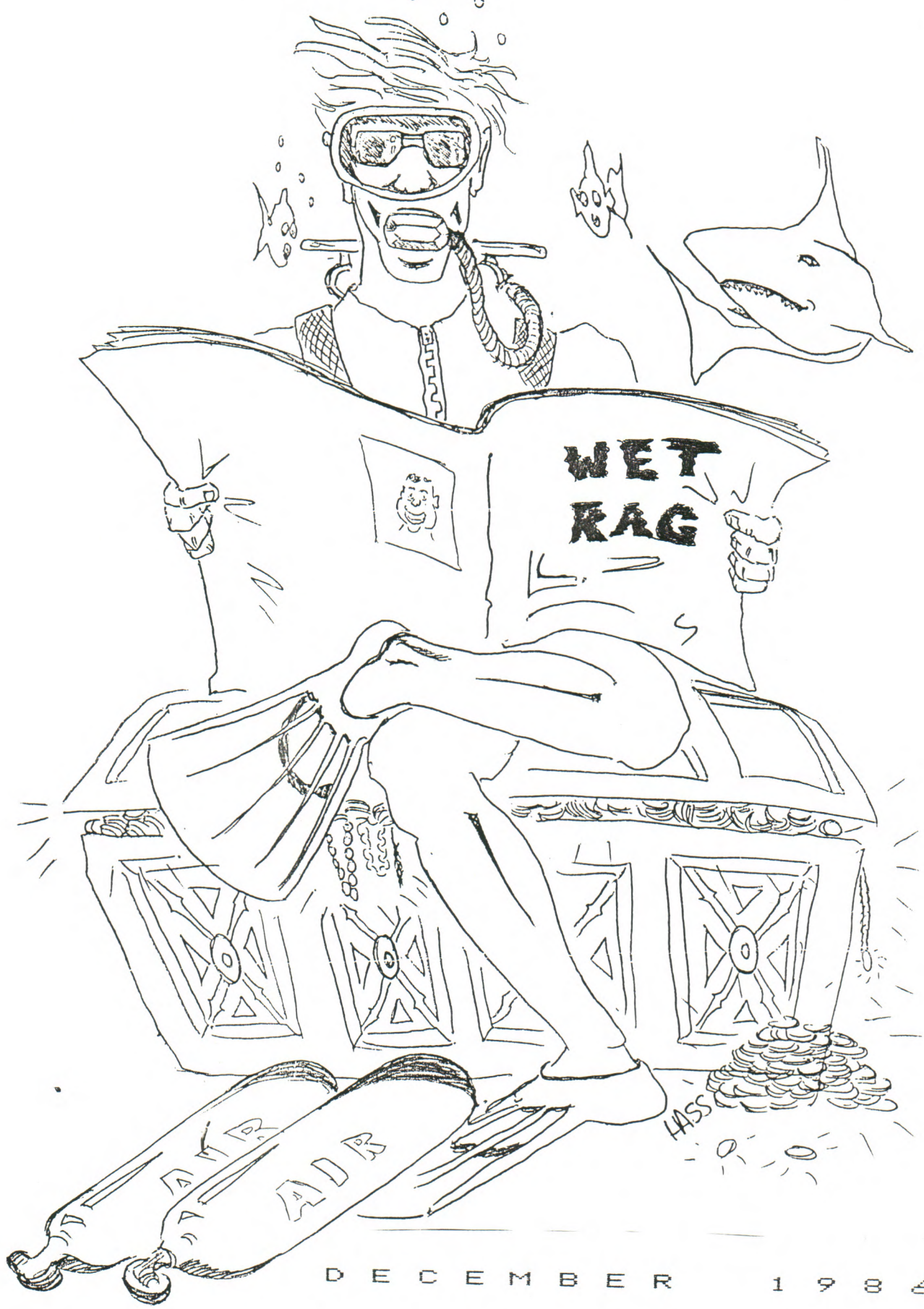


SOUTH PACIFIC DIVERS

SOUTH
PACIFIC
DIVERS
CLUB



DECEMBER 1986

MARINE STUDIES

A BULLETIN OF THE MARINE STUDIES CENTRE, UNIVERSITY OF SYDNEY

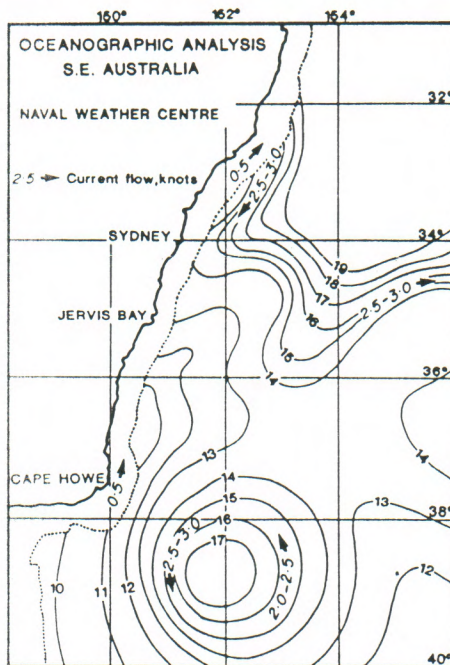
VOLUME 3, #19 -- OCTOBER 1986

OCEAN FORECASTING

Just as forecasting of the atmosphere by the Weather Bureau is of interest to many people—farmers, pilots, sports organizers, the building and construction industry—by the year 2000 we can expect ocean forecasting to be almost as regular a feature of Australian life. Given the population stretch around the edge of the continent and with our penchant for sport, both the people in general and those who earn their income from the sea, will come to depend upon such forecasts.

At present, detailed ocean forecasts are used by only a few specialized groups such as the Navy, professional fishermen and the offshore engineering industry, while yachtsmen, [particularly those involved in the America's Cup defence], are the first major sporting group to make use of detailed forecasts [see our example in *Wavemakers* this issue].

Grappling with some of the fundamentals of ocean forecasting are the Royal Australian Navy and the CSIRO's Division of Oceanography, who are cooperating in a joint oceanographic study of East Australian Current eddies, using drifting buoys being manufactured at the CSIRO Marine Laboratories in Hobart. Two of the buoys, which transmit their positions via satellite, were caught in a major eddy centred abeam of Cape Howe and these are augmented or replaced by others as they drift out of it. The second of these two buoys was



An analysis of the currents off NSW, as produced each week by the RAN Weather Centre

released from a Sea King helicopter on manoeuvres from 817 Squadron of HMAS *Albatross*, Nowra, in January 1986. Others are positioned the same way—lowered from a helicopter or from patrol boats.

The RAN Weather Centre uses the information gathered by the buoys to produce a three dimensional oceanographic analysis of the Western Tasman. The positions of currents and the

eddies spawned by the currents create "fronts" where water temperature changes. These fronts affect the propagation of sound through the water and are identified by the Naval Weather Centre at HMAS *Albatross*.

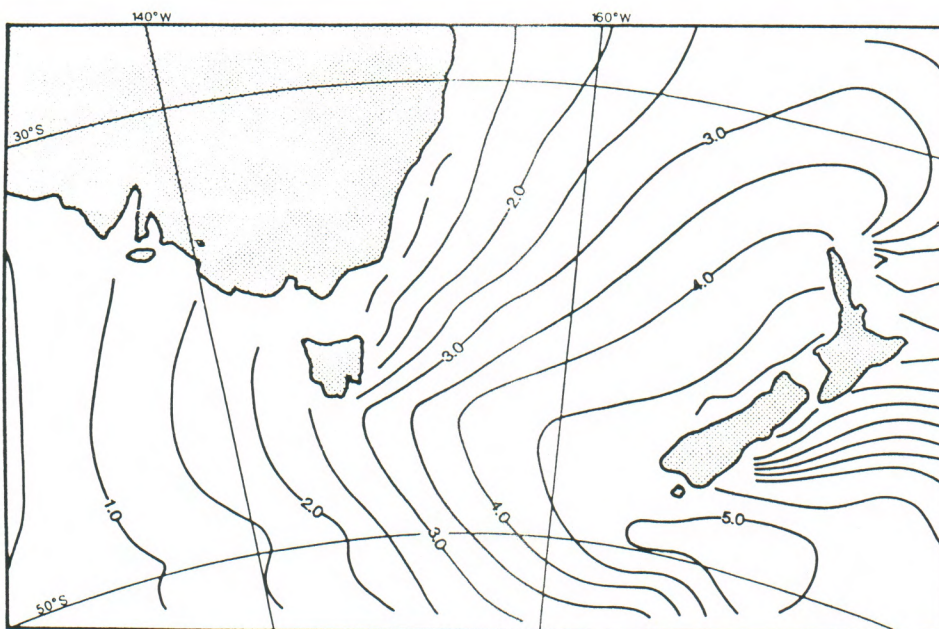
The transmission of the buoy's position is a complicated procedure, but it provides its location within three hours. Once the buoy signal has been received, the satellite transmits its position to a ground station in Alaska, which then re-transmits the information to Toulouse, France, where the data is processed. Scientists at CSIRO and officers at the Naval Weather Centre can then access the information via telex as soon as it reaches Toulouse.

CSIRO is cooperating in the project to further its studies of warm core eddies, particularly those associated with the East Australian Current, and to study the possible uses of the buoys as FADS—fish attraction devices. **George Cresswell**, heading the project for CSIRO, says "we don't know why, but fish are attracted to anything floating in the water—logs, mats of weed, and possibly buoys. Fishermen have long sought floating logs in the ocean because these attract fish. This has been utilised by overseas governments and by Australian state governments, and now anchored FADS are being used in some areas. If fish are attracted by buoys, fishermen would be able to get the positions from the navy and perhaps find a fair haul of fish around them."

Another benefit from the buoys will be real-time information on currents and eddies in the study area for search and rescue authorities in the event of a severe storm.

Each of the buoys costs approximately \$5000 to produce and the processing cost is approximately \$4000 per year, per buoy. The program is likely to last three years and, with its success to date, will be extended early in 1987 to cover the western Australian coast off Perth, which is another major naval exercise area. Use of the Sea King helicopters has increased the easy range for buoy placement, as well as drastically cutting the ship time formerly required. Helicopters flying out of Nowra can place buoys up to 200 miles off the southern NSW coast and by using the bases at Williamstown or Amberley, the range along the coast can be extended.

AMSTAC has established a working group on ocean monitoring/forecasting, whose members are **Bob Male** [Chairman], **Mike Manton**, **Phil Mulhearn** & **Chris Fandry**. The group is to assess Australia's forecasting needs to the year 2000 and how to implement them ■



A prediction of the significant wave height produced by the Bureau of Meteorology

MINUTES OF MEETING OF SOUTH PACIFIC DIVERS CLUB
HELD AT 17.11.86 AT BANKSTOWN SPORTS CLUB

Meeting opened at 8.12p.m. by the President, John Blaszcak.

Visitors: Karen Smith, D. House

Apologies: Neil Koos, John McDermott.

Minutes of the previous meeting were read. Business arising from the minutes was that a new social secretary was to be elected.

Correspondence;

Incoming: Scuba Divers Association of NSW. Sea Safety. Australian Underwater Federation.

Outgoing: Nothing.

Treasurer's Report:

Balance B/frd in Cheque Account:	\$ 986.46
Income	79.84
	1066.30
Expenditure	199.24
Balance in Cheque Account:	\$ 867.06
Balance In Savings Account:	\$3000.00

Accepted by Jim Smith, seconded by Gary Roberts.

Dive Reports:

Bristol point: A good weekend was had by all and some of the events are as follows:

Mark Gordon reported that after swimming in poor viz. for ten minutes at Point Perpendicular he was having trouble equalising and after seeing a shark he surfaced.

Bruce Gardiner reported that on Sunday morning after washing Gary Roberts boat and cooking breakfast for some people he went diving with Bob, Doug, Andy and Penny. Tony Martin gave them a lesson on entries from boats which nearly drowned everyone. There was a strong N.E. blowing and the anchor kept moving. After Penny dropped her weightbelt Andy went searching for it and drifted quite a bit. It was said that the current was so bad that they anchored at the Docks and did their dive at Point Perpendicular. Gary Roberts took out his new boat and when driving back from the docks the overflow pipe which had overflowed petrol into the hull caught on fire.

Mystery about Tony Martin's rubber Ducky?

B.J. commented on Peter Flockart's choice of tent sites - after a bit of rain the creek began to flow and Peter Flockart nearly floated away. (This is when it was suggested that a Water Resources Officer be elected). B.J. had an excellent weekend although he left his bungs out of his boat at one stage.

Terry Mansfield was supposed to give a drinking report.

Cindy Belveal gave one of her first diving reports and she went diving on Saturday at the "Docks". Commented on reasonable viz but water was very cold after thirty minutes.

Dean Williams went diving at Point Perpendicular - twenty minutes in fifteen metres. It was a major decision on who was to be the leader of the dive and after surfacing they were approximately seventy feet away from the boat.

Miriam Roberts had a very quick dive - jumped in, water too cold, had ear trouble so got back into the boat.

Martin Kandilas has been diving from the "Takaroa" with Larry King, and other club members. Larry did his first wreck dive on the Yongala with Martin, and after going down an alley in clear water it was noticed that behind Larry there was silt and poor viz. They took pictures of a 101 year old bottle of Scotch and they surfaced with some bottles of Tomato Sauce (one later decompressed in Martin's Fish bin) and a brass fixture, which was later returned to the water after a couple of incidents with the Water Police.

Dive Organiser's Report:

Gary and Miriam informed us that another four people are needed for the Ulladulla weekend. \$15.00 per night with breakfast. Lamb on the spit is to be provided on the weekend costing \$5.00 per adult, \$3.00 per kid over eight, eight and under are free.

There are a group of people going to North West Arm - Boxing Day and for a couple of days afterwards. Fellow members are welcome.

Shellhabour dive is organised for February 1st, 1987. After diving enjoy a picnic lunch.

Another site has been booked for Bristol Point - 21st - 22nd February, so let Gary and Miriam know numbers please.

Publicity Officer:

Cindy thanked Peter Stratford for writing an article on the "Takaroa" for our "Wet Rag". Apparently the mail is holding up some of the magazines. If by some reason members aren't receiving their magazines it would be appreciated if they would let Cindy know so she can rectify the problem.

Photographic Officer's Report:

Water Sports have confirmed a prize for the A.V.. Entry forms for the George Roberts Trophy are to be printed in the next Club Magazine. Terry has ordered the lithe film and duping film off Sam Lewis Photographics.

General Business:

Larry is selling two lenses. 20mm and 18mm.

Rick Latimer informs us there is a trip to Bass Strait going in February diving for approximately ten days. One way by boat, then fly back - approximate cost \$900.00. See Rick for more information.

Gary Roberts brought to our attention that there are prices in the November magazine about a trip to New Guinea. Gary would like to know if anyone is interested.

Social Secretary nominations: Tony Martin - accepted, Bruce Gardiner - declined.

Tony Martin elected as our Social Secretary.

Meeting closed at 8.55 p.m. Slides were shown by Lyn and Pat Manly: New Guinea Trip. Martin Kandilas: Takaroa Trip. Larry King: Takaroa Trip.

TRAVEL UPDATE

New Dive operation on Barrier Reef: Lady Musgrave Island

Lady Musgrave Island is situated on the southern end of the Capricorn / Bunker Group. The island has a large lagoon and fringing reef. The operators have moored permanently a 'mother ship' and run rubby duckys as tenders for diving around the island. Tents are available for those who would like to camp on the island.

Costs are ex Bundaberg:

Return transfer to the island by boat: \$65 each

5 days on 'mother ship' including all meals and all diving

\$445

CONTACT DIVE MAGIC Sydney 267 6744 Marilyn Moore

PHOTOGRAPHIC SAFARI TO LORD HOWE ISLAND

Lyn & Pat Manly will be on Lord Howe Island for 3 weeks early 1987; overnight E-6 processing will be available, slide shows, critique sessions and problem solving. They will provide, in conjunction with Geoff Deacon - Divemaster on Lord Howe, both in and out of the water, information and assistance relevant to the underwater photographer.

22nd February 1987 to 5th March only 2 places left

1st March to 15th March 1987 only 4 places available

Contact Lyn or Pat 728 6808 or Sealife International 665 6335

AQUASPORTS YAGOONA DIVE SAFARI TO PAPUA NEW GUINEA

APRIL 1987. Glen Percy of Aquasports Yagoona will be leading a group to Rabaul - 1 week - and Walindi Plantation - 1 week. Cost approx \$2,072. Contact Glen or Tom 708 - 2826.

MALDIVES either December 1987 or January 1988

Lyn & Pat Manly are putting together a group to travel to the exotic Maldiv Islands in the Indian Ocean flying Singapore Airlines (duty free shopping in Singapore - cameras, lenses and all those wonderful goodies). Duration will be 15 days, staying on an island for 1 week then a week on a dive charter boat cruising the other end of the islands. Great fish photography, shark feeding, clear water, soft corals, coral atoll islands with white sandy beaches - palm trees. Sounds good. (particularly considering the viz in Sydney at the moment).

SPD DIVE TRIP TO PAPUA NEW GUINEA

Gary Roberts is organising a group to Rabaul and Walindi, late 1987. Superb diving, good company, (the usual good stuff in paradise - clear water, wrecks, wall diving, night diving). Contact Gary.

DIVE REPORTS

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ACME TOURS "86"

On the 1st October we met at 7 a.m. at Sydney airport, all very excited about our long awaited trip to Papua New Guinea.

After delays in Sydney this meant our transfer time from International to Domestic in Port Moresby was reduced from a comfortable stroll to a 800 metre sprint. The flight had waited for our group and we were met with red faced stares as we boarded, the plane was not air conditioned while waiting on the ground.

Arriving safely without luggage or dive gear, we settled at the Kaiyuna Lodge. Morning came and so our holiday began. Collecting some luggage (some were not as lucky as others - the rest arrived later that day) we ventured on our first dive at Rabaul. It was the first tropical reef and clear blue water some of us had seen - "Just Lovely". Among our 10 dives at Rabaul, on spectacular reefs and wrecks, that blew our minds on average 100ft vis we even had time for land tours.

One was to the Japanese Hospital tunnels, very wet and slippery under foot; some tried to get down the easy way and slide on their bums, nearly knocking the Leader off her feet.

The second tour was a hike up to the volcano. After much persuasion, three Nationals from the local village took us across the harbour in their outrigger - we bailed all the way - it was either bail or drown! We made it across and started our walk up the volcano which nearly killed us but the unbelievable view of Rabaul harbour made it all worthwhile.

When our days at Rabaul came to an end we excitedly continued our trip to Walindi Plantation and started our 10 day diving holiday once again. Vis was excellent, you know you have good vis when you can read the name Moray on the back of your diving friend's B.C. 130ft below you. (Just another balmy day in paradise.)

Even though we had to battle with the killer Batfish we really enjoyed the diving, seeing the spectacular gorgonias and seawhips and the fabulous marine life. After diving sometimes 1 1/2 hours or till we had no air left would we drag ourselves out of the warm waters.

We would have lunch on an island and harass our deco cards and work out our 2nd dive which we dived to the limit.

After a hard day of diving we had to make the hard decision of what to have for tea. Most of us on Acme tours just couldn't make such decisions so we would pig out and eat everything while we talked about what we had seen that day.

Our time was up and we had to leave Walindi. We all enjoyed the company and especially the GREAT diving and would go back again and again.

Our thanks to Acme Tours '86. We Survived. "EM NAU". Lookem you behind time. - Vikki Colwell.

DIVE REPORT - Bristol Point - Sunday 16 November 1986

On board: Phillip Dunbier, Miriam Roberts, Cindy Belveal, Dean Williams and B.J. (boat & captain).

What started out to be a relaxing recovery from hang-over dive at Point Perpendicular, Jervis Bay on the Sunday morning, actually turned out ending in a marathon swim at the surface for B.J.'s boat; for the navigator, who I don't care to mention for obvious reasons, leading the dive somehow became disorientated and to B.J.'s amusement, the bubbles suddenly detoured his anchor and headed directly for Bowen Island. Upon surfacing, we became aware of our mishap, and as we were altogether we naturally thought B.J. could simply start the boat and motor over and pick us up. However, this was too much to ask of B.J. and instead he found great delight in simply bursting out with laughter.

Apart from this slight mistake in navigation we all had a very enjoyable dive, with visibility of about 15 ft and very calm seas. Phillip and Cindy also found great delight in having a poke at the "non-bitey" end of a moray.

In conclusion I would like to mention how much of a success this weekend at Bristol Point was. I could confidently say every club member that turned up had a very enjoyable weekend. The campsite was very well set out with very hot showers and clean amenities, and apart from the odd shower of rain (and consequently the floating of Peter Flockhart's tent), everybody managed to stay reasonably dry and comfortable. - Dean Williams.

* * * * *

On Friday the 5th December the club held it's Christmas Party, attended by about 80 people. After a Smorgasbord meal, some of the gamer club members were encouraged onto the dance floor by watching B.J. try to dance.

Door prizes were won by Sue King who drew her own ticket to win 3rd prize. Cindy Belveal won 2nd and Joy Wakling picked up 1st. Andy and Mary tied for drunk of the night. My thanks go to the people who did the decorations on Friday afternoon. - Tony.

"Rumours Round Town"

- (thoughtlessly submitted by anonymous club members)

*Yellow van was spotted parking in Henderson Street, Arncliffe recently with S.P.D. sticker proudly displayed in rear window. A courtesy call on the owner by another club member was met with two surprised heads popping up from the more comfortable rear section of the vehicle - and during DAYLIGHT hours too!!

*Unconfirmed gossip says one S.P.D. member is available to give dental checks at his/her new Macquarie Street Surgery! Anyone interested in making an appointment (MUST be crazy) - and, well we are sorry, but we don't know who to contact.

BOAT DIVES: Available at reasonable prices from AQUA SPORTS,
430 Hume Hwy., YAGOONA. Talk to GLEN PERCY.

FOR SALE: 1. TABATA B.C. - Very good condition. 18 months old. Size M.
Model 777 (Jacket Style), colour yellow - \$140 o.n.o.

2. AIRDIVE Regulator - 2nd Stage only, ideal octopus or main
2nd Stage - \$75 o.n.o.

3. OCEAN PRO Torch & Charger - New rechargeable battery.
8W, 12W and 30W Bulbs. Excellent condition - \$100 o.n.o.

Please contact John McDermott on 726-0982.(A.H.)

DIVING CALENDER:

December 26 - 28: South West Arm (National Park). Camping/diving weekend.
Anyone wishing more information please contact Gary Roberts.

January 17: Night Dive at Camp Cove. Meet at 7.30pm. More details at
December Club meeting (15th).

February 1st: Picnic Day and Boat dives at Shellharbour. Meet at the
carpark across the road from the Pub at 9.30 a.m. Bring your own picnic
lunch and the family.

February 20 - 22: Bristol Point. Diving and camping weekend.
Cost \$3 per person over 5 years. BBQ Saturday night \$5 adult/\$3 child.
All bookings and money close at January meeting (Monday 19th).

March 6 - 8: Seal Rocks. Self-contained units, bring your linen, four
people per unit. Cost \$16.50 per person. BBQ Saturday night \$5 adult,
\$3 child. All bookings and money close at February meeting (Monday 16th)
but get in early because this weekend books out fast.

Anyone wishing to do extra dives at any time please phone Gary Roberts on
771-3459 and something can be arranged to suit you.

President:	John Blaszcak	Photographic Officer:	Terry Mansfield
	Ph: 709-5535		Ph: 628-8172

Treasurer:	Ross Hipwell	Social Secretary:	Tony Martin
	Ph: 773-4406		Ph: 533-5576

Secretary:	Lyn Vincent	Publicity Officer:	Cindy Belveal
	Ph: 624-1287		Ph: 534-1883

Dive

Organiser: Gary Roberts
• Ph: 771-3459

Any contributions to the Wetrags will be gratefully accepted.
Please forward these to: Cindy Belveal,
49 Central Rd.,
NARWEE 2209

Correspondance to: South Pacific Divers Club,
P.O. Box 823,
BANKSTOWN 2200

DECEMBER 1986

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
	1	2	3	4	5	6
7	8	9	10	11	12	13
14	*15 CLUB MEETING	16	17	18	19	20
21	22	23	24	25	*26 SOUTH =====	*27 WEST =====
*28 ARM ===	29	30	31			

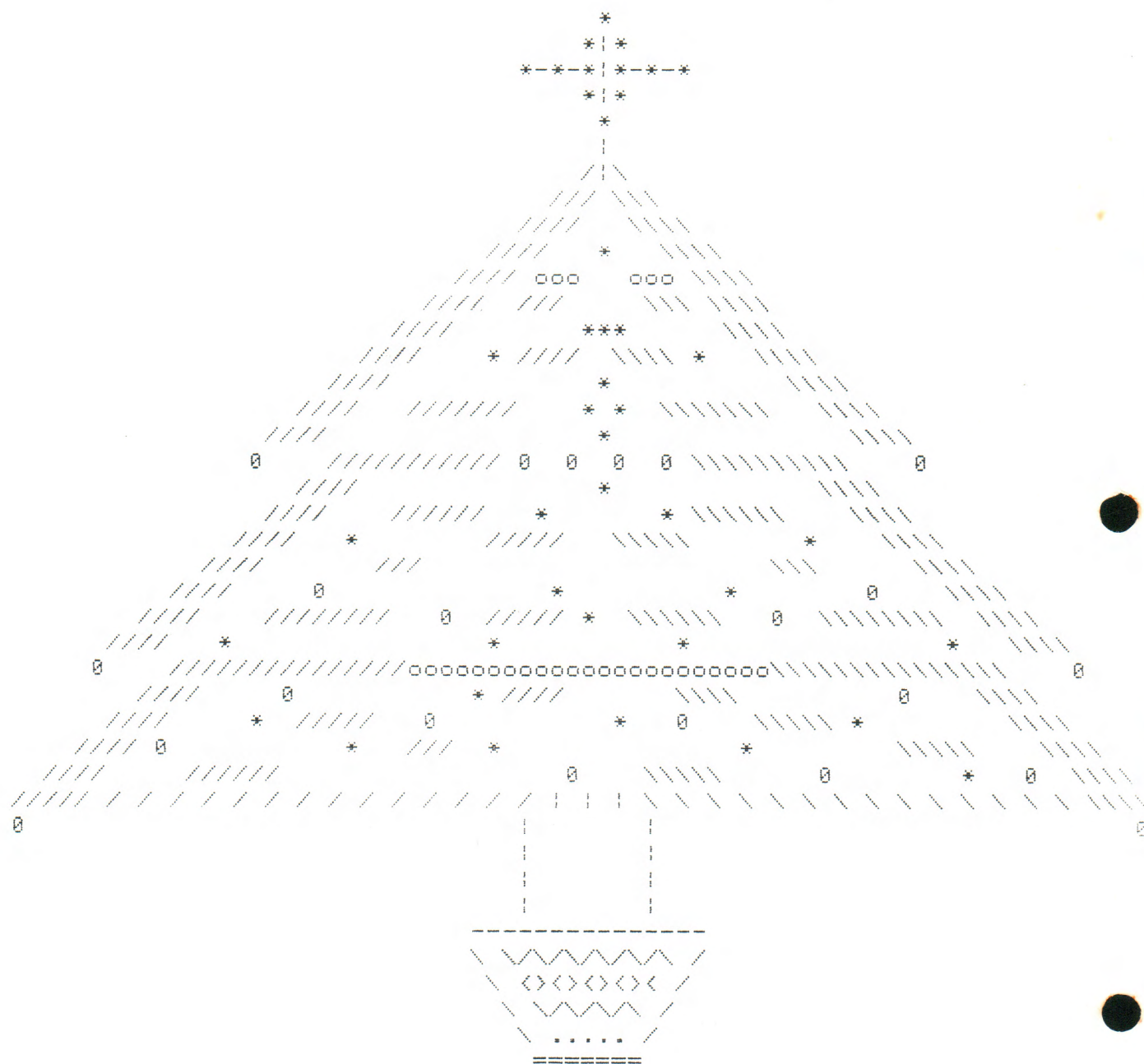
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JANUARY 1987

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
				1	2	3
4	5	6	7	8	9	10
11	12	13	14	15	16	*17 CAMP COVE
18	*19 CLUB MEETING	20	21	22	23	24
25	26	27	28	29	30	31

REMINDER: Bookings for Bristol Point weekend February 20 - 22 will close at January Club Meeting (19th).

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HAVE A MERRY CHRISTMAS & A HAPPY NEW YEAR !
FROM SOUTH PACIFIC DIVERS CLUB