 20p extra to the cabbie we had missed the burning tires, hastily erected barricades and groups of teenagers in oversize combat trousers carrying even more oversized AK47s. We took the taxi.

A somewhat indirect route trying to avoid the largest of the mobs, closed roads and wild eyed locals finally got us to the port and we sailed off to the relative sanctuary of the islands off the north coast. We even tipped the

taxi driver, as on balance his attempt at the usual "give me some extra cash" sob story was almost certainly true (Westerners in the taxi had meant that most of the armed gangs had left us alone - now he was driving back on his own he was visibly shaking).

When we arrived we confidently strolled into the dive shop and inquired about diving and accommodation - yes, in that order. The owners thought we were insane - nobody had travelled anywhere that day - a curfew was in force and people were getting shot. Our instructor qualifications might suggest that we were sensible responsible individuals but our judgement was clearly lacking. Our money was good for diving the next day, but I left with the distinct impression that he would be warning the dive guides to keep a careful eye on us. And as most sensible people had all come over to the islands the previous day to escape the trouble there were no hotel, hostel or rooms of any sort available - but he did recommend a reasonably sheltered stretch of beach.

The diving turned out to be excellent. Very strong currents made for beautiful corals and lots of sharks, and the minor civil war made for very few other divers. A perfect combination - unless you are my mother (sharks and a civil war?). Of course it did mean that those divers who had made the trip were of the nuttier variety and due to the rapidly spreading story of our legendary journey we were welcomed with open arms. The only questionable dive we did was the completely intact and upright wreck of a WWII German cargo ship deliberately scuttled to stop the Allies getting hold of it. Diving to 58 metres on single 12 litre tanks, with 15 minutes of bottom time and 45 minutes of decompression stops seemed perfectly normal given the company we were keeping. Although we didn't join in the competition to see who could use the least amount of air. 90 bar for the whole dive was the winner (who wants to flush out their system when you're decompressing anyway?).

CAMBODIA

We had to give this a try. No matter how big (I wish) London No.1 got, we knew that we would probably still be the only people in the club who could claim to have dived in Cambodia. I rationalised it as the fact that it's not that divers like talking about the dives they've done, we just like to listen to each other's stories. Trust me, I've been on the committee - trying to get people to talk instead of just listening to each other is really difficult.

We were staying in Sihanoukville - delicately described as a "fledging resort destination" - and so far things had been very promising. The beaches were beautiful and more importantly cleared of landmines. The motorbike we'd hired was in pretty good condition and I'd got over the squits that had been making travelling for any length of time very awkward (one of those technical diving nappies for long dives would have been much appreciated). But I started to get a bad feeling about the dive as soon as I put the receiver down. We were booked for tomorrow and would be picked up at our hotel, but never had the issue of whether we were qualified arisen. The truck that picked us up the next morning, which was at least a decade older than me, was the second sign. This was swiftly followed on arrival at the docks by the fact that the 'dive school' had three customers that morning - very convenient given that the school only had three sets of gear. The high ranking Cambodian official who was the only other diver took first choice of the kit - but obviously Mel and I are standard Cambodian diver size as everything magically seemed to fit.

We headed out to a couple of small islands about 10 miles off the coast in a boat which looked to be too knackered even for the Vietnamese boat people of a decade earlier. I have no idea how the two crewmen kept it going but it was clearly hard work because as soon as we arrived at the dive site they strung up their hammocks and went straight to sleep. With the dive guide suggesting that due to a strong surface current it would be best to head to the bottom quickly, it was a little

disconcerting to reflect that no one would be looking for us if we drifted off. As we should have guessed the seas were empty. Everything apart from the algae and urchins had been eaten. Even the nudibranchs which we'd seen in abundance a couple of weeks earlier in Vietnam seemed to have fled. But we made it back to the boat which was a bonus.

Our guide then informed us that as the school only had seven tanks she would not be leading the next dive. The Cambodian official was told to follow us as we knew what we were doing - and then our guide joined the crew by taking to her hammock for a short sleep. As for the currents well we'd probably work it out.

MEXICO

For the same reason that Europeans keep voting for the Red Sea, Americans keep voting for Cozumel as one of the world's top dive destinations - it is close and it is cheap. And just like the Red Sea the diving can range from the spectacular through the distinctly average to the totally over-rated. We'd done our homework and tracked down an ex-Cozumel instructor in order to get our hit list drawn up. With over 100 dive operators to choose from you can easily pick which sites you want to go to each day and then select the boat accordingly. Of course that doesn't mean you actually get to dive where you've paid for.

The boat turned out not to be the fast one we'd been promised but a chugging bathtub like affair. Clearly we weren't going the long distance we'd paid for but why worry - "this site just as good - better in fact". Thankfully we didn't have the over blown American limits of max depth and time to deal with (20m for 30 minutes or 30m for 20 minutes as lots of the schools had chanted at us.), just the request that we got back on board with 500 PSI (go on Joe - give the readers the metric equivalent. You know you want to *[see page 20 for the answer, and then a bit more... Ed]*). When Mel said that she only wanted 4lbs of lead (own dive suit - just ending a year in which we'd done 500+ dives in the same kit) the guides scowled, argued and then finally handed her a

belt, “here - 4lbs”, which clearly had 12lbs on it. Mel pointedly removed the excess - thankfully restraining herself from throwing it at the guide. The guide attempted to retaliate during the brief by very pointedly saying that he’d be taking extra weight for those people who would obviously need it. Always good for a laugh seeing the guide take his own 6lbs plus an extra 16lbs that Mel and I would certainly need. When we got to 20m we could just about make him out in the mushroom cloud of silt he’d created in his rapid plunge to the bottom. We did at least admire his ear clearing ability.

Hopefully, the more experienced amongst you will now be wondering how such a “good” reef dive could have silt on it? Exactly. Clearly feeling somewhat aggrieved by all this we were not exactly model customers on the next dive. Mel entered the water with a forward roll, which nearly gave them a heart attack and then as we were allowed to dive until 500 PSI, we did. Nothing like staying under an extra 45 minutes after everyone else

has got out and then smugly showing our gauges. Only then did the guide think to ask what level we were. Always good for a guide with 50 dives to preach the importance of breathing out on the way up to a couple of instructors - and then expect a tip. But the other patrons were clearly more than satisfied - all paying tips of 25%+ for the pleasure of having been taken to the house reef when we’d been promised much more.

But just because our first experience of Cozumel was rubbish doesn’t mean it all was. That evening after much searching we found an English guy running “an experienced only dive - and I don’t mean experienced in the American sense of the word”. By 8:30 the following morning we were exploring some sea caves at 40m, followed by a 2000m+ drop off. On the second dive the guide promised to find us a seahorse and after much searching he did. Very cool, very cute - a bit like Melly.

Jamie



late news

In common with most members of this club I was unaware that the editor of this most entertaining and informative publication was nearing 30 years of age. In fact yesterday - Tuesday 5th April - was the actual day. So how did such a loyal club member celebrate such a landmark occasion? By spending his evening down at the club practising rescue drills. It is this type of commitment to the club that sets an example to us all.

The fact that Joe has no life outside of diving is no excuse. The fact that in his own words, “I haven’t really got anything to celebrate - I

haven’t really achieved anything” (or something like that) is also no excuse.

Joe chose to spend his time with us because we are his friends. He is keen, committed, enthusiastic and aware that the club desperately needs more instructors. It is not (as has been suggested by some) that he is sad, mad and whilst wearing his strange red top “looks like an over-age unfit gay bloke”.

Please join me in wishing our editor a happy 30th birthday. From all your friends at London No. 1 [*hmm, with friends like those...Ed*].

Jamie

two's company, but three's allowed



There I was, minding my own business, quietly shaking my head as I patiently corrected all the misplaced apostrophes and erratically splattered inverted commas in preparing Jamie's first article (see page 6) for publication. I normally try not to respond to bait, and usually avoid penning an article myself (editing *London Diver* takes more time than you'd think and, besides, apparently you need to be witty...). However, try as I might to dodge the tightly packed gibes, I must confess to having failed. You can take this one as a bite!

Let's have a closer look at what I'm supposed to be responding to here: "...explain how BSAC can publish their annual accident statistics where diving in trios is highlighted as a significant cause of accidents (see February's *DIVE* magazine) - yet the organisation slowly turning our editor into a clone actively promotes diving in threes..."

The news section of February's *DIVE* included a reported section on the talk given by Brian Cumming, BSAC's Diving Safety and Incidents Advisor at last year's National Diving Officer's Conference. Since I wasn't there, I cannot comment on the accuracy of the magazine's reporting, however since the speaker was also responsible for writing the general conclusions published as part of the BSAC's NDC Diving Incidents Report for 2004 (the "Report") which I suspect either was, or formed the basis of, the talk reported on by the magazine, I shall for the purposes of this commentary refer to the Report only. Wake up, there's a long way to go yet!

For any of you who've never bothered to download the Report in either this or previous years (or having got that far, never gone on to actually read it!), let's start with a little bit of

explanation. The Report consists of some statistical analysis of the incident data and general written conclusions. The data itself, which is reproduced at the back of the Report consists of (mostly) brief incident reports of diving or diving related accidents and fatalities over the past year submitted by BSAC branches/members and by the Coastguard, RNLI and occasionally the press (so no doubt next year's Report will be forced to conclude that 20% of all diving fatalities were caused by garden gnomes...). The Report is not exclusively in respect of branch dives conducted by BSAC members, however there is unavoidably a strong bias to such dives given the primary method of data collection (i.e. BSAC incident forms).

The first thing to point out is that the Report focuses on and highlights many other contributory factors to last year's record number of fatalities (25 compared to the last ten years' average of 16.5), including, at the top of the list, non-diving related medical problems. It also identifies other wider problems which contributed to many of the non-fatal DCS and other incidents, such as poor skills, notably buoyancy (all of which I heartily agree with). I haven't the time or the space here to discuss any of these other factors, so instead I'll focus on this trio issue which both *DIVE* and our Branch's incumbent malcontent (well one of them...) have seized upon.

The key conclusions in the Report say that, "non-pair diving may have contributed [to the number of fatalities] by providing a distraction that allowed a problem with another member of the team to go unnoticed". The threat of separation seems to be the key issue one hears

disseminated regarding diving in non-pairs in UK conditions. It's one of those universal 'truisms' that nobody can quite remember where they first heard, yet feel duty bound to pass on anyway, along with such other gems as 'doing your deepest dive first' or 'using your drysuit for buoyancy' (what...!? well you *were* expecting me to be controversial, weren't you?). The Report goes on to say that, "[f]ive [fatality] cases involved groups of three divers diving together (trios). Three of these involved separation...". So let's look at them in a bit more detail.

The first of these separations is a genuine separation case. Unfortunately, the Report contains scant details, but it seems that an unspecified problem occurred to the third diver following his separation from the other two. The diver was brought to the surface unconscious by another group of passing divers, resuscitation attempts were unsuccessful and he died on arrival at hospital following an airlift. It is not clear whether the problem would have been resolvable by the other two divers in the original trio had the separation not occurred.

The second involved a separation on the ascent phase of a 40m staged decompression dive. The separation was caused by all three divers inflating delayed from depth in close proximity, then two of them losing sight of the third whilst they fought to untangle their lines. The dive computer of the victim shows that she made a normal ascent to 23m (where it is thought she made her gas switch to 50%) then a slow descent back to 30m followed by a rapid ascent to the surface from where she never regained consciousness (most likely following oxygen toxicity at depth). Tragic though this is, the facts here form the only useful discussion example, and I will return to this further on in this article.

The third fatality in this category did technically involve a separation, however this is somewhat misleading as this was not the main contributory factor in the death. The dive was in the deep end of the National Dive Centre in Chepstow and the victim failed to join the other two divers at the bottom of the 50m shot line. Thinking he had aborted the

dive the other two surfaced (after decompressing) but then made a further search after the third diver was not (as they expected he would be) back on the surface, eventually finding him unconscious on the bottom. Blaming the size of the group in this instance is not particularly useful, given that the NDC has some of the best visibility in the country (15 to 20 metres on occasions), that the group checked each other twice on the way down and that the cause of the death was the casualty not having completed the switch-on sequence on his rebreather before starting the dive (which would have been the main contributory factor regardless of the group size).

Of the other two "trio-related" deaths, neither include a separation and one (if not both - one is a media report and difficult to obtain any useful information from) actually occurred on the surface (which, at least statistically, most incidents do). Nonetheless, the Report happily includes them in supporting the trio data.

Now, about this clone business!? Mr Grumpy is of course talking about DIR. I have until now refrained from writing anything about DIR (not counting a satirical piece a couple of years back about rain in Cornwall - for those of you with memories, yes *that's* what it was about). And, as far as possible, I don't really intend to do so now, other than to put certain matters into context. So much is available in the form of articles and books written both by and about GUE, the WKPP, EKPP and many other groups, and in the first instance I would refer you to one of those. If you'd like to know more, start with an article such as *Evolution of DIR Principles* on the GUE website, or the DIR fundamentals book, which you can borrow from me if you ask nicely.

However, as regards its understanding amongst certain members of this Branch, I would like to clear up just a couple of misnomers and misunderstandings that exist at a really basic level. These are in response to things which I've heard, persistently in some cases, pass the lips of various people in the club, some of whom should know better. DIR is pronounced "D-I-R". It stands for Doing It Right, *not* Diving It Right, and has nothing to

do with Lamar Hires and his company Dive Rite (though some of their products are in fact DIR). It is *not* pronounced “Dewey” and has nothing to do DUI (Diving Unlimited International) or their drysuits (the fact that a cave-cut TLS350 is the commonly preferred DIR exposure suit is merely coincidental, and (bizarrely) never acknowledged in any company promotions by Dick Long (the impressively, yet improbably, named chairman of DUI) and the boys in San Diego).

So why are ‘they’ promoting diving in threes. Well in fact they are not, as such. DIR advocates diving in teams whether that be a buddy pair or a larger number. And a team is not just a fancy word for group. A team is just that - a cohesive unit with defined and commonly understood attributes working together to make the dive happen with reduced risk, increased efficiency and ultimately more fun.

Conversely, in much recreational diving, all too commonly a trio is formed by default either because of an odd number on the boat or one half of a buddy pair aborting, such that the trio is really a buddy pair with a random diver tagging along. That third diver is often unaware of any plan the other two may have or else what little preparation there is (or the knowledge and experience of those divers) may take no account of maintaining team integrity and managing problems. Other common issues are that either the ‘team’ randomly spreads out in all directions or one diver at the extremities of a particular formation, for instance at the front or rear of single-file line, loses contact with the other two or otherwise has no means of attracting their attention. Avoiding such issues, even in poor visibility, is in fact relatively simply achievable and is generally a combination of having a common approach to the conduct of the dive, being aware of maintaining the team throughout the dive and, not to be underestimated, using a relatively high intensity light with a focusable narrow beam to confirm and check positioning and with which to signal. Some or all of these factors not being the case, which sadly in a lot of the diving I see, they are not, then yes, I would tend to

agree that diving in trios in domestic conditions is generally less than optimal.

At this point, let’s add another layer to the discussion and consider in broad terms the nature of problems underwater. If you look at most incident analysis (BSAC’s Report as well as ones other organisations such as DAN publish) and compare the empirical observations of divers and instructors the world over, what you’ll commonly notice with respect to incidents is the following. Most problems which occur underwater are in fact both temporary and resolvable, however it is the mishandling of these, often in combination, which often turns a minor problem into a serious one, or at worst a tragedy. This is nothing new and is certainly not an original observation - think back to your basic training and the incident pit diagram, etc. So what’s different about DIR here then?

Before I answer that, and with apologies for jumping around a little, let me just try and address another misunderstanding. It is unfortunate that the most visually apparent aspect (and the one that usually causes most controversy) of DIR is the equipment, and as such it is commonly, but incorrectly, believed that this alone constitutes DIR philosophy. In fact, it is only a small part of the paradigm in which the system operates. However, the equipment is often the biggest quantum leap for people to achieve, either physically with respect to their actual configuration or as a concept which they can begin to understand. Perhaps this is because equipment selection is often a very personal matter. Aside from simple ignorance, people often like to believe that personal preference will result in them succeeding to assemble a unified system that will meet the personal needs of their diving, or else display a reluctance to either admit, or admit to caring, that the equipment they already own is less than optimal simply because to do so would mean admitting to themselves that they could have chosen, or could now choose, better. However in DIR, the equipment is merely functional. It is simply one aspect of critical thinking about a whole range of diving issues, reasoned in response to preventing technical related deaths which have

occurred over the years. If you have a knee-jerk reaction to anything that prescriptive (especially if you've formed that opinion without fully understanding how that system works) then you're really missing the point. You can sit there and chunter all you like, but one size really does fit all, and far from being a restricting factor on "your" diving, having a unified set of equipment across the whole team is in fact an incredibly empowering thing.

There is an old adage that prevention is better than cure, and preventing problems in diving is no exception. Whilst you can never account for the "X" Factor, i.e. that unexpected curve ball that might just rear up to try and ruin your day, you nevertheless can think through a lot of issues before you even get in the water. And that, in essence, is what DIR is really about. It seeks to take all of the components that create these small problems (i.e. the ones that can become bigger ones) and eliminate them through a combination of equipment, procedures, techniques, concepts and teamwork. Again, a lot of this isn't new, but neither does it claim to be. Most of the overriding philosophy can probably be found in the first few pages of any open water manual (even the *Peter and Jane Learn to Dive* offering that passes for BSAC's latest syllabus). Strangely, this is persistently levelled as a criticism against DIR. In actual fact, it's never claimed to have originated most of this information, merely to have collected and refined knowledge that was previously scattered over a large and varied number of sources, and put it all in one place.

Getting back to whatever it is DIR is supposedly "actively promoting", there is no rule as such about trios, only that a three is generically speaking considered to be a nice combination. In a team of three you have an improved redundancy of brain, equipment as well as gas. That third member of the team really comes into play if one diver has a problem. Let's say, for instance a problem accessing gas. Sure, it only takes one person to share gas with the OOG diver - we've all done 'air sharing' drills. Unfortunately in real life, gas emergencies are very unlikely to happen whilst you're kneeling on the seabed (nothing

is for that matter), so immediately you've got to deal with another problem as well, that of buoyancy. Often positioning will be an issue too, either by reference to a line (horizontal or vertical) or a fixed object such as a wreck, and that's before you have to deal with an exit/ascent (i.e. assuming the issue is not resolvable). Here the third team member can assume either a supervisory role, or manage such tasks on behalf of the group as deploying a marker buoy, maintaining the team's position in the water column, managing run times, ascent rates and deco schedules, etc. as well as be on hand to help resolve the problem in issue, the totality of which is often not easily accomplished by two face-to-face divers locked together by a relatively short hose.

In the tragic example cited above, there were a number of factors which caused problems, all of which could have been avoided and, had they still occurred, where DIR concepts and/or an enlarged team size would in fact have been of benefit. Please understand that I am not trying to suggest that this would definitely have prevented this death, however, I believe it would have gone a long way to increasing those chances on a number of counts. Firstly, in my opinion, even two divers trying to inflate marker buoys simultaneously from such a depth in close proximity is unnecessary and dangerous. Having three of you do it is just a really bad idea and the resultant entanglement and separation is not altogether surprising. Secondly, a gas switch is one of the most dangerous and critical sections of any deco dive. More technical related deaths have occurred due to a problem on switching and/or breathing the wrong gas than any other reason. For this reason, DIR has strict protocols as regards gas switching to ensure that the correct gas is breathed at the correct depth and so that this information is always verified by the other members of the team.

From the information given in the Report, the victim appears to have switched at 23m (itself 2m too deep to be cracking open a 50% bottle) and then dropped a further 7 metres where her PO₂ would have been at a dangerously high 2.0 bar. Not only that, but

due to the earlier problem she, was now alone when this occurred. A team ascending *as a team* (rather than each being focussed on their own ascent up their own line) would have been ideally placed to try to address the issues of the victim (here either buoyancy or whatever unknown problem may have caused the subsequent drop) whilst still having a member free to maintain other issues related to the ascent. In this example, turning what was potentially a team strength into a fatal weakness is saddening to say the least.

So if three is the magic number, does that mean I'm advocating not diving in pairs any

more? No, not at all. The classic buddy pair is still a completely viable grouping and I am not suggesting that a team should be looking to add a third member for safety reasons before contemplating a dive, nor that this represents a panacea for all issues you may face underwater. Rather, I'm suggesting the converse. That a team of three should not be regarded as one too many provided you address the relevant concerns with regard to safety and cohesiveness in your diving.

Joe

Further Reading

The BSAC National Diving Council's Diving Incidents Report for 2004 (and all years going back to 1997) can be downloaded at www.bsac.org/techserv/increp04/intro.htm

Evolution of DIR Principles by Jarrod Jablonski can be viewed at www.gue.com/equipment/jj-hogarth.shtml

equipment matters

Now the season I would like to say a big thank you to Nigel who spent a week on his own giving the boat trailer a new set of running gear. He did a lot of work to her for the coming season with new bearings brakes and more all on his own. Thank you.

The boat was de-winterised on the 13 March with an oil change, a new set of spark plugs, gear oil, testing the out boards and generally getting her ready for the on-coming diving! Thank you to those who helped. However, time ran short and we did not get a chance to wax and polish the Land Rover. So on or after

her next outing it needs to be done. No polishing, no diving. She does need it to keep her good looks! I'll see you all there with plenty of rags and thank you in advance for volunteering on the day.

Unfortunately, the club has had three tanks fail their tests and we now have four dedicated sets of regs for open water diving (identified by green hose wrap). Please do not sign out the other four Apeks regs as they are not in test.

Alex

hard hat diving oop north

There is something about UK divers that makes the ultra-stylish Italians cringe. Maybe it is all the garishly coloured fleece and Gortex we insist on wrapping ourselves in. Maybe it is our insistence on functionality over elegance. Perhaps it is because the average BSAC male diver is a pasty white colour, of stocky build and has more hair on his bottom than his head (no guessing why I haven't described the average BSAC female – besides you are all gorgeous...). But if divers are on average a little odd then it is the nautical archaeologists who are helping to pull the average towards the weirder end of the scale.

For those of you that don't know, a few of us have been creeping off to do NAS courses since last year. We've been measuring boats and fixing lines, learning about protected wreck status and dendrochronology and trying not to laugh at some of the other students' dress sense. Just like the BSAC run courses, some of the NAS courses are more interesting than others – but when we first heard about the technical diving weekend we were unanimous in thinking that this would be one of the most interesting. It was a weekend playing with all the commercial diving equipment – hard hats and under water comms, surface supplied air and helmet mounted video cameras so that the dive supervisor can see whatever you see. As soon as the annual course dates were released Ricky, Mel, Dave “the Skid” and myself booked in.

It was based at TWI in Middlesborough, a purpose built commercial diver training and exam facility, complete with a 6m deep tank containing an underwater structure resembling part of an oil rig. The facilities were excellent and if it wasn't so far away I'm sure that southern UK divers would be regularly trying to arrange weekend courses there. However, for those of you that don't like to venture much past the Watford Gap I am convinced that Middlesborough is the reason for the phrase, “it's grim up north”. It's not the people, well, it's not *just* the people, it is the landscape – a

modern day equivalent of Dickens' Coketown. So to avoid the grimness of the city we were staying about 10 minutes drive away in the “sleepy and picturesque market town” of Guisborough.

As you might expect, nautical archaeologists are not well known for being party animals so when we arrived at our NAS recommended B&B, the Three Fiddles Public House, we were somewhat confused. It was heaving. Taxis bringing in the locals for their Friday night out on the town were arriving every 10 minutes, such was its popularity. The temperature may have been below zero, but the locals seemed immune. The blokes were all in short sleeved shirts, un-tucked and with the top 3 buttons undone of course. The women all seemed to be in a competition to parade as much flesh as possible. And they weren't just skinny young things either – Hattie Jacques would have fitted in perfectly. I would have said that their mothers would not have approved – but I reckon the mothers were also in the competition. By stripping down to just jeans and a T-shirt I almost fitted in – but then Mel gave the game away with her big baggy jumper and complete lack of exposed flesh. We left to get some dinner as quickly as possible – our blatant open mouthed and amazed gaping was not going down well.

Just before we left we quickly scanned the pub for any other members of the NAS contingent. They were not hard to spot - oddly coloured fleece covered islands in a sea of lipstick, hair gel and cleavage. Now that we were in tune with the local tribal dress it was a relief that Dave and Ricky had not laughed louder on entering the pub. The sandal wearing, toe-ringed man by the door turned out to be their NAS room mate.

The actual diving was very interesting. After a very brief overview of the kit we were pretty much left to get on with it and learn as we went along. All of us got to dive twice in the full kit, plus the chance to dress the divers, act as tender, as comms supervisor and do a pot dive. Having the four of us in the same team

was very reassuring, especially when the first diver of the other team was seen to be making frantic jelly-fish impressions immediately on having been clamped into her helmet. No one had turned on her air, or showed her where the bail out supply was located. Upon querying how this could happen, the answer was simple – well, she hadn't asked for her air to be turned on. Obviously an optional extra, then. Even by the last dive on the Sunday the same team still hadn't quite got it together – sending in their last diver without the bail out gas supply turned on.

Ear clearing turned out to be more complicated than expected. Encased in a 10kg helmet with integrated comms and air supply meant that a simple nose pinch was impossible. The solution was a 'V' shaped neoprene covered prong which could be moved in and out or rotated through 360 degrees by the diver. With no clear explanation of how to use this device everyone seemed to come up with different ways of wedging it against (or even up) their nose so that they could clear. Cleaning the helmets after each dive became very important.

We worked with one diver per team diving at a time. The plan was to spend some time getting used to the kit (no fins to aid movement and a natural tendency to topple over due to the weight of the helmet) and the rest of the time practicing survey work on two blue plastic boats that we purposely weighted down and tied to the bottom of the tank - it was an archaeology course after all. Some of us spent more time than others pretending to be spacemen, trying to do somersaults and generally giggling, shrieking, shouting and creating havoc (no difficulty guessing who...). Roger, a university lecturer and the most popular member of our team, was the opposite extreme. He only wanted to do the survey work and whilst the rest of us measured to an accuracy of 1-2 cms he insisted on measuring

to the nearest millimetre. Not very successful when certain other members of our team were spending time deliberately hijacking the survey exercise by loosening the boats so that they were able to move about by about 20-30cms. With the computer modelling afterwards proving difficult (unsurprisingly) Roger was spotted in the corridor re-measuring the boats that we had now recovered from the tank.

The other amusing game was to torment Dave "the Skid" whilst he was diving. Having settled him at the bottom of the tank with my reassuring tones coming through the comms system, he was less than amused to hear Mel's cackling and realised that "the mad woman" now had control of his air supply. But it could have been worse – I had to deal with Roger as my comms supervisor.

Finally for those of you wondering why I keep referring to our current club president as Dave "the Skid" I will explain. It had nothing to do with the snow and ice that greeted us on the Sunday morning. On the Friday night, their toe-ring wearing room mate had gone to bed early and Dave and Ricky, being considerate chaps, decided not to switch the lights on and just got ready for bed nice and quietly. Unfortunately an earlier occupant of the room had not been so considerate. Having had a nasty bowel accident he had avoided the inevitable embarrassment by switching beds and making it look like the original bed was unused – hence the chamber maid had not changed the sheets. Dave woke to discover that he had spent the night lying in a rather large and ominous looking brown stain. Whilst he has our sincere sympathy for the mental trauma he must now suffer, we still struggled not to laugh – probably much like you will struggle not to laugh the next time you see Dave "The Skid" Marks.

Jamie

back on the boat with 500

For those of you who don't know or haven't worked it out yet after reading Jamie's account of some of his travels, 500PSI is a little under 35 bar. But 35 bar of what? We're all familiar with 12L tanks (actually most of the new lightweight Fabers are 12.2L now, if you're counting) and it's tempting to assume that anything we ever come across of similar dimensions will be of a similar volume. Not so. If you dive recreationally in just about anywhere in the world except Europe, what you'll most likely get handed at the rental store or dive boat is a Luxfer S080, an extruded aluminium-magnesium-silicon alloy cylinder commonly known as an *Aluminum 80*. You've probably all seen these (usually) unpainted tanks, row after row of them on holiday and may not have ever given this a moment's thought, except maybe to notice that they tend to make you feel a bit light towards the end of the dive. However, and just to prove to you that it is possible to write an article for *London Diver* about absolutely nothing in particular, permit me to take you on a tortuous tour through my tedious little mind, then amaze your friends with pointless facts about the humble Ali 80.

Firstly, let's get the spelling and pronunciation out of the way. *Aluminum* (pron. *uh-Loo'mernum*). Just what is with that?! Actually, it came as quite a revelation to me a little while back to learn that many 'American' spellings were in fact either more 'correct' or at least more established than the language we so proudly claim to be 'English'. Many of these, such as most words ending in "ize", have remained unchanged in American usage, only later to be changed by us Brits for our own purposes as part of some nineteenth century culturally elitist Greco-cum-Francophilic revisionist etymological re-write (a process which invented many of our so-called 'established' grammatical quirks such as split infinitives too).

Aluminium is a bit of an odd one though as there are valid claims on both sides. We have the better claim for international conformity,

whilst our 'Merkin friends have a viable (though perhaps coincidental) claim on originality.

The root of the problem is a bout of indecision and pedantry on the part of us Brits (no surprise there then). The guy who originally discovered that a metal could be isolated from the mineral *alumina* was a chap called Humphry Davy, who in 1808 first proposed the name *aluminium* for his new metal. He quickly changed his mind however and settled on *aluminum* to match the Latin root of its base. By all accounts, there followed lots of complaints by people with nothing better to do, which centred around the fact that many other elements then new to science ended in "ium" (such as sodium, potassium, etc.). Davy himself (who had in fact been responsible for isolating these other elements) was eventually persuaded four years later to change the name to *aluminium*.

It would be nice if the story ended there and convenient to assume that America had innocently adopted the original spelling whilst us Brits bickered over taxonomical niceties. There are many Americans, including a certain famous contemporary travel writer, who will tell you just that. Unfortunately, matters are never that simple and in fact America itself used the spelling *aluminium* for most of the nineteenth century after having readily accepted Davy's second name change. It even appeared as such in Webster's Dictionary, a publication otherwise considered anathema to English language purists, it being responsible for many of the phonetic spelling changes which now categorise (sorry, categorize) American English, including the ubiquitous (yet ironically un-phonetic) *color*.

So how did they get back to *aluminum*? Well, whether it was a typo or he had a particular affinity to Davy's name nobody seems to know, but that's the spelling which was selected in the 1890s to advertise the first commercially viable production method (electrolysis) for the metal, patented by a chap called Charles Martin Hall, whose business so

dominated its production for the decades that followed (in fact, now called Alcoa, it still does) that the name stuck, despite remaining as *aluminium* in American dictionaries. This was formalised by the American Chemical Society in 1926 after which our American cousins stuck with *aluminum* whilst us Brits (oh yes, and the rest of the English speaking world, as well as the French, Dutch, Germans, Danish, Norwegians and Swedish for that matter) were less swayed. The final chapter came fifteen years ago when the International Union of Pure and Applied Chemistry (IUPAC) chose *aluminium* as the standard international spelling. So did the Americans adopt the new international conformity? Of course they didn't. But, then again, the IUPAC would also have us use the US spelling *sulfur* instead of *sulphur*, though I can't see the British adopting that either!

Well, that about deals with spelling. Anyone still awake? Good, then we'll move on to size. Just how big is an Ali 80 then? Ahh, bad question to ask. You really want to know? Too bad, you're going to find out anyway. This had been bugging me for some time, ever since Keith and I were trying to work it out last year in the Red Sea with a pencil and paper (we weren't too far out as it happens). So recently I looked this up. Then kept looking and looking until I'd gathered enough information to calculate an accurate answer. And then really wished I hadn't bothered!

Let's start with what it is not. It is not a 12L cylinder. Let me say that one again. It is not a 12L cylinder. It may look, feel and smell like one. Dive guides may tell you it's a 12L, my last one with a charming yet unwavering Teutonic insistence (you can imagine the conversation... Me: "No it's not, look I've worked this out, I've studied the spec sheet on the Luxfer website..." Her: "Nein, zis ist definitiv TVELFF liter..."). Hell, even experienced instructors in our branch who've dived all over the world will blithely write (at length) in these very pages about the 12L tanks they used/saw along the way... Sorry folks, they're all wrong.

So how do you get to the right answer? As you probably know, whereas we use water

capacity to measure size (i.e. non-compressible volume), the Americans rate their tanks by the volume of free gas they hold. Which is nice. Until however you realise that this all depends on at what pressure you calculate that volume. Then you also need to know that whereas American steel cylinders are rated at 10% above the stamped pressure for LP (low pressure) tanks, alloy ones aren't, but also factor in that they are often both routinely filled to much higher than either of those pressures. Then, if you've still got a handle on how much gas you think you have, you probably won't want to know that the compressibility of its contents will vary depending on what gas you're putting in there, appreciably so when you bring helium into the mix. And that's before you even start to talk about real versus ideal gas laws. Confused? You will be. And probably quite exasperated too if I then told you that the US has 'officially' been metric since 1866 (oh, how I laughed).

Getting back to size, it also depends on how you make the comparison. At its rated reference pressure of 206.85 bar (3,000PSI) it'll hold the same as a 10.95L tank blown to the same pressure, though it would take an 12.28L cylinder at this pressure to contain the same amount of gas as the S080 filled to the 232(ish) bar we're used to. So which is it? Er, well in fact it's neither. Just to make matters even more complicated than they already are, a standard US spec S080 doesn't hold 80 cubic feet of gas at 3,000PSI at all. For reasons unknown, it actually holds 77.4 cu ft. Still want to know the answer? I really won't hold it against you if you don't, but if you filled an Ali 80 with water it should hold 10.60L. Lesson to be learned? If you're working out or teaching gas planning requirements for the UK, never EVER complain. It could be a whole lot worse!

Next month... everything you always wanted to know about titanium (*but were afraid to ask).

OK, I promise to get back in my box and be quiet now...

Joe

more from the red sea...



"To infinity and beyond...". One giant stride for man...one very strange leap from Mr Chapper...

*1 x Ikelite camera housing - £<ouch>
1 x TTL digital strobe - £<gulp>
1 x half-decent snapshot of a tortoise doing breaststroke - £<questionable>
1 x marine life ID book - Priceless*

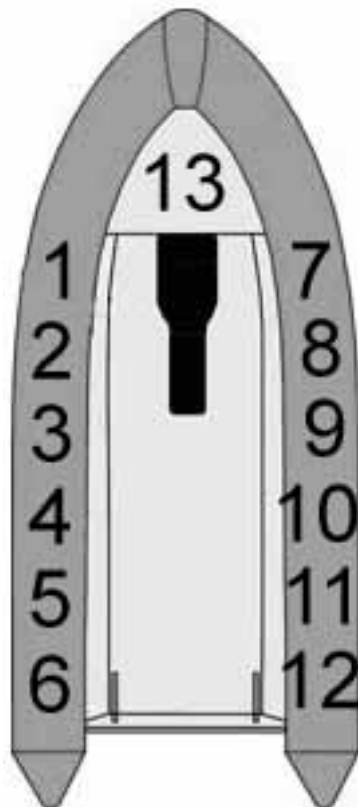


and finally...

Another fantastic puzzle devised by our resident quizmaster Jamie. Prize this time for the winning entry is a million pounds plus a still un-won copy of 'Dive Scapa Flow' by Rod Macdonald.

Match up the following 12 divers to their positions on the boat (see diagram below):

Alex, Dave, Ian, Jamie, Joe, Jon C, Jon W, Keith, Megan, Mel, Morgan and Tobias.



**Copy deadline for
next issue:**

**Friday 24 June
2005**

Tuesday evenings come to...

**THE
PERSEVERANCE**

for beer, food, news, gossip,
etc.

11 Shroton Street, London,
NW6 6UG

1. The position in front of the cox'n is occupied.
2. Tobias is sitting between Ian and Alex.
3. Jamie and Mel are sitting on the same side as each other, but not next to each other.
4. Joe is sitting on the starboard side but not in position 7. Joe is not Jamie's buddy nor is he sitting next to Alex.
5. Morgan is sitting on the opposite side to Tobias but no immediately opposite.
6. One of the Jons is in position 1.
7. Keith is in an even numbered position.
8. One of the girls is in position 4.
9. Jamie is sitting next to Dave, who is opposite Megan. Jamie is sitting immediately opposite his buddy.
10. Jon Chapper has a spare position next to him.

He'll face 30ft waves, blizzards, force 9 gales and sub-zero temperatures.



Andy Huggitt: 2nd Coxswain and Deputy Mechanic, Eastbourne Lifeboat.

Photography: Murray Langdon

All we ask of you is £20.

To: The Chief Executive, RNLI, FREEPOST (BH173), West Quay Road, Poole, Dorset BH15 1XF.

RT03/11

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