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# R.N. Diving Magazine

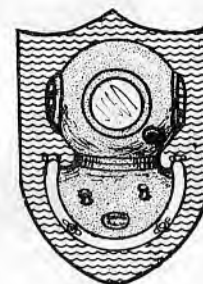
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Vol. 9

Christmas 1962

No. 3



The Staff of the Magazine  
wish all our readers  
'A Hearty Appetite and Good Cheer  
during Christmas and  
the New Year'



## Editorial

IT has been said that your Editor has been so long in *Vernon* that he is on the inventory. This state of immobility has now drawn to a close and yours truly has become an 'oggie' yaffler.

I have handed over to P.O. Radford who will soon learn the wisdom of the advice: 'Never Volunteer'.

Many thanks to those of you who have helped to circulate the Magazine and also our Advertisers for their support. With their help I have been able to turn over a thriving concern.

A Last Note: Many members of the Diving Branches would like to see more Team and Ship news. If one of your gang voices this opinion, stick a pen in his hand.

SHINER.



## Letters to the Editor

From: MR. F. J. 'JACK' DYMOND  
B.E.M.

Dear Sir,

With reference to the letter from Mr. A. Higgins, London, I think that there has been a mix-up somewhere. At the time that H.M. Submarine *Untamed* sank, H.M.S. *Tedworth* was in dock at Ardrosson. When the alarm was given, the *Tedworth* put to sea and on arriving at the spot where the submarine was last located found a mass of shot ropes scattered around the area. The search was made by a tug fitted with echo sounding gear and she located the submarine. Dick Oliver and myself placed a grapnel over the position indicated by the tug and picked up the *Untamed*, some hun-

dred yards or so from any shot ropes that were in position. When the tide eased a diver was sent down and he confirmed that the grapnel was on the *Untamed*. This was 16 hours after the submarine was reported missing. As stated, the E.R.A. was brought up from the engine room hatch. At no time do I recall a Chief Diver volunteering to go down hand over hand on a cable and certainly not on the anchor cable. The Captain of the *Tedworth* was Lieutenant Commander Warren, who at the time was Superintendent of Diving. The *Untamed* was raised and beached, after which the *Tedworth* left for further duties.

The *Untamed* was in the near vicinity of a German U.Boat U.33

on which the *Tedworth* had been working, taking out secret documents for the Intelligence people. As far as I know a record was set up on this submarine with divers working at a depth of 186 feet and working 64 feet inside the submarine.

### \* \* \* BELGE' HELGIQUE. DIVING TYPE OPPO'

Recently I received a letter from Chief Diver 1st Class, Jim Hendrickx. It is obvious from the letter that he has got in with the right types who, over the bubbly jar, have extended the hand of friendship to yet another section of the Diving World, namely the Belgium Navy. Don't worry about not writing in English very well Jim, we have the same trouble.

EDITOR.

Dear Ed.,

On Saturday 4th November 1962, around 4 p.m. while my wife, daughter and I were watching Television, someone rang the front door bell. I went to open it and look who was standing there, P.O. Ted Rose, Diver and Coxswain aboard the H.M.S. *Brenchley*. I was surprised to see him here in Ostend. And very nice of him to come and pay me a visit while his ship was in the Harbour of Brugge some 14 miles from Ostend.

We made Ted Rose very welcome and at home and talked about daily life and had supper. In the evening, my wife and I took Ted into town to a Hotel Bar opened by an Englishman and had a few drinks and drove Ted back to Brugges.

My wife and I were made very welcome on board H.M.S. *Brenchley* and also paid a visit on board H.M.S. *Shoulton* where I met P.O. Flanagan Coxswain, which I met also that time with Ted Rose in Grimsby.

We then all went over to the H.M.S. *Brenchley* and other divers joined us in the small mess and

talked about Diving, my wife was very interested. Afterwards we talked about life in Belgium and England, as you see my wife is English. She comes from London and is known in Ostend as 'Cockney Joan' and so living since 11 years in Ostend. Really my wife and I spent a good evening aboard and had some good English humour.

Ted Rose asked me to write a story for your DIVING MAGAZINE, I asked him what to write about and he told me anything, even that he came and paid me a visit in Ostend.

I met the British Divers for the first time some five or six years ago during an Exercise held in Holland (Dan Helder) and became a good friend of George Witherall, P.O. Diver and Coxswain on board H.M.S. *Brenchley* that time.

The British and Belgium Divers did some diving work together and had a good run ashore too.

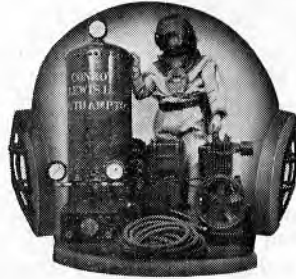
A few years later again exercising in Dan Helder and H.M.S. *Brenchley* was in the flotilla again. I went over aboard and asked for the Coxswain and met P.O. 'Pusser' Hills, George Witherell's relief. I was made welcome aboard and became good friends. 'Pusser' Hills told and explained to me a lot about the C.D.B.A. Diving Gear we then just had received and used for the first time in the exercise and was new to us all Belgium Divers. One of our divers and I did all the translation from the English C.D.B.A. Books into Flemish but we still had to learn a lot, so thanks to 'Pusser' Hills there are now more secrets for us.

After the exercise we met all aboard our ship and in the evening ashore in the M.O.O.C. Dutch Naval C.P.O's Club in Dan Helder with German, Dutch and French Divers and talked the Exercise over. I had to do a lot of translation in



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And the beginning of this year I met H.M.S. *Brenchley* again in Grimsby, I went aboard and asked for the Coxswain and so I met Ted Rose, I also met Dutchy Holland, Coxswain of H.M.S. *Dingley*, also a

diver. In Grimsby I also met P.O. Flanagan. I know also Nick — 'Big Chief Diver', also many others.

Best wishes to you all,

JIMMY HENDRICKX.

Cedra Belguim Navy, Ostend,  
Belgium.

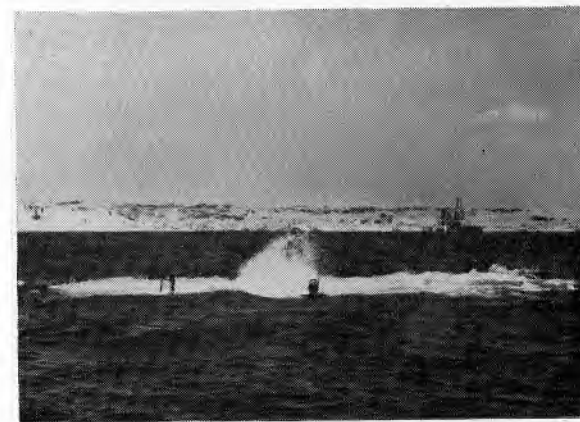
## Submarine Escape — Live Trials

A series of 'live' escapes from H.M.S. *Tiptoe*, on the bottom, were carried out off Malta recently at depths ranging down to 260 feet. These were the first sea trials of this type in the Royal Navy and were designed firstly, to test current British Escape techniques under realistic conditions and secondly, to try out a new 'hood'. It has been felt for sometime that the free ascent method of exhalation throughout the journey will not meet requirements in the deeper zones, i.e. where the rate of expansion is so small that these exhaled air is insufficient to carry off the excess air carbon dioxide. A simple form of hood was therefore constructed to enable the

escaper to breath naturally during the ascent, the expanding air being allowed to escape through the bottom of the hood.

Divers of the deep Air crash team were used as safety numbers, the intention being that they were in position abreast the escape hatch during each run, ready to assist any escaper in difficulty. This assistance was limited to ensuring that the escaper cleared all obstructions and continued his upward journey.

High speed pressurisation of escapers is a vital part of deep water escape breathing apparatus and preliminary trials had suggested that subjects could tolerate rates thought



Escaper arriving on the surface. The submarine lying in 260 feet of water





Escapees returning to H.Q. ship for medical check-up



Command Escape Officer Lt.-Cdr. L. E. Hamlyn and P.O. James discussing the ascent

to be prohibitive only a few years ago. For all runs the pressurisation phase was set at 20 seconds from surface to equalisation; if deeper trials are to be carried out in the future a much faster rate will be necessary and surface to 450 feet in 15 seconds is about the figure we have in mind.

The drill for the trials, after the submarine was settled and preliminaries completed was that the diving team, using S.D.D.E. from Gemini dinghies, remained on the surface. The Diving M.F.V. and Miner Six as Control Ship (both fitted with Recompression Chambers) were anchored clear of the submarine. When the escapees were ready the two-man tower was flooded at atmosphere pressure (i.e., vent to S./M. open) until water reached shoulder level when the vent was shut. The diver was then despatched from the Gemini. On hearing his 2-2-1 in the submarine, H.P. air was immediately admitted to equalise the escapees in the tower. This took 30 seconds; another 30 seconds (approximately) was required for inflation of equip-

ment, opening of hatch etc. As soon as escapees were clear the diver returned to the surface, decompressing as necessary during the deep runs; the two escapees were transported to the Control Ship by Gemini.

This routine went remarkably smooth and, apart from anxiety in the initial runs due to escapees 'snagging' their equipment on obstructions, the trials were successfully completed almost without incident. It is interesting to note, that the total time from starting to pressurise, both escapees on the surface was only averaging 90 seconds the deepest runs.

A final quote from the trials report: The Divers met every requirement with the dash and cheerfulness we have always been accustomed to expect from their organisation; the fact that every piece of equipment, Gemini engines, etc.; always functioned can only be due to the good work which they must have put in behind the scenes.

## Newsletter from Kiwi Land

THERE can be few places in the world which lend themselves to Diving in such an agreeable manner as New Zealand. The Naval base is at Devonport, and is within easy reach of the great Haurzki Gulf — with its multitude of small and varied islands whose coastlines offer what must be some of the worlds finest diving.

The Diving School itself, newly established in a modern building in the Dockyard, administered by H.M.N.Z.S. PHILOMRL, has a diving tender called *Manawanui* displacing just over a hundred tons. *Manawanui* is quite unlike any other diving craft, she was American built in 1946 and originally designed as a harbour tug,

being partially adopted for limited deep diving in 1953. No submersible decompression, or recompression chambers are carried, Stops being carried out on a stage.

Periodically, and usually between training courses, the complement of the Diving School, numbering 12, pack their steaming bags and depart in *Manawanui* to Great Barrier and its neighbouring islands about 50 miles out in the Gulf. There for spells of about a week, trials on new equipment in every possible environment are carried out. The islands are very sparsely populated, and most are covered in native bush, but in many ways are very like the Isle of Arran, off the West Coast of Scot-





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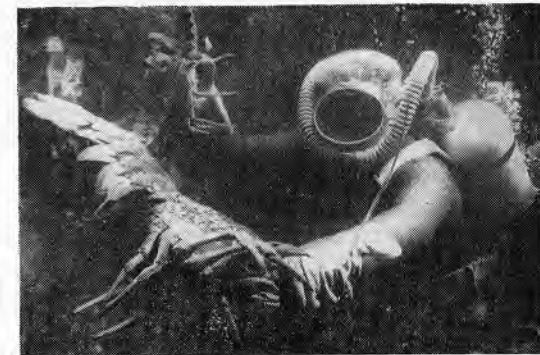
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land. Wild goats, wallabies, pig, deer and rabbit abound, and the occasional wild steer is not unknown, but by far the best hunting is to be found underwater — the cray fish are enormous, 12 to 15 pounders being common. A strange fact about the largest species, to which we have come to refer as packhorses is that in almost every deep, weed hidden crevasse where the pack-horses are found, there also lives a Moray eel — these are quite the most vicious looking creatures, dirty yellow in colour and with a loose fleshy head and large lower jaw, needle sharp teeth and one single fang in the centre of

tender piece of newly shot young pig or goat roasted on a spit over an open wood fire comes as a pleasant change — how over fed can one get!

In common with other Commonwealth Navies the R.N.Z. Navy are frequently called upon by other Services for jobs a little out of the usual. The underwater demolition of an old Army wharf in Wellington was one such commitment which occupied an interesting and absorbing week, especially when among the items recovered during the work was a complete Morris 8 car and a large safe which had been ransacked by



the upper palate. Unlike the Conger eel which usually retreats when approached, the Moray has an inquisitive nature and is well equipped for attacking the intruder.

The variety of underwater life is fantastic, during the course of an hour's dive, one commonly sees cray, moray, sting ray and octopus besides the ever present trevally and snapper. With the climate so mild throughout the year, the cruises of *Manawanui* are always looked forward to and enjoyed by the crew. Many are the leisurely barbecues we have enjoyed on some remote white sandy beach after a day's diving. I would never have believed it possible to become sick of the sight of crayfish, but a

burglars and ditched over the wharf — incidentally a couple of months previously we had recovered two similar safes in Auckland Harbour.

A number of war-time mine fields scattered among the Gilbert and Ellice group of islands are scheduled for investigation and clearing by the R.N.Z.N. The mines are American Mk. 6 buoyant and Mk. 13 ground. They number almost 300 in all and the location and clearing operations will be spread over two or three years. The investigation commenced this year and half of the Diving School complement departed in the Survey ship *Lachlan* a few weeks ago. Initially using a glass panelled wooden dinghy to locate the mines



without the hazard of entering shark frequented water, a fair proportion of a small field of 36 mines have already been located and charted to await demolition en masse at a later date. The times when a base ship is available to take the diving team out of home waters are very limited, perhaps not more than three months a year — since New Zealand's cooler winter months are the chosen times, everyone is quite happy. Diving conditions of course are superb, especially for the voracious shark, and we expect to be able to report in a later issue whether the standard chemical repellent was enjoyed by the sharks.

Unfortunately we do not have the advantage of mine hunting equipment — imagine the scope for a C.D. team with geminis and mine lifting bags, etc. However, we do have C.D.B.A. with the new reducers and visibility is so good that much can be

achieved with the glass panelled dinghy.

One of the most remote and primitive parts of the North Island provide us with our next expected diving commitment — Lake Waikaremoana, meaning 'Sea of rippling waters' — about 150 miles inland from Gisbourne on the East coast and forming part of a magnificent National Park, the lake is 2,000 feet above sea level and has a coastline of 120 miles, the water in the lake is at a uniformly low temperature all the year round and is up to 800 feet deep in places and abounding in trout. The lake is a natural one and is utilised by man in many aspects, an overflow outlet powers a large hydro scheme planned and completed several years ago. Recently the level of the lake was lowered revealing, to everyone's surprise, the tops of huge trees forming an underwater petrified forest, these are a

considerable navigational hazard for the craft that use the lake, and the Navy's assistance is required to sever the trees at their base by use of explosive. A number of inlets and bays in the lake are affected, and as the area was peopled exclusively by Maoris many years ago, it is very likely that we shall come across many historic, and possibly valuable Maori artifacts during our surveys underwater. Up to 1841 no white man had ever seen Waikaremoana — a Roman Catholic Missionary being the first. He was followed by the few early settlers hardy enough to withstand the rigours of the country and the onslaughts of the Maoris which later culminated in the Maori wars.

This then is the varied life available to us in New Zealand — never a dull moment.

P.O. Roger Compton followed me out from the U.K. early this year to relieve P.O. Len Spicer who has since retired. So stimulating is the country that within two months, Compton was married to a local belle, and he is now the proud father of three children! P.O. Mick

Queripel is our most recent arrival, but being already married is safe from the charms of the locals — he relieves C.P.O. Frank Brady who has also retired.

Commander Carr surprised us out here with his announcement of retirement, it doesn't seem so long ago that he was busily taking over as Superintendent of Diving from Commander Harland. We shall be sorry to see him go, one felt that he really had the interests of divers at heart, and we wish him well for the future.

In a country so well suited to recreational diving, it is not surprising to find the local Sub-Aqua Clubs to be most enthusiastic, and like other clubs overseas, friendly and entertaining folk. What they lack in equipment owing to stringent import controls, they make up for in enterprise — many are the home-made aqua-lungs and never was the expression 'She'll be right Blue' more exemplified — but with every justification.

Sunny Christmas Greeting.

GEO. W.

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## The Second World Congress on Underwater Activities

by LT.-CDR. S. A. WARNER, D.S.C., Royal Navy

*This is a brief precis from rough notes taken at the Congress. For full details a complete transcript of the proceedings can be obtained from the British Sub-Aqua Club.*

THE Second World Congress on Underwater Activities was organised by the British Sub-Aqua Club for the C.A.M.S. in London. The Confederation Mondiale des Activités Sub-aquatiques is a Federation of National Diving Organisations. It has headquarters in Paris and represents the following countries:—

1. Australia, Argentine, Brazil,

Bulgaria, Belgium, Chile, Czechoslovakia, Finland, France, Germany, Great Britain, Greece, Hungary, Holland, Italy, Libya, Malta, Monaco, Morocco, Poland, Portugal, South Africa, Spain, Sweden, Switzerland, Tunis, Turkey, United States of America, Uruguay, Viet-Nam, Venezuela, Yugoslavia.

2. The theme of the Conference



was 'The Challenge' and it was signified to see that most great names in the Diving World were listed amongst the speakers. It was difficult to find a country which was not represented in some way or other.

3. His Royal Highness, The Prince Philip, Duke of Edinburgh is President of the British Sub-Aqua Club but because the Congress clashed with the visit of the King of Norway to Britain, he was unable to open the Congress and had to be content with sending a message in which he extended a warm welcome to all the delegates and experts who came from all over the world to attend. He said 'the scope for increased knowledge of the sea and what lies in it is enormous and I am sure this knowledge, scientifically evaluated and pursued, is of the greatest importance to the future of mankind. I am therefore very glad to see the emphasis that the Congress is putting on Scientific discovery'.

4. Admiral of the Fleet, The Earl Mountbatten of Burma opened the Congress and in his opening address he regaled the audience with amusing stories of some of his own experiences as an underwater operator.

5. In reply to Earl Mountbatten, Commandant J.-Y. Cousteau then gave a brief history of his progress in the underwater world up to and including his last experiment of keeping two divers underwater and under pressure for one week. He then introduced what must be one of the strangest claims of the whole Congress and will undoubtedly be a source of much controversy for some considerable time. He said that he considered that within 50 years a 'new man' will be developed, a completely amphibious human that will live just as comfortably underwater as on land. Commandant Cousteau said that he would call these new humans, 'homo-aquaticus' they would have to have their lungs filled with

liquid and a means of injecting oxygen into the bloodstream would be devised. The 'new man' would probably eventually be born below the sea and have the necessary surgery at birth in an underwater hospital. He said that 'there will be parliaments and probably new nations underwater'. 'We have examples of this type of man inasmuch as we have good evidence to think that sea mammals are animals that have returned to the sea' Cousteau considers that with the vast progress to nuclear power it should be possible to set up industry underwater without the need of oxygen and that by using surgery to replace evolution a 'new man' will be born. New techniques and progress with new equipment is not the main requirement for progress according to Cousteau; he considers that it is a new inspiration that is needed.

6. Fifty years ago the possibility of putting a man into orbit was only to be found in science fiction but even so I cannot subscribe the Commandant Cousteau's claim of a 'new man'.

7. Following Commandant Cousteau was a paper read by Luis Marden and a film on 'Discovering the Bounty'. This was in strange contrast to the previous paper and came as light relief because I for one would have found it a little difficult to digest too many futuristic suggestions at a time.

8. The forenoon session on 19th October, covered the problems involved in farming the sea and speakers included Sir Alister Hardy, Professor Gunar Thorson of Denmark, Mr. James Shelbourne of Lowestoft and Mr. Robert Forster from the Marine Biological Laboratory in Plymouth.

9. The first thing that stood out was the immense numbers of eggs that fish lay. It is impossible to give examples of all sea animals and fish

but an example of one crustacean is that in a full lifetime it would lay about 300,000,000 eggs compared to a Queen Bee, which is the most prolific land creature, of 300,000. A mackerel on spawning lays up to 500,000 eggs, after 62 days only 20 are surviving and after 85 days only about two are left. The balance is maintained by the tremendous wastage so that normal replacement is maintained. The wastage being accounted for mainly by being eaten by other fish. 'To eat other fish and not be eaten, that is the problem'.

10. It is fairly obvious that here is scope for controlled breeding aimed at higher fish supplies for a world that is increasing in population daily and where even now considerable poverty exists. To this end, James Shelbourne of the Fisheries Laboratory, Lowestoft has carried out research and experiments with Plaice and he has increased the survival rate, from spawning to maturity to 60%. In fact this brings the breeding of Plaice very much into the realms of economical breeding, just the same as battery chicken. He has also proved that fish do not eat very much, or grow when the water temperature is below a certain figure and proved that by raising the temperature to summer limits and maintaining it all the time the normal three to four years required for the fish to reach maturity can be reduced to one and a half to two years. From all this information comes the proposal that practically all bottom fish (i.e. plaice, sole turbot, etc.) should be cultivated in large tanks and possibly, making use of the immense amount of heat, discharged into the sea by the nuclear power stations, to maintain the water temperature.

11. After hearing (a) how prolific underwater creatures are and (b) how very low is the survival rate, I find more scope for doubt about

Cousteau proposals. The afternoon session on the 19th was, in my opinion the most valuable and the most interesting of the entire congress. The Chairman of this period was our own Surgeon Captain Miles and the Speakers included, Dr. Albert Buhlman, Physiological Adviser to Hannes Keller, Mr. H. Hempleman, R.N. Physiological Laboratory, Captain Albert Behnke, U.S.N., Surgeon-Commander Cabarro, French Navy and Doctor Albert Craig of America.

12. Surgeon Captain Miles in his introduction covered very briefly the study of man's environment underwater, which produced problems mainly of physiology, orientation, breathing, circulation of the blood and decompression.

13. Investigations into underwater accidents, leaving out decompression sickness, has shown that 80% are caused through carelessness which should never have happened, such things as: bad maintenance, lack of gas, lack of local knowledge, etc. . . . In accidents on land involving unconsciousness about 1% prove fatal, underwater the fatality rate is in the region of 50%. On land, panic does not produce fatal results but underwater it is almost invariably responsible for a fatality. From this it is fairly obvious that some regulations are required and these regulations are aimed at safe diving without stifling progress.

14. The next Speaker, Doctor Buhlman, started by saying that when he and Hannes Keller started evolving their decompression routines for deep diving they did not believe in nitrogen narcosis and that narcosis as we know it is really caused by C.O.<sub>2</sub> retention. (During questions afterwards he did admit that they now think the nitrogen under pressure is probably narcotic).

15. He went on to say that in his opinion retention of C.O.<sub>2</sub> was caused by failure to ventilate the



Photo: T. Glover



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human system properly and that this was caused by the turbulence which is dependent on the pressure and the viscosity of the gas. For instance Helium by virtue of being a less dense gas does not suffer from turbulence at such shallow depths as  $N_2$ . Buhlman then stated categorically that Keller had used 10% oxygen and 90% nitrogen on his 500 feet dive. He said that increase in depth, increases the density which in time increases the viscosity which means that the amount of flow is less than normal. Increased density also increased the work on respiration muscles. Gas exchange, he said, is no different on the surface to underwater. The same amount of  $O_2$  is required, the same amount of  $C.O_2$  is generated. Failure to ventilate properly produced a  $C.O_2$  build-up, this means that additional ventilation is required. According to Doctor Buhlman, Nitrogen Narcosis can be explained by pulmonary  $C.O_2$  retention. In theory this can be overcome by adequate ventilation of the lungs and there is every reason to believe that a set pattern of breathing comes into the Buhlman/Keller routine.

16. Buhlman was followed by Mr. Hempleman who gave a most precise, clear and down to earth dissertation on Experiments in Sage Decompression.

17. He said that safe diving to depth for any length of time required a decompression surfacing routine. Incorrect or insufficient decompression creates problems which fall into three Categories:—

- 1.—Itching of the skin.
- 2.—Pains in the joints.
- 3.—Paralysis.

All these three happen within a very short time but investigations into the long-term effect indicate that there is possibility of bone change and that there is a very real danger of Cancer of the bone in later life.

This applies to subjects who frequently spend long periods under pressure followed by decompression and at present is more applicable to caisson and tunnel workers than divers. However, prolonged dives, such as Cousteau is contemplating will undoubtedly come within this problem.

18. Hempleman then explained some of his experiments and trials with goats. He said that goats were used because in many ways they compare almost identically with humans. His aim is to produce a safe routine for diving on air for one hour at 300 feet. In actual recompression trials he works on the theory that providing no higher ratio than 2% incidents happen on a particular schedule it is considered safe. He also stated that it is true to say that some people (and goats) are more susceptible to Bends than others.

19. Captain Albert Behnke, U.S.N. (Retd.), who is a Consultant on Submarine problems to the Surgeon-General, U.S. Navy, and also had first-hand experience of life-saving in the *Squalus* disaster then read a paper, I thought he was most amusing but gleaned little real information from his talk. One point he pressed was the absolute need to come up slowly during the initial ascent. This may have been the old theory, but the present attempts to cut down decompression time are based on the fact that one can come up quickly during early ascent because of the comparatively smaller percentage change in pressure at the deeper depths.

20. Captain Behnke was followed by a Serving U.S. Naval Doctor who has been carrying out trials with Buhlman's theory by doing one set of trials with Nitrogen and  $O_2$  and another set using  $O_2$  with the same partial pressure as would be present at the depths where Nitrogen and  $O_2$  were used. Very few experiments



have been conducted so far but all the indications are that narcosis, according to him, are caused by Nitrogen and not C.O.<sub>2</sub> retention.

21. The next paper was on un-programmed talk on prolonged diving using Standard Equipment and carrying out salvage work to a depth of 100 feet. This is done basically by having an automatic supply of mixture never allowing the O.<sub>2</sub> content to go below 1.6 atmospheres absolute. I am not absolutely sure how one can operate a diver at 70 feet for seven hours as claimed, but the principle is not entirely new to us, although we have confined our application to self-contained equipment.

22. Surgeon-Comdr. Cabarrou of France then explained how they are trying to select divers by use of the

E.E.G. test. So far they claim that their selections are as high as 67% correct and he concluded that in his opinion the use of E.E.G. can give reasonable indications of the results that can be expected. I am sure that an E.E.G. test is a reasonable thing to do before a diving course. At least it would provide a yardstick in the event of future accidents to the individual.

23. The Medical Session was concluded by a paper by Doctor Craig who is a Senior Instructor of Medicine in the University of Rochester School of Medicine, U.S.A. This paper was based mainly on the dangers of diving on a lung full of air without using breathing apparatus. Man's depth and time underwater is limited by his oxygen requirement and danger of collapsing lungs.

There is no doubt that trying to hold one's breath and exerting oneself for long periods underwater is dangerous. The chances are that most people feel the need to breathe before they pass out with oxygen lack (anoxia) but on the other hand it is not uncommon that the feeling of 'need to breathe' does not occur before unconsciousness. This applies in particular to people carrying out exercise.

24. Saturday the 20th of October was taken up mainly by papers on 'History under the Sea' by Sir Mortimer Wheeler, Underwater Excavations and Archaeology, by such people as Doctor Flemming of Cambridge, Mr. George Bass of the University of Pennsylvania. Such subjects as Viking Ships, Underwater Caves of Gibraltar and Excavating a Byzantine wreck were covered.

25. One of the most interesting papers in the afternoon was read by Dr. Edwin Link who is a retired millionaire and spends his retirement and money in designing and experimenting with equipment for locating wrecks and increasing divers' depth and time on bottom. He has in fact, just finished an interesting experiment in the Mediterranean in which

he kept a diver at 100 feet for 12 hours and then surfaced him in the 'Link' recompression chamber, which I gather is much the same as our S.D.C. The fact that his diver got a Bend doesn't detract from the achievement. He is also doing work with goats, but I rather got the impression that much of his work is repetition of work done previously by other people.

26. Saturday evening was taken up by films of Hans Hass, Hannes Keller and Dr. Jacques Piccard.

27. Monday and the remainder of the Congress was very much involved in trying to produce International Regulations for Sub-Aqua Clubs. Most of the sessions were in French with interruptions in German and Spanish and occasionally English. It was no wonder that this led to some confusion when it came to points like defining a swimming bath, does it have to have a roof? If not can it be called open water, etc.?

28. As a whole the Congress was a huge success and I am sure very valuable. I found the medical and physiological papers of extreme interest although quite impossible for me to do justice to in this precis.



## DEEP-DOWN COMFORT...

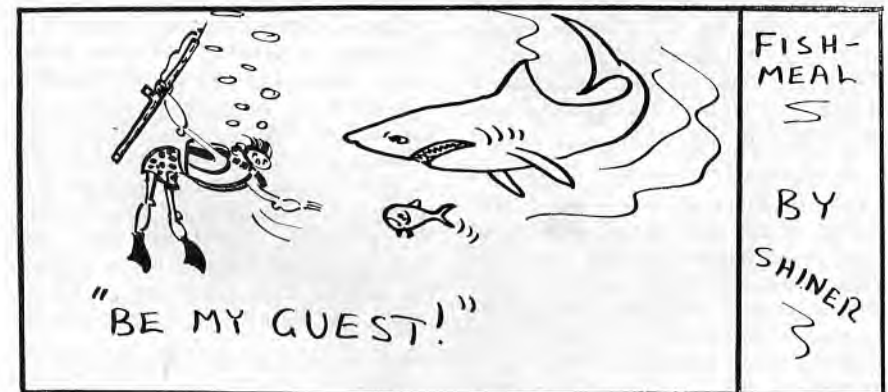
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## 'Bulwark' Bulletin

I don't think you have received any news from *Bulwark* this commission, so I shall take advantage of having passed E.T.I. and let you know what has happened out here in the Far East.

We commissioned this Commando Carrier in August 1961 and having applied a new coat of paint, both inside and out, we took on the look of belonging to the Fleet. After various trials with engines and guns, plus the landing and withdrawal of Commandos, we were ready for a rest period — and what better place could Jack wish for than the land of San Miguel and Suzie Wong?—

After a few days there a Helicopter failed to make the flight deck and ended up, or rather down, in 'Davy Jones's Locker'. Lieutenant Whatley ventured into the murky depths and secured a lifting wire to the rotors. Heaving in commenced, but as the 'chopper' came out of the water the wire parted and back to the 'Locker' went the 'chopper'. Diving operations were called off until the next morning (San Miguel was calling), when, with a slight hangover, I donned a S.A.B.A. set, located the 'chopper' and passed the lifting wires. This time the operation was a success. Mention must be made of the Side Party, consisting of a Chinese female crew in a well scrubbed and painted boat, who keep the ship's side clean. It was they who picked up the ditched crew from the 'oggin'.

P.O. Clark, C.D.I., then joined the ship and apart from giving me a shake (in the store) each morning (without tea!) took over the job of Chief Quartermaster, a job he still holds. We've been in and out of Singapore so many times that I've lost count, also we have visited places like Aden, Bahrein, Borneo and Australia

(where the beer is not as strong as the Aussies claim).

More diving, poker gauge testing this time, where we called in the slippery handed S.W.D's, who between them lost the Engineers' Special Spanner and a brass screw sleeve from one of the gauges. This caused them to be very unpopular but they have since proved their worth.

More diving, this time for H.M.S. *Caprice*. Apparently a young sailor was detailed by a Petty Officer to ditch some valuable return stores on the Quarterdeck but ditched them off the Quarterdeck. We managed to retrieve most of these stores and save him a lot of money. Among these items were three portable fans, a deck clock, a Smith's eight-day clock, various speakers and batteries and a magslip (value £20). The last item alone would have made his pay look ill.

Apart from our normal diving duties we have been flown ashore to retrieve rifles dropped over the side of L.C.A's by Royal Marines, kept the Sub-Aqua Club thriving with air, topped up sets for other ships and carried out trials with D.C.B.A.

Our Diving Officer is Lt. (S.D.) (T.A.S.) G. Hunt and the First Lieutenant is Lt.-Cdr. M. W. Paynter who some of you may remember as Captain of the *Reclaim*. The commission is now nearing its end and we have one rabbit run in Hong Kong before heading for Devonport. We probably won't get past the Fleet Club and will end up by getting the rabbits from the Naval tailor at home, on the allotment system.

See you all in the 'Shot Rope' in January! 'PERKS'.

## A Royal Marine Across the Atlantic 1961-62

by MAJOR P. J. DAVIS, D.S.C., Royal Marine

AS one who has been concerned with the Diving World for 17 years and who receives and reads the DIVING MAGAZINE regularly, I feel that it is time that someone from the Royal Marines contributed an article, to show that the 'Bootneck' can write as well as read!

Since I am no longer directly associated with the Joint Services Amphibious Warfare Centre (J.S.A.W.C.) and the Special Boat Sections (S.B.S.) it would not now be appropriate for me to write of the links that we in the Royal Marines have with the Diving fraternity and with H.M.S. *Vernon*. However, it can hardly be out of place for me to remark that relations between us have never been better and the exchange of ideas never more freely given than they are today.

On completion of a tour of duty at J.S.A.W.C., where I was also the Direct Liaison Officer on Diving matters with H.M.S. *Vernon* and the A.E.D.U., I was fortunate enough to be given duty in the U.S.A. as a student at the U.S. Marine Staff College. I attended a nine month course and was able to contribute quite a few points, particularly when discussion centred on underwater reconnaissance, military reconnaissance and obstacle clearance.

As many will know there is no exact equivalent in the U.S.A. to R.N. Clearance Diving Teams or R.M. Special Boat Sections. The U.S. Navy has Underwater Demolition Teams (U.D.T.) and the U.S. Marines have Force Reconnaissance Companies and Reconnaissance Battalions. The U.D.T.'s have the task of underwater reconnaissance and demolitions to the limit of the high-water mark. The Recon Units are

capable of reconnaissance both up to the highwater mark and more particularly up to about 40 miles ashore in the beach-head perimeter. Needless to say there is a considerable overlap, with the Navy claiming to be able to work ashore and denying the Marines the capability of underwater reconnaissance, whereas the leathernecks decry the efforts of the sailor ashore and claim complete adaptability to any sort of reconnaissance.

Both these U.S. units have numbers, equipment and facilities which we can only look at covetously. On the other hand I found that our individual training (both R.N. and R.M.) was of a much higher standard and we have many aspects of work, training and experience which they wish to be able to include in their syllabuses.

### U.D.T.

During this tour of duty (and during a visit in 1960) I visited and dived with the U.D.T. on the East Coast, both at their winter training area in the sunny West Indies, and at their normal headquarters at Norfolk, Virginia, and with the West Coast U.D.T. who have their headquarters at the Amphibious Base at Coronado, California. It was apparent to me that these two units (each 150-200 strong) belonging as they do to different Fleets, with wonderful training facilities and conditions for work, lack an overall control and common doctrine on employment. Each U.D.T. (remember they are 3,000 miles apart) has detachments abroad, in the Mediterranean and Caribbean (East Coast U.D.T.) or in Hawaii, Japan, or with the 7th Fleet (West Coast U.D.T.) All personnel



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are trained in air, mixture and oxygen and every man in the unit, whether he be cook, writer or driver, has a full U.D.T. qualification. The main impressions I carried away from both U.D.T. were:

- (a) their training is still based on a Pacific island type of war (World War Two).
- (b) their mine clearance is a long way behind that of the C.D. Teams.
- (c) their units suffer because almost all officers are short service.
- (d) their training facilities and equipment are excellent.

### RECON UNITS.

I was also able to visit and work with both East and West units. Although the Force Recon Company on each coast is vast compared with a Royal Marine S.B.S. their operational detachments are identical. We may well envy their readily available aircraft and helicopters, the submarines which are allocated frequently for training, the training areas and the equipment, yet we would be surprised to see how they envy.

- (a) our system of selection of personnel.
- (b) the length and type of training we are able to give.
- (c) the length of time our men are available to serve in this specialist work.

During my time in the U.S.A. I also visited the Experimental Diving Unit in Washington and availed myself of their facilities to keep myself up to date with my own time underwater. I offered to lend them my copy of the DIVING MAGAZINE but they proudly told me that they have their own copy! I also spent a very interesting day attending a U.S. Navy Mine and Harbour Defence Committee meeting where I was asked to describe British methods of attack and listened to their present and projected means of defence.

Though I completed a free ascent from a bottomed submarine in 60 feet of warm, clear, Caribbean water and a free fall parachute descent from a helicopter at 2,700 feet my most vivid impressions are of the camaraderie and friendship of the officers and men who live and work as we do.

This article would not be complete without mention of my all too short visit to the West Coast Canadian Diving Unit. Lt-Cdr. Ben Ackerman, R.C.N. was a complete host, guide and associate when I visited the R.C.N. Establishment at Esquimalt, Vancouver Island. He gave me a thorough tour of his unit, his establishment and his facilities though time did not permit me a look at the underwater world. Again in Canada I met avid readers of the DIVING MAGAZINE and many ears in H.M.S. *Vernon* must have tingled as we talked of mutual friends and common difficulties.

Perhaps I should have called this article 'A Royal Marine Across the Atlantic and Pacific' because as I write this I am travelling across the Pacific, destined for 40 Commando, Royal Marines at Singapore. Here I shall doubtless meet many I know, not only in the S.B.S. and C.D.T. but also in the U.D.T. and Recon elements of the U.S. Marine Corps and the U.S. 7th Fleet.

I am sorry not to have included any photographs. Some of the bottoms seen underwater in the Caribbean, in California, Honolulu, and Japan were too classified to send home — perhaps you can blush for me!

Best wishes of the Season to All.

**Overheard at Divisions** during near collision between a pile of divers and a heap of T.A.S. 'Gents'. 'Good old Mr. Wilson!'



## Sports Report

WITH the drafting of C.P.O. McKinley to the Mediterranean F.C.D.T., the vacancy of sports representative was left open and being a soft 'touch' I found myself organising the *Deepwater* Sports Programme. This I must say has terrific compensation for the running around it entails. Backed by (on the whole) a Division of very fit and keen sportsmen the job proved very worthwhile. The Division's morale is sky-high with everyone wanting games of any kind. Unfortunately I cannot get the desired number of fixtures and would therefore like to apologize to the people who cannot get a game, particularly the Rugby team, as I cannot get a taker.

### ATHLETICS.

*Deepwater* failed to bring home the 'bacon' in this event, although we took a very big slice in the field events. We did not have those two or three outstanding runners (which we have had in most years) to back us up on the track. Since then we have found some and next year looks rosy, depending on the old sports 'bug-bear', drafts.

### TUG OF WAR.

Well, once again the Trophy is back with the Divers, Lt. Dodd was the coach, it's the best thing that has happened for a long while; not only did he take the team to a win, but he

could not talk for three days after with his hoarse throat (the Diving Store was uncannily quiet). The team was quite a light one but of good proportion — they pulled fat chiefs in two straights pulls.

### AQUATICS.

Obviously this was *Deepwaters* meat, and as it should be; they were head and shoulders above the other Divisions. With such main-stays as Ron Hartshorn, who incidentally has three badges, the future is as bright as ever.

### WATER POLO.

Fixtures for this event are very hard to find around the *Vernon*, in fact non-existent against *Deepwater* class. So it was decided for the Gala that *Deepwater* would play *Vernon*, which proved to be a very interesting and keen game. *Deepwater* had the edge and won the match 5—3. (I wonder how many people had side bets).

### SOCCER.

The Divers are settling down to quite a useful team, we are lying third in the League Table at the moment with one game in hand. The only thorn in our side at the moment is the Electrical Branch who have quite a formidable line-up. If we can field our full team when we meet I am sure we can win.

### HOCKEY.

The section has a very useful team and the fixture with *Hermes* Seamen seemed to some people that we were biting off more than we could chew. However a fine 5—2 win was notched up, Bill Cornick smashing in three beauties.

### "VERNON" ROAD RACE.

The Cup came back to the Division after a brief spell away. With five runners finishing in the first 14 places, which, points-wise gave *Deepwater* a runaway victory. The Captain now says 'I hope the other Divisions give *Deepwater* a run for their money next year'.

We have now started a Darts Team in the Division as it is felt that it is as good an excuse as any, and better than most, for the arm-bending business.

Before folding up I would like to thank the 'Brass' of the Division for their whole-hearted support and the Competitors who have really dug in and played so hard.

Well good-bye to you people in the outposts. Happy sporting fixtures. Only a few more shop-lifting days to Christmas.

'SAM LEITCH' LUSTY.

P.S.—It looks like Circuit Training is paying off — well it's a thought!

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## FLEET CLEARANCE DIVING TEAM

Between 1st November 1961 and 1st June 1962, the Fleet Clearance Diving Team were engaged in clearing ammunition from the Johore Strait.

The team worked in close co-operation with the Army on a hazardous and extremely arduous task. The ammunition, which the team was clearing, had been submerged for up to 20 years and in some cases was most unstable. The element of risk was always present, as

well as, at times, very unpleasant conditions of tide and weather.

Throughout this task, the Fleet Clearance Diving Team worked cheerfully and efficiently, and their work has earned no small praise from the Army authorities assisting in the task. I am pleased to commend them all for their efforts.

*Admiral.*

*The Flag and Commanding Officers,  
H.M. Ships and Establishments,  
on the Far East Station.*

## Promotions and Advancements

### To Clearance Diving Officer:

Lt. F. Spragg  
Lt. N. R. Brookhouse  
Lt. B. F. Selwood  
Sub-Lt. (S.D.) P. R. G. Park

### To C.D. First Class:

P.O. T. Gibson  
P.O. H. B. Stiger (S.A.N.)  
P.O. M. Brassington  
A./P.O. T. H. McKissack  
A./P.O. L. J. Maynard  
L.S. S. Carter  
L.S. E. A. Ayre  
L.S. R. Pilling  
L.S. A. W. D. Brooker

### To C.D. Second Class:

P.O. J. Walker  
P.O. B. Radford  
A./P.O. F. McGrath  
A./P.O. J. Davies  
A./P.O. L. Smith  
L.S. A. Wilkes  
L.S. R. Pigg  
L.S. R. Wilson  
L.S. W. Crimmons



L.S. W. Brown  
L.S. B. Cornick  
L.S. E. Welch  
L.S. A. Slingsby  
L.S. P. Scott.

### To C.D. Star — New Members of the Branch:

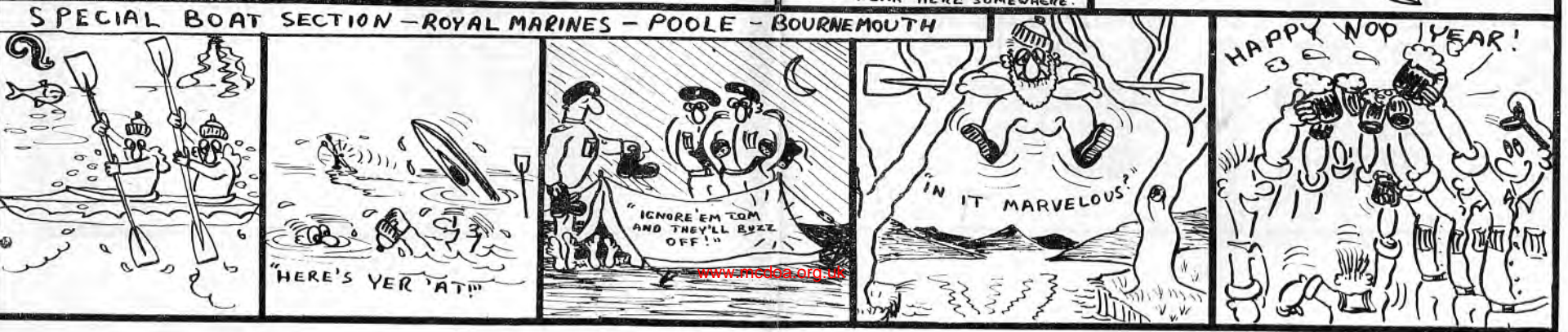
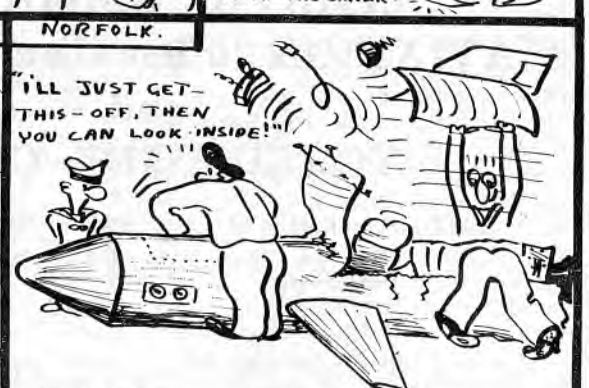
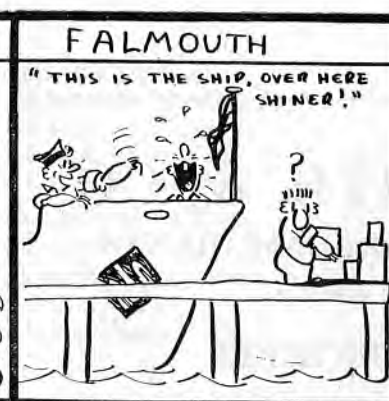
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L.S. B. Morton  
L.S. R. Fraser  
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L.S. E. Cassidy  
L.S. R. Viney  
L.S. D. Cripps  
L.S. D. Coote  
L.S. K. Shennan  
A.B. P. Meakin  
A.B. P. Gallant  
A.B. D. Chapman

## A Message from B.C.D. 10

Recently C.P.O. 'Bill' Wyvill, C.D.1, was presented with a silver cigarette lighter. This was a token of thanks—  
THAT WE CAME OUT IN ONE PIECE.

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E.R.A. A. Carley  
E.R.A. M. S. Free  
E.R.A. J. Sheriff

### To Chief Petty Officer:

P. Christmas, C.D.1

### To Acting Petty Officer:

B. Bray, C.D.1.  
C. Kempson, C.D.1

W. Crimmons, C.D.2

F. McGrath, C.D.2

B. Rogers, C.D.2

M. Handford, C.D.2

D. Stevens, C.D.2

\* \* \*

### CONGRATULATIONS TO

C.P.O. 'Ginger' BRYANT

on your Award of the 'British Empire  
Medal'.

## Shallow Water G.S.C.

'NOT too bad for numbers,' I had said, secretly very pleased with the divers I thought I had. I and two others had qualified Free Divers. The Gunner was qualified to supervise Free. I had two Shallow Water Divers and lots of places booked on courses for more. Two months later I had three new Shallow Water Divers out of the 12 who went on course. The remainder had failed in every way possible except with a diving knife between the ribs — and that came nearer than was pleasant. In another few months the Gunner left the ship and we left for East of Suez with a team of eight. This was shortly to be reduced to six. Enough . . . just.

We had few accidents, even though we did lose two divers. One slipped a disc before he even started diving for the ship. The second eventually decided that he could no longer face the murky depths with mud, snakes and worse unknowns, and wisely decided to relinquish. Our only near disaster occurred when Ben leapt in with the bottom of his set still hooked over the top guard rail. Straps broke and he hit the water like a swastika. It's a good thing he has strong teeth. Only the breathing tubes kept his set with him. It was Ben too who met the Baracuda. He had come up from 100 feet from the sunken 'floating' Dock at Trincomalee with

a diver from another ship. As they turned at 20 feet to sit on the scaffolding a couple of dozen long, lean shapes came straight towards them and passed close by. Was it presence of mind or sheer fright that kept them sitting there quietly until all had gone past? Half an hour later when someone dropped his weights, I found myself the only 'volunteer' to go and find them.

Compared with C.D's and Steamers, we 'amateurs' spend little time under water, though we try hard to earn our pocket money. '120 minutes in four months or no pay' — I should think so too! '90 minutes a month, half at night' — well worth aiming for, and useful to help in the battle for more time and hands. Far East bogey, '120 minutes day bottom search, 120 minutes night bottom search, 180 minutes other diving, every three months' — the 'other diving' is easy enough. Why is it such a struggle to achieve these times? Although it is useful to be able to quote the order about all divers attending every exercise, this is often not possible. The Engineer Officer cannot spare his Office Writer. The Turret O.A. is working all night for the shoot tomorrow. The E.R.A's are all needed for flashing up. So it goes. But we still need an S.D.O. and four to get one man in the water. Also we need a boat,



catamaran, jetty or solid ladder to operate from. Generally boats are either hoisted or fully employed. What wouldn't I have given for a Gemini (without engine) to be entirely self-sufficient.

Just occasionally there would be an urgent call for divers. Twice the stokers managed to drop the patent smoke baffles fitted in the giant exhausts. One I brought up from 50 feet at Subic, in the Philippines, after chasing brightly coloured fish in and out of the jetty piles. It was there that half the team picked up fancy American cups. The second was found in the Karachi mud, by Boggy bumping into it after circling the shot for half an hour. Also at Karachi, Tom went down to see why the Pitometer Log had broken off, and whether a new one would fit in the hole. The majority of these jobs took only a few minutes. The only really long one was getting three heaving lines out of the main circulator inlet grating. That lot was good for over 400 minutes, during working hours, visibility 40 feet, sea temperature 76 degrees F.

That was the one day we saw a shark. Our signal to the Admiral said: 'Intend operating divers at 1,000. Please make this signal general'. It must have been passed out on underwater telephone as George appeared half an hour later. He was a beauty — longer than the whaler and with a head the shape and size of a baby M.G. For an hour he circled the ship slowly, followed by half the Ship's Company with cameras. With difficulty the fishermen and marksmen were persuaded to leave him alone, but by the time we got in he had gone. This wasn't until after I had shown the Captain a clear likeness of George in 'Shark Attack', labelled 'Whale Shark — Harmless'. In small print below it said: '6,000 teeth on each jaw'.

Another job which the Engineer

Officer likes done, and therefore spares his hands for, is the inspection of underwater fittings. This requires an inspection and report on any damage or corrosion to rudders, screws, shafts, etc. We found that the best way was to take notes on a perspex square with chinagraph pencil. As each section was completed the diver would surface to make his report before going on. The separate mouthpieces proved their value here, both for speed and comfort. Several minor jobs, particularly around the screws, we found were done more quickly without sets. One or two swimmers with face masks and fins could soon check a rope guard or even take out a sample securing bolt. Practice and a few deep breaths produced reasonable times on task.

While away from U.K. we managed to clock up 3,548 minutes. This averaged 55 minutes per fit diver per month — not as much as we would have liked. It is unavoidable that with some divers who are senior rates the majority of diving must be done out of working hours. Normally this doesn't matter, but I think Taff found two hours scraping barnacles off the propellers no substitute for a Japanese bath with the usual attractions. Since it rained hard that day we didn't even have the usual admiring(?) crowd of spectators to keep us happy.

Aden was good, even though we heard, the day after we went down in the harbour in nil vis., that a native boy had been taken by a shark from his canoe. A popular move was to mend the shark nets around the swimming beaches. It was frightening the number of large holes we found to tie up. In fact this could easily have been done without a set but it made a pleasant outing and went down well with locals. The scenery went down well with the divers too. After watching the bikinis for a while our swim masks were

needed to keep our eyes back in our heads.

Our great day, or rather night, came during the Fleet concentration at Pulau Tioman. The C.D. Team put their limpets on and invited us to remove them at 2 a.m. With all the team sleeping on camp beds on the quarter deck we had Ben and Tom in the water in record time, with lights all round them. The boat was late again but when it came we scrambled in and soon caught up with the divers, pulling the boat along a waterline jackstay. One by one the limpets came up. Forward we nearly came unstuck. Launching the boat through the diesel exhaust we found no line beyond it. Tom was quickly surfaced and with one hand on the anchor

cable pulled us back. The other side was downhill. Search time was best in the Fleet but we learnt a few things ourselves that night.

As with everything else, we found there was little time for banyans after the work was done. Even so we enjoyed the warm, generally clear water East of Suez. Now we must get out our rubber suits again and prepare for ice in the face masks.

Christmas Wishes From:

My Team:

O.A.I Douglas, F.D.

A.B. Mackney, F.D.

P.O.M.E. Seddon, S.W.D.

E.R.A. Gearon, S.W.D.

A.B. Baker, S.W.D.

and Myself,

D.O. H.M.S. 'PLYMOUTH'.

## Snips from Snaps

A now retired member of the Branch once said to me: 'Swimming in the Mining Tank at Vernon makes you feel like a B - - - Goldfish in a bowl' Well, I wonder how he would have felt if he had had the chance of swimming in the manoeuvring tank at A.E.W. in Haslar? It is quite a tank, 18 feet deep and they say big enough to take a couple of Royal Yachts, not that

there is much chance of that ever happening even if we did have another Royal Yacht. Those enthusiastic model owners would be sure to object to their tank being used in such a way.

\* \* \*

There is a team of civilian divers operating at A.E.W., they are mostly Draughtsmen. The man in charge of these divers is Mr. Bill Hutchings





who is a leading draughtsman. When diving the team use civilian type aqua-lungs, they have both single and twin bottle sets to choose from. During the time I spent at A.E.W. Bill Hutchings and his merry men gave me the run of their very well equipped diving store. It certainly makes life easy when you get full co-operation from the people you are working with.

\* \* \*

Here in *Vernon* we are engaged on another series of ejector seat trials. Photography plays an important part in the experiments. Three 16mm. Cine cameras cover the actual firing of the seat. Two recording cameras both with wide angle lenses (Angenieux 10mm. f.1.8) 200 foot magazines and battery operated are used in perspex houses for the underwater shots. Both of these cameras are fitted to tripods and fired from the surface. One of the cameras operates at 24f.p.s. the other at 200 f.p.s.

Originally the cameras were operated by either a diver, doctor or photographer but there came a time



#### Puzzle — Find the Logic.

My wife and I were just in time to see our train pulling out of the station. Turning to her, I said: 'If you had'nt taken so long to get ready, we would have caught it'. 'If you had'nt hurried me', she snapped, 'we wouldn't have so long to wait for the next one'.

when there were no divers, doctors or photographers available so the present set-up evolved, talk about automation. We use another 16mm. camera running at 64f.p.s. this camera is used outside the tank and fires through one of the ports.

We are pretty well set up with underwater lights now in the tank. There are four Colortron units, all fitted with natty rubber covers tailored by George Allpress. The intensity of the bulbs used is greater than an ordinary 5,000 watt. lamp. the four units are all controlled through cine-master convertor with tappings off to over-run the lamps.

The convertor unit has a built-in temperature meter, there are six stages up to 3,450 degrees Kelvin. So you see we now have plenty of light even for colour on fairly high speed runs. I should mention that the underwater Cine-cameras are the property of the R.A.E. at Farn-Borough.

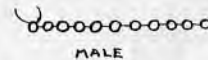
The two stills of the S.D.D.E. were both taken on F.P. 3 film, 50th at f.8. ROY FORDHAM.

## Marine Life

by PROFESSOR I. FINDEM (N.C.)

**M**ARINE Life? For the more seriously minded underwater adventurer this I know will prove good reading (ahem)—. For many years now, I have made a close study of minute creatures of the sea, plankton, etc. Now that the years are quickly passing by, I think it only fair to pass on my knowledge to the younger generation. This material accumulated after months and months of hard and hazardous work, must, I feel, be handed down, however let me proceed.

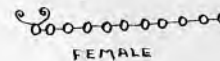
We have, among the thousands of minute creatures one of extreme interest, the 'THRINKLE WORSELL'. (Note sketch)



MALE

they are easily recognized by the series of round transparent balls which are joined each to each by a thin fibrous muscle, this muscle has one duty to perform and one only, that is to expand and contract and cause a caterpillar movement thus providing locomotion for the creature. Although these balls are joined together they do not in any way communicate with each other, the only way they can do so is to draw the balls together till they touch, only then is an impulse wave transmitted, and it knows what it intends to do.

Now in this other drawing we have the opposite sex, the female,



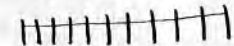
FEMALE

this I have determined by several experiments, one was to take careful note of their habits. I found, after hours of sitting with them, that the

male species went standing up and the female sitting down (travel I mean).

They communicate with each other by contracting the fibrous connecting muscles and then suddenly releasing them causing the small transparent balls to tap together in unison and so creating a sound like a tinkle, the muscles on expanding cause a sound something like this 'Worsle — Worsle — Worsle'. Thus I have named them 'THRINKLE WORSELLS'. . . . Now these creatures are known only to frequent places that have an accumulation of very old timber, such as wrecks, etc.

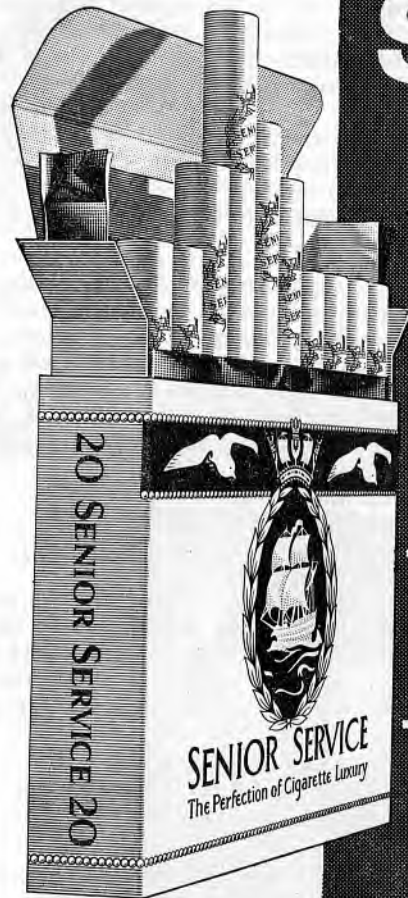
To capture one of these fascinating creatures however, presents one with a tricky problem. None the less I achieved the impossible, and have a pair of good samples in captivity. I shall explain how you too can be a proud keeper of such a unique and rare specimen. First you must obtain a few small rubber washers (your local plumber will no doubt help you on that problem). Now, with the aid of a razor blade carefully slice the washers into thin wafers, then cut a slot half-way into them, these must be formed so as to be a jig (see Fig.3)



ASSEMBLED WASHERS

Now you are armed with a very effective trap. On finding a 'THRINKLE WORSLE', however excited you may feel, I must emphasise this point, *Don't do Your Conkers*, approach the subject as quietly as possible, if you are wearing a lung take a good lung full of air, silently





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flip over the top of the 'THRINKLE WORSELL' making its mating call. Now, whilst in this position, hold your breath and carefully place the trap into position, that is with each washer between each ball. That is all one needs to do. Rubber, being a perfect insulator, isolates each ball, thereby silencing the signals from each ball. Now you have a very rare pet, but how to feed it? An admirable question. Admittedly this will in time, prove a little expensive . . . As oak, mahogany, teak and all hard woods are part of their main diet, and the only articles made up of this are items of furniture, etc., a little trying I agree but what are a few suites of furniture compared with a gem of a pet like this. In the course of a year I guess they would devour approximately two to three bedroom suites.

As I pound away at this infernal machine I can see my pair of 'THRINKLE WORSELLS' gaily having a ball in my aquarium (thrinkling away to their hearts content, bless 'em).

**Dangerous?** Unfortunately, yes, as you no doubt have observed at each

end of each pair we have a pair of small antenna, these are the armour of this particular kind of life. However to overcome this problem one has only to wear a pair of asbestos shoes and gloves, thus attired the ultimate danger is eliminated, **But** failing to do this can be very serious indeed. These antenna, on making direct contact with the giggle gland, which is situated in the centre of our palms, pierces the skin and at the same moment ejects a fluid, which passes into the gland, within seconds one begins to feel all giggly, on trying to suppress the feeling the worse you become. In the end the whole person becomes subject to fits of laughter, when one laughs a sharp pain passes up the tricuspid valve causing it to open and shut instead of shut and open . . . Hence the saying 'It only hurts when I laugh'. **So be Careful Friends.**

Well, this concludes my article for now. In my next series I will tell you how to breed them. I have to go now I can hear my nurse coming. He always arrives around this time, to make my bed and adjust my straight jacket. T.T.F.N.

## The Rockies

**B**EFORE the war the term 'Rockies' was used to describe reservists (Naval). Naval reserves were composed of R.F.R., R.N.R. and R.N.V.R. and were tolerated, envied and sometimes cursed by R.N. personnel.

They usually spent two weeks per year with the Home Fleet and at Sunday Divisions it was a common sight to see R.F.R. seamen conspicuous in blue caps and flannel richards and sometimes with moustaches 'a la Ronald Coleman' or 'Ole Bill'. Their blue suits were somewhat tight around the midriff

and short in the leg — this was due to the fact that they had put on weight since leaving the service proper.

R.F.R. men knew just how close to the wind they could sail during their fortnights obligatory service with the Fleet. Many a 'Joss Man' has been glad to see them depart. Talking of 'Joss Men' — there was the story of the 'Mutiny on the *Hermes*'. A party of R.N.V.R. ratings from a Scottish Division who were serving on *Hermes* felt that they were not getting enough to eat. It might have been the sea air which



had sharpened their appetites. However they selected a 'Shop Steward' as spokesman and went to the Officer of the Watch in a big heap and complained. After the O.O.W. had heard their story he dismissed them and later they were 'piped' to fall in on the flight deck. They arrived on the flight deck just as it started to rain and for one hour they stood to attention and received the O.O.W.'s rendering of K.R.'s and A.L.'s including certain paragraphs concerning Mutiny 'when two or more are gathered together, etc.' and 'the stating of complaints'.

However we now have a unified reserve which comprises of R.F.R., R.N.R. and R.N.V.R. entitled Royal Naval Reserve. Instructors at *Vernon* may sometimes wonder what happens to the 'Rockies who qualify as S./W. Divers once they leave the school.

We at R.N.R. Sea Training Establishment, Mersey have said our

good-byes to the divers of H.M.S. *Devonshire* who have been doing their dips with us. They even took part in our little display at the Liverpool Boys Scouts Annual Swimming Gala, whilst waiting for the *Devonshire* to Commission.

We hope that Messrs. Gage, Downey, Redwood, Elton, Hanlor and Crocks enjoyed our facilities at H.M.S. *Eaglet*.

We spend our Ob doing bottom search, finding lost boats fittings for the local 'yachtsmen', doing displays for worthy causes, clearing fouled screws on our mine sweeper and the training of new candidates for the school at *Vernon*.

We would like some news of other Rocky S./W. Divers. Perhaps this could lead to a regular feature in the R.N. DIVING MAGAZINE — 'News from the Rockies' or something like that.

R. LENNON, C.P.O.

Let's hear from you then, Rockies.  
ED.

## Recent Events in Diving Medicine

by D. E. MACKAY, Surgeon Lt.-Cdr. (R.N.)

SEVERAL developments have taken place in the past few months which have affected the scientists and doctors at Royal Naval Physiological Laboratory, Admiralty Experimental Diving Unit and the Royal Naval Medical School. Needless to say, they have also involved many divers and at the outset, let me make it quite clear that without the cheerful co-operation of so many divers a lot of the progress in diving medicine could not be done and I and my colleagues are continually indebted to them. Those divers who have taken part in the various trials know our feelings on the problems they have and this is not the place to elaborate on our concern for their finances.

The most important thing has been the restarting of experimental work on Deep Diving. The first practical point has been the establishment of the helicopter recovery team with its depth limitation of 250 feet. This limit has been decided on because of the problems of nitrogen narcosis in the swimmer; this problem may be exaggerated but only experience will lead to changes on that account. Experimental work has restarted on the use of Helium to avoid narcosis in deep diving. It has the potential advantage that all depths round the British Isle could be reached using it. Most of you will have heard rumours of dreadful disaster on the trials on H.M.S. *Reclaim* this summer and these rumours are regrettably based

on fact. A.B. Wannerton has been in R.N. Hospital, Haslar with serious injuries as a result of a spinal bend following chokes. I have every confidence that he will make a complete recovery but I am also certain that it will take some time — perhaps a long time — to achieve this recovery. In the meantime his spirit and cheerfulness are very inspiring and I am sure all divers wish that his rate of recovery could be speeded up. There were several other serious cases of decompression sickness which did respond to treatment — even if some of the treatment was new to R.N. circles though described in the U.S.N. Diving Manual. These cases were of spinal or cerebral type with chokes in many cases and shock in several. However, at the cost of long treatments in the chambers, all recovered eventually. It may be difficult for the divers who suffered to feel that it was worthwhile but it was of tremendous value to the back-room boys and here are some of the lessons learned:—

- (a) That a very short decompression time is possible for dives to 250 feet for 10 minutes on the bottom breathing air.
- (b) That new oxy-helium decompression tables can be produced for 300 feet which are shorter than the present tables.
- (c) That for short decompression times, it is essential to breathe oxygen after using oxy-helium, and not air.
- (d) That there is some form of trouble which does not produce symptoms persisting after a dive carried out breathing oxy-helium and decompressed breathing air. This trouble can become obvious during a second dive (the interval between dives is not yet discovered).
- (e) That the form of decompression sickness is one not com-

monly seen and needs the long treatment tables right from the start.

- (f) That the rate of ascent has to be steady and reasonably slow.

Naturally, all this information makes one question several points of accepted theories and suggests some problems which have to be investigated. Already proposals for future trials have been put forward and are undergoing initial experimentation. There seems to be no reason why a diver should not eventually operate from a small craft which has a derrick capable of taking a small submersible decompression chamber and which has a recompression chamber with its ancillary equipment; and why his normal operations should not exceed 180 feet — perhaps down to all levels of the continental shelf — as a procedure economical in time. The difficulty is far more likely to be the seamanship involved in managing a small vessel in open water. However, physiology is still a problem, equipment is not specifically designed for the job, and techniques for the best use of bottom line still to be developed, so the target is a little time away. As some philosopher said: 'a thousand mile journey starts with one step'; we have covered 180 feet!

Other work has continued. Table II Trials reached an important milestone this Autumn, four and a half years after starting them. Latest information from Australia on pearl divers makes my grey hairs stand on end — divers whose total decompression stops are deeper than our deepest stops for the same depth and whose total decompression duration is much shorter than we would ever contemplate — and the bend rate is only of the order of 6%. Oxygen consumption trials are still progressing. Surgeon Lt.-Cdr. Barnard has carried out the diving part of a C.D. Star



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Course — though I am told he did it in an unusual manner — so that there is now a Medical Officer with some practical knowledge of the diving training carried out by clearance divers. Surgeon Captain Miles has had his book 'Underwater Medicine' published — the first book devoted purely to medical aspects of underwater life — though it is written for an intelligent layman and the price is £3 (perhaps it is not really intended for wealthy divers).

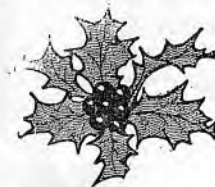
During the Summer, an instructional film has been made for the three Services on expired air resuscitation (mouth to mouth, kiss of life, etc.) and when it is completed, the method will become the official method — at least as first choice.

Finally, R.N.P.L. has moved. No longer does it stretch to Haslar Creek, no longer does it have to be sure there is not a funeral over the wall before letting off a charge, no

longer do most of its staff have to work in ancient wooden huts. The future of Peel Cottage is uncertain. R.N.P.L. is now at Stokes Bay in the modernised brick huts of what used to be *Vernon II* on Fort Road.



Bernards of Harwich  
extend Seasonal Greetings  
to all readers of the  
R.N. Diving Magazine  
and express the hope that they and the  
Magazine will meet with every success  
in the New Year.



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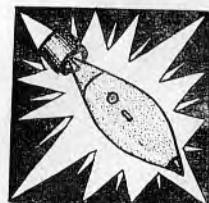
**Anglia House, Harwich, Essex**

and Branches



A lot of money has been spent and there is more space and more comfort for most of the staff. Naturally, it will be some time before everything is running smoothly, but I hope that divers will start coming over once

again (I am sure they will when Bill Filer and the Wet-and-Dry 1,000 feet Chamber are installed sometime in 1963), as I and my colleagues are always in need of volunteers for our pot trials.



## Portsmouth Command Bomb and Mine Disposal Notes



**A**FTER a fairly busy summer season, things in the Bomb and Mine Disposal line have been comparatively quiet during the autumn.

However, we did spend an interesting and fruitful week on the East Coast recently:—

On Monday the 8th October we disposed of a Dutch 'Seven Horn' Mine, which had been trawled up off Sizewell in Suffolk.

Tuesday found us getting rid of some old practice bombs at the Atomic Weapons Research Establishment at Orford Ness.

Wednesday we inspected some sites in Suffolk and Norfolk or possible Depth Charges, finding one probable at Stopford Bridge, near Tharleston, Norfolk. The removal of this will probably entail combined operations, with the Royal Engineers playing the major role.

On Thursday, after diligent and persistent searching we found and destroyed a British Type 'R' Mine in the River Alde, three and a half miles up river from Aldeburgh.

Friday evening found us in Essex. at Tollesbury, where in the gathering darkness and after a strenuous mud

crawl we counter-mined in situ three American 250lb. Practice Bombs. A very kind constable here rewarded each of us with a beautiful jar of honey brewed from his own bees. After which parting gift, we set course for the ever open arms (negative Check Point Charlie) of our Alma Mater, H.M.S. *Vernon*.

Throughout the whole of the foregoing historical odyssey, we had the benefit of the company of Lt.-Cdr. Staines, O.B.E., R.N.R. who was undergoing his fortnight's annual training. His wide experience and very able help proved invaluable, and by his inexhaustible store of good yarns, he was able to maintain the morale of

the B. and M.D. Team at a very high level.

It seems rather premature but knowing the inevitable delays in publication, here's wishing all Divers Everywhere a 'Jovial Yuletide' and a 'Guid New Year'!

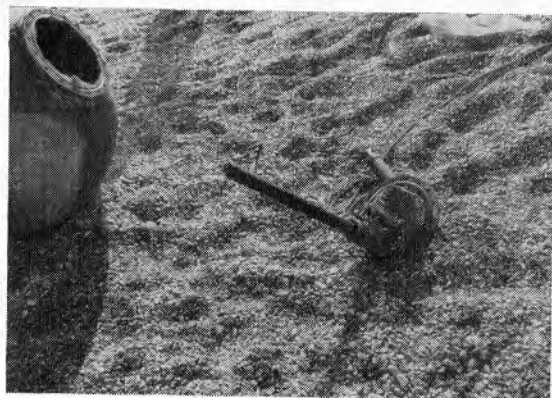
Yours aye, MAC.

P.S.—For the benefit of any unenlightened Sassenachs, honey when mixed with Auld Scotia's National Beverage forms a very tasty brew called 'Atholl Brase'. It can also be successfully mixed with 'Nelson's Blood'.

MRS. 'MAC' BEETON.



Crater from World War I 25lb bomb found at Leysdown, near Sheerness, Kent, 29/7/62



Dutch 7 horned mine, Sheerness, Kent, 8/10/62



10lb. British bombs found in River Swale, near Whitstable, 14/9/62



*Seasons Greetings from Metro-Goldwyn-Mayer Studios*



*Claire Kelly and Sherry Jackson*





## Diving from 'Dalrymple'

by JOK ADAMS

**D**IVING on a Survey ship differs very little from diving on a grey funnel boat. Visions of diving on unidentified wrecks, reefs and shoals are soon dispelled. In point of fact, the battle of the minutes is much more bitter, in view of the continuous work that seems to be the religion of the Survey Navy. The Diving Officer soon got the picture, and dips are confined to weekends when the ship rests. There are few R.A.'s in the Gulf, so the problem is who to choose this week. Many cries of 'But he had a dip last week' are heard. It goes without saying that this is not 'Horsea' in winter.

The ship is now in the second half of a Persian Gulf/Persian Gulf, General Service Commission.

Her Divers re:—

Lt.-Cdr. Campbell, F.D.  
L./S. Booth, C.D.\*

L./S. Cooper, F.D.  
L./S. Hoskins, F.D.  
A./B. Adams, C.D.\*  
R.E.M. Malia, S.W.D.

The Diving Officer is the Bosun, S./Lt. Attwood, whose qualifications remain obscure.

Our main work during the commission has been to chart the approaches to Abu Dhabi, a small town on the Trucial Oman Coast. There has been a rich oil strike, both ashore and offshore, and the problem is, how to get the tankers in to get the stuff out. Anyone familiar with the Gulf will know that deep water is a rarity. Especially around Abu Dhabi. The danger of sending our S.W.D. down too far, never arises. He would have to take a spade with him.

Masira Island lies off the coast of Saudi Arabia in the Arabian Sea. It

boasts a small R.A.F. camp (God rest their souls) and one automatic tide gauge, erected by us last year. The depth of water round the gauge varies from 10 feet to two feet depending on the state of the tide and the position of your feet. The rigging holding the structure up had parted in several places, due, it is thought to the continual chafing of the sand back and forth with the tide. The Bosun and yours truly, were dispatched to the island by air when this was reported, to renew the rigging. This necessitated long hours of snorkel diving every day for five days. Is it any wonder that I can now smoke a king size completely down in two puffs.

An amusing story to end. Those who remember Pete Cooper in the School will be interested. The Pete Cooper of the Chinese Restaurant fame. On our way out through the Red Sea, a canvas bath was rigged to keep the troops cool. Its total depth must have been about four feet. Pete was gambolling in this contraption, like all good Free Divers do, when he received a severe clout on the ear from a wayward knee. His look of stunned surprise at the telltale spot of blood, was comical to behold. The Doc soon verified a burst eardrum, and Pete swears that if it gets about *Vernon* that he burst his drum in four foot of water, he will have my 'guts' for a necktie. So I had better keep it quiet. JOK.

## English as she is Spoke (or Moddun Edjukayshun)

**W**HEN I first heard it, I could have sworn that it was an old-time Gunnery Instructor giving detail in Sanscrit for the drill of — 'From the halt to the halt, Change step'!

I was assured that I was completely wrong, didn't know my own language and that it was the latest on what is apparently known as 'The Hit Parade!' (so much for education!)

Being the first to admit that one can learn something new every day, I made a point of studying this strange new language — *and* the 'music' that is coupled with it. These new utterances, for such they appear to be, fall into two groups. That which is associated with the 'music', is apparently called 'Mid-Atlantic'. The other, a more general everyday means of contact, appears to be *still* awaiting its christening! (After listening to it, and trying to read it, I am *not* surprised at the delay in the ceremony!)

I repeat, assurance has been given me that this 'Mid-Atlantic' stuff is modern in approach, with a high educational value. A statement, that I confess leaves me with the dubious feeling that I may have missed something somewhere along the line. For I can well recall witnessing the same effects in various parts of Africa, over a period of some years. The characters, who believe in this M.A. stuff, perform in exactly the same way as the natives, of that large domain. Same glazed-eye, weird clothing, gyrations, and apparent lack of basic intelligence! (The only difference appears to be, the native does it all with an inborne sense of dignity!)

'Mid-Atlantic' has a power and rhythm of its own — if one is to believe its young converts. These goons drool inanely over the mouthings and wriggings of creatures with pseudo names, fantastic dress and propaganda backgrounds. Although the whole set up is very high-

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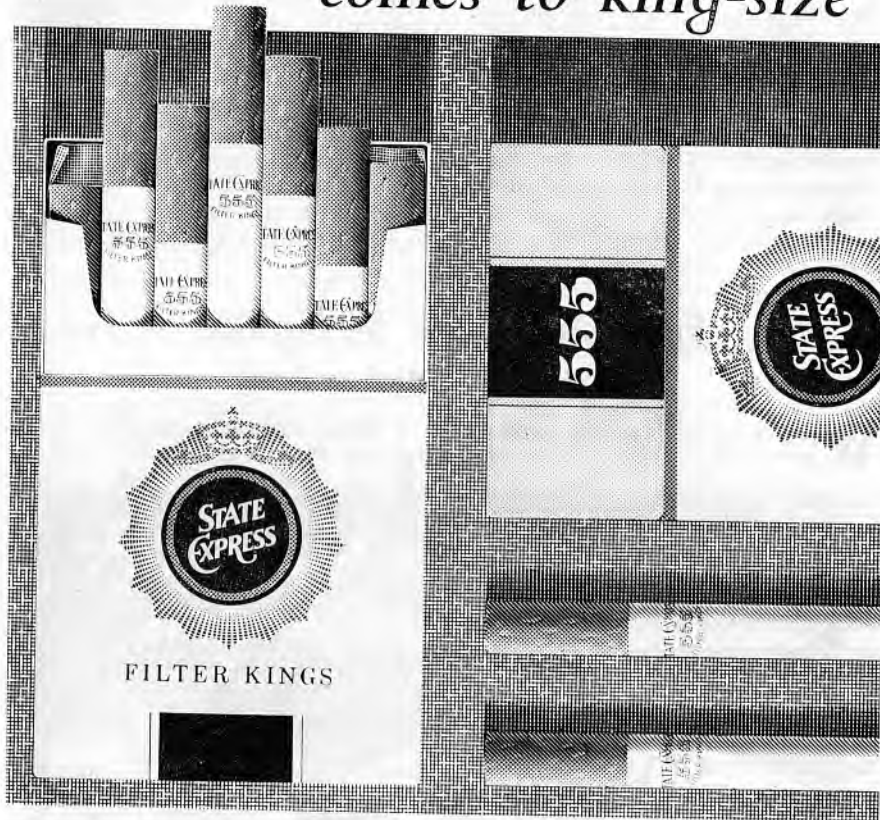
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powered indeed, no one yet appears to have given any thought to the general understanding of the meaning *intended* by the use of M.A. Difficulty of expression is painfully obvious — and I think, impossible. At least in English!

Occasionally, if one listens very carefully to these outbursts, it is possible to hear an odd word in true English. This is an obvious mistake on the part of the 'singer'. In such an instance, on investigation, one discovers that the 'star' is a person of somewhat more mature years than the average of his ilk. Thus he has probably been fortunate enough to have enjoyed a certain amount of schooling, English having formed part of the curriculum. Some of it obviously having been retained! (He has of course, since that time, completed a course in this weird new form of the mother tongue!)

Yet such mistakes are apparently few and far between, which renders *complete* understanding all the more difficult; not just for you and I but for the convert too!

As a firm lover of the arts and a keen student of music, I pride myself on my ability to give full appreciation to any good composition, especially so when coupled with a sensible lyric. Yet this so called 'New Trend' has me confused more than a little somewhat!

Who cannot admit to a fullness of feeling, a lump in the throat, a tear in the eye — when listening to a soulful rendering of such old and well tried ballads as *This Old Hat of Mine*, *The Ball of Killimore*, sung in double mark time, with three pace intervals between each stanza, and full canteen accompaniment. Or acknowledge the satisfaction derived from joining in the full throated roaring of that magnificent aria from *The Barber of Seville* more commonly known as *Never Kick Your Granny While She is*

*Shaving*. The exquisite understanding of a true love song, when partaking in that old favourite of the Senior Service — *My Girl is in the Texas Rangers*.

Such songs and ballads were always sung for the pure enjoyment of singing, with a diction which was the envy of stage performers! Now alas, the 'singer' (and I use the term in its loosest sense!) is generally gifted with an avaricious streak which makes him accept payment for his utterances, *far in excess* of that even obtained by a Clearance Diver Third Class! and that ain't (sorry; is not) hay. Plus the fact that it is impossible to understand what the hell he is attempting to tell us! All very sad.

The constancy of tone, durability of rhythm, and wealth of expression and meaning (generally underlying!) is not to be found in the 'new' works; they only tend to give one noise claustrophobia with their dirge like monotony. This is as inescapable as the meaning is unintelligible! So MUCH FOR MID-ATLANTIC!

The more everyday language(?) is equally as confusing, and appears to be spreading in a dangerously rapid manner! If it continues at its present speed, we shall all be compelled to revert to sign language! (What price a new Instructors rate?)

Consider the following: In a recent class of Shallow Water Divers, one youth, when asked by the Instructor if he was in possession of the noseclip belonging to a classmate, replied in highly indignant tones (and I quote), 'You think I know who was it, just let me caughts him that's why, and I don't care if he is!!' (The Instructor has since requested Dog Watch instruction in Esperanto! He feels certain he is missing something!)

This outburst in the 'new method' was all the more mystifying in view of the lads obviously high standard



of 'education'. For he carried his own comb, wore a wrist-watch, and was fully capable of drawing his own name in capital letters, without any prompting whatsoever!

Obviously something was wrong. Radically wrong. But where was the fault?

The following morning, the same Instructor informed me of an incident which he swore took place. He had attended a 'Tombola' Session at the Manoel Island Club, on the evening following the above outburst. During the playing of the Big House, there was a sudden strangled cry from the back of the hall. To him it sounded like 'Ow! Ow'. just as if someone had been stung by a Mad Maltese Tape Worm! (It must be admitted that they *are* flying rather low this season, *and* in great swarms)! Some

distress was occasioned to a number of participants, as our noseclip friend was seen to be struggling towards the platform, waving what was obviously the winning ticket (and he won the Snowball, too! twenty-five quid! sorry POUNDS!). The Chief in charge was most suspicious of our young friend, and the way he had called out for the house. After much heavy interrogation, Chief finally gave him the benefit of the doubt — and the money.

As our hero was attired in the 'modern' manner, complete with double-breasted Italian shoes fitted with ingrowing toecaps, the Chief had apparently taken him for a foreigner from a visiting ship. His appearance and manner of speech had puzzled them all. (As there were

three West Country ships in Sliema Creek at the time, the mistake was understandable!)

Such confused misunderstanding of 'our' language is much more prevalent than one would suppose, and many are the cases that can be quoted. I personally know of one, which I freely confess had the Chief Diver doing a double take on his service certificates, to make certain that he *had* passed the E.T.I. including English!

A smart young man arrived for a pre-course trial, with a very good report from his ship. He was reputedly a powerful swimmer, of high intelligence, and spoke three languages. (Unfortunately, it soon became apparent that English was *not* one of them)! Owner of his own transistor radio, he held the Gold Disc Girdle Belt for winning the TWIST CHAMPIONSHIP of Manoel Island, and a two tone matching pen and pencil set, while the modern toilet requisites carried on his person were above reproach!

I entered the office as Chef was questioning him, as to his reasons for wishing to qualify for diver. At this stage, Chief's face was almost purple, and he looked as if he was ready to do something drastic any moment! It finally transpired, after much 'interrupting' by our locally based 'new modern', that what the chap had been trying to make Chief understand was that he, the volunteer thought that he was a certainty to qualify! He was very interested in the idea, and above all, his girl-friend was positive that he would manage it with ease! After all, wasn't he the Champion Twister?

Poor Chief had thought that nasturtions were being flung at his antecedents, and was 'building one up' to answer the charge! As Chief is no mean linguist himself (speaking Welsh, West Country, English and

pretty fluent Manoel Island Dialect) he was more than a little hurt when he failed to understand our budding dipchick! You dear reader, will no doubt appreciate his dilemma, after reading the foregoing.

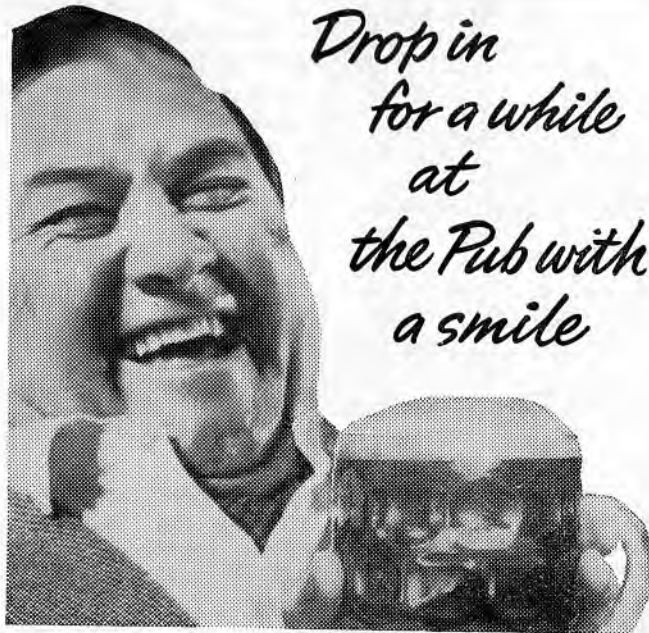
Doubt is often expressed regarding this type of 'English'. Does one accept the fact that it is phonetic — or intended to be so? If such *is* the case, then one has made a start. It follows, that the next requirement is full understanding. Do I understand what is being said (or written) — or am I simply making a guess? Judge for yourselves from the following. Consider its breathtaking purity of meaning. TWI — BOHELS . . . a gem of phonetic expression! You don't understand, why, it is easy! The meaning is perfectly clear — TWIN BOTTLES.

Or meditate for a moment on *this* jewel, culled from a recent examination paper. SILINDA VAL. You have it? Good! Clear isn't it? CYLINDER VALVE!

Experience has shown that, using a little tact(?) it is possible to have the 'new type educated' fully understand the type of English which you and I were taught at school; but *only* if it is spoken slowly — and in words of one syllable. The difficulty still remains — we cannot fully understand their speech or so called spelling-writing! (at least I can't!)

If, as has been stated in the Daily Press, this new form of our Mother Tongue *is* known as MID-ATLANTIC, then all I can say is, that is the most obvious place for it! And I only hope we are able to KEEP A LEVEL HEAD, until such times as it returns there (and the quicker the sooner!)

P.S.:— . . . I have often been most thankful that my old Seamanship Instructor was of Anglo-Saxon descent, gifted with a sense of humour on a par with his knowledge of the



**BRICKWOODS**



language! Needless to say, he found little difficulty in imparting the full meaning and a true appreciation of both to your humble Scribe! Of

course, that was in the days of wooden tin-gear, when *everyone* knew the alphabet — and just how to use it.

## No. 4 Special Boat Section R.M.F.V.R.

### Portsmouth Detachment

So we have never seen an article from a S.B.S. in your Magazine may we correct this omission and make the acquaintance of all your other U.W. species.

Firstly, we part-time bootnecks of No. 4 S.B.S. are five in number. One has female trouble (Limpet Type) and is rarely seen, Mne Lock has just completed his 'Green Beret' course and is new to the team, and the three remaining members are Marines: Hawkins, Moody and Colbourne. (All very keen types and therefore complete idiots).

Our Instructor at present is Sgt. (Mac.) Hine, M.M., a regular Marine and a S.C.I who has given us his solemn promise that one day we will see him in a frog suit. We have seen him wet but that was when he split his beer after being told it was his round. In a moment of drunken passion he confided the information that he was awarded his Military Medal for bravery in giving a direct order to a Marine (V.R.)

The 14 Days Annual Training this year was held at Texel in Holland with the Royal Dutch Marines, but alas, we three afore-mentioned idiots were unable to go. Instead, our two weeks were spent qualifying as parachutists at R.A.F. Abingdon under excellent instructors (who said the R.A.F. were soft types?) after which we unanimously decided that we would rather keep our fins on the sea bed.

We average two weekends a month and this year our activities have taken us all over the place for

diving and canoeing (Horsea Lake included of course), and to Glenshee in Scotland for ski-ing and snow warfare, to the Lake District for rock climbing, and various others for night demolitions, marches, beach recce's, etc., all highly organised P.U's.

Outstanding events in 1961 were the 'Swimmer-Canoeist' course at Poole, the S.W.D. course at Vernon (part of the S.C. course) and Whitsun over in Jersey C.I. where we each suffered a severe attack of the (elbow) bends cramp in the money fingers.

Next year we look forward to 'Free Ascents' in Dolphin Tower and bigger and more frequent hang-overs.

MNE. (Wetrun) HAWKINS.

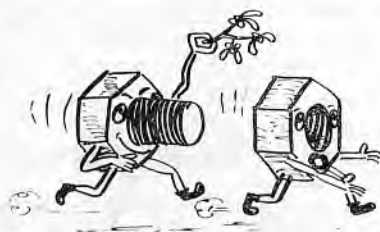
MNE. (Bootsie) MOODY

MNE (Hawkeye) COLBOURNE

MNE (Pad) LOCK

### OBITUARY

We regret the loss of Mne MOODY who has departed from our humble ranks having been 'demoted' to Corporal. May he rest in pieces. Next of kin (Brickwoods) have been informed and we offer our sincere condolences to the N.C.O's Mess.



## Royal Naval and Royal Marine Children's Home

THE R.N. and R.M. Children's Home, South Africa Lodge, Stakes Hill Road, Waterloooville can accommodate about 30 children, ranging in age from 2 to 15 years. They can take temporary cases, although the original function was to care for the children who had lost one or both parents.

All the children live at South Africa Lodge, a completely modern building, built as a Home. The children attend schools in Waterloooville and, if able to pass to Grammar Schools, remain until 18 years of age, and are found jobs suitable to their ability and taste. Those who have no family, spend holidays at the Home, and continue to keep in touch.

The admission of a child of serving or ex-serving personnel below Officer rank in the R.N., R.M., W.R.N.S. or Auxiliary Services is governed solely by the need of the child. A parent is assessed for a maintenance payment on his circumstances.

Any enquiries with regard to the admission of children should be forwarded through the normal welfare channels.

Two British sailors on shore leave in Sweden decided to go to church. Knowing no Swedish they agreed to play safe by picking out a man in front of them and doing exactly as he did during the service. The Pastor made an announcement of some kind and since the man in front stood up, the sailors quickly got to their feet too . . . only to hear sounds of suppressed laughter from the congregation.

After the service they asked the Pastor, who could speak English, what was the cause of the merriment. 'Oh', he said, 'I was announcing a

The Children's Vehicle Fund has now passed the £600 mark and the children are looking forward to the prospect of more outings than was before possible, and in the summer, every weekend at the sea. The children wish to thank every one who helped in this collection.

At this time of the year everyone's thoughts turn to children and our Naval Home receive evidence of this in the form of gifts which are gratefully accepted by youngsters who would otherwise miss a lot of the excitement of Christmas. The home is financed by the income from invested funds but this income is less than the running cost of the home and it relies on cash gifts to close the gap. At present these gifts are only just keeping the gap closed. If the rising costs get above the total income it will mean a drain on the invested money and a consequent drop in interest. This would be the start of a downhill slide.

If your ship is paying off and is looking for a charity to which it can donate the residue of its welfare money, put a word in.

From the Children — A Merry Christmas to You All.

baptism and asked the father of the child to stand up.'

The attractive blonde walked into the Dentist's surgery almost shaking with fright. The dentist did his best to soothe her, but without much success. As she sat down she ventured, 'You know, I think I would rather have a baby than have a tooth drilled'.

'Madam', said the Denist, 'I suggest you make up your mind before I adjust this chair.'

Bernards Bulletin.



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## For the Notice of New Enthusiasts

SUB-AQUA CLUB, SPRING 1948

**Members.** Two.

**Average Age.** 12 Years.

**Assets.** Good scroungers plus a little pocket money.

**Area of Operation.** Swimming pools and ponds in Chingford district.

\* \* \*

### Technical Knowledge

1. Air contains oxygen. When breathed it changes to Carbon Dioxide.

2. Water exerts pressure. This is what hurts the ears before you blow.

\* \* \*

### Equipment

One pair of Fins.

One length of hose (Garden) 10ft.

Two lead slabs, 4lb. each. Fitted to the fins.

One A.R.P. Gas Mask.

Maximum depth 5ft. 9in. standing upright.

Endurance 3 to 5 minutes.

\* \* \*

### Operation

The hand of the attendant held over the surface end of the hose forced the exhaled air out of the mask exhaust valve.

\* \* \*

### Main Hazard

The lifeguards who used to grab the hose, and in doing so, pull it out of mask socket.

\* \* \*

### Developments During Season

1. Addition of a bellows pump, hand-operated, single stroke. This delivered regular guffs of air and was complete with non-return valves.

Maximum depth 6ft. 6in. standing upright.

Maximum endurance 8 minutes.

2. Rubber float similar to the Gemini. Propulsion, two paddles or sail (with a soldiers wind).

This allowed the area of operations to be extended to the river Lea.

3. TRANSPORT. Barrow on swivel towed behind a push-bike.

\* \* \*

### Main Hazards with New Equipment

1. Leeches from the river.

2. The mask always pressed against the face during dives which explains why we always went around with bulging eyeballs.

\* \* \*

### Expenses:

MASK presented by neighbour.

HOSE — 'Found'.

FINS — £1.

LEAD — Garage roof.

RUBBER BOAT — Government surplus, 7/6, Gamages.

BIKE — Origin unknown.

BARROW — Found.

PUMP — Arrived with boat.

### Casualties

DEATHS — Nil.

BROKEN BONES—Nil.

CUTS AND BRUISES — Lots.

### Moral

We were lucky, if you wish to start there are now plenty of Sub-Aqua Clubs who welcome new members. Write to this Magazine and we will put in you contact with your nearest Club.



June Thorburn in a neoprene diving suit, taken at Seymour Hall Baths. Miss Thorburn recently appeared in the I.T.V. production *No Hiding Place* and is currently introducing her own record programme on the B.B.C., *Sounds Like June*. She is an enthusiastic skin diver.

The suit she is wearing was made by A. Tillbrook & Co. Ltd. (as advertised).



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