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The
Royal Naval

Diving Magazine

Volume 2. No. 1

APRIL - JUNE, 1953



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Vol. 2. No. 1.

APRIL—JUNE, 1953

EDITOR'S NOTE

Dear Readers,

As you can see, your magazine is under new management, and needs your co-operation more than ever. Your contributions have been very few and far between but maybe that is just lack of inspiration!

I would like to have names of people wishing to act as correspondents for all commands, teams, etc. throughout the world. There must be plenty happening of interest to us all. It takes all of two months to produce a magazine when one *has* the material so please help your staff.

It is hoped to maintain the price of this magazine at 1/- but this will definitely have to be reviewed at the end of the year—let us have your views on this please.

Lastly, I would like to thank all the past Editorial Staff for the help they have given and hope that the present staff will keep up the good work.

EDITOR

SECRETARY'S NOTE

Well here we are again with another issue. We asked you some time ago what you thought of the magazine—our ears burned for days but nothing was put on paper. What do you think of our cover? Believe you me, keeping both sides of the house satisfied caused quite a lot of thought.

As with all magazines there is plenty of room for improvement but alas, we have all too few contributors at the minute. The Special Boat Wing and B.D. School, Horsham, are contributing in our next issue, but let's have lots more from you dip-chicks abroad.

Don't forget too, to let us have any changes of address, otherwise we can never guarantee that you will get your magazine.

SECRETARY

TREASURER'S NOTE

As yet subscriptions have been coming in very slowly, but as long as they keep coming at all we can just keep going.

For information the position is as follows:—

The magazine costs £30 to print of which £18 10s. 0d. is covered by advertisements. The balance of the money comes from your subscriptions—240/- per quarter.

I am enclosing chits with all magazines posted abroad and am relying on your honesty to pay for your copy if you have not already done so.

Without your generosity in paying up regardless of what magazines you have or have not received in the past the publication will be unable to continue.

Why not be like me, start from scratch with this new volume.

TREASURER

DIVER'S BOOKSHELF

by James Benson

For technical publishing reasons the last instalment of *Bookshelf* did not appear. Space does not permit a complete re-printing, but in order to keep readers up-to-date, a very brief summary of the four titles covered is given below, using the following standard of appraisal: *** Excellent, ** Recommended, * Fair, † Doubtful.

Diving to Adventure. Hans Hass. Published by Jarrolds. Price 16/-. Profusely illustrated story of group of young Austrians interested in underwater harpooning and photography. The author has since written "Under the Red Sea." Comment †

Sea Devils. J. Valerio Borghese. Published by Andrew Melrose. Price 18/-. Italian human torpedoes by their commanding officer. Comment *.

Yangtse Incident. Lawrence Earl. Published by Harraps. Price 6/-. Journalist's account of the Amethyst saga. Comment *.

Dangerous Trade. G. Hackforth-Jones. Published by Hodder and Stoughton. Price 10/6. Novel of the Submarine Service in World War II. Comment **.

This column is continuing its coverage of overseas authors. In the last issue there should have been featured an Austrian, an Italian and a Canadian (Earl). This quarter, of the seven books mentioned one is by a Frenchman and one by an American.

First in interest, first as a literary work and first in its bearing upon the business of diving proper is "*The Silent World*" by Captain J. Y. Cousteau of the French Naval Undersea Research Group, published by Hamish Hamilton at 18/-. Here is a masterpiece, magnificent in every respect. Allow me to list its excellent qualities: it is beautifully bound and produced and at its published price is a real bargain for the lover of fine books; it contains 64 pages of superb photographs, most of them taken underwater, 16 in full and enthralling colour; it is written modestly yet authoritatively—succinctly yet in delightful style; it tells a story of interesting work well done, although it does tell us in Britain to salve our pride when we realise that these wonderfully tough Frenchmen regard a surface water temperature of 55 degrees F. as getting a bit too cold for comfortable working.

The prototype of Cousteau's aqualung — a self-contained compressed-air breathing apparatus operating through a demand valve and used with rubber foot fins and no life-line—was delivered to his own specifications in June 1943. He and a small team of enthusiasts developed their technique in Vichy France until after the liberation, when they were able to expand into the Research Group and acquire diving vessels, plentiful equipment and Government support in 1945. From

spear-fishing and underwater photography their activities grew to include oceanographical and archaeological research and association with the Picard bathyscaphe expedition to the Gulf of Guinea. All these facets of the Group's work are recorded by Cousteau. In addition he shows the same preoccupation with underwater flora and fauna as can be found in other self-contained diving reminiscences as well as—of much greater interest from our point of view and much less commonly found—discussing the technical and physiological diving points that arise in some detail.

One thing I did not like was something that was of the book but not in it. Hamish Hamilton's publicity has referred to Captain Cousteau as "the greatest living authority on modern deep-sea diving. He made it possible." Now I have every possible admiration for Cousteau and part of this stems from his extraordinary level-headedness and fairness of mind. So I am sure that this fanciful claim is his publishers' and not his own. Similar review references to the book have sought to belittle British underwater achievement (I have appeared in print about this elsewhere), but again it was the reviewer and not Cousteau who was at fault. If you have been put off by any example of this please change your mind. This book is a three-star "must."

Next in order of technical interest comes "*Epics of Salvage*" by David Masters, published by Cassell at 18/-. This is a disappointing book. The author has aimed high with his intention to chronicle diving and salvage proper from the beginning of the war to the present day. With the wealth of stories that can be imagined he has, I feel, produced a record that is sometimes unworthy of its subject. There is, too, an unhappy theme of seeking to apportion the blame, which forces itself upon the reader from chapter to chapter. I know of one definite inaccuracy in the text and find one reference to the behaviour of ships' companies in Suda Bay particularly distressing. Nevertheless, the book makes an interesting report of the discovery of the *Affray*, our regaining of the deep diving record and other incidents in which the names of Captain Shelford, Lieutenant Bill Filer, Mr. W. D. Barrington, Petty Officer Bollard and Diver Robert Hall figure more than once. For this reason alone many of you will doubtless be glad, as I am, to have this book on the bookshelf.

"*One of Our Submarines*" by Edward Young (Rupert Hart-Davies: 18/-) rivals Cousteau's book as an addition to English literature. I regret that I could not review it nearer to its time of publication, but in a quarterly magazine with a long gestation period it is difficult to achieve topicality. I regret, too, that Commander Young's book has to take a secondary place in this column, but a book's relation to the art and science of diving must be the first consideration in these pages.

Edward Young started the war as a Sub-lieutenant, R.N.V.R. and ended it as the first R.N.V.R. officer to command a submarine. In the

course of his career he experienced the whole gamut of his particular trade, from adventure, through long hours of endurance indistinguishable from boredom, back again to adventure and the sudden risk. It is possible that—save for a conning-tower escape from a sunken submarine—Young's story is in no way extraordinary inside its own sphere. Say only that he seems to be the average commanding officer of the average operational submarine—and what more recommendation does the subject need? And with the treatment being what it is—polished, unassuming and yet so coldly, so completely gripping—this is, in my opinion, the best submarine book of the post-war period.

Finally come four brief mentions. For these I have used the same method of appraisal as for the list of books held over from the last issue.

H.M. Submarines. Lieutenant-Commander P. K. Kemp, R.N. Published by Herbert Jenkins. Price 16/-. A complete history of the Submarine Service from the year dot. Comment **.

Malta. Sir Harry Luke. Published by Harraps. Price 15/-. A study in Maltese history and archaeology. Not a "popular" book, but a superb vademecum for the serious-minded reader who knows his Malta or who has or who expects to have the opportunity to get to know the Island in real detail. Comment (for a limited readership) ***.

The Caine Mutiny. Herman Wouk. Published by Jonathan Cape. Price 15/-. A novel of the stature of "*The Cruel Sea*." Deals with life aboard an American destroyer-minesweeper during the war in the Pacific. I definitely preferred it to its British counterpart. Comment ***.

Ship Recognition. Laurence Dunn. Published by Adlard Coles. Price 12/6. The title is self-explanatory. This volume deals entirely with warships. I found it invaluable at the Spithead Review. Comment **.

That's all for now. If any of you read any of these books and have any strong feelings for or against what I have written, please drop a line to the Editor or myself. But, for the benefit of Chatham ratings, no money will be refunded!

WHITE ELEPHANT

By " BROADSIDES "

All characters in this story are fictitious though the rest is fact.

While in the East Indies station I was drafted ashore to a Naval Base that was also occupied by the R.A.F. We will call it *H.M.S. Groundworm*.

At the time I had the reputation of being a collector of odd things—anything from skulls to sharks' teeth, moths to reptiles, and I had in my menagerie no less than a monkey, a python (small), a parrot and a baby mongoose.

On returning from a spot of leave up country I informed the blokes in the mess that I'd bought a baby elephant; in fact, that I'd got a bit high up in them hills and an enterprising Asiatic had palmed me off with this tachyderm for 200 rupees.

Laugh!! They killed themselves. I'd done it again—had for a sucker.

I sold a "share" to an R.A.F. Flight Sergeant and he too spread the gospel. Blackey knocked up some hobbling chains, a mahout was widely advertised for and a series of letters, telephone calls and a couple of telegrams were received informing us of the progress of Jumbo on his way to the coast.

The fact that my R.A.F. friend and I were always out when these calls and telegrams were received caused no suspicion. In fact the more that came in the more were people convinced it was a genuine buy.

The great day arrived. Jumbo was to be collected. A five-ton R.A.F. lorry was provided and we left most ostentatiously. Once again the fact that my R.A.F. friend was the driver was taken as quite matter of fact. We carried one passenger on the journey out, an R.A.F. chap who was on transit, which increased our innocence.

On the way back we went for a run to work up a good sweat and covered ourselves in dust and when we eventually staggered in the canteen we were very dishevelled and my "oppo" wore a "blood-soaked" bandage round his leg. Jumbo had been very upset and had kicked him! He blamed me for angering Jumbo, and I said it was his own fault and we staged a mock scrap until we were "held apart". This finally removed any suspicions and everyone was convinced that I owned an elephant.

Where was the beast? To those ashore he was housed in an R.A.F. Hangar, to the fleet he was chained to a tree in the shore base. For some reason neither party compared notes.

Without request willing helpers began giving up their make and mend to collect bamboo shoots from the surrounding countryside. Every day nearly half a ton was removed from the dump and ditched well away from the camp. A large appetite? We had to get rid of it somewhere.

Jumbo, during this period, was still "upset by his journey" and could not be seen.

The flagship was giving a concert ashore and willingly accepted the offer to parade Jumbo on the stage dressed up in a frilled skirt. A team of "chippies" shored up the stage and constructed a special gangway for him. On the afternoon before the show Jumbo developed a nasty temper and it was considered inadvisable to show him before wives and children. Still no doubt as to his existence.

I was now due home, so Jumbo was offered for sale for 150 rupees. The flagship welfare committee held a meeting and decided to purchase him as a gift to the African colony from which she took her name. It was proposed that Jumbo be stowed in the torpedo parting shop on the upper deck and for this purpose the making of a lifting band and ramp was put in hand.

At the last minute, again, the offer was turned down as I was not satisfied with the price and had decided to give him to Whale Island.

When I arrived in U.K. I thought that the hoax would surely have been exposed—but not a bit of it. When the flagship returned home they held a dance ashore which I duly attended. Everyone who knew me asked after Jumbo. To all enquiries he was "very well", and led the parade at Whale Island every morning with the big drum on his back.

Refuted and ridiculed—not by any means and I am certain that there are several people who believe that there is an elephant on the strength at Whaley.

After all he was a *bull* elephant.

(A visitor recently enquired after Jumbo.—Ed.)

BREAKING THE WORLD'S DEEP DIVING RECORD (1948)

By Lieutenant H. WARDLE, R.N.

Part 2—Oxy-Helium Trials (Deepwater 1947)

As a preliminary to the oxy-helium dives the whole of Deepwater's diving team were given a thorough work up in deep diving procedure. It was during this period that I joined for my "deeps". In this work-up two divers showed positive symptoms of nitrogen narcosis. These divers were among the youngest on board and although experienced and efficient at moderate depths this was their first experience of anything over 200 ft.

Since one of the objects of the trials was to satisfy ourselves that the use of helium was beneficial in cases of nitrogen narcosis, the first choice of divers for the preliminary runs was made from the two divers who failed to reach 300 ft. on air due to nitrogen narcosis.

Before describing the dives themselves it is as well to explain briefly the procedure it was decided to adopt. The principle aim was to depart from the standard deep diving procedure only where essential, and that adopted was as follows:—

(i) The diver was dressed in British deep diving gear in the normal manner, the only additional equipment being the electrically heated undersuit.

(ii) The usual drill was carried out for testing the injector only using oxy-helium instead of air. On completion of test the mixture was shut off and the diver supplied with air to conserve helium.

(iii) The diver remained "on air" until he had tested for leaks and was ready to leave the surface. Air was then shut off and the oxy-helium switched on. When the "voice change", about which more later, indicated that the diver was receiving the mixture he was ordered to carry on down.

(iv) The drill on the bottom was the same as for on air. When called up the diver controlled his speed of ascent by means of his outlet valve to the time laid down in the American decompression tables.

(v) The Submersible Decompression Chamber (S.D.C.) was lowered to the divers "first" stop instead of the first stop of reasonable duration, i.e. about 5 min. Immediately the diver came up into the chamber and his front glass had been removed, the oxy-helium was shut off and air supplied.

(vi) Decompression times were taken entirely from the U.S. Oxy-Helium Manual, in which there are no oxygen stops between 50 ft. and the surface. The only basic departures were that the diver breathed

air in the S.D.C. in lieu of oxy-helium and breathed oxygen from a breathing apparatus in the S.D.C. as opposed to having oxygen supplied whilst still in the water through the air pipe as practised by the Americans.

I think that here I should explain the "voice change" that occurs when a diver is breathing helium. As all divers know as the depth increases on air so the voice takes on a "punch like" or nasal tone due to the increasing density of the gas making voice communications difficult. A practised deep diver can, however, understand what the diver is saying with little difficulty.

With helium, which is only about one seventh the atomic weight of air, the tone of voice at the surface takes on a "Donald Duck" quality, making communication very difficult until the ears become attuned to this odd-sounding speech. Fortunately it was found later that speech became clearer as the depth increased.

The first dive was a preliminary one to 178 ft. to test the control procedure. All went well and the drill appeared quite satisfactory.

The next dive was the first real test. Both the men carrying out the dives had been withdrawn from air diving at 256 ft. and this was to be a dive to 270 ft. Again all went well and apart from feeling the cold penetrating down the deck of his undersuit the diver reported that he felt 100% better and was more "able" to move around than when on air.

The other member of the team went down, this time to 261 ft. He also reported that he felt more comfortable and more "himself" than when on air.

Here was achievement, and with growing enthusiasm preparations went ahead for the next dive. This was to be about 310 ft. and was to be carried out by the same diver that carried out the 270 ft. dive.

At last the time for the dive arrived, and the diver tested up and carried on down *three hundred and fifteen feet* and no adverse symptoms! The diver carried out a search of the area for about 15 minutes and reported that he was quite comfortable and it was easy to move around. Here indeed was progress, even our finest deep divers had to exert considerable effort when on air at this depth.

Our enthusiasm was however short lived. At the moment when, having returned to the shot, and he was about to be called up to the surface, a loud blood-curdling scream, made absolutely frightful due to the helium voice change effect, echoed round the upper deck of Deepwater from the loudspeaking divers telephone.

This was followed by an even more frightening complete and utter silence. The thoughts flashing through all our minds, particularly through that of Mr. W. B. Filer (now Lieut.) the officer-in-charge, can well be imagined.

Was it the dreaded "squeeze"? Was it oxygen poisoning? Was it some helium effect we knew nothing of? Most important of all—was the diver still alive???

Mr. Filer immediately gave orders for the diver to be hauled slowly up to his first stop. Even in these dire circumstances it could not be forgotten that a rapid rate of ascent on helium is an almost certain way of the diver receiving a serious bend due to the rapid diffusion rate of helium gas.

It was during this period that the tension was eased by a series of grunts, snores and the occasional disjointed words over the telephone.

The standby diver was sent down to meet the diver. He found him hanging clear of the shot rope, his injector still open, and apparently unconscious. Both divers were hauled up to the S.D.C. where the standby diver and the S.D.C. attendant attempted to get the diver into the S.D.C. During this time the diver alternately came to and tried to help or struggled madly even to the extent of trying to remove his front glass and get out of his suit.

He was eventually got on to the S.D.C. ladder and still with his front glass on, was hoisted to the surface with the S.D.C. On deck he was manhandled into the Recompression Chamber and placed back under pressure under medical supervision. He was unconscious during this stage, but recovered consciousness at 100 ft. After decompression he was moved to the Sick Bay, where he made a gradual and complete recovery.

The cause was initially diagnosed as acute claustrophobia, though many factors suggested oxygen poisoning. The diver had a first-class record of diving during the war, for which he had been decorated, and seemed a most unlikely person to suffer from claustrophobia, particularly at the end of the dive with nothing left to do but return to the surface.

After the above incident it was decided to continue the diving programme, but using the more experienced deep divers for the future trials.

The next diver went down to a depth of 325 ft. and all went well during the dive. He remained on the bottom for 14 minutes during which time he reported that he was more comfortable than on air and could easily work at that depth, and remarked on his exceptional feeling of well-being on the bottom.

He entered the S.D.C. at 130 ft. and carried out the procedure outlined previously for decompression. After he had been at 50 ft. for 21½ minutes his S.D.C. attendant reported that he was bubbling at the mouth and 30 seconds later he was unconscious suffering from severe oxygen poisoning.

The S.D.C. was "broken down" to the surface and the diver was hoisted out and transferred to the main recompression chamber and recompressed under medical supervision. He recovered during decompression and was perfectly fit by the next morning.

Possible causes of this incident were considered to be as follows:—

- (i) The long period on oxygen at 60 and 50 ft. which might conceivably be toxic.
- (ii) The cold due to helium lessening the diver's oxygen tolerance (this man had not worn the electrically heated suit).

For the next dive the following precautions were taken:—

- (i) The 50 ft. oxygen stop was broken down in 10 ft. stages until 30 ft. was reached.
- (ii) The depth of the dive was limited to about 300 ft. so that the partial pressure of the oxygen in the 20/80 mixture in use gave an equivalent oxygen depth of about 33 ft., the considered safe limit.
- (iii) Wearing of the electrically heated suit was made compulsory.
- (iv) The S.D.C. attendant was instructed to keep a careful watch on the diver during decompression for oxygen poisoning symptoms.

It was in a much more sober frame of mind that preparations were made for the next series of dives.

*Part 3. Completion of Oxy-Helium Trials (Deepwater 1947)
will be included in the next issue.*

DIVER'S HOWLERS

The Eustachian tubes are the corrugated tubes joining the M.R.S. set to the diver's helmet.

Cure for C.O₂ poisoning. Turn the diver into the wind and crack an O₂ bottle across his face.

Diving Exercises: These should be held at ten to four because then everybody is extra quick so that they can get ashore.

THE ROYAL GEORGE

By Lieut. A. G. WORSLEY

(With acknowledgments to Siebe Gorman for use of information in "Deep Diving")

H.M.S. Royal George of 108 guns sank at Spithead on the 29th August, 1782. She had during her life acquitted herself at Quiberon Bay and was at the time preparing to go to Gibraltar with reinforcements.

She was a three-decker line-of-battleship, flying the flag of Rear Admiral Kempenfeldt. During the morning she was heeled over so that repairs could be made to an underwater pipe, and while so placed heeled right over and sank. There were 1,100 people on board at the time including some women and children, and of this total only 200 were saved.

Attempts were made to raise the ship shortly after the disaster by a Mr. Tracey, who used a diving-bell for survey of the wreck and the placing of cables, etc., for salvage. His attempts at salvage however were completely abortive and work on the wreck was discontinued. The divers employed on this job were observed to be using leather air pipes strengthened by a spiral of brass wire, but these did not appear to be very successful. The friction of the air in the tube impeded circulation and made breathing difficult, also the "dead space" was large.

The wreck now remained untouched for 57 years except for a survey by a Dockyard official in 1817. He reported that the wreck looked beautiful when about 6 ft. from the deck, being covered with small weeds, shells and starfish. However, it was decided that it was too broken up to be a possible salvage proposition.

During 1834, 1835 and 1836 a diver using a Siebe "open" dress made several dives on the wreck and managed to recover quite a lot of personal property and 30 of the guns. The "open" dress consisted of a rigid helmet attached to a jacket (similar to the top half of a standard dress) held down by weights at the waist. Air was supplied, under pressure, to the helmet and thence out at the waist. This of course prevented any marked bending while working.

In 1839 the wreck had become a serious navigational hazard due to silting, and it was decided to disperse it by blasting. This job was given to Colonel Pasley, of the Royal Sappers and Miners. The method employed was to use watertight gunpowder charges of 60 lb. to one ton in size, the whole operation taking five years to complete.

These operations form a landmark in the history of diving for, from 1840, the divers were using the first "closed" dress, forerunner of the standard dress as we know it today. Their Lordships were most pleased by the fact that a diver could descend head foremost with safety, a thing that would have been impossible in the "open" dress.



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It was also one of the first occasions on which underwater demolitions had been carried out with electrical firing of the charges, using a battery.

Recovered before the blasting operations were several more cannon, human bones, a clay pipe, a ring and a pistol and other miscellaneous articles. The ship's bell was recovered and hung in the Dockyard chapel.

The wreck was then dispersed, the whole operation proving most successful.

The diving you will have noticed was carried out by Sappers and Miners. These men were borne in ships for this purpose and being Army personnel came under the Marines. It was because of this that diving eventually came under the gunnery branch.

The *Royal George* is thus unique in diving history for:—

(a) It was almost the last job to be done by Royal Engineers personnel.

(b) It saw the advent of Siebe's "closed" diving dress.

(c) Charles Dickens used it as subject matter in his "Mechanics in Uniform" in which he states that "... Corporal Jones of the Sappers and Miners, while at the bottom of the sea in his Siebe's dress, happened to come close upon his friend, Private Skelton, and could hear him singing at his work—which was the first intimation of the fact that the voice of a diver could be heard under the wave."

(d) For the story of an underwater fight. It is said that while working on the *Royal George* two divers, who were jealous of each other's achievements, quarrelled over a gun, one saying that it was his property as he was the first to find it. The other, Girvan by name, would not agree so they came to blows. Girvan being the more powerful man, the other started to ascend his shot only to be grabbed round the legs. During the subsequent struggle one of the windows in Girvan's helmet was smashed but fortunately the attendants had realised something was wrong and hauled both divers up. Girvan was more dead than alive, but recovered after a few days in hospital.

It is stated that both divers became the best of friends.

SPOTLIGHT ON RECONSTRUCTION

Heard on a No. 11 bus:—

Passenger: What's the Guildhall floodlit for?

Conductor: Well sir, that's to show all the Jerries coming over for the Review how good they were at knocking it down, and how poor we are that we can't put it up again.

WE WENT T'OTHER WAY

By YOUNG HICKORY

Depth—Rock bottom

Visibility—Cloudy with ground haze

Flow—Very little

This story was caused by one of our teams, who shall remain unnamed, being based on a civil aerodrome. And also illustrates what one can get talked into over a convivial noggin, be it the all too rare oil of the Juniper berry!

This 'drome had a small naval camp in one corner and a large R.A.F. hanger in the other containing several large planes. In between was a canteen with six lovely girls. Now I ask you why should warm blooded sailors have gone beyond this. But it was in this canteen that the plot was hatched. Someone—we never discovered who—mentioned that they would like to fly. Immediately an ex-Air Commodore in the team said he would see the Air Vice Marshal and fix this small thing.

The Air Vice Marshal turned out to be a pleasant little Flight Lieutenant who was the Commanding Officer and unlike most C.Os very cheery. However our Air Commodore who has kissed the blarney stone, came staggering back—sorry, swaggering back—to report that the mission would take place at 1030 hours the next day.

All fixed, the team decided to go ashore and partake of the Wine of the Country this perchance being their last session. If there is a blank here the Editor has cut out the evening mission. Cad!

Then came the dawn! I decided to muster the team, issue next of kin cards. The Air Commodore was showing his usual sangfroid, in fact he was what is technically known as indisposed. The No. 2 was still asleep after a hectic car drive with someone else changing the gears. The next bed empty....Next bed the pillow unusually high, investigated found two tins of carrots. Next bed rating very tired from previous day, too tired to undress in fact, just sleeping peacefully under a pile of coats. Next bed empty; must be mine. I knew I got up for something. Crash.

At 0730 team arose for flight. The breakfast was far from hearty. Then the walk to the hanger. Weather windy with low clouds, team same but less colour.

The C.O. greeted us with a dreary smile and smiles from the sergeant also, the latter handing us a parachute. One of our number now volunteered for Ground Crew.

After parachute instructions the C.O. informed the Flight Sergeant to show us the dinghy places. The reply of "Sorry Sir I don't know them" filled us with confidence.

The keenness for this mission was ebbing when the C.O. informed us that the pilot had arrived. A Naval Lieutenant. Well I ask you. A big plane with four engines and Naval Pilot, still some of the spirit was left so we climbed aboard. The team took up the crew places:-

Air Commodore as Co-Pilot
Myself - Bomb aimer
No. 3 - Front gunner
No. 4 - Radio
No. 5 - Armed with big axe to chop our way out

All set, engines tuned we taxied ready for the big moment.

The engines revved up and we slowly moved down the runway. After a couple of hours to our surprise we left the ground. We were up, at least our bodies were stomachs and all that went with same were left below and we all had a shallow air black-out. The higher we got the lower we felt but we pressed on. Silence reigned supreme and everyone showed symptoms of CO2 poisoning and most excessive apprehension.

The cloud was bad, the trip bumpy. Every time we passed over the drome appealing eyes looked at our pilot but no, the mission went on.

Then when all seemed lost we came out of the cloud and started towards the ground. Oh, the beautiful green grass. Oh, no, that's the fore gunner's face! Lower and lower and then bang and we rose again, then we were down. We'd won! Our ground crew acting as bats we taxied to the hanger and the engines stopped.

Silence. Then a cry of open the . . . door. This I tried to do while sitting on it (Narks—obviously) rather a difficult operation comparable to lifting yourself by your boot laces.

Once on terra-firma, congratulations all round. Now if anyone wants a ground crew apply to the Editor, and he'll forward our names.

[2000 ft. at 2d. per min. Negative S.9's for you chaps this year—
Editor].

FAREWELL

On the 13th May, the Clearance Diving Section lost one of its oldest member—"Nothing without signature" CAIRNS. I feel sure he will be missed from the Branch even if it is by the end of the "Tickler Racket."

"Mick" joined the service in 1928 and was in Haifa from '45 to '48. After which time he was attached to the C.D. School.

We wish him the best of luck in civvy street.

During this the Coronation Year we are hearing a lot about high society. This quarter marks an event of singular importance in the history of the magazine, for here, to the accompaniment of alarums and excursions without, and the tinkle of cocktail glasses and the pop of champagne corks within, we present the first episode in a series of quarterly peregrinations into the maelstrom of Mayfair and into the life of its noblest sons, that Beau Brummel of the Atomic age—Algernon Eustace Smith-Field.

Sarc Son of Satyr

"THE MORNING AFTER THE NIGHT BEFORE"

EPISODE I

Algy, or to give him his full name, Algernon Eustace Smith-Field, blinked his slightly bloodshot eyes in the midday sun of a spring day as he slowly walked down the steps of the Dorchester, side stepping a couple of cruising taxis, hooking one to leg with his walking cane in the best Frank Woolley manner, and crossed into the Park Lane side of Hyde Park. Muttering to himself about the earliness of the hour, for it was rare for Algy to see the morning light, he began to meander slowly in the direction of Hyde Park Corner, lost in deep thought and a general depression settling firmly on his head.

It was obvious to any passer-by that Algy was worried about something. Even the fairest female was denied the usual gentlemanly salutation, a raising of his immaculate hat, and the "Good Morning, a perfectly wizard day, don't you think?" which invariably accompanied it. The "Wizard day" informed everyone that he had connections in the R.A.F. and a quick glance at the current "Who's Who" will confirm this belief, his brother Aloysius Smith-Field having served the cause for two years in the exalted rank of L.A.C. Algy himself had just completed invaluable service for the nation amongst Basil Dean's young ladies and had used his talent in entertaining the troops far and wide,—the far being from London to Aldershot and the wide from Croydon to Hampstead. Still he had done something, and at the same time kept the morale up at home, in the numerous Piccadilly Bars and Mayfair Night Clubs,—to Algy, a valuable contribution to the national effort.

To-day, the world was apparently being carried by Algy alone; his head, usually high, was to-day bent in deep meditation, his brow more deeply furrowed than ever before. It had all started last night. His brain was not working as it should do, and recollections of last night were merely ghostly shadows darting about the empty compartments of "grey matter." The last haven of all had been the "White Lady" in Jermyn Street, he had proof of this, for how else could he explain the presence of the doorman's overcoat in his hotel suite. Yes, Algy had most definitely celebrated last night, and the consequences might be far reaching.

The memory of the unfortunate doorman's overcoat was still pricking his conscience when he was jerked out of his melancholia by the teeth of a pekingese burying themselves in the more edible parts of his left ankle. Algy let out a mighty yell, even for Hyde Park, dropped his gloves and cane, his hat fell off and he sat down in the middle of the pathway on top of the snarling beast. He rose immediately being now minus some more of his tender anatomy, and was about to deliver the unwelcome brute a mighty kick that would have done credit to the best professional footballer, when a sweet and pleading voice arrested his right foot from following the dictates of his brain. "Oh, you wouldn't kick a poor, helpless, defenceless dog," said the voice. (Ah, these women!).

Algy, remembering his good manners that his Harrow education had provided for, managed to refrain from saying the words that his heart sorely wanted him to say. Instead, Algy collected his cane, his gloves, put his immaculate hat on, took it off again with his gentlemanly salutation, and, looking into a pair of lovely and vaguely familiar blue eyes, managed to say, "Algernon Eustace Smith-Field, at your service Miss er, er?" like all such Englishmen do.

"Yes, we've met before, don't you remember?" Now, it takes a lot to shake a fellow like Algy, especially in the present atomic age, but this from a lovely and curvaceous female, of fair complexion, a pair of beautiful blue eyes, and silky blond hair that rolled in the style of the moment nearly halfway down her back, how could he have forgotten her. He looked at her more closely a second time, noted again the latest spring model she was wearing, which seemed to show off her figure to more than average advantage, and at last the truth began to dawn on him. Whisky, gin, then some more whisky, that woman in the red evening gown, which he had flippantly, and, he had thought, wittily, observed seemed to have been kept up by will power and faith alone. The thought of this brought a deeper hue to his already flushed face.

"My name is Julia Pembroke—my friends call me 'kitten'." At this Algy cast an anxious glance at her finger nails, and made a mental note of their length.

The name, the red dress, the "White Lady" finally brought it all back to Algy, and with amazing alacrity he shook himself clear of the wretched peke and with a hasty "Good Morning" called out "Taxi," at the top of his voice.

Will Algy escape? More important still, will he get a taxi? Why wouldn't he tarry with Julia Pembroke? Would Gibb's Dentifrice solve her problem? This and a hundred more questions which we know you are asking will be answered in next quarter's edition of the "Diving Magazine"

JACK ASHORE

With apologies to Sir Henry Newbolt.

There's a noisy crowd in the "Crown" tonight,
Packed to the door they still come in;
A piano is heard, though not in sight,
And the barmaid's talk swells the merry din.
Then into the room with his capflat-a-back,
And his trousers belled and his drooping frame,
Amble Jolly Jack on the bar ward tack,—
"Drink up! drink up! and the same again."

The noise of the crowd at length dies down,
Each glass is dry, mouths open wide,
And the air pump's roar sweeps through the "Crown,"
For Nelson's son has them all tongue-tied.
He vividly tells,—with no word of a lie,—
Yarns of subs, and fish under the bounding main,
But through the salt in the air his throats gone dry
Drink up! drink up! and the same again.

He tells of the mine which had ninety-nine hours
His ship in a forty-eight roll
(and then for effect he stifles his yawns)
Says he's dived every inch to the pole.
His tales are better than Mr. Cook's tours,
He yarns and drinks till his beer locker's full,
Then his knees give way and a barman roars
Drink up! drink up! what a load of bull!

A. G. Worsley

BOMB AND MINE DISPOSAL

I expect all of you know the Navy's responsibility for Bomb and Mine Disposal now lies with the Clearance Divers. This allows for more travelling round the country and the accompanying romance. Hail the conquering hero comes and all that. That is all very well as long as our hero keeps conquering. Do you remember your R.M.S. training? Does acoustic procedure mean anything to you? If not read your notes and make sure that you can see the necessary books to keep in touch. Lack of practice can be deadly, literally!

The Portsmouth Command was the first to adopt this change over; since when we have rendered safe the following:—four mines, three mortar bombs, one incendiary bomb, three smoke bombs, one boom defence buoys, two empty mine shells, two burned out V.M.F.I.s, one oropesa float (reported as a 1000 lb bomb in Southampton Docks), one box of proto (reported as a box of detonators) and several noggins of ale. Oh yes, and a thunder flash one guest night.

Incidentally for those who have not been here recently we have our own section in *Vernon* attached to *Deepwater* and we trust the standard of course has improved. The term R.M.S. is now dead and it is now all known as M.I.D. (Mine Identification and Disposal).

Officers in charge of teams please keep an eye out for a C.A.F.O. on nomenclatures, more cannot be said here.

Please let us know of any jobs you get that are of interest and as you can see elsewhere they may well be included in the magazine. Well done the Far East team. I.D.7.

BOMB DISPOSAL COURSE, HORSHAM FEBRUARY 1953

The Clearance Diver may often find himself in some peculiar "set-ups", but none so remarkable, we are sure, as that presented at the Bomb Disposal School, Horsham.

Here, one can on occasions find sailors almost working and actually liking it. The general idea is to dig a hole. Now digging a hole to find an unexploded bomb, we soon find out isn't quite the simple sort of job it may, to the uninitiated, appear to be. And now as experts may we say, with all due apologies to miners, navvies and gravediggers that the holes dug at Horsham are classical examples of shovelmanship and spadeology. Firstly, the earth is shovelled and piled in neat symmetrical heaps on the perimeter of the hole, then planks and shores are selected positioned and fitted to the n'th degree of accuracy. This exacting business progresses silently and swiftly, or at least did until the Navy arrived.

Somehow, try as we might, we couldn't quite conform to the general character of "Sappers". There was for instance the diver who went up and down while his pneumatic shovel stayed still!!

Firstly one of our number, Able Seaman Dumbell, confounded and rendered safe the Sergeant Major (Q.M.S.I. to be correct) by requesting the loan of "'arf-a-dollar to buy the lads Stand-easy tea".

"Old Fred" as he was dubbed (with no intended disrespect!) after being revived, proceeded to enquire from Dumbell in no uncertain terms where the blankety blank he got the idea that there was such a thing as "Stand-easy" in the Royal Engineers?

We were divided into two syndicates, and as a result, what was meant to be a friendly competition developed into a deadly feud. Sabotage became rife, tools mysteriously disappeared and under cover of darkness small raiding parties laboured to "fill in" what had been "dug up" by the opposing syndicate during the day. Purely by "accident" heavy lumps of clay were mysteriously projected from one hole to the other with the idea of maiming or killing anyone in what was now known as the enemy camp. Open warfare had been declared. The battle too acquired a nationalistic flavour when it was realised that one syndicate was comprised of three Scots and one Welshman and the other four Englishmen.

The object of excavating a hole for a depth of about 14 ft. to recover a "buried bomb" was never much in mind. Indeed, the only purpose this seemed to serve was to provide an excuse to maintain the feud, and so finally when the sinister looking missile lay revealed we were almost sorry. Immediately there were suggestions from the "Scottish Nationalists" as to what the "Sessenachs" should do with their bomb when they found it. However all good things must come to an end and it was with some regret that we completed our "Digging Course" and so on behalf of the Scottish and Welsh Nationalists and (may I?) the Sassenach's, I should like to express our appreciation for the tolerance and forbearance shown by the Instructors of the Bomb Disposal School. Thanks for making our course instructive and enjoyable.

Oh! And by the way, Sergeant Majors aren't so bad. Dumbell got his "arf dollar" after all.

C.D.

ROUND THE SCHOOLS

PORTSMOUTH: Here in *Vernon* life is pretty hectic. The Review is causing a definite increase in tempo. From here the Fleet Mail Office and foreign patrol are being run. But as yet no increase in diving jobs. The divers entered a decorated float in the Lord Mayor's procession and L/Sea. Jennings made an impressive Neptune. It was found though that wearing M.R.S. for three hours on a hot day is a bad thing!

CHATHAM: Oh dear, reception very poor!

DEVONPORT: Life as usual in the West Country. The diving boat was entered in the decorated boats event during the Coronation celebrations and walked away with first prize. Well done.

SAFEGUARD: Up there in the cold, cold North. In that land of intrigue, where people say E II R with fear and apprehension, a deep and lasting silence seems to have settled. Maybe they are unable to penetrate the haggis curtain.

ROUND THE TEAMS

ANNET: Employed in the Humber. No breath of scandal could ensue from Mr. Mac's team I'm certain.

FLATFOLM: Working hard in Newcastle-on-Tyne, where women are evidently women and divers are scared of 'em. Whispers are heard that the 1st Lieutenant has excelled himself and is an object of envy. Congratulations on the display.

FAR EAST: Seem to have been enjoying themselves thoroughly blowing up 50 tons of Jap bombs. Congratulations on the write-up in the "Straits Times". (I wish we could afford to reproduce the photograph of the explosion—contributions, Ed.).

HOME FLEET: They have been competing with dry-rot—in the ship, not the divers—but after the Review they go to Alderney. All right for some.

MEDITERRANEAN: Lt. Piper has just relieved Lt. Badcock, but more than this I haven't heard.

PORTLAND: The curtain of security covers them, but rumours of a reputation for lobster salads have reached us.

TRIALS: They work oh so terribly hard, and everything's so secret, even air trips!!

51st: Resplendent with their new diving vessel, but as yet they have been unable to do much diving.

[I regret to say that nothing has been heard from Standard Divers Abroad—Ed].

A.E.D.U. NOTES

We understand that the *Diving Magazine* is now being produced by a re-organised staff and we would like to congratulate those who have undertaken the work, thus displaying the spirit required to keep our magazine alive. We would also like to record our thanks to those who have kept the magazine going since its inception, particularly to P.O. Colgrave, who has doubtless shouldered the greater part of the burden.

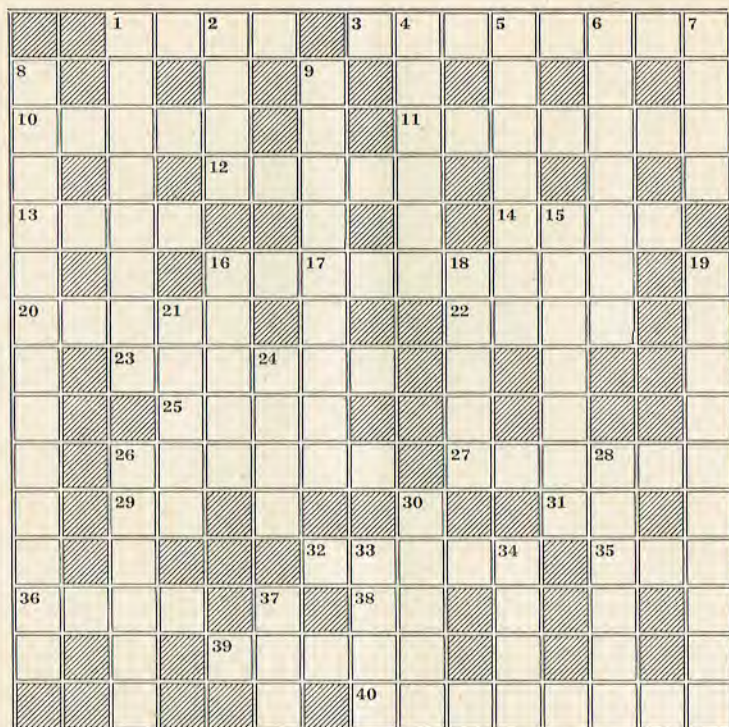
Since last going to Press, A.E.D.U. has become somewhat re-deployed. Most of the old site in *Vernon's* 43 Building was urgently required for important T.A.S. activities resulting in the drawing office, laboratory and other offices receiving their marching orders. The workshop remains where it is, as it was considered that it would require a team of *Daily Mirror* "Garths" to move Jock Campbell and his formidable array of precision weapons. The question of where to put the more portable part of the A.E.D.U. was indeed a difficult one. Rather like prospective house purchasers we were invited to look over various apartments to see if they would meet our requirements. Finally, we settled for the old pay office alongside the football pitch. If the reason for our choice was the hope of discovering a store of dirty old "green-backs" then we have been disappointed and we shall still have to pin our faith in Littlewoods. We have had the pleasure, however, of turning down a number of applicants for casual payments. In case you are a little short of cash when next in Vernon, we might say that the Paymaster has moved to the old W.O.'s Galley, presumably the cash department has been warned off the grass of the football pitch and considered that the old galley might offer a few scraps to satisfy the appetite. Our new quarters represent a vast improvement on the old ones, a fact which, we hope, will be reflected in our work, though there may be some distraction if we are still here next soccer season. Whether we shall still be here or not depends on the progress made with the Ministry of Works Hut that is being put up as our semi-permanent home.

We were very pleased to welcome Captain Welham and Lt. Cdr. Wilson of the U.S.N. to our unit on 16th March. Lt. Cdr. Wilson is the Commanding Officer and Captain Welham the Medical Officer of

the U.S. Navy Experimental Diving Unit which of course makes them our opposite numbers on the other side. During their week's stay much valuable information was exchanged and it was encouraging to discover that their findings from trials and experiments closely tallied with our own. They were able to give us the value of their experience with wet compression chambers, which will greatly assist us when we design our own in the near future. Captain Welham gave generously of his fifteen years experience of applied physiology and Lt. Cdr. Wilson spoke with the voice of one who had commanded submarines and auxiliary submarine rescue vessels, as well as being a deep sea diver. We were therefore somewhat encouraged to say the least, when after a short acquaint dive in our new M.R.S. and Patt. 5562 breathing apparatus rigged for swim, both officers expressed their warm appreciation of these outfits.

We often wondered how a lobster felt about being boiled alive, but never bargained that we should ever make a close study of the matter as, in fact, we did the other day. Doc. has a simple and, we think, successful idea to assist with ear clearing when wearing a "C" type hood. It consists merely of a duct from the face mask to the outer ear region along which gas can be forced by the process of "snorting" past the nose clip or blowing out of the corner of the mouth, thus forcing gas to the outer ear region and preventing reverse ears. We had a run at the floating dock in C.A.B.A. and found that the idea worked satisfactorily. Doc. then wanted to be sure that the trim when swimming was not upset by the displaced gas. Clearwater was desirable for this trial to achieve surface observation. The Mining Tank usually meets this requirement for us, but as it was out of action, we asked for, and were cordially welcomed to the new 100 ft. D.S.E.A. Tank. Conditions were perfect, a 100 ft. of beautifully clear water, a fully automatic lift to the top of the tank and every assistance from the D.S.E.A. staff. Having dooned Patt. 5562 Breathing Apparatus, swim suit, "C" type hood, facemask, etc. we carried out the pre-diving procedure and entered the glorious waters. What a shock! In place of the usual first immersion chill, we appeared to be enveloped in a steam bath, with no means of turning the heat off! Needless to say time did not improve matters and it wasn't long before we were breathing hot air. Admitted it was only a matter of "getting our own back" but what with internal flooding from perspiration and generally being cooked alive, it was not a good dip. The water temperature was ascertained as being 94 degrees F. In spite of our discomfort, however, we were happy to discover that the modified "C" type hood does not upset the swimming trim and we hope you will be getting more comfortable dips with the new "C" type hoods in the near future.

Congratulation to Mr. Gordon and his team of Navy Day Divers who warmed up the chilly atmosphere prevailing at Easter by performing the Indian Rope Trick in reverse. Our observer would like to humbly comment that he thought the Diving Display was jolly well done and very ably supported by a masterly commentary.

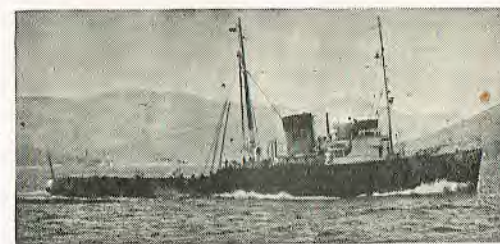


Across

1. Something can be this through 3 across (4).
3. A saucy Yorkshire river finds an opening (8).
10. Down—on the bed? (5).
11. It's useless—giving one a long time to dress (7).
12. Finish thus (3, 2).
13. Treat roughly—with a hammer? (4).
14. Quite dead (4).
17. One thing that we should not be (7).
20. Deserving of help (5).
22. Not new (4).
23. An angular character? (6).
25. A shoe stopping the flow? (4).
26. Hymns of triumph (6).
27. Motorists find these avoid a let down (6).
- 29/31. Abstainer in spectacles (2, 2).
32. Picked, given time (5).
35. Small enough anyway (3).
36. Suggest a musical march (4).
38. Gunner or artist initially (2).
39. A disused fight (5).
40. One required to put up the score (8).

Down

1. The old Jew doesn't sound too happy you understand (8).
2. Bronte's Jane (4).
4. Complete the washing and pass on (3, 3).
5. SORE RED — seen in church (anag) (7).
6. Alone I did it as it were (7).
7. Veer a long time (4).
8. To Anne a glimpse is enough to cover this watering place (10, 3).
9. To one this on joining up (3, 2, 4).
15. Sea Tone (anag) — Full House? (3-4).
16. Revolutionary machine? (5).
18. What the housewife does (5).
19. Met with in commons (10).
21. Old coin (5).
24. Can I touch you for this? (4).
26. Description that won't hold water (6).
28. Tea rot (anag) (6).
30. This beast is alright in the head it seems (5).
33. This isle is heartless (4).
34. Lake pure and simple (4).
37. One doesn't need this for a trick (3).



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