



Established 1962

# WET RAG

[www.southpacificdivers.com](http://www.southpacificdivers.com)

FEBRUARY | 07

This month's feature is

## TECHNICAL DIVING

- What is Technical Diving • Decompression • Narcosis • Oxygen Toxicity • Rebreathers
- Wreck Diving • Cave Diving • Oztek • Dive Reports • and much more!



# Club President's Report



Hello again and welcome to another edition of the Wet Rag. February and March is basically peak diving season - a lot of courses are running, people are out on private and charter boats, meaning that Scuba gains a higher profile during this period.

It means that now is the time to get back in the water if you haven't been active. Our 'End the Dirty Water' protest seems to have helped, with members reporting good conditions over the last couple of weeks.

## Something for Everyone

Even though this edition has a Tech Diving theme, our club isn't just for hard core Techies, members have a wide range of experience and interests. Theme months allow us to focus on a particular topic but the club has a much broader base than any one theme. For example, at the other end of the scale, New Diver month will take place later in the year, helping inform and inspire new divers.

## Need Help!

Geoff has been too busy with work to organise diving lately, which has meant a drain on me helping fill in the gaps. It's not hard but does take a little time to talk to the boat owners and members to make things happen. And the effort pays off – with 30 people diving from club boats on the SCAN day before Christmas and even more divers in the water on Feb 4th for the protest dive.

Being a non-profit dive club, organising such activities is on a volunteer basis. Unlike a charter boat or dive shop, there's isn't a single owner reaping the rewards. Everyone benefits from being part of the group. That's why a few more dive organisers are needed, to help share the workload.

## Pioneering Spirit is Back

South Pacific Divers Club has been a pioneer for more than four

decades. In the 1960's through 1980's members pushed the envelope discovering new sites, finding wrecks, caving/cave diving and exploring other new frontiers.

It's time to rekindle some of this spirit with members searching for wrecks again and charting new dive sites. There are already two hot prospects for new wrecks to check out and it's still only February! South Pacific Divers, not just a club but a way of life.

See you at the boat ramp,  
John Fardoulis  
President South Pacific Divers Club  
[john@southpacificdivers.com](mailto:john@southpacificdivers.com)

## Editors Report

First I'd like to thank everyone who has contributed to this issue. I put the call out for contributions expecting very few however I was wrong, there are many active divers in the club and they have submitted plenty of content for this issue.

In this issue we have our technical diving feature. Technical diving is a huge topic to cover and I hope the feature articles can give you a taste of what it's all about so that you can then do your own research to find out more.

The water has cleared up in Sydney this month and we have had lots of club diving. Peak season is now so if you want to dive make sure you book onto a dive early. Boat spaces are at a premium this time of year

so don't miss out. We have a number of exciting dives organised over the coming weeks and March is shaping up to be the biggest month of the year as far as diving events and opportunities.

Please keep those articles coming in. Don't be afraid to offer your services for a regular column. Just a few pictures and a couple of paragraphs is all that we need to whip up a great little article. Dive reports are always welcome. Got a new piece of gear? Write up a gear report and let others know the ins and outs.

It's your club and this is your club magazine so it's only as good as you make it.  
See you in the water sometime soon,  
Scott Leimroth

SPDC WET RAG Published by South Pacific Divers Club Inc.  
Editorial content can be sent to [scott@southpacificdivers.com](mailto:scott@southpacificdivers.com)

# January Club Meeting

January's meeting was another informal (social) one. Everyone went home with a belated Xmas gift, a Jon-line which each person made at the meeting. Lengths of rope and shark clips were provided free of charge - with rope splicing lessons provided by a number of tutors such as Scott Willan, Matt Reeve, Geoff Cook and Rob Creaser.

This was a fun and useful way to learn a little about rope handling, with the finished product being a diving accessory that is useful for clipping onto an anchor or deco line in currents and a general purpose fastening device underwater.

February's club meeting will see the return of a Launch Night theme with club member Andy Del Riccio providing insight into Tech and Rebreather diving. Club meetings are held on the third Monday of the month at Bankstown Sports Club, Greenfield Parade Bankstown.



## SPDC Memberships February



**LEE PARKER**  
*NEW Single Membership*



**OLIVIA HADISA PUTRA**  
*NEW Single Membership*



**BRENDAN HALL**  
*NEW Single Membership*



**TOM CHENSEE**  
*NEW Single Membership*



# Shipwrecks and Sharks Dive Day and BBQ

When: Sunday 18th Feb 2007

Where: Malabar

What: Diving the wrecks of the Kelloe, Malabar, Tekapo. Also diving with the Grey Nurse Sharks at Magic Point.

How: Club Boats - Book early to secure your spot.

**8.30am dive is FULL**  
**10.30am Dive only 3 spots left.**

BBQ on the beach after the dives.

RSVP by Friday 16th Feb to  
Dave Chillari 0425 209 576  
davidchillari@yahoo.com.au

Kelloe's anchor - by Max Gleeson

# MARCH DIVE CALENDAR



When	Where	Departing From	Type of Dive	Contact	Other
18th Feb	Malabar	Malabar Beach	Wreck & Sharks	Dave Chillari	RSVP by Fri 16th Feb to Dave on 0425 209 576
10 - 11th March	Nelsons Bay	Nelsons Bay	SCAN Dive Weekend	John Fardoulis	Boat spots all taken. Shore dive at Fly Point.
17 -18th March	Sydney	Australia Technology Park, Eveleigh (Redfern)	Technical Diving Event	John Fardoulis	
18th March	Long Reef	Contact Bob for info	Wreck and Reef	Bob May	Double Dive - RSVP Bob on 0245 791 053
6 - 9th April	Jervis Bay	Contact Bob for info	Reef	Bob May	RSVP Bob on 0245 791 053

**Print this page out and stick it on the fridge so you remember what's on this month.**

Spaces on boats are limited so it's best to book in as early as possible. A minimum of at least 3 days notice is required. Be sure to confirm the dive 24 hours before as weather conditions or other circumstances may result in a change of plans. If you need to cancel please try to find a replacement and notify the dive organiser or boat owner as soon as possible.



# 4 Months Free Membership Special



Join South Pacific Divers Club  
and be part of our ongoing club activities  
including regular local club dives,  
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That's right, join SPDC now and your membership lasts until 2008!**

**Fill in the membership form at the back of the Wet Rag today!**



# CREATURE FEATURE

## Moray Eels

Moray eels are large cosmopolitan eels of the family Muraenidae. The family Muraenidae is one of the most abundant and widespread of all eel families. It contains an estimated 200 or more species in 15 genera. The genus *Gymnothorax* contains an estimated 120 species worldwide, with about 30 species in Australia. Around Sydney, there are 4 local species, with several other tropical species that occur in the region as juveniles.

Morays range in size from the 20 cm Redface Eel *Monopenchelys acuta*, found in the Atlantic and Indian Oceans, to the huge 3.75 m Longtail Moray *Strophidon sathete*, found in the Indo-Pacific. Moray eels frequent tropical and subtropical coral reefs to depths of 200 m, where they spend most of their time concealed inside crevices and alcoves. In Australia the Green Moray occurs in temperate coastal waters from south-eastern Queensland to Shark Bay, Western Australia, including northern Tasmania.

Despite their fearsome appearance morays are not considered dangerous to people, although larger individuals can inflict serious wounds. It has been reported that some species have poor eyesight. This may account for morays sometimes attacking the hands of divers, which may be mistaken for an octopus.

All morays are carnivorous (meat eaters). Their teeth vary in size and shape, from the huge fangs of the Dragon Morays, genus *Enchelycore*, to the low, rounded teeth found in the genera *Echidna* and *Gymnomuraena*.

Morays have the ability to tie their bodies in knots and use this to gain leverage when tearing food. It was long thought that this was only a story, not based on fact, but has since been verified.

They secrete a protective mucus over their scaleless skin which contains a toxin in some species. Their small circular gills, located on the flanks far posterior to the mouth, require the moray eel to maintain a gape in order to facilitate respiration. Morays have an excellent sense of smell, and have the nares (nostrils) developed into tubes.



*Green Morays - above, top right and below.*

*Spotted Moray - right.*

*Ribbon Morays - below right*



# BETTER DIVING

*Buoyancy control is the key to any great dive.  
Neutral buoyancy should be regarded as a necessary aspect of  
any dive, like finning or even breathing slowing and deeply.*



## Bouyancy Control

The whole concept of buoyancy control seems simple enough, you just add some air to your BCD, breathe right and you float though the water with the greatest of ease achieving what is called neutral buoyancy!

Unfortunately buoyancy control for most divers is more like a constant tug of war with the power inflator hose. Too much weight sends you looking for the inflator hose with even the slightest change in depth. Too little weight and you struggle to stay down at depth, if you can reach depth that is.



The first rule is to ensure we are weighted correctly at the start of every dive. Neutral buoyancy on the surface is a basic skill, but is also a fundamental step to achieving buoyancy control throughout the dive, so we should take a moment to review it.

At the surface, prior to descent, keep your regulator in your mouth, deflate your BCD and hold a normal breath. You should float at eye level. If you don't, add or subtract weights until you do.

In your basic open water class you may have been instructed that proper weighting was achieved by having no air in your BCD, and the water should be approximately dissecting your mask at eye level. Get your breathing settled down before you do this test, slow deep diaphragm breathing.

Having familiar or the same gear each dive is important. If you have to use different equipment (hire gear) each dive you will have trouble getting your buoyancy right. With your own gear you can set it up so it is perfect every dive.

To determine the amount of weight you should dive with, you should be neutrally buoyant during your 3 m safety stop at the end of your dive with between 20-50 bar in your tank and no air in your BCD. If you remain motionless and you sink, you're overweighted. If you start floating to the surface, you're underweighted. Adjust your weight on the next dive accordingly.

### Cylinder

An aluminum cylinder when full will be negatively buoyant but when empty that same cylinder will be more positively buoyant. A steel cylinder, depending on cubic footage, will be as much as 3 kgs negative when full. When empty that same steel cylinder will still be negative 1.5 kgs buoyant. Best checked with empty cylinder.

Wetsuit/drysuit how thick? In the tropics you might wear less so your buoyancy will change. Even a hood can add buoyancy. Some fins are more buoyant than others and if you have a pair that is fairly buoyant, that could cause a problem.

Trim yourself properly. This means to ensure that you have positioned your weights and cylinder to the correct point to where you feel most comfortable. Make sure that you have even weight distribution from head to toe and left to right. Where you position your cylinder will have a great affect on your buoyancy and trim. A cylinder worn high places you in a more head down position, a cylinder worn too low places you in a feet heavy position. Correct trim is important so that you are more streamlined and your breathing and movements will become easier and better.







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## Central Coast / Newcastle Shipwreck Night



Club member Max Gleeson will be guest speaker at the next Charlestown Diving Academy meeting on Wednesday February 21. The event is being held at the Charlestown Golf club, Barkers Ave Hillsborough.

Of course shipwrecks will be the theme for the night. As well as a slide presentation of wrecks like the Quetta, St Paul, Yongala and NSW shipwrecks, Max will also be screening some stunning video of the Bega and Keilawarra shipwrecks, their marine life and artifacts. Max will also have his books on sale.

Details of the exact times can be found by contacting [www.charlestowndive.com.au](http://www.charlestowndive.com.au)



Top and Left - Stunning coral growth on the Yongala wreck.

Below - The twin engines of the Wandra wreck near JB.

Images by Max Gleeson



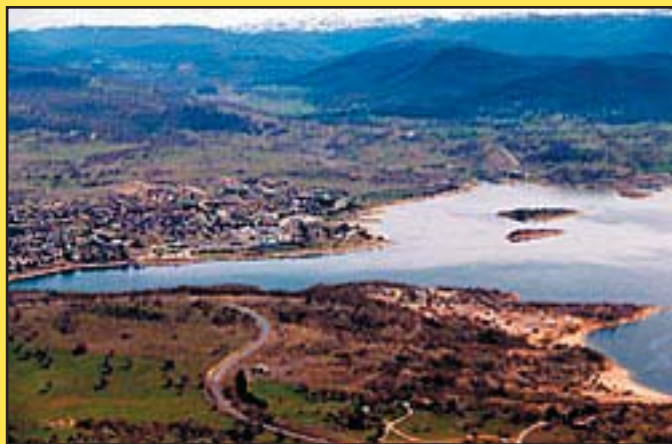
# Altitude Diving - Lake Jindabyne

**61 km from Cooma and 462 km from Sydney, Jindabyne, and Lake Jindabyne, are 914 metres above sea level and possibly the best location in Australia to hone your altitude and drysuit diving skills.**

The present day township of Jindabyne is a new town that was created after the original settlement was drowned in the late 1960s during the creation of Lake Jindabyne as part of the Snowy Mountains Hydro-electric Scheme. Lake Jindabyne has a capacity of approximately 690,000-ML and is a popular trout fishing destination.

We will be diving the sunken township from club and possibly hire boats depending on numbers. Accommodation at Snowline caravan park, around \$60 for a 5 person cabin per night with cooking facilities. Drysuits recommended! Hoods mandatory. Dates are yet to be confirmed pending interest. Possibly the 28th - 29th April.

Go to <http://www.snowline.com.au/diveinfo.htm> for some more info.



## Lake Jindabyne Facts & Figures

- \* Lake Jindabyne altitude is 914m (3000') above sea level.
- \* Depth Range from 0m - 50m (depends on lake operating level).
- \* Average dive site depth 7m - 20m.
- \* Visibility range 0m - 5m (average 3m).
- \* Temperature on surface - summer 20 deg C.
- \* Temperature at 10 m (3 deg C - 14 deg C).
- \* Temperature at 20 m (average 8deg C). Thermocline usually at 9m.
- \* Atmospheric Pressure at Lake Jindabyne 0.9086atm.
- \* Best dive conditions Jan to early April.

## EQUIPMENT CONSIDERATIONS

- \*Altitude corrected dive tables ARE required Dive Computer must re-calibrate for altitude
- \*Sharp knife ( monofilament line is a common hazard)
- \*Dry suits are preferred in this water temperature A hood should be considered as mandatory
- \*Buoyancy should be re-calibrated due to freshwater
- \*A torch is required on deeper dives as the light rapidly dwindles
- \*Dive Spares Kit ( the closest dive store is 2 hours away)
- \*First Aid Kit with attention to treating hypothermic conditions

RSVP ASAP [scott@southpacificdivers.com](mailto:scott@southpacificdivers.com) or 0413717170 if you are interested in this trip.



# COME TO OUR NEXT CLUB MEETING

**Special Guest Speaker  
Club Member Andy Del  
will give a presentation  
on technical diving and  
the Kiss Rebreather.**

**Monster Club raffle  
of on the night!  
WIN Dinner for two  
at Piccola Trattoria!**

Andy has a wealth of experience in Technical diving and will demistify the 'Dark Art' of Rebreather diving. Andy will be able to answer all your questions on the night.

**When: Monday Feb 19th - 8pm**

**Where: The Garrison Room,  
Bankstown Sports Club  
Greenfield Parade, Bankstown.**

Members meet in the Greenfield Station Bistro for dinner at around 7pm so why not join us.

**If you've been thinking of coming along to check us out then this meeting is a great opportunity to do so. Meet new dive buddies, sign on for a club dive, organise a dive, make new friends, hear exciting stories, learn about technical diving.**



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## Dee Why Wide Dive Report

by Dave Chillari

On Saturday Jan 20th 7 intrepid explorers set out for a dive on Bob May's Big Red Monster to explore the Dee Why Wide reef.

Aboard were Bob May, his friend David, Rob Creaser and his son Jesse, Fran and Peter and myself. After embarking from Tunks Park and dropping via Barry's shop to pick up a BCD (someone had forgotten to bring a BCD- Rob beers all round) we set out through the heads to our destination.

At the heads we contacted coastal patrol who, after asking everything including what we had for breakfast, we were given clearance to proceed to our dive site. After a short trip out, a few of the divers were looking a bit green. When we arrived at the site, we quickly dropped anchor and the greener members entered the water to stave of the dreaded Mal de Mer.

After we all entered the water we went up to the anchor line. We all descended as a group, but Jesse had problems clearing his

ears so Rob took him to the surface. The rest of us continued down to the reef and were greeted by cold water (about 16degrees) to a depth of about 24m. Visibility on the surface was a few meters but cleared up a bit deeper down. At the top of the reef we found some cracks and



gullies and tunnels to explore. By this stage Rob had returned to the group and I buddied up with him. We further explored the cracks and I was fortunate to see an Eastern Blue Devil fish. (But not fortunate enough to get a good shot)

After leaving the cracks, we explored deeper to 34m, where I went into deco (Rob had not been down as long as I). We then had an ugly green water ascent After doing our deco we surfaced to find ourselves about 200m from the boat. We signaled to Bob our position, when Rob tells me we have company...what he

called a 3m Bronzie below us. I didn't see it so it didn't exist...OK???

After boarding the boat, we returned to Sydney Harbour, where we bumped into John taking the RIB out for a dive at Old Mans Hat. After a brief chat we continued onto Southern Cross Diving for tank fills.

After dropping us off at Tunks Park, Bob, his friend Dave and Rob went for another dive at Old Man's Hat.

Images by Dave Chillari.

Opposite page - Giant stride entry from Bob May's boat.

Above - Exploring Dee Why Wide.

Right - Tunnels at Dee Why Wide.



# This month's Celebrity Diver

## Tiger Woods

Tiger Woods, was once asked why he liked scuba diving so much.

His explanation? "The fish don't know who I am."

Tiger Woods (1975- ) American golfer, youngest player ever to win the U.S. Amateur and the age of 19 in 1994 and to compete in (1995) and win (1997) the Masters [noted for his 1997 Masters victory (by a record 18 under par and 13 stroke margin); for his 2000 U.S. Open victory (by a record 15 strokes); for his British Open victory (by 8 strokes) and PGA Championship (making him one of only five players to win all four Grand Slam titles); and for his 2001 Masters victory (making him the first player to hold all four Major titles simultaneously). Raised as a Buddhist by his mother Kultida,

Tiger is a very serious diver and has been diving all over the world. In fact he enjoys it so much he went scuba diving from his luxury yacht before and after his 2004 wedding to Swedish beauty Elin Nordegren in Barbados. I'm not sure if he has ever played golf against the Shark (Greg Norman) but he has dived with Great Whites at Seal Island in South Africa. He is also a certified cave diver.

As one of the worlds richest golf pros when he goes diving he does it in luxury on his 151-ft luxury yacht aptly named 'Privacy' which is has a fully-equipped dive center and dive boat.



Tiger loads his RIB for a dive - Left

Tiger in South Africa for Shark Diving - Below Left

With his wife Elin - Below Right





## Feeling Lonely?

*We've got plenty of dive buddies for you to pair up and dive with. A lot of our diving is inexpensive and fun boat diving.*

Contact [john@southpacificdivers.com](mailto:john@southpacificdivers.com) to find out how you can come diving with us, meet new friends and have some fun with our club on a dive. You don't have to be a member to come along and enjoy yourself.

## A Little Nervous?

Come along to one of our relaxing, divemaster assisted, dives. We'll even hold your hand if it helps. Join us for an easy supervised dive.

## The Next Step?

Been diving for a while and ready for the next step?  
Sick of the same old dives?

Meet some of our experienced divers and learn from them. We cater for divers of all skill levels, from our active juniors group right through to our rebreather special interest group and beyond.

Contact [john@southpacificdivers.com](mailto:john@southpacificdivers.com) to join us on our next club dive or to simply find out more.

Remember, you don't have to be a club member to check us out.



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Walindi Resort is a small dive resort, situated on the shores of Kimbe Bay, Northern New Britain, Papua New Guinea. New Britain is the largest of Papua New Guinea's Islands. Walindi's accommodation consists of 12 self contained, comfortable bure style bungalows spread along the beach front, and surrounded by rainforest gardens.

A true resort with bar, lounge and library, pool, sundack, tennis court, video facilities, child minding and much more, including a quality dining room offering three meals a day. Walindi Diving have three day dive boats operating from the resort daily.



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The coral reefs around Walindi are extraordinarily rich. Over 400 species of reef building corals have been recorded in Kimbe Bay. This is more than half the total number of known coral species in the world. Over 900 species of fish have been recorded and this number will continue to grow as more research is done.

Walindi Diving has approximately 25 dive sites which are visited regularly from our shore-based dive boats. The nearest dive site is a short 5 minute boat ride and the furthest is only 75 minutes from the jetty.



**New Diver?**

**Need some equipment for your next club dive?**

**The Club has two sets of dive gear for you to use.**

**Equipment consists of regs/guages, BCD,  
Weight Belt, Tank.**

**You need to provide Mask, Snorkel, Fins and  
Wetsuit.**

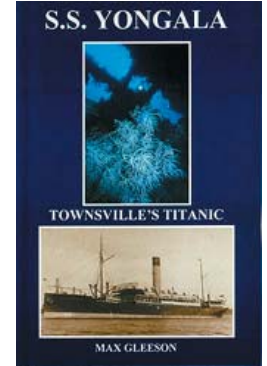
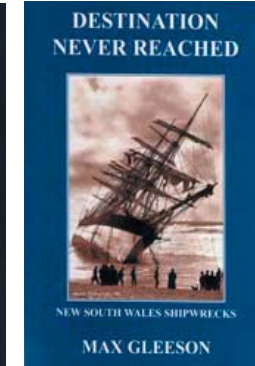
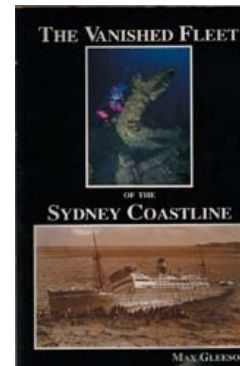
**Equipment is only for use by club members on  
club dives. It must be washed before return  
and the tank refilled.**

**Contact [john@southpacificdivers.com](mailto:john@southpacificdivers.com)  
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# **Shipwrecks of the Australian East Coast**

**Max Gleeson**



Max has combined his passion for Australian maritime history, his love of wreck diving and his award winning photography to produce a three book series on NSW Shipwrecks, and one on Australia's premier wreck dive, the Yongala. Each book provides a rich insight into Australian Maritime history through the use of original historical photos, colour underwater shots of the wrecks as they appear today, detailed accounts of wreck disasters, the events leading up to them and the subsequent courts of marine enquiry.

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## TOP 10 Reasons to take your wife/husband scuba diving this valentines day.

### For the Guys

- 1) Where else can you be with your wife and still enjoy 50 blissful minutes of silence?
- 2) When you get lost underwater, she can't make you stop for directions.
- 3) She'll scare the good-looking woman away so you can concentrate on your diving.
- 4) It'll give you the perfect chance to watch her show off that Victoria's Secret 2mml shortie you got her for Valentine's Day.
- 5) Who else is going to carry your equipment?

### For the Girls

- 6) So he can take over the un-ladylike task of spitting in your mask.
- 7) You can see if it's really true about what happens to the male organs when exposed to cold water.
- 8) They all look the same in full-length neoprene, so you might get lucky and end up taking a better one home.
- 9) You can have fun watching him squirm as he tries to answer the question, "Do I look fat in this wetsuit?"
- 10) It's the only time you can get him excited about going down.

courtesy of scubaduba.com

# Reporters Wanted!

The Wet Rag is your Club Magazine so help support it by submitting a dive report or other information.

## Worried about writing?

**Don't be!** All you need to do is write a few paragraphs or even submit your thoughts in point form.

## A Picture tells a thousand words!

Send in your captioned diving pictures.

If you're at a dive just pull out your mobile phone (most have a built in camera) and snap a few shots before or after the dive. No need to write a full article, just a few lines in point form and you're on your way to getting published.

Submit your articles or images by emailing them to: [scott@southpacificdivers.com](mailto:scott@southpacificdivers.com)



## What kind are you?

Someone once said the membership of an organization is made up of four bones:

The Wishbones, who spend all their time wishing somebody else would do the work.

The Jawbones, who do all the talking, but little of anything else.

The Knucklebones, who knock everything that someone tries to do.

The Backbones, who get under the load and do all the work.

What kind of member are you?



# Wreck Diving - The Annie M Miller

*"Like most people, I dive with a purpose... like taking a chance to learn something, or going somewhere new. So when John F and Scott W kindly offered to take me to the Annie Miller in January, I did not hesitate one bit."*



## Dive Log – Annie Miller - By Joyce Lee

**Dates** – 20th Jan and 4th Feb 2007

**Conditions** – pea bog one day, perfect the next

It was a sunny day on the surface but with a pea bog like vis till 20m under. The lack of vis was a concern as it was my first proper deep dive. Even though I was tense and shaken all over, nothing could stop me from being amazed at the amount of fish life on the wreck. There were some visibly 'upright' bits making it feel like the presence of a former ship. Unfortunately nitrogen and fright got the better of me, and my dive was cut short prematurely.

Not one to admit defeat easily, I joined Bob May and crew on another outing to the Miller a few weeks later. It was 10 year between visits for some of my boat buddies – and it's nice to see that they're still visibly impressed.

Visibility was much better than my first visit, and if anything the massive schools of fish was the only obstacle in the way. Along with Mark P, whom should be highly commended in braving the dive in a 3mm wetsuit, we did an almost complete loop of the wreck with bottom time of approx 12min.

Jelly fish and iridescent speckles kept us company on the deco stops... the water was obviously clear and the sun was shining through.

Maybe the blue water protest actually worked – and our sacrificial burning of sausages obviously pleased the powers above.

Lee, Olivia, Joyce and John on John's boat at Little Manly.



The Boiler of the Annie M Miller with Diver and Nanygai  
Picture courtesy of <http://www.michaelmcfadyenscuba.info>

Fast Facts: S.S. Annie M Miller

Built: 1928 by the Clyde Shipbuilding and Engineering Company Limited in Port Glasgow, Scotland.

Dimensions: 707 tons with a length of 48 metres and beam of 9 metres

# Wreck Diving - The Annie M Miller

*"It was then that I thought I might be lucky to see the structure of the ship better. My patience was rewarded with a clearer picture of the "bones" of the ship."*



## Dive Log – Annie Miller - By Rob Creaser

**Date** – 4th Feb 2007

**Divers:** Rob Creaser, Scott Egginton, Geoff Cook.

I helped get Scott's twins into the water, and Geoff wanted to get into his gear onboard. We got him into his gear and he entered the water. That left me stranded, alone to deal with the challenge myself. I could not operate my inflator button, due to all the sand that accumulated after sitting in the sand waiting for Scott. I orally inflated and heaved the twins into the drink, only to see them not break the surface, but descend! I had my fins & mask on, so I quickly dove head-long (never done that before!) into the water in hot pursuit. I found Scott (what a guy!) had stopped the descent of my precious kit and grabbed the manifold and kicked hard to the surface 1 Metre above. I quickly slipped into my harness and connected the dry suit inflator hose, whilst heading for the down-line. A quick check for "OK" before Cookie, Scott and I dropped into the abyss at 0938h.

2 minutes later we hit the sand at 43m and checked our gear and such before heading off. The large boiler was there right in front of me at the down-line - great placement John! The wreck hull plating is collapsed and without much to indicate your relative position, but I found a place where the hull plating had a clear undercut or breach. It was then that I thought I might be lucky to see the structure of the ship better. My patience was rewarded with a clearer picture of the "bones" of the ship. What was

clear was the double-skin created by fallen bulkhead on the hull plating.

Heaps of Bulls eyes make the wreck home, so much so that it is hard to see the wreck itself, along with Green Moray Eels and cauliflower sponges. Run-time was 81 minutes for a bottom time of 22 minutes on air. It appears that everyone else enjoyed the dive as much as I did - Bonus!



Picture courtesy of <http://www.michaelmcfadyenscuba.info>



# OZTeK'07

## Technical Diving Conference

### Four Events: One Great Show

**Date:** 17th - 18th March 2007. 09-00 - 18.00

**Venue:** Australian Technology Park  
Bay 4 Atrium & Auditorium, Locomotive  
Workshop Eveleigh, NSW 1430  
Sydney, Australia



**Combining four great events into one action-packed weekend, the OZTeK'07 Diving Technologies Conference & Exhibition will appeal to divers at every level of diving experience.**

Having now come of age and achieved international recognition as one of the world's premier diving events, OZTeK'07 will be held at Australian Technology Park in Sydney, Australia, from the 17th –18th March 2007 and promises to be one of the most outstanding diving shows ever seen in Australia.

#### **The Exhibition**

OZTeK'07 features a full-scale dive exhibition showcasing the very latest in equipment technology and accessories, liveaboards, dive trips and exotic diving destinations. For all visitors there's the chance to win one of the many fabulous door prizes drawn at regular intervals throughout the two days.

Over 50 companies and organisations have a confirmed presence at OZTeK'07. Showcasing the latest diving trends, innovations and destinations, OZTeK'07 is the region's biggest dive shop.

#### **The Conference**

One of the most distinguished casts of diving celebrities to ever be gathered together at the one time in the one place, each of the speakers and presenters at the OZTeK'07 Conference are leading lights in diving.

Featuring a full conference programme, complemented by seminars and workshops, of topics and talks that span the complete range of diving interests, the presentations will provide the diving community with the opportunity to meet, listen to and learn from, some of modern diving's most accomplished personalities.

With many of the presentations accompanied by films and images, Gold and Silver Pass holders to OZTeK'07 will be offered a unique opportunity to meet, listen to, and learn from the world's diving best.

(For further information on the speakers now scheduled to appear – as well as the Conference programme itself – please visit the website at: [www.diveoztek.com.au](http://www.diveoztek.com.au) )

### **Workshops & Seminars**

The workshop and seminar sessions allow ticket holders the opportunity to further their knowledge about a variety of diving topics from people who are all acknowledged authorities in their respective fields of expertise.

### **Underwater Photographic Competition**

Sponsored by Sport Diving Magazine and the PADI Diving Society, the third OZTeK Underwater Imagery Competition has some fantastic prizes. Chaired by Kevin Deacon, one of Australia's most experienced underwater photographers, the judging panel will also include a number of invited OZTeK'07 Guest speakers. In addition the viewing public will also have the opportunity to cast their own votes for those images that they deem best in each category.

Prizes will be awarded on the Sunday 18th March 2007 during the OZTeK Conference Afternoon Sessions.

(Further information on the Underwater Photographic Competition can be seen on the website at: [www.diveoztek.com.au/terms.html](http://www.diveoztek.com.au/terms.html) )

### **The Gala AWARDS Dinner**

Celebrating the social aspects of diving, the OZTeK'07 Dive Conference & Exhibition finishes in grand style with the Gala AWARDS Dinner to be held at, 'Dockside Cockle Bay' overlooking scenic Darling Harbour.

Held in association with the Our World-Underwater Scholarship Society, (sponsored by Rolex) the evening begins at 7 pm on Sunday 18th March 2007, and includes a full three-course dinner and drinks; the introduction of the first Australasian Rolex Scholarship; the presentation of the OZTeK Awards to recognise achievements in the Australian Diving Industry, and the opportunity to win one of the many outstanding 'Lucky Draw' prizes – including a a ten-night accommodation and diving package valued at \$2,450.00, to the Lissenung Island Diving Resort in Papua New Guinea.

With tickets priced at just \$110.00 (inc GST) per person, the Gala Dinner promises a perfect finish to an extra-ordinary weekend of diving adventure and excitement.

**For further information on all that's happening at OZTeK'07 – or to book tickets to the Gala Dinner - please visit the website at: [www.diveoztek.com.au](http://www.diveoztek.com.au) or contact the organisers by e-mailing: [admin@diveoztek.com.au](mailto:admin@diveoztek.com.au)**



Image by Neil Vincent



## Looking for a dive buddy?

We have members all over Sydney looking to dive every weekend. Come along to this months club meeting and arrange your next dive.



Meetings are held the 3rd Monday of the Month at 8pm in the Bankstown Sports Club, Greenfield Parade, Bankstown.

## REBREATHER TRY DIVE

*Come Along to Plunge Diving at Mosman on Monday 19th of March and look, touch and try dive the Prism rebreather.*

Thanks to Simon from [www.divetekoz.com](http://www.divetekoz.com) for arranging this. Simon will also be bringing the Prism to the club meeting on that same night to give us a breif talk about it's operation and give anyone who has to work through the day and can't make it to Plunge a good look at it. He will be able to answer any questions you have about the Prism.

Spaces for the try dives are limited and booking is essential.

Contact [scott@southpacificdivers.com](mailto:scott@southpacificdivers.com) if you are interested in coming along.



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Diving Equipment

# Dive Report - Magic Point Grey Nurse Sharks

By Rob Creaser

We dropped anchor in 15M but when I swan down the anchor line expecting to see the plough anchor in the sand I saw that it was on the edge of a boulder field. Not to worry, I thought, I'll just wrap the chain around this large boulder to hold it fast and "voila" done! Scott E and Paul followed me out over the wall into the favourite site where the Gray Nurse sharks like to hang-out. As was my want we anchored West of the "mark" in order to close on the target site from one end of the drop-off, as coming down the wall in the middle will "spook" the sharkies - which cuases panic and ends in a mass exodus, not returning for a while!

There were 10 female sharks in residence on this occaision, a nice number in recent times! This meant that you could be looking at 3 sharks 3-4M away in one direction, and look over your shoulder to (predictably) find another withing 1M of your blind-side checking you out! They are exceptionally inquisitive sharks and the juveniles are particularly so, making a head-on approach to withing 500mm or closer at times before turning away.

Scott and Paul stayed a respectful distance while I had "dutch courage" with the video camera in hand. We saw a flotilla of interlopers arrive from the other dive boat arrive with Captain Phil gesturing the group to remain close to the bottom. They were seemingly a little excited, leaving huge bubble towers above them from the excitement of being in the midst of the "fearsome top predators" - we knew otherwise!

We respectfully settled-in and parked ourselves withing easy view of the overhang to observe the "girls" in their own habitat without moving or threatening their domain. Soon enough the younger ones could not resist their temptation to come and say "hello" by heading toward us in the typically precocious "head-on, collision course"! This was fun and made for some great filming opportunities. The older adults were not phased by our presence, and continued their patrol of the area and remained "aloof, stoic even" by maintaining a side-on profile to us at all times.





# February Dive News



## *New Wreck for Tasmanian Divers*

The Troy D will be sunk on 10 February 2007 just off Maria Island on the South East Coast of Tasmania in order to create an artificial reef and dive tourist attraction.

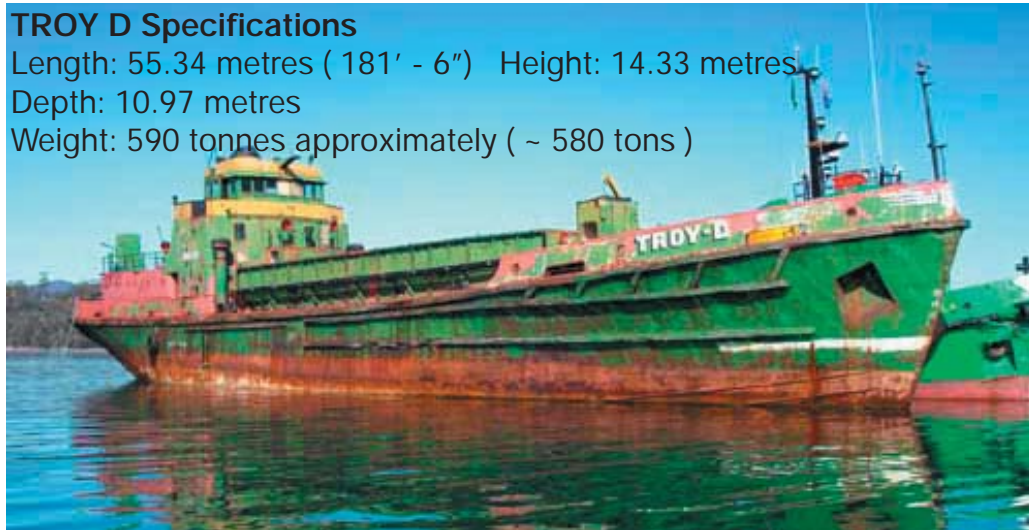
Formerly a motorised Barge the "Roy A. Cameron"; converted to a Coastal Trader. Built in 1969 at the State Dockyard, Newcastle, NSW to International Class. Initially used as a Hopper Barge for service in Port Phillip Bay by the Port of Melbourne Authority for channel and berth maintenance. Then Purchased from the Port of Melbourne Authority by Devine Shipping in mid 1995 and refurbished at Geelong as a bulk carrier for trade on the NSW coast between Port Jackson (Sydney Harbour) and Bass Point (south of Wollongong). Grounded at Bass Point at about 19:00 hrs , 1st November 1995. Refloated the next day by the Owners and laid up at Port Jackson Sydney Harbour until 2006. see <http://www.troyd.com.au> for more details.

### **TROY D Specifications**

Length: 55.34 metres ( 181' - 6") Height: 14.33 metres

Depth: 10.97 metres

Weight: 590 tonnes approximately ( ~ 580 tons )



## *Whale attracts Sharks to Kangaroo*

A ROTTING whale carcass lured huge sharks into a Kangaroo Island inlet.

The 16m whale's body washed up against the rocks on the northeastern tip of the island, near Penneshaw.

Great white sharks more than 6m long circled the area and had been feeding on the carcass. Jess Condo, 34, of Penneshaw, said he saw about four Great Whites in the area yesterday morning.

"One big one was nearly as big as our (6.1m) boat," he said. "They were circling around the whale. Then they came up to the side of the boat and brushed against it."

The SA Museum is expected to carry out DNA testing on the whale carcass to determine what type it is, how it died and how long ago. Joe Springall, 19, of Morphett Vale, said one of the sharks tried to attack his boat.

"All of a sudden this shark floated under the boat ... he decided to have a go at the back of it," he said. "He came up on the marlin board and took a bite. Then it stuck its head up then went back under the boat." Acting director of Fisheries Martin Smallridge asked that people respect a 100m exclusion zone around the carcass.



# HMAS Adelaide to be sunk off Central Coast

February 08, 2007 12:26pm

**As predicted in last months Wet Rag !**

*HMAS Adelaide is set to be sunk off Terrigal, on the Central Coast of New South Wales, creating an artificial reef for divers and surfers to enjoy. Member for Dobell Ken Ticehurst said the sinking of the escort frigate would provide the central coast with a place on the itinerary of globe-trotting divers.*

*"The HMAS Adelaide will open the door to a unique international tourism market and will attract divers from all over the world to the central coast" Mr Ticehurst said.*

*"Because of the nearness of the central coast to Sydney we will attract lots of additional tourists," he said.*

*"Particularly diving on these artificial reefs is very popular and we would expect to see somewhere between 10 and 20,000 extra people come up to actually take advantage of this."*



We know the Central Coast Artificial Reef Project - CCARP - have been working hard on setting up an artificial reef for around 6 years. The CCARP committee is comprised of members of Brisbane Water Aqualung Club, Terrigal Underwater Group, Gosford Diving Services and Terrigal Diving School. Congratulations from all at South Pacific Divers Club on this success. We'll look forward to diving it once it is in place. This should really boost the central coast as a diving destination. The site is off Avoca in about 30m of water.

see <http://home.kooee.com.au/gosdivserv/ccarp/index.htm> for more information.



Latest news suggest the wreck will be sunk somewhere off Terrigal, not Avoca as previously planned.



# Technical Diving

A diver is seen from behind, swimming away from the viewer into a dark, narrow underwater cave. The cave walls are covered in rough, textured rock. A bright, circular light source at the far end of the cave creates a strong lens flare and illuminates the water and the diver. The diver is wearing a full scuba diving outfit, including a tank and fins.

## FEATURE SECTION

Technical diving is a form of scuba diving that exceeds the scope of recreational diving. Technical divers require advanced training, extensive experience, and specialized equipment.

DEEP DIVING - WRECK DIVING - CAVE DIVING - MIXED GAS DIVING - REBREATHING DIVING

## What is 'Technical' Diving?

Technical dives are dives that require equipment or techniques that are beyond the scope of standard recreational diving. For example, dives to depths deeper than 40 meters or dives in an overhead environment with no direct access to the surface or natural light, or altitude diving. All these could be classed as a technical dive. Such environments may include fresh and saltwater caves and the interior of shipwrecks. In many cases, technical dives also include planned decompression carried out over a number of stages during a controlled ascent to the surface at the end of the dive.

The depth-based definition is derived from the fact that breathing regular air while experiencing pressures greater than those at 30m or deeper causes a progressively increasing amount of impairment due to nitrogen narcosis. Increasing pressures at depth also increase the risk of oxygen toxicity in oxygen-rich breathing gasses. For this reason technical diving often includes the use of breathing mixtures other than air.

The following is an overview of some of the elements that need to be considered when undertaking a technical dive.

Technical diving often involves decompression procedures. In Sydney, most of our wreck dives would be considered technical dives because they are over 40m and involve decompression stops as well as other diving techniques and equipment not covered in the basic open water course.



### Nitrogen Narcosis

Nitrogen narcosis is a reversible alteration in consciousness producing a state similar to alcohol intoxication in scuba divers at depth. It occurs at any depth, but in most cases doesn't become noticeable until deeper depths (around 30m). Jacques Cousteau famously described it as the "rapture of the deep". Its precise mechanism is not well understood, but it appears to be a direct effect of high nitrogen pressure on nerve transmission.

Due to its perception altering effects the onset is hard to recognize, its severity is unpredictable, and it can be fatal, either from its own toxic effect or the result of illogical behaviour in a dangerous environment. However the cure for nitrogen narcosis is a simple one, as effects disappear upon ascending to shallower waters. If you feel anxious on a deep dive it could very well be a sign of nitrogen narcosis and the best course of action is to simply ascend a few metres or until it's effects subside.



## Oxygen Toxicity

Oxygen toxicity is caused by breathing oxygen at elevated partial pressures. The high concentration of oxygen damages cells.

Breathing a mixture with the same oxygen concentration as is found in air (roughly 21%) at depths greater than 66 meters results in a very rapidly increasing risk of severe symptoms of oxygen toxicity. These symptoms can include visual and auditory hallucinations, loss of muscle control, full body seizures, and loss of consciousness.

## Decompression

We all cover the basics of decompression in our open water course and if you've continued your diving education you will have learnt more about it along the way. It's beyond the scope of this article to even begin to touch on the many different aspects and approaches to decompression theory. Suffice to say that we still don't know the mechanisms behind it. We do know that it occurs when bubbles form in our blood and become large enough to cause a problem.

Every dive, however, causes some bubbling in the blood. I'm sure we've all heard the old chestnut "Every dive is a decompression dive". There are many different dive computers and dive tables available to the technical diver these days and most have a very low bend rate. Every technical diver will tell you that no matter how good the tables or computer and no matter how safe you think you are there are still cases where people get bent for no apparent reason. There are no guarantees so it's important to make informed decisions and plan your dive down to every detail in order to avoid becoming a statistic.

Deco software can be found at:  
[www.gap-software.com](http://www.gap-software.com)  
[www.hhssoftware.com/v-planner](http://www.hhssoftware.com/v-planner)

Also have a look at [www.ndc.noaa.gov/pdfs/USNDeco1.pdf](http://www.ndc.noaa.gov/pdfs/USNDeco1.pdf) also [USNDeco2.pdf](http://www.ndc.noaa.gov/pdfs/USNDeco2.pdf) at the same address. These documents are the USNavy deco tables and procedures.

## Gases other than air

**Trimix** is a mix of oxygen, helium and nitrogen, and is used on deep dives.

The main reason for adding helium to the breathing mix is to reduce the proportions of nitrogen and oxygen, below those of air, to allow the gas mix to be breathed safely on deep dives. A lower proportion of nitrogen is required to reduce nitrogen narcosis. Lowering the oxygen content reduces the risk of oxygen toxicity to a safe level.

Conventionally, the mix is named by its oxygen percentage and helium percentage. For example, a mix named "trimix 10/70" consisting of 10% oxygen, 70% helium, the remainder (20%) is obviously nitrogen.

**Heliox** is used for deep dives also and totally eliminates nitrogen from the mix. Breathing only helium and oxygen means that the effects of nitrogen can be ignored for decompression planning. Commercial divers use heliox as a matter of course but the price of helium makes it prohibitively expensive for divers and it is usually only used in rebreathers.



**Nitrox** refers to any gas mixture composed of nitrogen and oxygen; this includes normal air which is approximately 79% nitrogen and 21% oxygen. The most common use of nitrox mixtures containing higher than normal levels of oxygen is where the reduced percentage of nitrogen is advantageous in reducing nitrogen take up in the body's tissues and so extending the possible dive time and/or reducing the risk of decompression sickness. Nitrox and pure oxygen are also used to accelerate decompression, particularly on trimix dives where the decompression would be extremely long without the use of high oxygen percentage deco gasses.

In recreational diving the richness of individual component gases of breathing gases is expressed by partial pressure.

Using diving terms, partial pressure is calculated as:

partial pressure =  
total absolute pressure x volume fraction of gas component

For example; using air (79% nitrogen and 21% oxygen) at 30m the partial pressures of the two gasses are:

total absolute pressure at 30m (1 atmosphere at the surface + 1 for every 10m depth) = 4 ata (atmospheres)

$4 \text{ ata} \times .79 = 3.16$  - the partial pressure of nitrogen in air at 30m is 3.16

Nitrogen narcosis will be noticed at a nitrogen partial pressure of 3.16 and above.

$4 \text{ ata} \times .21 = .84$  - the partial pressure of oxygen in air at 30m is .84

An oxygen partial pressure of 1.5 or higher can greatly increase the dangers of oxygen toxicity and should be avoided.



# SS KEILAWARRA

TECHNICAL DIVING

Images and text by Neil Vincent

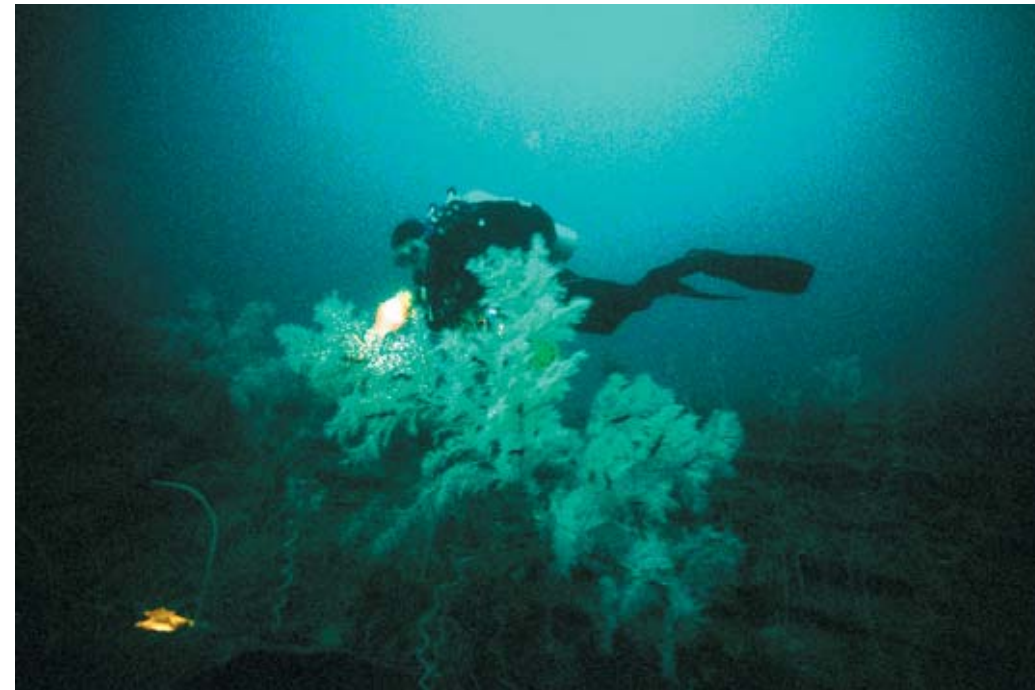
The following dives took place on the 26th, 27th, 28th February 2002

**I first heard about the Keilawarra speaking with Max Gleeson about undiscovered wrecks on the NSW coast. The name came up again in a conversation with Chris Connell from Dive Quest at Mullaway about 8 years ago.**

Chris had a commercial fishing friend who thought he knew where the wreck was laying. Having heard lots of stories like this during my diving life, I normally wouldn't have given it much credence except for the close association and co-operation between Chris and Darcy, the fisherman. Darcy was also known to me from my spear fishing days on the south coast of NSW. So I did believe the whereabouts of this wreck could be reality. I asked on several occasions for Chris to see if it was possible for Darcy to show us the location of the wreck. What worried me at the time was that he may.....and it may be too deep to dive.

Built in Scotland in 1878, Keilawarra was 61 metres long and 784 tons gross. On the night she sank, Keilawarra was heading north from Sydney on her regular passage to Brisbane and other Queensland ports. Off the Solitary islands near Coffs Harbour, NSW, with smoke from their stacks obscuring their vision, Helen Nicholl was south bound, at full speed, the master of the Keilawarra unwittingly ordered his ship across the path of the Helen Nicholl. The resulting collision and confusion contributed to the deaths of 40 people, including many women and children.

Just after the Olympics in 2000, I heard that the Keilawarra had been located and dived. The team which included Darcy Wright, Chris Connell, Kevin Denlay and John Riley located the wreck using Darcy's GPS marks, a depth sounder and the experience of the wreck divers John and Kevin. Kevin dived the unconfirmed site first and confirmed that it was the Keilawarra which indeed lay 75 metres below.



It must have been a great experience to be the first to see the wreck since 1886. John Riley is a hands on shipwreck historian, researching, discovering, mapping and documenting to further our knowledge of the vessels which once plied our coast. It's not his career it's his hobby.

He wanted to dive the Keilawarra again to update his maps and to have photographs taken which could be used in articles to increase the public's awareness of the rich archeological site that exists. Protecting the site from plundering through public awareness is also the aim of both Darcy and Chris. So to this end Chris assisted the project by providing the dive boat and crew for a week for free.

Arriving at Mullaway we disgorged a mass of equipment into the dive shop and began assembling it into some semblance of order. Other divers who were staying for the week looked on in dismay "You are going to where four cylinders!! How long will you stay on the dive??" When the answer came back as fifteen minutes,

the lady called us all mad!! And just walked away... I looked about and wondered if she may be right.

Laurence, Dive Quest's coxswain took us straight to the buoy on the surface, which should be considered a good omen, except there should have been four buoys. Three were being pulled under by the current and the fourth occasionally surfaced. John and I decided to dive. We geared up, four tanks with regulators, lights, camera housing with two strobes, come home reels..... falling into the water relieved our legs of the weight of all this equipment.

The boat was positioned so that we drifted easily back to the buoy, grabbed the rope and began the long pull down the line to the wreck 75 metres below. The 26 degree, 30 metre visibility water lasted to about 30 metres. The water then turned cooler and the visibility reduced to five metres until we broke through into very clear water again at about 50 metres.



Like a moonless night, the wreck began to appear. White shapes on the black bottom became one and a half metre tall Black Coral trees. Boilers appeared, then the wreck was laid out before me. After eight minutes I reached the bottom, the mooring was in the bow. Anchor winches stood behind the chain locker which was now a solid mass. Sea Whips with Drifting Anemones, Plumed Gorgonian, Curled Sea Whips and tall trees of Black Coral cover the wreck....much to Riley's disgust.....he believes that wrecks should be just rust.....real rust.

What really caught my attention and was different to other wrecks which I have dived was the small items which were scattered about. Even wrecks which have been "protected" in places like Truk Lagoon and the Solomon islands don't have the small items left. One at a time they have been taken until none remain. This wreck contained all the items with which it sank, some 120 years ago. Only items which have deteriorated are gone, nothing has been removed by man. Prized items which are often pilfered first, port holes, the ship's telegraph and the propellers are still to be seen along with china plates and cups bearing the name, Keilawarra.

After our long hard swim down, our bottom time was far too short. Maybe the lady at the dive shop was right. Ascending to our first decompression stop at 50 metres passed more quickly as we had the current with us. During the two minute stop I felt like I was a flag in the wind. I wasn't a



pleasant thought that still had sixty minutes of fluttering to do. At fifteen metres the four surface buoys came to meet us as the current was so strong!!! Luckily we had attached additional rope and another buoy which I proceeded to cut loose allowing us to drift free with the current. Seeing this happen the boat dropped the decompression lines to us ten minute early. During the next fifty minutes we drifted 1.4 nautical miles!!

Over our three days of diving the current abated, the sea remained calm and the weather remained fine. We each had three dives on the wreck taking photos, sketching, measuring and making mental pictures of this historical site.

Some technical aspects of the trip. It was a BYO. We had to be self contained, everything we needed we had to supply ourselves, all we used from the dive shop was air to top off Nitrox. Each person was responsible for the planning and execution of their own dives. Chris and the Dive Quest crew provided transport to and from the site and support on the boat. To this end each of us had different gasses, decompression profiles and equipment setups.

My planning had parameters which constrained me so I designed my dives around those as did each of the other divers. Tim had to plan his diving around transporting gear to and from Tasmania. I live on the Central coast so going to Sydney to have my gas mixed at a dive shop was not an option. I am not set up to mix with Oxygen so I chose to mix Heliair rather than Trimix.

I am a certified Gas Blender so I ordered a bottle of Helium and sat down with the Abyss Decompression Planning software to cut the best table for me. I wanted a very clear head on the bottom (42 metres EAD at 75 metres) so I chose a mix high in Helium to reduce the Nitrogen, unfortunately it also reduces the Oxygen in Heliair. The final mix was Oxygen – 13%, Nitrogen – 49%, Helium - 38%. The downside of Heliair is the fixed ratio between Nitrogen and Oxygen so my low oxygen meant a longer deco. For travel gas I used Nitrox 32 and final deco Nitrox 70. I mixed 6x100cf cylinders of Heliair, 1x55cf



Nitrox 32 and 3x55cf Nitrox 70. Each dive I used 2X100cf Heliair on my back and one Nitrox 32 and one Nitrox70 side slung. At the end of the day I used the remaining Nitrox 70, re-pumped with air to make Nitrox 32 for the next dive.

Bottom time was 15 minutes and the total run time was 75 minutes. My first stop was at 50 metres. The most complicating piece of equipment which I carry was my camera with two strobes. It takes all the remaining space on my chest, making access to light heads and my fly difficult.

Darcy had buoyed the wreck for us but rather than doing a major part of the deco on a fixed line which was susceptible to current, we had prearranged for our free floating shot lines to be dropped to us at

40 minutes runtime. On these we drifted free for deco. When our first shot was lowered so was a message slate to take lunch and drink orders and on to which I attached my camera housing.

My only concern about diving to wreck was the long compulsory deco and the chance of being harassed by sharks. Darcy's garage is full of big shark jaws and he is full of big shark tales. I had a sawn off broom handle with a steel spike in one end to use as a tooth pick. Luckily I did not have the opportunity to use my "shark prod". The only incidents on the trip were when Mark and I imploded one strobe each on our first dives. From then on the remaining strobes worked perfectly. It was a rewarding and exciting week.

Thanks must go to Chris, Darcy, Laurence, Rick, and all the Dive Quest crew for their generous contributions and support, backing up the dive team.



Dr Mark Spencer kitted up and ready to dive.



# Hi! Would you like a KISS?

## TECHNICAL EQUIPMENT

By Andy Del Riccio

You get used to the stares, and the comments. Many people are quite negative about rebreathers. Just last week I was treated to repeated sad stories about pesky rebreathers: can't descend fast enough, too much maintenance, want to dive longer, etc etc. So why get into rebreathers? Why would you want a KISS?

For me, diving is a relaxing, personal, get-away-from-it-all sport. Everyone has a different reason for diving. I started my diving out of Cairns, and was hooked by the time I returned to sunny Sydney. Within a short time, I was diving every weekend, tripping away up and down the coast and having a great time. Well, by the time 2004 came around I was diving deeper wrecks, using trimix, and wondering where all the spare cash was – it certainly wasn't in my hip pocket. Most Saturdays were spent diving with members of the Sydney Project, out on Long Reef, seeing rebreathers all around me. It was time to make a decision and get a CCR of my own.

So why did I buy a KISS? After having a good look at all the different rebreathers around at the time, there were two main choices, an electronically controlled or a manually controlled unit. Being a Virgo, I like to be in control, so I guess it was natural to move towards a manually operated CCR.

### DOING THE DEED

Buying a KISS is a little different from dropping to a dive shop and ordering a new BC. It takes international phone calls, faxes, money transfers and shipping. Yep – one orders direct



from the factory in Vancouver, Canada. Funny thing is, I lived there for two years and didn't even dive then...

Anyway, with time, it arrives in a nicely made wooden crate, in its component pieces complete with a nice booklet of instructions. All one does is make it from a load of parts. You'll have a few O-rings left over: with time, you'll even work out where they go, too! It took me a few weeks to get to the stage I was game to do a 'couch dive', with dive buddy Derek sitting shotgun (and watching The Bill). After that, I did laps of



the park (in a mask) with Derek mournfully in tow.

All sounds a bit odd for diving kit? You see, there are a few things to get set on a KISS that is a bit out of the ordinary. All rebreathers have to find a way to replace the oxygen metabolised during the dive, and a method to remove the carbon dioxide produced by this process. On most closed circuit rebreathers, sensors and electronics determine when a solenoid opens and oxygen is injected into the breathing loop.

A KISS simply leaks O<sub>2</sub> on a constant basis through an orifice, with a manual addition valve (much like a BC power inflator or drysuit inflation valves) to allow the user to maintain a constant partial pressure of oxygen. Combine the two and you have the KISS valve, developed by the late Gordon Smith.

But wait! Remember how a regulator works? As we get deeper it compensates for the increasing pressure so the amount of gas reaching your second stage remains the same. Problem with this is there are more and more molecules of gas (i.e. denser) being breathed. On rebreathers, this means a higher partial pressure of O<sub>2</sub> entering the loop. Not a good idea. The solution is elegant – have a non-compensating oxygen regulator. A simple plug of plastic does this. Then, by setting the inter-stage pressure so your PO<sub>2</sub> remains steady, you're all ready to dive.

Phew!

## LEARNING AND DIVING A KISS

Diving a rebreather is a skill, just like 'normal' scuba diving is. With the help of Steve James (now based in Perth diving a Megalodon CCR) I completed level 1 CCR, using it with air diluent to 40m.



There are skills to learn, such as adjusting PO<sub>2</sub> levels, diluent flushes, mask clearing (with minimal bubbles!), open circuit bailout, SCR bailout, regulator failures, display failures, no mask swims, ascents, etc. etc.

Diving on a KISS is a vastly different experience from open circuit. All one hears is a soft hiss of O<sub>2</sub> bleeding into the loop. No bubbles, no beeps, flashing lights, just quiet.

There are downsides as well. The CO<sub>2</sub> scrubber can stop working, the O<sub>2</sub> flow can stop, the O<sub>2</sub> sensors can read incorrectly, differently or not at all. Each has a set response, and all are sitting in the back of your mind during the dive.

## A FEW MODS

As time has gone on, I've made a few modifications to the unit, each to solve a particular issue I had discovered. The stainless steel O<sub>2</sub> hoses stuck out at all angles, so a visit to swagelok in Kingsgrove saw a set of blue reinforced rubber hoses replace them. As the KISS is a short stumpy little machine, I was getting an agonisingly sore lower back. Enter the KISS stool to stand it on, then the KISS stand, made by the UK mob Narked



at 90. Changing the tank connections from cam bands to quick releases saw a few extra unforeseen alterations – moving them off board by 10mm, moving the diluent manifold to clear to tank, reshaping the steel backing plate for the manifold to fit, making a new set of blue swagelok hoses for the diluent feed that fits the new lengths, making a custom ADV hose to fit the new manifold position, etc etc.



The next planned change is to remove the KISS valve (shock! horror!) and put on a fine metered needle valve for O2 delivery and reverting the O2 regulator to a depth compensating one. This will keep O2 flowing past the 90 odd metres it is currently limited to as I can then dial in the oxygen flow I wish to have. After that is the bailout breather, a side mounted extra rebreather that is ready for an emergency, thus saving on having to take large amounts of open circuit tanks just in case...



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Mon 9am-1pm / Tue 9am-4pm  
Wed 9am-4pm / Thu 9am-4pm  
Fri 9am-4pm  
Sat 5.30am-4pm  
Sun 5.30am-4pm

Filmed by Paul Boler



**Southern Cross Divers**  
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# Newt Suit

The Newt Suit is a type of Atmospheric Diving Suit (ADS), developed by the Canadian engineer Dr Phil Nuytten in 1987. It is constructed to function like a 'submarine you can wear', allowing the diver to work at normal atmospheric pressure even at depths of over 300 metres. Made of cast aluminium, it has fully-articulated joints so the diver can move more easily underwater. The life-support system provides 6–8 hours of air, with an emergency back-

up supply of an additional 48 hours.

An atmospheric diving suit is not a new idea. The first atmospheric diving suits were developed over 200 years ago to protect divers from pressure while they maintained enough dexterity to carry out work. Operating at normal pressure means the diver can descend and ascend without the long decompression stops deep divers must endure to avoid the bends.

Right: Two divers, one wearing the "Tritonia" ADS and the other standard diving dress, preparing to explore the wreck of the RMS Lusitania, 1935.



## Specifications

**Depth** - 305 meters ( 1,000 feet)

**Height** - 112 cm ( 81.2 inches) adjustable

**Weight** - 378 Kgs ( 832 lbs)

**Weight in water** - 2 -4 kgs ( 4-8 lbs) flying mode

**Hull** - A356 Cast Aluminum

**Thrusters** - constant with variable pitch, two complete sets

**Power** - 2 x 2.25 hp at 400 Hz

**Control** - foot controls, left foot vertical control, right foot lateral control

**Communication** - digital voice/data, through water and hard wire

**Life Support** - 6-8 hours Reserve 48 hours, oxygen re-circulation with fan powered CO<sub>2</sub>, back-up oral nasal lung powered emergency CO<sub>2</sub> scrubber, dual independent Oxygen system - port and starboard

**Safety** - tether cutter, emergency 37.5 kHz pinger, ballast jettison, xenon strobe, radio frequency beacon

**Optional equipment** - dual on suit video cameras, on suit colour imaging sonar, AMS suit monitor system, surface monitoring for CO<sub>2</sub>, HPO, O<sub>2</sub> %, depth, temperature, cabin pressure.



# OZTeK'07

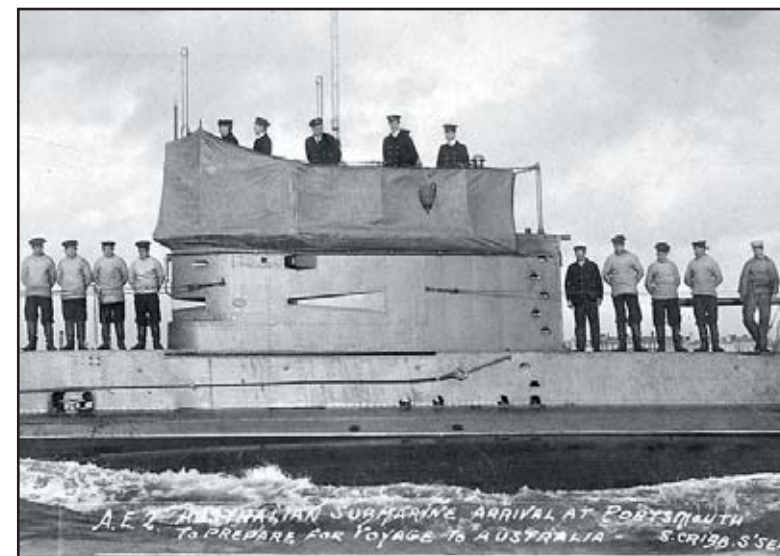
## Australia's Underwater Heroes

Acknowledging Australia's contribution to undersea heroism, the action-packed programme of presentations at OZTeK'07 features two on-going diving exploration projects spanning two world wars.

The first Allied submarine to successfully pass through the Dardanelles Strait into the Sea of Marmora, where it carried out attacks on Turkish shipping in 1915, the Australian submarine, AE2 was subsequently scuttled by its crew. Finally located in 1997 by an Australian contingent of divers led by Dr Mark Spencer, the wreck was subsequently confirmed as being that of the AE2 during a second expedition in 1998.

Working with maritime archaeologist Tim Smith, (who will be delivering a presentation on the recent discovery of the Japanese Midget submarine, M24) and the Submarine Institute

of Australia, Mark Spencer and a team of divers will return to Turkey this year to carry out further scientific investigation of the wreck's condition with the aim of providing information for future management considerations, including the remote possibility of raising and conserving the WWI submarine. This presentation includes never-before-seen information on the AE2 and the diving team's objectives.



At the forefront of some of the world's most groundbreaking Wreck Diving expeditions, Carl Spencer from the U.K. has recently been involved with the search for the Royal Navy's four-man submarine, X-5.

'Operation Source' was one of the most incredible tales of the Second World War, in which Royal Navy X-craft midget submarines attacked the German battleship Tirpitz in Norway. A daring plan was hatched by the Admiralty to sink the Tirpitz using midget submarines to plant high explosive mines beneath the ship's keel.

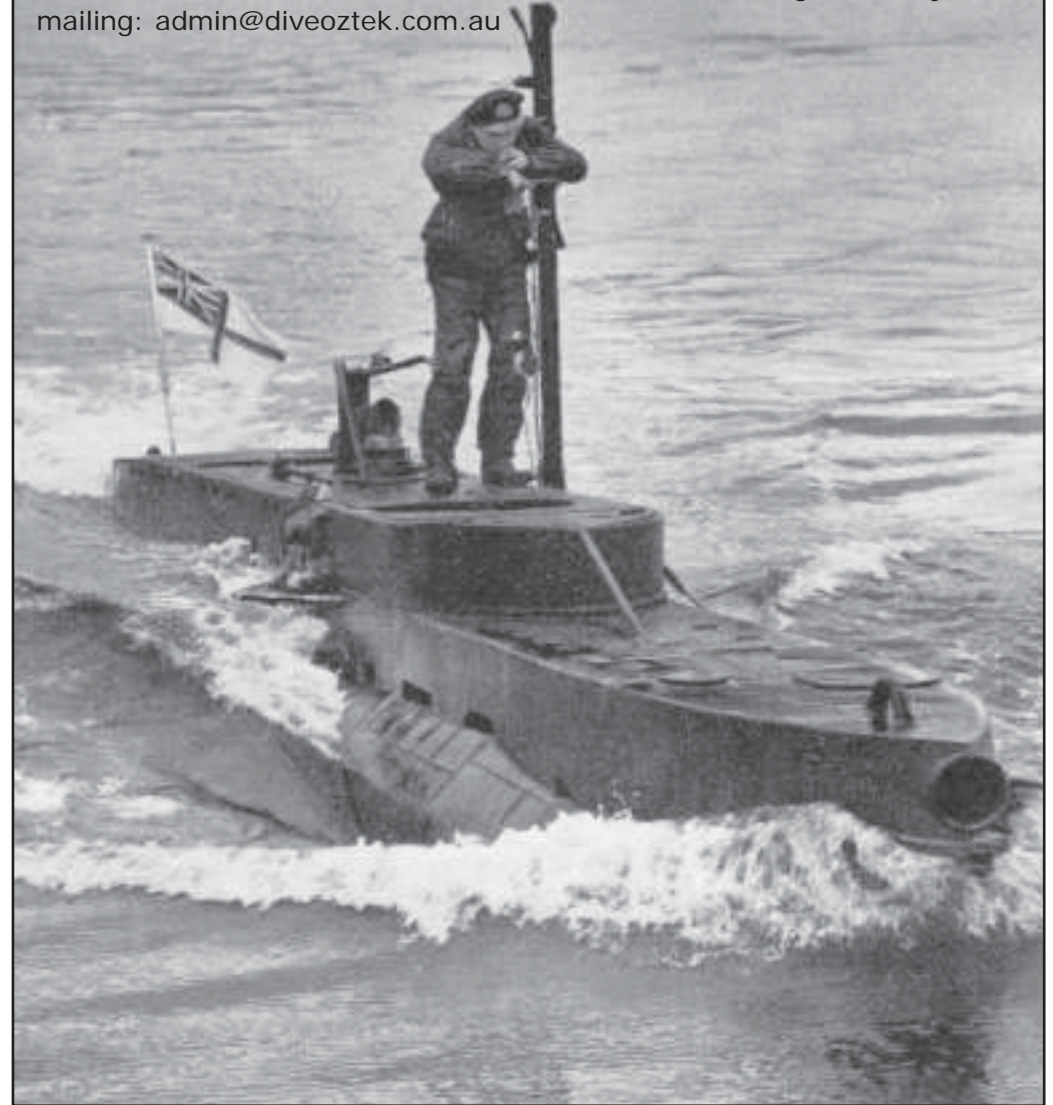
On 22 September 1943, six X-craft midget submarines set out from Scotland to sink the battleship at anchor in Norway. Three never reached the fjord and X5, commanded by Australian Lt Henty-Creer, was presumed sunk by the Germans. Only X6 and X7 made the attack.

Both Lt Donald Cameron in X6 and Lt Godfrey Place in X7 placed their charges successfully, but were forced to surrender. Both were awarded the Victoria Cross. Although Tirpitz was not sunk she was put out of action until April 1944. Lt Henty-Creer, the commander of X5, and his crew were never seen again. Neither he nor any of his crew received any posthumous gallantry awards.

The forays into the Arctic by the British Team in 2006 were heavily supported by The British and Norwegian Royal Navies in the guise of two Mine Counter Measure Vessels, detached from a NATO exercise to assist in the search with some of the most sophisticated sonar and ballistic imaging equipment available to the Military. Armed with a mountain of sonar data and possible targets, the team are mobilising for a final assault on the area with the intention of locating the final resting place of the X5 and her gallant crew, putting an end to the speculation of whether the midget submarine contributed to the attack which ultimately rendered the Tirpitz lame, taking no further part in WWII.

This presentation will provide a background to the midget submarine raid, X-5's Lt Henty-Creer, and the Expedition's discoveries and disappointments.

For further information on all that's happening at OZTeK'07, please visit the website at: [www.diveoztek.com.au](http://www.diveoztek.com.au) or contact the organisers by e-mailing: [admin@diveoztek.com.au](mailto:admin@diveoztek.com.au)





# From the Archives

Reprinted from  
the June 1990 Edition of  
the Wet Rag

## CAVE DIVING CATEGORY 3 EXAM 17TH MARCH '90

by Neil Vincent.

On the 17th of March this year I presented myself for a category 3 exam at Goulden's Waterhole in Mt. Gambler. Once in the water I seriously questioned my sanity in putting myself through this torture test.

The category 3 test is the highest level examined by the C.D.A.A. After the 3 hr theory test there are 4 parts to the practical test. Each is examined by 2 examiners who write a report on each part. So in the day you have to perform for 8 different examiners who are looking for anything to fail or drown you with.

The first part is easy. A gear check; number of lights, compass, knife (even took it out and tried to cut his finger. It did!!), fin and mask straps taped, deco tables, slate, types of clips used, tether, guide line reel, streamlining of hoses, on and on and all this gear had to be accessible but not foul guidelines.

Part 2 following a guideline with your mask blacked out so that you can

see nothing. All done by feel. The aim of this test is to assess your ability to extricate yourself and your buddy from a tunnel that is completely silted out. The examiners look for buddy contact and communications, not becoming fouled in the guidelines, bouyancy control, not losing contact with the line and arriving at the correct end of the line (i.e. the cave entrance). The line took 35 minutes to negotiate. It began at 20' and reached depths of 50'. It wound its way through the branches of a dead tree, crossed itself on a number of occasions, in another section there felt like about 10' of "slack" line between two tie off points 2' apart (really easy to. foul your tank then have to untangle it with your buddy blindfolded). The last section of the line ran along the underside of the roof of a cave. There were heaps of tie-offs that had to be crossed by unclipping the tether line from the guide line and reclipping on the other side without losing contact with the line or losing direction.



Image by Neil Vincent

I had trained with Lyn but she decided the day before the exam that she was of sound mind and didn't want to do the test. So I was buddied with a guy from Adelaide named Simon. We worked out a communication system in the 30 mins before the test and off we went. For the first half we went well, then we came to a crossover with slack line. The lead diver works out which way to go and clips onto the line. He then shows the following diver which line he is clipped on to. The following diver then feels the situation and decides which one he feels is correct. If

both agree (which is the usual case) both continue on. Simon picked the tight line and indicated which line he was on. I checked and didn't agree. I tried to signal to him but could not find him. I checked again and still thought I was right but I still could not find Simon. I had to make a decision. Follow where I thought Simon had gone, take off my blacked out mask and fail, or follow what I thought was right. I decided to follow where I thought was out and face the roth of the examiners. I followed the line to the end, the correct end. Simon unfortunately went back in the wrong direction to the start and theoretically died.

The examiners agreed with my decision. They said that if two divers could not agree on the direction to go, each diver goes in the direction he thinks is correct.

They do not tell you results until the examiners have a meeting after the tests so they allowed us to continue to the next test, maybe only for the entertainment of the examiners.

Test 3 was a task loading stress test. Two divers, one reeling and one following clipped to the guide line swim across the sink hole down to about 35'. After about 50' I tied off on a tree branch, then headed off in a different direction. After another 20' the examiners removed my mask and air supply then Simon's mask. I turned and indicated to Simon that I had no air. We began to buddy breath. I wasn't quick enough in taking in the slack line and some of it tangled around Simon's fins. The cold water disorientated us "hen it hit our faces. We settled down, organised our breathing while I untangled the line. Once this was organised we then travelled back to the tie-off point with no masks, one air supply and reeling in guideline. At the tie-off I untied the guide line while Simon supplied me with air. Then we continued to the safety of the surface. On the surface we changed lead and repeated the test again. No problems but I was glad it was over. I really hated that test.

Test 4 is pretty easy. It is a buoyancy control test. A shot line is set in 50' of water and the diver being tested has to ascend and descend to the depths

indicated by the examiner without the use of fins or arms. Once at the levels set, a diver must hold position without use of arms or legs for up to 5 minutes using only B.C. and their lungs. The diver is then required to swim 1/2 metre above the silty bottom using a finning technique that will not disturb the silt.

Goulden's Waterhole is a very silty sink hole with a water temperature of 15 deg.C and a normal viz of about 15'. After one hour of testing viz was about zero to 2'.

14 divers sat for the exam. 10 passed. This was the last category 3 ever. The system has been reviewed to eliminate this type of stress testing and the new system is made up of intensive training, diving technique and equipment seminars with the final evaluation being made diving in actual sink holes and caves.

Emphasis is being changed to high tech equipment, more conservative dive planning, (Canadian navy tables), and training and equipping divers to dive every dive as a solo diver not relying on a buddy.



Image by Neil Vincent



# *End the Dirty Water Protest Dive Day and BBQ*

## *Feb 4th - Little Manly*

Sunday Feb 4th saw over 40 divers attend our End the Dirty Water Protest Dive Day and BBQ at Little Manly Beach. Four club boats did multiple runs with 21 divers on the Annie M Miller wreck at various times early in the morning and runs out to Old Mans Hat and various reefs around North head throughout the day. Overall over 30 divers got in the water and everyone enjoyed the BBQ and social get together afterwards back at Little Manly beach. The weather was fantastic with light southerly winds to keep us cool and beautiful sunny skies.



Our protest must have worked because visibility was much improved on recent weeks. Dave Chillari's banners went down a treat and with our club flags flying onshore and from the boats no one on the beach would have been left wondering who we were. Everyone chatted and made new friends and there were even some rebreather try dives off the beach. The benefits of non profit club diving were very evident with the most expensive item for the day being the air fills. Time for a club compressor I think.







Above: Interest in Steve's rebreather was high.  
Below: 2 full boats on the Annie M Miller.



Blue Steel - Zoolander  
eat your heart out.



Geoff was happy to get  
his dose of rusty metal.



Left:

What's wrong  
with this  
picture?

Andy Del on  
Open Circuit??



The club flags really attracted  
attention on the beach.

2 of the club boats back at the beach.



Glen and Jackie after their  
dive at Old Mans Hat





Top Left: Jackie and Scott E  
 Top Middle: Rob Creaser after his dive on the Annie M Miller.  
 Top Right: The Crowd enjoys the BBQ while waiting for the boats to return from yet another dive.  
 Above Left: Fran and Peter  
 Above: Marti, Rob and Dave.  
 Left: Joyce has great diving and BBQ skills.



Above: David Hyche with his wife and Paul Daniels.  
 Right: Mitchell Cook gets into the protest for Blue Water.







Rob, Mark and Mark from Jervis Bay enjoyed diving from the Harbour.



Loading for another run out to the wreck.



Steve disembarks with his rebreather.



Andy returns to shore



Joyce, Andy and Geoff work the BBQ



David gears up for the BBQ

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## SPDC MEMBER PROFILE

# NEIL VINCENT



### *What's your nickname?*

I have been called lots of things but I have never really had a nickname that stuck. We are members of a cave diving group and when we go on trips to remote areas, radio contact between vehicles is essential so we all have call signs reflective of personal traits or incidents, we have been given the call sign "Hubble" from our practice of taking cameras in to the deep unknown. I guess that is as close to a nick name as I come.

### *How long have you been associated with SPDC?*

I began diving when I was about 17 years old in the Kingfishers Spearfishing Club. Other members of Kingfishers were also members of SPD. I learnt a bit about SPD from the likes of Pat & Lyn Manly, Gary Cameron, George Roberts and Karl Herald. George had planned to teach a couple of us to scuba dive just before his untimely death. Karl took me on my first scuba dive by accident, I thought we were going spearfishing but Karl brought some tanks and gave me the standard dive course of the time "breath out of this until you feel resistance then pull this lever and surface". I passed and was duly certified. The first camera I ever took underwater was when Pat forgot his mask when the two of us were diving from his rubber boat and he could not dive, so he said I could take the camera on the dive. I swore I would never take a camera underwater again, I could not focus or frame on the subject and the resulting images were horrible. This was the early 70's, basically I hung around with divers many of whom were SPD members but I wasn't until the late 70's maybe even the early 80's that I joined the club.

### *What sort of diving do you enjoy most?*

Where there is something special to photograph or there

is a challenge to the dive. The "something to photograph" may be a small interesting invertebrate in 5 feet of water or it may be a whale shark or a diver deep in a cave or a panorama of a wreck. I like to produce images which are different, which have impact on the viewer.

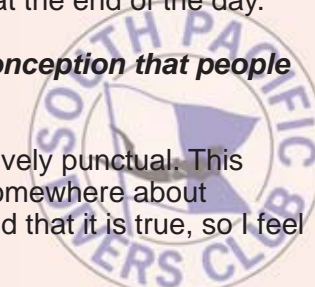
For the past two years I have been enjoying trying to photograph big things. White sharks in South Australia was a must do for me and I was not disappointed. They were majestic, powerful, timid, aggressive and cunning. It was an awesome experience just watching each shark's character and I am very pleased with the photographic results. Swimming and photographing Sea Lions and Dolphins in South Australia was also incredible both interact with people and being in South Australia, in a Sea Lion colony, out of a cage there was also the chance of an encounter with a GWS so the adrenalin was always flowing.

Where I live on the Central Coast where there are not too many big animals so the shipwrecks are the subject of choice up here. Using Leigh Bishop's method of available light photography I have had great fun showing larger parts of the wreck. Then taking it one step further, I have been planning the photos and stitching them together to create very descriptive panoramas of the wrecks.

Cave diving/photography is a real team effort, much planning goes into each dive, so when it all goes to plan, everyone feels good.....when it all turns to silt, we have lots to talk about over a few beers at the end of the day.

### *What is the most common misconception that people have about you?*

That I am hyper-active and obsessively punctual. This is a total misconception.....I read somewhere about reincarnation but I am not convinced that it is true, so I feel



that if I am only going to get one go at this life thing, I am going to pack as much into it as I can. Obsessively punctual.....no.....but I am never late and expect those around me to do the same!!!!

### ***What kind of music are you into?***

I don't like a particular type of music but more voices, lyrics and instrumentation. I have a leaning towards Bluegrass, folk, country. My favourite artists at the moment are Paul Kelly, Steve Earl, Kasey Chambers & Bill Chambers. They are all songwriters as well as singers, the lyrics they write have meaning to them, usually life experiences or messages they wish to convey.

### ***Any phobias?***

Siltouts in caves, siltouts in restrictions in caves.

### ***What temptations are you powerless to resist?***

Peanuts. Bourbon, Magnums

### ***What do you like to do in your spare time when you're not diving?***

Land photography, bush/beach walking, travelling, reading.

### ***Whats your favourite dive site and why?***

This is really hard. Cave diving, it would be two, McCavity at Wellington and Tank Cave in Mt Gambier. McCavity because it was once a dry cave and so now that it is flooded with gin clear water, it is possible to float among the spectacular cave formations, Tank Cave because it is so expansive (10,000 metres of passage) and so different depending on where you are in the cave. Tank cave still has many more secrets to give up, so each time we dive, it is a new experience and you are unsure of what you will see.

Wrecks, Blackjack in Milne Bay because it is a great plane wreck, so intact. The Nord in Tasmania and the Keilawarra off Mullaway. The Nord

sits upright beneath 300 ft high cliffs in the cold clear still Tasmanian winter waters. It still looks like a ship, big impressive stern covered in yellow zooanthids, decks and superstructure covered in sea whips and anemones and once during deco, the gin clear, 10 degree water turned pink as huge school of krill engulfed us, just awesome. The Keilawarra is a wreck site, broken down with only the boiler and engine standing high above the sand, steel plate and tangle beams and pipework lay flat showing the ships former shape. Nothing has been removed from the wreck, so it is possible to see and photograph crockery, personal effects, port holes, gauges etc. Among the man made reef grow sea whips, hand sponges, black coral and gorgonian fans.

### ***What's your most treasured piece of dive equipment?***

It is hard to think of any of my diver gear as "treasured" they are all tools that allow me to exist in a totally alien atmosphere for short periods of time. I guess the results my camera produces are treasured and the memories the rest of the equipment allows me to experience are "treasured"

### ***What's the most annoying thing someone could do to you on a dive?*** Stir up silt!!!!

### ***If you could go anywhere on the planet to dive where would you go and why?***

Can I be greedy and have two!! My list of places to go and things to do is huge and since your offering to finance this. I would love to take two off the list. Tonga to snorkel with the Whales, I think that would be so beautiful to be close to such a huge wild animal. Yucatan Peninsular to dive the caves and cenotes, similar to McCavity, at some stage during their development these passages were dry so there are spectacular formations about which to swim.

### ***If you could have a 'celebrity' dive buddy who would you choose?***

God, If I could get him out of church on Sundays and certified as a diver, maybe he would show more interest in the weather on weekends.



# Dive Report - S.S. Tuggerah

By Scott Leimroth

**Destination: S.S.Tuggerah**

**Location: Off Marley Beach**

**Depth: 45.6m**

**Weather: Sunny - light south east breeze**

**Visibility - 10m**

We anchored into the wreck at about 8.30am and sent Steve in first. Unfortunately the anchor pulled out. Pulling up the anchor for another try we noticed it was stuck on something. It took all our efforts for two of us to pull it up just a few metres. Was it hooked on a net? We were a long way off the wreck. Had we hooked into the Nemesis? We sent Steve down to investigate. The anchor rope became lighter and when he surfaced Steve told us it had been hooked into a bolt hole of a large piece of steel plate from the wreck. We anchored again and this time it stayed in. Descending to the wreck there was a layer of dirty water above it but visibility on the wreck itself was ok. Anchored amidships we swam forward to the bow to investigate it's remains.

There were a large number of Baler snail eggs on the port side of the wreck and a number of dead/empty snail shells. We swam towards the stern and noticed the bouy line that had recently been put on the wreck was still attached, ascending into the gloom. Unfortunately it is no longer on the surface and needs repairing.

I looked around the boiler and engine and found some old timber. The view of the skeleton of the wreck as we sam back toward the anchor and made our ascent was impressive, even in average visibility. After a 16min bottom time we ascended to our deco, glad to have Max's shark shield with us after sightings of a large shark at La Perouse this week and a number of other sightings by the Bate Bay surf clubs. When we got out of the water a seal was basking on the surface in front of the boat.



Steve made a number of dives. Luckily the rebreather uses no gas. If we had had to make two dives on open circuit we would have had little remaining air to enjoy the wreck.



Max and Steve after the dive on the Tuggerah. Another successful mission.

A large black seal was basking on the surface in front of the boat. They often lay on the surface with one flipper in the air.



# Boat Owners & Dive Leaders



## BOAT OWNERS

### Geoff Cook

Email: geoff@southpacificdivers.com  
Phone: 0404 554 554  
Location: Barden Ridge  
Boat Type: Shark Cat, 5 shallow, 4 deep  
Favourite type of diving: Wrecks



### Scott Leimroth

Email: scott@southpacificdivers.com  
Phone: 0413 717170  
Location: Cronulla  
Boat Type: Inflatable, 3 shallow, 3 deep  
Favourite type of diving: Wrecks



### Martin Kandilas

Email: martin@mdk.au.com  
Phone: 9525 9399  
Location: Dolans Bay  
Boat Type: 5.5m, 5 shallow, 4 deep  
Favourite type of diving: Wrecks



### John Fardoulis

Email: john@southpacificdivers.com  
Phone: 0400 888 888  
Location: Lilyfield  
Boat Type: RIB, 5 shallow, 4 deep + 7.5m half cabin,  
6 shallow, 6 deep  
Favourite type of diving: Helping novices



### Scott Egginton

Email: pennynscott@optusnet.com.au  
Phone: 0406 049 449  
Location: Milperra  
Boat Type: 5m, 4 shallow, 3 deep  
Favourite type of diving: Wrecks and Deep



### Scott Willan

Email: swillan@thomascoffey.com.au  
Phone: 95437095  
Location: Bangor  
Boat Type: Runabout, 4 shallow, 3 deep + Yacht  
Favourite type of diving: Fun Dives



### Bob May

Email: bobmay@hotmail.net.au  
Phone: 0428 295 516 or 02 4579 1053  
Location: Windsor  
Boat Type: 6.5m Marlin Broadbill, 8 shallow, 7 deep  
Favourite type of diving: Reef & Photography



### Max Gleeson

Email: maxglee@optusnet.com.au  
Phone: 0416 041 021  
Location: Caringbah  
Boat Type: Marlin Broadbill, 4 deep  
Favourite type of diving: Wrecks



## DIVE LEADERS

All boat owners are dive leaders. In addition, the following are also shore dive co-ordinators and dive leaders.

### Scott Hansman

Email: scott.h@southpacificdivers.com  
Phone: 0403 843 521  
Location: Cronulla  
Favourite type of diving: Reef dives, shore dives



### Paul Stranger

Email: paulstranger@hotmail.com  
Phone: 0432 860 501  
Location: Newtown  
Favourite type of diving: Night dives, shore dives





# Around the Grounds

By John Fardoulis & John Olsen

A quarterly SCAN (Scuba Clubs Association of NSW) meeting was held this month and the following is a summary of what's going on.

## **University Clubs** (in general)

Changes in university Union contributions is a major area of uncertainty for Uni dive clubs at the moment. Union fees used to be compulsory, but a shift to voluntary fees will probably result in the tightening of purse strings across sports associations.

Funding for club boats, compressors and Scuba equipment could be affected.

## **DOUTS Accident**

DOUTS (UTS Dive Club) had an accident with their club boat on the Woolli bar just before Christmas. The boat is out of action and might be so for a few more months.

Some of the other clubs have offered assistance with boat diving - providing discounted six month memberships to help DOUTS members while their boat is being repaired.

A discussion was held regarding boat diving, suggesting that DOUTS members contact RUC (Ryde Underwater Club) and URG (Underwater Research Group) for reef and general diving. Help is available from us for experienced wreck divers to go out on SPDC member boats.

## **Nelson Bay Weekend March 10-11**

The next official SCAN event is an away weekend at Nelson Bay during March 10th and 11th. Most clubs will be shore diving, with RUC & BWAC club boats and a few private vessels in attendance. Accommodation needs to be booked urgently.

## **NSW Maritime Representative**

Les Caterson has been representing the diving public as a

SCAN rep on Recreational Vessel Advisory Group of the NSW Maritime (formally known as the Waterways Authority of NSW). After representing SCAN for ten years, Les needs a break and will be stepping down.

This group has delegates from just about every group of waterway users such as the:

NSW Water Ski Association

Boat Owners Association

Aust. Power Boat Association

Seaplane Pilots Association Australia

NSW Water Police

NSW Canoeing

NSW Rowing Association

Advisory Council of Recreational Fishing

Surf Life Saving Association of NSW

Yachting Association of NSW

If you've got boating experience and would like to discuss representing SCAN at the bi monthly meetings please contact John Fardoulis [john@southpacificdivers.com](mailto:john@southpacificdivers.com)



# Club Update

## **St George Scuba Club**

Results from a survey recently confirmed that club members are very active divers. Night dives every Thursday night. They also have a 'Women's Only' weekend at Nelson Bay coming up.

## **RUC (Ryde Underwater Club)**

RUC have been in the water when the viz has been ok. Swansea on the January long weekend was good to start with prior to the big blow. Also their Christmas at Ulladulla was good with plenty of social activities. Of interest to other clubs is they have an Undersea Explorer trip planned for October so that may enable some "tag along" divers from other clubs.

## **URG (Underwater Research Group)**

URG of course are active and especially so with their involvement in harbour keepers fish ID training and the like. For those who are relatively new to diving, URG has been running a number of marine research projects for years.

## **University of NSW Dive Club**

UNSW dive club like all uni clubs faced that unknown at this time of the year of how many students would enrol? And what level of funding would be available and the whole fee structure issue in a post VSU environment. "O" day was approaching and membership drive was important. They have 2 boats an 8 diver RIB and a 5-person inflatable, which gives them plenty of flexibility.

## **South Pacific Divers Club (SPDC)**

Everything is going well, more activity by the month, a healthy number of boat owners and active divers. Around fifteen people dived reef and more than twenty of the thirty plus divers enjoyed an outing to the Annie M Miller from four club boats on Feb 4th. Special interest groups have also been a hit.

## **DOUTS (UTS Dive Club)**

DOUTS are working towards regaining a dive boat capability but in the short-term shore diving events would be promoted. Wayne thanked the offers from other clubs to take DOUTS members out as space permitted on their boats. Like UNSW "O" day was an important time in the calendar. Insurance policy is another item for clubs to look at. The DOUTS policy was market value, which meant basically a devalued asset.

## **University of Wollongong Dive Club**

UOW are a bit sad at the moment with a lack of a management team. Avril is concerned and frazzled. Jeremy confirmed that with the start of a new year it would be a challenge especially as recently the diving had been ordinary. (There was wide agreement that diving had been patchy over recent months).

## **Who is SCAN?**

The SCUBA Clubs Association of NSW or SCAN was formed in the early 90's when independent divers needed their own voice in the Scuba industry, into government and the community at large. Representatives from a number of clubs met and from that initial meeting, SCAN was conceived as a body to address the issues facing independent dive clubs at that time and in the future.

Membership of SCAN is a useful thing for dive clubs and NSW divers generally as we are the only group who can legitimately act as a PEAK BODY to represent recreational diver's interests in NSW. That is why we have a seat on some NSW Government Advisory committees. As we all know Government Authorities like to liaise with user group peak bodies so SCAN is the logical choice. And this is a key role performed by SCAN (well actually club delegates).





## BUNYIP ON THE PROWL

*Which 'Deep Diver' has been pushing his luck lately, doing longer dives than his more experienced buddies and running out of air on one dive. He should remember the old phrase: There are old divers and there are bold divers but there are no old bold divers.*

*Which club member was goggle eyed at a recent event when a certain female turned up. He was last seen begging for her phone number.*

*Which Sydney dive club made sure it was well and truly catered for before other dive clubs when booking for an upcoming event. While their members might sleep comfortably at night they unfortunately miss out on the real diving.*

*Which committee member has been spending more time on the phone and internet than on the job lately? A bit more diving might be the cure.*

## WEBSITE STATISTICS

The Website receives between 100 and 200 visits per day from users all around the world. They are downloading the WetRag with on average over 2300 downloads per month for each issue..

We had the most visits in September - 5639 !!

In December we had 3427 visits to the website.

Wednesday is our busiest day on average.

Most people visiting the website between 5pm and 10pm.

## Join Us



Like to join the South Pacific Divers Club?  
Membership has many benefits including:

- **Like minded people** to dive with.
- **Mentoring** - Learn more about diving. Increase your diving skills by diving with others. Experienced members are keen to help you learn more. Group organised education such as first aid and boat handling courses.
- **Adventure** - New places to dive. New things to see.
- **Boat Dives** - Charter boats at discount rates and a number of members boats are available to dive from. Not for profit diving with new friends.
- **Develop Special Interests** - Rebreather, Photography, Ecology, Wrecks, Exploration.
- **Free Independent Advice** - Equipment, sites to dive, trips away, etc.
- **Social Activities** - BBQs, Barefoot Bowls, Wine Tasting, Movies, Charity events, Paintball, and much more.
- **Life long friendships** and contacts in the diving industry - Not just a club, it's a way of life.

To **join** simply fill in the form on the next page and post to  
P.O. Box 823, Bankstown, NSW, 2200.

Better yet, come along to one of our **club meetings** held every  
**3rd Monday of the month at Bankstown Sports Club, Greenfield Parade, Bankstown.** Email  
john@southpacificdivers.com for more information.



ESTABLISHED  
1962

# Join the Club.

## Membership Application Form

Complete this form and post to: **South Pacific Divers Club, P.O. Box 823 Bankstown NSW 2200**

### APPLICATION FOR MEMBERSHIP

☐ I wish to apply for 1 year's membership.

NAME: \_\_\_\_\_

ADDRESS: \_\_\_\_\_

Post Code: \_\_\_\_\_

Phone: \_\_\_\_\_

Work: \_\_\_\_\_

Home: \_\_\_\_\_

Mobile: \_\_\_\_\_

E-Mail: \_\_\_\_\_

Diving Certification: \_\_\_\_\_

Certification Number: \_\_\_\_\_

Are You a Boat Owner: ☐ yes ☐ No

If yes, type of boat: \_\_\_\_\_

Join now and membership lasts until end financial year 2008

#### CURRENT MEMBERSHIP FEES:

Single \$50.00      Family \$75.00

*Please Note that Membership for 2006-07 has been increased to cover Insurance*

### DIVING MEMBERSHIP APPLICATION

I/We \_\_\_\_\_ hereby apply to join South Pacific Divers Club Inc. I/We understand the Club is non-profit, non-affiliated with any training organisation and is for certified divers. South Pacific Divers Club Inc does not offer instruction, advice or supervise its members' divers. It is a condition of Club membership that members exercise their own judgement in accordance with their training in deciding whether and/or how to participate in any particular dive, the technique used, or choice of equipment and that any clarification in regard to these matters should be referred to a qualified instructor or my/our certifying agency.

**I/We have read the above conditions and accept same as a condition of membership.**

Signed \_\_\_\_\_

DATE \_\_\_\_\_