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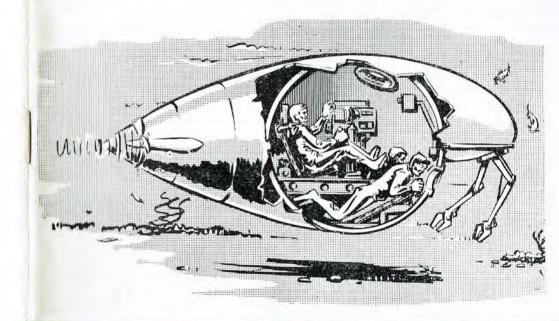
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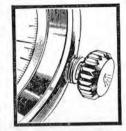




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R.N. Diving Magazine

EDITORIAL STAFF

Editor	 	 	P.O. V. GIBBONS
Treasurer	 	 	 S/Lt. P. R. PARK

Vol. 11 Summer 1964 No. 2

Editorial

NEW PAGE.

In this edition we have started a 'question and answer page', this is designed to help divers (civilian and Naval) solve any problem or question they may have on diving matters. If you send in a question it will be dealt with immediately and published in the following edition (anonymously if you are bashful).

COVER.

The new cover was designed and illustrated by Mr. G. Wilson, from ideas and sketches received in this office during the past few weeks. I would like to record our thanks to all contributors of these ideas, some of which have been incorporated in the new design.

The illustration on the cover is the *Deepstar* which was mentioned in our last edition and by various diving magazines, Lt.-Cdr. Franklin, R.N. (Retd.) has kindly written a very comprehensive article on this revolutionary

underwater machine, which is published inside.



We are always greatful to ship's Diving Officers who send prompt payment for magazines, but please try to return invoice (or other suitable document) when making remittance. Recently we received two postal orders to the total value of 12/-. These postal orders were attached to a minute sheet and duly signed, unfortunately no ship was mentioned and the signature cannot be deciphered.

If by chance the sender of these two 6/- postal orders (127607, 127608) reads this note, please let us know to what ship this sum should be credited.

V.G.

The Channel Tunnel

by Cmdr. J. R. CARR, O.B.E., A.M.I.E.E., R.N. (Retd.) (formerly Superintendent of Diving)

"Through caverns measureless to man, down to a sunless sea."

NE of the joys of retirement is that there really is time to think and, furthermore, one's ideas do not just mean more work. So it was when I became involved in a very minor way with the Channel Tunnel I was able to ruminate on the use that might be made of it by the Admiralty Experimental Diving Unit, then by other R. and D. Establishments, and so on, without feeling that this would lead me into yet another item for the 'Estimates'.

So much has already been written about a Channel link that it is necessary to make some assumptions before the service potential can be considered; the ones that I am making are, firstly that there is going to be a tunnel and, secondly, that it is going to be of the immersed tube type. Very briefly an immersed tube tunnel is laid like this: a platform mounted on stilts, such that it can

advance across the Channel, carries a dredging head, which digs a trench. A similar platform follows along behind; sections of the tunnel are made up ashore, floated out to the second platform, where they are secured between the legs and lowered into the trench. Some juggling then ensues to get them into position, where they are clamped to the preceding section. Subsequently arrangements are made to fill in the sides and cover over the top of the tunnel section so that the sea bed is once again flat.

Underwater Laboratories.

It would not be very difficult, providing it were to be done during initial construction, to make compartments on the top of one or more sections, which would stick up above the sea floor when the tunnel had been laid; go one step further and fit the compartments with a 'wet and dry' lock, on the principle used in midget submarines, and there is

access to and from the bottom of the sea. Here then would be a series of 'underwater laboratories' at atmospheric pressure, from which the sea floor can be studied. They could be reached directly from the land and are unaffected by surface weather conditions.

Sea Conditions.

The project route of the tunnel goes through a considerable variety of underwater conditions. There is turbid water in the tidal coastal areas and over mud further out; while in mid-channel the water is relatively clear, with a hard bottom at depths around 200 feet and tidal streams up to $3\frac{1}{2}$ knots. It should be possible to find any state that may be desired except perhaps warmth.

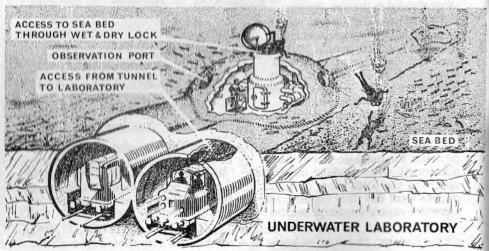
Who Might Use Such Facilities?

The applications for diving are quite straightforward, equipment can be tested or divers under training taken out to the sea-bed at whatever depth is required, with no more trouble than the administrative difficulty of getting to the laboratory with-

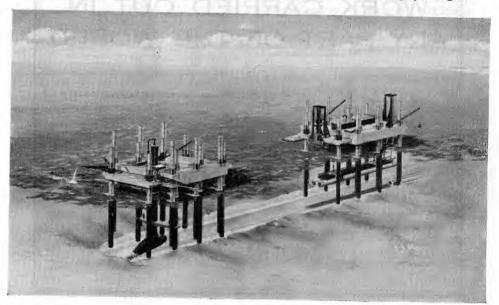
out unduly delaying the flow of traffic through the tunnel.

Oceanographers might like to be able to make continuous observations and measurements even though the area affected is very limited. When we come to the fishery organisations and marine biologists the possibilities seem greater. Apart from all the year round plankton counts it is not difficult to imagine some form of caging of patches of the sea-bed where the growth of fish can be studied under natural conditions. This would provide a sort of deep water aquarium or 'Whipsnade of the sea'.

Such studies might lead to the farming of the sea, but who would be the 'fish-heads'? The same laboratories could provide for the study of man under pressure, Commandant Cousteau's 'homo aquaris', who would live for considerable periods in air under pressure, going outside to do his work. All the necessary services could be led to the underwater house, while the physiologist



Proposed method of digging the Channel trench



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could observe from the tunnel laboratory, remaining himself at atmospheric pressure. If all progressed well a string of underwater houses can be visualised along the line of the tunnel.

Coming back to problems more easily appreciated at present, the underwater laboratories have much to offer the physicist, the metallurgist and the chemist, particularly when their work leads to the better operation of submarines. Since we must think of all this in terms of applied science, what could be the military aspects? I must leave such questions to those better informed and qualified than I am, but it does seem reasonable to suppose that a channel tunnel would provide better potential bases for controlling traffic through the Straits in time of war, than did the Dover barrages of the last two wars.

Conclusion.

The ideas summarised here may well be merely flights of fancy but perhaps some of them are wanted if we are to forecast our laboratory requirements for the next 50 years. With relatively little advance planning, it appears possible for an immersed tube tunnel to allow quite unusual facilties.

The equipment and functioning of underwater laboratories must necessarily come later, what seems to be needed now is to investigate what is involved in making provision for them in design stage, because later the cost would clearly be prohibitive. It is fun thinking of things for other people to do!

This article is published with the kind permission of the Editor, Journal of the Royal Naval Scientific Service.

Letter from the Med.

Dear Readers,

The time has come around once more when I put pen to paper for an article to our Magazine. A word of advice to young (or any other) authors, do not submit your letters or articles to your Diving Officer for his comments for it will be snowed under all his paper work and never rise to the top. My last letter so far has been in this position for six months.

The team out here now consists of: Lt. Lovell Smith, S./Lt. Francis Drake Carr, C.P.O. McKinley (any reports about him having passed away are wrong), the wreath money has been shared out. P.O. Macrae Clifton, P.O. Jones, P.O. Wright, L./Sea. France, L./Sea. Steel, A.B's Wade, Harrison, Dalby and Eastwood (known as Goldfinger).

There are no out of the ordinary jobs to report on since my last letter (the one that got through). The 7th Minesweeping Squadron (foul screw experts) keep us busy with odd jobs. Med. fleet exercises still need our services, the last one was at Taranto (Italy). We were working on H.M.S. Plover with Lt. Cdr. Messervy in command, and I would like to add they did us quite proud during the short period of our visit. Also aboard her was another old friend. Sammy (one badge) Wand. The weather was against us during our stay at Taranto, but we were well looked after by the Italians. We also renewed aquaintances with our American friends, Pat Carroll is still with them, many of the old team will no doubt remember him.

We have had many visits from classes of different kinds from Vernon

(U.K.) and I am still waiting the day when we can turn out a non-drinking class. But I believe there is a move afoot to get us entertainment money.

We still get the occasional night attacks. Our last one turned out to be quite interesting, the coxswain of the ship was C.P.O. Slim (arms spread out) Welsly, so the refreshments onboard were only of the liquid type. On another attack an old friend came to light propping up the bar, C.P.O. Jeff Burgess, so you can see we need entertainments money.

The diving section here is now completely enclosed in a wire fence, H.M.S. *Phoenica* is no more, and our address is now M.F.C.D.T., F.D.C., B.F.P.O., 51.

Not a lot of sporting activities to talk about. Lt. Lovell Smith won the Naval Squash championship and the team with the help of a class from *Vernon* won the last *Phoenicia* Road Race.

Getting back to jobs, although there has been plenty to keep us busy none of the jobs have been outstanding. We have a close liason with Dutchy Holland on the *Ausonia*, which incidently should be returning to U.K. some time this year. Dutchy will be coming to our team to finish off his time out here in place of

Macrae Clifton. By the time of going to print, C.P.O. Jackson should be in the chair and I should be home. L/Sea. Steel will have left also with A.B. Broadhurst in his place.

We are preparing for a trip to Turkey. Not to Ismir this time but further up the coast. There may be some interesting events whilst we are there for the next issue.

A small incident which occurred the other day; P.O. Macrae Clifton was somehow awarded his Long Service and Good Conduct Medal (15 years of undetected crime), but when we received our S.50's (pay documents) we found that P.O. Wright had received it instead; wishful thinking? or can't they tell the difference in ages?

A word to the fishermen amongst our readers, large groupers are still being fished out of the Med. Octopusses are getting larger and sea 'mooses' those poor harmless crayfish type animals are being shot at with spear guns by some ship's teams. This is not a sport, its butchery, and should be discouraged.

As this will be my last 'letter from the Med.' I'd like to take this opportunity of saying that although the future is uncertain out here, the spirit is still the same (S.R.D. Type).

All the best. MAC.

Editor's Lament

THE Editor at his desk did sit, with furrowed brow and eyes close-knit,

'Twas obvious to all who may his thoughts were blue his mood was grey.

Why was he there in such a state?
Listen, oh readers I'll tell his fate,
The magazine he had to edit,
was living on the bounds of credit.
He sought ideas but all in vain,
nothing would come to his fuddled
brain.

He sat and sat for days on end, thinking out a brand new trend.

Something new was required, to make his readers 'awe inspired', Originality was his aim, but all his works seemed just the same.

Help he wanted and needs today, cartoons, sketches come what may, two ways were left, for him to choose, make a success, or go on a cruise.

V.G.

Sport Diving in the Naval Air Command

HEN Cousteau gave the world the 'aqua-lung' neither he, nor anyone else could have forseen the enthusiasm which it would be accepted, nor the magnitude of the hordes which were to invade the underwater world.

The ages and occupations of those who indulge in this activity purely as a sport know no limitations and cover every possible combination. Children of eight years, and even younger have happily surveyed the sea-bed at 30 feet, grandfathers of well over 70 have spent birthdays and New Years Eve underwater, people get married under water, and in Sweden there is even a dog which when fitted with its special breathing apparatus swims the length of the local swimming pool, underwater of course. Housewives, doctors, schoolgirls, engineers, these are only a small crosssection of the occupations of those who dive for the pure love of it all. Naturally, amongst this vast mixture of people are a high proportion of servicemen, naval personnel being no exception.

Because of the longer periods of shore-time enjoyed by the Fleet Air Arm, or Naval Air Command as it is now known, it is not surprising that the first move towards organising naval sub-aqua Club activities came from this branch of the service. Prior to 1959, there were probably not more than two hundred members of the N.A.C. interested in diving, but since that time the interest has increased beyond all expectations. Now every air station, both at home and abroad has a fully equipped and organised sub-aqua club. Later in 1959, those members of the Fleet Air Arm who were interested in organising a club started to correspond on the subject, and resulted in a meeting at H.M.S. Heron. This meeting paved the way for an official meeting at H.M.S. Ariel, at which a representative from every known subaqua group was present, including the Staff T.A.S.O. and P.T.O. from Flag Officer Air (Home). As a result, the Home Air Command Sub-Aqua Club was born, with a set of basic rules and aims, an elected Chairman (Lt. (L) Graham), a Secretary, myself, and precious little else. We had no funds, and little chance of getting any, no official status and virtually no members outside those present at the meeting but we had plenty of enthusiasm.

At first there was considerable opposition, both from service sources and the individuals we wanted to recruit. From the official point of view the arguments were, 'we already have a naval diving manual, and a set of diving regulations, both of which are the result of many years of experience, if you want to dive then it must be in the framework of the existing pattern'. From the individuals, 'why do we need an organisation when I already have my own equipment and can dive when and how I like'? All good arguments, but ones to which we had to find an answer, and good ones at that, if the newly formed H.A.C.-S.A.C. was not to die an early death.

It was the intention to build up the organisation slowly, obtaining official recognition and various concessions in easy stages. Our most important and immediate step was to get a set of diving regulations, which were sound, acceptable to both the Admiralty and ourselves, which did not infringe outside the standard regulations of service diving. No easy task I can assure you, the most difficult barrier to overcome being the acceptance that sport diving was

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essentially a 'freediving' activity, without life-lines.

Until relatively recently, all service divers except C.D's operated on a life-line, and even with the introduction of the naval 'free diver', these still dived on life-lines except under certain conditions of ships bottom searching. But to impose this restriction on sport diving is unacceptable. Most naval diving is carried out from a boat, but sport diving often necessitates clambering down headlands, over several hundred yards of rocks, or swimming out from a shallow beach into deeper, clearer water. To expect a diver to wear a life-line under these conditions is out of the question, since the value of a life-line is lost when it is excessively long or not tended from above the diver. Provided a sport diver is equipped with a compass, a lifejacket, knows the local tidal conditions before he enters the water and has received adequate training in his equipment, he will come to little harm. and this is borne out by the few fatalities amongst sub-aqua clubs. There were many such instances where a difference existed between the techniques of naval and sport diving, and in which a relaxation of the rules was necessary, at least from our point of view. A typical example is the medical standards which include rigid maximum physical sizes regarding height and feet size, eye sight standards, etc. However, we have been fortunate to obtain so much co-operation from those concerned, and the existing regulations for sport diving are adequate and acceptable to all concerned. After all, we are an armed service and no matter how strongly we feel about these side-lines, they are side-lines purely for our pleasure, and the service is justified in making regulations that prevent us drowning ourselves.

In answer to the questions from the individuals we were trying to win over, 'why do we need a sub-aqua club'? we had this reply. The number of naval ratings who, with their own equipment went diving alone was quite alarming. Anyone can walk into a sports shop and fully equip themselves for sport diving. and whilst the service could restrict an individuals activities during certain times, they could not restrict what he did in his spare, or leisure time. All too often the equipment used was unreliable, often home-made and the user having received little or no instruction, and being completely ignorant of the dangers of diving. This was the basic reason why we wanted a club, to prevent the first fatality if that makes sense, since the first diving accident would mean a clamp down on all sport diving, the use of service compressed air sources, boats, etc. A club also offered the lone wolf companionship, someone to dive with, and probably the use of club premises, air sources, transport, expeditions and the like. In fact, provided we did not instigate a membership fee, the individual had nothing to loose and everything to gain by joining the ranks of H.A.C.-S.A.C.

Since it was desirable that we worked to a standard, or at least recognised training schedule, we looked around at what all the other civilian sub-aqua clubs did, and were faced with one of two alternatives. Either we accepted, lock, stock and barrel an existing schedule, or we sat down and wrote out our own. If we used someone elses, then our system would have recognition outside the service, if we wrote our own, our certificates of proficiency wouldn't be worth the paper they were written on. So, we accepted the already well tried and proved system of the British Sub-Aqua Club. This



The diver is wearing an Underwater Swimmer's Dress made from rubber-proofed crimped knitted nylon, and is using SABA (Swimmer's Air Breathing Apparatus).

The suit is manufactured by Dunlop General Rubber Goods Division of Manchester, and the breathing equipment by Dunlop Aviation Division of Coventry.

Dunlop have for many years produced various types of underwater equipment for the Admiralty, playing a leading part in the design and development of apparatus for different specialized branches of underwater operations.



DUNLOP

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was on the grounds that the B.S.A.C. was the National body for sub-aqua activities in this country, and therefore its voice carried some weight, and its certificates enjoyed world-wide recognition. Approval was sought, and granted to use their manual and training programme, and slowly the various clubs in the H.A.C. - S.A.C. became special branches of the B.S.A.C. with full membership, log books, tests, the Triton magazine and many other benefits. Since we cannot force members to become members of the

they can continue to dive as a member of H.A.C.-S.A.C. and receive a local certificate of proficiency, which is now recognised outside the service. As in most civilian organisations, we rate our sport divers as being of either 3rd, 2nd, or snorkel diver standard. 1st Class Diver can only be awarded by taking the B.S.A.C's National written and practical examination.

B.S.A.C. (at an annual cost of 15/-).

The N.A.C.-S.A.C. is now well established, and feel that in time will enjoy the popularity and prestige of other major sporting activities in the service. We have our own magazine called Nepton, whose content and interest may one day rival that of the R.N. Diving Magazine. Although our distribution is very limited, it is at least free. Other achievements have been the direct instigation of two A.F.O's on the subject of sport diving, and the annual 'diving week'. This is a week of concentrated diving, held in much the same way as a 'festival of football, or drama', at which about six divers from every sub-aqua club have the opportunity to take part in advanced diving activities they might otherwise never experience. So far, all three events have been centred on H.M.S. Seahawk in Cornwall, this years event, due to start on June 20th will be in

the Scilly Isles. Wreck diving features the most interest in diving week, and since Cornwall is well littered with wrecks it is easy to oblige our members. Wreck diving offers considerable interest, depths normally between 50 and 80 feet, the chance to find something worth having, and dive planning since repetitive dives to this sort of depth require some de-compression. The latest administrative project was a competition for the best design of a club badge, this has now been completed and the final choice accepted and passed to a manufacturer for estimates of embroidered and printed samples.

What of the future? Well, we have an uphill task, and don't really have very much to show for all our efforts, all too often we get a good club going, when the drafting authority strikes, and we loose the 'mainstays' of the organisation. There is also the continuous ridicule and contempt that gets levelled at sport divers, often, I regret to say by service divers who probably have no idea of what they do, and most certainly have never spent something like £50 on their own equipment. The sport diver is not a professional. he dives when and as he likes simply for the love of diving, and is often perfectly capable of performing useful underwater work. We have all heard stories about bad sport divers. who are both a menace to themselves and others, but with respect, there are plenty of service divers whose ability leaves a lot to be desired, and I speak with some authority having been a service diver for almost eleven years myself.

Finally, there is the matter of our choice of title, why did we choose such a confined title as the 'Naval Air Command Sub-Aqua Club' and not the 'Royal Naval Sub-Aqua Club'? The answer is simple, at the

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time that the original H.A.C.-S.A.C. was formed there were no General Service sub-aqua clubs in existence, only those in the Fleet Air Arm. Therefore the choice of title was obvious. However, we may well soon feel the need to change our original ideas and call it the 'Royal Naval Sub-Aqua [Club', but not until some interest is shown outside the Naval Air Command. Personally, I would welcome the change and an organisation that embraced the entire service, and this may well come about

with the formation of the clubs at H.M.S. Fisgard, Raleigh, Collingwood and Engineering College, Manadon.

If anyone, anyone at all, is interested in this project, or would like more information on what I have described, I would welcome some correspondence on the subject, and as a committee member of the N.A.C.-S.A.C. could give an authorative point of view in reply.

C.P.O. R. LARN, H.M.S. Seahawk.

The Tartar Tribe

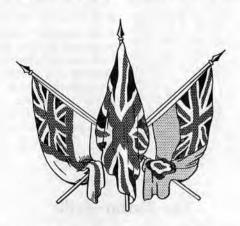
THIS is being written in a valiant effort to catch the summer issue and warn our chums in U.K. that if they have been taking out our sweethearts they had better head for the hills as we will be home in early August.

Since our previous screed we have flogged many thousand miles more of ocean in our very large parish and in most places have taken the opportunity to leap under the water and see what cooks; or sometimes just to avoid messdeck rounds. Our travels have taken us from Barbados at Christmas with temperatures in the eighties to Washington in March, where greatcoats had to be worn to help stave off a freezing wind and it took half an hour to find it - the greatcoat, of course. We are currently (late May) in the Southern part of our beat attempting to take the Senior Officer, West Indies, on a cruise in his domain. This has just been interrupted because our friends in 'B.G.' are burning down the temples again and we may have to stop them.

During our diving activities in and around the Caribbean it is surprising the variety of bottoms one encounters or, to avoid giving Surgeon Captain Miles more scope for another after dinner speech, perhaps I ought to refer to them as sea-beds. The variation is most marked in the coral formations rather than the numbers of fish, although they too differ a fair amount from place to place.

During the past three months or so 'Deeps' Hodgins has been weilding his underwater camera more and more frequently and I hope some examples of his work will appear with this article. We are still very much novices in the art and if some of the photos printed show the diver to be headless, it is for this reason rather than for any better known and more noble cause.

Highlights of interest during the past few months are 'What it is like to be stung by a sting ray' and an underwater demolition task on a wreck in the Turks and Caicos islands. Taking the sting ray first, this of course happened to 'Deeps' who is a master at putting his hand in the most obscure places. The sting ray in question had just been speared (and in this case was about the size of a Portland Dab) when somehow it managed to whip its tail round and make a slice between the fourth and little finger of the right



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hand. I turned round to see my 'buddy' grasping his hand tightly and his face contorted in agony, at this stage I was unaware of what had caused it and for a moment thought 'Deeps' was playing the fool! I assisted him to the surface, summoned over the attendant Gemini and once he was in it got the full story and a whole lot of foul language as well. The symptoms described were as if one had slammed ones fingers in a door and in addition a paralysing feeling started to creep up the forearm as far as the elbow. The visual indication was a deep 'scalpel' type cut about 3 inch long. 'Deeps' was rushed back to the ship where on arrival he was violently sick and thereafter suffered gradually decreasing agonies for the next four hours or so. Moral of this story is that if you want to spear a sting ray cut off his tail first.

Our demolition task at Cockburn Harbour, South Caicos, was a most worthwhile and interesting job and in addition enabled a team of six to divorce ourselves from the Grey Funnel Line for 24 hours. The ship was visiting Grand Turk Island at the time so in order to get to the scene of action some 23 miles away, in Cockburn Harbour, we had put at our disposal the M./V. Sea Horse (which in general layout and size was not unlike a 45foot M.F.V.) and its native crew.

The three hour crossing took quite a slice out of the time available and we were unable to start our initial survey until 4 p.m. on the first evening. What had been vaguely described as a 30 foot boat of metal construction, turned out to be a 50 foot double skinned L.C.M. which had been converted into a salt barge and had sank at its moorings two hurricanes ago, whenever that was!

During our initial survey we also discovered that the wrecks' resident caretaker was a large grouper, some 4 foot long and weighing 70lbs. This splendid fellow was doing rounds when we first saw him, and after a short while of hide and seek around his property, he retired to his bedroom which was in the prop section of the wreck. The only access being through a 2 foot diameter hole in the after bulkhead of the after hold.

We carried out two 'blows' of 36lbs. explosives each that evening before failing light stopped at 7 p.m. That night we had a run to the local 'night club' which was nothing more than a native bar armed with a Juke Box, and a large publican who dispensed of unwanted customers by horse-whipping them off the premises.

Work started again the following morning at 7.30 a.m. with another survey during which we found the 'caretaker' dead in the after hold. Poor chap, must have died of a heart attack, old age or something of the sort

The day was frustrated by a series of partial failures of the explosive train and what was to have been one big bang, early in the forenoon, ended up as a series of smaller ones stretching into the afternoon. However, despite these delays and the shortage of time available, an appreciable impression was made on the wreck which now lies lower than it originally did, and is 'all shook up'. At 3.30 p.m. having packed our bags, Sea Horse took us out of harbour to our rendezyous with Tartar.

Sadly this is our last article to the magazine from our present team, by early September most of us will have gone our different ways in accordance with the usual Service motto of: 'When two or three are gathered together in one place thou shalt break them asunder'. If any readers have toiled with us this far we admire their endurance and wish them all the best. See you in U.K.

D.P.R.L.

Diving Training for 'Ganges' Juniors

ATCH 'em young. We're trying to do just that in Ganges where we are spreading the diving word to Juniors aged 151 to 161 Our task is to give 'reliable recommendations' to the Commodore Naval Drafting at Haslemere and you might well think that with each Ganges Junior spending a year here there was plenty of time to do that. For those of you who don't know the Shotley round, however, we have about 220 Juniors joining every month or so. By various processes of whittling that number down (for the volunteering rate is about 50%) we are left with about 70 to whom we can give a little diving training each month. In practice this works out that we can run three one-day courses every week for eight Juniors a time. So although we started with a year's training, ample time apparently in which to give everyone some diving, it doesn't work out that way.

The one-day courses are in the hands of our resident C.D.1, P.O. Snell. Graduates of E.C.D. 25 will no doubt have fond memories of the sympathy and gentle encouragement that they gained while they were on course. Despite that we still seem to get volunteers.

Ganges of course has always done a little diving with a rapidly changing team of S.W.D's amongst the Ship's Company. The new task of training Juniors as a full-time job has meant that we've had to be on the scrounge for entirely new facilities. Luckily Ginger is a fully qualified Scrounger. First Class and we lack for very little. We waited a long time for some of our diving gear and particularly for the compressor which we finally collected direct from Dunlops rather than trust it to the tender mercies of British Railways. We now own an old cooling-water tank where we can put Juniors down for the first time. This is concrete lined, about 50 feet by 20 feet and about 8 feet deep at the deeper end. Here we chuck them in for half-an-hour or so, employed on that oh-so-useful diving job of chipping a link in half. Why doesn't Pusser buy a few hundred half-links—it always seems so laborious to make them this way.

By the end of this preliminary session, the course numbers have probably been halved — two of the eight on average are stopped by the medicos anyway for short-term unfitness (colds, etc.) and two more have handed their cards in as a result of this first dive.

Suffolk natives will know that neither the Stour nor the Orwell are really the best of rivers in which to teach Juniors diving from scratch. The periods of slack water are so brief that diving from Shotley Pier is not very practicable. The nearest possibility is Felixstowe Dock, two miles away by water and 20 miles away by road via Ipswich. We've managed to win a medium-sized M.F.V. for the summer as our diving boat and we hope by the autumn that an official replacement for her will have arrived. With the M.F.V. we are able to give each Junior who is still keen to continue a dip in the muddy waters of Felixstowe Harbour where the visability is nil, and the bottom suitably muddy and covered in gash. Rumour says that it's littered with full bottles of hooch ditched by the coasters' crews on hearing the buzz of a Customs search. Our score so far — 19 bottles of Orwell vintage 1964. The Juniors are surprised at the mud — one surfaced to report sadly that he couldn't find the bottom.

This second stage sorts out the remaining Juniors who think it's

going to be a jolly, and on average we are then left with two survivors of the original eight. This is a fairly rapid sorting-out process but we like to think (and we've only been doing this a few weeks now) that those who remain really mean business.

there's no doubt that if we're to

fill the enormous number of C.D. billets required in the next 10 years we must do more and more to beat the drum for diving early in people's training. We're just at the beginning of this recruiting drive here in Ganges. I hope in later issues that we'll be able to report worthwhile long-term results. "LOFTY".

Portsmouth Command B. & M.D.

THIS is it! Having been hounded from pillar to post, I am finally cornered and must get a few lines down on our activities during the past months.

We have been getting some very interesting jobs recently — the highlights being a German 'D' mine at Whitstable and a 4,000lb. Bristol blast bomb at Stiffkey (Norfolk).

In addition we had one of 'those' sorts of jobs, where the object reported was definitely there, in about a dozen different places—this entailed a search of the Thames from the upper reaches to the estuary. Pity we don't have S.9's now.

During our travels we have clashed with quite a few of the fraternity. Ken Newson is driving a pub at Framlingham and is well worth a visit any time, I repeat 'any time'. Rumour has it that Ken is doing so well that he bought a Jaguar and pranged it all in one week — we really must get him a nice new hearing aid! We also had a very short and enjoyable meeting with the Slough Sub-Aqua Club. You will not find the dives we carried out, in that short hour, in any diving manual — off the clock low — 'old man'.

At the time of writing, half the team are away in Norfolk, dealing



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with a fishing boat, having trouble with a depth charge in its net and also clearing shells off a disused range. The silly season is really in full swing!

The team consists of — Lt.-Cdr. J. Rea, M.B.E. C.P.O. R. Flanagan P.O. Bray

P.O. Futcher

P.O. Wilkes

L.S. Pastides

L.S. Thomas

A.B. Barker and of course, Jan Gardner.

All the best.

J. REA.



Members of Pompey B. & M.D. Unit, having 'steamed out' Bristol blast bomb.

The Television salesman gave a convincing home demonstration selling the remote-controlled television set. He installed the set in the home, then took the remote-control a block down the street and switched channels without difficulty.

A week after the sale had been concluded the owner complained about the remote control 'Doesn't it work?' asked the salesman. 'Oh yes', said the customer, 'it works fine. But it's getting to be quite a nuisance going down the street every time I want to change channels!'

'My Boy,' said the millionaire, lecturing to his son on the importance of economy. 'When I was your age I carried water for a gang of bricklayers'.

'I'm proud of you, father,' answered the off-spring. 'If it hadn't been for your pluck and perserverance I might have had to do something of the sort myself'.

There's one great snag about being the light of a woman's heart — she wont allow you to go out.

More About Para-Mines in 1941

by LT.-CDR. W. H. TAYLOR, G.C., R.N.R.

HIS time in Birmingham after one of the many blitzes there. The speed with which these Mines, Types C and D, could be dealt with depended upon the situation of their fall. Sometimes, when they were buried by a collapsed building — their presence revealed by traces of the green parachute and its cords— or sunk in a marsh, again betrayed by the parachute silk, many weeks of intense labour could be devoted to the clearance of a single mine if its location was such that it could not be damaged into immobility by letting off a standard charge somewhere near it and accepting the risk of complete detonation.

I had had a day, however, of easy ones, in the sense that they were all 'sitting pretty' in one way or another; on the top of a bank; in a court-yard and so on from which the '17 second' escape route was easy or nonexistant. At any rate, no time had to be expended in arranging for funkholes and I had made good progress with four incidents before I began to feel a little weary towards tea-time and the approach of darkness when work would have to stop for the day. I just had one more on my 'orderbook' however and, knowing that its removal would ease the evacuation discomforts for about 20,000 people who could return to their homes, I decided to try to deal with

The neighbourhood of its location was designed in rectangular fashion like parts of New York, the streets all running at right-angles to each other, and I saw the mine lying on the surface at a cross-roads. I saw it from a long distance away and was able to arrange for my initial preparations before going to inspect it;

blowing up the motor-horn, etc., again, no need for a funk-hole as one had but to decide which building to hide behind should the worst happen.

Nonetheless, I approached it with some caution until I had wandered almost all round it to discover where the all important bomb-fuse was situated. I was absolutely shattered to see, attached to it, one of our motor-horns. Even if, so soon, the Germans had discovered our methods, how the hell did they manage to fit the darned thing on? And why bother, anyhow? I was puzzling over this problem almost to the exclusion of all else, when I became aware of frantic signalling and shouting from far away down the street at right angles to the one from which I had come and there was one of my colleagues, Lt. Rowson, who, apparently, had also had this mine address in his orderbook and approached it from another direction. He had started work on it and had started the bomb-fuse and had just run for his life when I turned up. Looking out from round his shelter to see how things were going on and to wait for the possible explosion he nearly died with apprehension when he saw me standing there.

In the circumstances, since I was too dumb-struck to move away, he hadn't much option but to come and join me at his job which hadn't yet blown up. We consulted as to what to do next.

We decided that the motor-horn attachment must be holding the bomb-fuse striker (as, indeed, it was designed to do) and that, perhaps, we should resume the work of stripping it.

This was easier said than done for the shock of impact when the mine hit the road must have distorted the locking ring and we found it impossible to move it. In those days our spanners were made of soft nonmagnetic steel and they soon got bent out of shape under extreme pressure. So we applied both our spanners at the same time in order to exert more power and did all we could, still without moving the ring. We were reluctant to hit it because the striker was only being held back by the air-pressure in the motor-horn.

As we struggled, Rowson's spanner, which overlaid mine, slipped off suddenly and he dislocated his thumb on the kerb-stone as a consequence. There was a pause in the operations while I did my best to re-set it and make it more comfortable. But that hand was out of use for the rest of the job.

Then it occurred to us that we might collapse the locking ring by drilling round it, so we went to a garage, which had been evacuated, and helped ourselves to a drill. We returned to the job and resumed work. I had got about a third of the way round and all seemed to be going jolly well when I became aware of a slight hissing. A horrid thought! The drilling was releasing the air pressure from the motor-horn! I asked Rowson to hold it with his good hand in order to maintain its pressure by squeezing it whilst I hurried on with the drilling.

It soon became obvious that this wouldn't work for long and I could not bore enough holes to collapse the ring before the motor-horn's pressure was exhausted. We decided that we should have to abandon the job.

That was easy enough for me but what about Rowson still squeezing the horn to keep its pressure up? How was he to get away?

A hurried lashing with some codline round the motor-horn (a clumsy instrument, anyway!) and we both withdrew, setting fire to the mine as we did so.

We had decided, in advance, to do this should we fail to move the bomb-fuse because the mine could not be left as it was and we had done all that we could and we did not think that anyone else could do any more. Nonetheless, it would have to be moved sooner or later with almost inevitable detonation. We thought that, if we set fire to it, a considerable proportion of the charge would be burnt before the fire reached the detonators and would thus reduce the force of the explosion to that extent. If the bomb-fuse should operate before that, when the motorhorn ceased to hold the striker, well - that would be that! Which happened first we shall never know for, after an enormous flare-up of fire which ignited all the surrounding houses, the thing went off with an enormous explosion which blew us both reeling down the street, bruised, filthy and shaken but, still alive.

B. and M.D., Scotland

21

Do you like travelling and glorious scenery? The occasional bit of sea-time too? You do? Then come and join us in B. and M.D., Scotland!

Just recently we have been man-

aging to knock up an average run of 1,000 miles which keeps everyone (except the garage mechanic) happy.

What jobs do we do? You name it and we've probably done it some time or other. Bodies in Loch's,



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BADMINT	ON RUGE	Y UND	ERWATER E	QUIPMENT
Odul	Peter Anders Ken Edward	OII	THSEA Ints	TENNIS
ATHLETICS	Personal attent	TO LL	M GROVE	FIRE ARMS
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WEIGHT	SP	BOWLING		
INDOOR GAMES	THE SC	BOXING		
CRICKET	Sportsme	FISHING		
GOLF	FOOTBALL	SQUASH	HOCKEY	FENCING

searches for stolen safes, big bangs, little bangs — even things that won't go bang — but we still manage to enjoy life.

The year started with the recovery of a Shackleton's engine, it fell off into the Beauly Firth near Inverness in January. We feel that it was the ideal spot for training. A mile of mud before you start work, really has you wondering why you joined; or have instructors changed their ideas now?

Shortly after thawing out we went to Aberdeen to get rid of a G.U. mine on the beach. It was in rather a mess so we borrowed a Minesweeper and towed it out to sea on her sweep wire to blow it up. It rather upset the local children as they had used it as a goal post for about five months. From there to Invergordon. Ouite a stir — headlines in the local paper — Trawlermen's night of terror and all that. 'Yes it was a German mine, we could read the lettering on the casing' - they too could spell DUMMY. Oh well! It was a nice ride.

Another dummy in Invergordon and then a torpedo warhead in Wick were followed by a H2, Mark 2 at Hartlepools. We'd never heard of it but found it tucked away on one of the books. A splendid bang and then a drive home in a blizzard.

The silliest thing we've done is paddle through the surf at 2.30 a.m. on a Monday morning looking for beach mines and locators. Cold and rather miserable at finding nothing we made up for it with a live 6 inch shell at Dunbar and an S. Mark 6 at Loch Tarbert.

For the rest, gas cylinders, mortar bombs, small arms ammunition and the usual assorted batch of boom floats, flares and smoke candles, rockets and practice bombs, our four months total being 305 objects and 500 rounds of ammunition. We are also reliably informed that soft Scottish rain is good for the complexion, that's why we're such a handsome bunch, consisting of: Lt. Cdr. Johnson Newell, C.D.O., C.P.O. Jackson, C.D.1., P.O. Robbie, C.D.2. A.B. Williams, C.D.2, L.S. Newman, C.D.*, L.S. Cassidy, C.D.*, L.S. Adams, C.D.*, A.B. Boulton, C.D.*.

For the future we are getting away from it all in Scapa Flow, knocking down a submarine hurdle. Lots of crab and lobster there to persuade us to dive!

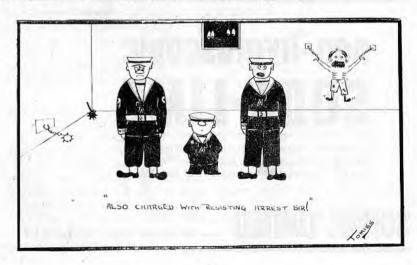




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THE reference to 'Deepstar' in the last edition of the magazine has prompted me to give a few details of this revolutionary underwater research vehicle.

'Deepstar' is a much improved successor to Captain Cousteau's Flying Saucer, and it is being built with his co-operation by the Westinghouse Company of America. It consists of a 6 feet diameter spherical hull constructed of high strength steel which is mounted in a hydrodynamically shaped cowling 17 feet long, 12 feet high and 8 feet wide. The hull, which is $1\frac{1}{4}$ inches thick, is fitted with two 4 inch thick 'plexiglass' windows for use as observation ports by the pilot and observer. Within the hull the equipment includes a gyro compass, two-way radio, three echo sounders, a movie, a still and a T.V. camera, flash-light, tape recorder and a sonar set. The three echo sounders are so mounted to provide three dimensional coverage when under way — one looking forward, one upward and one downward. External equipment includes a collecting basket, a lamp for area illumination within the vicinity of the vehicle, and two remotely controlled arms. One arm carries a lamp for use with the cameras, the other arm which can extend to 6 feet is fitted with collecting tongs or other special tools.

The vehicle is propelled by two battery driven reversible variable speed propellors mounted in sided streamline tunnels in the trailing edge of the pear-shaped cowling. At a cruising speed of about $\frac{3}{4}$ knot the batteries will have a life of 24 hours and the vehicle a range of some 20 miles. A maximum speed of $3\frac{1}{2}$ knots can be attained with a subsequent reduction of battery life.

There is provision for a crew of three; a control number seated at a panel in the centre of the vehicle, and the pilot and observer who lie in a prone position on either side of the controller's seat, looking out through the observation ports. The crew breathe oxygen supplied through a closed circuit respiratory system with a gas endurance of 48 hours. A C.O₂ content indicator and a humidity control are fitted in the system.

The safety factors have been given special consideration and include: an emergency release of solid ballast for a quick ascent. Inflatable conning tower for surface use. A radar transponder to assist search parties in locating the surfaced vehicle. An emergency breathing apparatus which is entirely independent of the built-in system. Inflatable life raft and flares.

The 'Deepstar' has an overall weight of 9 tons, has been built for a maximum operating depth of 12,000 feet, and on completion of trials will be available for deep sea oceanographical studies, underwater photography, oil surveys and salvage operations.

G.A.F.

NEWS ITEM

It is of interest to hear that the Japanese are building an underwater vehicle or bathysaph. It will be nearly 46 feet long, displace about 33 tons and is designed to hold a crew of three and three scientists. It will be used for sea-bed exploration in Japanese waters to a maximum of 300 metres (984 feet). Among the special equipment to be fitted are two bow lifting arms capable of lifting up to 100 lb weight, and also a fish trap which empties into a tank within the bathyscaph.



TERI HOPE, to be seen in Paramount's Fun in Acapulco

News from Yo-Yo, M.F.V. 1077

URING the past years many questions and stories have grown up concerning a mysterious vessel known as 'Yo-Yo'. Like the Loch Ness monster and the mythical Flying Dutchman it has plagued the mind of the diving world with such riddles as, what is it? Where is it? What does it do, etc. I have decided to try, while still of sound mind, (I think) to answer these queries to the best of my abilities. M.F.V. 1077, better known as 'Yo-Yo' is a 75 foot motor fishing vessel fitted out in a 'Harry Tate' sort of way for diving. The name 'Yo-Yo' comes, I believe. from the fact that even when secured with much cordage, it still goes up and down, much to the discomfort of our internal workings.

We are based on H.M.S. Maidstone at Faslane and operate in the Clyde area wherever our feats of skill and daring are required. For those of you who have never had the misfortune to visit Faslane, I should explain that it is the 3rd Submarine Squadron's base, situated in the heart of darkest Scotland, where only drunken matelots and a few brave missionaries face the foreign hordes.

I refer to it as darkest Scotland because that is the natural colour of the sky in these parts. The continuous downpour of rain, although a great discomfort, had lead us to some very strange and interesting discoveries. For instance, how many of you people south of the border knew that heather is really a form of seaweed, or that the bagpipes are really a multiple snorkle with built in counterlung, or that haggis is a watertight bag meal. However once one has got the knack of clearing your ears when bending to tie up loose shoe laces it is not so bad.

The answer to the question, what does ('Yo-Yo') do? Most of our

work is obviously on the submarines, and in particular that nuclear wonder Dreadnought known locally as 'Doughnut' among other things. Very few days pass when we don't get a submariner calling for our assistance. A great number of these sad tales of woe are also poured into the ears of P.O. 'Bob' Lusty, C.D.1 who leads Maidstone's intrepid band of fearless frogs. We have recently lost valuable services of Mick Gale and Bert Hibbert, and last but by no means least, C.P.O. 'Ernie' Foggin (who is reputed to have supervised the first Operation Awkward on Noah's Ark), all of these are now residing in Vernon. Our bold crew now consists of, C.P.O. C. B. Fawcett, C.D1, P.O. M. E. Libby (F.D.), A.B. Edwards (F.D.), A.B. Thompson (D.F.), A.B. Chisholy (S.W.D.)

And a funny little sub-calibre, double stomached, animated gash bin, called M.E.I. J. Laccohee-Joslin (no kidding).

All the best of luck to all. BUNGY.

Peter Ustinov, who once wrote to a Scots' hotel manager to ask if dogs were acceptable, received the following reply:

"Dear Sir,

During 30 years in this trade I have never known of a case where a dog has been found guilty of stealing the cutlery, falling asleep with a cigarette in its mouth, breaking furniture or leaving without paying the bill. Therefore I can see no reason why you may not bring your dog. I would add that, if you produce a letter of recommendation, I should be doubly pleased to include yourself among my clients".

1964 'Vernon' Sports Day

THIS year's Sports Day was one to be remembered by all who took part, and those who cheered each entrant past the line.

There was great speculation as to the winners many days before the events took place. Some thought that Deepwater had breathed her last and that Weapons and Radio would wipe the board. It was true that the latter named Division had a very strong Team: Lt.-Cdr. Sinclair, O.A. Lyons and P.O. Kirkham to name but three. Other speculators thought that Deepwater would pull something out of the bag and come out on top as in previous years.

The truth is that the result seasawed between these two Divisions with the remainder of Vernon left at the starting line. Weapons and Radio won the day by 4½ points, their final score being 98½, with Deepwater at 94.

Even though Deepwater were beaten they were not dishonoured, for the failing came from underestimating the opponents not the efforts on the

Weapons and Radio are to be congratulated on their success and the keen sportsman-like attitude throughout the sports.

The main members of Deepwater division who made this gallant effort were: Leading Seamen Slingsby, Setchell, Dadd and Able Seaman Mack, the weakness being in the Jumpers (or the supremacy of the opponents). Deepwater managed a forth place whereas Weapons were first and second in both the triple and long jumps. (What we want is jumping Divers.)

Noteworthy Results:

L./S. Setchell, winner of the 1 and 3 miles.

L./S. Dadd, winner of the 440, fifth



place in 880, second in the Javelin.

A. B. Mack, winner of the 880. also with a fantastic run in the Medley Relay made up almost half a lap to win for Deepwater.

L./S. Slingsby (Jun.), winner of the Hammer in a new Vernon record of 89 feet, this record was previously held for some time by another diver: C.P.O. McKinley.

The Tug-of-War team is well worth mentioning at this stage. Although to their consternation there were no points for this event, they exibited brawn and muscle to pull their way to victory beating Osprey, Weapons and Radio and in the final, Boyd

division in convincing style. It is also much to this bold divers credit to note that they, as a team represented Vernon in a three-cornered sports event against Dolphin and Haslar. This event was a victory for Vernon with the Tug-of-War also taking the honours.

The Team was -

Coach: P.O. Atkinson

Team: P.O. Audoire

P.O. Maynard

P.O. Hendricks P.O. Mackenzie

L.S. Peters

L.S. Meakin

L.S. Stephens

L.S. Slingsby (Jun.)

Surveying in the Royal Navy

PART I

N order to promote Naval knowledge of Marine exploration we have some thousand men and eleven ships under the command of the Hydrographer of the Navy, and the job that he is doing is of the utmost importance, not only to the Royal Navy but to all of us:

(Extract from the First Lord of the Admiralty address to the Royal Geographical Society, 10th June 1963)

The average person cannot really envisage the enormous responsibility that is carried out by the 'Survey Navy', we in fact see only the end product of this branch of the service in the navigational charts and publications we use. The Admiralty are premier chart merchants in the world and it is doubtful if any other country has given more to the safety of Mariners and their ships than Great Britain.

There are very few parts of the world that have not at one time or another been charted by the Royal Navy and at the time of writing (1964) we have 11 ships actually engaged in survey duties ranging from the Artic to the Antarctic and the amount of sea time put in by these ships is a terrifying thought (to anyone who gets drafted to one of them).

In 1963 the Admiralty had ships surveying from Barbados in the West to New Zealand in the East and from Scotland in the North to the Antarctic.

These ships carried out duties ranging from surveying to carrying Ornithologists to study sea birds.

Perhaps the most well known of the survey ships is H.M.S. Vidal. She first commissioned in 1953 and has been mainly employed on surveys in the North Atlantic and West Indies, and in 1963 surveyed 47 miles of coastline and three 310 square miles of sea bed.

H.M.S. Dampier (1948) has duties that include Malaya, Borneo, Hong Kong and Singapore.



How can I Save?

Of course, I try to. But my pay's not enough to save anything.

That's what I thought when I was your age, until someone showed me the progressive Savings Scheme. I only had to put aside £3 a month by Naval Allotment but when I leave the Service next year I can collect £855.

Sounds too good to be true. Where's the catch?

No catch. And if I had died at any time my wife would have received the whole £855 immediately. You see, it's a Savings Scheme and Life Assurance Scheme rolled into one.

Supposing you hadn't signed on for 22 years' service?

Well, when I had finished my 9 years, and had paid premiums for 7 years, I could have drawn £234 to help set me up in Civvy Street, but now, after 22 years' service, I shall have the option of taking the £855, or if I don't need the cash immediately, a pension of £172* a year when I retire from civilian work at 65.

Which will you take?

I'm going for the pension. I'm all lined up for a job already, and with the extra pension to look forward to when I retire, and the wife provided for if anything happened to me—well, its the kind of security we all want.

How do you set about all this?

That's easy. Ask the Provident Life for details of the Progressive Savings Scheme.

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In 1963 Dampier surveyed 118 miles of coastline, 217 miles of sea bed and had 2,400 miles of soundings, this was in addition to 45 dredge and 75 core samples, not finished yet, she also carried out a survey of Hong Kong Harbour approaches and surveyed Kepple Harbour in Singapore.

H.M.S. *Cook* spent 1963 in the Pacific mainly working around Fiji, New Guinea and the Gilbert Islands.

Unfortunately during one of her surveys, *Cook* grounded on an uncharted coral head (since charted) and suffered damage that resulted in the forward section being flooded.

The ship managed to get back to Suva and was repaired with the help of the ships divers and divers from H.M.N.Z.S. *Taranki*.

So that no time would be lost, surveying was carried on by the ships' boats but the major part of it by H.M.N.Z.S. *Kachlan*.

The day before leaving Suva, Cook rescued the crew of an American yacht that grounded on a reef and later salvaged the yacht.

On her way back to Singapore she handed over a hundred tons of stores at the hurricane struck Island of Tangoa in the New Hebrides.

H.M.S. *Dalrymple* commissioned as a survey vessel in 1949 and has surveyed in several parts of the world. In 1963 she conducted surveys as far apart as Ireland and the Indian Ocean.

It is hoped that surveys carried out by *Dalrymple* in the Persian Gulf will result in providing material for modern charts of the approaches to the oil sheikdom of Kuwait so that even the largest tanker will eventually be able to use the Gulf ports with safety. H.M.S. Owen started her surveying year at the North end Coast of Kenya. This coastline survey was pretty arduous work as it often entailed the survey parties working up to their waists in mud and water in mangrove swamps (anyone fancy lugging a theodolite around Horsea Mud?)

While preparing for the annual inspection at Aden, the ship's Divers were called out to recover an aircraft that had crashed in Aden Harbour (some people do anything to get out of divisions). After a brief respite in U.K., Owen sailed back to the Indian Ocean to take part in two ship sesmic work with R.S.S. Discovery, this work being carried out between Mombassa and the Sechelle Islands is part of the Royal Navy contribution to the International Oceanographic Expedition.

By March of 1964, Owen had surveyed 2,000 square miles of ocean off the coasts of Kenya and Somaliland.

The five ships mentioned are the ones that carry out surveys mostly away from U.K. Between them in 1963 they have surveyed 573 miles of coastline, 7,875 square miles of Ocean, this is in addition to other duties such as core sampling, bird watching (which type?), wreck sweeping, water (fire) sampling, tidal observations and magnetic observations to mention a few of the tasks carried out by them. K.S.

A husband and his wife went to the doctor for their yearly check up. The husband went into the office first and a little later the doctor came out shaking his head. 'I don't like the look of your husband', he said to the wife. 'Neither do I', answered the wife. 'But he's good to the children'.

31

Your Questions Answered

Question:

Please could you tell me of the opportunities for commercial diving in New Zealand? I am emigrating shortly and as I have had a number of years experience in most types of equipment I am hoping to make this my trade out there.

L/Sea. R. D. BLAIR.

Answer:

In answer to your query concerning opportunities for commercial divers in New Zealand: to my knowledge the openings are very limited in comparison with the amount of underwater work done in Europe. I know of only two diving companies doing full-time diving work. These were started by keen amateurs, using Scuba and are doing very well. An enterprising individual could create his own business. As an employee there is less hope: the various Harbour Boards employ 'Hard Hat' divers and may have an occasional vacancy. However pay rates are poor compared with the earnings of private contract divers.

(The above answer is an extract from a letter by Wade Doak, Editor of the New Zealand magazine Dive).

Question:

Recently I was discussing diving to an 'old hand' and he mentioned the diving disease 'Pete', as I had never heard of this before could you please explain who or what 'Pete' is.

Mr. P. HOWARD (Croydon)

Answer:

'Pete' originated during the war and comes from the letters 'O.P.' or Oxygen Poison. Very little was known about this illness at the time and it used to be said, 'Oxy Pete got me' when a diver had suffered from Oxygen Poisoning.

Question:

During a recent Diving Holiday, I found an uncharted wreck, who if anybody should I inform?

Mr. T. E. BARNETT (York)

Answer:

If your wreck is a genuine uncharted one the local Harbour Master will be the best person to inform. Also the Hydrographer of the Navy, who will investigate and publish the findings in a Notice to Mariners.

Question:

I am a Leading Seaman, Shallow Water Diver with a T.A.S. nonesubstantive rate. Is it possible for me to do a course to qualify Clearance Diver.

L/Sea. K. WEST.

Answer:

It is possible for you to get your wish, but I am afraid it is highly unlikely, as the branch is slightly overborn with senior rates, the policy is not to accept Leading hands or above. Contact your Divisional Officer who will advise you.

Question:

Was the German Battleship *Tirpitz* actually sunk by midget submarines. We have been having a small messdeck argument on this subject, and some of the theories put forward have been fantastic. Could you let us know the true story?

A.B. BILL FREEMAN

Answer:

The first attempted attack on the *Tirpitz* was in Autumn 1942 being a complete failure. In 1943 six 'X' craft launched another attack whilst the *Tirpitz* was in Kaafiord (Norway). They were towed to within range by conventional submarines, after many snags with nets and other harbour

defences, three succeeded in getting through. 'X' 5 was lost with all hands 'X6' and 'X7' managed to release their charges underneath and alongside the giant Battleship being taken prisoner after scuttling their crafts.

Although the *Tirpitz* was not sunk after this operation she suffered considerable damage. It was an air attack in 1944 that finally destroyed her.

Question:

Helium is a very rare and expensive gas I have been told. Could you enlighten me as to when it was first

used for Deep Diving and what is it made up of.

A.B. (Pincher) MARTIN.

Answer

Helium was first experimented with by the Americans, Yart and Sayer who developed it for use in deep diving. The British carried out experiments prior to the last war but due to limited supplies these tests were not conclusive. Helium is an inert gas being odourless and non-explosive. It is found in minerals containing certain radio-active elements.

The main source of supply in the world is United State's natural gas fields.



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Kelp Baskets and all that

THE 1963-64 season in H.M.S. Protector has produced some good diving opportunities which the regular team of one Artificer Diver, one Free Diver and six S.W.D's have exploited fully, breathing good wholesome pure Oxygen. Next season however we are to be modernized and carry S.A.B.A. Several other divers onboard disappeared into the blue on detached survey duties, at least one of whom had never looked the same since meeting a shark on a jaunt while the ship was at Dakar. (It is believed he had been ashore the night before).

In Port Stanley the team was faced, in early December, with a large task. It was refitting the shoe which supported the bottom of the rudder of a

local M.F.V. (Motor Fishing Vessel). The whole fitting with associated check plates as seen in photograph had to be removed and a new brass fitting and plates secured in their stead. This was achieved in three days, it was hard work but the team thoroughly enjoyed this unusual job.

A job such as this early in a ships commission is first-class for working up the team. Several lessons were learnt including one by the Diving Officer who had always despised the wearing of more than one undersuit. However when he came up blue with cold, he was forced to admit that it is essential to keep warm, not only for comfort but in order to maintain the will to keep on at a diffcult job.

The crew of the M.F.V. were



M.F.V., Port Stanley—the bits we got off. The bits we put on are, we hope, still on the bottom of the M.F.V.

extremely kind and at the end of the job, a little 'inner warmth', was distributed to everyone's satisfaction.

The standard tasks in Port Stanley is cleaning the stranded sea-weed called Kelp which gets sucked into the inlets and can bring a ship to a halt as she tries to leave harbour. This requires a dive some 75 minutes before the ship moves, and some of us hero's went down at 0530 on New Years day. However even with a thorough clearance, the trouble still persisted until the Senior Engineer produced his 'Kelp Baskets', great wire mesh affairs which were fastened to the inlet by a diver and could be slipped from inboard using a trip line as the ship gathered way. These seem promising although initial attempts to fit them proved hilarious. One diver could not understand why the basket seemed so heavy until he found his partner dangling underneath it, having a touch too much negative bouyancy, while legend has it that another diver surfaced to find no sign of his 'oppo' - so he went down again to find him swimming around inside the kelp basket.

Our efforts have either amused or encouraged quite a number of volunteers for ships Diver from the ship's company and we have just completed their aptitude tests at Las Palmas. We hope they finally qualify and have as much fun as we have.

Ships Team —

Lt. B. N. Wilson, S.W.D. Chief Shpt. M. J. Bell. Art. Diver P.O. E. A. J. Wood, S.W.D. L.M. (E) J. D. Greenhill, Free Diver

M. (E) 1. A. J. Beaumont, S.W.D. A.B. J. P. Phillips, S.W.D. A.B. J. Davies, S.W.D. A.B. T. H. Hess, S.W.D.

The First British National Diving Coach

ANY readers who were around Vernon in 1951-52 will remember Brian Booth. He qualified Diver and after a short stay departed to the West Indies aboard H.M.S. Bigbury Bay. A Chief Petty Officer (now serving in Vernon) remembers him well and says 'Booth was the type of fellow you would readily recommend to anyone at any time', he went on to say 'He was like a fish, in the water whenever possible gaining knowledge and experience'.

Booth left the service and joined Siebe Gormans as an Instructor/ Diver, during this phase in his life he was responsible for training the very first police frogmen teams, namely the Berkshire Police Force.

He joined the Shell Oil Company as a Rigger/Diver and qualified as Marine Superviser after two years. The next six years were spent in Sarawak working for the Borneo Oil Company, gaining experience in many aspects of underwater work.

On returning to U.K. last year Booth decided to settle down with his wife and family. The position of National Diving Coach was offered, which he readily accepted. appointment is designed to coordinate all Sub-Aqua Diving training methods throughout the United Kingdom.

As a very enterprising individual, Brian Booth has many ideas to standardize the Clubs and has plans to form three or four diving sites where his training methods can be adopted.

Congratulations Brian Booth on your appointment, and all the best in this new venture. V.G.



Promotions and Advancements

To C.D.:

M.E.(1) S. Whatley O.S. R. Massey O.S. J. W. Harris A.B. Tonks A.B. A. V. Gale L.S. D. J. Culpin L.S. T. M. Curry A.B. R. Lougher

A.B. J. Thomson

To C.D.1:

P.O. K. M. McKenzie P.O. C. B. Jones P.O. S. Templeton

P.O. J. A. Wilson

P.O. B. Rogers

Deeps

THE old suit leaks, and the cuffs Relief valve not working, feeling so are worn.

Reducer's packed in, and the breathing bag torn.

Woollens are wet, and an ice-cold

Diving ain't all hav, is it?

Going down the shot, getting lower and lower.

Haven't had a dip, for six months or more.

But I've heard it said, and it's true

That to much diving weakens you.

Pain in my ears, came down too quick.

Nose-clip refuses to do the trick. And this here cannister sure feels sick.

Can't be a darn thing in it.

There's too many weights, and my breathing's queer.

Guess that's last night, the girl, and the beer.

Now I'm foul round the shot, and I can't get clear.

You just can't depend on nothing.

forlorn.

The tidiest diver that ever was born. Now the left boot is pinching my favourite corn,

Diving's dismal, ain't it.

I've lost the jackstay, but I don't care. Never did figure on going nowhere. Just stuck in the mud, it makes me

Life gets worse than ever.

Lifelines all round me, should sort it out a mite.

But it's caught on a rock and I'm trapped in the bight.

The inboard end's beside me, this can't be right,

Diving's deadly, ain't it?

Can't get my knife out, it's rusted in, Never did write a form for next of kin.

Hope they don't tell Ma, how dumb I've bin.

Not much longer now.

S.'9s and taxes, debts and woes, Anoxia, Narcosis, and so it goes, And now the clip's fell off my nose, Diving ain't all hay, is it?

WIGGY (reproduced from Vol. 2, No. 3).

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Navy Names New Ships

A nannouncement by the Admiralty Board of the names of a fleet of new ships shows that while its eyes are firmly fixed on the future it remains over conscious of its past.

The 14 vessels concerned have been planned to keep the Royal Navy in the van of modern seafaring practice and aspiration — from the opening up of polar waters and the comprehensive study of the oceans to the vital business of charting the Seven Seas

Though the ships themselves will be up-to-the-minute in every detail of their design and equipment, their names will reflect the Navy's history in the realms of exploration, research and hydrography as far back as the sixteenth century.

Thus, the Royal Navy's first ice-breaker - whose role will combine the tasks of patrol, survey and scientific support in the Arctic, Atlantic and Antartic - is to be named after Captain Scott's famous ship Terra Nova. Unlike Scott's sail and steam propelled 764-ton vessel, with her coal-fired boilers and underpowered single-screw engine, however, her modern name-sake (displacing 7,500 tons) will be powered by four diesel-electic engines driving twin screws and developing some 15,000 horse-power. She will also be equipped with two helicopters.

To tackle the problems of oceanography with their duel beating on undersea warfare and the economic exploitation of the oceans, the Navy is now building three new ocean survey ships of advanced design. These 2,800-ton vessels, to be delivered next year, will be named after their illustrous predecessors *Hecla*, *Hecate* and *Hydra*, several generations of which have served the Navy

with quiet distinction since the end of the eighteenth centure.

Thus, Hecla figures prominently in the abortive search for the North-west Passage from 1819 - 1825, in subsequent exploration round Spitzbergen and in hydrographic surveys off West Africa till 1828 — while her 'battle honours' date from 1798. Hecate achieved fame with her threeyear survey of the west coast of Canada from 1860—1863, giving her name to the wide strait separating the Oueen Charlotte Islands from British Columbia and has 'battle honours' dating from 1810. Hydra, which has the longest Naval record of the three — starting in 1778 — has 'battle honours' ranging from Syria in 1840, through both World Wars to the Normandy invasion. Her surveying history is concentrated in the Mediterranean from 1863 - 1868.

The new ships to bear these names will be deployed mainly in the deep oceans. To the extent that their work will involve the mapping of the physical properties of the waters comprising the oceans (their depths, currents, temperatures, salinities, densities, transparencies and acoustics—as well as the shape and composition of what lies under them) these ships will be virtually extending the investigations of their predecessors, but probing much more deeply into them.

The new *Hecla*-class will replace the four ageing ships of the *Dampier* class and the even older *Scott* which have borne the brunt of hydrography since the last war. This role—the never-ceasing task of charting and re-charting the shallow seas for the safety of navigation — will soon fall to a new class of coastal survey craft of smaller dimensions. Six of these, each of about 500 tons, are

projected for hydrographic work overseas. They are planned to work in pairs, each pair assigned to a particular theatre of the world, and will be called *Albatross* and *Albacore*, *Bulldog* and *Barracouta*, *Fox* and *Fawn*.

These names were all borne by surveying ships of the last century, several of them perpetuated in the names of shoals and reefs shown on the present-day charts. Their activities ranged over 70 years, from 1812-1883, and covered the English Channel, East and West Africa, the North Atlantic, Bermuda, the Mediterranean, Sea of Marmora and the Red Sea.

Meanwhile, to augment the surveying effort in home waters during the run-down of existing ships, two coastal minesweepers have been converted to surveying craft and will start work this summer. Commissioning in mid-July, they are to be named *Mermaid* and *Myrmidon*. The former name dates from 1586 when it was borne by a 120-ton ship Commanded by Captain J. Davies who gave his name to the great Strait between Greenland and Baffin Island

while searching for a North-west Passage. *Myrmidon*, a screw sloop, served as a surveying vessel in the Mediterranean, Red Sea and Antarctic from 1885-1889.

Two further names with nineteenth century hydrographic connotations have been allotted to a pair of inshore minesweepers which will replace the aged survey launches Meda and Medusa for work in inshore waters at home. These larger and more modern vessels, when converted for surveying duties, will be named Woodlark and Waterwitch. The former was borne by a cutter charting the Orkney and Shetland Isles during the first part of the 19th century and the latter. during its closing stages, by a screw yacht surveying the islands of the South-west Pacific, the Great Barrier Reef and the China Coast.

The above replacement programme, though it gives the Navy more ships for its specialised tasks, will in fact be more economical. Being designed solely for their job the vessels will be proportionately more effective and, most important, will require fewer sailors to man them.

Two Divers Die in Under Thames Tunnel

ATE in June this year we read in the national press of the tragic story of two young men who were sucked into a disused pipe and to their deaths under the Thames. It was stated by Mr. Jeffrey Davies, a brother of one of the drowned divers, 'They died because someone opened a valve'.

The two divers were Mr. Richard Davies, 18, and Mr. Ronald Finch, 28, the former was the son of the Firm Chief; Mr. Joe Davies. They

were working at the entrance of a disused pipe, which at one time had fed water to the cooling system of the London Transport's Power Station in Lots Road, Chelsea.

The pipe which has a diameter of 7 feet 9 inches and is over 200 feet long, runs from an intake pit situated in the middle of the Thames to a further concrete pit at the waterfront. The divers job was to clear away silt and debris from the face of this tunnel which incidently had

not been used for 20 years. A large valve which should have been closed was the cause of this disaster, this valve was operated from inside the main building and notices had been displayed to the effect that the valve must not be tampered with. It was not foreseen that this valve may have been opened before the day's dive, if it had the job would not have been undertaken, for it would have been far too dangerous.

The valve was situated at the Power station end of the tunnel stopped the water draining out, once this valve had been opend the tunnel emptied thereby unknowingly setting the trap for the unsuspecting divers.

The equipment in use was 'Hard Hat' or Standard which only became obsolete in the Royal Navy at the beginning of this year. Whether the two divers would have stood a better chance of survival in selfcontained gear is impossible to say, for the rate at which they must have been swept into the tunnel, with the inrush of water, it is doubtful if anything could have withstood the terrific force.

The attendants on the barge at the surface tending the air pipes were almost pulled into the water with the sudden surge which ripped the air pipes from the helmets of the divers.

The bodies of Davies and Finch were recovered at low water the following day, by divers from the firm.

The Metropolitan Police Underwater Search Unit Divers were present when the bodies were recovered, but did not take part in the operation.

The loss of these two men is felt throughout the Diving World. V.G.

H.S.C.D.T., H.M.S. 'Dingley'

THIS is to dispell once and for all the popular belief that the divers on the *Dingley* can't write (stops to consult Pitmans English writing dictionary). Those of our readers who remember our last literary masterpiece, may be interested to know a copy is now obtainable from the History Museum, London, after its recent discovery in the archives of that establishment.

We will begin this epic saga from the latter end of February, when the team flew, or rather, was flown to Gibraltarforexercise 'Magic Lantern'. On arrival we were told we would be based at a place with the rather grandoise title of 'The Governors Cottages', which turned out to be more like Stonehenge. Our task in 'Magic Lantern' was night attacks on N.A.T.O. ships which were carried out in perfect visibility, a far cry

from our normal lot in U.K. waters. Working with us were a team of Canadian C.D's, and both teams got along like a house on fire, many a past glory was relived, and as to be expected, many a bottle of Malaga sunk. The only minor disagreement being, whether it was limey, or Canuck C.D's who were with Wolfe when he stormed the heights of Quebecs. Before concluding this phase of the story, it should be noted that one of our gallant band fell down the Rock, and hurt his leg, whilst picking flowers!

On arrival back in U.K., we once more set sail for Alderney, where we carried out trials on sea-sick tablets, which turned out to be a very cheap way of getting a fast hangover. After our intended five-day stay, a gallant daily attempt was made to leave harbour, but every night saw us once

more propping up the 'Seaviews' bar, however funds were exhausted after 12 days, so our stout little ship was 'forced' to sea.

On return from Easter leave, our next task was a mine clearance exercise in Wilhelmshaven, with the Dutch and French divers. Out of the total of 20 mines recovered, the *Dingley*'s Crack front line N.A.T.O. assault team frogmen found three, one of which had been lost from the recovery tug.

Still the story had a happy ending, because a good run ashore was had by all.

Of course during the whole period of this article our night attack duties were not neglected, during one of these a rather unpleasant incident occurred, the Cox'n (Jock Adams) made a vicious, and unprecedented attack on the revolving propeller of one of our tame Johnsons, using his face, the beast, which proved to us our Cox'n wasn't as hard faced as we thought.

However the spirit of the thing was not lost, for as he was being sewn together, his plaintive cry echoed throughout the ship, 'Giz us a tot doc.', then we knew all was well.

Meanwhile in a darkened room in Whitehall, hushed voices were planning our next mission, the plot thickened when the team were each solemnly issued with a pussers rigging chiv, and a handful of salt tablets, listed on B.U.A's flight 811 as Government Officials, the team was spirited to Aden, travelling in mufti, and trousers.



From our man in Aden, cunningly disguised as an R.A.F. Movements Corporal, we learned our next rendezvous, Bahrien!

There the facade crumbled, as we were shown our luxurious accommodation (the tank deck of the L.C.T. Bastion) by our old friend 'Jim' Harrison. For the next two days, we lived with flies, mines, sand, intense heat and bootnecks, until we reached the Iranian Island of Kharge. By this time the name Bastion was suitably corrupted. For the next week we we exercised with Iranian divers doing compass swims, demolitions and night attacks. As many sharks were seen in the area, a new diving disease developed, which was promptly named dinesion diarrhoea, or shark aphobia, the syptoms being strained neck and gimbal eyes. One shark attack took place, two of our number lured a six footer to the bow doors, and set about it with a seven pound maul and a crowbar. It retired bruised but unbeaten.

A new world high jump record is hereby promulgated, from 80 foot below to 17 feet above, when one of our fearless frogmen encountered a large turtle and shark, well within yomping range.

Our tour of duty in the Persian Gulf was rounded off, by a social evening with the Iranian divers. After sampling their own version of a proto cocktail, which went under the name of arrak, we left, colours flying but twitching at the extremities, minor convulsions and slurred speech were observed.

Now of course we are back plodding the waterways of good old air conditioned England. At time of writing we are anchored off St. Malo (North France) waiting for our E.T.A. Deleting the Tanky (rich fatty Bartholomew) the gaunt faces surrounding me are:—

Lt. MacKay S.-Lt. Cobby

P.O. Jock Adams

P.O. Mick Roberts

L.S. Mo Moss

L.S. Andy Clyde

L.S. Ron Neville

A.B. Henry Cooper

A.B. Chris Harpley A.B. Jock Russell

A.B. Thatch Thatcher

A.B. Happy Day

What is a Copededa?

CELECT any 12 divers and ask Them the question that titles this article and if you get one correct answer it will be a miracle. Yet all divers know what it is, though perhaps by another name, having seen many during their underwater travels. Even so, having identified it, there are very few among you who could give a description of it. The fact is that you Naval divers are a self-centred bunch who carry out your allotted tasks taking little interest in what is going on around you. You dive in all parts of the world, in different climatic and varying water conditions yet know

nothing or next to nothing of the environment in which you are working. Of course you know if the water is hot or cold, whether the visibility is good or bad and that the bottom is mud or rock, but outside these very basic facts you are appallingly ignorant. If you cut your hand on the ship's bottom you couldn't care less whether the offending growth is a tubeworm or an encrusting bryoza, to you it is just a b ---- nuisance and of course this is literally true. Similarly if stung by a jelly fish that it is a medusae or a cyonae is of no consequence, it is still as painful.

However I am sure that there have been times when you are 'X' feet down, that you have wondered why nature behaves as it does. How for instance does the growth on a ship's bottom start and what exactly is it? Or why do jelly fish carry stings and how many types are there? Just as on the surface you can recognise a daisy from a dandelion or a mole from a mouse, so as divers you should be capable of identifying the various species of plant, animal and fish life in the sea. Now, I am not suggesting that when you are on a diving job you drift off nature studying, Chief would have something to say about that, but while underwater you do have a wonderful opportunity to observe life at first hand. interest once started should be followed up by enquiry and reading.

The obvious question now is WHY? Why should you do this. Such specialised knowledge is not a requirement for qualification nor does it improve the efficiency of the diving operations. This is of course absolutely true; however I can give two good reasons for correcting this seemingly lack of underwater education. Firstly for your own satisfaction, to fill in the background to

the diving and know something of the conditions in which many of you in operational units, spend most of vour working day. Secondly because the Navy is becoming oceanographic conscious which means an increase in the study of the oceans and the seas, their water, plant and animal life. Within the hydrographic department there is a small expanding oceanographic branch, whose work is receiving wide attention throughout the Navy, and you as divers must ultimately become associated with it, even though in only a small way. You may be called upon to assist in the oceanographic programme and should have some inkling of what the subject matter is about. I have recently become interested in oceanography and being a diver at heart. have volunteered to write a couple of articles on these aspects of the subject that affect the divers. The articles will not be instructional but of general interest, and being a learner myself is assurance that they will not be loaded with scientific or technical data. So, the Editor being willing, the first article will appear in the next edition of the Magazine.

Meanwhile, what is a copededa? G.A.F.

The Diver has been Remembered

N the 21st March of this year, a Bronze Statue of a Diver was erected in Winchester Cathedral.

It was presented by the Rt. Hon. Lord Ashburton K.C.v.o. and dedicated by the Dean of Winchester, the Very Rev. O. H. Gibbs-Smith, C.B.S.

The Diver was W. R. Walker, who in between the years 1906 and 1911 was responsible for saving this Cathedral from certain disaster. The momento inscribed on the pillar states: WILLIAM WALKER THE DIVER WHO SAVED THIS CATHREDAL WITH HIS TWO HANDS.

The job was unique in diving history and without precedent in Church archaelogy. It was noticed in 1905 that parts of the Cathedral were showing signs of collapse, and on inspection it was found that the foundations were laid on a peat bog. The original builders had either failed to detect this as a bog or thought it insignificant, and over the centuries this peat bog slowly compressed until

the whole building would have been destroyed. Immediate action was required if the cathedral was to be saved

A pit was sunk, and it was found that beech trees had been used in the foundations making a raft on which these foundations laid. While some of these logs remained sound after 700 years many had decayed. More serious than this was the fact that water from the river Itchen filled the surrounds. Unfortunately pumping was not possible, for with the pumps sucking the water out so would come the silt and sand from under the building thus pumping away all the support.

The only solution was to employ an experienced diver to clean up the Marley clay and Peat flooring and lay an immense concrete bed capable of substaining the weight of the old masonry.

Mr. W. R. Walker who was one of Siebe Gormans most experienced divers (and who had taken part in many of the earlier practical experiments in Siebe Gormans research department) was engaged for this historic task.

The pumps were employed to keep the water level down, thus enabling as much repair work as possible to be done.

When the Diver appeared the water was allowed to resume its normal level and William Walker commenced his task, which was to take him six memorable years.

The job was made much more hazardous by the fact that the Diver had to work in complete and utter darkness and with the threat that the building could collapse still further.

He excavated the peat from the foundations, cutting it square to the wall and removing every particle from the gravel surface. It was an extremely arduous job working inch by inch in the black pit.

Diver Walker's next task was to lay ready-mixed cement in small jute bags, when one layer had been placed in position, the bags were cut open and the concrete spread out giving a firm surface. Four layers of these bags were laid by Walker giving a very firm base and checking the inflow of water. After some time the concrete set and the water pumped out enabling the bricklayers to repair the original foundation.

Mr. William Walker died in 1918. seven years after completing this arduous and difficult job. He was only 49 years of age and had given many of these years to diving, so it was very fitting when this fine statue was erected in the Cathedral which he had saved. V.G.

New Tunisian Nautical Centre at Zembra, Cape Bon

THE Island of Zembra off the habited except for the 'Village', Tunisian coast at Cape Bon is well known to yachtsmen, and its natural amenities have now been enhanced by the Tunisian Government who have established a nautical school which is ideal for underwater sports. The Island itself is unin-

which is occupied by the underwater centre and aqua-lung school, together with the sailing school of the Centre Nautique International de Tunisie.

The diving school is under the

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management of Mr. Reg Vallintine, well known in underwater diving world, who for the past three years has run a diving school on the Island of Giglio, Italy. This summer at Zembra, in addition to instructing, Reg Vallintine and the divers of the Neptune Watersport Club will be busy collecting for the Natural History Museum and the Zoo.

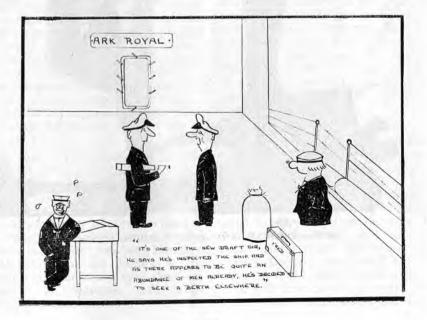
The aquarium of the London Zoo is anxious to obtain wrasse, groupers and stargazers, besides such interebrates as vestlet anemones, Red Sea squirts and large tube worms. Reg Vallintine, who found many almost tame groupers when he dived off the island in January this year, had high hopes that they will be able to obtain many of the specimens needed.

Method of transportation will be by special plastic bags — one third filled with sea water and two thirds with oxygen. The fish are to spend a comfortable one day trip by air to London. Methods of catching include luring the fish with delicacies such as the entrails of sea urchins into specially constructed traps, a method that proved very successful last year, the fish became so tame after being fed that they headed straight for the divers as soon as they appeared underwater.

'Neptune' divers also intend to continue their collection of Mediterranean hydroids and corals for Dr. Rees of the Natural History Museum and to map one of the ancient wrecks which are said to lie around the islands.

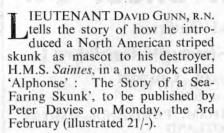
The Neptune Watersports Club arranges diving, water-skiing and sailing on its holidays which are organised from London.

(Address obtainable from the Editor.)



Alphonse: The Story of a Seafaring Skunk

by DAVID GUNN



David Gunn decided that a skunk would be the pefect mascot for the *Saintes* after a friend who was a keen animal-lover said 'There's no challenge in keeping a cat'

And so, with the Captain's permission, Alphonse was bought — for £15 — from a zoo supplier in Bedford but before he was safely installed in his ship he had to meet the Press, for his story became news. ('Stinker Signs On' was the headline in one national newspaper). Alphonse's introduction to the Press almost resulted in his never going to sea. While he was being photographed he slipped out of David Gunn's grasp and headed at a fast pace through St. James's Park in the direction of Buckingham Palace. His escape was inadvertantly stopped by a pair of nuns who blocked his path long enough for his anxious owner to retrieve him.

Aboard the *Saintes*, Alphonse settled down to ship routine like a seasoned sailor, and when the ship sailed out of port he was the only member of the crew who successfully weathered a particularly bad passage through the English Channel. By the time the *Saintes* reached Gibraltar, Alphonse was the darling of the ship's company, and even the Captain's cat, Sylvester, had taken kindly to him,

But life with Alphonse was not without its complications, and in Malaga, he disappeared. After three days of frantic searching, complicated by theories that Alphonse had probably gone ashore to see Spain for himself, the renegade skunk was discovered hiding out in the bridge. He had climbed a ten-foot vertical steel ladder to get there, and even the lack of food could not disguise his pleased reaction to his exploit.

After a nine-month tour of duty which ranged the length of the Mediterranean and included escort duty to the Royal Yacht Britannia. H.M.S. Saintes passed through the Suez Canal without Alphonse, who was left in Malta, to protect him from the intense heat of the Persian Gulf, where his ship was now headed. Alphonse's sojourn in Malta was made happy by the fact that he was able to indulge in his favourite land occupation; digging holes in people's gardens. But when the Saintes returned to Malta and Alphonse was once more onboard, he quickly settled down to his now-familiar ship-board life.

The voyage, over, back home in Hampshire, a new form of existence was planned for Alphonse. He was on land, not the deck of his ship, and it soon became apparent that his frenzy for digging was unquenchable. And the day came when David Gunn came to Alphonse's enclosure and found himself staring at a gaping hole. After days and nights of acute anxiety Alphonse was found; and it was evident that 'wild' life suited him, as he had never looked so well. So David Gunn, after some hard and



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serious thought, decided to set (skunks are nocturnal creatures) a Alphonse 'free for all time'.

small striped animal with a slightly And if you are wandering about in rolling gait, you can bet he is Hampshire and see in the dusk Alphonse, formerly of H.M.S. Saintes

Two Men Injured as Seven Ships Free **Grounded Freighter**

Pearl Harbour, Hawaii . . .

TT took the combined efforts of three Pacific Service Force ships, two Naval tugs and two civilian tugs; and cost one man his left foot and fractured another man's leg, before the Nationalist Chinese freighter Hai Fu, aground near Honolulu Harbour, was finally pulled

The 455 foot freighter went aground on a underwater peninsula about 500 yards from shore while making an approach to the harbour. Civilian tugs tried in vain to pull her off, and later in the day the U.S. Navy was asked to assist. That night, the rescue and salvage ships U.S.S. Current and U.S.S. Bolster. the fleet ocean tug U.S.S. Hitchiti, and the yard tugs Ottumwa and Tusumbia took positions around the stricken freighter rigging towing lines.

Commander Willard F. Searle, Jun., Pacific Fleet Salvage Officer, boarded the Hai Fu to direct the operation. Working with Cdr. Searle were Lieutenant (Junior grade) Stephen Ching, U.S.N., from Commander Pacific Service Force staff. who acted as interpreter for the Chinese speaking crew.

The first attempt to pull the freighter free began shortly after midnight. Cdr. Searle stationed

himself on the Hai Fu's bridge and ordered salvage operations to begin. The freighter shuddered and appeared to move, and then, with a loud snapping sound, one of the two-inch tow lines on the stern parted. Cdr. Searle rushed to the fantail to see what had happened. He was followed by Nicholas Riegg, 21, an American passenger who was on his way to Taiwan to enter the Mandarin Language Training Centre there.

Just as the two men arrived on the fantail, another tow line parted, the broken end whipping viciously across the deck striking both men. Riegg suffered a severe gash above his left foot, a broken leg and minor head injuries. The foot was later amputated at Honolulu hospital. Cdr. Searle suffered a compound fracture of his right leg.

Towing operations were cancelled for the remainder of the morning. but at noon the ships began again. This time the Hai Fu slipped off the reef and into deep water.

The Hai Fu, meaning 'Big Lion', was bound from Japan El Salvador with a load of scrap metal and earth moving equipment. After being pulled off the reef, her voyage was delayed until a 10 foot hole in the bottom of her hull could be repaired.

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