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H.M.S. VERNON

CAPTAIN R. C. WATKIN, R.N. (see page 41)

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R.N. Diving Magazine

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| February 1961 | No. 1 |
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| | February 1961 |

The Life of 'Deepwater'

(Part II)

by CAPT. W. O. SHELFORD, R.N. (Retd.)

- 3 -

DEEPWATER' sailed for her first 'Training Cruise' on a Saturday evening early in September 1947. The weather was as lovely as only an early Autumn evening can make it, and with the prospect of the weekend at sea and three weeks in Loch Fyne during Scotland's best time of the year, I felt that life was pretty good. We moved steadily down Spithead, round the Isle of Wight and headed down Channel into the setting sun.

Off St. Catherine's my complacency received a sudden cold douche as the Port Engine came to a grinding stop. We made slow speed on the other engine for an anxious half hour, until Jerry Lane, my Chief, came up to the Charthouse bearing a newspaper parcel. From this he spilled a number of jagged oily pieces of steel all over the clean chart, explaining as he did so that they used to constitute the crown of No. 4 Port Piston. However, he cheerfully assured me, we carried a spare piston and if I could anchor for a few hours he would fit it in No. 4. So back we went to St. Helen's Roads, let go the anchor

and told the engine room staff to do their damndest.

Early next morning we were off again, breasting a rising sea down Channel with both engines going fine. About tea-time that afternoon we rounded Land's End to find half a gale blowing and a steep sea running under our Port quarter. *Deepwater* began to roll alarmingly but ploughed steadily on for another hour or so, when both engines stopped suddenly.

Apparently the heavy rolling had disturbed water that must have been lurking unsuspected in the oil tanks, and we now had it in the fuel lines of both engines. After about an hour of wallowing lifelessly in the trough of the sea with many an anxious glance at the cliffs of Cornwall getting ever closer to leeward. we were able to start up again. By this time it was dark and raining and the sea was getting worse. The rolling was frightening in the extreme; the ship was going over to leeward some 45° or more and hanging there as though she would never recover. I remembered that although we had done an 'Inclining Experiment' in the Dockyard and the Constructor had worked out the results and assured me the ship was stable, I had never had the official 'Stability Statement' from the Admiralty and I began to wonder whether a decimal point or something had gone astray.

Staggering down from the bridge for a quick warm up, I came upon the watch on deck, a bunch of seasick National Servicemen huddled in the lee shelter-deck. 'Sam' Stanley, Petty Officer of the Watch was haranguing them:

'Call this rolling? Nothing why I was in a ship once which rolled so much we had to rig a spud-net over the funnel to stop the Stokers falling out of the boilerroom!'

I arrived back on the bridge in time to hear the Engine-room phone ring and the big Port engine stop. Another piston had gone and this time we had no spare. This was serious; we were by no means clear of the Cornish coast, and the weather showed no signs of letting up. To continue on towards Scotland with only one engine and the lowerpowered one at that was obviously madness. On the other hand to turn back meant several hours of slow steaming with those threatening black cliffs and the surf leaping hungrily at their base always under our lee.

Searching the chart for a harbour of some sort my eye fell on St. Ives, not far away down wind. Telling Bill Filer to steer for it, I went into the charthouse to look up the Port in the 'Channel Pilot'. 'St. Ives' I read, 'offers a good anchorage for small steamers' (so far so good), 'but a heavy swell runs in the bay in strong winds from the Southwest, West and Northwest. The Mariner is most strongly warned not to approach the Port under such conditions'. This Mariner wasted no time in regaining the bridge and altering Course back towards Land's End; it was the only thing left to do.

At least, on a Southerly course, the rolling and lurching was less; she was a good ship in a head sea and life seemed less alarming. Jerry said the starboard engine might suffer from the same troubles as the other at any moment, but he thought the could nurse it for another few hours. I told him we'd make for Penzance which, allowing for a safe margin round Land's End, should take us four or five hours. He begged me not to prolong the agony unnecessarily.

By 1 a.m. we were well clear to the Southward of all the land, and I gratefully headed up Channel again. At the same time, the rain stopped, the wind began to drop and a brilliant moon came out through the clouds. For the first time for eight hours my heart came down out of my mouth and I began to feel more confidence in the ship. The lights of Penzance came up, but I remembered the last time I had anchored there in a submarine and we had rolled sickeningly all night in a heavy ground swell. The starboard engine seemed to be chugging steadily on, and I thought that Falmouth would be a far better place to make for. The solid mass of the Lizard Head would protect us from any westerly swell, and there was a dockyard there and tugs to help if need be.

So Penzance dropped slowly astern and in a lovely dead calm dawn, the anchor rattled down in Falmouth Roads. Jerry Lane appeared on the bridge, red-eyed and blinking in the early morning sun; wiping the oil from his face he said:

'This Penzance? Its taken a bloody long time to get here!'

- 4 ---

I was half way down the ladder to my cabin before I answered:

'This, Chief, happens to be Falmouth.'

I gather it was as well that I didn't hear his comments.

After breakfast and a clean up, I reviewed the position. It seemed a pity to send the 'Deeps' back by train and call the whole trip off. There must be water deep enough to do some diving not too far out in the bay for the starboard engine to take us out and back, so that the whole thing would not be a waste of time. The chart showed a depth of of 32 fathoms close under the shelter of the land near the Manacle Rocks. and there we were headed at dawn on the Monday morning.

Though that particular class never went deeper than 200 feet until much later, they had the distinction of being the first 'Deeps' to do their training entirely in salt water from a ship that was never still. How different from the calm waters of the Scottish Lochs.

It is an ill wind that blows no good, because this unexpected visit established Falmouth as a diving base, and I hope that the friendly reception we had there and the contacts we made still bear fruit when the trials parties go down there.

The Mayor, the late 'Billy' Lamb, was a terrific character. He loved parties and literally threw Falmouth open to us when we came in for the weekends. On the first official call, he proudly showed me the Mayoral Chain of Office and pointed out the several plaques presented by various visiting Naval ships. I promised him a trophy from *Deepwater* the next time we called.

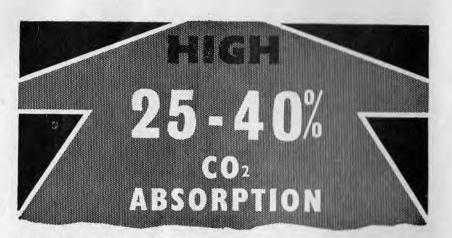
At last we dragged ourselves away and limped back to Portsmouth. Poor Deepwater spent most of the next few months in Dockvard hands being refitted again and having various modifications done. We did however get in some sea time in Spithead, doing trials of Submarine Immersion Suits, Submarine Escape Rate of Ascent trials, and comparative tests of various types of gas cutting torches in deep water. Perhaps our most important work was the preliminary testing of the Oxy-Helium gear, trying American helmets against the British and getting to know the American panel and controls.

By the early summer of 1947 we felt fairly confident that we really could get to Inveraray. The piston lubricating oil system had been overhauled, and the troubles that had beset the port engine had been rectified. Some rather bold speed trials had shown that the ship went a lot better at a steady cruising speed of 14 knots, and that at that speed everything was much happier down below than when trying to keep down to an 'economical' ten.

We sailed once more in early June with another crowd of 'Deeps' and all the Helium gas we could muster. My plan was to spend a week or so at Falmouth and get off the 30 fatham stage there to give every one a bit of a shake down and get used to S.D.C. drill and crash surfacing in the open sea before creeping into the calm security of Loch Fyne.

My first duty on arrival at Falmouth was to keep my promise to the Mayor, so he and the Town Clerk were asked off to lunch to receive a presentation. 'Billy' Lamb could hardly suppress his curiosity, but I promised him he could wear it for lunch. We brought it in, beautifully polished and engaved: 'To His

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Worship the Mayor of Falmouth from the Captain and Officers H.M.S. *Deepwater* 1947', and hung it round his neck. But I'm afraid his worship was unable to survive the soup course under the drag of an M.R.S. front-weight!

Apart from some difficulty in getting clear of a wreck in the fairway the first time we unmoored in a strong wind, this visit to Falmouth passed without untoward incident. We enjoyed ourselves hugely with the help of the Senior Officers Reserve Fleet's staff, his Wrens, his boats and his transport. Our trials caused some wonderment ashore, especially as we were still using 'Cassidy', the wooden dummy, for Rate of Ascent trials, and his silhouette dangling from the crane iib gave rise to the rumour that I had hanged a man from the yard-arm!

24 hours before we were due to leave Falmouth, the Gyro compass fell over, and I had to ask Slough to send their expert on German compasses down to look at it. He arrived very promptly by the next train in time for supper in the wardroom, and after the meal he got down to work. I don't know who finally had it as a 'caboosh', but the gyro room was a cramped illventillated compartment leading off the Port for'd corner of the diving flat. It was a very warm night and Chads and two other officers volunteered to go down and help him lift the heavy armature. Whether it was the heat, the beer fumes or Chad's pipe, we shall never know, but the poor expert fainted and had to be carried up on deck! On recovery, he very gallantly carried on, only to report to me in the small hours that he would have to take certain parts back to Slough for repair.

I was damned if I was going to be heading for im baulked at this stage by a mere rocks beyond.

compass, so I asked him to rejoin us at Inveraray, while I took the ship up on the magnetic compass. Now, when we took her over, *Deepwater* had only a magnetic steering compass in the wheel house which was no good for taking bearings, so I had fitted on the bridge a type of small compass known to submariners as 'Faithful Freddie' because of its reliability. The Navigator who had adjusted our compasses after the refit had been none too complimentary about my 'Freddie'.

As we rounded Land's End the following morning in our second attempt to get to Scotland, I remembered the note that the Navigator had written at the foot of his report on the bridge compass:—

'This Compass is not free from magnetic disturbance and the Commanding Officer is warned not to rely on it for navigational purposes.'

We had got round one of the most difficult corners without hitting anything solid, and I have a theory when cruising round the English coast that you can't go far wrong if you keep some shipping between you and the land, so I slipped down to my cabin, sorted out the Navigator's compass report, tore it up and dropped it out of the scuttle into the sea.

'Freddie' proved worthy of my trust and in due course we found ourselves entering Loch Fyne. Those who have been up there in *Reclaim* will know the Otter Spit, the bar of sand and shingle that extends almost right across the entrance, leaving only a narrow deep water channel round its Northern end close under some forbidding rocks. Viewed for the first time from the bridge of a ship, it seems that there is absolutely no room to turn her hard round the end of the Spit, and one seems to be heading for imminent disaster on the rocks beyond. Conning the ship very carefully up to this hazard, I was surprised to hear from the helmsman:

'Ship's not answering the helm, Sir'.

Cursing the fresh wind that must be blowing her bow off course I ordered: 'Stop Port', to be answered from the helm:

'The telegraphs aren't working either, Sir.'

Only then did I realise that the steady 'Chuff - chuff - chuff' of the Diesel exhausts was no longer with us. With a ship that was completely 'dead', and as I later discovered, was in total darkness below due to the generators going 'off the board', we drifted in majestic silence towards the Otter Spit! At the moment Chads appeared, puffing his huge pipe, with his usual 'Everything bearing an equal strain, Sir?' Anyone but he would have blanched as I yelled - 'No blank well! Let go the anchors for - - - -'s sake.' Incredibly both bower anchors were unstowed and crashed into the Loch in time to pull Deepwater up like a horse reined in before a jump, and the expected shudder of shingle under her keel failed to materialise. It did not take long to reorganise below, but we completed that trip with 'Chippie's' maul poised over the anchor slips!

When we were at last moored off Shira Point with our stern wire round a convenient tree in traditional Diving Ship fashion, a slight difficulty presented itself. *Tedworth* had always, on her many visits up there, gone alongside Inveraray Pier to emabrk fresh water, but soundings showed that *Deepwater* couldn't possibly get in. It looked as though we should have to waste time going all the way down to Rothesay every time we needed to water ship, until Chads remembered another of his incredible contacts and organised an Army manned L.S.T. from Stranraer as water boat and general tender for the whole of our stay. Her officers turned out to be a cheerful and willing crowd, and apart from ferrying off water as required they did innumerable odd jobs, not least among which was to provide a bar alongside the pier which made waiting fo routine boats a sheer pleasure.

Harry Wardle has already described our diving adventures at Inveraray in this magazine, and as this is a story of the ship I will not repeat them here. Suffice it to say that the first attempts to use Oxy-Helium mixtures below 300 feet were unfortunate, and after having one diver screaming with oxygen poisoning at 320 feet, and two cases of violent Oxygen convulsions in the S.D.C., I regretfully decided to pack it up and go back to Portsmouth to sort things out in the comparative security of laboratory and decompression chamber.

We had been nearly seven weeks in Inveraray and we had made friendships which last until today. *Deepwater*'s radio wouldn't connect with any known Naval wavelength, so our official contact was through the telephone in the bar of the 'George', where Betty and Donald Clark always made us completely at home.

Except in Loch Fyne where it had rained almost continuously, the summer of 1947 was famous for its prolonged heat wave. Once clear of the Loch we made a fast passage South in blazing sun and sparkling blue seas. Across the Bristol Channel the steady throb of the engines carried us up to Land's End, and one hot afternoon I was checking our position on the chart when I heard a shattering roar behind me. Automatically swinging round and staring skywards to see what sort of aircraft was 'buzzing' us, I found the cloudless blue sky blotted by angry white flames and shimmering smoke blasting from the funnel.

As I shouted to 'Stop both engines', the flames turned to deep red orange and the smoke became black and oily as it curled over the sea. At the same time huge chunks of red hot coke erupted from the funnel and cascaded down all over the upper deck, setting fire to anything inflammable in their path.

For a moment all was pandemonium as shouts of: 'Fire in the motor boat!' - 'Fire For'ard!' -'Fire on the Ouarterdeck!' floated up to the bridge and the engineroom reported that the fumes were so bad down there that they couldn't start the fire pumps. But men came pouting out from everywhere and doused the fires with buckets or slashed away burning canvas and tossed it overboard. We had 10,000 cubic feet each of oxygen and hydrogen stacked on deck aft and just as I ordered the lot to be dumped, the hoses came on and we were able to keep this potential bomb wetted down.

I realised that the silencers should obviously have been decoked and they were now clearing themselves in a drastic manner, but assumed they would burn themselves out soon, and thus save a nautical chimney sweep a job. But they burned merrily on, and Jerry Lane came up and told me that if we didn't get the fire under control soon, he was afraid that it would spread down to the engines, in which case we would almost certainly blow up. Even though it might mean completely ruining the engines, he proposed putting fire hoses down the funnel top to kill the fire at its source. I agreed and for half an hour we

-9-

cascaded cold sea water down the funnel. I shuddered to think of the effect on those huge temperamental machines, hot from 48 hours fast running, but gradually the smoke turned to steam and then subsided altogether. The fire was out but now had two supercharged high speed diesels full of salt water, on which they had certainly never been designed to run. It took us nearly four hours to drain and blow them down, and even then, when we eventually tried a cautious start, a shower of black horrible water blew into the sky and soaked me and everybody else on the bridge.

So at last we came safely into Portsmouth; we had made the round trip to Invararay and back, even though we had orginally set out nine months earlier! This was really the end of *Deepwater*'s sea going proper although we made many more local forays that winter. Defects kept on cropping up and our stocks of German spares were almost exhausted; I was afraid that one day we would be in real trouble and that our luck so far could not last.

I had grown fond of the ship in spite of her perversities; when everything was working she was a joy to handle. In my last three 'alongsides', I achieved the C.'Os ideal of three orders only: 'Stop' - 'Half astern together' - 'Stop'. I felt that we put up a more impressive show coming into harbour than most of the local operating ships. Better, for instance, than the Navigational School frigate who came alongside us in a strong wind and fired so many 'Coston Gun' lines at us that the quarter-deck party had to take shelter behind the Recompression Chamber, from which position Sam Stanley was seen waving a white handkerchief and shouting: 'Don't shoot! Don't shoot: We surrender!'

- 8 --

THE OUTSTANDING CIGARETTE OF THE DAY



So it was with feelings of genuine regret at losing my unorthodox Command, mingled with some relief that this very unorthodoxy had not landed us in any major disaster that I watched the tugs nosing her into

EDITOR'S NOTE—It is not often that the steady painstaking work of the Dockyard Divers comes to the notice of the public, thus it is with her berth alongside Vernon in March 1948, almost exactly two years after she had been surrendered by the German Navy and honoured with the title — 'His Majesty's Ship'.

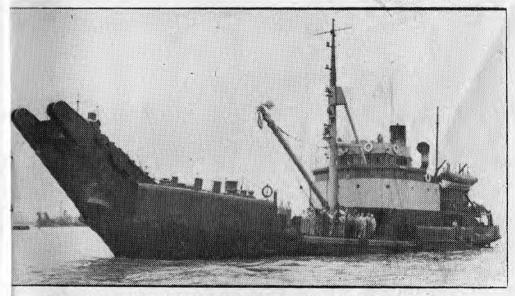
pleasure and fellow feeling for a job well done that we publish this reprint of an article appearing in the 'Portsmouth Evening News'.

Yard Men's 'Superb Job' on 'Queen Mary'

THE mighty Cunard Company is deeply in debt today — to three Portsmouth Dockyard divers, writes our Naval Correspondent.

In last night's stormy Solent they freed the 81,000-ton liner *Queen Mary*, paralysed for 12 hours by a steel hawser with a stranglehold round one of her four propellers. Many of the 800 passengers braved a howling gale and blinding rain to watch operations on board the tiny mooring vessel *Moorhen* (500 tons), sent to the *Queen Mary*'s aid by the Captain of the Dockyard.

They cheered as diver Bill Semmens, of 18 Wootton Road, Leeon-Solent, surfaced at 11.10 p.m.



The mooring vessel 'Moorhen', from which diving operations were carried out to free wire from the liner 'Queen Mary's' propellor rope guard, E.N. 0420

- 11 -

holding the last piece of 31in. wire which he spent almost three hours cutting from the propeller's rope guard.

Today, Mr. Semmens and his supporting divers, Mr. C. J. Dunning, of 42 Neville Avenue, Portchester, and Mr. George Parr, of 5 Britannia Road, Southsea, are the toast of their workmates in the Captain of the Dockyard's Department.

I went out to *Moorhen* at No. 3 buoy in Portsmouth Harbour with Captain B. Pengelly, R.N., who personally congratulated the divers, 'Yard riggers and ship's crew for 'a really superb job.'

It took ten hours from the time *Moorhen* bobbed alongside the liner hove to off Ryde.

'I went down for a preliminary examination at 2.30', said Mr. Semmens, 'the weather was terrible rain, squalls, heavy seas, and force eight gale . . .'

Put in skipper Mr. Robert Reeve: 'There was a 75 m.p.h. gust as we left harbour'.

With only a small battery torch to probe the dark, muddy sea, Mr. Semmens groped his way round the massive 35-ton propeller and its shaft.

25 feet above, *Moorhen*'s crew struggled to keep their ship fast alongside the giant hull, and four riggers braced on the heaving deck, pumping air to their pal below.

'It was just like walking on a deck being on one of those propeller



They freed the 'Queen Mary' last night — but today was still 'back to duty' for Lieut.-Comdr. J. H. Coryn, R.N. (Mooring Officer), Mr. R. Todd (Chargeman of Riggers), Mr. L. J. Dunning and Mr. W. Semmens (Divers), and Mr. R. Reeve (Master of 'Moorhen'). E.N. 0419

blades,' said Mr. Semmens, who was hauled up after 11 hours to report 12 turns wrapped taut round the shaft.

The gale roared on as divers and crew waited for slack water. At 8.30 p.m, with a $1\frac{1}{2}$ -knot tide still running, Mr. Semmens disappeared under the turbulent waves, lit now with a blaze of lights from *Queen Mary*.

Oxy-acetylene gear was passed down on a line he had secured earlier, and the big wait began. Extra wires held *Moorhen* to the liner, but she pitched, and her welldeck was continually awash.

'I just went on cutting across the strands,' said Mr. Semmens modestly.

His face was dangerously close to the wires. He had to judge when they were about to snap, and draw back out of the way before the sharp strands slashed into his suit as they parted.

Three tugs on the line at 11.10 p.m. and his marathon was over. 'I had a

pain on my chest where I had been lying so long,' said the hero who comes from a family of divers.

It did not stop his climbing Queen Mary's ladder — and we normally have to carry divers on board after a job like that,' said Mr. Reeve.

Engineering Department diver Mr. George Parr then went down to inspect the shaft and propeller. He gave the all clear, and *Queen Mary's* anchor was rattling in the hawse pipe as *Moorhen*'s men and the divers were returning on board after receiving the personal thanks of the liner's captain.

Captain Pengelly and the Admiral Superintendent (Rear- Admiral J. H. Unwin) praised the work of 14 riggers under Mr. Ron Todd (chargeman) and Mr. J. Gould (Inspector) and the skill of *Moorhen*'s crew.

'We were pleased Portsmouth Dockyard took on this job,' they said.

Port Diving Unit, Londonderry

- 13 -

T is now nine months since our last contribution to the Magazine so, yet again, this is in the form on an annual report.

The team now consists of:— Sub.-Lt. (S.D.) (T.A.S.) D. J. Hillman, S.D.O., S.W.D.; C.P.O. Edwards, D1; L/S. Mellars, D.3., on draft to *Blake*; A.B. Hayward, D.2., on draft to *Reclaim*; A.B. Wilson, D.2.; A.B. Barkley, S.W.D

Drafted:

L./S. Williams, D.3., to *Protector*; A.B. Culpin, D.3. to *Vernon*; A.B. Roche, S.W.D. to *Vernon*; A.B. Richardson, D.3 to *Barnstone*.

A change in complement of D.3's has increased our numbers by two,

but great difficulty has been experienced maintaining any one of them for a period of more than four months, this has been less than two months with some. This has meant drastic measures on paper to C.N.D. recommending a minimum drafted time of at least six months. Although this has not been approved, at least an assurance that more consideration will be forthcoming in the future.

With the introduction of the new S.S. Pay (Diving) which caused some comment among team members, we have been more than busy with the exercising of S.W.D's from *Sea Eagle*, S.D.B. Squadron and visiting ships which included *Torquay*, *Battle*-

axe, Delight, Saintes and Camberdown. The APTITUDE TEST which was quoted in the September issue of the Circular Letter is a natural feature of diving here at all times as the nil visibility, foul bottom and current of the Foyle has the distinct advantage of quickly sorting out the competent from the non-competent among S.W.D's, especially those whose confidence has been acquired in the ideal Hans Hass conditions !

Apart from numerous Submarine Inspections, Foul Screws, Pile Inspections, Clearing Slipway, Recovering Lost Domes of the local S.D.B. Squadron and odds and ends lost overboard from ships, we have had two diving operations out of the ordinary from which valuable experience has been gained.

The first was a very sad occasion which occurred on the 1st July. The team was sent to join H.M.S. Barbican at Belfast with full diving equipment to recover a Sea Venom which crashed into the Belfast Lough with the loss of both pilot and observer. Two days diving saw the success of the operation by the recovery of 90% of the aircraft and the two bodies. The briefing given to the divers before diving commenced by the Technical Officers of the R.N. Aircraft Yard at Belfast, on the main points of lift and the operation and safety arrangements of the ejector seats was of immence value. Although the operation was not difficult it was an extremely unpleasant task. The result - C.-inC's commendation to Hayward.

Our second operation was of a more pleasant nature, for whilst carrying out a swimming exercise at the entrance to the Foyle, Chief's eves focused on two masts protruding from the water some 40 yards off the pier at Greencastle, Eire. The divers natural instinct of inquistiveness ventured to find what this was. It was in fact the 14-ton fishing trawler Sheila which had sunk there the day previous after being towed from seven miles out at sea, where she had been holed by an underwater obstruction, and unfortunately had not just made the harbour.

Diving in Eiren waters required approval, and the go-ahead was given to do what we could to help.

By burrowing holes under the keel we managed to pass two wires one for'wd and the other aft, these were then attached to two other fishing trawlers lying either side at dead low water acting as lifting craft. Just as the weight was being taken by the rise of tide some ships exercising, passed close at speeds above 10 knots and their wash somewhat wrecked the operation, but never say die!

The following day we reeved an extra two wires, removed the seven ton of ballast from inside, plus all loose equipment, and at dead low water that evening commenced the lift again. This proved successful and at high water the trawler was beached inside the harbour.

Although the trawler only lay in 12 feet at low water, it was treated as an exercise which afforded valuable practical experience as well as being thoroughly enjoyed by all members.

Our assistance and the success of the operation was very much appreciated by the people of Greencastle which resulted in a bit of a 'Hooley' being laid on for our benefit some days later and from which we have not yet quite recovered.

At very long last our ancient burning equipment has been replaced by 'Seafire', and training with this is going great guns in our tank in the odd spare moments.

At the moment our 45 foot Diving Launch is under new construction, which includes a new all-metal watertight canopy, etc., this plus many new changes in the units accommodation in the past months is due to the cooperation and tolerance of the Base Engineer Officer and his Staff.

Underwater at Corfu

by DEREK HAWKINS

and no extra charge for Scorpions.

Having suffered during the last hot war in tents in Tripoli and Bashas in Burma, the prospects of camping out in any form was singularly unattractive, but it was cheap, so cheap that the straw huts seemed almost tolerable, though there must be some other major snag.

Good food, French food well cooked by French chefs, and served by Greek waitresses, not as attractive as the cooking, but nevertheless adequate, and anyway you could always look at the olive trees and coloured umbrellas underneath which the tables were set, or alternatively if ones eves wandered past a fair bunch of assorted French, Danish, German and English girls, they were caught by bright points of sunlight reflected from the sea below through the prickly pears, olives and bouganvillea, and one could just see two diving boats lying by the wooden jetty, the third was away on a diving bivouac at Navarin.

This was the bay at Paleokastritznia - call it Paleo its easier on the west coast of Corfu lying off the Greek mainland, and this also was the Club Mediterranee diving camp.

The wine, red or white, in earthenware pitchers or in tin jugs - who's fussy anyway - was ad lib during meals and free, as was the food.

The diving boats were adequate, the equipment; Mistral Demand

Straw hut, Polynesian style valves, bottles, harness, flippers, masks, tubes and air was free and readily available. The total inclusive price was £8 10s. 0d. per week.

> Viewing this prospect through a rain streaked window in England, it seemed much too good to be true. That price for those amenities in that place - not possible?

> Only one snag, a desperate 36 hours in a train from Paris to Brindisi, heat, flies and boredom.

A night crossing from Brindisi to Corfu, sleeping on a hard deck, but well recompensed by a wonderful dawn coming up over the black and sinister mountains of Albania and then the colour and translucent light of the port of Corfu.

Nearly two hours in a rickety bus across the island from the town of Corfu. Screaming hairpin bends, donkeys, cactus and blaring horn made it easy to get a hangover on Ouzo, strong but very easily drunk at threepence a glass.

Being a complete newcomer to diving with an aqua-lung, there was first a flipper and tube diving test, not too difficult.

Then an explanation of the principle and working of an aqua-lung and demand valve in rapid French, very little understood, and a short while later and with mounting apprehension, over the side and slowly down the ladder, water and panic rising at about the same rate. The sun blazing hot, the water flaming cold, unexpected in the Med., but an

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PICCADILLY CIRCUS, S.W.I. and EDINBURGH

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unpleasant fact on the west coast of Corfu.

Underwater for the first time ever, visibility 100 feet fantanstic colours, corals, and fish. This is definitely worth £8 10s. 0d. a week and the train and bus ride.

Next day, sitting on the bottom, only 15 feet down but deep enough for a beginner, lead weights across the legs; mask off, on and clear it. Embout — mouthpiece to you out and replace it. First time relatively easy and a slight feeling of contempt for those who don't dive.

Medical: pulse, heart, ears, blowing up chunks of mercury, holding breath. Apparently fit for deeper diving, amazing!

Another day: the diesel engine, coughing slightly, takes us out of Paleo bay with the water blue and clear as glass. The other boat with the spear-fishing enthusiasts, after following us, turns off and leaves us alone.

Anchoring in 60 feet, the bluegreen rocks showing darkly on the bottom. Equipment on, waiting with the sun beating down, the rugged and majestic coastline, a small monastery on the top of a mountain, barren hills and a white villa on the waters edge.

One by one, five divers jump over the side and disappear, marked only by streams of silver bubbles in the blue. Next to go, can't back out now with all those girls watching. Must be stark raving mad to pay £8 10s. 0d. a week to suffer like this.

Descend reluctantly to 60 feet, very slow progress due partly to ears and mainly to fear. Relax on the rocks having eventually got down. Not too bad. A dirty great Grouper peers out of its hole and gets itself shot by the monitor, rather unsporting but its edible—just.

Beginning to enjoy the scenery, when the monitor swims across the field of vision and with unfortunately unmistakable signs, no excuse with language difficulty down here, orders the removal of bottle and harness.

Struggling with a large bottle floating overhead and straps everywhere, the monitor then sneaks up and pulls one's mask off. Why can't he go and shoot himself another Grouper and leave us struggling. Re-adjust mask eventually and with bottle under-arm, flipper nonchalantly around and return to the surface. Numerous moments of blind panic now conveniently forgotten and superseded by a feeling of achievement and well-being.

Back to the camp, drinking, feeding and then more drinking at the king-sized straw hut which is the bar. An evening under the olive trees and stars, dancing in the dust with the cicadas outdoing the record player in sound volume. One cannot think of better surroundings in which to learn to dive.

Fire Down Below

A monthly dipper came to me One fine day with a flat calm sea To earn some cash so that he could thrive

and keep his hand in with a dive.

The coxswain and the C.D.2. Dressed him up and briefed him too, To cut through links till his arms did ache

So he could prove to us, he was no fake.

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- The coxswain said 'Toil till your face With a groan and a grunt the attenis blue
- you can't get annoxia cos' you're on The diver surfaced and we all felt O21.
- Then with a great big grin and a gentle shove
- He was in the water whilst we laughed from above.
- The gallant lad went sedately down, Stopped at 5 feet to have a look round
- Tried to descend but came up again. 'Its my ears', he said, 'oh what terrible pain'.
- Once on deck he could clear his ears, So we calmed his trembles, removed his fears.
- But as there was no time to suminate We rigged him up so he could Suitinflate.
- Breifed in its use and how to stay alive He entered the water for his second dive.
- Down he went with a pause here and there
- To relieve the pressure and fill his suit with air.
- The bottom was reached at 25 feet, And there he staved without murmer or bleat
- Stirring up mud and frightening fishes away
- And dreaming naughty things to do with diving pay.
- 'Haul him up', said the coxswain, 'his time is past.
- Grog is up and I must not be the last'.

- dant heaved.
- relieved.
- He took off the set and rolled back his hood
- Then we said that his diving had done him no good.
- The side of his neck was raw and flaming red.
- 'Those are second degree burns' the coxswain said.
- His hair was singed and clothes burnt through
- Due to suit in-flation and excess O². As we stripped him down he said he
- felt hot All through sponteneous combustion.

Boyles law and what not.

- Whilst the diver was being treated by the Doc in base
- His clothes were dispatched to a different place
- Where chemists and doctors, N.O's and the lot
- Found the reasons for his singed top-knot.
- Now the moral of this unusual tale Is to check your garments without fail,
- To see they're clear of paraffin
- Before you put them on and jump in.
- And when you use your suit inflation Do it slowly with deliberation
- So that you don't have to make fantastic claims
- Of how you blew to the surface and burst into flames. D.L.

Salvage in Canada

by ALGY WARE, Ex-C.P.O. DIVER 1

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T am at present employed in the M/V. Foundation Vigilant, as 2nd Mate and diver. She is an oceangoing tug of 800 tons, powered by diesel engines developing 3,000 h.p. and having 30 days steaming range.

She is owned by Foundation Maritime Ltd. of Halifax, Nova Scotia, which is a subsidiary of one of the largest construction companies in the North American continent. She, is stationed at Quebec City throughout the shipping season, which in the St. Lawrence, is from early March to mid-December.

In the early hours of the morning on 10th May we received a message that the British tug Melanie Fair was aground at Portnuef, approximately 30 miles above Quebec City en route to Montreal. We arrived at the casualty at 0500 and anchored half a mile above her. She was an ex-Admiralty Rescue Tug, built in 1943, and recently bought and sailed from Pompey. The crew had been taken off by the buoy vessel Safeguardian with the exception of the Captain and 1st and 2nd Mates. We contacted the Captain by radio telephone, and he said 'he did not require our assistance'. In view of the fact that the boat-deck was awash, this struck us as a little strange. At about 0800 the Captain of Melanie Fair was taken off by our motor launch, and in company with Captain Finch, our Salvage Officer, proceeded ashore to negotiate with the Salvage Association representative and the ship's agents in Montreal. Just after midnight on Wednesday 11th May, Captain Finch returned, and informed us that Lloyd's, Open Form had been signed and that we could start salvage operations.

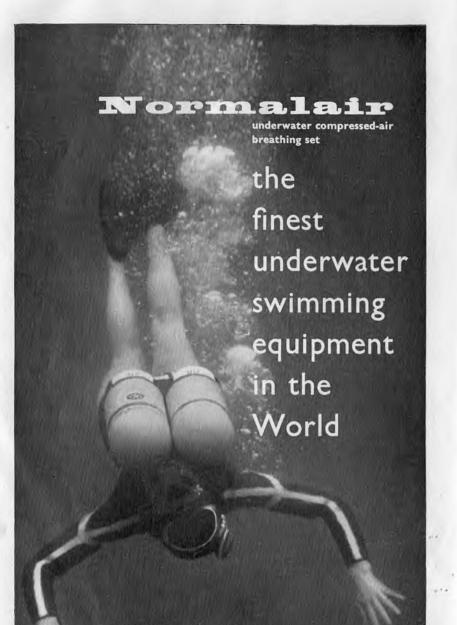
Our 8in, 4in., 3in. pumps, compressor and diving gear, etc. were hoisted out on to the after end of two small harbour tugs, and we arrived alongside the casualty at 0530. We had taken soundings round her on the Tuesday, and there was not enough water for Foundation Vigilant to get alongside. The Chief Engineer of Melanie Fair appeared on the target, and told us she was holed in the Boiler Room, and that W/T. door to the bridge room was only partially closed. He had had time to blow down the boilers, which indicated that the damage was not

great. The pumps were rigged and all compartments except the Boiler Room and Engine Room were sound, the two exceptions being tidal. Lady luck was on our side at this time, as the casualty had a 10-15 degree Port list, and the all important door was hinged on the Starboard edge so that the door tended to close all through the operation. The tide was rising by now, so we disconnected the pumps and returned to Foundation Vigilant.

It was decided that we would attempt a lift on the afternoon tide on Thursday 12th, as we had an increase of one foot on that tide. It was higher still on Friday 13th, but we would not push our luck on a day like that. We returned to the casualty at 1200 on the Thursday and pumped all the sound compartments on the falling tide. Two 8in. pumps were rigged in the bridge room, and when the level was low enough we closed the W/T. door enough to allow one 4in, pump to keep the Engine Room flooding to 4in. above the plates. The 8in. pumps were then transferred to the Boiler Room. They overcame the leak and we were able to clear the obstructions round the door and it was closed and dogged. She refloated at 1930 and was towed to a safe anchorage for the night, as it was blowing hard from the North and a heavy sea was running.

We sailed in tow at 0730 on Friday 13th, arriving at Quebec at 1155, but as there was no dock available we had another night holding her on the pumps. She was docked down on the chocks at 1700 on Saturday 14th in Champlain Dock at Hauzon opposite Quebec City, and we returned to Foundation Viliglant. We were glad to see the back of her. as she was covered with quarter inch Bunker 'C' oil fuel everywhere -and so were we. All ended well, and what

1.184



For details write to: NORMALAIR LIMITED YEOVIL ENGLAND INDUSTRIAL DIVISION 27-31 MINSHULL STREET, MANCHESTER, I. is most important, we received a fortnights pay as a bonus, plus fat heads the next morning.

No doubt quite a number who read this will remember Captain Finch, He was for some years an Admiralty Salvage Officer prior to coming to Canada about three years ago. He is the Senior Salvage Master in this company, and sends his best wishes to all who knew him, particularly in Safeguard at Rosyth.

I would like to take this opportunity of thanking very much, all of you who were so generous when I lost my wife last year. My best wishes to you all.

Yours till Hell freezes, ALGY.

A Short History of Naval Bomb and Mine Disposal

by LIEUTENANT COMMANDER W. Y. MCLANACHAN, R.N.

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TINES of various types have been used in war at sea since 1585 when the Dutch killed several hundred Spaniards at Antwerp by means of boats filled with gunpowder and detonated by clock operated flintlocks. The first instance of actual mine disposal occurred in the Crimean War (1854-56) when large numbers of Russian mines were rendered safe by the British at Sevastopol, Sveaborg and Kronstadt. The mines were filled with gunpowder and were fired by means of a lead horn containing a glass phial of sulphuric acid, which when broken ignited a mixture of potassium chloride and sugar. Their disposal was probably a combined operation carried out by the R.N. and the R.E's

The American Civil War of 1861 saw a booby trapped mine used for the first time. This was known as Brook's mine and consisted of a moored mine with a ground mine connected to it by a wire. Any attempt to R.M.S. or sweep the moored mine caused the Ground Mine to detonate.

In 1875 H.M.S. Vernon the torpedo establishment, became responsible for the development of mines and their disposal. Naval bomb and mine disposal has remained a responsibility of the Torpedo Branch ever since. The Torpedo Branch amalgamated with the Anti-Sumbarine branch in 1946 to form the T.A.S. branch, and in 1952 when the Clearance Diving Branch was formed and took over responsibility for Naval Bomb and Mine Disposal, it became part of the T.A.S. structure. Although Vernon became responsible for the development of the mine in 1876, controlled mining (i.e. mines used in the defence of harbours and fired from shore) was done by the Royal Engineer Corps of Submarine Miners, this corps being eventually disbanded in 1903.

In World War I, Great Britain laid 128,000 mines, 40% of these being in enemy waters, and the Germans laid 43,000, the majority of these being laid around our coasts. Included among the mines laid by Great Britain were 400 ground mines, operated by a magnetic dip needle which were laid off the coast of Zeebrugge and Ostend in August 1918. Some of these mines were later recovered by the Germans who used the magnetic dip needle principle in all their magnetic mines in World War II. Immediately after the 1914-1918 war an intensive minesweeping campaign was carried out and the majority of the mines which had been laid were swept.

Between the wars any mines washed ashore were disposed of by Commander (M) (Mining) who was Head of A.M.E. (Admiralty Mining Establishment) in Vernon. A.M.E. consisted of a number of civilian scientists and torpedo officers, and on this small band of men fell the vital responsibility of defeating the enemy's prodigious mine effort when World War II started in September 1939. On 22nd November 1939 the first German Magnetic mine was rendered safe at Shoeburyness by lieutenant Commander Ouvry, D.S.O., R.N. On the 14th June 1940, a diver, A.B. Tawn, rendered safe the first German Ground Mine underwater in Poole Harbour.

In August 1940, one officer and five ratings were killed in the mining shed in Vernon by a booby trap fitted behind the door of a German mine type 'C'. The primary object of this booby trap was to prevent us finding the Ship Count device or Clicker Mechanism. The Germans were so determined to prevent the Vernon disposal team from stripping any future mines that in August 1940 two special mines were dropped, each 10 miles inland from a major naval port. One was at North Boarhunt, near Portsmouth, and the other at Piddlehinton, near Weymouth. Both these mines were similar to the German mine type 'D' but had no influence unit, bomb fuse, or clock. They were fitted with special triple booby trap charges, which were operated by two electrical switches and a mechanical switch, if any attempt was made to remove the rear door. Fortunately in both cases the booby traps were detected and the charges detonated without loss

or injury.

With the commencement of the blitz on London in the autumn of 1940, followed later by blitzes on other major cities such as Coventry. Birmingham, Liverpool and Glasgow, naval mine disposal officers were required to dispose of land mines. These land mines were in fact mainly German mines type 'C' and 'D' being used as blast bombs. Most of the officers employed on this work were young R.N.V.R. officers. who were given a short course in Vernon and then often found themselves disposing of mines many miles from the sea. H.M.S. Vernon was badly blitzed on January 10th and March 10th 1941 and the instructional staff moved to Roedean near Brighton, while the A.M.E. moved out to Leigh Park, near Havant. In the March 10th 1941 raid two 50 K.G. unexploded bombs were found in Vernon, one outside the clothing store and the other at the S.W. corner of the football ground, near the Captain's house. One of the members of the present C.D. branch had the pleasure of assisting in the location and removal of these bombs. In April 1941 an officer and five ratings were killed while working on an acoustic mine underwater at Falmouth. One of the ratings killed was A.B. Tawn who nearly a year previously had rendered safe the first magnetic mine underwater. The cause of this tragedy was the acoustic unit being operated by the noise made as the diver gagged the bomb fuse. During the blitz, as well as dealing with land mines, naval mine disposal officers were often called to deal with bombs. So from 1942 to 1945 a naval bomb disposal school was opened at H.M.S. Volcano, near Ravenglass in Cumberland. There, bomb disposal and demolition was taught but officers still went to Vernon for mine disposal courses.

When H.M.S. Volcano opened, one of the officers in the first course was Lieutenant Crabb. On completion of his course he was appointed Bomb and Mine Disposal Officer at Gibraltar, which at the time appeared to be a 'dead-beat' job. However, when the Italian underwater saboteurs, operating from one of their ships interned in Spain, started placing charges on the bottoms of our ships in Gibraltar, Crabb quickly donned a Davis Submarine Escape set and became a clearance diver. He was kept busy at this until the fall of Italy, when he gained contact with the Italians, got much valuable information from them, and also did a lot of mine clearance in Italy. At the beginning of 1944 it became apparent that large numbers of divers would be required for mine clearance when the assault on Europe was carried out. These parties were known as Port parties ('P' parties) and were trained at H.M.S. Vernon II at Brixham. The equipment they used was the one bottle 'P' party set with 75/25 mixture and a 3 litre flow, followed later by a two bottle set using a 45/55 mixture and a 4 litre flow. The suits used were the Sladen, the Shallow Water Diving Dress, the 'P' suit, and towards the end of the war the Vernon Mine Recovery Suit, the latter having the advantage of having a phone. The following is a brief summary of their operations: 'P' Party Operations from Cherbourg to Bremen, June 1944 - December

1945

No. of Diving Days:—598. Area Covered:—19,845,310 sq. ft. Distance Covered:—1,257 miles. Mines Dealt with:—

210 mines; 106 charges; 1 VI bomb.

No fatal diving accidents occured during these very hazardous operations.

Also in 1944 a large number of L.C.O.C.U. (Landing craft obstacle clearance unit) teams were trained at Horsea and Brixham, in preparation for the assault on Europe. These L.C.O.C.U. teams were used in the Normandy and other landings and one of the more senior members of the present C.D. branch was awarded the Conspicuous Gallantry Medal during these operations. When the war ended most of these special teams and parties were disbanded and the ratings and officers de-mobbed. The residue of the 'P' parties moved to Port Edgar in Scotland, and the L.C.O.C.U. teams to Fort Cumberland at Eastney. In 1948 the 'P' party and L.C.O.C.U. divers became known as diver (C), and H.M.S. Lochinvar at Port Edgar was their base.

Then in April 1952 the Clearance Diving branch was formed, and in October of the same year it moved to its present base at H.M.S. Vernon, Portsmouth. Since the end of the war all Torpedo Officers appointed to Bomb and Mine Disposal jobs have undergone a course in bomb disposal with the R.E's. These courses were first at Ripon, then at the School of Military Engineering at Gillingham, and now at Broadbridge Heath. Since taking over responsibility for all naval bomb and mine disposal in April 1952, all Clearance Diving Officers and 1atings undergo a course of bomb disposal with the R.E's. Naval bomb and mine disposal units are stationed as follows:-

- Portsmouth (has just taken over responsibility for Nore command.)
- (2) Devonport.
- (3) Port Edgar (Scotland).
- (4) Malta

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(5) Singapore.

When not engaged in mine disposal, these units are employed in

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clearance diving duties. With the passing of the years, the number of mines dealt with becomes less, but some are still being found which were laid in the 1914-1918 war. (e.g. in February 1960 an anti-submarine net mine laid in April 1918 was washed ashore near Aberdeen. The 65 lb. T.N.T. charge was still in excellent condition). In view of this, and in conclusion, it would seem that it will be many years before naval mine disposal becomes a completely redundant occupation.

Summary of Mines Laid in World War II

In all theatres of war a total of 209,170 British mines were laid by ships and submarines and a further 54,194 by aircraft. The losses incurred during these mine-laving operations were seven ships, five sub-

marines, four coastal forces craft and 500 aircraft.

The total losses by the enemy due to British mines were as follows:-

1,050 Axis Ships Sunk.

540 Axis Ships Damaged. 21 Japanese Ships Sunk.

The Germans laid in northern waters a total of about 120,000 mines and 30,000 sweep obstructors. Assisted by the Italians they also laid a large number in the Mediterranean.

British losses due to enemy mines were as follows:----

British Warships Sunk:-281 (includes all types).

British Merchant Ships Sunk:-296.

Allied Merchant Ships Sunk:-521.



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Greetings from your Kiwi Cousins

COMEBODY with little sense of Auckland. The building is 150 feet by Thumour has just passed on the information that Christmas is just around the corner, so perhaps it is fitting to send along this article for the benefit of the DIVING MAGAZINE.

The number of divers in the R.N.Z.N. is still small because it is not always possible to lay hands on the many volunteers at the time courses start. This results in some classes starting with only four or six candidates and should any of these · drop out the picture is not at all comforting.

On top of this hazard, it has been known for an important job to be given priority and all training has come to a halt.

At present we run courses as follows:-

(a) Shallow Water Diver (C.A.B.A.) This course has been under way since 1958 when we introduced the Heinke Compressed Air Breathing Apparatus into our Navy in lieu of Patt. 5562A.

(b) Diver 3rd Class.

The same course as the R.N., Standard, including S.W.B.A. C.D.B.A., M.R.S., Cox Gun, and Sea Fire U/W. Cutting torch which we have been using for seven years now.

(c) Diver 2nd Class.

This course which normally consists of one candidate, joins up with the Divers 3rd class but at the end of the course candidates have to be very good in both practical and theory.

Next year we hope to introduce a new diving policy, but it has not been confirmed as yet.

Our school is situated in the Dockvard of the Naval Base at Devonport,

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20 feet divided into a changing room including toilets and showers, a main office, two classrooms, instructors office, pantry, workroom, store, suit room, and lay apart store. Although the end of the building is alongside the water, at high tide, we still have to walk 200 yards to the pontoon from which we dive in 28 feet of water.

The diving tender Manawanui is a 75 foot steel tug which is now fitted with a H.P. compressor, standard and Deep control panels. It is fitted with ten bunks, two hammock slings and camp stretchers space for three. (With a class of eight on board we just manage to squeeze in for ten days!) There are two Recompression Chambers, one 300 feet with one air lock, and a portable one which is only capable of 90 feet although in all other respects is similar to the R.N. 240 feet ones. We also have a very small diving tank, a six inch air lift and a portable generator for oxy-arc cutting and underwater welding.

The majority of practical instructions take place from the pontoon, ships bottoms in the dockyard basin or in the harbour but during Standard courses or the continuation of training of port divers, the class embarks in Manawanui for ten days diving in the Hauraki Gulf which is situated just outside the Auckland harbour. On these trips we generally operate from Great Barrier Island which is 50 miles out but which is adjacent to deep water. While out, we work up to 180 to 200 feet, carry out a night exercise using Sea Fire and also carry out above and below water demolitions.

During the summer it is usual for us to start diving just after 7.30. work right through until the diving is finished, have a late lunch and then go fishing or rabbit shooting.

The Port work is a slightly different kettle of fish. In the harbour we have our usual run of clearing screws, recovering lost articles which range from watches to cars and working for the police when they are unable to obtain the service of a civilian diver.

Outside the harbour we have numerous interesting jobs as well as mundane ones some of which I will tabulate:—

(a) Demolishing the remains of a wreck which was fouling a small boat passage about 60 miles South of Great Barrier Island. This was done with the use of line charges with 25lb. and 10lb. demolition charges.

The water was beautifully clear and the numerous varieties of fish were something to see. The shame was that the jelly fish would not go away. After every bang at least ten fish went to the bottom for every dozen which came to the surface. On the last day we had a couple of sharks come around after each bang but, they did not bother us at all.

(b) Recovering a 'Havard' aircraft which sank in 152 feet of water in the middle of the Haurakir Gulf. We found the aircraft by using a fisherman's trawl fitted with wire between the trawl boards instead of the net. After it was raised we towed it back into harbour slung under two large buoys only to have the main body of the plane tear away from the slings just off the main wharfs in Auckland at four in the morning! However, the plane was recovered later that day.

(c) Recovering and laying D.G. Ranges.

(d) Working with the State Hydro Electric Department clearing the upper side of one of their dams in the South Islands - Depth 170 feet.

(e) Recovering frigates' anchors. One near the top of North Island and one about half way between here and the top.

(f) Demolishing a rock outcrop just outside the harbour entrance. This proved too tough because we were only allowed to use one M.K. 12 D.C. because people up to five miles away were complaining about the foundations of their houses being shaken up!

(g) Carrying out an initial survey of a sunken dredge which foundered very close to the Harbour entrance.

(h) Salvage one S.D.M.L. which was astride a reef in the Gulf with a heavy surge breaking over it plus the salvage of three small fishing boats which had been holed either just inside or just outside the gulf.

(i) Just recently S./M. Anchorite hit a rock in the Gulf while submerged so besides surveying her damage before she was docked, we had a look at one of the numerous outcrops they have since discovered in this area.

(j) On the Deep side, we have had a practical job in 250 feet. For this job we borrowed Jock Kerr from the R.N. to help our own Bill Short. You probably read all about it in this magazine after Jock forwarded an account of his experiences.

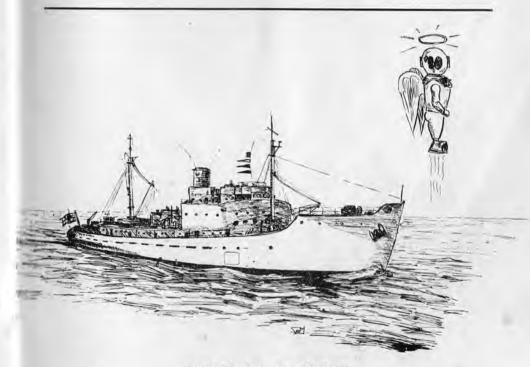
Last November we had to muster our swim resources in a hurry to carry out an investigation into the foundering of one of the coasters which went down with all hands in 230 feet, 20 miles off the South Island. Frank Brady was the only Diver 1 available, so a team of four others were worked up to 220 feet in Deep gear before the weather broke and we sailed south. Because of the heavy swell we were only able to carry out one dive and the remainder of the survey was concluded with the underwater T.V. operated by our Fleet Auxillary T.U.I. We had Frank dressed up on Christmas Day but the weather came up and we finished running for harbour with our chicken in our dirty little hands!

As perhaps most of you know, Len Spicer is the other Instructor on loan and I hear that the Spicers and Bradys are going on a motoring tour of the North Island over the Christmas leave period so by the time they get back they should have loads to talk about despite the fact that it may not be so flattering for us natives I will not go any further because I am sure you will prefer to have what space is left filled up with items of local interest, but I trust you may be able to appreciate, in future, that although the Kiwwies are under way while you people are sleeping, we do try to keep up with the good name revered by our contemporaries in the R.N.

No doubt you will read this in the New Year, so please accept all best Wishes for you and yours from the Diving School, Philomel.

KIA ORA.

Kiwi.

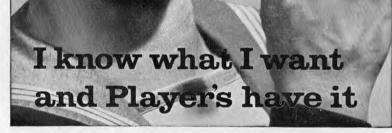


'Anybody here seen Keller?'

EDITOR'S NOTE—Lt. G. A. M. Wookey, M.B.E., R.N. set up a world record by diving to 600 ft, in 1956. The Admiralty stopped deep diving in the R.N. in 1959. On 3rd November 1960 Hans Keller, a Swiss diver, made a simulated dive in a wet compression chamber to 820 feet.

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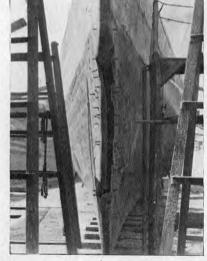
Repairs to the Stem of H.M.S. 'Apollo' by Shallow Water Divers

T the end of June 1959, H.M.S. A *Apollo* visited Stavanger for five days prior to taking the C.-in-C. Home Fleet on a short cruise of Northern Norway where he had arranged to meet several of his Subordinate N.A.T.O. Commanders. Immediately before her visit to Norway, H.M.S. Apollo had come South from Iceland patrol at 27 knots in order to keep pace with the programme, but whilst at Stavanger a split in the stem was discovered which it was vital to repair if the C.-in-C's programme was not to be seriously disrupted.

A careful examination by the ship's shallow water divers revealed that the stem plate had split vertically down the centre from about two or three feet below the waterline almost down to the forefoot. The split, caused by corrosion, was therefore about 9 feet long and the pressure of the water at high speed had opened out the jagged edges to a width of about 10 inches. Subsidiary damage had been caused in the forepeak and some of the rivets of the foremost frame were loose or missing. In addition there was a separate split in the starboard side about two feet aft of the stem half way down.

The repair of such extensive damage was a formidable problem, complicated by the necessity to sail on the first stage of the voyage to North Norway within 36 hours of first discovering the trouble. The programme at the end of the Norway trip required a passage speed of 22 knots for over a thousand miles from Tromso south to Whitby, so the initial work carried out was designed to strengthen the stem to prevent the edges of the split peeling back like a sardine tin, which the Constructor from Rosyth subsequently confirmed would almost certainly have happened. Using Cox's gun on which





the divers had had no previous training, holes were punched on either side of the split and four specially made tie rods were passed through and bolted up tight. The small split was patched with a plate held by four bolts but because at this stage it was not expected that it would be possible to make the forepeak compartment watertight, no rubber jointing was inserted under the plate. Bolts were also fired into the loose rivets. This work was completed before the ship sailed from Stavanger.

As the Ship steamed north into the Arctic Circle work on the bow was progressed at each port of call, at some of which the ship spent only a few hours. The water conditions for diving were good though cold and the midnight sun enabled work to continue throughout the night when necessary.

The second stage of repairs was the fitting of a fairing plate around the stem to shield the forepeak from the great water pressure which would be caused by steaming at speed. By bending thin brazing rods around the split as templates at various positions a patch of the correct shape could be ordered from ashore. The first plate obtained was unfortunately made of too thick metal and was therefore too rigid to be adjusted in shape for further distortion of the edges of the split which had occurred on passage north. The second plate was made of lighter material (approximately 3/32" mild steel) and could be bent to fit. It was appreciated that this thinner plate would become distorted by water pressure but it was the best patch that could be fitted.

The plate was hung in position and then secured in place by Cox's gun bolts. These were fired successfully through the patch into the hull even though a gap in between was sometimes unavoidable. The top and

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bottom sections of the patch were fitted with a wooden former to fill the gap. Three strengthening bands were also wrapped around the stem to make sure the patch was held in position and these and the sides of the patch were welded by a civilian diver. This Norwegian diver using standard divers equipment provided the only 'outside' underwater assistance required.

At Tromso a concerted effort was made to pump out the forepeak so that the back of the split could be filled with cement. Unfortunately there were still too many small leaks which could not be plugged and even a gas turbine pump could not make a significant impression on the water level. The ingenuity of the Engine Room Department, Shipwrights and Divers had been stretched to the limit the supply of oxygen had been exhausted, and the attempt to put the finishing touches to an ambitious job had to be abandoned.

In the course of this operation, many subsidiary problems had to be solved and much support work organised. This included trimming the ship to raise the bow as much as possible, constructing a special underwater platform for the divers to stand on, the maintenance and preparation of Diving Sets, replenishment of oxygen supplies, preparation of Cox's gun ammunition and a host of other smaller tasks. Fortunately 10 Shallow Water Diver's were borne at this time who coped admirably with the wide variety of jobs. In spite of long working hours all showed great enthusiasm and the two who were responsible for the most difficult work (both had only recently qualified as S.W.D's) thoroughly deserved the C.-in-C's commendations that they were given. The fact that Apollo was not delayed at any port and was able to complete the C.-in-C's cruise as planned was a credit to all concerned.

Research and Development-It's Hell!

by R.P.C.

N Englishman, an Irishman and A a Scotsman, were working to-gether in a Naval Research and Development Establishment. The Englishman was a Scientist in the best tradition. He never believed anything at all about anything at all until he had permed a theory about it, worked out its equation, proved it by experiment and drawn his own conclusions. The Irishman was an Engineer and he had been brought up to believe that he could invent anything to do anything with anyting provided he had a specification, and absolute choice of materials and a free hand to design for the most efficient employment of principles. The Scotsman was a Naval Officer and a Clearance Diver to boot, which explains why he and the other two could never see eye to eye about anything at any time. He had been trained to expect results and not excuses, and as far as he was concerned, a reason was only another name for an excuse if the result was not forthcoming at the end of it.

This story really begins at the Stage I Meeting on the development of the 'Camera Recording Experiment Explosives Pulses'. This project had been allocated the code of 'CREEP'. The derivation of which is fairly obvious, but nevertheless it was an unfortunate title for a top priority project required in less time than it takes.

The Chairman of the meeting reviewed the Staff Requirement and the Agreed Characteristics, which among other things called for the camera to be capable of use by Clearance Divers to the bottom of Loch Ness, in the middle of the

night and with snow on their fins. There must be a variable delay setting which could be changed by the diver when wearing his special Admiralty Pattern Underwater Polo Gloves, and the exposure must also be variable in a similar manner but with a clear distinction so that the wrong control would not be altered at the right time. Clamping and sighting adjustments must be provided, with compensation for visibility, and everything must be simple, light and foolproof. All requirements must be met and incorporated in a diver - proof machine within six months, before the new GORDON class submersible completed her conversion refit in Bermuda Yard. The most important requirement was for simple to find control which a diver could set to record the experimental firings under any circumstances.

The meeting having confirmed the facts of life for the project, the coffee cups and biscuits were removed, the brown sugar was brushed off the table, and the First Prototype Model CREEP was produced from beneath the Engineer's chair. Then the Scientist unrolled 17 graphs in eight colours, and explained in words of one syllable how the polarised light from the detonations must be refracted through the split phase gratings, reticulated in the collinating prisms, and rectified into an imaginary image of a bubble dancer - at least that is what it sounded like. Meanwhile the Clearance Diving Officer twisted a dirty pipe cleaner he had just discovered in his ash tray into a tiny sporran for a noseclip. Next, Ireland declaimed the virtures of a deep drawn casting sealed for poros-

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passionate and detailed description of the linkage which ensured that seven and three-quarters of a turn of the recessed grub screw in the base of the container would change the delay setting by 52 seconds, while nine presses on the rubber covered push button would reset the exposure plate to one and a half seconds, from which any additional setting could be obtained in two second increments. A special tool had been developed with a female socket head for the grub screw on one end, and a blunt hole on the other for the push button. It would be obvious to the meeting that even the fifth category of humanity could not confuse these settings. A special left-hand knurl would be applied to this tool so that the diver would be less likely to drop it on his way down.

ity with adhesive tape, and gave a

At this point Scotland saw the light and enquired politely in his raucous Dundee accent how the diver was supposed to know the original settings on the camera? Was an underwater slide rule being included in the kit, and how was the device supposed to be carried? The confident assertion that it could probably be carried underneath the arm, handbag style, was not well received and the meeting adjourned pending modification in consultation with the user's representative.

Here England went upstairs to oil his computer, Ireland retired to the Drawing Office to persuade his draughtsmen that a large knob was more important to a CREEP than a left-hand thread, and Scotland removed himself next door to restore his spirit level.

From these small and inauspicious beginnings developed a beautiful friendship. A partnership between user and designer incredibly tender in its relationship, ideally suited to furthering the interests of the service.

Three designs and six months of intensive effort later, a new CREEP emerged from the workshop, dazzling in its polished freshness, and startling in its simplicity of form. The newest and most nobbly knobs had been geared to a click setting mechanism which could reproduce the rythm of 'Scotland the Brave' on the delay side and the opening bars of 'Derry Vale' on the exposure control. Enormous handles had appeared in several places, and the flanges had been thickened by an inch or so to ensure that the occasional light-hearted tossing into the drink would cause no weeping at the joints. As a concession to functional necessity a window had been retained opposite the lenses of the recording camera, but this was now protected by a double screen of piano wire and perforated zinc.

CREEP was now considered ready for Experimental Trials, and a party including the Engineer, who had learned to swim 'just in case', sailed for an 'Island Paradise' to conduct a proving programme. On passage a conference was convened to draw up the Trial Orders.

'First I want you to lay the sinker' said the Boffin Type 'and then we dive the camera and check the clamping action'.

'Er, this sinker sir' remarked the chief diver thoughtfully, 'would this be the rusty scaffold sort of thing made up from old gash piping which was standing outside the store?'

'That's right, we haven't had time to paint it since our tank trials in the lab.'.

'I see, yes sir' agreed the chief as he quietly went on deck, and the meeting continued the planning. Presently he returned as the noise of an outboard motor came through the open scuttle.

'Just sending a couple of the lads back in the gemini sir, Pincher

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thinks he left the electric kettle on' he explained and transferred his attention again to the discussion.

Arrived on site, the gear was brought on deck and prepared for action, while the functions of the parts were explained to the team by the designer.

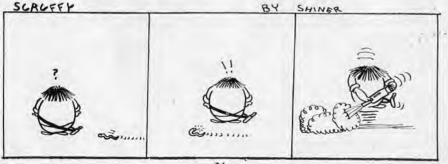
'First of all the handwheel must be screwed right back, and then the hook goes over the sinker stanchion like this — Oh! sorry, not brought up yet. Never mind, we'll use the bridge voice pipe instead.'

Screwing up the clamp the camera was soon secured to its temporary anchorage and the team inspected it for firmness and tried the controls. After exercising a bit, questions and comments were invited. The Liverpool member of the team was critical.

'Well yer know, I mean to say like, it's a bit like that party I had on the common the night before last yer know, afterwards like, when she wanted to be pulled up like, yer know, it's a bit heavy like.'

The P.O. thought it was not firm enough and tried to see how tight he could screw the clamp. He gripped it in both hands and gave another turn. A creaking sound gave warning of impending disaster, and a sharp snap presented him with a handwheel and half a spindle for a keepsake.

Unbolting the bracket, the camera



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was laid upon the deck, while the full resources of the engine room were brought to bear to heal the crippled clamp and fit the spare spindle pessimistically included in the outfit. Finally, the Buffer piped 'Hands to Dinner' and the gear was left to adjust itself to its environment.

The CREEP lay on the deck close to the open doors where Gemini had been launched. Gently it rolled to and fro as the ship moved on the swell, with each roll the shining thing inched itself towards the scuppers until it lodged loosely against the shallow ridge of the deck head plating.

Some gins later the Wardroom party returned on deck, just in time to see the beautiful prototype teetering on the edge. With an agonised yell 'Ould Ireland' leaped for the gap in the rail, tripped on a ringbolt and made a passable swallow dive over the CREEP and into the water. Caught in the slip stream, the camera quietly tilted away from the several outstretched hands and fell.

As the bedraggled Boffin surfaced he gazed amazed at the sight of a Gemini dinghy alongside with a CREEP at the masthead of a rusty scaffold sort of thing made from old gash piping!

'It's alright sir' grinned a cheering figure in a neck seal and a two way stretch, as he hauled him into the dinghy. 'We didn't forget to turn the kettle off after all.'

News from Guzz

Oput pen to paper and give you what little news there is from the land of webbed feet and 'Tiddy Oggies'.

At last the Diving Section has had its face lifted completed, so now we have a most immaculate layout, but alas, our staff is dwindling at an alarming rate. Bill Soper is on draft to *Tiger* and Snowy Bolton to *Forth*, both effective in January 1961. This will leave us with Nobby Hall, Bill Morris, Scants and Packer.

To C.P.O. Soper fell the honour of instructing the last ever, class of D.S's, who took him on the traditional farewell run, which ended by them donating 5/- per head to the Police Orphanage (squaring up for having eaten all the flowers in the lounge of a well known public house). We understand that C.P.O. Morris is still in the doghouse as a result of the party. He attempted to awake his wife at midnight, using a handful of gravel on her bedroom window (unfortunately he included half a house brick).

This is not much of an article but at least it serves to let you know that we in Guzz still exist and are in good heart, despite the efforts of C.N.D.

Spearfishing World Championships Sicily 1960

by J.H.

THE World Spearfishing Championships take place annually and attract a large number of entries from all over the world. For 1960 they were held under the Sponsorship of the Olympic hosts (ITALY) in the islands north of Sicily.

Teams of three per nation, each individual being provided with a boat, a neutral umpire, flippers, gun, mask and schnorkel. Suits may also be worn. Two six-hour periods are allocated on two consecutive days and the maximum weight of fish brought up wins the day. No assistance is permitted from the 'boatkeeper' and even the guns must be reloaded by the competitor in the water.

Naturally countries with warm, clear water nearby start with an enormous advantage and countries like Brazil, U.S.A., Spain and Italy, invariably lead the world. The British teams' practice consists of shallow, and normally muddy, water with few opportunities to study the fishes habits or to catch them. For this reason the facilities of the Submarine Escape Training Tank were extended by the Commanding Officer of H.M.S. Dolphin. This not only enabled selection to be on a fair and wide basis but resulted in the team eventually selected, improving greatly on previous years. All members were capable of bringing up an 8lb. lead weight from 100 feet and of dives of well over a minute.

The British Team selected consisted of Captain Baynham (R.A.S.C.) as team Captain, Jack Wright and Reg. Vallintine. Lieutenant Commander Hamlyn was team manager and interpreter and Leading Seaman David Griffiths travelled as one of the reserves.

Team prize went to Italy who were closely followed by Spain, U.S.A., Brazil and Malta. We were placed fourteenth. Individual Championship was won by Bruno Hermanny of Brazil. Other placing were 2nd, Claudie Ripa (Italy); 3rd, Don Del Monico (U.S.A.); 4th, Ianussi (Italy); 5th, Neguera (Spain); and 6th, Marti (Spain). The first British placing was Derrick Baynham at 27th with Jack Wright one place behind.

There is a growing interest in this

sport in the United Kingdom and it is of note that this year the minimum standard which 'interested' the selectors was the ability to go to 60 feet, swim for 20 seconds and return to the surface. The qualifications required are essentially those required for every underwater performer - physical fitness, technique, judgement and coolness in a crisis. It is hoped that when the time comes to select the U.K. team for the next World Championships (scheduled for 1962 in Spain) there will be a large number of young men with these qualifications in good measure!

Iranian Naval Divers Visit Kharg Island

by LT. BURSTALL

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In another article is a description of the work being undertaken by the Oil Company on Kharg Island. This one deals with the activities of the Iranian Divers on the occasion of their visit there.

Before going into details, it is as well to point out some of the problems involved in undertaking such a trip. First, Kharg is over 1,000 miles by road and rail from Bandar Pahlavi, and though the rail journey is fairly straight forward one, the roads through the mountains in the North are extremely steep and tortuous, and liable to cause considerable damage to be inflicted to equipment if loosely packed. Secondly, as a total of 16 divers would be going, sufficient equipment to allow them to work for about a month involved nearly all the gear we possess; and thirdly, adequate arrangements had to be made for the team to be fed and accommodated for this period in what was expected to be an inhospital and hostile island.

These problems all resolved themselves, and we at last arrived in Kharg Island on 17th November, the day the weather broke, but none theless pressed ahead with the Training programme.

Apart from general diving training, as an interesting diversion assistance was given from time to time to some of the construction firms there. Once we were called upon to assist in blasting a trench through 80 yards of rock. As we were given unlimited supplies of explosive, this task was attacked with exceptional enthusiasm and a satisfyingly deep trench resulted: but the after affects were disastrous: the gelignite had been ... hot and sticky, giving off obnoxious fumes, so that everyone who had handled it was afflicted by an extremely severe headache for the following 12 hours - which accounted for the unpopularity of the task with the Island's experts and also for their frequent absence, sick.

We had one further task with explosive, this time a little less unsavoury. A number of steel piles in the sea-bed had to be chopped off, and it was suggested that this might be done with explosive as a quick alternative to underwater burning. Accordingly this was tried, but in the absence of shaped charges or P.E. it was anticipated that extensive damage might result to the pile. So for the first explosion an experimental pile was used. Line charges were made up in 6 feet lengths and of various weights. The first one of 25 lbs, blew a large hole in the sea-bed but only flattened the base of the pile. The second charge, of 50 lbs., 'felled' it, but also split 20 feet of the weld seam. This damage was more than could be accepted, and so further demolitions along these lines were discontinued - but disappointing of all, no fish were caught.

By way of compensation, though, quite a number were caught when doing general underwater demolition training. On one occasion it was a question of which of us would recover most of the fish — the divers in the dinghy with a net, or the shark, whose dorsal fin could be seen cutting through the stunned fish floating on the surface. Honours were about even.

Though the Gulf has a bad reputation with regard to sharks, they are treated very causally by the local inhabitants; certainly there seemed little justification for their reputation when we were there, but then it was autumn, when they tend

to migrate south to warmer water, and those that remain behind become semi-soporific. They were encountered by us on two occasions only, the second one being by a diver who had been swimming at 60 feet, and surfaced on completion of his dive to say that he was very interested in three big fish about six feet long that had been swimming alongside him most of the time — and he went on to describe 3 Mako sharks.

We had expected to be asked to survey the Kharg/Ganaveh underwater pipe line for the Oil Company, but as mentioned earlier it was not completed before it was time for us to leave. We had also hoped to be able to do a little training in Standard Diving gear with oxy-arc cutting apparatus belonging to the Company, but unfortunately the gear was not available, so that all work was done exclusively in frogsuits.

After a month in amongst the Gulf coral there was not a suit that was unpatched, nor a set that had not suffered somehow at the hands of Kharg. So, when the time came to leave, though we were sorry to depart from the sunny south, in many ways we were glad to be going back to Pahlavi and its rain, where we would at least have all the normal facilities at our disposal for maintenance, repair, and so forth.

We arrived back home on the 6th January, exactly two months after leaving, and life is now back to normal again.

D.B.B.-18.1.60.

News and Views from R.N.P.L.

RiGHT at the start, let me make it quite clear that only my own opinions are expressed and nobody else has any responsibility for them. For several weeks I managed to leave my desk and have a very happy and — I think — useful time. It started with the Diving Officers meeting, at the end of the T.A.S.

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Conference, which I found very interesting and stimulating. One of the big points was the instruction in mouth-to-mouth artificial respiration by Surgeon Captain Miles, so that we could catch up with Portsmouth Police and other Bodies in recommending the method for use. This was later backed up by a demonstration to all classes in Vernon by a medical officer on course for Shallow Water Diver. The next day, with my black-bag carrier Sarge, we accompanied the teams and Dingley to Alderney, as far as I was concerned to carry out two purposes, one to see what operational C.D. teams did in fact (and how) and the other to do some self-contained diving myself. The weather was against us (to put it mildly) but both my aims were met.

I certainly won't forget Sarge using S.D.D.E. trying to catch an octopus one-handed and, near success, being jerked back by his friends on his line.

After Alderney the big play was to be the trials of equipment for survival in Portland Harbour. Originally 10 divers from Dingley, myself and my Sherpa were to take part as guineapigs, with Dr. Cowan of this Laboratory in charge of the C.O.2 estimations and the Portland team as Gemini drivers and generally transport and towage masters. For, I'm sure, very genuine reasons, Dingley team preferred to be on a slip so the diving representation was considerably reduced. The trial itself was not nearly as bad as I had expected. The worst part was jumping from the side of H.M.S. Plover at 6 a.m. and



swimming to the rafts, but once one was inside, the fug built up nicely. At any rate when the Gemini came up to adjust moorings and A.B. Chaplin driving, offered to change places it was a case of 'I'm alright. I'm inboard'. Seriously I think the Gemini drivers and the Safety Equipment and Survival Officer as bowman made all the difference between success and failure in these trials and it was nice to remind the flying side of the Navy yet again of the value and versatility of the diving branch. Whatever the result of the trial, 1 must admit that personally it was excellent training, particulary in the many minor points which might make all the difference in a real disaster. Perhaps the major lesson was the importance of drying the raft by baling, by mopping up with sponges or socks, by wringing out soaked cloths and then shutting everything down to build up warmth. Before this trial, if anyone has said that in a rubber liferaft in Portland Harbour in November with Force 6-7 winds, I would be as warm as on the best day in summer, my remarks would have been loud and rude but we reached temperatures of over 75° F, and had to open the sleeves to cool down. Boredom is the biggest problem and a watch-keeping system of all the odd jobs helps to fight this. A pack of cards is supplied but no instructions on 20 man games. To help those with poor memories, perhaps a song book — especially with the stag-party versions of songs should be packed in some nook or cranny of the food and water pack. I believe that volunteers will be required for a similar trial in February 1961 and selection of those who are fittest will be made - if any serving or reserve personnel are interested I am sure the Air Medical School at Seafield Park would be pleased to hear from them.

My next activity required the help of a volunteer and Lieutenant Grattan bravely agreed. This meant multiple diving of three to four times per day. daily for a week on what all published work suggested would be grossly inadequate data. I was convinced he would succumb to a bend on the second day, Lieutenant Merrick of E.C.D.U. who ran the pot reckoned it would be the third: in fact he lasted the whole trial. This was upsetting. However I now have able mathematicians working it all out and obviously the business will have to be repeated with more people with fewer safety factors once the figures are cleared. So guess what! Yes, more volunteers please and absolutely no rewards but the glow of satisfaction at doing something worthwhile.

While all this has been going on, H.M.S. Reclaim with her standard divers has been doing sterling work on the basic factors of diving tables on which we hope to develop safe combined dives. I gather the only reason a diver does not beat anchors to the bottom or leave the bottom after the anchors whenever she moors or unmoors, is that the divers have to let go and weigh the anchor respectively. However the task is long drawn out as each dive is a long one on Table II and the process goes on slowly but answers are beginning to appear as the half-way stage approaches. Bends are occurring and for once no suspicion of extra lolly by S.9 arises. As the rate of bends is about the same as in S.9 days, I am impressed by the honesty of pre-April divers who did not fall to temptation. My thanks are due to these divers who have taken the risk of bends, suffered their bend, and had no reward for these hazardous dives - other than their S.S.P. - all for the good of future operations by the diving branch. I hope

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Finally, perhaps one should mention thet Surgeon Captain Miles has become part-time at R.N.P.L. owing to his increased commitments but Surgeon Lieutenant Barnard has arrived to help me out with the lecturing duties as well as developing

to take my share in this trial on her his own lines of research. 1960 has been busy and 1961 promises to be as busy at least. We may become frustrated but we will never be bored - we just don't know where to start that's why we sometimes seem to be doing nothing - so to all our guinea pigs in 1960 our thanks and all the best for 1961 when we hope you'll come again and bring your friends.

Buddy Lines



ESPANIOLA.

We were delighted to meet up once again with our Spanish diving friends LIEUTENANT ALFREDO RIOS and CHIEF PETTY OFFICER FERNANDO RUBIO during H.M.S. Reclaim's recent trials off Spanish Morocco. Their help with the trials and value as shipmates was much appreciated.

TUBBY LINTON.

Now an Inspector of Shipwrights in Gibralta Dockyard, Tubby will be remembered by our older readers as one of the few Dockyard Divers to qualify in Deep Diving. He gets a special mention for his sterling work in the book 'The Admiralty Regrets' which tells of the loss and recovery

of H.M. Submarine Thetis. It was a great pleasure to see him looking so fit and well.

DIVING CAPTAIN.

We take off our hats (hoods) to CAPTAIN R. C. WATKIN, R.N., OUr favourite diving student of 1960. When Captain Watkin was informed

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that he was to be Captain Mine-Counter-Measures, H.M.S. Lochinvar and knowing he would have Divers and Diving vessels under his command, he decided to find out what goes on in the weird underwater world and what makes a diver tick.

To his very great credit he spent three weeks at H.M.S. Vernon actively engaged in diving in all forms of equipment in Horsea Lake, the mining tank and at Spit Head. The Lobsters around Spit Sand Fort soon found they had another formidable adversary. Such activity for a man of mature years gained the respect and admiration of us all.

(Photograph on Front Cover). sk

SUPERINTENDENT OF DIVINGS TROPHY.

This Trophy awarded to the Officer qualifying top of the Long Clearance Diving Officers Course was presented to LIEUTENANT N. MERRICK, R.N. for the second qualifying course in 1960. The first award of this trophy was made to LIEUTENANT H. E. CAISLEY of the previous course.

*

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DIXIE DEAN.

ste

The Sheffield Press gives us news of Dixie a Diver 1 who left the Service in August 1960. He is, the paper tells us. South Yorkshire representative for the Employment of Sailors, Soldiers and Airmen. Keep a few jobs open Dixie.

* **DIVER'S DINNER.**

We were very pleased indeed to see many of our old friends at the Annual Dinner again this year. The attendance (180) provided extremely pleasant company and it is felt that a good time was had by all. Our particular thanks go to MR. BLAKE, CAPTAIN MILES and COMMANDER PARKINSON for their grand speeches

and to COMMANDER CARR (Supt. of Diving) for 'Chairing' such a collection so admirably. There was a suggestion of professional entertainment but we feel that even the stars would have been sorely tested in competition with these grand speakers. The substance of Mr. Blake's speech is reproduced herewith :---

Mr. Chairman, Divers, Civilians all I am responding to a call.

My fellow Guests around this table To reply to your Toast are much more able.

But when Bill Filer, at point of gun Issued an order and said 'You'll come And what we want from the likes of you

Is a nice little speech and a joke or two'

What could I do but say 'all right' And that accounts for my speech tonight.

The Senior Service has a reputation For hospitality on each occasion So I will start these words tonight By saying simply 'Jack's all right'.

Whilst running my eye down the list of names

I was struck by the quite outstanding range

Of interest, tonight collected

As far as I see none is neglected.

So first let us take the poor blokes who dive

Down they go AND come up alive Which all things considered is rather

a wonder Bearing in mind how we makers

blunder.

But, back in the factory, H.M. Inspector

Is going round boots with a mine detector

Each nut and bolt is gone over twice And then screwed up with a bloody great vice

we linger

The blighters undo it with thumb and forefinger.

From the divers we turn to the backroom boys

Calm and serene with all their toys Doctors, psychiatrists, all terribly able

Come out at last with a Staging Table.

Hours are spent just designing gear Which really is neither there nor here. How much more useful to make a few pills

Which taken at source would breed divers with gills.

From them we must turn to Commander and Captain

Way back at Dartmouth their big ends were lapped in

Nothing must stop the machine-like precision

With which they arrive at the ONLY decision.

Now let us talk of late of S. of D's Firstly, Bill Shelford who joined S. and G's

Renowned and respected wheree'er compressed air is

But now due to Take-Over he's joined up with Fairey's.

Next in succession and breathing normal air.

Slightly apprehensive, but still sitting in his chair

With quiet unruffled dignity Bob Harland shews the way

To make a modern aqua-lung and what's more to make it pay.

One is tempted to speculate about Commander Carr

And I can't resist the punning if he only had one 'R'

Aeroplanes and Diving are but part of industry

Just consider the advantage he would have with B.M.C.

But in spite of the care, over which Lastly, there the little boys like Plessey and Dunlops

> Trying to scratch a living by filling up the shops

With the morsels that remain, after other plutocrats

Like Heinke's and like Siebe's have pinched the plum contracts.

There's the trusting Civil Servant tucked away up at Whitehall

He's very human really but he seldom comes to call

Whilst down at Bath his brother is sweeping out the mud

Still lapping round his ankles from the third successive flood.

We could go on ad infinitum and by adding to this list

Immortalise for ever, those who'ld otherwise be missed

But you have listened to me patiently and I hope enjoyed my jests

So I'll just sit down with THANK YOU for myself and fellow guests.

> * * *

CONGRATULATIONS.

To SURG.-LIEUT. CDR. J. RAWLINS, both on his provisional selection for promotion to Commander, and the award of the O.B.E.

To C.P.O. E. FOGGIN and MR. T. TOMKINS (A.E.D.U.) on their award of the B.E.M.

OBITUARY

A considerable number of Naval Divers will be sorry to hear that 'Sam' Spencer, 'mine host' of The Eagle, St. George's Square, Portsea, passed away suddenly on February 2nd.

Sam and Mrs. Spencer's establishment has become so popular with divers that it has won for itself the title of 'The Shot Rope'. This is an area award which does not appear in the record books and is not won by ballot or competition, it is merely the spontaneous response of a most

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individualistic group of drinkers to the landlord who gives the best service with the best beer.

We offer our simple but sincere sympathy to Mrs. Spencer in her hour of loss and trust that she will feel able to continue tending 'The Shot Rope'.

A wreath was sent from the Diving Section, H.M.S. Vernon, as a final tribute from Sam's diving customers.

Any Volunteers

LOCATION.

The Reviera of the North of England.

ACCOMMODATION.

Four Star (not listed).

CUISINE.

Four Square.

BEER.

William YOUNG —(McLanchan) ER.

Work.

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Rocket finding and Disposal.

Team:

Lt. C. L. Lawrence, M.B.E. (since relieved) Petty Officer W. W. Wyvill. (since relieved)

A.B. I. Jackman.

A.B. R. P. Dean

(One small STEAMER unwilling).

On Monday 2nd May the above mentioned team 'ENROVERED' and proceeded to The Ministry of Supply Proof and Experimental

Range, Eskmeals, Bootle, CUMBERLAND.

This unheard of Outpost of the Empire is situated in beautiful country nigh unto the Lake District, glorious golden sunkissed sands, miles and miles of sand dunes; V.G. for 'BUSH CONGERING' and of course the limpid pale blue waters of the Irish Sea. A first class amusement arcade offers such interesting side shows as one Rocket Launcher. Two 6 in, guns 12.3 in, guns and numerous white coats (to hide the brown underneath) using such patter common to

Whale Island except that they refer to the Combined sponge and rammer by its proper name.

Arriving in these hitherto uncharted waters of Northern England prepared for anything we were given everything (almost):

D.U.K.W. — Diving for the use of (Excellent).

Gas — Breathing for the use of Similar.

Explosives Disposal for the use of Likewise.

and in fact anything within reason was for the asking. Of course Jackmans request was a little difficult and required a little time and cultivation. We still wonder why he got an extra early morning cup of tea and genuine Ham sandwiches for lunch when we had to make to with 'Pussers Ham', but there jealousy will get one no where and let's face it he must have worked.

The reason for our being there were seven in numbers. Two Ton 25 ft. long 21 inch Diameter practice rockets sticking up like Chapel Hatpegs under 25 to 30 ft. of water and 1,000 yards from the shore. THEY, English electric and the Army, wanted a few back for examination and the remainder they wanted razed to the ground because of the danger to navigation for small fishing boats.

The method of search (open water) lifting (tidal) and disposal (noisy) is given in great detail in B.R. 155c (paragraphs various) and other books

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of great learning and details of this nature are only boring when repeated to the casual reader so 1 will therefore concentrate on the Joll-i-fication or lighter side of the operation Funny HA, HA... suffice for me to say that we found NINE (they fired two whilst we were there (four were recovered and the remaining five were successfully razed to the ground as requested.

This took up most of our time from 0730 to 1700 each day from 3rd to 23rd May, except for four days weather unsuitable, two days (shot off) firing and Saturday. Sunday 21st to 22nd, make and mend. Between 1700 to 0730 the scope and opportunity for making a C.D's life the envy of the outside world was unlimited, one could walk over the undulating countryside a few miles (13) to Eskdale renowned for its scenery, salmon and trout fishing, etc. via TWO PUBS the BROWN COW and the RED BULL. It is our undivided opinion that the procreation of these quadrupeds in this part of the world has been by artificial insemunation for a considerable number of years because the Cow could never get to the Bull, or vice-versa in the allotted time. however, further thrills are in store because by pressing on another 15 miles same sort of countryside (No Pubs) and one arrived at Coniston Water home of the Bluebirds, but unfortunately, it not being their nesting season, we saw nout so we forced on via Hawkshead Bridge, Elterwater, to Ambleside (they weren't open) and solid fuel was of major importance and where one member of the team ordered Fish and Chips, Eggs (2) Bacon Sausages, Ham and Salad, all on one plate and wolunteers . . .

got it and stowed it away too and went round the buoy on the Ham and Salad, plus Make and Mend Duff and three cups of Cawfee.

Having thus satisfied the inner man we circumnavigated Lake Windermere and then made our way in the general direction of Bootle pumping and watering 'Ship' at suitable filling stations scattered about the countryside for the sole purpose of refreshing weary travellers.

Other forms of entertainment offered in this area are, T.V. room, Dart Board, Cinema every Thursday showing such modern Todd A.O. films as Tom Mix-in-Cement, George Raft in Floating Timber to mention but a few, and every Friday a Dance is held in the huge hall in the centre of Union Strasa in the local Metropolis, this is an occasion which should not be missed under any circumstances.

I have recently received another communication from this part of the world, requesting our services to dispose of a further eleven rockets; W.W. Wyvill and Dean got the buzz early through Willies Watney chums in the sergeants mess and promptly volunteered and got draft chits to the Jewel of the Mediterranean, at least that's our story. Jackman is keen to see the love of his life again and would not miss this vocation for anything in the world. Leading Seaman Clarke and Able Seaman Williams the two unsuspecting reliefs will I'm sure, be only too keen. to get cracking but there is a requirement for an extra two, because it's a little too much for four, six could manage comfortably . . . So any

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Divers' Employment Bureau

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

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

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

Diving Experience

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

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