

# Free Flow

The magazine for LSAC

Oct 2004  
Issue 80

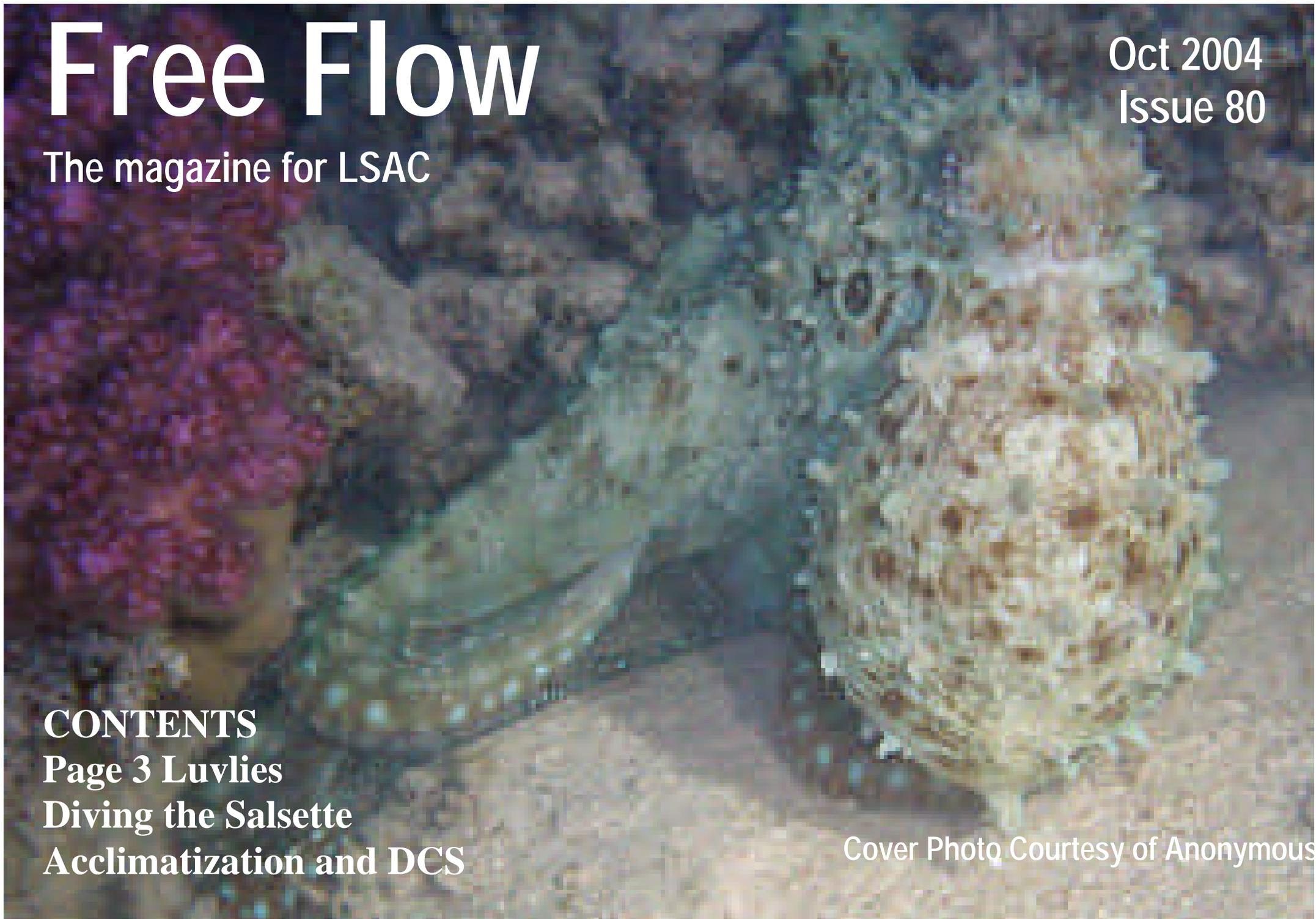
## CONTENTS

Page 3 Luvlies

Diving the Salsette

Acclimatization and DCS

Cover Photo Courtesy of Anonymous



# Editors Bit...

At all good Newsagents now.....  
Hence only downloadable from [lsac.co.uk](http://lsac.co.uk)



# Free Flow

## CONTENTS

- Page 1  
Cover
- Page 2  
Editors Bit
- Page 3  
Page 3 Luvilies
- Page 4  
Chairman's Report
- Page 5  
None Divers Club
- Page 6  
Diving the Salsette
- Page 12  
British Flagship found after  
111 years
- Page 13  
Acclimatization and DCS
- Page 16  
Tuesday Schedule



**Just a gentle reminder from a previous winner, above, "Don't forget to get those photos ready for the annual competition." Entries on display and voting at the quiz night Tues 14<sup>th</sup> Dec**

Much has happened since the last edition: of most note is the AGM and the changing of the guard, i.e. committee. In particular we have a new Chairman, secretary and 3 new ordinary members. (Yes I know some serving members have changed role).

The purpose of the Chairman is to steer the club in the direction of the members wishes and oversee the committee members. The role of the ordinary members is to be the voice of the club members. It is their role to circulate, listen to the moans, groans, complements, etc and bring these to committee to influence decisions/policy.

Several people have suggested that Freeflow should be a little more controversial, namely a vehicle for gossip, policy discussion and the like. As far as I'm concerned anything that is sent to me gets published, anonymously if requested, provided it does not offend. So get your pens/fingers scribing.

There have been no responses to the 50's club from last month so I can only conclude no-one's interested, i.e. Goodbye to the 50's, which is a great shame since I'll be there next year.

[www.lsac.co.uk](http://www.lsac.co.uk)

Pete

# Page 3 Luvlies

Free Flow  
Oct 2004



Yes I know we've had a puffer before as a page 3 luvlie, but isn't he/she cute !

If you would like to become Miss or Mr Aug or know someone who should be, then please email me with the photo and a brief description of why the person should be a page 3 lovely.

**[pete.barnard@power.alstom.com](mailto:pete.barnard@power.alstom.com)**

# Chairman's Report

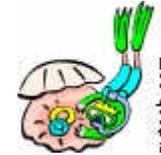
Well it is the first report as chairman & seeing it is only a few days into the Chairmanship perhaps you can appreciate that there is little to really report or say, though some members in the club that I always have too much to say. So I will tell you on what sort of chairman I would like to be & what I can do for the club. As a person I would like to feel that I can easily be approached & ready to listen to any suggestions that any of the members would like to bring forward. It could be ways of improving the club or even if it's a bit of interesting gossip. I would even promise that everything would be kept in the strictest confidence, well at least till we get down the pub. I have taken over at a time when the club is at its most popular, at least since I have been at the club & hopefully we will all work together to retain the level of interest. I am predicting that we will have a good time next year, as we will all start to meet our new members & develop new friendships as everyone becomes integrated into the club.

I will reiterate this message again for the new members on the Tuesday nights, but there is quite a good social meeting on the Tuesday down the pub after the pool sessions & I would like to think that more people would take this opportunity to meet the more seasoned members. With having so many at the club now I should imagine that the trips next year are going to be very popular so for those that are requiring sea dives must not be shy at coming forward to make sure their names are added when the dive trips are announced.

I will be see about seeing the appropriate people so we can organising during the winter months other dive trip planning evenings, where we can perhaps plan some new trips to different locations. Hopefully the next report will have more content & as I am chairing my first committee meeting so this should provide items of interest. I would like to sign off by thanking our past Chairman, Nigel who has now become boat officer. Plus wish all of those either carrying on with their positions & to those in their new positions all the best for the coming year.

*Jonathan Bill ( Chairman)*

Has anyone else been this fortunate- a cuddly toy puffin or a mug with pictures of sunken wrecks?



Any non-divers out there who are reading this?

Behind many divers there is someone supporting, encouraging, and looking forward to hearing the exciting tales of underwater exploits that our other halves wax lyrical about!



How about a section for those of us who fit this role?

I have spoken to a number of you already and have some ideas for an article or two. If you are out there and would like to have 'your say' - do contact me via my email address – I can only promise confidentiality and hopefully a bit of humour from those of us who don't dive but seem to know a fair bit about the sport!



By the way the above were presents brought back by one diver for a partner who didn't go on the trips. Have you received a gift you would like to tell us all about?

Indira – reached via [indirabarnard@btopenworld.co.uk](mailto:indirabarnard@btopenworld.co.uk)

## DIVING THE SALSETTE

Like most divers I have a mental list of “to do” dive sites, the Salsette has been on this list for some time. A long time ago it was simply known as a “deep dive” and hence unobtainable to most. An ex-member of the club (Andy Fairey) was the only person I knew who had done the dive in the early 90’s and he enthused about portholes, great Viz etc.

When “technical diving” caught on later in the decade I (along with others) found myself with more cylinders, more DV’s, a Nitrox qualification and a suspicion that I ought to be using the kit a bit more! A couple of aborted attempts for Pete Woodcock and myself ensued but the arrival of my two daughters meant that it was not a top priority.

In conversation with Jon Brewis this year we decided that it was about time we did this dive. Jon and I checked our diaries and decided a date during the week. This is achievable out of Weymouth and meant that we only needed 1 day off work and I could get back home the same day. I found a charter boat that would go to the wreck, but did not need a full boat. You pay a higher price (£38 for 2 dives) but it makes planning easier.

Once I had a date, dive site, boat and cost sorted out my original plan was to announce the details to the club and if anyone else cared to join then fine. I was a bit shocked to find 8 other divers interested.

My “technical diving” skills were a bit rusty, and I was diving with Phil Turney who had recently completed a weeks deep diving out of Weymouth so I had to get some practice in.

I have a Buddy stab jacket that can accommodate twinning bands meaning I can fit 2 x 12 litre cylinders each with their own DV. I do not have a cross valve as the cylinders are used for Sport Diving as well. I have a 3L pony cylinder that I mount to one side. My dive plan was based on the maximum breathing time I can get out of the 3L pony as it carried my 50% Oxygen decompression gas. Checking back on old dives reminded me that I usually breath 16 Litres per minute.

My practice was to get comfortable with the kit again and confirm my breathing rate had not changed. My first stop was a training dive at the Cove. I had trainees with me but most people would agree that the above kit was overkill for 20m & 6m in the Cove. I found myself underweighted – I had changed thinsulate and the 4 Kg weightbelt was not enough. I also found that the bungees I used for holding my DV to the pony cylinder had given up and were now called string.

Having rectified these problems I had a weekends diving in Plymouth. Others will tell you that 2 x 12 Litre cylinders + 3L pony are not welcome on Lucky Dip as they take up a lot of room and are bloody heavy to haul into the boat. Apart from finding I was still

underweighted when the cylinders were empty I had an excellent weekends diving in Plymouth. The Persia was my favourite, and it was my first dive on The Maine as well. These were both 30m dives and decompression was the order of the day to get the most out of them. Diving the Scylla with 2 x 12 L is a pain as you keep bashing pillar valves.

Come the day – come the crap weather. Surely we would not be blown out again (this is what had stopped Pete and myself twice before). Off we set – the boat sure did roll and Gary Rose’s dive buddy (Ash) sure did suffer, most of us agreed that we wouldn’t have gone diving if we felt as bad as he looked but apparently he often gets that ill ! 2 other divers joined us; I assumed that they knew each other. It turned out that they were strangers, but it wasn’t a problem as they were solo divers!!

The dive itself:

Down the shot line... fast. Heart beating fast for 3-4 minutes afterwards until my eyes / narcosis adjusted.

Very good visibility and very warm – huge fish everywhere.

I, like most people wrongly decided to turn left and dived the midships section which meant we missed the spectacular bits.

Teeming life in amongst the superstructure is my overriding memory.

I was very aware of clock watching once 20mins had passed, and a total of 20mins decompression is enough for me.

Afterwards I spoke to one of the solo divers.

Did you enjoy that? I asked

Best viz for a long time he answered

What’s the best dive you have done down there? I enquired.

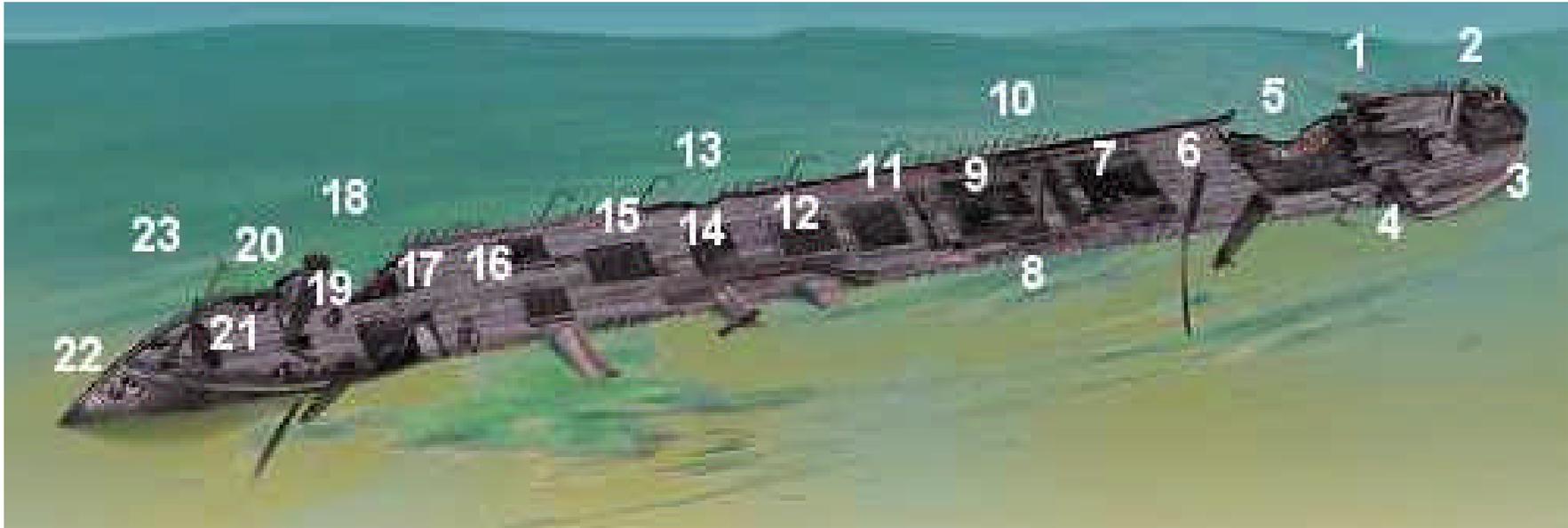
I can’t remember he said ... I have Alzheimer’s !!

Most of us enjoyed the lunch of meat pies provided by the skipper – some did not.

The second dive was crap. 20 minutes on a sandy bottom in 2m viz... Ahh, UK diving.

And the overall feeling of the group.. “We will have to go back and do that dive properly”

Neil Tomlin



**The Best Wreck Dive in Britain - that is the P&O liner Salsette, which lies 43m deep in Lyme Bay. Few wreck-divers will disagree with that top rating, so **John Liddiard** makes it the first ship in the year 2000 to feature in Diver's inimitable Wreck Tour. Illustration by **Max Ellis****

The *Salsette* was definitely the toughest Wreck Tour I've had to put together so far. It took more than the few dives I managed to get on it in 1999. The wreck is big and complicated, 134m long, 34m to the starboard railing and 44m to the seabed. I had to call on the help of several of the Weymouth skippers and pick the brains of many divers to fill in details for this one.

Torpedoed by UB-40 on 20 July, 1917, the P& O liner Salsette might have been just another of many wartime shipwrecks off Britain's southern shores, but since it was first dived in the early 1970s, a plethora of portholes and other non-ferrous fittings have made the Salsette the Mecca of South Coast wreck-diving. Ask any Weymouth skipper and it seems that just about every charter group wants to dive this one.

You need a pretty long dive to see all of the Salsette in one go. I have selected a route that runs roughly from stern to bows; if you don't manage it all, just start at the other end and work backwards on a subsequent dive. The starting point very much depends on where the boat skipper places the shotline. With digital GPS and colour video sounders, you can challenge the skipper to see how close he can get to a particular point on the wreck. Beginning at the stern, make for the starboard railing and follow the rounded hull down towards the keel (1). I have heard that a propeller is still there, though I have not seen it myself. Presumably it is attached to the port shaft beneath the keel, because the starboard shaft is clear. A tidal scour gives a maximum depth of 48m here.

Back on deck, the 4.7in gun is still fixed to its mount above the upper deck (2). This is one of the few structures to survive above the main deck. Other cabins and superstructure have long since rotted and crumpled to the seabed. Going beneath the gun towards the seabed, the upper deck has partially collapsed and skewed to starboard, leaving a swimthrough between decks on the port side (3). The cover of the upper deck ends by a large capstan (4). The starboard side of the hull and deck has caved in (5) to provide a large cavity full of debris, though the actual torpedo hole is further forwards towards the boiler rooms amidships. With two decks of cabins below the main deck, there is considerable scope for wreck penetration from this hole.

Back on the main deck, a mast lies collapsed to port (6), with a crane just below it. My guess is that the broken area of the wreck just aft of this mast was the site of one of the holds. A large rectangular hole in the deck (7) is filled with debris and has some steel lattice walkways round the edge of it, suggesting that this was once a gallery above the engine room. It is possible to penetrate forwards from here past large-scale engine-room machinery and out through the torpedo hole in the starboard side below the waterline. Just forwards are two cylindrical structures at deck level, thought to be water tanks (8). Another large debris-filled hole in the main deck again contains areas of steel lattice walkway, suggesting further engine-room areas (9).

The Salsette once held the coveted Blue Riband for the fastest crossing of the Atlantic and is listed as having eight cylinders of quadruple expansion engine, presumably four cylinders for each shaft, so there is a fair amount of boiler and engine machinery below decks. Part of the problem with being precise here is that the original plans for the Salsette were deliberately destroyed when shipyard companies changed hands many years ago.

Over the starboard rail in this region is an area of open companionway below the main deck (10), another area to explore for penetration to lower decks. Forward of the engine-room debris, a large winch is situated across the centre line of the ship (11), with another debris-filled hole to lower decks. As nearby holes are engine room and flues, this could have been a ventilation hatch. Photographs of the Salsette show a number of ventilators above this area.

Continuing forwards, the next rectangular debris-filled hole is the remains of the aftmost flue from the boiler room (12).

Towards either side of the deck is another pair of capstans. On the starboard side an area of hull plates is missing (13), providing another route below decks. Moving on towards the bows and back on the main deck, the next hole is again filled with debris, but has some railings on one side (14). Might this have been a stairway? The Salsette had two funnels and the flue from the forward funnel is the next major hole, again, alas, filled with debris (15).

Nearing the front of the area of the superstructure, the wheelhouse has mostly gone, but the outline of the supporting steel frame can still be found on the wooden deck (16), with an upright section remaining in place towards the port side. In front of the superstructure is a pair of cut-out sections in the deck and hull with a walkway (17) forward to the foc'sle. These provided access to the forward hold. The hull has split open on the starboard side (18) where the bows are settling slightly towards the seabed. On the deck above, a crane is located on a pivoting base (19), now pointing down across the wreck. Just forward of this, a few more plates are missing from the starboard side of the hull, giving access inside.

We are now among the usual bow fittings, with another capstan (20) on either side of the deck, bollards and cleats for tying off mooring ropes. In the centre of the deck is a huge anchor winch (21). Chains stretch forward and are routed through narrow channels to a pair of anchors, held tight against either side of the bow (22). Beneath the bow, the seabed is again deepened by a tidal scour to 46m. Between the anchor chains is the base of a small crane used for fitting anchors. The mast for this crane is still upright (23), rising to 32m and the shallowest point on the wreck. This makes a good place to release a delayed SMB and ascend.

Although I have described the Salsette in a single route from stern to bows, it will take a few dives before you feel you really know your way around this superb wreck.

Given a chance, there are many parts of the Salsette I would like to explore in more detail and perhaps that is why so many divers want to return again and again. There is just so much to discover.

---

**TIDES:** Slack water is 3 hours after high water Portland. On neaps, the tide also drops to a diveable state (but not fully slack) 2 hours before high water Portland.

**GETTING THERE:** Follow the A37 or A354 to Dorchester, then the A354 to Weymouth. Avoid the seafront and continue on the A354 along the back of the harbour. Turn left just before the fire station. Boats pick up either across the bridge at Weymouth Quay by the Sailor's Return pub or further along the cobbled Old Harbour area. For Portland, continue on the A354 past Chesil Beach, turning left to the old dockyard area as the road starts to climb the hill to Portland.

**HOW TO FIND IT:** The position of the Salsette on GPS is 50 29.67N 2 43.07W (degrees, minutes and decimals). There are no convenient transits, so you have to search with a GPS and echo-sounder.

**DIVING AND AIR:** From Weymouth - Channel Chieftain, skipper Pat Carlin 01305 787155; Skin Deep, skipper Ian Taylor, 01305 782556; Tiger Lily, skipper Chris Caines, 01305 821177; Old Harbour Dive Centre 01305 760888. From Portland - Portland Dive Centre, 01305 820870. On the web, take a look at [www.deepsea.co.uk](http://www.deepsea.co.uk) for charter boats. Air, nitrox and trimix are available from Old Harbour Dive Centre.

**LAUNCHING:** Slips are available at Weymouth, Portland, West Bay and Lyme Regis. Harbour and launch fees are payable.

**ACCOMMODATION:** The area is littered with B&Bs and small hotels. Campsites are out of town, usually very smart and a bit expensive. Contact Weymouth Tourist Information, 01305 785747.

**QUALIFICATIONS:** Experienced sports divers who are prepared to make decompression stops. Mixed-gas diving is not required, but you won't get much bottom time without planning a deco dive and a rich nitrox mix is always a good idea for deco stops.

**FURTHER INFORMATION:** Admiralty Chart 3315, Berry Head to Bill of Portland. Ordnance Survey Map 194, Dorchester, Weymouth and surrounding area. Dive Dorset, by John & Vicki Hinchcliffe. World War One Channel Wrecks, by Neil Maw. Shipwreck Index of the British Isles Vol 1, by Richard & Bridget Larn. The Diver Guide to Weymouth & Portland Area, Weymouth & Portland BSAC. On the web, try [www.deepsea.co.uk](http://www.deepsea.co.uk) for boats and diving services and the Reading BSAC website at [homes.arealcity.com/rbsac](http://homes.arealcity.com/rbsac) for wreck information on the Salsette. Weymouth Tourist Information, 01305 785747.

**PROS:** Fairly intact with a lot to explore. Well serviced by hardboats and RIB shuttles. Air and nitrox easily available.

**CONS:** Slack water essential. Its fame tends to attract divers who are not really experienced enough to dive it.

Many thanks to Ian Taylor, Pat Carlin, Janine Gould, Chris Caines, Callum Beveridge, Steve Kendall, Alex Poole, Helen Jarratt and many members of Dorset Sub-Aqua Club.

---

---

Appeared in DIVER - January 2000.

---

## **BRITISH FLAGSHIP FOUND AFTER 111 YEARS**

British deep diving expert Mark Ellyatt and Christian Francis, a Lebanese-Austrian, have discovered the wreck of British Mediterranean Fleet Flagship HMS Victoria off the Tripoli coast. In a press conference last week they announced the startling discovery of the massive ship standing straight upright in 100m, its bows buried deep in the soft mud. In an interview with the Lebanon Daily Star, Francis described first seeing the wreck on 22 August during a dive to 70m "I saw a huge shadow off to the left between us and the setting sun. We couldn't imagine what it was and swan over to see."

Mona Mounayer, co-owner of Firehorse Films which is filming a documentary about the discovery, said "it's a wreck that surpasses any other along the Lebanese coastline and in the world. It's uniqueness is not so much that it is the HMS Victoria, but its vertical position. It looks like a skyscraper."

The story of the sinking of HMS Victoria is one of the most tragic accidents in British Naval history. Steaming into Tripoli with 10 battleships, Vice Admiral Sir George Tryon order a complicated and dangerous manoeuvre. If it had come off it would have been a spectacular sight for the thousands watching from the shore. On 23 June 1893 the two columns of five ships steamed away from the coast with the plan to turn a tight circle towards one another to head back to port, something akin to line dancing. In a spectacular miscalculation Tryon failed to leave enough room between the two columns for the ships to turn. The lead ships, Victoria and Camperdown, collided holing Victoria below the waterline. It took just 13 minutes for Victoria to go under, her massive forward guns dragging her down bow first with the propellers still turning futilely in the air. Tryon and 357 crew perished with the Flagship, Tryon allegedly saying 'its all my fault'.

The MOD is in discussion with Lebanon about access to the wreck. HMS Victoria has been classified as a National Maritime Grave, which limits diving and prevents film or pictures of human remains being published. An official War Grave designation would prohibit diving altogether.

# Acclimatization and DCS

By Dr. Sawatzky

Does repetitive diving increase your risk of DCS? Do multiple days of consecutive diving increase your risk of DCS, or reduce the risk as you 'acclimatize'? The answers to these questions are not simple. We do not completely understand what is going on in these situations, but an increasing body of information is available. There are really two separate topics here. The first is repetitive diving, on the same day or over multiple days. The second topic is multi-day diving that is NOT repetitive diving.

We've all been taught that repetitive diving increases our risk of DCS (at least we should have been!). A repetitive dive is a dive where you start the dive with some residual nitrogen (and/or helium) still left in your body from a previous dive. Dive tables typically assume that if it has been more than 12 or 18 hours since your last dive, all of the inert gas you absorbed during the last dive has been eliminated. We know that uptake and elimination of inert gas is approximately exponential and therefore complete elimination of the excess inert gas absorbed during a dive will take a VERY long time. However, 12 to 18 hours after a typical recreational dive the amount of retained gas is so small that it usually has no practical significance. For example, 24 hours after a shallow, no decompression dive, the amount of retained gas might be equal to the amount of inert gas you will absorb in 15 seconds during your next dive to 60 fsw.

Let's look at this in a bit more detail. Decompression equations assume that the various tissues of the body take up and eliminate inert gas at various rates. Given that inert gas is transported between the lungs and the tissues in the blood, it makes sense that tissue with a very high blood flow (working muscle) would take up and eliminate inert gas far faster than tissue with a very poor blood supply (bone). Every tissue can tolerate a certain amount of excess inert gas and it seems that faster tissues can tolerate more excess inert gas than slower tissues. After a single, recreational, no decompression dive, most of the excess inert gas will be in the fast tissues. These tissues will lose the excess inert gas quickly and they will be pretty much back to normal several hours after a dive. Slower tissues will absorb relatively little inert gas during this kind of dive.

If we do a dive deeper than recreational limits, or a dive where we stay down longer than standard recreational limits, more inert gas will be absorbed by slower tissues and it will take much longer to eliminate this gas after the dive. If we do a second dive before we have completely eliminated the excess inert gas, the amount of inert gas in the various types of tissues becomes very hard to estimate. By now you are most likely thinking, 'it is easy, my computer does the math and calculates it?' Your computer does the math, and most computers will generate a pretty picture to show you how much inert gas is in each 'tissue compartment', BUT what your computer is doing is solving a mathematical equation. What we really need to know is how much inert gas is retained in the various tissues of our bodies. **YOUR COMPUTER HAS ABSOLUTELY NO IDEA HOW MUCH INERT GAS IS IN YOUR BODY!!!** The capitalization is because I cannot emphasize this point enough. The problem is made worse because many decompression equations 'pretend' that they

somehow represent what is happening in the body. In reality, all are simple math and have very little to do with physiology. Life is even more complex than you might imagine. I gave the example of working muscle as a 'fast' tissue. But, blood flow to a muscle can be as much as 100 times greater at maximum work compared to blood flow at rest. What is the blood flow to a muscle during a dive? Well, it depends on how hard the muscle is working, and it can change dramatically during the dive (hard working dive followed by cold, long decompression stops). Which compartment in the decompression equation represents this muscle? The answer of course is, none. But the complexity is even worse! We tend to be warm at the beginning of the dive (bottom phase) and cold at the end (decompression). These temperature variations cause huge changes in the distribution of blood flow in our bodies during the dive. Again, no decompression equation can know about these changes. Some dive computers measure water temperature and adjust the decompression based on this. However, it is not the water temperature that matters, it is the tissue temperatures of the diver. Depending on how you are dressed, how hard you are working, etc. you can be very hot or very cold in any temperature of water.

But there is still more complexity! When you generate inert gas bubbles in the venous ends of the capillaries, and those bubbles get carried back to the lungs where they are trapped and the inert gas eliminated, the inert gas is carried from the tissues to the lungs much faster than when no bubbles are present. This means that the amount of inert gas in the tissue will be LESS than calculated by the dive computer. But, if the bubbles stay in the tissues, inert gas will move from the tissues into the bubbles. This will cause the partial pressure of inert gas in the tissues to drop. The amount of inert gas that is carried in solution by the blood from the tissues to the lungs is a function of the partial pressure of inert gas in the tissues. Therefore, tissue bubbles will dramatically slow down the elimination of inert gas from the tissues. In this situation there will be MORE inert gas in the tissues than calculated by the decompression equation.

Recent decompression models try to incorporate the effect of bubbles on decompression (bubble models). Do they calculate the effects of circulating bubbles or stationary bubbles? Another problem is that the same diver doing the same dive might have no bubbles one day, and many bubbles (of either type) another day. In addition, there is a huge difference between divers as to whether they will bubble or not after a given dive profile. By now I hope you fully appreciate that your dive computer has absolutely no idea what is happening in your body. Another complication is that nitrogen is 4 to 5 times more soluble in fat than in water. This means that the partial pressure of nitrogen in fatty tissues will rise far slower than in watery tissues with the same blood flow. It also means that when the tissues are saturated, fatty tissues will contain 4 to 5 times more nitrogen than watery tissues. The solubility of nitrogen and helium is similar in water but helium is far less soluble in fat than nitrogen.

The reason most decompression equations work fairly well is because the variables in the equations have been adjusted to give decompression profiles which work most of the time for most divers. Therefore, the decompression equation is only as good as the diving data that has been used to adjust the equation. This is a VERY important point. Bubble models are not necessarily any better, or worse than any other decompression equation. There is not necessarily any difference between 4, 8, 12 or 16 compartment models. More is not necessarily better. It doesn't really matter if the model is parallel or series.

Formal, scientific testing of dive tables and decompression equations has been fairly extensive but it has almost exclusively involved a single dive per day, and usually no diving for at least one day before the experimental dive. There were only a few hundred repetitive dives done to test the DCIEM air model and these dives were limited to two dives in one day (many thousand single dives were done). Other tables had even fewer or no repetitive dives to test them. Therefore, even the fairly well tested decompression tables and models are based on very small data sets of repetitive dives. Many decompression models have NEVER HAD FORMAL TESTING, let alone testing for repetitive diving. They have simply been 'adjusted' to give decompression profiles that 'seem reasonable' to the designer, based on other models and their own personal bias. They are then released to be 'tested' on the diving public. Unfortunately, there is almost no feedback to the equation designer on whether the divers develop DCS or not. The only feedback they get is in the form of law suites when divers developed serious DCS with permanent neurological damage on their tables or using their computers!

In spite of the above, most current tables and dive computers give decompression profiles that work most of the time, for most divers, for single recreational dives. They also work fairly well for two and sometimes even three dives in one day. However, as mentioned above, there has been VERY little formal testing done for doing more than one dive a day. The equations are ASSUMED to work for several dives in one day and several days of consecutive diving, but they have not been well tested for this kind of diving. When you adjust an equation to fit the data, the more data you have, the better the equation can be adjusted to fit the data (in simple English, lots of good data means the table will be 'safe'). When you have little data, or even worse, when you 'extrapolate' your equation outside your data, the reliability of the equation is unknown (in simple English, the table might be safe, or it might be totally unsafe, you have no way to know). Therefore, when we do more than two dives in one day, we are doing a type of diving that has not been well tested, and our risk of DCS might be much higher.

It is very important to remember that just because we slept, and the date changed on the calendar, we are not necessarily starting a new dive series. If we did a late evening or night dive, the first dive the next day will be a repetitive dive. If we did deep/long dives, the first dive the next day could be a repetitive dive. This could be true even if your table or computer calculates you have eliminated your excess inert gas.

I am out of room in this column but by now it should be fairly clear that we can reasonably expect an increasing risk of DCS with repetitive diving. We will continue this discussion and move on to multi-day diving in the next column.

Tuesday Night Schedule:- Be There or Be Square ☺

DATE	INTRO/OCEAN DIVER	SPORTS DIVER	DIVE LEADER	SKILL DEVELOPMENT	INTEREST EVENINGS	POOL TRAINING
31-Dec-03	<b>NO CLUB - HAPPY NEW YEAR</b>					
13-Apr-04	<b>NO CLUB - EASTER</b>					
20-Apr-04	OT1 / INTRO - Neil Tomlin	ST5 - Jon Brewis		Boat Handling Course Lecture	St.Kilda Video	Intro Course
27-Apr-04	OT2 - Martyn O'Driscoll	ST6 - Neil Brown	DT1 - Nigel Spickett			OCEAN DIVER
04-May-04	<b>NO CLUB - MAY BANK HOLIDAY</b>					
11-May-04	OT3 - Phil Turney	Catch up week	DT1 - Nigel Spickett		Dive planning evening	OCEAN DIVER
18-May-04	OT4 - Phil Turney	Catch up week	DT2 - Steve Ward			OCEAN DIVER
25-May-04	OT5-Steve Ward	REVISION - Neil Tomlin	DT2 - Steve Ward		Lundy Breifing	OCEAN DIVER
01-Jun-04	<b>NO CLUB - WHITSUN BANK HOLIDAY</b>					
08-Jun-04	OT6 - Richard Green + Neil B.	Exam Neil Brown	DT3 - Pete Woodcock			OCEAN DIVER
15-Jun-04	OT7 - Richard Green	ST2 - Neil Brown	DT3 - Pete Woodcock			OCEAN DIVER
22-Jun-04	Catch up week	ST3 - Richard Green	DT4 - Neil Brown		Dive planning evening	OCEAN DIVER
29-Jun-04	REVISION - Neil Tomlin	ST4 - Fran Duinker	DT4 - Neil Brown		Red Sea Diving-Alex Bullard	OCEAN DIVER
06-Jul-04	EXAM - Neil Tomlin	AIM	AIM		Talk on Towing AIM	OCEAN DIVER
13-Jul-04	Exam review - Ian Jennings	ST5 - Neil Brown	DT5 - Jon Brewis		Instructor review	OCEAN DIVER
20-Jul-04	EXAM - Neil Tomlin	ST6 - Richard Green				OCEAN DIVER
27-Jul-04	Drysuit Intro - Nigel Spickett	Catch up week	DT6 - Steve Westwood		Dive planning evening	OCEAN DIVER
03-Aug-04	Drysuit Introduction - Neil Tomlin	REVISION - Neil Brown			St. Kilda Breifing	OCEAN DIVER
10-Aug-04		EXAM - Neil Brown	DT7 - Neil Tomlin			
17-Aug-04		Exam	DT7 - Neil Tomlin			
24-Aug-04			DT8 - Neil B. Pete Woodcock			
31-Aug-04	<b>NO CLUB - AUGUST BANK HOLIDAY</b>					
07-Sep-04		ST1- Phil Turney	DT8 - Fran Duinker			
14-Sep-04		ST2 - Steve Ward	DT9 - Alex Bullard	Advanced Diver exam		
21-Sep-04		ST3 - Pete Woodcock	DT9 - Alex Bullard		Instructor review	TRY DIVE
28-Sep-04	<b>AGM</b>					
05-Oct-04	OT1 / INTRO - Neil Brown	ST4 - Richard Green	DT10 - Phil Turney			Intro Course
12-Oct-04	OT2 - Ian Jennings	ST5 - Alex Bullard	DT10 - Phil Turney			OCEAN DIVER
19-Oct-04	OT3 - Bob Mulholland	ST6 - Fran Duinker	DT11 - Martyn O'Driscoll		Astral Navigation-Steve Westwood	OCEAN DIVER
26-Oct-04	OT4 - Janet Roelandts	Catch up week	DT11 - Martyn O'Driscoll			OCEAN DIVER
02-Nov-04	OT5-Mark Scott Simons	Catch up week	DT12 - Neil Brown			OCEAN DIVER
09-Nov-04	OT6 - Robin Sherratt	REVISION - Neil Tomlin	DT12 - Neil Brown		Instructor review	OCEAN DIVER
16-Nov-04	OT7 - Nigel Spickett	EXAM - Neil Tomlin	Catch up week			OCEAN DIVER
23-Nov-04	Catch up week		REVISION - Neil Tomlin			OCEAN DIVER
30-Nov-04	REVISION - Neil Tomlin		EXAM - Neil Tomlin			OCEAN DIVER
07-Dec-04	EXAM - Neil Tomlin					
14-Dec-04	<b>Quiz and Social Night</b>					
21-Dec-04	<b>Christmas No Meeting</b>					
28-Dec-04	<b>New Year No Meeting</b>					