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DECEMBER 1954 Vol. 3, No. 1

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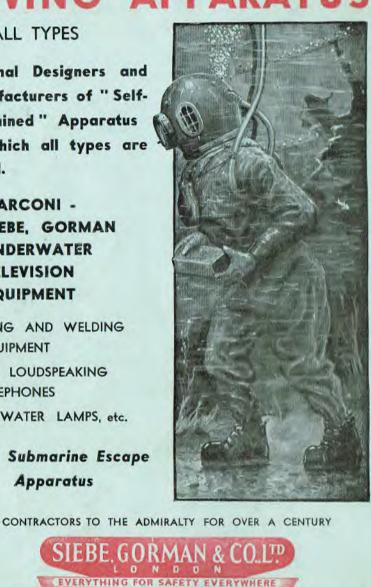
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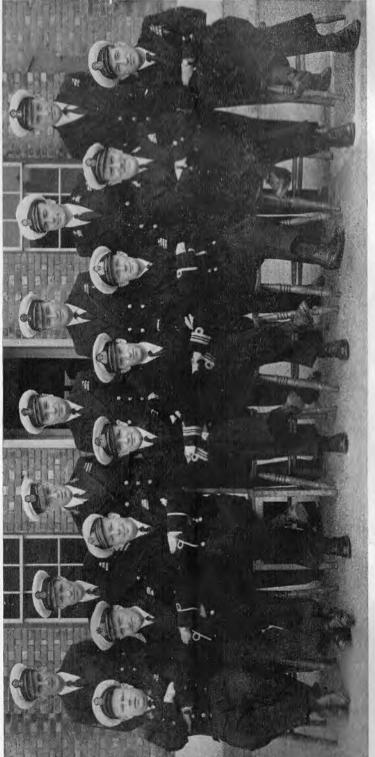
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Diving Magazine

EDITORIAL STAFF

Editor: Lieut. A. Sagar, R.N.V.R. (C.D.) Treasurer: Mr. S. G. Currie-Davis, Commd. Bos'n (C.D.)

Vol. 3. No. 1

www.mcdoa.org.uk

December 1954

EDITORIAL

Apologies to those who have been eagerly (!) awaiting this issue. Also to teams: we have been hurried into print and there has not been time to contact all groups for their news and contributions. BUT please don't despair—send off your poems, cartoons and articles to me as from the moment you read this. We need your genius, without your—"I mean you personally!"—your gifted efforts, the magazine just doesn't exist, we can't edit and the world groans over the loss. Just have a go! Every mis-spelt word from a diver is life and movement to the journal. Remember the magazine is a direct reflection of divers everywhere; if the magazine is obsolete and literary stagnant... so are you!

But anyway to our friends above and below we extend our heartiest wishes for a Very Happy Christmas and Prosperous New Year—wherever you are, and hope that in some small way the

following pages will help to brighten the festive season and be a reminder that there's somebody giving four pulls two bells on the breastrope.

TREASURER'S NOTES

I should like to thank all subscribers for their loyal support.

In spite of the fact that staff difficulties have only made it possible to produce one issue this year, subscriptions have been sent in, almost as usual. These amounts have been "carried forward" and, we shall, of course, send on further copies of the Magazine as it is published. If you do not receive your copies, please do drop me a line and remember that in most cases, copies are returned, due to failure to inform changes of address.

I hope that this current issue makes up in some measure, for our not too good showing this year.

And so to our Financiers, Advertisers, Subscribers, Contributors and Readers, may I wish you all Seasonal Greetings. S.G.C.-D.

JAPANESE DUMP BLOWN UP OFF SINGAPORE

There are many and varied jobs which come under the rather obtuse title of "Clearing Diving," and it was all in the day's work when the Far East Clearance Diving Team under Lieutenant E. Gash, R.N., were called in to deal with over 50 tons of Japanese bombs dumped into the sea by surrendering Japanese troops in August, 1945.



Ranging from 50-250 K.G. many were High Explosive with a fair sprinkling of phosphorous bombs and anti-personnel, they lay under and around Aver Samak Jetty, Some over 8 feet in length were sunk in the mud up to their tails, all were covered with marine growth and fused together with rust. At a rough estimate it was thought that over 200 bombs lay waiting until someone moved them or they moved of their own volition due to crystallization or carelessness on the part of some native. A damaged phosphorous bomb if set on fire could easily set the whole dump off. It was decided to countermine.

The explosion seen from 2 miles away, a 2,000 ft. column of water, white smoke is seen from the phosphorous bombs. During the time needed to prepare the dump, it was necessary for the C.D. team to live and sleep in the jungle — only Lieut.

Gash had a mosquito net and there were eight very sore and wiser men in the morning.

About 1,000 Islanders living in Ayer Samak on the eastern end of Tekong left their homes at 6 a.m. on 14th May, 1953, The military jetty at Ayer Samak where the bombs were dumped had an air of eeriness and quiet. Came 12.30.

Then . . WHOOF . . .

The waters around the Island turned chocolate colour and twenty minutes later the Motor Fishing Vessel manned by the Fleet C.D. Team nosed their way carefully towards the jetty. As the boats drew closer to land, thousands of fish were seen floating on the surface, stunned or dead. Scores of fish were collected by the boats. An hour later the Tekong Islanders joined the fish hunt, dozens of native prahus and koieks appeared from nowhere and fish was the menu that night for miles around.

On inspection the main part of the jetty was found to be completely missing and a 50 foot crater still remains to tell the tale.

By LIEUT. A. SAGAR, R.N.V.R.

OBSERVATIONS FROM AMERICA By LT. CDR. W. FILER

Covering approximately 20,000 miles in just over four weeks leaves one little time to study the way of life of the people occupying the country visited. A few of the impressions gained during this tour may, however, be of interest, particularly to those who have not been fortunate enough to visit America to gain first hand impressions.

Flying the Atlantic instead of ploughing through it was quite a new experience and to expect the four engines of the 70-seater Super Constellation to keep turning for hours on end seemed to be asking *too* much. The strong head winds encountered at high altitudes caused our pilot to keep down close to the upper cloud base which resulted in quite a bumpy trip, as we passed through angry anvil-shaped minor cloud formations sticking out above the general level. A flash of lightning which licked its way down the length of the fuselage made me think hurriedly about the location of the emergency exits and caused much crossing of fingers. The exhaust pipes from the engines glowing red hot in the darkness, the intense purple flames darting out, didn't exactly inspire confidence, but fortunately seemed to do no more harm than to scorch the engine cowling and leading edge of the wing.

We were impressed during our visit by the meticulous care our American hosts took when making introductions, and on one occasion whilst waiting for a fairly large gathering to assemble, our excellent liaison officer who was making the introductions for the benefit of each new arrival, concluded by introducing a late-comer to thirty other officers with the appropriate interchange of name and rank, accurately and without faltering.

Although most of our travelling was by air, all the short journeys were by car, and even the utilitarian naval vehicles were beautiful devices with latest streamlining, hydromatic gear selection, radios, heating, etc., and would all take six passengers in comfort.

Whilst being driven back to our hotel from the naval gun factory one day, the driver told me that 95% of the ratings own their own cars, which gives some idea of their standard of living.

The car parking problem in the States, and in Washington in particular, is so acute that many people get up early in the morning and drive into the city to secure a place to park, and then go and have breakfast whilst waiting for the day's work to begin. A few people try to overcome this problem by having a British baby car for city

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work, but the American habit of shunting their cars into and out of line of cars parked bumper to bumper makes the British baby look dog-eared in a very short space of time. American car designers have produced so many different models in the history of their industry that the main difference between new models is some small gimmick to catch or appeal to the ladies. Although the American husband fills the purse, he certainly does not hold the purse strings, and American car design, as well as the design of almost everything else, is entirely influenced by the peculiar whims of the real buyer.

It took some time for the English members of the party to adjust themselves to the intense central heating, and I know that for the first week or so I found it necessary to go out of doors from time to time to make sure that I was breathing. It was the sort of heat that really hit you when you entered a building and the temperature seemed to be as high in the main line railway station as it did in a private house.

"Don't fool about Knocker"

In Washington we went to see the latest entertainment invention called "Cinerama." This is something which ousts Hollywood's broad screens, 3-D, etc., and consists of three enormous screens running down two sides and across the front of the auditorium with three separate projectors, projecting each on to one side of this gigantic screen. This is coupled with a thing called stereophonic sound. The main feature of Cinerama is that the audience is given the sensation of actually being in the picture and it was admitted by some members of our party that after they had watched a travelogue of America, through the eves of a pilot of an aircraft, they felt quite air-sick.

Generally, things like hamburgers, steaks, omelettes, etc., are cooked on an open hotplate in full view of the customer. Eggs can be ordered "sunny side up," "over easy " or " over well done." Steaks really were the size of a dinner plate and two inches thick, and could be ordered well done, "medium" or "rare." A pleasant and delicious discovery being that you can still eat the steak even though you have somewhat apprehensively ordered a "raw" one. Tea is definitely not to British taste and is normally made by dunking a tea bag in hot water. Coffee is available almost everywhere and at any time, and is consumed with about the same regularity as tea in this country.

Since, in spite of Town and Country Planners, the Englishman's home is still his castle, he usually has a wall or hedge round it. The Americans obviously don't feel the needs for barriers of this sort and apart from a few places in the town and cities, their gardens and holdings possess no visible boundary. It was, in fact, implied that to build a high wall round your house was the sort of thing that gets Senator McCarthy on your tail.

It seems strange to English eves to see bright neon signs outside churches, encouraging people to come in, but their churches are well attended and some of our party were fortunate enough to be there when President Eisenhower attended the local church near to our hotel at Washington.

Almost everything was obtainable from a slot machine in the States, numerous brands of chocolate, a variety of ice-creams of different flavours, fruit juices in complicated machines which can supply any mixture of flavours you desire. It was found that by judicious manipulation of the knobs on the more complicated machines we could cause the most frightful things to happen inside. "Coke" machines are everywhere and hot coffee with or without sugar or cream can be obtained from slot machines in bus stations, airports, etc.

Cotton towels are not provided in the majority of public washingplaces and hand drying is done with hot air machines or paper towels.

Although we never managed to attend one, we were intrigued by the open-air cinemas. A colossal concrete screen is built in an open space which is dotted with pick-up points for headphones. The customer drives up alongside the pick-up point, takes the headphones into the car and sits back and enjoys the film.



From Fisherman's Walk we had a very good view of the notorious Alcatraz Island, and were able to identify the guards, with the aid of a "nickel a time" telescope. Fisherman's Walk is a sea food paradise. Crabs, abalonies, prawns and longusters (lobsters fitted with antennae instead of pincers) are on sale in every other shop. Most of them still alive and displayed in tanks so that the customer can select the one he wants and have it cooked. These shell fish are quite the biggest I have seen and much larger than the "Devonport monsters of Barnpool."

We found that Hawaii was the exact place that we had read about. The climate was perfect and underwater swimming spiced with a little underwater photography and fishing was sheer joy. Visibility underwater was anything from 50 to 100 feet, and an hour's immersion merely made you anxious for more. As in all the places we visited we saw very little of the local life in the daytime as we were involved with either confernces, discussions or demonstrations, and usually had to rely on one or two free evenings to explore. In this way we covered the famous Waikiki beach area at Honolulu and even became honorary members of the Outriggers Canoe Club which is run by Duke Kahanamoku, a former Olympic swimming champion and a Prince of Hawaiian Royal blood. One of the most outstanding memories of Hawaii is of the banyan tree standing in the grounds of the Royal Hawaiian Hotel. This enormous tree has a main trunk of fitting proportion to its overall size and then five other trunks of similar dimensions spaced equidistantly at about half radius from the main trunk to the outer fringe of its huge umbrella like branches. These additional trunks have grown out of the branches and back into the ground.

Our send off from Hawaii was quite something and really traditional. All the officers of the Unit we were visiting and their wives came to see us off at the airport, and the wives proceeded to decorate us with garlands (leis) accompanied by a traditional embrace and with much camera clicking. Although this was secretly appreciated, we were in quite a hurry to get into the aircraft and hide our red faces.

On two or three occasions we spent the day aboard American ships. We were very impressed by the standard of their entertaining and the quite extraordinary cleanliness of the ship. The handling of these ships was very good by any standards and a surprising thing was that the Commanding Officers of these smaller ships held the curious rank of Temporary Lieutenant or Lieutenant Commander Confirmed Chief Petty Officer. This seems to be a Government wangle whereby these people leave the service on C.P.O.'s pension and not on the Lt. Comdr's. Perhaps when you get American scales of pay during your active service life this is not of any great significance.

In conclusion, I would say that everything the Americans did was done on a fabulous scale with little or no expense spared to achieve the ultimate object.

BOMB AND MINE DISPOSAL NOTES

Clearance Diving responsibilities for Command Bomb and Mine Disposal commenced early in 1953, with the appointment of Com'd Bosun S. Currie-Davis at Portsmouth. Later followed by similar appointments for Senior Commissioned Gunner J. Rae and Commissioned Gunner S. Honour to the Nore and Plvmouth Commands. More recently Commissioned Gunner (TAS) C. Lawrence has been appointed Mediterranean Fleet B. & M.D.O. and now we are pleased to hear of the appointment of Senior Commissioned Bosun P. I. Messervy as Command B. & M.D.O. Scotland. We wish him luck and a good bag.



Speaking, or should I say "blowing" for ourselves, we have, during the last 20 months, found life quite interesting, sometimes arduous, but never dull. The variety of missiles, and projectiles has exceeded anything shown in the book. Yes, we have *had* a "kitchen stove" !

The highlight of 1953 was an incident at Saltdean, Sussex, when we were presented with TWO German C.Q's lying within 150 yards of each other.

The lowlight was a "flying" expedition (by Fleet Air Arm transport) to Jersey Channel Isle by "The Bandit" and "Bluey" to deal with a German mine. The two remember little about the mine, but have vague recollections of gaily (and with "reckless abandon") jumping down 200 feet of sheer cliff, after enjoying a wonderful lunch given by the local dignitary. "Bluey" Honour carried the "dets"; "Bandit," C-D, crafty-like, bounded 50 yards "astern."

The mine, deeply buried in bounder rock, was rather inaccessible, and the two had to strip off and swim round some rocks. (Bluey, of course, lost his underpants !). However, this didn't worry them a great deal. Getting back and scrambling up that cliff, after lighting a length of safety fuse certainly *did*. Nuff said !

The excellent liaison with Army Bomb Disposal has been strengthened and in this respect we should like to offer our best wishes for the coming year to the local B.D. Troop, (No. 2 Troop) Royal Engineers at Fort Widley, commanded by Captain R. Hough, G.M., R.E., and also to our friends at Army B.D. School, Broadbridge Heath (Lieut. Colonel G. Slade, R.E.). Most Clearance Divers look upon "B.B." as their ancestral home. Stop press ! Congratulations to Major "Ray" Ballard on his promotion. Finally a word about our "lads." We wish A.Bs Bill Sadler and Will Wilcox the best of luck in the Far East team. Congratulations to you both on passing for Leading Seaman.

Petty Officer B. Dillistone will shortly be on his way to Canada; we wish him luck in his new venture.

We haven't seen much of P.O. "Bungy" Edwards or P.O. "Soapy" Watson at Devonport and Chatham, but are sure that they are keeping our flag flying in those "foreign parts."

And so all the very best to "Mine Maskers" and "Bomb Busters" from our present team, Leading Seaman "Taff" Jones, Leading Sto. "Terry" O'Neil and the incorrigible arch fiend A.B. Jim Rushton.— Oh ! and count me in on this too—S.G.C.D.

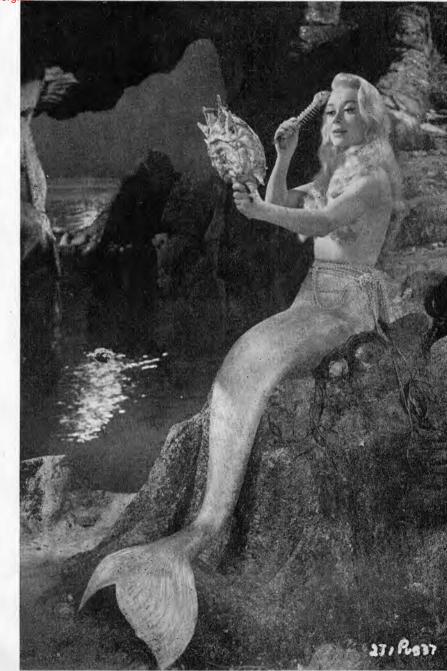
THE STRANGER WORE A NOSECLIP

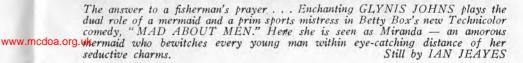
He rode down the Erith Jetty, a quiet confident figure mounted on a Post Office push-bike. He carried no kit this character, but from his hips hung two well oiled nose clips. He leapt into the boat, landing gracefully on feet encased in dusty but well cut "pusser's" sea boots. A wave of his right hand enclosed in a small black glove; we moved. The new hand from the C.D. Branch had joined.

A warm welcome awaited him. On the gangway, clad in unwashed blue jeans and ragged hat, stood Mac, the foreman of the "Annet Strip," and cradled in Mac's arms was a cox's gun, rust showing under the bleak Thames sky.

The bowman with a quick flick of his wrist secured and faded. Running a practised eye over the set-up, the loaded "U.B.A.'s" and the piles of empty "proto" tins, the character climbed aboard. The foreman took a last lingering pull, nonchalantly tossed away the Dettol bottle, and spoke: "New huh! Can you use a thousand foot jackstay?" The character casually spat out a mouthful of "proto", said, "Yep," and strolled for'd to the madhouse. Here he was met by the boys!!!??? a truly unlikely and unlikeable bunch. The boys were mostly clad in well-worn loan clothing overalls over greyish woollen garments. Once again the character's eyes flickered, checking the escape routes; there were none. Here though a hard unpleasant character sauntered in carrying a "gash" bucket full of pot-mess. In one movement the boys grabbed a dirty plate apiece and an equally dirty spoon, and got themselves outside it.

Patting a well filled stomach, the character drew himself to his feet. "Fellas," he said, "Glad to be here." At this a pack of cards appeared. "Any takers?" he said. The boys moved in jingling their ball weights. Peace had come to the "Annet Strip." The C.D.1 had joined.





BOMB IN A BUCKET

This is only a story—any similarity between characters and persons living or dead (mostly dead) is deliberate and intentional.

In answer to an agitated, agonised, and aggravated call, "The Bandit," "Pusser," "Bill" and "Will" found themselves on the foredeck of a dredger. What had previously been reported as a 50 ton bomb 100 yards long by 50 feet in diameter, was in fact a very ordinary German 250 Kg buried nose down in a dredger's bucket full of the slimiest, sludgiest, smelliest, b'ackest mud you ever



saw. The missile, from henceforth known as the "objectile" was found to be armed with a Nos. 17 and 50 fuse and in spite of its sordid miserable environment, obviously had to be treated with respect. After excavating half a ton of the "filthy stuff," access was gained to the fuses, which were then dealt with much to the amusement of Bill and Will who were holding on to the "Bandit's" ankles whilst the latter, "head down" in the bucket, soon fervently wished that the objectile would go off and clear the air a bit! Once the teeth had been drawn the remainder of the task seemed an easy one. A small hand operated crane was fortunately (did I say fortunately?) positioned on a gantry directly over the bucket and the job of stropping and lifting the objectile seemed comparatively simple.

Pusser ("I can drive anything") volunteered as crane driver and soon created an impression of confident efficiency by cleverly lowering the crane hook straight on to the Bandit's "bonce."

The objectile was eventually stropped and at the order "hoist s'owly" it shot up in the air for a height of 15 feet, did a 90 degree turn to starboard, traversed across to port and finally lowered itself into the bucket again. A plea of "Take it easy this time" produced an encore, with the bomb swinging precariously on the strop which had slipped from centre.

It became more than suspiciously apparent that "Pusser" was applying the old principle of "trial and error" in his efforts to master the crane, and it was small consolation to hear a cheerful "Sorry, wrong knob" with the objectile flying up and down like a "yo-yo."



After a few minutes it also became obvious that our mechanical genius was more intent on exploring the various combinations of gears, pawls, brakes and handwheels than positioning the bomb. "Pusser" perched spider-like on the gantry was really enjoying himself, and gaining confidence with every jerk and swing. Once having got the idea of the thing he proceeded to give a remarkable practical display of Newton's laws of motion. However, during a brief moment, when "Pusser" by mistake let the bomb touch the deck, "Bill" had the presence of mind to unhook.

Finally, an inshore minesweeper based nearby very kindly came to the rescue and the bomb was soon on its way to open water where it was demolished. S.G.C-D

ADMIRALTY EXPERIMENTAL DIVING UNIT

Much has happened since the last issue of the Diving Magazine. A few changes have occurred in the staff, Lieut. Border eventually took over Deputy S. of D.'s chair from Lieut-Comdr. Filer. Surg.-Lieut. Cradock-Watson relieved Surg.-Lieut. Hollis, who is now endeavouring to make a name for himself in the outside world. In the Lab. we have been joined by Mr. Taylor and Mr. Walker. Mr. Walker is no new-comer to A.E.D.U.; he was previously on the strength but left at the request of the Government for a two year holiday in uniform. Mr. Fisher has joined the capable staff in the Workshop.

One of the main events this year was the move of A.E.D.U into a new building; this was only just in time, extensions to the Vernon piggery were beginning to worry us, many more extensions and the piggery would have become an annexe to A.E.D.U. Your pork would then have probably come from pigs that had died of "bends."

The new building is an improvement over the old but unfortunately we have less space and there is no room for our museum. We have had to share our offices with diving models. There is a possibility that we will be able to obtain a room at a later date for use solely as a museum.

Acceptance trials of the new M.R.S. have been completed with very little adverse criticism, minor modifications are being introduced and the next step will be a trial order. We are now pressing on with the conversion of M.R.S. for standard diving.

Progress is being made with C.A.B.A., we have what we think a good, if somewhat unusual harness, unfortnately we are being held up for cylinders.

B.I.B.S. and S.E.B.A. have passed out of our hands and are now in production.

The Observation Chamber failed the test at N.C.R.E. and had to be returned to the makers for strengthening; it is hoped that it will be back at N.C.R.E. for test about the end of November.

The article by B.F. (last issue) has stirred us into action on the question of underclothes for divers. Some trials were carried out last winter and further trials will be carried out during the coming months. perhaps the answer we arrive at will not be in accord with the standards laid down by B.F., but I am sure it will be of value to divers in general. We are also investigating gloves and we think we are nearing a solution to this knotty problem.

H.M.S. Reclaim is carrying out deep diving trials at Gibraltar; it is hoped that as a result of these trials the practical working depth on oxy-helium will be increased : also the time on the bottom. These trials are also trials of the bulk oxy-helium storage system which was installed during her last refit.

The Superintendent of Diving recently had a tour of Europe, visiting centres connected with diving in France. Ita'y, Germany and Scandinavia. A lot of interesting information was obtained, but on the whole this trip showed we have no reason to be seriously dissatisfied with our own progress.

Various other projects are under way, but little can be said about them at present.

HEARD IN THE DIVING SCHOOL

A certain Diving Officer :---

Owing to Shallow Water Dives attaining such a tremendously high standard, D.3's and C.D.3's will have to look to their laurels.

More divers are required to volunteer for the Far East?!

THE PEE LITTLE THRIGS (A FAIRY STORY BY COLONEL STUPNAG)

In the happy days when there was no haircity of scam, and when port nicks were a chopple apiece, there lived an old ladyputher mig (in sother words a wow) and her see thruns. Whatever happened to the pigs' old pan is mistwat of a summary.

Well, one year the acorn throp crailed, and old paidy lig had one teck of a hime younging her feedsters. There was a swirth of dill too, as garble wern't putting much stancy fuff in their peepage. As a result, she reluctantly bold her toys thy'd have to feek their own serchuns. So. amid towing flears and sevvy hobs, each give his nuther a big mug, and the pee little thrigs set out on their wepparate says.

Let's follow Turly Cail, the purst little thrig, shall we? He hadn't gone ferry var when he enmannered a nice looking count, carrying a strundle of baw, which was very vellow.

"Meeze, Mr. Plan," said the pittle lig. "Will you give me that haw to build me a straws?" (numb serve, believe me).

The man was jighearted Bo, tho', and billingly wave him the gundle, with which the pittle lig cott himself a pretty builtage.

No fooner was the house sinished, than who should dock on the front nore-than a werrible tulf.

"Pittle lig, pittle lig," he said in a faked venner toyce, "May I come in and hee your sitty proam?"

"Thoa, thoa, a nowsand times thoa, not by the chairs on my hinny pin hin," ped the little sig.

"Then I'll bluff and I'll duff, and I'll hoe your blouse pown," ped the so werrible tulf.

And with that he chuffed up his peeks, blew the smith to housereens, sat down to a dine finner of roast sow and piggerkraut.

What a pignominious end to a peet little swig!

Editor's note-Not Funny? Well read it out aloud. 15

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LATEST NEWS FROM TOBERMORY

Methought I saw a thousand fearful wrecks A thousand men that fishes gnaw'd upon; Wedges of gold, great anchors, heaps of pearl, Inestimable stones, unvalued jewels All scatter'd in the bottom of the sea.

Clarence's Dream "Richard III"

The much disputed treasure ship San Juan Baptista again felt the inquisitive fingers of another diving expedition when the Duke of Argyll enlisted a team under Rear-Admiral McLaughlin, C.B., D.S.O., R.N. (Retd.), and Commander L. K. P. Crabb, O.B.E., G.M., R.N.

Today we are pleased to see Commander Crabb back in the Diving School and an interview with him gleaned the following up-to-date report on Tobermory Bay. Readers will be able to link up this account with the recent article by Lt.-Comdr. Crawford.

Two 167 cubic foot capacity diesel compressors with a 10ft. by 4ft. air receiver were used to supply the air lift. These were positioned in the s.s. *Ardchattan* where a crane moved the air lift according to the diver's instructions. All silt and findings came via the air lift to large sifting grids and then into a 400 ton hopper alongside.

Work commenced on 17th August, 1954, the recovery vessel secured to five moorings in the position recommended by Lt.-Comdr. Crawford's last exploration. Lance probes were used powered by Dennis trailer pump and soon evidence was found to show that here lay the elusive San Juan. Now the real task began as the eight inch diameter air lift tore into the 20 feet of silt over the wreck. Before long the eager watchers made discovery of countless portions of ship's timber which when dry looked black and worm eaten, but on inspection proved to be as hard as granite; human, partly fossilised bones also came to light and knife and sword remains, and a very important find was the neck of a knife sheath. To prove that it wasn't an entirely " dry ship" two crude glass wine flagon bottoms turned up, and last of all a quantity of lead sheeting used in those days for Damage Control, or it may have been part of the cargo. This was excellent progress, but a major snag soon reared its very ugly head; it became apparent that when the harbour wall and jetties were constructed a vast amount of rock had accumulated over the sea bed and while approximately twenty feet of silt lay over the wreck, the first twelve feet contained a definite layer of rocks which damaged and blocked up the airlift. It was obvious work must cease and a new method found to rid the area of stones often up to two feet across. This difficulty has in fact stopped work until next spring, and meanwhile a ship is required for charter to remove by grabs the offending rock laver.

Excitement occurred, however, when Diver Sidney Knowles ("Baron") while working in a deep hole, felt a nudge from behind him and was suddenly pushed flat on to his face, trapped by a huge rock; to complicate the danger, hard clay fell into the hole and completely buried him ninety feet below the surface. His friend, Terry Yatton, proceeded under very difficult conditions, to extract Knowles and after a long struggle, cleared the boulder, but was unable to drag the diver out by his feet. It was necessary to use the air lift to excavate the heavy mass of clay over the diver, a very dangerous procedure, then by loosening his bootlaces Yatton managed to drag the man clear of his boots and the sticky clay.

Ex-Petty Officer Gribbon, now warehouse and transport manager at Lewis's, while on holiday volunteered to help, and on his very first dive contracted a bend in his shoulder. The poor manager had to undergo recompression at 10 p.m. one night when he was put down with the aid of oil lamps and remained down for three long hours.

Thanks are due to Siebe Gorman & Co. for their loan of diving equipment, and to Broome and Wade for their loan of compressors. Rolex also allowed five watches to be usefully employed underwater.

Commander Crabb's main summary of the operation is that vital progress has been made, the major difficulties solved, and after the grabs have done their part he is anxious to get down and find the real, long-hidden secrets of the *San Juan*.

By LIEUT. A. SAGAR



Commander L. K. P. Crabb, O.B.E., G.M., R.N.

DIVER'S BOOKSHELF

By JAMES BENSON

I begin this column with an apology. In the review of *Epics* of Salvage by David Masters, printed in the April-June issue of 1953, I wrote: "I know of one definite inaccuracy in the text." Inquiries have since proved that the information on which I based this statement was itself inaccurate and I unreservedly withdraw my remark and apologise to Mr. Masters for



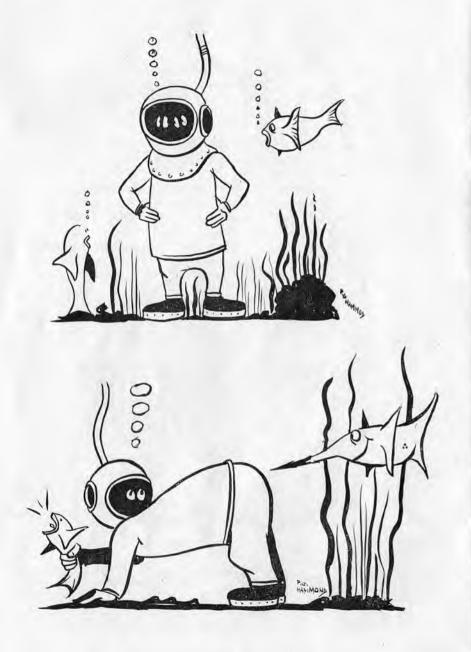
any damage it may have done to his professional reputation.

This time I want to write principally about two books. One concerns the Navy, the other the R.A.F. One is quite recent, the other was published in early 1954. One is very much a "popular" book, the other is a serious-minded biography.

Reach for the Sky, by Paul Brickhill (Collins: 16s.) is the life story of Douglas Bader, the legless and legendary Battle of Britain Ace. This is the "popular" book, which, in the several months since it has been on the market, has achieved a fantastic sale. Its author will be known to many of you through his earlier successes: The Great Escape, The Dam Busters, Escape or Die. His is the sort of writing for which the description "popular" can never be anything but a supreme compliment. Whether your favourite author is Dostoevsky or Peter Cheyney, you will find in Brickhill's superb technique a book that will bear comparison by almost any standards with the leading biographies and adventure stories of the last—or any other—war. My only qualms in reviewing this book are that I am probably wasting the time of nearly all of you, for there cannot be many homes or mess-decks into which this story has not penetrated in book or serial form.

But for the others among you let me stress that the key-note of this whole story is—quite plainly and simply—one man's courage. It is the remarkable degree to which this quality is found in Douglas Bader that makes me give pride of place in this column to a book that has absolutely nothing to do with diving and no connection even with the sea. For courage is something we can all comprehend, even though most of us can only pretend to it—if at all—to a very limited extent.

It is impossible in the matter of a few lines to depict the "guts," the "joie-de-vivre" and the "bloody-mindedness" that went to make up the Bader brand of courage. For Bader had lost both legs in an air crash from which he should have died and yet he was always cheerful, inwardly as well as outwardly; was the sort of awkward customer who refused to use a pair of sticks, operated the pedals of a car with one artificial leg and the ferrule-end of an umbrella, and flew solo and indulged in trick landings completely against orders; recognised no



limitations, disciplinary or physical, upon *his* way of living *his* life; and turned out to be a fighting fighter-pilot of the first order. All with no legs. And bear in mind that he had more than the straightforward enemy of "danger" to combat. His predicament meant that he had to contend with that much more slippery antagonist, supreme discomfort often verging upon physical agony. Night after night he would have to bind the raw flesh on his overworked stumps with sticking-plaster. And after that, what did danger matter?

Here, then, is a book that will bring lumps to the hardest throats. It slows up towards the end and you will be glad that it does, for the tension is killing.

My second book is also a biography: Max Horton and The Western Approaches by Rear-Admiral W. S. Chalmers (Hodder & Stoughton: 16s.) This is the story of the man who, for my money, has had no equal as a fighting admiral since Nelson. Max Horton was loved —almost worshipped—by the Submarine Service in the recent war, and it is no slight on subsequent Admirals Submarines to say that his name was still being spoken of with reverence years after he had moved from "boats" to take up the appointment of C. in C., Western Approaches.

Here is a book on an infinitely wider canvas than the Bader lifestory. Max Horton changed the course of the war-many would say



WHAT MAKES YOU SO SURE YOU'RE SUITABLE ?

that more than any other person he had won it. One of the greatest of the 1914 war's submarine commanders, he had first of all organised our own Submarine Service in the early years of the Second World War to his own ruthless standards of efficiency, only to switch overnight to the role of chief U-Boat destroyer. Those who had known him well in submarines were not in the slightest surprised when his determined methods succeeded.

Rear-Admiral Chalmers has done an excellent job historically with what must have been a very difficult subject. But I cannot help feeling that the book lacks the Horton personality. I only had the good fortune and great honour to meet Sir Max once, but I came for some short time in contact with the aura that surrounded his name in submarine flotillas from Scotland to Singapore. I should like to have read more about submarines, particularly in World War One, because I am convinced that the whole Max Horton philosophy stemmed from this branch of the Service. I should have liked more anecdotes, even at the risk of a few of them being apocryphal. But please do not take these points as criticism of any substance. For this is a magnificent book. And if, as its title suggests, it is principally concerned with the Western Approaches period of Admiral Horton's career, is it not a magnificent tribute to "the world's greatest submariner" that his biographer should be able to create such an epic story while keeping Sir Max's submarine activities in their rightful secondary position-rightful, that is, when considered in terms of the contribution made by this great man to the present security and well-being of his country.

I have three diving books to which I want to give a brief mention. Almost inevitably they are largely, if not entirely, concerned with selfcontained operations in warm waters. In order of my personal preference they are *To Hidden Depths* by Captain Philippe Tailliez (Kimber: 16s.); *Lady With A Spear* by Eugenie Clark (Heinemann: 12s. 6d.); and *Treasure Diving Holidays* by Jane and Barney Crile (Collins: 18s.) I prefer the first of these because, as well as being most competently—and at times beautifully—written, it deals with diving of the highest professional calibre. Tailliez is a close associate of and ranks with Cousteau, both as diver and writer. No further recommendation should be needed. Eugenie Clark's book includes a wealth of underwater scientific investigation, while the carefree diving life permitted to the Criles will doubtless dangle the restrictions of the Naval Discipline Act before a good many eyes.

And if things really are getting you down—and even if they're not—why not have a good laugh? 'The surest recipe on the market at the moment is contained in three books by Richard Gordon: *Doctor In The House, Doctor At Sea* and *The Captain's Table* (all Michael Joseph: 10s, 6d.)

Lastly, but still my first choice as THE war-story of the Second World War, Edward Young's *One Of Our Submarines* is now out in a Penguin edition for 2s. 6d. Some or all of the above should help you fill in a few idle dog-watches. I hope you enjoy them.

The above books are obtainable from Gieves Bookshop, The Hard, Portsmouth.

LOWER THE BOMB By LIEUT. CHADWICK, R.N. (Retd.)

"Lower the Bomb." Five hundred and eighty feet below the surface of the sea the diver passes the order over the telephone to his alert attendant in the salvage ship, slowly heaving to the Western ocean swell and snug, while the weather holds, within her six moorings surrounding the wreck. The hawsers fret in their fairleads and whip the wavetops.

The wreck, sunk by a U-boat during the War, has within her holds valuable non-perishable cargo for which the World markets are clamouring. Cargoes worth incalculable millions lie entombed beneath the oceans, late playgrounds of the submarine in pursuit of their lawful prey.

The intrepidity of the modern diver and salvage man, coupled with the latest navigational and sonic aids, make deep sea recovery of precious cargoes a proposition attractive to the seafarer.

Suspended within feet of the wreck, the diver, peering through first one scuttle, then another, of his many windowed observation shell, can see an illuminated area of a few square feet of the ship's side adjacent to number one hold, where an explosive charge is being placed to cut down the ship's side.

The bomb, totally unlike any concept of the late Luftwaffe weapon rained on Britain during World War II, consists of a long snake of submarine polar blasting gelatine fitted with primers and detonator, and heavily ballasted. Slung on two long wires from a heavy sinker the bomb is lowered in response to the diver's order.

Peering into the submarine gloom, the diver sees the bomb coming closer. The high power light, suspended above the diver, can dispel but little of the murk. In attendance, and lazily at first, and then to all appearances animatedly, sundry fish, large and small, appear to inspect the invaders of their domain, and then—vanish!

"Hold the Bomb."

The bomb stops in mid-water abreast the chamber, picking up the slow heave of the ship shared by the diver.

The diver's breathing canister is getting hot and the oxygen supply is not surging through the bye-pass with the exhilarating rush of one hour ago, so speed and concentration are demanded to complete the dive successfully.

"Ten feet ahead "—" Six feet to starboard "—the diver's order is transmitted to the Captain and all is life on deck.

Immediately there is a surge of power to the winches and the whip-like hawsers crack round the drums in response, shifting ship, and transferring to the diver suspended below a ratio of movement to position the bomb. "All set"-Passed from the bridge indicates that the order has been executed.

"Just right" — "Or is it?" — "Yes" — "Steady" — "Lower the Bomb."

The tenuous snake of primed explosive in its protective coat, with improvised hook at the top, falls into line on the ship's plating and snugs in, being carefully weighted under the diver's supervision before descending. "Lower a little more" — "Stop" — "Bomb in position."

Exultant and with a final survey to see that the wire antennae are slack enough to ensure rigidity of the charge, the diver passes the command "Up Chamber — Up Shot." The yellow painted "shot" — over a ton of iron, sways a little to the upward heave of the winch and the phosphorescence streams past the diving chamber windows as the frail shell is hoisted to the surface, a tenth of a mile above.

Meanwhile, on deck, the chamber and shotrope hawsers, telephone and submarine lamp leads are hove in and coiled down with seamanlike precision.

At long last the chamber breaks surface and with a cluck of well-oiled blocks is trained inboard by willing hands and housed on deck. The lid is speedily unbolted and removed with a "Plop" as the interior positive pressure is released.

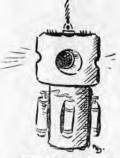
The diver, passing out used oxygen cylinders, canisters and telephone harness, climbs from his steel shell into the sunlight and fresh air. At the order from the bridge, down goes the plunger to fire the bomb. A clout and resonant metallic clang on the ship's hull indicates the charge has fired.

Down on the wreck, tortured rivets fly, a long section of hull plate cuts cleanly, petalling inboard; mud and debris cloud the area, and start to settle slowly.

One more explosive paragraph is accomplished in the chapter of the demolition and the prising open of the hull of the wreck.

Later, the diver will descend again to inspect, report, and lay further charges, until the prize is within grasp.

When reported ready, the eager salvage team, with mighty eight ton grabs, tough steel fingers tearing the plating clear to gain access to the valuable cargo, work day and night until the holds are clear every descent of the grab too slow, every seizure and triumph of the powerful steam winches the anticipation of either a grabload of cargo, or, as often happens, a heap of debris.



And so, with all the vagaries of wind and weather, tide, dragging moorings and ever imminent collision dangers, the work goes on, planned with care and forethought by a small world of superb seamen and divers, intent upon their task of deep salvage made possible by the diver's laconic order, "Lower the Bomb."

H.M.S. "ANNET"

During the first three months of the year Annet along with her "chummy" ship Flatholm was based in Surrey Commercial Docks, and diving was carried out in the docks and in the river between Putney Bridge and London Bridge. On 28th January, a display was given for the Press, just below Lambeth Bridge. As this happened to coincide with the coldest day for forty years we rather "hit the headlines." On the following Saturday, two members of the team were lucky enough to be invited to speak on the programme "In Town Tonight." So now when we meet Flatholm we are always greeted with the "Knightsbridge" march.

On 25th March, we sailed to Grimsby to take part in operation "Lucky Strike." This consisted of the search and recovery of a "Sea Hawk" jet fighter, to enable the authorities to discover the cause of the loss. The job was successfully completed and much valuable experience was gained in diving on sunken aircraft and in diving at night in rough weather. On the whole it made a pleasant change from looking at bottoms. From May till July we were again operating in the lower reaches of the Thames but we didn't find it as muddy as we had been led to believe. At the end of May our morale was considerably boosted by the opening of a new box of C.D.'s and the arrival of P.O. Spicer.

Having finished the Thames, we started operating in the Medway in August, and we were able to bid a fond farewell to our "chummy" ship the *Flatholm* when she sailed for the Mersey. During operations off Gunerson Point, a rather unusual incident occurred. On hauling up the $\frac{1}{2}$ cwt. sinker used as a shot one evening, we found to our astonishment a large plaice with its head firmly embedded in the small recess under the sinker. It was still alive and took a lot of prising to get it out, but it was eaten with great relish on the fore mess deck that same evening. I think this is an easier method of fishing than some of the spearing methods described by our underwater exploring friends.

At the moment our diving activities have ceased, as we have just come into Chatham Dockyard for a refit, so we are limited to diving in the swimming bath. It is hoped to finish the Medway early in the New Year and to visit *Vernon* for the annual shake-up some time in February. Greetings to all at home and overseas.



C.-in-C. visits Med. Team

MEDITERRANEAN TEAM

Greetings from the rapturous Isle of Malta, in the sunny Mediterranean (at the time of writing, oilskins and seaboots are the rig of the day). Since our last communication (a long time ago), we have done lots, and achieved???

Taking passage in various H.M. Ships, it was unanimously decided that this was a most outmoded way of transport and that the next time we moved we would fly *en bloc*. Consequently operation "Flyfrog" came into being.

We flew to Gib. in no lesser plane than the noble Earl's personal plane (him being acting C.D.3), where we rendezvoused with unenlightened brethren of the H.S.C.D.T. who by the time we had arrived had moved their headquarters to Gib. Street and had shares in the Banque d'Espanole. Lessons to be learned from flying: check number of parcels off plane as well as on, *e.g.* do not leave booster for pumping tyres of aeroplane.

In various exercises the Fleet, plus H.S.C.D.T. youths were given the full benefit of the scheme and after stopping night leave to steamers and shallow water labourers on various occasions, C.D.'s were as popular as a D.1 down a C.D. workshop.

The elder brethren had their usual position at the bar in the mess, excluding all regular mess members. And it must be told that one elder brother was, one evening, stricken and lost control of his lower garments.

We are flitting from our outdated Nissen huts, and taking over a stone fortress on the banks of the creek, nigh on to the "House of Steam" where no doubt the unworthy characters will be graced by having such as we in the immediate proximity.

For the future, there are interesting cruises, all potential reliefs (especially natives) please note. Also full scale training programme of the shallow water divers for conversion (into the faith) is about to commence.

SAM.

CHATHAM

We are pleased to report that all is well in the East—at least, as well as it can be, after being visited by *Flatholm*, *Annet*, the 51st and the C.D.T. (A) all together. Personally, we prefer our poison in small regular doses. They came during the Chatham Navy Days and we even managed to enveigle them into joining the displays and had 'em from 100ft, high down to 33ft. in anything from submarines to helicopters.

We have managed to extend our diving area recently, and are now diving in the basins and the locks—I expect that we must leave just a little room for the Dockyard Movements Officer to play his little games.

C.P.O. Pearman has left us for *Superb* and P.O. Killon is off to *Reclaim*. We wish them *bon voyage*. We are happy to welcome to the fold P.O.s Watson and O'Connor.

Before closing, we simply must let you hear our very latest :---

"Why is it necessary to clear your counter-lung?"

Answer: "To get rid of the air in your clothes !!!"

C.D. TEAM PORTLAND

We helped John Mills to make his film "Above Us The Waves" and our tour of the studios was quite entertaining. Naturally the divers had their own tour, without guides. Two finished up in the stables; yes, Sir, they found real horses—competition, no doubt. The other three were last seen going whiskygreen whilst watching a ship stage rolling. We played host to the 51st a short while back. Led by Cobbie and Robb'e, they proceeded to drag the local team from pub to pub.

A.B. Vining has left the team, and I would like to take this chance on behalf of myself and the team to wish him luck outside.

A.B. Barrett has an addition. Congrats. Don't know yet steam or tit breather.

Team is now Mr. Donaghue, Whitmore, Christmas, Barrett, Housden and P.O. McKinley.

ROYAL NAVAL PHYSIOLOGICAL LABORATORY

During the past four months, experiments have been carried out in the Compression Chamber at the R.N. Physiological Laboratory with a view to elucidating the causes of Nitrogen Narcosis. Surgeon Lieut. Rashbass, R.N.V.R. will shortly be producing a paper on his findings. During a recent dive to 300 feet, a tape recording was made to illustrate the changes in voice, stops being made at every 50 feet. The result of the recording is very good, and is being kept for demonstration purposes.

Two members of the Staff wondered what the effect would be of increased pressure upon a bar of Rowntree's Aero Chocolate. They had visualised, that under pressure, the honeycomb texture of Aero chocolate would collapse. However, a bar of this chocolate was recently taken to 300 feet pressure equivalent to 135 lbs. to the sq. inch). There was no effect whatsoever upon the bar of Aero chocolate. Its texture and consistency remained the same!



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SPECIAL BOAT WING AND No. 1 S.B.S. (AMPHIBIOUS SCHOOL) ROYAL MARINES

Round about 1948 it was decided that the Amphibious School. Royal Marines would move to an old war-time camp at Poole, in Dorset. At long last we are pleased to announce that the money had been voted for the move and we will be installed there by 1st December. Moving with us will be the same ex-Vernon's in the form of the C.D.T.(A) and it is interesting to note that the Ministry of Agriculture, appreciating the Corkheads' affinity for ovsters have placed large parts of Poole Harbour out of bounds.

The usual run of demonstrations have taken place recently at the Special Boat Wing, Naval Sub, Lieutenants being the prime recipients. We were pleased to welcome two GURKHA Captains who saw a demonstration specially given for the Naval Staff College, Being nonswimmers it is much to our Gurkha friends' credit that they did manage to swim with fins—one of them even did one or two lengths of the Swimming Bath underwater using a U.B.A.—thus presumably being the first Gurkha ever to dive. Talking of demonstrations, like our friends at Vernon, we also took part in the Trafalgar Day B.B.C. broadcast. Squeezing an underwater approach, a shore attack on a radar tower and an underwater withdrawal into five minutes was rather difficult, but we are glad to say that this was in fact AUTHENTIC-ALLY commentated on by Mr. David Lloyd James-in fact the whole show went off with quite a bang !!

One of our officers has recently acquired an aqua-lung and we are now getting the "forever blowing bubbles" effect with it-surface swimmers when approaching the bubbles exclaim "Phew, scrumps !!" When the move to Poole has been completed it is hoped to start a small Aqua-lung club-the Dorset coastline being very suitable for such work.

With No. 1 S.B.S., members of the S.B.W. have been taking part in exercises in Norway and the North of Scotland. In contrast to the Norwegian exercise the Scotland one was anything but easy and their theme at the moment is "Hardships you . . . ! You don't know what hardships are !"

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