The Malacy Duale November 2004

In this issue of the Muddy Puddle we have a review of a recent Red Sea trip; there is a guide to buying your first set of dive kit; Paul Brown explains trimix; Chris Boddington tells us some of his favourite diving moments; Diver of the Month makes an appearance and voting for the Alternative Dive of the Year commences.

WELCOME

To new members Chris Carter & Steve Speer who joined after the recent Try Dive evening.



New Website

The new club website is up and running after a period of development.



At the moment it is very much work in progress and is being updated on a regular basis.

The new address is:

www.croydonbsac.com

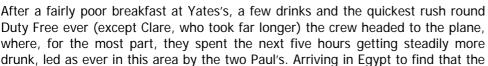
Feel free to pass on any comments to:

web@croydonbsac.com

A massive thanks to Chris Boddington for all his hard work.

Red Sea 2004

The first week of October saw 8 of the club (well, ok, 6 and 2 hangers on we don't seem to be able to get rid of) head to Sharm el Sheikh in Egypt for a fantastic weeks diving in glorious sunshine. Or at least that was the plan when Andy Hart, Ben Stock, Chris Griffiths, Clare Walton, Kevin Turley, Paul Brown, Paul Carvall and Tony Ray met up early on Sunday morning at Gatwick airport.





coach wasn't quite as ready as expected to transfer them to the boat proved to be no problem for our crew, some of whom carried on drinking all they way on to the boat - the M/V Excel (please note Chris, not the Hurricane!).

Sunday night was spent drinking some more (spotted a trend yet?) and quietly breathing in the diesel fumes from all the dive boats in the marina. The Excel was full with 20 divers, which led to some problems with the sleeping arrangements as there was only one couple and two double bunks. Chris though kindly offered to sleep in the saloon which solved this problem, though maybe Mr Backhurst should pay more attention to this in future! We met our guides for the week, Andy and Cheryl and all picked spaces on the dive deck for our kit.

The Excel is one of the bigger liveaboards in the Red Sea and is a very comfortable boat, though it was heading for a refit a few weeks after our departure. A number of training courses were on offer, and some of the other divers on board took advantage of these. Nitrox was also on offer, with most of our crew going for the very reasonable package costing £40 for nitrox fills for the week, though you were only ever going to get 32% regardless of what you might want!

Following the usual checkout dive the boat headed out to some of the wreck sites in the Red Sea. The first part of the

was to be mainly involve diving wreck sites, with some reefs at the end of the week.

Following are reviews from some of the crew for a few of the dives, for those of you not yet bored witless hearing about them all in the pub!

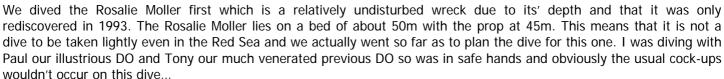


Rosalie Moller and Thistlegorm

The Rosalie Moller and Thistlegorm are two of the most famous wrecks in the Red Sea and as such need no introduction. However for those of you who have been stranded in some kind of diving desert...

Both ships were sunk within three days of

each other back in 1941. The Thistlegorm was discovered by a Heinkel He 111 while searching for the Queen Mary at what was at the time believed to be a safe anchorage. She was sunk by a single bomb that landed in the number three hold which was loaded with ammunition. The blast lit up the sea for miles around showing the Rosalie Moller anchored near by in stark relief. Three days later another Heinkel came back and sunk her too.



The descent was down a shot tied to the forward mast and then we were to ascend at the end of the dive up the rear mast to a shot that would be tied on by the Cyclone (in the same fleet as the Excel, who we were diving from). The dive went pretty much according to plan. We wandered casually down the shot swam up to the sharp end then down to the blunt end while sticking our noses into various orifices. There were some monster Lion Fish and the odd Nudibranch and that was about it really. The wreck is still remarkably intact which makes it an interesting dive as you get a feel for what the ship would have looked like prior to sinking. It is also

interesting to be able to see so much underwater due to the improved visibility. We then did the usual ignore the plan while underwater and do another five

minutes to get nicely in to deco before beginning our ascent.



unicyclist (unintentional) while holding a stop at 22m for the micro-bubbles. I'm blaming poor weight distribution and a current but that may not necessarily be true. Anyway we then wandered up the line in our usual fashion. There was some comment that the shot seemed rather slack. At the time I assumed that this was due to the Cyclone surging forward as it was quite rough on top. This proved not to be the case as we realised when Ben and Andy who were ahead

of us reached the end of the piece of rope to find out that someone had very inconveniently unhooked the boat. So blobs out for a bit of a drift while we finished deco and then a bit of a swim back to find the Excel.





A few hours later we dived the Thistlegorm. To be precise we dived it four times. This is, I reckon, some of the best diving that I've ever done due to the scale of the thing the visibility and the cargo which really made the dive for me. The first dive was a bit of an exploratory dive to see around the aft holds and then get our bearings for a night dive. The second dive the night dive was to be blunt a bit pants (I enjoyed it! – ed). Think diver soup with bright lights and you kind of get the picture. The next morning we rose bright and early to get a dive in before the











wreck got too busy and had a swim down to the locomotive followed by a tour of the very impressive stern (the one with the guns on you see in all the photos) before making our way up the starboard side to the bow and back. This was all part of our cunning plan to see all of the wreck as the next dive we did the Tony Ray hold tour. This works by sneaking in at the bottom of the holds and then working your way up through the inside of the wreck checking out the cargo as you go. This

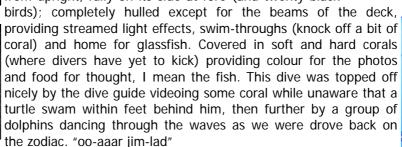


covered the Bedford trucks and the Lee-Enfield rifles as well as the infamous BSA motorbikes and Wellington boots. This was a very special set of dives for me as one of the main reasons I went to the Red Sea was to see the Thistlegorm while it is still there. My thanks as always to my dive buddy Paul.



Carnatic and The Tile Wreck (Andy Hart) Carnatic:

Steam-sail ship from mid-1860's,in two large chunks at 25m. Think old style wooden galleon, square windows along flat/square stern, probably sunk by pirates its helm has a spooky look to it. The rear half is tilted about 20% from upright, fully on its side at fore (and twenty black-





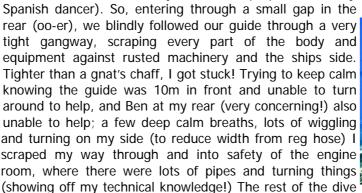


The Tile Wreck:

Not sure if the dive guide had sussed out we were the two thinnest divers, the two most eager, two quality divers with the best buoyancy (yeh right!), or just wanted to kill myself and Ben, but he kindly offered to take just us two inside this old wreck. Having first

stopped by an eel garden (scaring them back in their holes before others got there), we swam round to take the customary view of the prop and a cute yellow flatworm (floating like a small





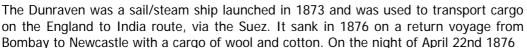


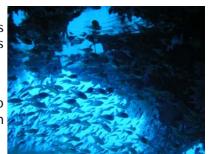


was more plain sailing (well, diving really), covering the landscape of Italian tiles Paul Carvall would be proud of before returning back on board to review the rust stains on my beautiful blue suit and cuts on my fingers (lucky my jabs are still in date!). "roughty-toughty divers"

Dunraven and Ghiannis D (Ben Stock)

Following the checkout dive on the Monday morning we headed for the Dunraven. This was one of the dives I was looking forward to the most, having heard all of the stories from the Red Sea veterans in the pub. Its fair to say that it didn't disappoint.





it collided with the Sha'ab Mahmud reef. The cargo caught fire and burned for 13 hours before the ship sank below the surface, probably without any casualties.

The wreck is now lying upside down against the reef, with the stern at around 29m and the bow at around 18m. Andy and myself were diving together and we jumped in to immediately get a fantastic view of the wreck on the way down. We headed to the bottom then swam along the length of the ship to the stern and a good look at prop, which was a fantastic sight.



It was at this point that we came up with what was to basically be our dive plan for the week - follow somebody else who



has a rough idea what they are doing. On this occasion it was Tony, who was leading Kevin into the wreck through a hole at the stern. So in we went to see the stern, which is home to a lot of glass fish, and for a swim through to the engine room, before heading back out around the midship area. There was a nice colourful selection of fish to see on this dive as well, including all the usual Red Sea favourites, however I am hopeless with their names so can't remember any of them!

This was one of the first wrecks I had really been inside and it was every bit as good as the pub stories had made it up to be. The rest of the dive was spent swimming around the bow section, where the were a few more swim throughs, and finally a nice long look

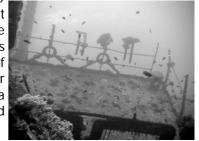
at the reef on the way up, which was very colourful with a lot of interesting fish. All in all, a very enjoyable dive.



The next dive of the day was the Ghiannis D, another of the famous Red Sea wrecks. This is a relatively recent new wreck, sinking in 1983 after hitting the Sha'ab Abu Nuhas reef, which seems to be a magnet for ships in the area. The Ghiannis D sits almost right beside the Carnatic and the reef is also home to other wrecks including the Tile Wreck which we were to dive the next day.

The Ghiannis D was a 2,900 ton freighter launched in 1969 and had been bought and sold many times in its short history. It is believed to have started life as the Japanese

ship Shoyo Maru and at one point went under the Greek name Marcos. At the time of its sinking it was known as the Ghiannis D and was sailing under a Greek flag from the port of Rijeka heading for Yeman. The vessel was 99m long and two engines with two propeller shafts. On hitting the reef the ship remained afloat for 6 weeks before the force of the sea split her in two, with the stern heading down to a depth of 23-27m. The bow remained above water for some time before it too sank to the reef below, not lying on its port side.



This was a very interesting dive as the wreck is still very ship shape and there was a lot to see. Andy and myself headed down to the stern, swimming some way off the wreck to get a good view of this section. This wreck is lying on its port side at a very strange angle which didn't really do wonders for anybodies heads, and made more than one person feel a little queasy. Having looked

at the stern we then swam down to where one of the propellers can still be seen, almost embedded into the reef and with the blades crushed.

This is another wreck where is possible to enter the superstructure and have a look around. We headed in through a door and were soon in the engine room, which was in good condition and well worth having a look at. We spent some time in here before heading out a skylight at the top of the room. At this point I annoyed Andy a little, making him swim the entire length of the wreck to see the bow section, before returning again to the stern - a swim of around 200m, guaranteed to annoy Andy who is not one for finning! In my defence though, it was a very scenic swim with soft and hard corals amongst the wreck and lots of fish. On



returning from the bow we spent some more time looking at the structure before heading up after a very nice dive.

Overall a great week was had by all. A big thank you to Paul Carvall for organising the trip!

Quiz Time - Part 1

The only serious quiz in the magazine this month, here as I was desperate for something to fill this page on the day the magazine was due out!

All of these questions are taken from the Ocean Diver course. Answers at the bottom of the page.

1. The BSAC 88 tables refer to an 4. Which part of the body, if ascent rate of 15 m/min. Should you:

A: ascend to the surface at exactly 15 m/min

B: ascend to 6m at exactly 15 m/min

C: ascend to the surface at a maximum of

15 m/min

D: ascend to 6m at a maximum of 15 m/min

E: ascend to 6m at a minimum of 15 m/min

2. If you have been sea sick but have recovered enough to dive, what precaution should you take to reduce your risk of DCI

A: stay in the middle of the boat

B: get someone to help you kit up

C: drink fluids before the dive

D: eat before the dive

E: eat after the dive

3. A given volume of air will expand to three times its original volume on ascent from:

A: 30m to the surface

B: 20m to the surface

C: 10m to the surface

D: 40m to the surface E: 50m to the surface

unprotected, is the greatest source of heat loss?

A: hands and feet

B: chest

C: armpits

D: head

E: legs

5. What does the buddy check acronym BAR stand for?

A: Breathing Ascents Releases

B: Briefing Availability Rehearsal

C: Buoyancy Air Rescue

D: Breathing Air Releases

E: Buoyancy Air Releases

6. As an Ocean Diver you will be qualified to:

1: dive to 20m with another Ocean Diver, under the supervision of a dive marshal

2: go diving unsupervised to 20m with a Sports Diver

3: dive to 30m with a Dive Leader, under the supervision of a dive marshal

4: go diving unsupervised to 20m with another Ocean Diver

A: 1 only B: 1+2 only C: 1+2+4 only

D: 3+4 only E: all four

7. Which of the following should you agree with your buddy when making your dive plan?

1: signals

2: air planning

3: the dive site

4: whether to do the dive or not

A: 1 only B: 1+2 only C: 1+2+4 only

D: 3+4 only E: all four

8. What factors, in addition to depth and dive duration, can cause increased air consumption?

1: cold

2: hard finning

3: anxiety

4: lack of fitness

A: 1 only B: 1+2 only C: 1+2+4 only

D: 3+4 only E: all four

9. Which of the following can predispose divers to DCI, even though they have followed their tables or computer correctly?

1: dehydration

2: getting cold

3: inexperience

4: unfitness

A: 1 only B: 1+2 only C: 1+2+4 only

D: 3+4 only E: all four

TRAINING OFFICER'S BULLETIN

A number of new members have joined the club recently as a result of the Try Dive night. Chris Carter and Steve Speer who took part in the event and have since joined the club and have commenced their training. There is also the possibility of another couple of people joining in the next few weeks.

Thank you to all those who helped out with the Try Dive event. 6 people attended out of the 12 who showed an interest, and all seemed to enjoy themselves. We even organised a second evening for those who could not attend the first, however nobody showed up except the club die hards such as Roy who brought the kit along. Thanks again to everybody who helped on the night.

A Dive Leader practical session is scheduled for Saturday 13th November up at Stoney Cove. Six divers and myself as trainer/assessor. We shall accomplish as much as possible without myself getting bent. An Advanced Diver session will occur later in the month as well. All those who want to help with training please get in touch.

Thanks again to everybody who has helped so far.

Regards

Alan

(Paul Brown)

Buying Your First Set of Dive Kit

As we (finally) have a couple of trainees in the club I thought I'd write a short piece on buying your first set of dive gear. This is not meant to be an exhaustive list because as we all know you never stop buying. I'll list the kit in the order that I would recommend you buy it - but remember this is MY OPINION, there are no hard and fast rules on buying gear.

Budget

The bad news is that a set of gear is going to cost you somewhere in the region of a grand to fifteen hundred quid if bought new. The thing is, you dont have to go down to Amphibian Sports with £1500 in you back pocket and spend it all at once (although Bob would certainly like you to!). Buy your gear in stages after reading magazine and internet articles and (probably most usefully) speaking to other members of the club. Also remember there is nothing wrong with buying equipment second hand, in fact this is an excellent way to get you first set of kit.

Buying

The internet has made it very easy to find good deals on gear and to compare prices, however, without supporting your local dive shop you won't have anywhere to get the air that you need to dive! It is worth shopping about, but always call into Amphibian Sports as James and Bob will do their best to sort you out a good deal. If you are looking to buy second hand e-bay has a large diving section and there is an excellent gear page on www.ukdiving.co.uk. In addition to the local shops and internet there are the two annual dive shows, in Birmingham (October) and at the Excel centre, Docklands (March). These are effectively the Ideal Home Exhibitions of diving and are full of stands offering gear.

I have set the following out in the order that it is probably best to buy it and have put an approximate price next to it (these are really just guestimates, you'll probably get the gear a bit cheaper than this). Some pieces of equipment will be needed from the very start of your training, others wont be needed until you will do your first boat dives. This is by no means a complete list, but is really the equipment you will need to get you diving (for example I have not listed dive computers as all Ocean Diver training is conducted using the BSAC '88 Tables so a simple timer is adequate).

1. Mask, Fins and Snorkel

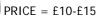
I've grouped these together as you are likely to buy them at the same time, all three are quite individual items and so you are likely to want to buy a set fairly early in your training. Masks come in a mass of sizes, shapes, colours and prices - the most important thing is to get one that fits correctly. Take time to go to the dive shop and try lots of them on. A correctly fitting mask should stick to your face when you put it on and breathe in a little, without the strap holding it in place. Fins come in two basic types, the "pool fin" where there is a built in shoe that you put your foot in to and the "sea fin"

that has a pocket big enough for your foot and either the drysuit or wetsuit boot you are wearing. You will eventually need a set of sea fins to use in your open water training, however, if you want to use these for pool training you are going to have to buy a set of neoprene booties to go with them. Snorkels also come in a variety of shapes and sizes with valves and bends and corrugated bits on - just buy a cheap J-shaped snorkel as you won't really use it that much.

PRICE: Mask = £25-£45 Snorkel = £5-£10 Fins = £20ish (pool) £40-£50 (sea) Booties = £20



You may or may not need a weightbelt in the pool, but you will definitely need one for your open water training. A simple webbing strap with a good quality stainless steel buckle is all that's needed. There are other belts that are harnesses and will take the weight off your hips, these are popular with many club members but for me they are needlessly over-complicated and create more problems than they solve.



3. Exposure suit

I have put the suit as the next piece of equipment you will need to look at getting because the club (unlike with BCD's, regulators and cylinders) does not have suits for you to use. There are really two types of suit used for UK diving, the semi-dry suit and the drysuit and basically they do what they say on the tin.

A semi-dry suit is a neoprene wetsuit fitted with tighter seals at the arms and feet, which normally consists of 2 parts, a long-john section and a jacket with built in hood that goes over the top. The idea is that a thin layer of water is allowed into the suit and the body heats this to keep you warm. PROS: These are (relatively) inexpensive and do not have the complications of drysuit use. CONS: In the early months of the UK diving season they are ok on your first dive but in-between dives on the boat they do not offer the same level of thermal protection as a drysuit will.







A drysuit is a full 1 piece suit that has a watertight zip with tight wrist/neck seals and built in boots that will keep you completely dry through the dive. Valves are fitted to allow you to put air in and out of the suit to counteract the effects of pressure on ascending and descending. There is a small amount of extra training involved in using a drysuit, but this is not difficult. There are 2 types of drysuit - membrane and neoprene, the details of which you'll learn about in your Ocean Diver lectures. Suffice to say there are pros and cons to each type, which I won't detail here. PROS: Drysuits keep you warm and dry and offer a high level of thermal protection both in and out of the water. CONS: They are expensive and will require a little more training.

MY OPINION: I think you are better off buying a drysuit from the start rather than investing in a semi-dry then buying a drysuit later. I would say the best thing to do initially is to buy a second hand drysuit (that will probably cost approximately the same as a brand new semi-dry) then look to buy a brand new suit later in your diving career, once you know the features/type you'd prefer.

PRICE: Semi-dry = £200. Drysuit = £400 - £800 (can pick up second hand suits for about £200-£250)

4. Regulators (aka regs/DV's/valves)

There is a vast choice of regulators on the market and knowing which to go for can be difficult. Currently there are high standards for regulator design and as such there aren't really any really rubbish ones available. They all have to pass the same testing in order that they get their CE approval, so in terms of reliability you are on pretty safe ground. You will need to buy a regulator 1st and second stage; an octopus (emergency 2nd stage); and a pressure gauge. These rarely come as a set so you will have to buy them individually (although any shop will do you a deal if you buy all of them together). Before you buy, borrow some different regulators to try out in the pool and see which feel most comfortable in your mouth. Current favourites among club members are Apeks and



Poseidons, both of which have a very good track record. The club owns Scubapro and Apeks regulators which can be used for both pool and open water training as well as open water dives, so no need to buy these straight away.

PRICE: Complete set = £400 - £500

5. BCD (Buoyancy Compensating Device aka Stab jacket)



It is important to get a BCD you are comfortable in so once again, try as many different jackets out in the pool as possible. Buddy jackets are a favourite in the club as they are tough as old boots. The club has several Buddy BCD's for use by members, therefore, as with the regs, no need to rush out and buy one too soon. This is another item of equipment that can be picked up easily secondhand, often at a vastly reduced price (in fact, if you are interested I have one for sale:).

PRICE: £300 - £400

6. Cylinders

The club has a lot of cylinders that are available for club members to use. For a day's diving you will normally need two. Cylinders come in a variety of sizes based on their water capacity. "Usual" sizes are 10I, 12I and 15I. Typically members have a 15I and a 12I, the larger one being used for the 1st (deepest) dive of the day. Once again there are loads of these going second hand, normally at about half the RRP.

PRICE: 12I = £140. 15I = £160.

7. Sundries

The following are bits and bobs that really don't need an awful lot of explanation and which will only be required for open water training.







So there you go, a bit of a beginners guide for gear. With that lot you should be able to complete your Ocean Diver training and get through your first dives, after which you can go and spend even more money!

Quiz Time - Part 2

See if you can match the picture to the question!

Night dives are

- a) interesting as you can see life you would not see in the dav
- b) boring if you go in the wrong direction
- c) dull if you are diving in a lagoon with nothing to see
- d) evil and to be avoided at all costs



The first step ensuring that you do not become separated from your desired dive site is to

- a) head for the right dive site to start with
- b) carry personal flare
- c) agree the plan with your buddy and f) Lose the dive boat then head in the wrong direction

When diving near fire coral, urchins, reefs, wrecks, you should

- a) Keep away from it
- b) Kneel on it
- c) Make sure you touch every surface and kill it all

When diving on nitrox it is a good Cyclone liveaboard idea to

- a) Analyse the gas yourself rather than trusting the person that filled it
- b) Calculate the maximum operating depth and stay well above it
- c) Remember to set your computer to the right gas
- mix
- d) Ignore everything

you were taught and go way below the maximum operating depth for the gas d) You want to ask them why Cyclone you are breathing.

their Divers make most of insurance claims because

- a) The clips on their kit aren't secure enough to keep it on their BCD
- b) Cameras fall apart in the water
- c) Boat crews treat the kit badly breaking it
- d) They foolishly leave their regs on the bench instead of putting them in their

run

they

not

out

air



a) Carry enough gas

- b) Breathe shallowly
- c) Hyperventilate
- a d) Monitor their air supply regularly
 - e) Use a dive computer



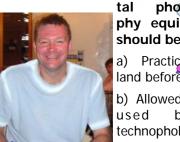
When is it a good time to remove with 4 toilets to share round 200 people your shotline if you are the MV

- a) When there are no divers decompressing on it
- b) When the divers from Cyclone are all on board
- c) When the divers from Excel are decompressing on it

Dive guides are happiest when

- pictures
- b) You want to ask them a question
- c) They charge you £40 for a DVD of your week away
- removed the shotline

Using unfamiliar underwater digi-



photography equipment should be

(Tinkerbell)

- a) Practiced on land before diving
- b) Allowed to be by technophobe
- c) Given someone who does not know

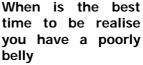
the front of the camera to the back of the camera

Divers d) Used with respect to ensure you do usually not upset the Mega Pixies



Finning is

- a) Fun and exciting to undertake
- b) Should only be done if absolutely necessary
- c) Hated, why do you need to fin!!



- a) on board the boat on the first day
- b) when you are in the comfort of your own



c) cruising at an altitude of 35,000ft and



The most desirable colour to return from holiday is

- a) golden brown
- slightly pink which might go a

brown in a day or so

- c) burnt red
- a) Charging £10 to download a few d) the same colour you went as white as a ghost



Deeper and Deeper

Recently I have heard a few members of the club saying that they are interested in doing some deeper diving with a view to perhaps gaining a trimix gualification. This is no bad thing and really does open up a wealth of good diving to the suitably qualified diver. This article is really a review of what to consider before entering into this type of diving and my view on these points. First we'll look at what trimix is and at what point it is required/practical, secondly there is a brief look at the risks, after this there is a resume of the training available through the various agencies along with a basic look at the additional equipment requirements and lastly a look at some of the classic south coast dives I've done that are available as deep air/trimix dives.



What is Trimix?

Trimix is a mixture of 3 gases, usually oxygen (O2), nitrogen (N2) and helium (He). Other gases have been experimented with, but realistically these are the only three we need consider. If you think what limits the depth we can dive to on air/nitrox (forgetting, for the time being, about the amount of gas available) it can be narrowed down to two things:

a) nitrogen narcosis; and b) partial pressure of O2 (PPO2).

Narcosis increases at depth, and while the onset of symptoms differs for most people it's generally accepted that there is a noticable amount of impairment deeper than 40m. BSAC recommend that the maximum PPO2 for use with air is 1.6bar this gives a max depth of 66m. Generally, however, this is felt to be a little excessive and most agencies agree that a

PPO2 of 1.4 is more realistic for UK conditions, giving a maximum depth of 57m.



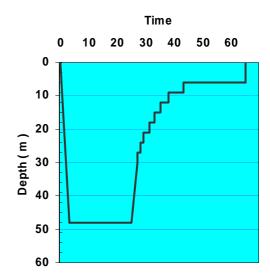
So, if we want to dive deeper we need to address these two problems - ie decrease the amount of O2 in the breathing gas (and so decrease the PPO2) and decrease the N2 content in order that we reduce the narcosis. This is where the He comes in. He is an inert gas, it is unreactive and does not really have any major effect on the body, much the same as N2 but without the narcotic effect. So by adding the He to our mix we can decrease the percentage of the other two gases, which will allow us to dive deeper. A few simple calculations allow us to select a gas appropriate for the depth we plan to dive, for example for a 68m dive I would choose a 18/40 (18% O2, 40% He, 42% N2) which would give me an equlivalent narcotic depth (END) of abouth 32m.

It is generally accepted that if you are diving below 45m - 50m then using trimix is the way to go. Personally I use trimix on all dives below about 50m and certainly notice a difference.

Risks

Diving is, in general, not an inherently dangerous sport. If you dive within the guidelines to the depths recommended by the recreational training agencies there is only a small chance of something going wrong - as proved by the low level of incidents experienced by the club in the last 49 years. The thing is, that the deeper you go, the higher the risk - so trimix diving is really the "riskier" end of the sport.

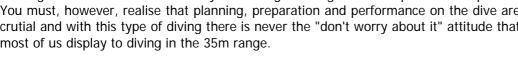
Sub 40m you are looking at mandatory decompression dives, where the deco depth can be considered to be an invisible ceiling which can't be passed through. The deeper/longer you stay on the bottom for, the longer you have to wait before you can pass through this ceiling. To give you an example, an air dive with a stage bottle of 50% nitrox to 48m for 25 minutes will give you a runtime (that is total time in the water including bottom time and deco stops) of 63 minutes. Stay an extra 5 miutes and the runtime is 78 minutes, an increase of 15 minutes. To give an example of a typical trimix dive to 66m for 25mins bottom time using 18/40, 40% (travel gas) and 80% (deco gas) you are looking at a runtime of 87mins....



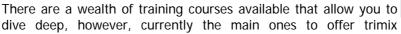
When you are hanging there for this amount of time several issues become important: cold, boredom, availability of gas, drifting too far, keeping contact with the boat etc all of which have to be addressed and/or have contingency plans made. The result of most problems is the same - decompression sickness. He is a less forgiving gas than N2, if you miss any of

your mandatory stops there is a good chance that you will have some sort of DCI, problem. This is because He ongasses and off gasses faster than N2. Miss a stop before the He has offgassed and he comes flooding out into the bloodstream.

The question with trimix diving is "are you prepared to take the risk?". With the tough training schedules that are currently on offer gas diving is a safe sport to take part in. You must, however, realise that planning, preparation and performance on the dive are crutial and with this type of diving there is never the "don't worry about it" attitude that most of us display to diving in the 35m range.



Training



courses in the UK are IANTD and TDI. This will change soon when BSAC introduce their trimix course, I don't know when this is planned for though. Realistically it doesn't matter which agency you train with, as the courses are similar in content. You just need to find a good instruc-

Assuming you have already completed an Advanced Nitrox course there are really two routes you can go so as to start using trimix. Route one would be to do an Extended Range Diver (TDI)/Technical Nitrox (IANTD) course which is really designed to teach you the techniques, theory and equipment considerations for deep air diving (to about 55m). This won't get you on to trimix, but will get you using larger stage bottles and rich nitrox mixes for extended

decompressions. This style of course is offered by both BSAC (ERD) and PADI (Tec Rec). Once you have completed the ERD/TN course and done some diving in the 50m region for a while you'll be able to sign up for a Full Trimix course. This will allow you to use any mix to an unlimited depth, although as with all diving you should be progressive in increasing your depth. Max depth on the course will be about 65m - 70m.

The second route, is to go from Advanced Nitrox on to the Normoxic Trimix course. This course teaches you to dive with normoxic mixes (those that have the same proportion of O2 in as air - 21%) and will allow you a maximum depth of 60m. Once you have gained some experience using normoxic trimix you can enroll on the Full Trimix course and extend the allowed mix/depth. The advantage of this is that you do not have to dive deep air - He is introduced earlier in the training route.

Personally (like most Millwall managers) I think route one is the way to go. Knowing how narcosis feels at 50m+ will help you appreciate how useful having He in the mix is and will make you cautious as no matter what mix you are breathing 60m is still a hell of a lot of water above your head.

Equipment

The deeper you go, the more gas you need, so as a minimum for trimix diving from 60m - 80m you need a set of twin 12I's for your bottom gas. Deeper than this and you are looking at sets of

> 15's, 18's or 20's for the really deep stuff. For your travel and decompression mixes you will also need two stage cylinders (sometimes 3 for 100m+ stuff) which are usually 7l or 10l each. Of course, all these need regulators etc so there is a fair bit of expense before you can do this sort of diving. A good (non leaking) drysuit is a must, as is a good quality undersuit to keep out the cold on those long stops.



INTERNATIONAL

Redundancy is the key and so "if you need it take two, if you don't need it, don't take it". For example, two reels and smb's are carried so that if you have a tangle and have to let go of the reel, you can still send your second blob up to let the boat know where you are.









Doing it!!

So you've done the course, bought the gear and you want to go diving. The attraction of these wrecks are that they are generally in better condition, are less dived and are usually further out giving better vis. There is a lot more scope for checking out new marks which haven't been dived - and possible finding that elusive bell or telegraph. Here are a couple good south coast dives that are in the deep air/trimix range that should whet your appetite:

1. The Duke of Buccleugh, 58m. 20 miles south of Littlehampton.

3099-ton four-masted iron steamer, built 1874. 380ft x 38ft. 500hp engines. Cargo: 600 tons hand-painted Belgian china and glassware, 2533 tons of iron rails and machinery, Middlesbrough and Antwerp for Madras. Position: 50 29.50N; 00 26.03W. Sunk: 7 March, 1889 in night collision with 1478-ton sailing ship Vandalia. All 47 crew of Duke of Buccleugh lost.

Diving: Upright and 8m proud. Masts lying across it. Large split in starboard side close to bridge is collision damage, suggesting it was rammed by Vandalia and not, as its captain stated, the other way round. China and glass-ware in holds mostly broken, but some intact pieces can be found. Viz usually good.

2. The Moldavia, 52m. 25 miles south of Littlehampton.

9505-ton P&O liner, built Greenock 1903. Commandeered by government as armed merchant cruiser 1915. 520ft x 58ft. 340hp triple-expansion engines. Armed: Eight 6in guns. Cargo: 900 US troops, Halifax, Nova Scotia, for London. Sunk: 23 May, 1918, by one torpedo from UB-57 (Oberleutnant Johann Lohs). 57 US soldiers killed.

Diving: On port side, least depth 28m at stern. Two guns there point surfacewards. Much decking in place at stern on vertical drop to sand and shingle. Other guns amidships in wreckage where torpedo struck. More damage forward. Bow intact. Many of 1000 portholes still in place. Propellers and condensers salvaged. Viz very good. Beware depth - divers have been killed on this wreck.

Practical Rescue Management

(Ben Stock)

On 24th October Chris Boddington and myself attended a Practical Rescue Management Course, organised by the London Region and held at Grangewater in Essex. The weather the day before had been terrible, with torrential rain and strong winds, but luckily for us the weather had cleared for the Sunday and it was sunny and dry all day.

PRM is one of the Skill Development Courses offered by BSAC and can be counted towards the Dive Leader training. This course can be run by clubs themselves and last year I had the pleasure (!) of spending a day acting as a victim when Sue Eames took some of our divers on this course, so I had a rough idea what to expect.

The first part of the morning was spent going over some of the theory behind PRM and emphasising the role of a Rescue Manager. It was stressed that in any rescue situation somebody must take overall responsibility and this person has to manage the skills of all involved to successfully solve the situation. There is no point in this person attempting to do everything themselves as this will be of no benefit to the people in need of help. Also covered in this morning section was how to prevent rescues being needed in the first place, with the well known BSAC Incident Pit looked at again, and the group talked over a couple of scenarios discussing how to prevent an incident and what to do if it happened.

The group was then split down into smaller groups to spend four hours reviewing rescue skills and to each take turns to be the Rescue Manager. The Instructors had set up different stations covering such skills as recovering a diver to the shore, CPR, rope throwing, recovering divers to a boat, parbuckling (method of removing a casualty from the water using ropes) and so on. There were also a number of small role-plays where everybody had an opportunity to act as Rescue Manager, learning the importance of getting everybody involved and this was reviewed regularly with some pointers from the Instructors.

After lunch there were two big rescue exercises which the whole group were involved with. The first of these concerned two divers who had surfaced after one had run out of air, both missing some stops. These were relatively quickly recovered to the beach, both put on oxygen and the emergency services contacted. The second exercise involved 2 divers who surfaced in difficulty, with one failing to remain at the surface and heading back down to the bottom. After some initial problems (nobody had a weight belt to hand so it took sometime to get down and recover the lost diver) the group came together well and acted as a team to rescue both divers successfully. There then followed a few more theory lectures and a review of the day.

This was a good course and the day was a good laugh. The only criticisms we had are not aimed at London Region, who organised a good day, but more at the course structure itself. The lectures, whilst informative, are taken from directly from the DL course, so this was the third time I had seen them - maybe BSAC should think about writing some course specific lessons. Many of the exercises were geared towards RIB's with little thought towards hard boats where the skills may need to be adapted slightly. Finally, this course is designed to teach the management of rescue skills, not the actual rescue skills themselves, so it might be an idea to attend the other rescue SDC's before doing a PRM course.

Overall though I certainly felt like I learnt a lot and enjoyed the day, even though the water was very cold!

Quiz Time - Part 3

This has been 'borrowed' from the Yorkshire Divers website, who 'liberated' it from the Irish Tec Dive site, who 'found' it on another web site, etc. etc....

How to impress your diving instructor?

- a. Tell your instructor you will race him to the surface.
- b. Lie face down and motionless while holding your breath.
- c. Loudly proclaim that safety stops are for "wossies"
- d. Show up with a set of tables based on your own algorithm "that's WAY better".
- e. Spit in your wetsuit and pee in your mask.
- f. Ask your instructor, which fin goes on which
- g. Tell your instructor there is no way you can lift a cylinder with 2000 pounds of air in it.
- h. When asked for your dive plan, you hand over a bundle of travel brochures.

What Not To Say On A Dive Boat

- a. "Can I keep this coral your anchor broke off?"
- b. "Buddy???? Oh, did I go down with a buddy?"
- c. "Can someone lend me a computer, mine keeps flashing 'DECO VIOLATION'?"
- d. "Does anyone else smell smoke?"
- e. "What do I do with this bucket of vomit?"
- f. "Is that your mask under my tank?"

Does your buddy hate you if: -

- a. He gives you the "wait here" sign and you are still on the boat?
- b. He "forgets" to close your dry suit zipper?
- c. When you give him the out of air signal, he passes you his snorkel?
- d. When you indicate you are low on air, he writes on his slate "I'll get you some" and swims off?
- e. You give him the "OK" signal and he gives you the finger?
- taken it off yet?

When Do You Need To Practice Better **Buoyancy Control?**

- a. You rely on the silt trail you always stir up to find the shot line at the end of the dive.
- b. You insist that you never wear fins because it makes it more difficult to walk on the bottom.
- c. The only place you can hover is at the surface.
- d. On ascents, your entire body clears the surface d. He is a victim in your rescue course, and he of the water.
- e. You use 50 bar for breathing and 150 bar for your BC.
- f. You are certain you went for one dive, but your computer has logged three.
- g. You think being neutral in the water means that you don't fight with your buddy.

Is your buddy experienced if: -

- a. He asks, "which one of these thingies goes in my mouth"?
- b. He offers to carry everyone's gear to the boat?
- c. He thinks BC is a comic strip about cavemen?
- d. He's upset when you tell him his dive computer How Do You Know Your Buddy Is doesn't run windows '98
- e. He pees in his wetsuit BEFORE he gets in the water?
- f. He argues that NITROX was a monster who battles Godzilla?
- g. He says "Oh, I just wait
- 'til I get that "tingling feeling", then I know it's time to surface"?

You know more than your instructor when:

- a. You have to lend him a weight so he can get under.
- b. He keeps calling his scuba cylinder an 'oxygen tank'.
- c. He fills out a dive log entry for every pool session.
- isn't playing.
- e. His new dive computer is a Palm Pilot.
- f. You ask him about nitrox and he says he doesn't watch wrestling.
- g. If you get hiccups underwater he tells you to hold your breath.
- h. He tells you not to worry about your gauges, "YOU'LL KNOW WHEN YOU'RE OUT OF AIR!!"
- i. He tells you to wear gloves so that the coral
- won't cut you as you drag yourself over the reef.
- j. He tells you to use all your air underwater -"waste not - want not".

Suffering From 'narcs'

- a. He keeps staring at himself in your mask.
- b. You find him buddy breathing with a shark.
- c. He pees in his dry suit.
- d. His mask fogs under water and he spits in it.
 - e. Your mask fogs and he spits in it.
 - f. He looks at you cross-eyed and slurs his

f. He spits in your mask for you, but you haven't **Favourite Diving Moments**

This month it's the turn of Chris Boddington, who rates any dive on the Mulberries highly, but not quite in his top 3.

>I was with the two Dave's off Aiwail Shoal in S. Africa, and after another great dive, we began our decompression stops, at 15m. The vis was good, although we couldn't see the seabed beneath us. Then out of nowhere a school of 20 Scallop Hammerhead Sharks swan from behind us, and underneath, then wheeled around and came straight at us. The school broke just before us, and individual sharks shot above, below, around and in between us, before reforming into a school behind us...Our grins were so big our regs almost dropped out.

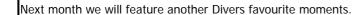


>A night dive on the Fujikawa-maru, Truk Lagoon, again during a deco stop, I decided to hang in the lea of the masts, to escape the current. The water was as black as the cloudless night sky, and no moon was showing above, my lamps were fading so I switched them off, and hung in the blackness allowing my eye to adjust. So I noticed that the mast became highlighted by the bio-luminous plank-

ton in the water, as the currents gently carried the plankton into and around the masts. Soon other divers joined me, and too switched off their lamps, and enjoyed the light show. The show increased when a school of squid joined in, but flashing their luminous strips and darting about. I spent over 40minutes deco'ing from a 30m 25minute dive, and would still be there if I could.

The final great moment was diving on the James Egan Layne, out of Plymouth. The viz was great for an Easter weekend, and the sun was beating down, the seas flat and the hangover from the previous days drinking thumping. I was diving with a trainee/novice on their first real dive in the UK. The dive was excellent, certainly more than you could hope for at Easter. Towards the end of the dive, I noticed my buddy's face. The look of excitement and joy was plain to see, their reg almost dropping out and mask struggling to stay water tight. I've seen that look several times now, in new diver's faces and it reminds me why I like to dive.





DIVER OF THE MONTH

Welcome to the Diver of the Month awards for November 2004.

A fairly quiet month by recent standards, thanks to the weather putting paid to any idea of going diving. However, hardened Diver of the Month nominees will stop at nothing in their quest to win this award and so a few of the regulars have made some strong entries.

So here are this months tales of calamities and disasters.

On the recent Red Sea trip many of our party took advantage of the Excel's Nitrox package, either to increase their bottom times or to make their safety margins, depending on who you believe. Now for those of you who have not done a Nitrox course here is a basic lesson, there are limits to the depth you can use a Nitrox gas depending on the amount of Oxygen it contains. On a Nitrox course how to calculate the Maximum Operating Depth for the gases you are using is taught. On the Excel the Nitrox mix available was 32% (regardless of what you might have wanted) which gives a

Maximum Operating depth of 40m. So not the best gas to be breathing if you decide to head down to 43m now is it, **Chris Griffiths? Andy Hart, Ben Stock, Clare Walton, Paul Brown & Paul Carvall** all earn themselves a nomination for the choice of nightspot on the last night in the Red Sea. On the grounds that what goes on tour should stay quiet, I won't go into further details here, but suffice

to say they should all be hanging their heads in embarrassment!

The club is no stranger to the odd little mistake whilst on Red Sea trips. On more than the odd occasion some of our divers have mistaken the wrong boat to be theirs or have lost the boat completely. This year it was **Paul Brown and Clare Walton** who paid a

mistaken the wrong boat to be theirs or have lost the boat completely. This year it was **Paul Brown and Clare Walton** who paid a visit to this old favourite, getting slightly confused on a wall dive and spending half an hour loitering around underneath the wrong boat before noticing their mistake. Still, Paul had a good 15 bar left in his tank by the time he made it to the right boat which is more than enough.

Chris Boddington and Ben Stock recently attended a Practical Rescue Management course organised by the London Region. Regular readers will be surprised to hear that they were on relatively good behaviour and failed to earn themselves a nomination, despite Chris (formerly the 'Tallest Man in Japan') sitting at the front of the class and Ben calling Resusci-Annie a 'bitch'. Instead the nomination was earned during the last rescue scenario where the 22 attendees on the course were called upon to rescue 2 divers who had surfaced with a problem. Putting aside the fact that none of them had a weighbelt immediately to hand so took 15 minutes to go down and lift the diver who failed to remain at the surface for the moment we shall concentrate on those on the pontoon. Pontoons are, of course, designed to float on the surface of the water, allowing easy access to boats and so on. On this occasion around half of the group rushed to the pontoon to aid in the rescue, whilst others prepared things on land. However, 11 rescuers with various items of kit plus instructors is rather more than this pontoon was designed to support, so it promptly started to sink. At least our 2 divers were nowhere near the scene when this happened, as they were too busy crying with laughter at the sight.

Tony Ray, Paul Carvall, Ben Stock, Andy Hart & Chris Griffiths paid a visit to that old club favourite, getting hopelessly lost on a night dive. Having already dived the same site in the afternoon they don't really have much in the way of an excuse. Still, at least they eventually made it back to the right boat after a fairly dull dive looking at a lot of sand.

Chris Griffiths makes his now customary second entry for the month. A few of our divers in the Red Sea bought a copy of an excellent book on the wrecks of the Thistlegorm and the Rosalie Moller, which covered the history of the ships and has some great pictures in. Still, as good a book as it is, it's pretty useless if, like Chris, you buy the Italian version.

A slightly controversial entry now, which many feel should probably have won this month's award (but they aren't writing this, I am, so tough!). **Ben Stock** came very close to having to make a fairly large insurance claim on returning from the Red Sea. At the end of the week Ben was packing all his kit away and after taking his Regs of the cylinder he had been using put them on the bench beside his bag so he wouldn't forget them. He then forgot them. It was only thanks to the Egyptian coach drivers poor time keeping that he was still on board when the dive guides found them and returned them to him, saving the insurance company around £500 and him a lot of hassle.

The winner this month though is not a member of the club or even a diver. The award goes to the M/V Cyclone and its crew for

two reasons. Firstly for their behaviour on the Rosalie Moller dive site. Our divers were onboard the Excel, which was unable to anchor directly to the wreck, so were briefed to go down another boats line to the fore-mast, and return to the surface via the aft-mast which the Cyclone was tied on to. Seven of our divers headed down to the wreck, the deepest dive of the week and in many ways a great dive. After a fairly long time on the wreck, given the depth and the fact they were all using single cylinders, and with some of them now slightly into deco our divers headed to the surface. Following the plan they headed up the aft-mast and then onto the line leading to the Cyclone. However, half way up they noticed something was going on as the line was vibrating a great deal. Still they headed up to their stops, only realising what had happened when they reached the end of the line at 9m. The Cyclone had nicely untied itself and headed off. Our crew coped admirably though, and within minutes they had deployed 3 SMB's between the 7 of them. On reaching the surface Tony got slightly annoyed with the frankly disinterested guides onboard the Excel, whose approach was that the group should have come straight to the surface rather than risk separation from the boat - apparently physics and decompression don't apply in the Red Sea! It's worth remembering at this point that both boats are part of the Tony Backhurst fleet and the divers would have been on the line for at the most 10 more minutes, hardly slowing the Cyclone down a great deal in its rush to be first at the next dive site.

Secondly the cook on board the **M/V Cyclone** came down with a bad case of Scabies during the week and had to be returned to shore. Scabies is a not too pleasant skin condition with symptoms including rashes, severe itching all over

the body and possibly even 'flaky' skin. It is contracted by touching somebody already with the condition. Not exactly an ideal state for a ship's cook to be in!

ALTERNATIVE DIVER OF THE YEAR

It will soon be the time of year when all the major annual awards will be dished out. Whilst awards such as the 'Sports Personality of the Year', the 'AFI Television Awards', the 'British Comedy Awards' and even the 'Teacher of the Year' are all keenly awaited, none will be as closely fought for as Croydon BSAC's Alternative Dive of the Year.

This award will be presented to the individual who has, frankly, screwed up in the most spectacular fashion in the last year. Unsurprisingly there is a huge number of entrants all eager to take this respected award.

Unlike the Diver of the Month Awards the Alternative Dive of the Year is voted for by the members of the club. Below is a list of some of the more deserving potential winners, but you can vote for anybody you like as long as there is a decent reason for them taking the award. The person with the most votes will

win this coveted award, and possibly be presented with a nice certificate (if I can be bothered to make one!). Please send your votes to **editor@croydonbsac.com** by the end of December, the winner will be announced in the January issue of the Muddy Puddle.

In no particular order, here are some of the potential winners:

Alan Lawrence - for ignoring his computer and missing a load of stops at the Farne Islands, which got everybody's heart racing and left him sitting out 3 dives.

Roger Wishart - who on one dive with Wittering Divers managed to lose both his computer and his torch. He, luckily, had the computer returned to him but there is still no sign of his torch which, by now, will have racked up about a month of stops (or 3@6m for those using the BSAC 88 tables).

Andy Hart - no stranger to the Diver of the Month awards, Andy earns himself a nomination for this prestigious award for his less than excellent SMB skills on a Brighton dive earlier this year. The SMB went up fine, but was not actually attached to his reel at the time.

Ben Stock - another regular in the Diver of the Month awards, who has strangely yet to win one. Nearly leaving his regs in the Red Sea was daft enough to earn Ben an entry for the Alternative Diver of the Year.

Chris Griffiths - who, judging by the sheer weight of entries he makes to the Diver of the Month award, has to be the unluckiest person never to have won one. Can take your pick here really, but heading to 43m on EANX32 (Maximum Operating Depth - 40m) and writing off a Porsche after only having it for 10 days are very strong entries.

Paul Carvall - our illustrious DO took part in a morning's diving at Wraysbury over the winter that could only be described as rubbish. Taking around 5 minutes to deploy his SMB whilst sitting on the 6m platform was particularly poor.

Bob Lenham - not a member of the club, but the owner of the local dive shop. Had a bit of a nightmare whilst on his Rebreather course forgetting to fill the crack bottle on his SMB. Proceeded to try and fill it with the exhaust from his Rebreather, an idea never likely to work.

The Weather - responsible for the cancelling of far too many dives this year.

Send your votes to editor@croydonbsac.com

Sue Eames - despite being an Advanced Diver and Instructor, Sue forgot to do her dry suit up before jumping in on a dive out of Brighton.

Andy Bennett - for making a few of the club panic with his suspected 'skin bend' at Plymouth over the Easter weekend. Turned out to be a case of dry suit squeeze.

O'Three - who must surely be under investigation by the Trading Standards for claiming to make drysuits.

Alan Glen - the club's Training Officer and resident Scapa Flow expert. Either he slept awkwardly on the last night on his Scapa trip this year or he was suffering from DCS as he woke up with a sore little finger, so headed to the chamber.

Clare Walton - again, a person with a lot of potential entries to chose from. Going on holiday in this country in August with no coat may have been a bit of a mistake.

Jaime Dawson - like most divers is susceptible to collecting the odd bit of tat on a dive. Mistaking a paint brush for a toy soldier at the Farne Islands may have been a bit silly though.

So there we have it, some fine nominees, all eager to take this award. But don't forget you can vote for anybody for any reason. Good luck to everybody!







(Hannah Stock)

Spot the Difference

See if you can find the 8 differences between these two pictures







Croydon BSAC 23 Annual General Meeting

The details for the AGM are as follows: **Date:** Wednesday 1st December 2004

Time: 19:00 in the bar, meeting starts at 19:30

Venue: The Burn Bullock Public House, Cricket Green, Mitcham (see map below)

An agenda will be passed round shortly.

Please make the time to attend the AGM. This is your chance to have your say in how the club is run and to hear what the committee have been up to over the past year.

A number of positions on the committee will become available at the AGM. Currently the positions of Expeditions Officer, Dry Officer and Membership Secretary will need to be filled. Please volunteer your help if you are able to.

Also, the future of the Club RIB will be discussed, with a review of available statistics such as finances and usage. A vote will be taken as to whether the RIB should be kept or not, so if you want to have your opinion on this matter to count you must attend the AGM.

