



St George Scuba Club Newsletter March 2022

Taken by Ray Moulang

Ulladulla trip



© Ray Moulang

In this newsletter:

Club Ulladulla Trip

Geoff Ward

Magic Point

Wayne Heming

Iceland diving just before Covid struck

Marianne and Peter Tibbitts.

Jervis Bay Maritime Museum

Lynne Tuck

Enlightenment News

Eddie Ivers

Review of Personal Locater Beacons and Nautilus Lifeline. Phil Short

Gallery contributors. Wayne Heming, Ron Jerochim.

Thanks to all the contributors for their submissions in a period where there was not a lot of diving due to the big wet.

Club trip to Ulladulla 21 to 24th February.

By Geoff Ward Photos. Ray Moulang and Peter Flockart

11 members attended

The Diving:

Diving in 2 groups we scheduled 3 days of diving; one each at the Home Bommie and North Bommie plus Burrill Rocks and 1 day further south at Kiola for the pinnacle and the wreck of the Northern Firth. Unfortunately, the trip coincided with flooding and heavy rain along the east coast of NSW. Large seas prevented the Kiola leg of the diving and confined us to the local dive sites. Visibility close to the harbour was, not unexpectedly, only fair improving to 15M to 20M at the rocks. Only 4 of our divers made the 6th dive on the Thursday with most opting for an earlier departure.

Generally speaking, the fish population on the close bommies showed signs of overfishing with a scarcity of most species. We did see 2 good eastern blue devils on the home bommie. The reefs were also home to some good gorgonians and interesting sponge gardens. One group saw 2 small hammer heads on the surface near north bommie. The photographers were restricted to nudibranchs, gorgonians and some odd sculptures in a small cave on the home bommie.

Burrill Rocks was definitely the better of the dives. Our group did a drift along the wall from The Arch to near the Caves and through a large split for the first dive, the wall being in the vicinity of 15M for most of the dive. We did see a small school of kingfish on 2 occasions but otherwise only the smaller species such as one spotted puller and pomfrey. Our group crossed the resting place of what was quite possible the largest bull ray I have seen. Mike Scotland spent a good part of his time with the ray and estimates the height from top to bottom to have been around half a meter. Estimates of the ray's girth varied but 2.5m would have been in the ballpark. Our second dive was on the Caves at the western end of the wall where large rock formations provided a number of swim throughs and caves. Ian Roffey reported seeing numerous slipper crays under the overhangs. The gorgonians and black corals in this part of the dive were more numerous and the topography, generally speaking, the best of the dives we did.

The Dive Operator:

We dived with South Coast Underwater Dive Academy (SCUDA) run by Brian Harrison. My personal interaction with him was nothing but positive. His pricing for the dives was extremely competitive and he provided excellent fills at a bargain price. Unfortunately, due to time constraints, Nitrox fills which were advertised, were not available to us.

Brian was extremely welcoming, opening his home for a BBQ that he and his family provided. His hospitality extended not only to cooking but cleaning up as well. His daughter, Samantha, cooked fresh muffins for our surface interval. Fresh muffins, donuts and hot drinks between dives probably rated as the best fare a diver could ask for. Thanks to both Sam and Tony for their efforts. To acknowledge Sam, the divers each made a modest contribution towards a gift voucher for her at the local book shop. Brian assured us it was well received.

The Food:

Monday night saw us at the Mollymook Golf Club for dinner where the choice of meals was above average and the standard of the meals more than acceptable. After the BBQ on Tuesday, where we were totally spoiled, we had a curry night on the Wednesday evening at the house. Michael McFadyen and Ian Roffey made meat curries, Jill McKenzie (only lady on this trip) made a vegetarian dish and Joel Santiago chipped in with an Asian eggplant and egg dish. Along with a good selection of side dishes, I would say it was the best of the club curry nights I have had with the club, as the food was simply delicious. A big thanks to everyone who contributed to the evening. Brian, his assistant Chris and Samantha came along to the evening and so hopefully we were able to repay some of the kindness we were shown.

The House:

Numerous people commented that it was the best accommodation they had had on a club dive trip. A big thanks to Jill for finding and organising the house. It was essentially 2 houses separated by an adjoining door. One house had 6 beds and the other 8. Each had separate kitchen and dining areas. The beds were king singles and could be configured as singles or doubles. The house is owned by divers so we were well catered for with outside washing and drying facilities. Going mid-week meant the cost was more than reasonable and we had no problem with availability. We would definitely stay there again and highly recommend the house. The address is No1. Boag St Mollymook and it was booked through AirBNB.

The Fly in the ointment:

The boat comfortably held 6 divers. Diving was therefore split into 2 groups. Between the loading, unloading, gearing up and diving the interval between dives was much longer than usual. Brian and his crew (thanks Tony) did everything they could to make it enjoyable, however 3 hours is a long wait between dives. There is no easy way around that with a large group. With the invitation going out to all club members, the issue of space on the ribs at Ulladulla was always going to present a challenge. One suggestion, from Mike Scotland, was to book both dive operators so the groups could dive simultaneously. Alternatively, 2 groups of 6 could dive over a six-day period. These suggestions however are not without their drawbacks. I would highly recommend Brian to you as an excellent choice for small groups, 2-6 people, wishing to dive this area.

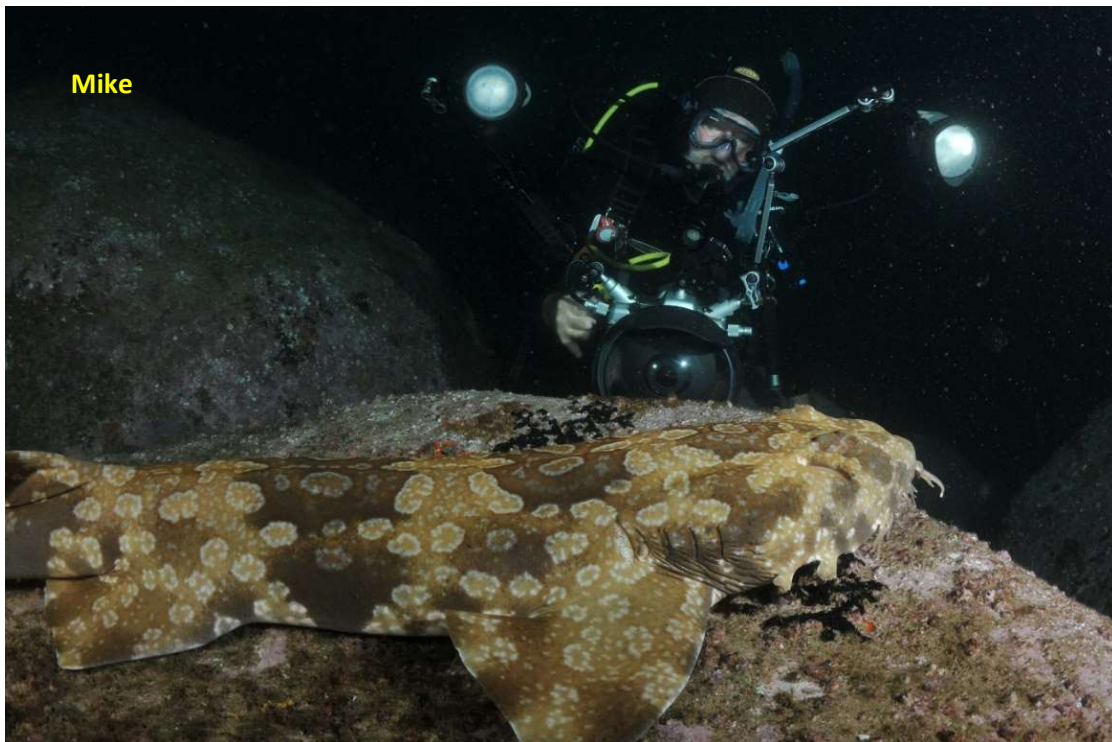


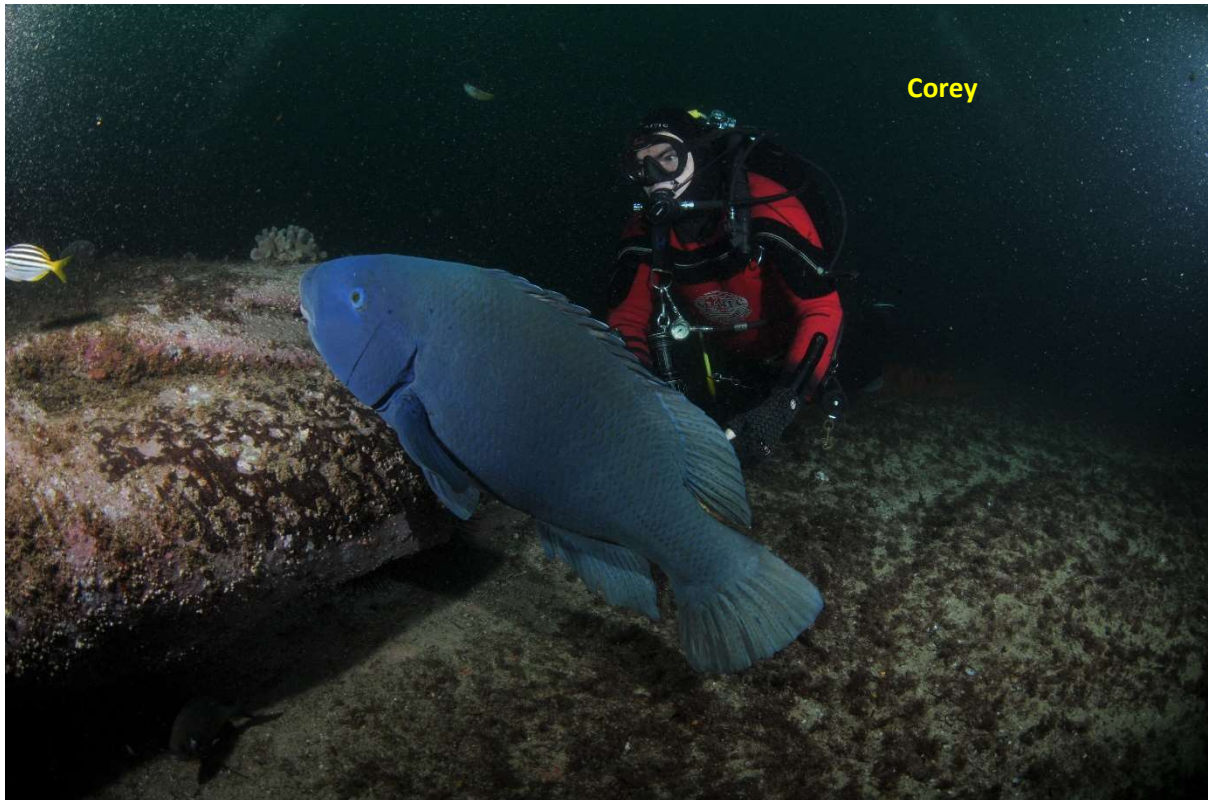


Magic Point, South Maroubra 26 February 2022

Wayne Heming. Photos by Wayne

Wayne took his boat Yes Dear Too to South Maroubra with Mike Scotland and Corey O'Keefe. They had about 10m greenish viz, on a 1.5m eastern swell and a bit sloppy.





Iceland

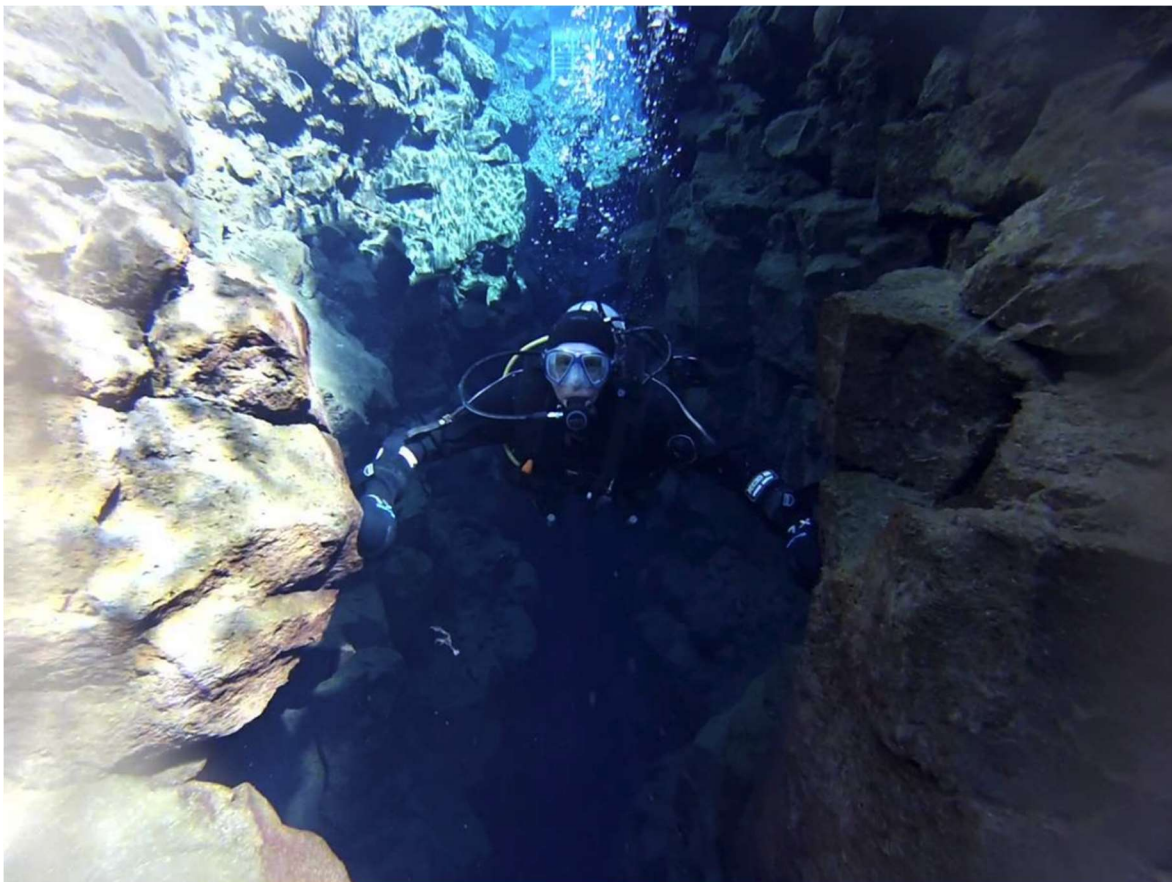
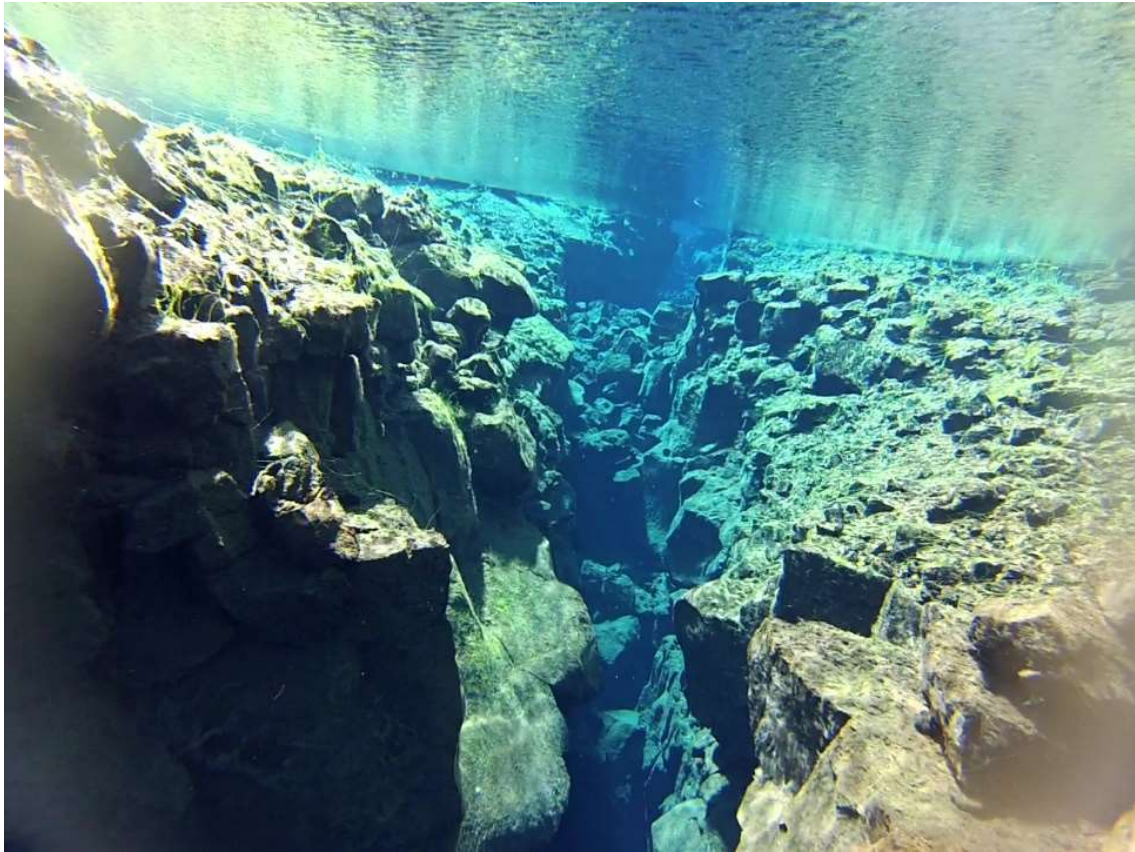
Text and photos by Peter and Marianne Tibbitts.

Remember overseas travel. Peter and Marianne managed to sneak a trip to Iceland just as things were shutting down..... and were lucky enough to get back to Sydney just after the two week hotel quarantine came into effect. So two more weeks holiday in a 6m by 6m room. Here is their description of their dive.

Silfra is the only place in the world where you can dive or snorkel directly in a crack between two tectonic plates. The earthquakes of 1789 opened up several fissures in the Thingvellir area, but the Silfra fissure cut into the underground spring filled with glacial meltwater from the nearby Langjökull glacier.

The water is a chilly 2C so you are provided with an extra thick drysuit, hood and special 3 fingered gloves. Although cold, the water is crystal clear from its filtering through the glaciers.





Jervis Bay Maritime Museum

Text and photos. Lynne Tuck

I recently spent an interesting morning with my Dad, (who had escaped from WA for a week and a half) at the Jervis Bay Maritime Museum. I've been to the markets there and it always intrigued me how they got a ferry inside! The Lady Denman ferry which serviced Sydney harbour was built in Huskisson and is now part of the museum. You'll have to visit yourself to learn the whole story.

This museum is packed with interesting things. I learnt surf skis were actually invented by an Australian oyster farmer, to check his oyster, he loved to surf and surf skis were invented. We spent nearly 3 hours there, I'm not usually into museums, but we could have spent at least another 2 hours but ran out of time.

As this rain is going to persist, thought I'd give you an idea for a rainy day!

Lynne Tuck



Seabee Aluminium Runabout

This homemade motorboat was fashioned from the hull of a *Republic Seabee* aircraft. The original *Seabees* were designed in 1941 as low cost four-seater amphibious aircraft (seaplanes), which could take off and land on water or land.

This *Seabee* was salvaged after a hangar fire at Bankstown Airport in 1958. It was transformed into a runabout in 1960 by Les Hodge, who operated a nearby panel-beating business. In 1961 the *Seabee* was bought by Jack Dowling, who brought it to Jervis Bay in the mid-1960s. It is a great example of adaptive re-use, having three compartments: a cockpit for a driver, a compartment for passengers, and a section cut out of the stern for an engine.

The *Seabee* was originally donated to the Fleet Air Arm Museum in Nowra in the 1990s. It was deaccessioned in 2003 and 'adopted' by a group of volunteers from the Lady Denman Heritage Complex, who donated it to the museum in 2008.

Donated by Cris George.

Enlightenment News

Text and photos. Eddie Ivers

During this recent prolonged period of severe weather and flooding along the east coast both shore and boat diving activity been cancelled

I suggested to Phil that I initiate a diving related topic dear to many divers , that being our illumination otherwise dive lights or torches

Following is a list and comments on the various illuminators I have owned and sometimes destroyed over the last 20 years



Alpha Diving AL2000

This was my first dive light back around 2001

The Quartz Helogen bulb was a 75w MR16 downlight which generated heaps of light and lots heat with no heat sinking as the wand was Delrin

The weak link as with all canister lights is where the cable enters the compression glands

Batteries were 2 Sealed Lead Acid 12v in parallel

I flooded this light numerous time and repaired the wand connectors with parts from Jaycar

After replacing the MR16 with a Led MR16 I replaced the wand with a customised maglite head with a led triple emitter , 2amp driver and a latching relay switch

I also cut down the canister , epoxied the join and changed the battery pack to a smaller 8.4v lithium pack.

Alpha Diving have these canisters plus upgraded heads(wands)

listed for sale

<https://www.alphadiving.com/lights.html>

Be mindful that this is a large heavy canister dive light and is unsuitable for overseas dive trips



Ocean Graphic Led Canister light

I ve included this as the light I never decided to own , I am aware many club members have used this light and have encountered numerous issues and that repairs are difficult if not impossible

Also this large heavy canister light still available from Alpha Diving and is unsuitable to overseas travel



Bight Star HID Darkbuster

Absolutely awesome light however the HID emitter is fragile and very expensive to replace
Also too big for my liking

Eventually sold mine on Ebay to a diver from Kiev



Ultrafire W200 V Tillytec W30

The Ultrafire W200 is Chinese knock off of Tillytec W30 backup light that was discontinued by the German/Swiss manufacturer
Attached are pictures of the original Tillytec and the cheap Chinese copy above

In its original form the W200 used a small weak led emitter and 3 AA batteries

This is the dive light nick - named by Ken Ridley as the MUT (mighty under water torch) that has also been discontinued

I re engineered the Chinese knock- off to use a P60 drop in module and 2 18650 lithium batteries in serial giving 8.4v

Run time using a 1.4 amp driver was approximately 2 hours

Finding a supply of single 2 amp drivers without multimodes was near impossible as generally P60 modules are designed for bike riders torches

I ceased modification of Ultrafire W200 due poor Chinese QC of the tubes



Chinese Cheap Yellow Torch V Ultrafire AW40 V

LedLenser D14.2

A



This little cheap yellow torch is a knockoff of a knock-off & appears to be from a based on a Led Lenser below

Its beauty is its simplicity and price

Excellent as back up and has also been dived deeper than 30m

Its emitter can be replaced with a P60 drop in however for the price I wouldn't be bothered , instead buy another on Ebay for less than \$20

The LedLenser D14.2 will set you back over \$100 it's only 400 Lumens however your buying good quality not a cheap knockoff



The Ultrafire AW40 preceded the cheaper yellow torches , cost of this was \$40
I still use this as a back up

The driver below has been upgraded to this from Kaidomain

AMC7135-x-8-MCU-3040mAh-4-Group-2-5-modes-17mm-Circuit-Board



Trustfire TR-DF002

This is not your usual cheap Chinese diving flashlight, it's well made and has a powerful triple emitter
The entire torch is made of a composite material covering a metal tube interior & head
Heat sinking does not appear to be compromised by this unusual design
The spikes on the 4 Stainless steel bolts holding the front lens can cause injury or could be used for self defence
Batteries are 2x 26650 or with an adapter 2x 18650
Cons are its too big & heavy for my liking
Eventually the torch flooded as the front lens cracked
Kaidomain & Aliexpress have these for sale US\$78



That 's enough for now , compliments if you have remained awake reading these ravings of a Flashaholic

Here ends episode 1 , The next Enlightenment news will reveal my current arsenal of illuminators and a story of Javier a Spanish cave diver who had his designs pinched by a Chinese manufacturer

Watch this space !!

Some info on Personal Locating Beacons (PLB) and Nautilus Lifeline. Phil Short

As there is not much diving news after the big wet, here is some light reading about PLB's and Nautilus Lifeline.

For almost all of the boat dives we do, being unable to find the anchor and then drifting under a safety sausage waiting for the dive boat to come and get us is not a problem. However, in current prone off shore dives and remote location diving, quite a few divers have spent an uncomfortable number of hours drifting and some have lost their lives, mostly due to incompetent dive operations in third world locations. In a well publicised case, a couple of divers were lost in Queensland after their boat left them on the reef, so nowhere is immune from human error. If you find yourself in that situation, without an emergency location device, your searchers are literally looking for a leaf in a pretty big ocean.

There are some choices when it comes to emergency location devices and I have compiled a bit of information, and whilst not a complete run down of everything, it may help point you in the right direction if you are interested. I have listed some common acronyms that may assist in understanding how these devices work.

AMSA Australian Maritime Safety Authority.

AMSA is a statutory authority established under the *Australian Maritime Safety Authority Act 1990* (AMSA Act), and included in its range of responsibilities are:

- promote maritime safety and protection of the marine environment
- prevent and combat ship-sourced pollution in the marine environment
- provide infrastructure to support safe navigation in Australian waters
- **provide a national search and rescue service** to the maritime and aviation sectors

When you open an account with AMSA and list your PLB / EPIRB you can update with information i.e. I am travelling to Bali and diving in xyz location between x and y date. If the device is activated in that region it will speed up the response.

AIS Automatic Identification System

Is a maritime communications device which uses a very high frequency (VHF) radio broadcasting system to transfer data. AIS equipped vessels (shipborne AIS) and shore based stations (non-shipborne AIS) can use it to send and receive identifying information. This identifying information can be displayed on an electronic chart, computer display, chart plotter or compatible navigation radar. (It allows one AIS equipped vessel see other AIS traffic on its chart plotter).

DSC. Digital Selective Calling

DSC is used in VHF radios to automatically (digitally rather than through voice) call up another DSC radio using an [MMSI](#) number and operates similar to a pager. A DSC VHF radio can send and receive a digital distress signal in an emergency situation. When equipped with GPS, the DSC signal will also contain the location of the vessel. Not all VHF radios are DSC equipped but all commercial Australian vessels are equipped with DSC VHF radios.

MMSI. Maritime Mobile Service Identity

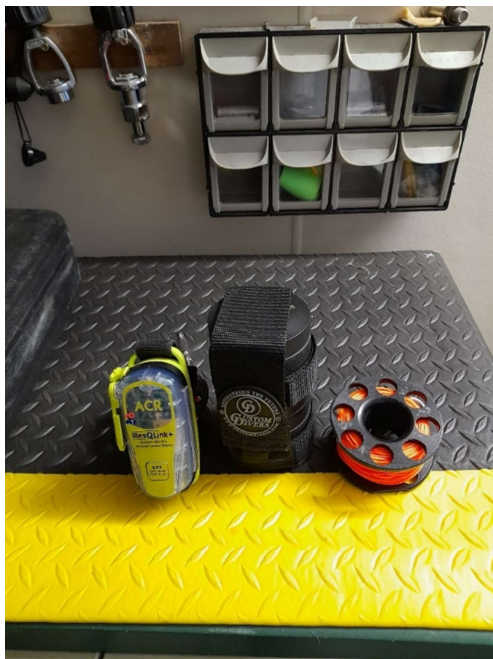
Is a nine-digit number that is allocated by AMSA on application by a boat owner that has DSC or AIS capability. To enable the DSC function of a VHF radio you must have an MMSI. You need a radio operators licence to apply for an MMSI.

EPIRB. Electronic Position Indicating Radio Beacon.

EPIRB's are an emergency beacon mandated for boats that operate 2 nautical miles or more offshore in Australian waters. They must be registered with AMSA and provide details of vessel, owner and emergency contact. On activation they send a signal on 406MHz to satellites activating an emergency response. Not all EPIRB's have GPS. The non-GPS model narrow the search area to within 5km, GPS models narrow it down to metres.

PLB. Personal Location Beacon

PLB's are a smaller version of an EPIRB and are designed to be worn or carried by individuals (like divers). PLB's are GPS equipped and are activated in the case of a life threatening emergency to bring rescuers to your location. PLB's do not meet the requirements for maritime vessels travelling more than 2 nautical miles off the coast. PLB's must also be registered with AMSA. PLB's on the market are not waterproof to depth, but some newer models are waterproof to 15 metres and have a battery life of 7 years. If you want to use a PLB for diving you need to buy a small housing for it. The PLB's are around \$370 and housing can be purchased for about \$150.00.



Custom Divers PLB case and harness which attach to your BC. The case has a double O-ring seal and I would avoid cases with a single o-ring.

ACR PLB.

If you are buying a PLB make sure you get one that floats. Not all do.

Dive Tub sell the housing for \$150.00

Nautilus Lifeline GPS

The Nautilus Lifeline is a small device that has GPS functionality and can transmit an emergency distress message on AIS (1 watt power on 161 and 162 MHz) and on Digital Selective Calling (0.5 watt power on 156 MHz). The operators manual provides some information on when an MMSI is needed and varies according to region. The Nautilus uses a line of sight VHF radio signal and claims to have a range of 34 miles. One thing to consider when assessing its possible range is that it has a small aerial and when used it will be very close to the water line. It does not communicate with satellites.



{From Nautilus web site}

The Nautilus Marine Rescue GPS is incredibly simple to use. Simply undo the latch and open, turn on, remove the antenna retainer, and press the red button. That's it! Your GPS position accurate to 1.5 metres and a man overboard distress message will be broadcast to all AIS equipped ships up to 34 miles away, as well as a special DSC message to the marine radio on your own vessel.

Ebay price \$355.00

How do EPIRB's and PLB's work (Diagram from AMSA site)



Distress Beacon is activated.

When your life is in danger activate the device. The device's signal will be picked up by satellites from anywhere on earth

Signal is received by satellite

The signal is received by the world-wide dedicated search and rescue satellite network (Cospas-Sarsat) on 406 mhz. PLB and EPIRB's also transmit on 121mhz as a homing signal for rescuers to gain a more exact location when near the target. The nearest ground station is notified of the signal for rescue coordination. The coordination centre in which the

device is registered is also notified, which for us is AMSA. If you are overseas AMSA is involved in rescue coordination, which may be important in third world countries.

Search and Rescue Operations commence

If your beacon is registered with AMSA, they will look up your details and contact your emergency contacts. If your contacts are aware of your location and activity or you have updated your travel details on your AMSA account it will speed up the rescue coordination. Even if AMSA cannot obtain further information, they will act on the emergency signal.

NEXT. You hopefully get a free helicopter/boat ride.

Comment

I have both a Nautilus Lineline (older model) and a PLB contained in a housing. Both are nice pieces of equipment but if I had to pick one in an emergency it would be the PLB. The PLB doesn't rely on line-of-sight VHF radio communication but transmits to satellites. In an emergency activation of a PLB, AMSA will co-ordinate with local search assets anywhere in the world. Negatives are you need a diving cannister and it can only be used in a life threatening emergency. You can also use the PLB on land while hiking where you may not have mobile reception.

The nautilus is more convenient as it doesn't require a housing and is very compact and will fit in most BCD pockets. It communicates with AIS and DSC equipped vessels. It is GPS equipped and relays your position. In first world countries near cities, I would be confident of the signal being picked up and acted on, in third world countries, not so much. My Nautilus has had a fair few dives with no leaking issues.

Advantage of bulk buy when buying as a club

Stephen Fotoulis recently organised a members group buy for dive tanks. In total 13 tanks were purchased and they all got a discount on average of \$100 per tank. Dive imports Australia just could not be beaten on price.

Just one of the many benefits of being in the club. Something to think about if you are buying an expensive piece of dive equipment.



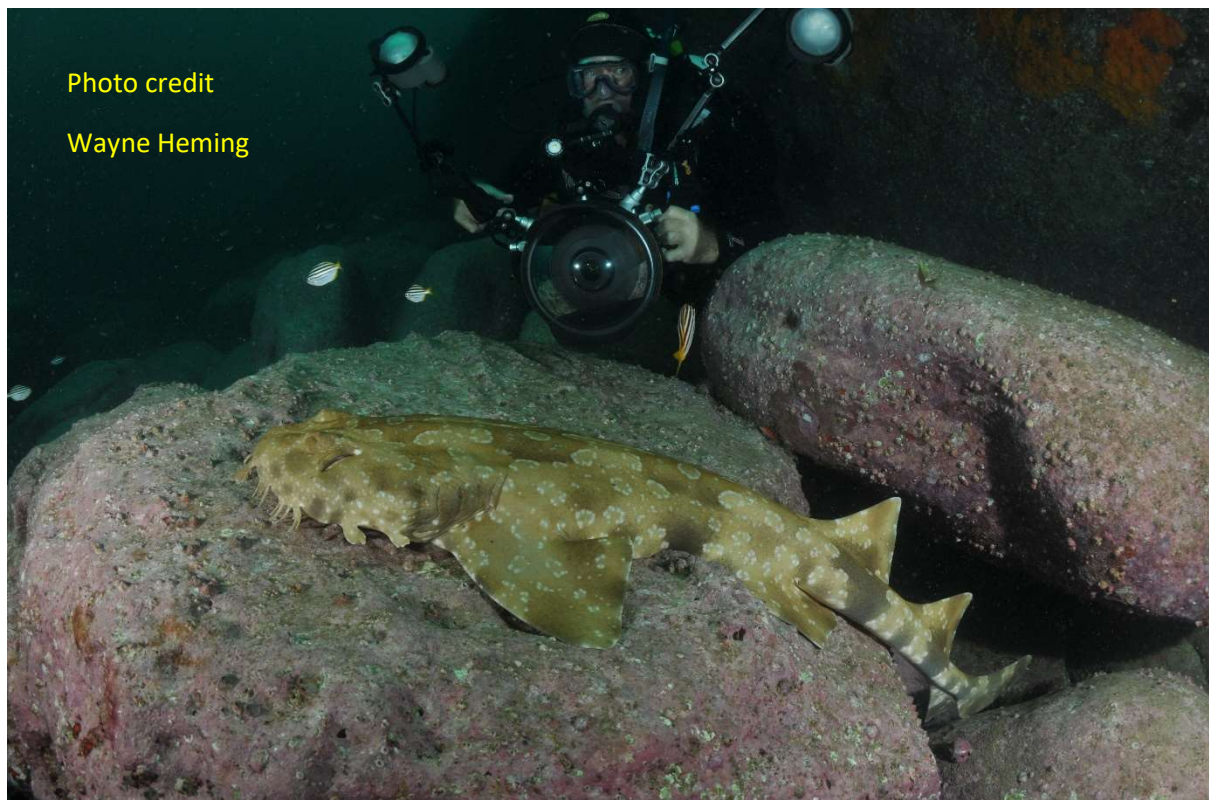
NSW Maritime Website

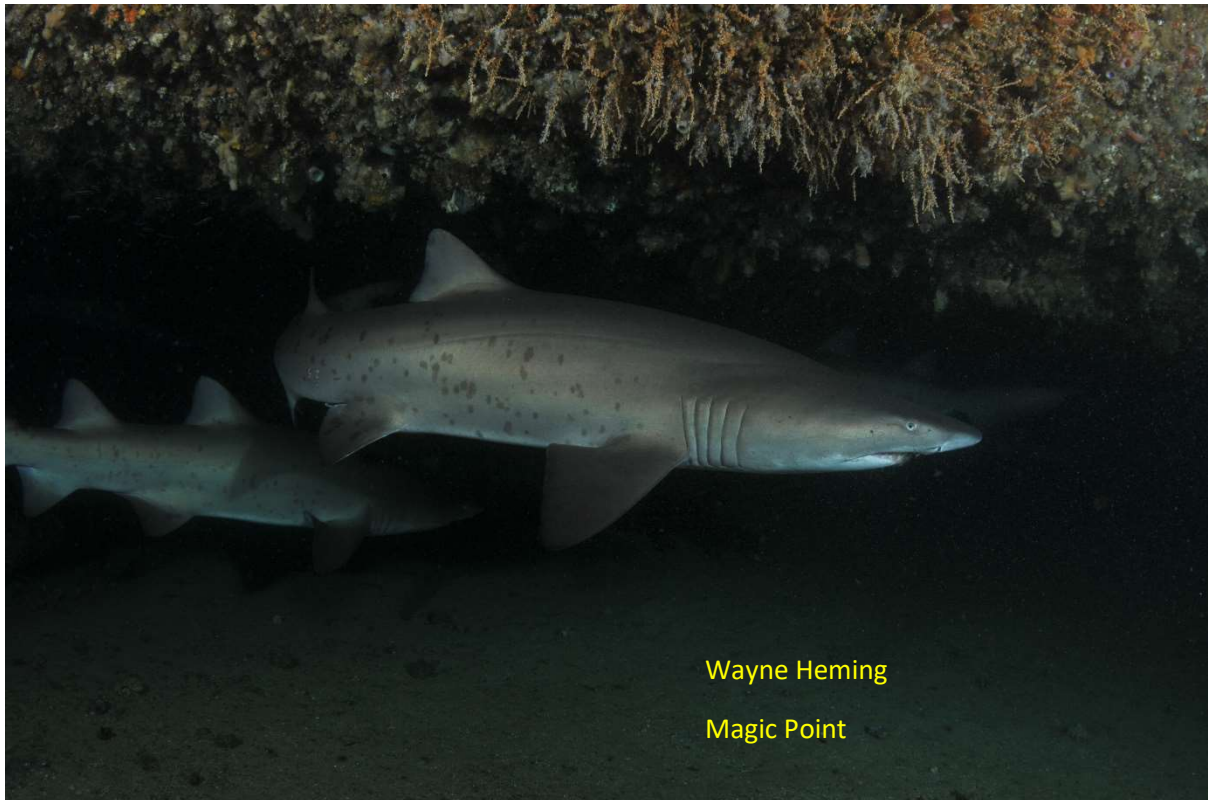
Greg Blackburne is a member of the Recreational Vessels Advisory Group (RVAG) and sits as a representative of SCAN. Greg keeps the club abreast of relevant things occurring within maritime authorities and volunteer organisations mostly through the club's facebook page. The Maritime NSW site is worth a look, especially when it has safety and environment related articles. You can sign up for their newsletter.

<https://roads-waterways.transport.nsw.gov.au/maritime> Protecting marine life | [NSW Government](#)



Gallery





A group of members were travelling to Truk this year with Max Gleeson. Sadly the trip looks a bit sketchy at the moment with Truk closed off to visitors till at least May.

A couple of photos from one of the travelling group, Ron Jerochim, to remind us of what we are missing.



Upcoming Organised Club Dives and Activities

April 2022

★ Boat Dive and BBQ - Frenchmans Bay - Meet La Perouse

Date:	02-04-2022	Starts at:	7:00
Contact Ray Moulang/Eda di Camillo			

★ Night Boat Dive - Barrens Hut - Meet Yowie Bay/RMYC

Date:	09-04-2022	Starts at:	7:00
Contact Craig Spillane			

★ Easter Weekend - North Haven - Meet North Haven

Date:	14-04-2022	Starts at:	6:00
Contact Ray Moulang			

★ Boat Dive - Whale Watching Platform - Meet Hole in the Wall/Port Botany

Date:	16-04-2022	Starts at:	7:00
Contact Shelley Breuseker			

★ Club Meeting - GRSC - Meet Dolls Point

Date:	20-04-2022	Starts at:	20:00
Contact Maxine Hayden			

★ Boat Dive - Barrens Hut - Meet Yowie Bay/RMYC

Date:	23-04-2022	Starts at:	7:00
Contact Jason Coombs			

★ **Anzac Day Shore Dive/BBQ - Bare Island - Meet La Pouse**

Date:	25-04-2022	Starts at:	9:00
Contact Deb Cook			

March 2022

★ **Deep Wreck Dive - SS Undola - Meet Yowie Bay/RMYC**

Date:	01-05-2022	Starts at:	7:00
Contact Ian Roffey			

★ **Shore Dive - Shiprock - Meet Dolans Bay**

Date:	07-05-2022	Starts at:	9:00
Contact Michael Materazzo			

★ **Shore Dive - Dusky Whaler Sharks - Meet Shelly Beach**

Date:	08-05-2022	Starts at:	9:00
Contact Jason Coombs			

★ **Lord Howe Island Trip - Lord Howe Island - Meet Sydney Airport**

Date:	13-05-2022	Starts at:	6:00
Contact Michael McFadyen			

★ **Boat Dive - Big Saigon - Meet Yowie Bay/RMYC**

Date:	14-05-2022	Starts at:	7:00
Contact Phil Short			

★ **Club Meeting - GRSC - Meet Dolls Point**

Date:	18-05-2022	Starts at:	20:00
Contact Phil Rose			

★ **Boat Dive - Pizza Reef - Meet Yowie Bay/RMYC**

Date:	28-05-2022	Starts at:	7:00
Contact Bob Hill			

Please submit any articles and photos to me by replying to my club emails which are sent out every month. The newsletter will be published every month or bi monthly depending on content received.

Our newer members are encouraged to submit photo's and stories on their dive.

Dive stories and photos are not restricted to organised club dives. Things like "I learned from that..." recent courses, equipment and general interest diving / diving photography articles are also welcome. If you have no time for words, just send me some of your best photo's for inclusion in the gallery section.

Many thanks to all of the contributors.

Regards. Phil