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### **R.N. Diving Magazine**

#### EDITORIAL STAFF

Chief Petty Officer R. L. BENFIELD, Editor. Lieutenant A. C. OTLEY, Treasurer. Instructor Lieutenant R. M. SMART, B.A., R.N., Secretary. Able Seaman A. LYDEN. Cartoonist.

Vol 7	Spring 1960	No. 2

#### **Editor's** Notes

It has been some months now since our last edition, and no doubt many of you thought we had forgotten you.

The delay was mainly caused by the Printers Strike in June, and due to the pile up of work due to this dispute they are still trying very hard to catch up with themselves. On the other hand we must blame also the lack of support from all Units for not sending in material. We have found it hard to compile this magazine even now.

As you know we have no staff to run about to get stories like other magazines. We just have to rely on Heads of Units to send in all they can whenever they can.

Many times this magazine has been praised by readers from other countries as well as our own, and it would seem a pity to have to discontinue publishing it for lack of material. All you have to do is spend an hour or so writing down your local news and information, preferably in reasonably good English, but this is not essential. As long



as your articles are inceresting, they need not necessarily be connected with diving.

The R.N. DIVING MAGAZINE has a very good reputation and a high standard to keep up. We hope that everyone will co-operate to enable us to resume regular publication.

#### Underwater Fishing

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THE World Underwater Fishing period was spent in obtaining exyear at Malta between the 13th and 18th August, with the competition proper taking place on

Championships were held last perience of local conditions, surveys of the competition area and various social activities.

For those who have never heard Sunday 16th. The remainder of the of the competition, a little of its history and organisation will probably be welcome. The first championships were held in Italy in 1954 when 33 competitors from six countries participated. Spain won the competition, and since then France have won it twice, in 1955 and 1958, Italy in 1957 and Spain again in 1956.

Up to last year each country could enter up to six competitors but due to the increase in the number of countries participating (12 in 1958 and 19 this year), the team number has been reduced to four.

Competitive spear fishing is more an individual than team sport as participants compete strictly as individuals. Each competitor is allocated his own boat with a steward whose task it is to remove the fish from the harpoon and record the catch. The winning team is decided by totalling the three highest positions of each country's team according to the number of competitors. Thus the highest individual would receive points equal to the number of competitors, the second individual one less and so on.

For the individual placing points are awarded as follows:—

1 point per gram weight of fish caught.

250 points for each fish caught over 250 grams ( $\frac{1}{2}$  lb. approximately).

There are numerous prizes given, the chief ones being to the team with the highest number of points, to the individual with the highest number of points, for the heaviest fish caught, and for the greatest number of fish caught.

This year 74 competitors participated representing:—

Australia, Belgium, Brazil, France, Spain, West Germany, Italy, Holland, Monaco, Portugal, Switzerland, Tripoli, Greece, Tunisia, United Kingdom, U.S.A., Yugoslavia and Malta.

The competition period was officially opened with a march past by the competitors, a flag raising ceremony and a presentation to the Governor and the Archbishop of Malta. It was a most impressive sight with the competitors in their various modes of dress ranging from skin tight track suits to the more formal blazers and flannels. They lined up in front of their country's flag, while their respective National Anthems were played. The start of the competition on the Sunday was no less impressive when the 74 competitors' boats were towed to the competition area behind their 'mother craft'. It looked like a repeat of the Dunkirk evacuation. Then when all were in position the signal was given and the participants sped off to spear the biggest and the mostest fish. It was 0945 and they had until 1500 in which to prove themselves.

The weather at the start of the competition was good but it deteriorated as the day wore on and by midafternoon the competitors were having a very bumpy time, as were the stewards in their dinghies. However there were only two casualties and these were not serious.

With the competition over the stewards sealed the individual catches in bags and took them ashore for the weighing. Here the excitement rose as the various weights and points were announced. The Americans and the Spaniards had obviously done well, recording the heaviest single catches. One grouper weighed over 70 lbs., while one of the Malta team had speared over 43 fish. When one remembers that the competitors were diving to depths between 50 and 80 feet to get the

-4-

fish, these catches were remarkable achievements.

When the results were finally announced, the leading places went to Spain, U.S.A., Italy, Brazil and Malta, with the United Kingdom 12th. The individual with the highest number of points and thus the World Champion was an American. This is the first time that the championship has been won by someone from outside the Mediterranean.

#### Clearance Diving Acceptance Trials Team

T is unfortunately a long time since the Acceptance Team produced an article for the MAGAZINE. This has not been due to lack of interest or lethargy on our part but simply because all the recent trials, with one exception, have been classified. The exception was Helicopter Diver trials to assess the suitability of carrying in a helicopter a diver as a recue number. The object was to find out the feasibility of carrying in a plane guard helicopter a diver who can jump into the sea, assist the aircrew of a ditched aircraft to escape, and then be recovered.

The trial started by working up the team to jump 30 feet from a static platform, fully equipped and breathing from the set. We then progressed to actually jumping from a "Chopper" and were then recovered by the scoop-net and the strop method.





## PLAYER'S

## taste better

H.M.S. EXCELLEN



It is undoubtedly a fact that an underwater swimmer fully equipped can do far more in the rescue role than a surface swimmer or an aircrew hand hanging on the end of a winch wire, but with the problem of very heavy modern aircraft and the introduction of self-ejection, even under water, it is debatable whether a diver in a helicopter is a worth-while proposition. This, of course, is a problem which only the "Air Boys" can decide upon.

up with us on several occasions and next term we hope to include Fowey and London in this list. For the benefit of those who are keen underwater fishermen I recommend the Falmouth region as the most interesting place on the South Coast.

Like all teams we have had our changes in personnel. Petty Officer White has left for Singapore and Petty Officer Howe has taken over the job of keeping the trials team in order. Instead of the old morning



-7-

Last term was an interesting one in many ways, and has seen many changes not the least of which was the falling by the wayside of the two stalwart bachelors Wilkinson and Gardener, both of whom decided to enter the matrimonial stakes.

We have visited many places, the most attractive of all being Alderney, which as most divers know is a place "out of this world". Falmouth and Portland also had to put greeting from the C.D.1. of "Start getting dressed" we now have "Why aren't you dressed?"

In September we shall be losing Leading Seamen Wilkinson and Templeton, who are taking the C.D.2's course. The team will consist of "The Boss", Lieut. Cdr. Warner, C.D.1 P.O. Howe, L/Sea Drain, L/Sea Hendricks, A.B.'s Gardener, Egan and Phipps.

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#### My Contribution to the Diving Magazine

W7RITE an article, he says. appropriately named. He could Pick up pen and paper and write a few hundred words for the Diving Magazine. Me write an article-that's a joke-it takes me all my time to make out a football coupon. Bur orders is orders, so I acquired pen and paper, which in itself was a major task. You see, all the pens were for decorative purposes only, prominently displayed above the divers badge on the blazer pocket, while the only paper available was of the wrong texture for writing on, indeed it was never meant for that purpose. However, when both the necessary items were obtained I retired to the little house for imagination-what could I write about ?

I could peel off a few vulgar stories but that would not be in keeping with the high moral standard of the diving fraternity, or I could tell you of the time my mother-inlaw caught her left ear in the mangle, but as you don't know her you would not appreciate the full humour of the situation. So I was forced to write about diving and the pleasures of working under water, of breathing through a mouthpiece that tastes like last week's socks, while a glorified clothes peg pinches your nose. Of getting wet and cold and generally miserable, but managing to smile when you notice that the public are looking at you. Do you know that there are some perverts who actually enjoy diving and are not really happy unless they are in the water?

I recall one such character who was in a unit with me, his name was Sharkey and he was very

-8-

stay in the water day and night if he were allowed, only surfacing for his tot, pay and meals and in that order of priority. He was a peculiar chap was Sharkey, always looked miserable when he was on the surface. never went ashore, never took any leave, but was content to sit waiting for his next dip. Once under water however, his whole character changed. All those cares would be lifted from him and he would gallivant around like a mating prawn, whistling through his mouthpiece like an out-of-work ship's siren. In the mess he never had much to say, he was rather a recluse, and no one knew if he was married or a free man, then one day his private life was exposed to us.

It was Sharkey's birthday. The news had leaked out somehow, and as is the custom in diving vessels we had 'sippers' all round. 'Sippers', for the benefit of the Totally Ignorant, is a sip of a tot of rum, and the quantity can be guaged when I tell you that three sippers make one gulpers and three gulpers makes one tot. Well, Sharkey had so many sippers that he got well and truly tight and did not know whether it was Christmas or the second Sunday in Lent, and was quite incapable of diving. When told to go and sleep it off, he pleaded that he was fit to dive, and when told he was not, he became hysterical and was carried weeping to his mess. Poor old Sharkey-everyone of us felt sorry for him and we did our best to comfort him by bringing out the spare bottle of bubbly and giving him a liberal measure. This stopped the tears but

started him talking and we heard why he was so keen to get under water. It appeared that some years previously he had become entangled in a marriage of convenience, he had married a brewer's daughter, but it had not worked out as planned, and after giving it a fair trial he had left her. I can't remember whether it was the second or third day of the honeymoon.

Since then his wife assisted by her

three brewerv brothers had endeavoured to find him, and what they were going to do to him was nobody's business. So he had qualified diver and only felt really happy when he was fathoms under-there was little chance of being found there.

Sharkey has left the Navy now, but I heard that he is still keeping out of sight. He is a sweeper in a sewerage tunnel, and of course he is still wearing a noseclip. A.L.

#### Notes from the R.E.D.S. (Marchwood)

- 9 --

VER the last few years we have been receiving regular copies of the R.N. DIVING MAG-AZINE and so far our Royal Engineer Diving Section here at Marchwood (Southampton) have made no attempt to contribute to the articles therein. We hope to rectify this in future issues. It is not commonly known (except perhaps by the Barrack Stanchions at Vernon) that the Royal Engineers now have an establishment of about 20 diversunfortunately the majority of these being 'paddlers'.

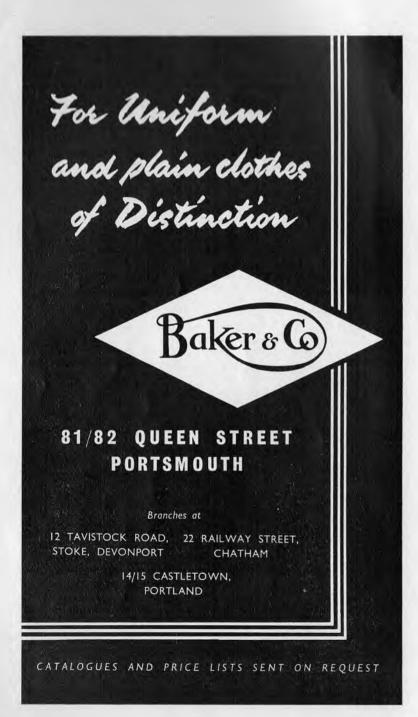
Here at Marchwood (the depot of all Port Units of the R.E.) we have at the present time, 1 D2, 2 D3's and 2 S.W.D.'s, the rest of the fraternity being spread out over various parts of the globe in places such as Singapore, Cyprus, Bahrain and the Christmas Islands. Most of the work undertaken concerns port maintenance, port operating and port construction, plus any 'perks' that happen to be in the offing.

Our gear consists mainly of C.A.B.A. (which is dying of old age), a rather quaint 'surface demand' which is similar to the Navy's 'Hooker', a couple of aqualungs and of course our old favourite 'Standard'. We are hoping in the not-sodistant future to be issued with S.A.B.A.

Our pot-dips are undertaken at Portsmouth aboard Deepwater and at least once a month the mess deck looks more like a barrack room than a matelot's 'grot'-it may be noticed on those particular days that the main store is heavily locked and secured!

May I say in closing my first literary effort that all divers (irrespective of shape or size) visiting Southampton will be made welcome by the R.E. Diving Section at Marchwood, or if in Singapore, by 10 Port Operating Squadron R.E. at Tanjong Berlayer.

Here's to S9's and no 'Jankers'.



#### S.C.U.B.A.

Our Malta correspondent has sent us an article from the *British Medical Journal*, which we reprint below by kind permission of the Editor of the *B.M.J.* and the author, M. A. Weller M.B., B.S., Although parts of the article are rather technical, we print it because of its general interest and the dangers which it illustrates.

The 750 litre cylinders referred to can be purchased easily for about 10s. in Malta, where they have several at the Diving School. They can be made into ideal aqua lungs and provided they are used with a reliable demand valve such as the 'Mistral' or 'Drager', and tested properly, a lot of fun can be had in complete safety.

#### ASPHYXIA WITH NITROGEN

A case of asphyxia with almost pure nitrogen under pressure is reported because of its rarity and because cases of a similar nature are likely to become more frequent as 'free' diving with self-contained underwater-breathing apparatus (S.C.U.B.A.) becomes an increasingly popular pastime.

#### CASE REPORT

A licensed aircraft engineer aged 29, a keen and experienced 'free' diver, flew round the world. While at Honolulu airfield he asked an airfield technician to refill his 750-litre cylinder with air to a pressure of 150 atmospheres. The cylinder was painted grey with a black-and-white band at its upper end, and was clearly labelled 'AIR' (see photograph). In due course the cylinder was returned to him and he came back to this country with it and the

rest of his underwater-breathing apparatus.

Two weeks later he went 'free' diving at the local swimming-baths. After boasting to his friend about his 'fresh air from Honolulu' he adjusted his equipment, took a few breaths to test the valves, then entered by the ladder at the deep end-6 ft. (1.8 m.)-breathing through his open circuit apparatus. He remembers striking out from the side of the bath and a moment of realization that something was wrong before becoming unconscious. He remained underwater for only about 30 seconds before his companion realized he was unconscious.

He was quickly and easily brought to the surface, but difficulty was experienced in lifting him to the side of the bath, and his right forehead was then bruised. He was noticed to be intensely cyanosed, especially in his neck, and his mouth was closed



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tightly on the mouthpiece of the apparatus. He vomited and defaecated almost at once after removal from the water.

Artificial respiration was begun by Schafer's method, and oxygen was administered shortly afterwards by ambulance attendants, who were quickly on the scene from their ambulance station immediately opposite the public swimming-baths. When seen, about 20 minutes after the accident, his behaviour was very similar to that seen in recovery from nitrous oxide anaesthesia. He was stuporous, but could answer his name, repeating it many times. He repeated, 'I have been drowned; I am all right,' and burst into laughter.

His temperature was  $97^{\circ}$  F. (36.1° C.), pulse 108, and B.P. 150/90 mm. Hg. There was a superficial bruise on his right forehead. Subconjunctival haemorrhage had occurred in the lateral aspect of his right eye, and pinhead ecchymoses were seen in his right sclera. The pupils were equal and dilated, and reacted to light. The fundi were normal. His cranial nerves were normal, and the only abnormality evident in his central nervous system was that his reflexes were all brisk.

During the next 12 hours his level of consciousness rose to normal. He vomited two or three times. Subconjunctival haemorrhage was evident in both eyes, such that the whole of the sclerae were suffused with blood. He had diplopia and difficulty in focusing. Otherwise he was well and able to get up to go to the toilet. Thirty-six hours after the accident he was discharged home, where he remained symptom-free. His subconjunctival haemorrhages were still obvious three weeks later but were resolving peripherally. Subsequent analysis of his 'compressed air' cylinder showed that it contained oxygen 0.5%, nitrogen 99.5%, carbon monoxide nil. In fact, his cylinder had, by mistake, been filled with nitrogen at Honolulu.

Nitrogen, used commercially as an inert gas for pressurizing aircraft petrol tanks, is stored in cylinders coloured grey (B.S. Colour No. 30) with a black band lettered with the symbol 'N'. Air is stored in cylinders of identical grey colour, but with no black band or symbol. Both cylinders have a right-hand screw thread. It is easy to understand how this mistake in identification of cylinders occurred.

To conclude this unusual record of chance occurrences it seems reasonable to report that the patient was tragically killed five weeks after this incident in an air crash in the Libyan Desert.

#### DISCUSSION

The points of interest and the lessons to be learned from this case are as follows.

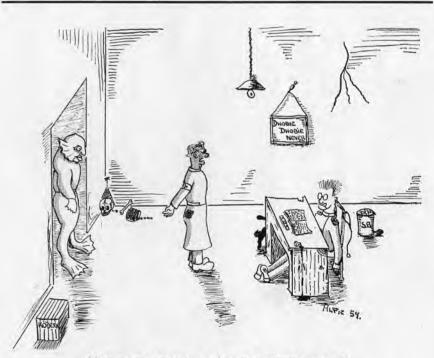
1. Nitrogen is present in atmospheric air at about 79%, and is an inert odourless, colourless gas. Sudden exposure to air containing less than 4% of oxygen causes loss of consciousness, with hardly any warning symptoms, within about 40 seconds (Hunter, 1957). Francheteau (1954) describes the rapid onset of unconsciousness occurring in three men who entered atmosphere containing 96% nitrogen, and Wright (1940) states that unconsciousness develops suddenly in 45 seconds if pure nitrogen is inhaled. In the case reported unconsciousness occurred in less than 60 seconds after breathing pure nitrogen. A simple safety precaution can immediately minimize the dangers of a repetition

of this accident. It is recommended that all 'free' divers using S.C.U.B.A. breathe through their apparatus for a timed 60 seconds, observed by a companion, before they enter the water. If their cylinders are charged with pure nitrogen by mistake they will become unconscious in that time, and their companions will have a relatively easy task reviving them.

2. The accident reported is analogous to the 'mistaken cylinder' accidents of anaesthesia, the incidence of which has been reduced by strict care in the identification of cylinders by their colouring and labelling. Commercially, care is taken also, and distinctive colours and left-hand threads are used for the cylinders of potentially explosive gases. Air and nitrogen cylinders, however, are a similar grey colour. A change of nitrogen cylinders from grey to a more distinctive and alarming colour is recommended.

3. It seems reasonable to assess this patient's symptoms and signs as resulting from three factors: sudden unconsciousness due to anoxia; subsequent behaviour due to nitrogen intoxication ('nitrogen narcosis'—Hunter, 1957); and his subconjunctival haemorrhages due to local 'squeeze' (Lanphier, 1957), a pressure effect similar to suction produced in his face-mask while he lay unconscious under 6 ft. (1.8 m.) of water.

MICHAEL A. WELLER, M.B., B.S.



"Next case, excessive underwater operating, Sir." — 13 —

#### News from 'Forth'

T is a long time since we in *Forth* contributed an article for our many readers throughout the world, so here goes and we endeavour to make up for lost time.

During the past seven months we have had several interesting cruises to French and Italian ports, including a week at Toulon and a week at Genoa, these two places being of special interest to the divers.

At Toulon, we were able to visit the French Diving School, and see their organisation for the training of divers for the fleet. It will be interesting to note that this school principally trains the frogmen of the French Navy in the use of aqua lung. The sight of some of their fine equipment made our eyes sparkle.

The second interesting place, Genoa, provided us with quite a mixed bag, for berthed not more than the width of a diving boat away, as we lay to the jetty, were two American destroyers and their depot ship likewise secured. Furthermore, Genoa is the home town of some well known diving personalities, and we had the pleasure of meeting Professor Luigi Ferraro, Rag. Anton Egidio Cressi, Doctor Luigi Stuart Tovini, and Marion Catalani.

As could be expected, it was not long after we had secured and the brow was ashore that the Chief Diver made his pendants to the Chief Diver aboard the American depot ship and a strong friendship materialised. Once again we were most impressed with the diving equipment they carried and had available for immediate use. It would seem that for general every day underwater work on the depot

ship, and the destroyers attached. gas-mask diving was their pet equipment, similar to ours but with one big advantage (?) because the diver can adjust his own air supply according to depth, thus preventing the unnecessary quantity of air rushing past one's face (especially at shallow depths). Off the cuff, we were able to make a fair exchange with our American friends and we now possess for trial purposes one of these adjustable own-air-supply face masks. We were also shown the American Navy aqua lung, similar in design to the standard civilian set, but nevertheless a very desirable piece of equipment to possess, especially as the sets designed for the Royal Navy are still not available to all.

On the next to last day of our stay at Genoa, Professor Ferraro, Rag. Cressi, Doctor Tovini, and Mario Catalani, were invited on board to lunch and a tour of the ship. Naturally their main interest was in viewing our re-compression chamber and the diving equipment carried, followed by a visit to the submarine Tally Ho. At this stage I think I should mention a few words about our distinguished visitors. Professor Luigi Ferraro is the Italian ace frogman of World War II. who, with his underwater teams, caused us many a headache and pain by his activities in Alexandretta Harbour and Gibraltar. For these episodes he was awarded the Italian Gold Medal of Bravery. the equivalent of our Victoria Cross.

Rag. Anton Egidio Cressi is worldfamous for his production of underwater equipment (suits, fins, face msaks, snorkels and underwater guns, etc.) and was a pioneer of spear fishing in Italy. I do not wish to embarrass him by mentioning his age, but I would like to say that I only hope I am as active as he is when I (if ever) attain his age. He thinks nothing of a one or two hour underwater fishing expedition every day throughout the year.

Doctor Luigi Stuart Tovini is a well known underwater sportsman and the first Italian Spear Fishing Champion. He is also a well known director of underwater films, working on many occasions with Hans Hass. The "Blue Continent" and the "Last Paradise" are two of the films he directed. He also produced a number of shorts for B.B.C. television.

Mario Catalani, another wellknown underwater sportsman, won the World Spear Fishing Championship in 1957. He is also renowned for the fantastic depths he is able to plunge to on one breath. (We did hear the figure 42 metres mentioned but we may have this wrong !)

This visit was covered by the Italian Press and television, and it was hoped to forward photographs taken on our quarterdeck at the time, but unfortunately to date we have not received the photographs.

After our guests had been wined and dined, *Forth*'s diving team were invited to go on a tour. The first place we visited was the Fire Brigade Headquarters, which as well as covering the city for all emergencies, is also a training school for firemen throughout Italy who are required to undertake underwater rescue work. The equipment used was primarily of the self-contained type working on the same principle as our self-contained sets, including both oxygen and compressed air types. In general a most interesting visit. As a last rider, I would like to mention that all the team were invited to try the firemen's emergency pole so reminiscent of the "Keystone Cops". This was a most interesting spectacle to watch, Dixie Dean's effort being the best. A crash and a bang, cigarette in one direction, cap in another, and Dixie was at the bottom wondering what had hit him.

Our next port of call was the Carabinieri Barracks. The carabinieri are the well known Italian State Police and have their own diving teams specially trained in detective work and the recovery of bodies and guns and miscellaneous items used in the world of crime. Their equipment primarily consists of aqua lungs and many interesting pieces of equipment were laid out for our inspection. All divers of these units are trained by Professor Ferraro.

With the sands of time running short we were taken to the Cressi Factory for a conducted tour by Rag. Cressi and Doctor Tovini, where we were shown the rubber in its raw state being processed for the making of the many types of diving equipment produced at the factory. From the moulds and presses we were then shown the assembly lines where all the bits and pieces were assembled into the finished article as bought in any underwater-sports shop. The stock room was a sight for sore eyes: masks of all shapes and sizes, fins of all kinds, snorkels, spear guns and Cressi underwater oxygen sets, in countless numbers. From here we were taken to the show room where one was able to view one of each of the various items produced at this factory. A most impressive array. To bring to a close this most



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interesting tour, Rag. Cressi invited us to select any article (within reason) that we would like to take away as a memento of this occasion. Fins and face masks (Pinnocio style and plain) seemed to be the popular selection. We were also presented with a miniature set of underwater swimming equipment which I am sure will take a place of pride in our divers' showcases at home.

As we departed our hosts expressed their desire to meet any R.N. diver who may be passing through Genoa, and we sincerely hope that any ship visiting Genoa in the future will enjoy the wonderful hospitality that was offered to us.

In between cruises, Forth's diving team do work. Our primary object in life is to keep the submarines in running order and to recover the hundred-and-one items that always

seem to be by accident or otherwise dropped over the side, accompanied by the same old cry, "Can you please recover so and so-it dropped just here". Of course it hadn't. We even recovered all the Naval Stores ledgers from the bottom of Msida Creek. It says something for our honesty that even the Diving Permanent Loan List was brought up !

Our diving team at present consists of : Lieutenant Newman. Lieutenant O'Brien, C.P.O. Jackson, Diver 1, P.O. Dean, Diver 1, Shipwright Court, A.B. Davidson, A.B. Elliot and A.B. McLuckie. We also have a strong team of S.W.D.'s, including several from the submarines. Our recent departures are: A.B. Lewis, A.B. Dobson and A.B. Pennington.

S.J.N.

#### A Few of the Precautions useful to note by the Chap in Charge of the Diving Boat

Check over all the gear you will need in plenty of time before you proceed, for, once you have 'slipped', and are under waythe 'WEIGHT' is all yours, and be sure that you'll pay for anything faulty, or maybe forgottenwet protosorb, or diaphragm rotten.

Lifeline unmarked, suits that are split (especially in the place where you sit). Boots without laces, sheaths without knives. a 288 for recording the dives. Watch, pencil, and manual of divingall assist you in earning your living.

Have you brought enough divers along? (remember the words in the old fashioned song, 'enough is as good as a feast, so they say') are your numbers enough to keep danger at bay? Or will you be worried when one's down below with no one as 'standby' and ready to go? Sufficient attendants, ladder and shot;

If you haven't got these - then aren't you a 'clot'? Weights for the diver, set prepared right. if necessary, why not the light? For sometimes it's useful, as all of us know. remember how dark it can be down below. When did you last have a test on your pump? As the boys heave around, is it going to jump? Forget not the lashings, for how embarrassed you'll be if on the first 'heave' it falls o'er in the sea. Have you the tools, spare washers, and 'greys' that are always in use by the divers these days. Woollies and jockstraps, weights (front and back). Make sure that the air pipe connections aren't slack. That the valves on the helmet are efficiently working. and also the reducer, its job is not shirking. Remember the flags that are to be flownhave them displayed when the diver is down: and, if it be that you're diving at night. be certain your lights are plainly in sight. If the 'torch' you are taking along for the work. for goodness sake check all the 'bits', and don't shirk the loading of bottles, both gases, enoughfor it's always the same when the metal is tough; you find that you've run out of what you require and THAT is the time when the 'Fats' in the fire ! Your name will be MUD and the diver will use (just for YOUR benefit) the best of abuse. After checking, and taking all care with the gear you are going to use — make it quite clear to ALL who are going, that no one gets dressed with the boat under way - in case it's upset. A diver needs food — so arrange for his meal; don't give him a chance to come up with a squeal. but cover his welfare (not forgetting his 'tot') list all you need, then get the lot. And now that you're ready remember what's top on the list of important duties you've got; SAFETY AND WELFARE OF THE DIVER ABOVE ALL Good attendance, and air, no squeezes from falls. If he gets attended in the way that he NEEDS YOU'LL get top efficiency in doing the deeds underwater, that will bring to your side the BOSSMAN himself — all glowing with pride in the knowledge that here are the men, trusty and sure, who all know their jobs, and can be relied on, what's more. So if you are one who can 'shake out the lead'. Crack on with the job and KEEP A LEVEL HEAD.

#### (Sir Hook)

F. WALKER

#### News from Iran

Lieutenant Burstall who left Deebwater some months ago to go as British Naval Adviser in Bandar Pahlavi. He gives the following account of what seems to have been an interesting journey.

'I have finally made it after many setbacks on the way here and a number of frustrating delays, taking in a sort of Cook's tour of the Middle East, including Ankara, Instanbul, Beirut, Bahrein, Abadan, Khorramshahr, Teheran and finally this place.

'All went fairly well until Ankara. There the Turks decided to leave 30 minutes early, and I arrived as the plane was taxving on to the runway. However I just managed to catch it with a whole host of customs, immigration and health officials running behind and frustratingly shaking their fists. In Beirut I was so absorbed in a bellydancer that I lost my passport, which luckily turned up just in time at the airport.

'Bahrain was fine-four days swimming, sailing and drinking, but when I came to leave I was snarled up in the local annual pilgrimage to Mecca. Arabs everywhere and 120° in the

letter has been received from shade, which meant I had to spend another four days in a god-forsaken placed called Kuwait. It stinks of money, and all the locals there drive 1961 models of Chevrolets, Buicks, etc., but are still not interested in shoes or soap. Abadan was hotter still and all the tarmac was nipping off down the runway in a river.

> 'At Khorramshahr I took a boat trip up the Shatt (Full of Sharks) and the local Mede managed to put us aground. Teheran was a great improvement; every private house has its own swimming pool, and there are at least one or two Western-style W.C.'s. Landing in Pahlavi was interesting, as the airstrip has the best grazing in the locality. We had to make three passes at it at low level to scare the cows, sheep and horses off before landing. I stepped out into a cow-pat. That same night I tried the local vodka. Two bottles of it laid me out for 24 hours. It looks rather as if it's not going to like me, which is a pity as it's the same price, bottle for bottle, as beer.

'Regards to all and sundry and salaams from the Caspian Fleet Clearance Diving Team.'

#### The 'Voyager's' Return

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with the United Nations Strategic Reserve in Far Eastern waters, Voyager turned her bows homeward and, after calls at Fremantle and Melbourne, reached Sydney in September 1958. First things first, and within a few minutes of berthing at Cruiser Wharf, Garden Island Dockyard, a stream of men and "rabbits" was moving swiftly

FTER a period of seven months from ship to shore. Not long afterwards the tide turned and there was a surge of wives, fiancés and sweethearts back on board to have a looksee at the ship which had carried their menfolk on a tour of "The North", from Sydney, via Cairns, Darwin, Singapore, Manila, Hong Kong, Tokyo, Otaru and Penang, back by way of the Sunda Strait, westabout round Australia to Syd-



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ney. Quite a tour, and one which was certainly not a pleasure cruise from beginning to end.

The ship had been exercising nonstop from January to June 1958 and it was a blow when the much looked-forward-to trip to Japan was ended abruptly by the news of troubles in the Middle East which. for us, resulted in a high speed dash from Hokkaido to Singapore. Bang went our last minute "rabbit run in Hong Kong, and many were the shopkeepers in that port who cursed roundly at being left with halfcompleted orders on their shelves as Voyager moved out of Lei-u-mun only four hours after entering harbour !

During the latter part of the cruise, therefore, the Divers had little chance of dipping and our arrival in Sydney was taken as being the signal to re-commence underwater activities. The Diving School at Rushcutter's Bay lent us an M.F.V. and we started two five-day " Refreshers " for the team which, at that time, was 11 strong. Simultaneously, we started a qualifying course for four new divers, so the equipment was certainly not left idle for a moment — in fact we had to borrow gear from the Diving School in order to keep the gang occupied.

The weather was warming up and the waters of Sydney Harbour and its surrounding coves were at just the right temperature for "skin" diving: the few "suit" dives included in the course syllabus were NOT popular! As for the dives to 80 feet in suits and boots for hammer and chisel work, well volunteers there were none.

But the main practice needed was getting used to diving in Australian shark waters once again. Now there

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are sharks in the waters around Singapore and the off shore islands and we had dived there often enough -(the only time we stopped was when there were at least half a dozen bronze whalers close aboard the ship)-but for some inexplicable reason the known presence of Tiger sharks at Pulao Tioman, for example, didn't worry the team at all. However, the Australian sharks are a very different crowd-as Hans Hass found out when he visited the Great Barrier Reef area-and it took a little time to get used to diving in Sydney Harbour after an absence of seven months. Despite all the books that have been written on the subject, it would seem that the only thing which has been established about sharks is that they are completely unpredictable and our team obviously bore that in mind for their first few dives-judging by the slowness of working and rapidity of leaving the water. Talk of "Noah's Arks" and "Gentlemen in Grey Overcoats" was heard all too frequently until, after two or three "dips" with no sign of the enemy, nerves steadied up and the standard of work returned to normal. For the record, during the 10 days of training we sighted nothing more terrifying than a series of sting rays-not a single shark put in an appearance near the diving boat.

One of the tasks given to the team was that of checking the groove of the Captain Cook Dry Dock prior to placing the caisson, and it was during that job that the biggest underwater beastie of the fortnight put in his appearance. A diver descended to the bottom and then swam across the dock checking that there was nothing in the groove which could foul the caisson when it was placed and flooded down. The groove is about four feet wide

and the diver was feeling his way along it when he came up against an obstruction-a giant ray whose "wings" overhung the edges of the groove on both sides. At a rough estimate the creature had a wingspan of over six feet—but the diver did not stay around long enough to make more than a very rough estimate before leaving for the surface. It took a certain amount of talking to persuade him to return to his job but, when he did go down again, the ray had gone. There were some prize "fishermen's stories" told at dinner time that day.

Later in the course we were carrying out a search of the *Sydney*'s bottom when we were joined by an underwater cameraman who was experimenting with flashlight shots under the carrier's hull. He took one or two photographs of the team —somewhat to their surprise at times.

To round off the courses, we organised a Families Day. Each diver was invited to bring guests and we embarked them in the diving boat, took a picnic lunch, and chugged our way round to Chowder Bay for an afternoon of "mixed" diving. The ladies were invited to join their husbands or boy friends in a series of excursions into Neptune's kingdom; and one young lady, at least, did not need a second invitation. (In fact we couldn't get this lass out of the sea-all she did when called up was to remark, "This is beaut !" before disappearing below the surface once more.) The diving boat hummed with activity as couple after couple took their turn with the sets. The girls who were waiting to dive watched-some a little anxiously -to pick up "tips" from those actually in the water, while the men either tended divers or carried out a safety patrol under and around the boat. Even "Junior" took his turn on compressed air while Mum looked on !

Finally the Captain, whose last dive in Sydney it was to be for a while, decided it was his turn, and afterwards, everyone having had a "dip", we called it a day. The Banyan was voted a success, especially by the ladies, who had decided that diving was definitely a good thing.

Now, with our refit behind us, we are off back to the Singapore area to take part in the SEATO Exercise "Sea Demon", so doubtless the next few months will provide us with the material for our next contribution to the magazine. Meanwhile, from us "Down Under" to you "Up Top", pleasant dipping—and here's hoping that the summer weather thawed the ice on Horsey Lake.

VOYAGEUR.

#### Command Bomb and Mine Disposal Unit

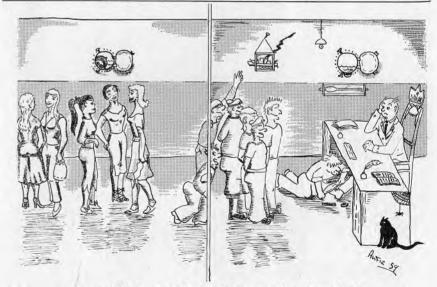
HAIL fellow divers from a Caledonia, which far from being stern and wild as the poet says, has in actual fact been bathed in glorious sunshine for the past month. (I must justify the large retainer paid to me by the Scottish Tourist Board.) We are still very busy in this unit, our travels having taken us to places such as the Shetlands, Scarborough, Belfast and Inverary, the one time 'Home' port of H.M.S. *Reclaim.* We regret that one member of our team, L/Sea. Davey of Auchtermuchty fame, has forsaken our evergreen pastures for the barren wastes of the George Cross Island.

As we have spent some time in the Shetlands recently, here are a few interesting points from these 'friendly islands'. The capital of the Shetlands is Lerwick with a population of 6,000 and it is a very busy fishing port, frequently visited by the Russian and Polish fishing fleets.

Most wartime submariners will remember Lerwick which was used as a refuelling base when operating between Dunoon and Iceland and the Scandinavian coasts.

The football season in Lerwick starts in May and most of the local teams bear such famous names as Hibs, Celtic, Tottenham and Arsenal. Apparently the locals have enough sense not to call any of their teams 'Pompey'. An interesting spot on the main island is called Mavis Grind. At this spot one can stand in the North Sea and throw a stone into the Atlantic Ocean. The Shetlands are a happy hunting ground for the archaeologist, and some very interesting discoveries have recently been made on the Island of Bressay. There are two very famous brochs in the Shetlands. a broch being a kind of fort built about the 2nd century A.D. These were used by the local inhabitants as a refuge-for themselves and their goods and cattle-from the raids of the Norsemen and the Romans. One is on the island of Mousa and the other, the Clickemin, is near Lerwick. Another link with the past is the great annual festival in the Shetlands known as 'Up-Helly-Au'. This recalls the days when the great Viking kings were taken to sea for burial and their ships set on fire.

Well, this is all for the moment from the Shetlands, but in closing it should be recorded that one of our members set up an all time record for the 8 miles walk from Scallaway to Lerwick.



'Please Chief, we don't mind doing the Sub Aqua Club' - 23 -



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#### Falmouth to Weymouth

I not of the statements of the statements being levelled at my barge and her crew, I am writing this short account of the voyage back from Falmouth to Weymouth at the end of the West Country summer training season. I don't think that there is any reason to justify here my late arrival at Falmouth, for those of you who have sailed any distance will appreciate that E.T.A.'s are difficult things to make good when the wind drops and the engine behaves like a badly stowed kedge anchor.

All diving trials and training had been completed in the Falmouth Bay area by midday Friday 10th July and the Dutch barge *Scaldis V* was to be found lying at a buoy in the harbour waiting for the westerly wind that the weather forecast had promised us. The crew consisted of my wife Jane as first mate, deck hands John Plumpton from the Experimental Diving Unit, Robin Apthorpe and Tony Rose from the training class and the paid hand Katey.

Had we had an engine that was in working order, we could have slipped our moorings when the crew was assembled and cleared the harbour immediately. However one must learn to be patient when relying on wind and anyhow, what is the hurry when the sun is shining onto one's back, especially when there is beer to drink, lunch to eat and a colourful Cornish town to look at?

At 1225 there was enough wind to take the mirror surface off the water and so we pointed ship, slipped our moorings and as the staysail filled in the light airs, we gathered steerage way and headed for the entrance of the harbour. Jane

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took the wheel and the men went up for'd to hoist the mainsail. This is always quite a job and on this occasion took us 10 minutes. The wind being astern hampered the evolution and it was not until 1240 that both sails were drawing nicely.

Having passed the shipyard, we lowered the port lee board, jibed and stood out of the inner harbour with an ever decreasing and shifting wind. Black Rock was passed safely even though the barge was drifting sideways, but once clear of that obstruction the wind freshened and an hour after slipping, St. Anthony's Head Light was abeam.

To begin with, the wind did not favour us with anything better than the occasional puff and at 1530 we had not even reached Dodman Point. The barge lay there rolling lightly to the swell and hardly moving through the water. The starboard lee board had to be raised half way up in order to stop it snatching against the ship's side as she wallowed. It was at about this time that the channel tide turned against us and sadly we watched the coast line going past us in the wrong direction as we lolled in the sunshine.

Although the wind was not favouring us, the mackrel did, and supper that first evening out consisted of those very pleasant fish. Others that were caught were soused to be eaten later.

The wind started at 2000, gently at first, but without faltering it gradually increased to force 2 Northerly. With the wind came the end of the fine weather heralded by a torrential downpour. For the next few hours thunder and lightning played their noisy games through the skies, fortunately never coming close enough to worry us.

I have learned through hard experience just how difficult it is to put a reef into a large sail at night, especially when that sail is not fitted with roller reefing. Accordingly, before I turned in, we reefed down just to be on the safe side. Even though it was not dark and there was not overmuch motion on the barge, the whole operation lasted 25 minutes.

Before the end of the middle watch it became obvious that the boat was making a cup of tea or two and the pump had to be put to good use. The wind had increased to force 4 to 5 Nor'Westerly which enabled *Scaldis* to lift her skirts and run to the Eastward with sheets eased well away and lee boards stowed. Salcombe was due North at 0900 Saturday and shortly after that we rounded Start and headed into Lyme Bay towards the Bill.

When we were well into Lyme Bay, the pump fell into small pieces all over the deck and it was obvious from just one glance that here was a dockyard job requiring welding gear, and little things like seizing wire and jubilee clips proved quite useless. The loss of the pump in a boat is usually a bit irritating but on this occasion it was enough to make even the hardiest bargee mutter four letter words into his beard. At this time *Scaldis* was enjoying a tea party that would have put that little frolic at Boston to shame.

Twice I hove her to in order to lessen the motion of the boat while we moved much of the water with buckets. The wind was then Southwesterly force 5 with one of those unpleasant swells that one tends to get in that area, The visibility on deck was not good mainly as a result of the intermittent rain and I was pleased to see Portland Bill Light at sunset, especially as it was where I had expected it to be. We were heading for the inner passage round the Bill in order to get into the sheltered water of Weymouth Bay and there find the leak, dry the bilges and carry on towards Portsmouth. Accordingly, we closed the Portland Bill Light.

Shortly after Midnight, I put the wheel up and steered so as to pass  $\frac{1}{2}$  cable clear of the Bill. The motion on the barge was too great for bailing and so the water down below was just left to increase of its own free will. The swell was now on the starboard quarter and imparting a crazy corkscrew motion to that red and yellow craft that was laboriously making its way against the tide.

At half past midnight we were close to Portland Light. Its intensity was sufficient to light up the coast-line beneath it and before that we had been steering relative to the Bill as silhouetted against the Shambles Light. The movement on the barge made steering very hard work and so I asked Jane to take over as my lee helmsman. As the two of us spun the wheel this way and then that, we could look over our shoulders and, in the beam of the lighthouse, see the white horses of the race then running on the starboard quarter. The swell was enormous although the wind was not great.

By 0200, we had finished rounding the Bill by the 'biscuit toss' passage and were able to steer North East to stand into Weymouth Bay and sheltered water.

It is a strange fact that to the east of the Bill, the tidal stream, except for four hours a day, sets always to the South. It sometimes goes faster or slower, but for twenty hours a day its direction never changes and any boat rounding the Bill should bear this in mind if steering to Weymouth.

Just before dawn the wind started to drop but the swell to the north of the race was just as great as ever. As the wind dropped we started shaking out reefs but even so we were unable to achieve sufficient headway to overcome the effect of the south-going tide and by 0430 compass bearings of the shore told me that once again we were on our way back. This time there was no complacency to be found on board. Circumstances had changed since that time off Dodman Point for now astern of us there could be seen something that has a pretty considerable reputation throughout the sailing fraternity of not only this country.

Portland Race can be really almost tame in calm weather and during neap tides but even on such occasions one is well advised to give the area a wide berth if possible. The disturbance of the water in that area is caused by the meeting of something in the nature of seven tidal streams. Portland Bill gives a wonderful funnelling effect to all these tides and Portland Ledge tends to make the one try to pass over the other thus causing the most incredible overfalling effects. Now if you add to this mess the effect of a long Atlantic swell and the increased speeds of spring tides, you might be able to picture something of the conditions to be met on that morning of Sunday 12th July. On second thoughts, I don't think you could unless you too have seen what it can be like in that area.

At 0440, I fired a distress signal in the hope of getting a tow away

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from the area of that witches' cauldron. It was a vain hope really and 40 minutes later it was obvious that we could not escape it. The main sheet was hauled in short and the boom lashed so that it could not swing. Both runners were hauled taut and belaved. The girls stayed in the deck house and the men held ready in the cockpit for any emergency. There was nothing more that we could do and the battle had now to be fought by our proxies.

At 0540 it started with 30 foot waves throwing the 69 ton boat up and down from trough to crest as an irate school master does with a piece of chalk. Poor old boat. She had never been designed for treatment of that magnitude. Her broad planks and bluff bow had fitted her for calm waters where she should have spent her later years gliding upright and with stately grace, perhaps on continental canals or river estuaries where she would be responsible for turning many heads to stare and wonder at her old-world beauty. But here she was on the high seas at dawn combining her own efforts for dignified survival with the forethought and experience of her crew.

There are occasions when what we call the inanimate seems to join with us and fight for us, when what apparently has no life makes an effort as though life is merely latent in its fibres and requires atmosphere and urgency to manifest it. From midnight to 0600 *Scaldis* went through such an occasion with the gameness and dignity of a middle-aged duchess dancing the Charleston. She came out of her ordeal as she had gone into it—dignified and beautiful—but the effort required took its toll.

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The waves that we met were half the distance apart that one would normally expect them to be. The direction from which they came differed by as much as 90° and it was necessary to keep her stern into them to avoid shipping water into the cockpit. Only one sea came inboard and that was before the real fun started. It threw Jane right across the cockpit deck and as the barge rolled it washed her back again before the cockpit drains cleared it away.

One sea caught the rudder with a tremendous clout and all but carried it away. It was useable up to about 10° of helm. Fortunately, by that time, the worst was over.

I believe that had *Scaldis* been a lesser boat, 70% of the waves would have broken onto her upper deck. It would have been impossible to remain in the cockpit and we would have had to remain down below. Fortunately, our passage through that inferno was made comparatively safe by the fact that *Scaldis* has a broader stern than any middle-aged char that I have ever seen.

Often as we lay in a trough, I would look up at the next wave towering over us and breaking as it came and I would wonder. But the miracle always happened and we were always lifted well over the danger by our buoyant stern.

As we came out to the South of the race, we could see the lifeboat and that was a very pleasing sight. They passed us a tow and we stowed our sails.

Everyone in Weymouth was kind to us on our arrival but my thanks go to the men of the Lifeboat Institution who brought us in and berthed us alongside with faultless seamanship. To the fire brigade we owe much, for they pumped out the bilge for us in the absence of our pump. In calm water we found that there was about four inches of bilge water over the cabin sole — or where the sole should have been had it not been washed away.

By 1630 we were comfortably on a slip and able to go ashore and have the first meal of the day. So ended an unforgetable adventure throughout which the Rayburn stove never went out.

#### B.D.O. Diving Team, Hong Kong by Chief Petty Officer Peach

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CAN'T remember the Diving Magazine receiving a letter from this team before, but I believe it must be that Devonport Division wished to keep its existence a secret from the other depots. However, because of centralised drafting I managed to snake in, only to find I am left with the obituary notices to write up as the team is now redundant.

The last team in commission was headed by Petty Officer Lewis, assisted by Petty Officer Welsby, Able Seamen Marshall and Cameron. Fortunately for me this is the second time I have been a lone Pompey diver cast amongst 'Drake's men', who I know are all pixiated, so I took my turn-over without alarm, even if it did mean "Don't tell the chief " or, "Don't tell the Captain " —all very secretive—and as there was nothing to tell I had to keep it to myself.

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Lowering concrete container

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The units here since the war have primarily been employed on examining fleet moorings, working in conjunction with B.D.O. With the approach of the Dockyard shutdown, most of the moorings have been lifted and sold as scrap, sent back to U.K. or Singapore, or retained as spare for the few moorings remaining. All this was carried out by the boom vessel Bartizan, captained during my little stay by Lieut. Cdr. Bridger, R.N. on loan from H.M.S. Newfoundland. His ego for getting the job done left us all breathless but still very happy. A month before Bartizan sailed for Singapore, Lieut. Cdr. Bridger returned to the Newfoundland. He was relieved by Lieut. Perry, R.N., also from H.M.S. Newfoundland. He supervised a short refit for Bartizan then steamed her to Singapore to be turned over to B.D.O. there. His stay was short and sweet.

The maintenance of the few remaining moorings now comes under contract to a local civilian firm.

For a few months the team were busy constructing a concrete base on which to lay a wall of precast concrete blocks to close off the boat slipway, which is now being filled in and will eventually form a new main road through Hong Kong. I am happy to report that the underwater work went very well and the team received a strong recommend from the Civil Engineer through the Commodore, H.M.S. *Tamar*.

Shortly after Xmas the team joined with the F.E.C.D.T. in a

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"Yorkshire" run which started with beer and skittles in the Fleet Club but ended with beer only because too many divers insisted on launching themselves down the bowling alley as well as the ball, and the marker was getting confused because he didn't know whether a shout of 20 meant an order for pints or the number of skittles knocked down. The run started with a full muster but when it had developed into each one pulling his own rickshaw and the clock said it was late A.M., things started to thin out a little. However, a pot-dip on Saturday morning cleared all heads and there were no repercussions except for Mac, who held the kitty. After a Jewish march past on the morrow he was positive he must have included 100 dollars from the wrong pocket. I'm afraid all he got by way of reimbursement was a pat on the back for such generosity.

During spring we were visited by standard divers of the fleet from H.M.S. *Albion, Ceylon* and *Dampire*; they seemed delighted to be able to wear the big hat by way of a change from self-contained equipment. Alas, I doubt if there will be any recurrence of these pleasures as our boat has received the final axe and the equipment now reposes like ancient relics in a dockyard store.

Petty Officer Welsby and Able Seaman Cameron have their flying orders for August (without relief) and I expect mine will arrive soon after. For the time being we are spending the forenoons in the Dockyard Swimming Pool with Patt 5562A. At least it is one way of keeping cool.

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#### Disposal of Japanese Torpedoes

On June 9th 1959 the International Salvage Company discovered live torpedoes in a submarine being salvaged in the Singapore Roads. Diving ceased and M.F.V. 1044 was requested to take a team to investigate.

The preliminary survey by the Fleet Bomb and Mine Disposal Unit took  $25\frac{1}{2}$  hours and it was found that the submarine had been rammed 53 ft əbaft the bow and the section containing the forward tubes had broken away and wəs lying on its starboard side. The break was 14 ft aft of the ends of the tubes, which contained six torpedoes covered with torn plating, cross beams, cable gear and part of the saddle tanks. The torpedoes were suspected to be 21" type 95 with 870 lbs warheads.

Diving conditions were fair—little tide, with visibility changing with tide between zero and three feet; depth of 75 feet and mud or hard rock bottom.

Conditions alongside H.M.S. Laburnum in the Telok Ayre basin, between dives, were excellent. We used their power boats, canteen and bathing facilities.

The Fleet Torpedo and Antisubmarine Officer and Chief of Staff decided that it was too risky to countermine the torpedoes in situ.

Both Boom Defence Vessels were refitting, so the Salvage contractors moved the 'dangerous bit' out of the shipping lane to a safe position.

The bow section was now lying keel uppermost at approximately  $45^{\circ}$ , supported by a 120 ton pontoon and 4 ft 7 in wires, in 42 feet of water with soft mud bottom. Visibility varied with tide between 18in. and 6 ft. The plating was twisted

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and hard against the tubes in places and therefore was removed.

Many methods were tried to remove the torpedoes from the tubes; including parting the tubes at the middle flange which was joined with 1 in bolts. It was hoped, then, to unbolt the warheads. It was not successful.

An attempt was then made to cut the tubes out one by one. After cutting away plating, frames, rivets and a section of the keel it was found that cutting the 6 in. thick flange where the tubes passed through the bulkhead generated too much heat too close to the warheads (the tubes were 8in apart). The next plan was to cut the tubes out in sections of three. The tubes were 20 in apart laterally and it was thought that, after clearing away the bow-door operating rods and various pipes, it would be possible to get into the gap and cut down the centre bulkhead. However, once in, it was not possible to move let alone cut. F.B. and M.D.O. spent 10 minutes getting out.

It was then decided to lift all the tubes together after they had been cut away, leaving a dead weight of 15 tons. A lifting vessel was necessary and H.M.S. *Barfoam* had completed her refit.

*Barfoam* laid two moorings from her bow and two stern anchors and then took the weight of the wreck from the pontoon.

The weather deteriorated giving a 2 ft-3 ft swell which continued throughout the operation.

The bulkhead was cut through past the centre line by about 6 in and the forward longitudinals cut. After unsuccessful attempts by *Barfoam* to put the section over on the other

tack an attempt was made to cut through the bulkhead from the lower sid .. An acces; hole was cut, but it became obvious that the final cut made from this position might allow the diver to be crushed by the tubes moving. The access hole on the other side was therefore enlarged and the centre beam cut away; the diver could now reach across to the cut made from the other side. The final cut was made and the diver was able to get out of the hcle. In a short time owing to the swell the tubes settled back to the position from which the diver had been cutting.

The tubes were ready for lifting and after four attempts — failures due to small projection, getting foul before being cut — the tubes came clear and hung below the horns of *Barfoam*. It took two days to transfer the tubes to *Barfoam*'s stern and secure them for towing and dumping.

We had other difficulties not mentioned above. The torpedoes were armed ready for firing. They had been 15 years in the water and the detenators were extremely sensitive. The detonators were screwed into the primes which were screwed into the main charge. We were not sure whether the oxygen bottles in the tcrpedces were fully charged or not.

We had no drawings of this type of submarine to help us to know where to cut. The submarine was covered in barnacles on the outside and mud and pitch on the inside; on cutting, this bubbled and made the most alarming bangs. This was overcome by cutting small access holes and chipping down ahead of the cutting torch.

*Barfoam* was most considerate and helpful, and her ability to raise large lumps saved many hours of cutting.

As a result of this work the following awards have been promulgated:— Lt. (SD) P. J. Messervey, M.B.E., R.N., has been awarded the George Cross and P.O. H. Roberts has been awarded the B.E.M. (Military Division). 'Congratulations Pete and Robbie' from all of the Branch.

#### Mediterranean Fleet Diving School

We have quite a lot to say for ourselves in this issue—so much has happened in the last few months. The arrival of our longawaited M.F.V. 1151 to serve as our new diving tender has caused quite a lot of comment in the press.

'A 75 ft. R.N. M.F.V. commanded by Lieutenant W. Crutchley, R.N. of Bridport, arrived in Malta on Tuesday after a 2,000 mile voyage from the United Kingdom which took 28 days to complete. The M.F.V. was brought over to Malta to serve as a depot ship for the Royal Navy's Diving School, Malta. She was formerly the Squirrel and was employed on fishery protection duties before she was reduced to reserve. M.F.V. 1151, one of the larger class of such vessels. is believed to be the only one of her type still having tall masts and foresail, mainsail and mizzen. Good use was made of these sails during the trip from England to Malta, not to increase the speed of the boat but to act as stabilizers during the heavy weather met with en route. The M.F.V. had a crew of 2 officers and 11 ratings-some came from H.M.S. Vernon and others from the reserve fleet. The ship left Devonport on 1st April, and much was made of the fact that it was All Fools Day and that the crew numbered 13. Up to Cape Finisterre the little M.F.V. was escorted by the tug *Accord*. They had fair weather all the way and during their journey down obtained their best speed of the trip  $-9\frac{1}{2}$  knots. They put into a small Portuguese port to make good slight engine defects and sailed serenely for Gibraltar where they spent what was decided as " a very pleasant week".

Since 1151's arrival in Malta we have installed a R.C.C. in the for'ard hold, and tucked away in another corner we have our small H.P. compressor for topping up C.A.B.A.'s. These craft do make ideal self-contained diving units available for submarine accidents and the occasional long distance diving job or jolly. Talking of jollies, we expect to take the M.F.V. to Augusta in Sicily early in August

#### Book Review

CHARKS! There are more theories and general ideas about these vicious creatures than any other beast of the sea. It is true to say that nearly everyone old enough to read has some pet theory on the subject; and as divers are known as the greatest talkers and budding Einsteins they have the most wonderful ideas of all. In fact there is little known about sharks and their habits. far less than all the other fish that are reasonably common, and because of their infamous reputation not many people are prepared to find out for themselves whether sharks will attack or not; or, in fact, any other details of their lives.

to do some diving and attend the regatta. We will let you know how we get on in our next issue.

Syracuse is only a stone's throw from Augusta and is famed for the ancient relics and amphorea that may be recovered from the sea bed.

About mid-August the World Underwater Fishing Championship took place near Comino. Competition is fierce—the Maltese are out for a win on their home ground. They came 5th last year at Portugal. Our diving M.F.V. will be standing by and acting as H.Q. and safety ship. It should be an interesting three days (see page 3)

By the time this goes to print both Lieutenant George Wookey and P.O. Clarke will have been relieved at the school, Sub-Lieutenant Jim Grace and C.P.O. Lock being the lucky successors. Lieutenant Wookey will be going to *Vernon* to do the C.D. conversion course and Nobby Clarke will be returning to the school in Oggi Land.

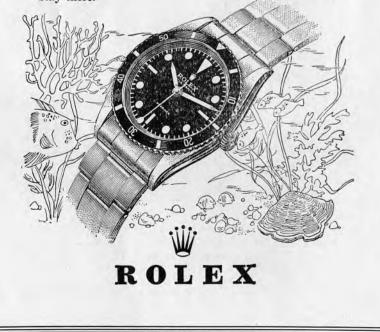


Doctor V. M. Coppleson, a wellknown Sydney surgeon, has written a book under the title of *Shark Attack* in order to remove the wildest of the theories and sea yarns about sharks and give some idea of their habits and their real danger to

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## A watch that stays waterproof 660 feet under water!

ROLEX have produced a new watch for sea-going activities called the Submariner. Particularly designed for deep-sea divers, this special Oyster wristwatch is guaranteed waterproof and *pressureproof* to 660 ft. (200 metres) under water. Incorporated in the Submariner is the revolutionary "Time-Recorder" revolving rim, which enables the watch to be used as a stop-watch. It is invaluable for navigation, speed testing etc., and *indispensable* to divers, who can now tell at a glance how long they have been under water and how long they may safely stay there.



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swimmers and divers. He has studied the details of every recorded shark attack since 1919 and also the few attacks that were recorded before that date. By comparing the details of these attacks—they have been recorded all over the world—he discloses some most interesting facts which are irrefutable on the evidence that he puts forward.

Sharks exist all over the world, including the seas around the British Isles, and there are many species that are known to be dangerous under certain conditions. It is these conditions which puzzle people and provide the mystery of the shark's habits. Why will even the most dangerous variety not attack people in the water when the water temperature is less than 70 degrees Farenheit? Why are twenty more men than women taken by sharks in the areas where shark attack is prevalent? Why are over 50 per cent of the attacks recorded between 3 p.m. and 6 p.m.? Why are nearly 70 per cent of the attacks in less than 4 feet of water when the greatest number of sharks are in much deeper water? Why will an attacking shark keep on at his victim and not touch those that are trying to rescue the unfortunate person? Why do sharks keep away for months from an area where one of their number has been killed?



FAR EAST CLEARANCE DIVING TEAM

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www.mcdpa.org.uk

All these facts emerge from Dr. Coppleson's book and they give great food for thought. However, this book is more than just a scientific survey of the shark's revolting habits; it is most interesting reading in a macabre sort of way and the book is well illustrated with photographs and diagrams. It is of interest to divers, bathers and

all men connected with the sea, especially as this book is the first ever to analyse the subject and put forward definite theories based on fact. It is at least some comfort to know one's chances should one of these unpleasant creatures be encountered.

LIEUTENANT J. GRATTAN, R.N.

#### Divers' Employment Bureau

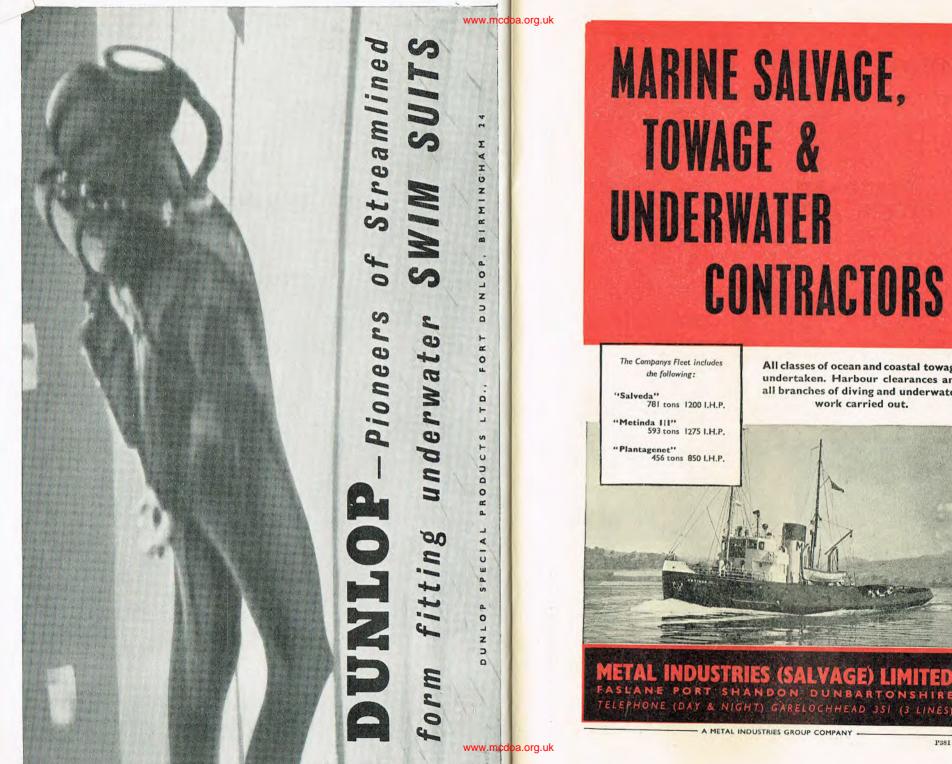
The Bureau continues to function, and if you wish your name to be recorded please forward the undermentioned to the Employment Bureau.

Applicants must be either serving R.N. Divers or Ex-R.N. Divers who are subscribers to the *Diving Magazine*.

Full Name	
Rating Off. No	Age
Time Expired or Expires	
Private Address	
Willing to Serve Abroad	
Diving Rate Date an	d Place Qualified
Equipment Experienced in	

Diving Experience

This information will be filed and referred to as and when diving employment is required. The Bureau does not assure you of a job, but it will advise applicants on vacant diving situations.



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