NAVAL REVIEW

" Think Wisely.

Plan Boldly.

Act Swiftly."

For Private Circulation.

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OBJECT AND REGULATIONS OF "THE NAVAL REVIEW."

CHANGE OF ADDRESS.

The Hon. Editor's address is changed to :

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HON. EDITOR'S NOTES.

I regret that I must again call the attention of members to the necessity of complying strictly—both in the letter and in the spirit—with Regulation No. 3 of THE NAVAL REVIEW. A study of the Regulation itself will, I think, sufficiently explain to members the importance of this.

Articles, Book Notices and Correspondence for the November issue should reach me not later than the 15th of October, or earlier if possible.

> RICHARD WEBB, Hon. Editor.

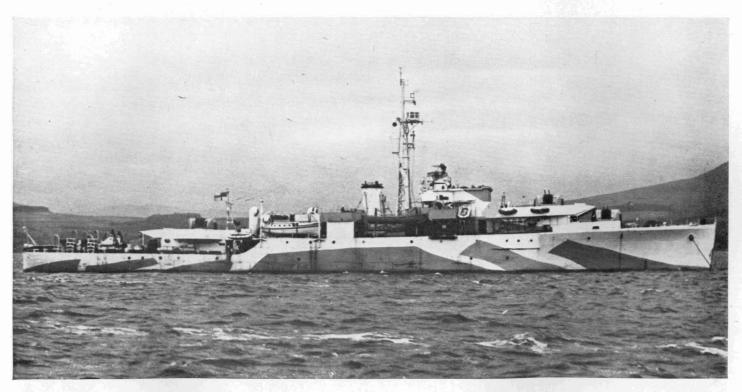
9, ALEXANDER SQUARE, S.W.3. 15th August, 1949.

THE RICHMOND SCHOLARSHIP.

A Richmond Scholarship, in memory of the late Admiral Sir Hubert Richmond, tenable at Downing College, Cambridge, is offered for competition on the results of the open entrance scholarship examination to be held in December, 1949. A candidate will be required to attain to the standard of an open scholarship, and will normally offer History as his subject; preference will be given to the sons of officers of the Royal Navy or the Royal Marines, on the active or retired lists. In the absence of a candidate who qualifies by examination for a Scholarship, one or more Richmond Exhibitions may be awarded. Further information will be sent by the Senior Tutor of Downing College on request.

H.M.S. AMETHYST.

"Your bearing in adversity and your daring voyage will be an epic in the history of the Navy." (Admiral Sir Patrick Brind, Commander-in-Chief, Far East Station)



Signals from the Amethyst (30-31 July).

"2212. Have slipped cable." God save the King."

" "0532. Have rejoined the Fleet south of Woosung. No damage or casualties."

Message from His Majesty the King.

"Please convey to the commanding officer and ship's company of H.M.S. Amethyst my hearty congratulations on their daring exploit to rejoin the Fleet. The courage, skill and determination shown by all onboard have my highest commendation. Splice the main brace. GEORGE R."

THE LANDINGS IN NORTH AFRICA.

OPERATION TORCH.

Supplement to the LONDON GAZETTE of the 22nd of March, 1949.

THERE is no doubt that the Naval Despatches of the War, as published, make very poor reading. In themselves most of these documents are terse and accurate descriptions of the events which they attempt to portray, but unfortunately their scope is too narrow and confined entirely to a particular phase of each operation. The TORCH Despatches are no exception to this rule. The period covered is only from the 22nd of October until the 17th of November, 1942. In fact, of course, the period covered, if a reasonable history is to be provided, should have been from the 1st of October till the eventual capture of Tunisia. I propose to trespass on members' patience by attempting briefly to sketch in this background.

In mid-July, 1942, the Combined Chiefs of Staff met in London. After a world-wide survey, the largely British conception of a Mediterranean strategy to strike at the soft under-belly of the Axis was recommended. This recommendation was approved by the President and the Prime Minister on the 25th of July. Those who wish to examine the pros and cons and arguments which preceded this decision can hardly do better than read General Eisenhower's admirable book "Crusade in Europe." Decision once taken, activity became intense. Time was extremely short, so were the available resources. It was essential to get the operation in as early as possible, not only because the Western Allies were being pressed for action by the U.S.S.R., but also because it was essential to effect the landings before the onset of winter weather. In addition, the relief of Malta had become a pressing need, and it was also necessary to co-ordinate the timing with the opening of Operation LIGHTFOOT, better known now as the Battle of Alamein. Planning was not made easier by the fact that this was the first great Anglo-American venture; and also that it was the greatest amphibious operation at long range so far undertaken in the War.

The naval planning was initiated by Admiral Sir Bertram Ramsay with the same staff that had been toiling for many months at SLEDGEHAMMER and ROUND-UP. It is in no spirit of criticism that I must say at this point that the American officers, commanders and staff alike, were necessarily inexperienced and green. The greatest possible amount of understanding and forbearance had to be exercised by officers of both nations alike in settling down as an integrated staff contemporarily with the evolution of the plans and orders for this great enterprise. That they succeeded so well is perhaps the greatest tribute of all to the personality of General Eisenhower. I am sure that he would be the last to disagree in the statement that at this stage he had not become, except in name, a real Supreme Commander. It was the privilege of many of us in the succeeding months to watch his stature grow into the great Supreme Commander that he eventually became. His triumph at this time was the production of the inter-allied staff which, in spite of difficulties and many disappointments and setbacks, had become such a truly homogeneous and single-minded body.

A 2

Admiral Ramsay, who was responsible for the majority of the naval planning and for all the spade work and drudgery, did not have the privilege of leading the naval forces into action. Admiral Sir Andrew Cunningham was selected by the Joint Chiefs of Staff to lead the naval forces in the venture. He had hastily to be relieved of his duties with the Joint Chiefs of Staff in Washington and fly back to England. Before he was able to settle down to the leadership of the new expedition he had to fly more than once between Washington and London. He made one or two minor adjustments in the Naval Staff, bringing in his own Chief of Staff, Commodore Royer Dick, and one or two other well-tried members of his old Mediterranean Fleet Staff. By the time he had settled into the saddle planning was entering an advanced stage and proceeding at a feverish pace. The Naval Staff was not really formed finally until late September. D-Day was the 8th of November. The first convoys were due to leave the Clyde on the 22nd of October, having carried out their rehearsals prior to that date.

Admiral Cunningham's Despatch refers to the difficulties of co-ordinating movements of forces whose starting points were as far separated as Scapa and Freetown. This might almost be regarded as meiosis, at least as far as the Admiralty Planning Staff were concerned, since the forces engaged in TORCH at the time of the initiation of the planning were, in fact, scattered as widely as Polyarno, the United States and Madagascar. As the planning proceeded the usual setbacks to be expected in war dropped like sand into the bearings at intervals. The *Curacoa*, one of the few A/A cruisers, with an important function in the operation, was rammed and sunk by the *Queen Mary*; The *Phoebe* was torpedoed off Point Noire. A variety of smaller ships suffered breakdowns and casualties and had to be replaced. Gear went adrift or could not be got ready in time. Up to a very late stage and even when the operation orders were actually in the Press, political influence tended to alter the composition of the forces in an effort to preserve a truly Anglo-American texture in the operation.

Behind all these difficulties lay the constant menace of the U-boat. The Battle of the Atlantic was at its height. Escorts and merchant ships alike were in desperately short supply. The utmost economy had to be exercised in the employment of our limited resources, and arrangements had to be made that the forces earmarked for TORCH should be rapidly re-disposed on completion of the initial landings. It would perhaps be well to emphasize here that Operation TORCH did not involve a really large-scale assault landing. The resources for such were not in existence. Apart from L.S.(I.)s or Combat Loaders with their associated ship-borne assault craft, the only resources for landing were three L.S.T.s of the "Maracaibo" class, six rather broken down L.C.T.s which happened to be at Gibraltar and a large number of L.C.M.s carried in M./T. ships or in the three gantry-fitted oilers. The vastness of Operation TORCH lay in the follow-up arrangements which were planned, after the capture of Algiers, Oran and Casablanca, to pour ground and air forces into North Africa to establish the Allies firmly on the southern Mediterranean coast and open that sea to shipping. In addition, arrangements were put in hand to force a passage to Malta with vital supply convoys as soon as the moment was judged ripe. Malta needed supplies so sorely that no delay could be allowed to arise in selecting this moment. Convoys were accordingly prepared at each end of the Mediterranean.

The planning and preparation of the whole Operation was so rushed that there was no question of preparing an overall plan for issue to the Task Force Commanders to allow them to proceed with their detailed planning in conformation to the Commander-in-Chief's general intention. The Task Force Commanders and their Staffs were housed in the same building as the Supreme Commander and the Commander-in-Chief. Constant consultation and close co-operation at all levels took the place of the usual deliberate study and evolution of a plan.

A grave source of concern was the probable sea conditions on the West African coast at Casablanca where at this time of the year swell was only too likely to preclude any possibility of landing. Meteorologists on both sides of the Atlantic undertook an intensive study and long-range forecasts of conditions which proved quite remarkably correct. The United States Task Forces under Admiral Hewitt were able to effect their landings, but only just. Another foot or two in the height of the swell would have defeated even the splendid seamanship displayed by the United States Navy.

Behind all the normal complications of planning lay political uncertainty about the attitude of the French. Complicated rules had to be laid down as to the precise action taken by various units in the face of varying degrees of French opposition. We were bound in most cases by that uncomfortable rule that we should not be the first to open fire. The attitude of the French Fleet in Toulon was an unknown quantity, as was the attitude of the Italians; but in the worst case we might find ourselves called upon to meet both Fleets, which, together, would present a force of very superior numbers. It was felt, however, that should the two attempt a concerted action, without previous arrangements, they would handicap each other so badly as to effect mutual neutralization.

The naval plan as finally evolved relied upon the supply of Malta as a screen to cover its intentions. Elaborate precautions were taken to ensure that only the minimum of movement would be seen into and out of Gibraltar by day. All the main forces and convoys save one slow assault convoy passed the Straits of Gibraltar in the dark. It was simply hoped that unfriendly radar stations in Spanish territory would not cull too much information during the passage of this vast quantity of shipping through the Straits. Arrangements had to be made for almost all the naval forces involved to enter Gibraltar, fuel and get away again in darkness. Foul weather was a bugbear which could not be faced with equanimity. In fact it did not arise. To the writer one of the most fascinating phases of this operation was the passage of the convoys through the Straits. After the hectic weeks of planning and all the uncertainties involved it was like a fairy tale to stand in the Local Defence Plot at Gibraltar and watch the "bogeys" being plotted on the table and be able to identify, solely by reference to the operation orders, each one of the many hundreds that appeared, and to see that each unit in this vast and complex movement was appearing and moving precisely to time and programme.

It is a matter of history now that surprise was achieved. That it would be so achieved seemed at the time almost impossible. Every effort was of course made to maintain security during the planning and mounting stage. Every effort was made to conceal the destination of the convoys once they were at sea, but so many possibilities existed that the show would be given away. There were the exploits of the submarine *Seraph*, first in the landing and recovery of General Mark Clark and his colleagues on the North African coast near Algiers, and then in the embarkation of General Giraud from the coast of Southern France. There were the beach reconnaissances carried out by other submarines; the passage of the convoys through the Straits, the accumulation of stores of all kinds in Gibraltar, and finally, during the last two breathless days before the landings, Gibraltar airfield was packed with aircraft in full view of Spanish territory. That, it would seem, was the most dangerous time of all. The whole airfield was covered with Spitfires and other aircraft packed densely with wings overlapping. There was no room for another aircraft on the airfield at all. Only the runway was kept clear. Looked at from the North Front, it was an amazing sight; and all felt that it only needed one reconnaissance aircraft followed by the one quite light raid with incendiary bombs to wreck the whole operation. No raid came; nor for some inscrutable reason did the Germans, who must have observed this congregation, read the signs aright.

The major military threat to the operation had been adjudged to be, in the approach stage, U-boats in the Atlantic; in the assault and follow-up stage, aircraft from Sicilian and Sardinian bases. In the Atlantic we were singularly lucky. Wolf packs were present to the west of Spain. At the critical period a homebound S.L. convoy passing to the eastward of the assault convoys had the misfortune to attract the wolf pack. This convoy had bitter losses. They did not know it, but their sacrifice was ensuring the success of TORCH, for they drew the whole of the enemy forces and the TORCH convoys passed unmolested on their way. Only one casualty marred the flow of the TORCH convoys to their destination. On the day before the landings the U.S. combat loader Thomas Stone was torpedoed and brought to a standstill. The determination of her captain was reflected in the remarks in the Despatch. He lowered his assault craft and sent off soldiers in boats on their 150-mile journey to the assault. detaching his only escort to shepherd this flock, his wounded ship remaining as a helpless target for any U-boat that remained in the vicinity. This ship eventually reached Algiers in tow.

The landings themselves proceeded reasonably according to plan; errors were made, navigationally and otherwise; but the beach-heads were gained promptly and expanded satisfactorily. French opposition was patchy and mostly ineffective. The only determined opposition experienced was from the French Navy, from their ships and from naval-manned coastal batteries alike. Memories of Oran and Dakar could not be lightly expunged. Such actions as were fought out with French surface forces were distasteful in the extreme. Their ships emerged from harbour dashingly and gallantly, but apparently without co-ordination. They were disposed of one by one with practised ease by our veteran ships which, in any case, out-gunned and out-ranged them.

It must be stated here that there is little doubt that, had effective opposition been encountered, these landings would have failed. Infantry were landed satisfactorily and according to plan, but the capacity for landing vehicles simply did not exist. As we came to know later in the war, vehicle-landing-capacity is the real pivot upon which hangs success or failure of an amphibious operation. As it was, half-hearted French resistance collapsed at the first serious clash. Had it not been so, without vehicles and heavy supplies the momentum of the assault could not have been maintained.

At each of the ports in the Mediterranean sectors, Algiers and Oran, arrangements had been made for two ships with anti-sabotage and anti-demolition parties to force an entrace at a selected moment in an attempt to preserve harbour installations and to prevent merchant ships from being scuttled. Selection of the moment was a most difficult problem. In neither case was the attempt successful. In both cases the enterprises were conducted with the utmost gallantry. Only one of the four ships survived. Casualties among ships' companies and landing parties alike were heavy. As things turned out the attempt at Algiers was unnecessary; but that is being wise after the event, and detracts in no way from the brilliance of the exploit. At Oran considerable sabotage took place, which fully justified the attempt that was made to stop it. The surrender of the ports and our entry into them came, on the whole, surprisingly quickly. Once entry was effected there was no delay, and the speed with which merchant vessels were berthed and port installations brought into operation was most creditable in this our first really practical experience of the opening of captured ports. The entry of the *Bulolo*, flying the flag of Vice-Admiral Sir Harold Burrough Flag Officer, Inshore Squadron, to Algiers was, to say the least of it, spectacular. She not only entered the port—she drove herself firmly into the seaboard of North Africa. On her way in she had been near-missed by a bomb. Unknown to those on board her a telegraph shafting had been dislocated. When "stop engines" was rung down as she approached the *Quai Transatlantique*, the engines ground remorselessly on until, amid the cheers of the welcoming population, she struck the roadway bows on with a resounding clang, sending the solid granite setts flying. Luckily she caused no serious damage to herself. At least she left her mark on Algiers !

As has been stated before, the major threat at the assault stage had been considered to be air attack. In the event air attack in the Oran sector proved negligible and in the Algiers sector far less serious than anticipated. Some casualties occurred and some bombing of the town; but, thanks in the first instance to the excellent work of the aircraft carriers and, ultimately, to the good work of Royal Air Force Spitfires, these attacks were largely neutralized. The speed with which occupied airfields were brought into operation was most creditable. The main failure in the anti-air defence was in the slow provision of effective shore-based radar. Errors were bound to occur in an operation of this magnitude which was the first of its kind, and one error which was made was in arrangements for priority shipment of radar installations. This lesson was learnt and digested, and did not occur in further operations. There was also failure in the provision of night fighter defences, and for some days Algiers was considerably bothered by night raids. In this case the fighters themselves arrived, having flown over Spanish territory en route from England. Their A.I. gear was removed for fear it should fall into enemy hands. It was unfortunately shipped in a slow follow-up convoy, and the fighters were largely useless until it arrived. Another lesson which was not forgotten.

As has already been stated, the danger of air attack had been a main preoccupation in the planning stage. It was felt that a congregation of shipping off the landing beaches would present a tempting and vulnerable target. This shipping included a large number of valuable personnel shipping. It had been realized that sufficient escorts would not be available to take these ships away as and when they completed their unloading. The risks had been weighed and it had been decided that the safest course in the circumstances would be to sail large fast ships independently, diversely routed, for Gibraltar, rather than leave them a helpless prey to bombs and torpedoes in an open anchorage. Two of these ships which could so ill be spared at this stage of the war were sunk by U-boats. The enemy's U-boat reaction was unexpectedly quick, and he concentrated very rapidly in the eastern approaches of the Straits. On the credit side the U-boat losses were also severe. Very good work was done by Coastal Command based on Gibraltar, and several U-boats were sunk.

These merchant ship losses were followed very quickly by more. As soon as the situation in Algiers was cleared up a further landing had been planned to capture the port of Bougie and the airfield at Djidjelli. So quickly did Admiral Burrough get to work on this project that the expedition sailed on the 10th of November from Algiers and the landings commenced on the 11th. No opposition was encountered from the French. The armistice signed in Algiers was already

having its effect elsewhere. Concurrently with this operation units of the First Army were reaching out to the eastward as fast as circumstances would permit. The air menace really came to life in this Bougie operation. Carrier-borne support was weakening owing to unserviceability of aircraft. The Argus, supporting the operation, was damaged by a bomb which reduced support still further. Swell and other difficulties delayed the capture of Djidjelli airfield. When it was captured the organization for petrol supply had been emasculated by casualties amongst the shipping, and in spite of every effort it was not until the 13th that effective fighter strength could be operated from this forward airfield. The distance from Algiers precluded effective constant patrol by fighters from Maison Blanche. The resultant casualties among shipping at Bougie was serious; one white ensign L.S.I. and two large liners were lost. There were further casualties among M.T. ships and warships. It is rightly observed in the Despatches that such casualties are part of the price that must be expected to be paid when taking such large and valuable ships into forward areas. Ill-luck with the personnel ships continued to dog the expedition, as two more were lost in homebound convoys from Gibraltar.

As a background to and superimposed upon this Operation was a maze of political intrigue. These difficulties mainly concerned the Supreme Commander, but uncertainty as to the final attitude of the French persisted for some time and made the tasks of all more difficult and obscure. The situation as our troops pressed on to the eastward became at times almost Gilbertian. It was quite possible to take up a civil telephone in Algiers and find oneself talking to a German in Bizerta, or to start talking to a Frenchman and find oneself rudely interrupted by a German before the conversation could be concluded.

The operation developed into a race to the eastward in an attempt to forestall the Germans who were now reinforcing North Africa across the Sicilian Channel, by every possible means. Lack of M.T. and shortage of supplies and petrol reduced the First Army spearheads to a minimum. As far as the Navy was concerned, the eastward movement was pressed on with all possible speed. Philippeville and Bone were occupied by small parties of troops taken forward in destroyers. Cruiser forces were immediately established at Bone to strike at the enemy reinforcement route from Italy and Sicily. The Luftwaffe were by now, however, thoroughly on their toes. Air raids on Bone were heavy and continuous. The operations of surface forces without fighter support had to be limited to night operations in these eastward areas. Submarines of the 8th and 10th Flotillas were concentrated off the Gulf of Tunis, and also took a heavy toll, but the Germans succeeded in establishing themselves in the Bizerta/ Tunis area in the nick of time. Our leading troops reached the hills overlooking Bizerta before they met serious opposition and were forced to recoil and consolidate. In this manner the bitter Tunisian winter campaign developed.

Admiral Cunningham remarks in his Despatch that during the planning stage he had advocated a landing at Bizerta, in spite of the risks involved, and that it is a matter of lasting regret to him that this bolder conception was not implemented. There appears little doubt that, had we taken this risk, we could in fact have taken the whole of Algeria and Tunisia in one fell swoop. It is a matter for historians to decide whether, in the end, greater advantage did not accrue to the Allied cause by the slower method that was followed. The bold conception would have meant immediate destruction of Rommel's armies; the slower method led to the presence of much greater German forces in North Africa and the eventual capture or destruction of over 300,000 men.

THE LANDINGS IN NORTH AFRICA.

The campaign settled down to a build-up race. The front was established roughly on the borders of Tunisia. Each side strained to reinforce ground and air forces in readiness for the final struggle which would decide the ownership of the Southern Mediterranean board. Each side also concentrated on attrition of its enemy's supply route. The supply and reinforcement of Bone in the forward area was a matter of particular concern and called for very intensive effort by four fast L.S.I.(M)s and the three "Maracaibo" L.S.T.'s, supported and escorted by the Hunt class destroyers of the Inshore Squadron.

On the naval side the theatre was extremely active and interesting. Almost every angle of modern naval war was encountered. Big supply convoys coming in at weekly intervals alternately from America and the United Kingdom ran the gauntlet of U-boats' and shore-based air attack throughout their Mediterranean voyage. At the eastern end of their run, the Bone sections also had to be defended against E-boats based at Bizerta. Air attack in harbour, particularly at Bone, was commonplace. Human torpedoes and limpeteers caused trouble in Algiers from time to time where, despite every effort to turn ships round quickly, there were frequently up to fifty ships lying in the open anchorage waiting their turn to unload or awaiting convoy. In the area to the east of Bone and the entrance to the Sicilian Channel both sides went in for an intensive mining campaign. Cruiser and destroyer actions by night in this area were frequent. Submarines maintained ceaseless pressure on the enemy's supplies. Naval aircraft based on Bone and Malta contributed their share, as did the R.A.F. aircraft based on Malta. We were never able to stop this traffic completely. The routes lay so near to enemy air bases and were outside our fighter range. The R.A.F. were never able during this North African campaign to supply aircraft of the right type or in the right numbers to do their share of the job. Had they been able to do so, traffic could undoubtedly have been stopped and the campaign greatly shortened.

As the winter wore on, the volume of supplies and the number of troops and aircraft entering the theatre became enormous, and as our air power built up the enemy's was steadily broken down until, in the early part of 1943, air attacks on our bases became comparatively infrequent. Night torpedo attack on the convoys remained, however, a constant nuisance in spite of good work by the R.A.F. night fighters. The moon, as always in the Mediterranean, made protection of shipping by night a hazardous affair.

The Eighth Army at this time was of course closing in steadily from the eastward and slowly squeezing Rommel's and Kesselring's troops into Tunisia, where eventually they were to be squashed and finally destroyed. While this process continued, the Staffs were looking ahead planning the next move—the invasion of Sicily. On top of the ordinary requirements of a major theatre was superimposed the construction of hards and training facilities for landing craft and ships of all shapes and sizes.

Finally, as the armies closed in for the kill, plans were made on the naval side to ensure that defeat should be complete. RETRIBUTION was the name appropriately earmarked for this Operation, in which we were to take our revenge for Dunkirk and Crete. Admiral Cunningham's Orders for this told his ships "To sink, burn and destroy: let nothing pass." Nothing did pass. The Germans were ever blind to the true meaning of sea power. This was to be a lesson in that subject which they could not easily forget.

The whole of Operation TORCH was in fact a magnificent example of correct application of sea power which enables the holder of command of the sea to strike the enemy at his selected time and place and at the enemy's weakest point. It was also, as has been said before, a magnificent example of inter-Allied co-operation. Three Services of two nations, eventually to be joined by the French forces and including of course, as always in the last war, on the Royal Navy's side Norwegian, Dutch and Polish elements, worked as a closely knit team welded together by the personality of that great man, General Eisenhower.

Tunisia finally fell and the whole German army capitulated on the 13th of May, just six months after the initial landings in North Africa. The way was clear for re-entry into the Continent of Europe.

M. L. P.

EXERCISE TRIDENT.

I THINK it can be said that TRIDENT was a great success. I do not presume to make this sweeping statement on my own assessment of it; I asked many people who attended what they thought of it and their common verdict was unqualified praise in general, tempered with certain criticisms which find their place in this article.

As I said in my pre-TRIDENT article¹ the background of Greenwich was a great asset—and the weather was kind. Most readers of THE NAVAL REVIEW know the Royal Naval College, so there is no reason to elaborate on the dreary atmosphere that prolonged rain can produce; but fortunately there was practically none, so that did not arise. Further, the bulbs were out to perfection for the second session, which was very thoughtful of the Almighty. To come out of a rather gloomy series of lectures into a mass of tulips and hyacinths in full bloom restores one's belief in the good things of life.

A nice touch added to this background on the first morning of the exercise when a yacht anchored off Greenwich wearing the Royal Naval Sailing Association pennant surmounted by a white painted trident !

ATTENDANCE.

There were, as I said in my previous article, two sessions. The first was attended by junior captains and equivalent ranks; the second by flag officers and senior captains. The composition of the two audiences was not quite what I expected in two respects. I did not expect so many representatives of the other Services and Ministries, nor such extensive American representation. The fact that the former were so numerous was obviously sound, since during the discussions there was nearly always someone present who was qualified to speak on any point that arose. The latter point took me by surprise both as regards quantity and quality.

It was satisfactory to see so many members of the Admiralty Secretariat at both sessions. I hope they enjoyed the exercise; it is all to the good for them to see and know as much as possible about the Navy's activities.

In passing it is perhaps of interest that His Royal Highness the Duke of Edinburgh attended the whole of the first session and that His Royal Highness the Duke of Gloucester attended certain items in the second session.

It is, however, in connection with those who attended TRIDENT that the first serious criticism arises. At no time during either session did any member of the Government or politician attend. In some cases there were very good reasons why they could not : the Prime Minister was occupied with the Commonwealth Prime Ministers who had been summoned to England during the second session ; the Minister of Defence was abroad during the second session ; the First Lord, who was to have addressed both sessions, was sick and could not leave his house. But there does not appear to have been any reason why others, despite their normal heavy duties, might not have put in an appearance in view of the special nature of the occasion. The absence of political representation,

¹ N.R., February, 1949, p. 32.

EXERCISE TRIDENT.

quite apart from the impression of avoiding TRIDENT that it gave, was a distinct handicap since on no point could an authoritative political view be heard by the audience.

A second criticism made by many people was that nobody below the rank of captain was allowed to attend. While it is axiomatic that the commanders of to-day are the flag officers of to-morrow, it is also a matter of hard fact that the seating capacity of the hall was filled. There is no solution to this criticism except to cut down the non-naval members of the audience, which is undesirable, or to have a third session which, apart from being an additional strain on the directing staff, raises many problems.

As the subject matter of the two sessions was to all intents and purposes the same I do not propose to differentiate between them in this respect. There were minor differences, of course, since the first session was to some extent a rehearsal for the second, and adjustments were made as a result of the experience of the first session. But these adjustments were not ones of policy and did not affect the general run of the Exercise.

Before launching into a description of the Exercise it is perhaps fitting to remind members that, broadly speaking, the object of TRIDENT was to consider how the lessons of the past should be applied in the future, with particular reference to scientific research and development.

OPENING ADDRESS.

The opening address was by the First Sea Lord. Short and very much to the point, it gave the audience a very good start off. It was immediately followed by some remarks on the amenities at Greenwich by the Admiral President, but he omitted to point out that the programme was so full that there would be little time to enjoy them !

PART I.

SITUATION ON OUTBREAK OF WAR.

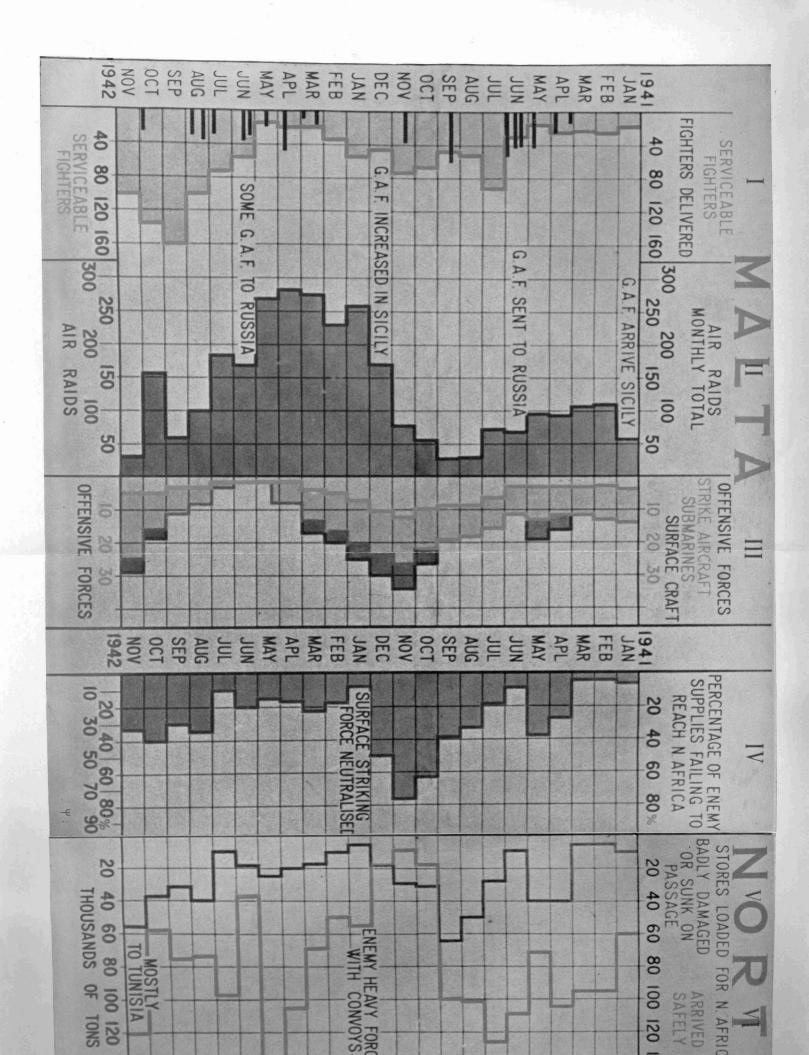
The Exercise proper then started. Part I, which occupied the first two days, consisted of a series of lectures describing what the state of affairs might be in every relevant sphere in the event of war breaking out at a future specified, but arbitrary, date. In nearly every case the lecturer held an authoritative position in connection with the ground he covered.

The first lecture of all was, strictly speaking, outside this series, and yet was a very good lead in to it. It consisted of an analysis of a few of the major lessons of the Second World War given by the Directing Officer. His object was to point out cases where there had been faulty thinking or inadequate provision, not to point to shortcomings which have only become lessons as a result of experience, and which could not have been foreseen.

The Vice Chief of the Naval Staff then outlined the strategical picture. This was followed by a trio of lectures on raw materials, oil and shipping, respectively, given by senior officials from the three Ministries concerned. These in turn were followed by a lecture by the Director of Naval Intelligence with a complementary one by a Royal Air Force officer, which completed what might be termed the general survey of the position in the future and led on to lectures of the same nature but on matters in more detail.

WEAPONS OF THE FUTURE.

The first of these was an excellent lecture on weapons of the future by the Assistant Chief of the Naval Staff with short complementary ones on naval aviation developments by the Deputy Chief of Naval Air Equipment (which



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included a short film of jet aircraft operating from carriers) and on Coastal Command developments by a Royal Air Force officer. Most interesting and stimulating and with very good diagrams. Flag Officer, Submarines, then described submarine developments in the future and provided a nice touch by informing us that Thursday's lunch would consist of "Frood"—deep frozen food—as supplied to submarines on "snorting" patrol. It was, and jolly good too.

MARITIME FORCE REQUIREMENTS.

Another trio of lectures came next, summing up collectively the maritime force requirements for the protection of our sea communications, the individual subjects being ocean convoys, coastal convoys and the sea route through the Mediterranean to the Middle East. What might well have been platitudinous dissertations were far from it owing to the novel way in which the subjects were handled. The ocean convoy lecture excelled in the presentation of its statistics. derived from the First and Second World Wars, and incidentally disclosed one or two little known facts. It also provided much food for thought for the future. The Coastal Convoy lecture did its best with an uninspiring subject and I think the audience, many of whom had had no experience of coastal convoy work, learnt a good deal from it. The Mediterranean lecture, in drawing its lessons from the past, included a brilliant graphical display of the close relationship between the Royal Air Force fighter strength in Malta, the proportion of Rommel's supplies that failed to reach him by the trans-Mediterranean sea route. and the progress of the Army in the Western Desert. These graphs are reproduced here and merit study by everyone; they point the lesson that Malta. as an operating base for forces of all types was an essential pre-requisite of victory in the Western Desert.

MATÉRIEL.

Having left an impression—rather a vague one in some ways—of our needs for the future in people's minds, the next lecture by the Controller gave the audience an inkling of what we are up against from the matériel point of view in bringing the Fleet up to date both in terms of numbers of units and modernization of equipment. I confess to having been rather stunned by the mass of statistics in this lecture, but the essential point, which was most eloquently made, was that there is no reason why the Navy's needs should not be met without disturbing the nation's economic recovery as far as materials and industrial man-power are concerned; but the allocation of the necessary money will without doubt be the limiting factor. The lecturer ended on a note of : " well, there's the problem and it is up to the Naval Staff to tell me how they would like the money spent that we have got."

"THE FLEET-SOME RELEVANT FACTS."

There followed a most intriguing lecture under the presumably intentionally non-committal title of "The Fleet—some relevant facts." The lecturer began by analysing graphically last year's Navy Estimates. Navy Estimates in the printed White Paper form are of value to check a point of detail; but they are not easy to digest as a whole and almost impossible to draw deductions from. Put graphically in the way the lecturer did showed the proportion of the whole which is "irreducible" and how the remainder is divided up between "running-costs" and "re-equipping" (including of course stock-piling). As a side issue he also showed the proportion of personnel ashore and afloat. He then compared this with a similar break-down of the 1938 Estimates which showed the increase in the running costs and the greater proportion of the personnel that are ashore at the present time; which, be it noted, is by no means

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all attributable to taking over naval aviation from the Royal Air Force in 1937. Then, after a partial examination of the current Navy Estimates, he made his main point: that we are spending too much on running costs and not enough on material re-equipment, and that with the present numbers of officers and men and with the Estimates at their present figure, we shall never be able to afford the scale of re-equipment the Controller's lecture showed to be necessary, nor shall we ever be able substantially to increase the proportion of the personnel afloat. He wound up on a note of : "it is clear that something must be done to correct this state of affairs. There are many solutions; here for argument's sake is one," and he then proceeded to show what could be done with the present money if the personnel were drastically reduced in numbers. As a side issue he pointed out that the Headquarters Staff (Admiralty and related establishments) has increased to approximately two-and-a-half times its 1938 figure.¹ In the discussion this led to an attack on the growth of the Secretariat; not, oddly enough, by a naval officer, but by a member of the Royal Corps of Naval Contructors who made the point that the design departments have scarcely grown at all since 1938. (The Civil Engineer-in-Chief's Department is actually smaller than in 1938).

MOBILIZATION.

The last lecture in Part I was by the Second Sea Lord on how mobilization will be carried out in the future and the sources from which our Reserves will be drawn. Interesting, but on the whole not productive of many discussion points.

REMARKS ON PART I.

A criticism that was levelled at the lectures in Part I by several people was that they were not all necessary for the education of the audience and that the time might have been better spent. I do not think this criticism can be upheld. Of course there are members of an audience of this nature who know all about, for instance, the strategic distribution of oil; but there are many who do not, and the case for omitting any particular lecture would only be made if it could be claimed that it was common knowledge to the vast majority of the audience.

An interesting criticism from one or two of the non-naval members was to the effect that the Navy must be unsure of itself if it finds it necessary to emphasize the importance of sea power. Possibly a valid comment, but the country as a whole does little to show that it appreciates that in both this century's world wars sea power was the vital foundation which alone permitted offensive operations to be carried out in any theatre of war. Maritime power would perhaps be a better term than sea power.

The discussions on the Part I lectures were like the curate's egg. Some excellent points were made and many interesting facts came to light; but, on the other hand, some fearful red herrings were trailed across the proceedings and more than one speaker would have contributed more by saying nothing.

PART II.

TACTICAL AND STRATEGICAL OPERATIONS IN THE FUTURE.

Part II, which occupied the next day and a half, concerned itself with demonstrating strategical and tactical operations in the future, woven for continuity's sake into a hypothetical setting. Since this hypothetical setting had

¹ 1938–3,859. 1948–10,000.

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of necessity to keep clear of war plans and yet bear critical scrutiny, the task of the Directing Officer cannot have been light.

The presentation of this part consisted of a series of Joint Planning conferences and meetings at an Area Combined Headquarters interspersed with demonstrations and lectures portraying attacks on convoys of the future, carrier operations, a Royal Marine Commando raid, an attack by midget submarines, an attack by coastal forces on a coastal convoy and methods by which the Navy can give direct and indirect support to the Army. Each conference and demonstration had some new surprise or twist, and humour was not lacking; so that by the end of Part II the audience had reached the frame of mind of being prepared for almost anything to happen.

JOINT PLANNING CONFERENCES.

A detailed description of this part would cover pages, so I intend mentioning a few points only. Firstly the Joint Planning conferences and Area Combined Headquarters meetings. A deep debt of gratitude must be paid to Captain Anthony Kimmins for his work on these. Voluntarily and gratuitously he found the time from his other multifarious activities to edit and polish up the original scripts of these items into their final form, and the rehearsals were carried out under his personal supervision. A further debt of gratitude is owing to certain amateur naval officer actors at the Admiralty who were not part of the TRIDENT staff and who gave up much of their spare time to take part in these items.

It was generally agreed that the points in these conferences were well put over and, further, that the presentation approximated very closely to the real thing. There was no over-simplification of the procedure, as is so often the case, and which so frequently strikes a false note with those who have taken part in actual meetings of the type being portrayed. It must be recorded, however, that the audience on occasions laughed at the most unexpected places !

DEMONSTRATIONS.

Secondly the demonstrations, where again certain serving officers with experience in producing amateur theatricals most generously gave some of their spare time to polishing these up. I think the palm must be awarded to the Tactical School for their portrayal of a submarine attack on a convoy in the future. The stage technique was first class, and the presentation so slick that one was wafted from the bridge of the senior officer of the escort to the pilots' cockpit of a flying boat and thence to an Admiralty desk in a matter of seconds by the manipulation of a few lights and with the aid of some simple stage properties and noises "off." This demonstration also scored one of the big laughs when the yeoman of signals reported to the captain, directly after two ships had been torpedoed, that the Admiralty had made a signal appreciating that a submarine might be in contact with the convoy. Poor old Admiralty ! But how true to life !

My praise of the Tactical School must not be taken to imply that the other items were not good. They were very good indeed; but they did not set themselves such a difficult target and so did not risk so much had they not achieved it.

Flag Officer, Air's high light on the subject of an air attack on a convoy was his peroration in a lecture ostensibly being given to the Staff College in the future describing the action. He said in effect: "Had we possessed or been fitted with the following devices the results would have been more in our favour.

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But we were not. And yet the necessary knowledge was available about all of them in 1949 and only the necessary money and scientific effort was lacking." A sombre thought.

CARRIER OPERATIONS.

Carrier operations of the future were described by a lecture—but a lecture with a difference. Two short interludes were introduced into it with the object of stressing certain points. Both were in a light vein and the second was brought in and acted so naturally that it took a few seconds to appreciate that it was not an unrehearsed episode. The effect of these two interludes was to focus the audience's attention even more closely on one of the most important items in the whole of TRIDENT.

COMMANDO RAID.

The Royal Marine Commando raid was staged in a very straightforward way and used an excellent floor relief map. There was no outstanding point in it, but the method of portrayal was probably the clearest of all the demonstrations, and Captain Kimmins said that, purely from the point of view of a producer, he considered it the best of the demonstrations.

MIDGET SUBMARINES.

The midget submarine attack took the form of a "de-briefing" meeting on their return to harbour, embellished by good hand-drawn lantern slides and a variety of outside effects such as a diver in his working dress and "tele-vision" pictures.

NAVAL SUPPORT FOR THE ARMY.

There followed a short lecture by an Army officer on ways in which the Navy can support the Army when the latter is operating with a flank on the sea. By contrast with the demonstrations which it came in the middle of, this was a weak item and, in addition, more than one Army officer in the audience said that he thought the subject matter was indifferent. A pity, since TRIDENT as a whole lacked matter of interest to the Army.

METHODS OF ATTACK ON COASTAL CONVOYS.

The last item in Part II consisted of a series of short demonstrations, woven together by a *compère*, to illustrate methods by which enemy coastal convoys supplying his land and air forces when operating near the sea could be attacked. A pack attack by submarines was described by a narrator with the aid of a floor map and team of young submarine officers acting the parts of the control team in the senior officer's boat. The latter were dressed in submarine sweaters but had no stage properties whatsoever and only acted the motions they would in reality have carried out with, of course, appropriate dialogue. This was a brilliant piece of acting; but curiously enough it was much criticized by the Americans in the audience on the score that we should have gone the whole hog and constructed the submarine's control room on the stage. Rather a typical American comment; they were not impressed by the acting as acting, only if it took place on a stage set which looked like the real thing. The same reasoning that classes an American film as good if it costs a million dollars, but a British one which only cost a hundred thousand as poor irrespective of its appeal. I replied to this effect to one group who tackled me over a drink and it obviously got under their skins; but I did not press the point as in other respects they were so terribly enthusiastic.

The coastal forces attack, also part of this item, was shown by a ten-minute film which was a good example of the technique used in instructional films at its

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best. Much use was made of models, and the result was a clear demonstration of the method of conducting a coastal force attack with concise explanations where essential.

DISCUSSIONS ON PART II.

The discussions on Part II were, to put it bluntly, disappointing. It is true there were interesting discussions on tactical matters and on several points of comparative detail, and many valuable personal experiences were recounted; but-and it is a big but-nobody really criticized or remarked on the hypothetical setting as a whole. True, it was known to be hypothetical and not a war plan, but it was advanced as a feasible strategical undertaking and yet nobody rose to their feet and said they thought it possible, impossible or even frankly rubbish. This almost complete absence of criticism by any senior officer was very much commented on by some of the deeper thinkers among the more junior officers present; several talked about it at the time and have written about it since. One explanation suggested was that the showmanship was so good and the presentation so polished that the audience were numbed into a state of mind not conducive to serious discussion. I cannot believe this ; it is tantamount to saying that if members of the audience attend meetings there is a risk that they may be overwhelmed by inspired oratory. I have yet to meet a senior naval officer who shows signs of any such defect. Be that as it may, however, the discussions were disappointing and their standard scarcely lends support to another criticism made by some officers that the time allowed for discussions was inadequate.

PART III.

SCIENTIFIC PROGRESS.

The last half day was taken up by Part III which covered scientific progress in the future. The reference book which was issued to each member of the audience in advance contained the following gem of a quotation at the head of this part :---

" Il y a trois manières de se ruiner, disait le grand Rothschild : le jeu, les femmes et les scientistes. Les deux premières sont plus agréables, mais la dernière est plus sûre."

a quotation evidently unknown to the scientific world in general since Sir Henry Tizard, who is a bit of a collector of quotations, asked where it came from !

The first item was a discussion on progress in ship construction and marine engine design between the Director of Naval Construction and the Engineerin-Chief of the Fleet with the Deputy Controller in the chair. It included a large amount of most interesting matter, but like so many discussions on technical matters did not really "get across" to a predominantly non-technical audience, partly I fear owing to the indifferent delivery of the speakers. Rather unfortunate as there were many important points made.

The next two lectures by Dr. Carroll—the Deputy Controller (Research and Development) and Mr. Brundrett—the Chief of the Royal Naval Scientific Service —gave between them a rapid survey of where science is leading us in all fields (except one) in the future. The time allowed was too short, and I cannot help feeling that so much ground was covered at such a rapid pace that many of the audience's brains must have been in a whirl at the end. There were, however, one or two very good remarks in the lectures. Dr. Carroll, to emphasize that the scientist often approaches problems from an unexpected angle, pointed out that the recognized way of sinking a ship is to make a hole in her and let the water in, but that it would be equally effective to alter the density of the water

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surrounding her so that it would not support her, and that this could be done on a laboratory scale. Mr. Brundrett referred to the need for a more elegant solution to the anti-aircraft gunnery problem than to attempt to fill the space between the gun and the aircraft with metal.

The exception I mentioned above was the atomic field, and this was ably dealt with in a special short lecture by Dr. Penny, a scientist who works in this field for the Ministry of Supply.

EFFECT ON MARITIME WARFARE OF ATOMIC WEAPONS.

Part III then wound up with two quite outstanding lectures. The first, a most provocative one which left many of the audience rather startled, was on the effect on maritime warfare of atomic weapons. The lecturer started by saying that he only voiced his own opinions and then tore to shreds many of the stock arguments commonly heard about this subject. His ending is worth quoting. Having delivered his shattering series of pronouncements he said (not verbatim) :—

"Many of you may think this is wishful thinking on the part of an officer prematurely entering his second childhood. May I say that there is no such thing as wishful thinking. It is a term invented by the unimaginative to curb initiative. What I am advocating is dynamic thinking."

The importance of his remarks to the naval officer were that he showed it was quite probable that atomic weapons may once more make naval forces the country's primary means of offence.

CO-OPERATION BETWEEN THE SAILOR AND THE SCIENTIST.

The last lecture of all was on co-operation between the sailor and the scientist. Very well delivered by the Naval Member of the Defence Research Policy Staff in an exceedingly witty fashion, it drew attention to the short-comings and foibles of both parties and indicated how they can better get together and help one another.

DISCUSSIONS ON PART III.

Oddly enough the discussions on this part, which one might have expected would not be particularly good in view of what had gone before, were of a high standard and a great deal of interest came out. Unfortunately they cannot be commented on in these pages for security reasons. The last discussion in this part wound up with very complimentary remarks by the Commander-in-Chief, Portsmouth, and the senior American officer present, on the arrangements and amenities during the Exercise.

After dinner on this last day Sir Henry Tizard, the scientific adviser to the Minister of Defence, summed up the scientific aspects of the Exercise as a whole. His talk was in his usual amusing style, but I regret to say was rather unsuitable in some respects, and being somewhat out of phase with his audience's mood struck a rather discordant note. Also it did not confine itself to the scientific aspects.

Finally the First Sea Lord summed up the four days' work in a few very much to the point remarks. I could wish he had more opportunities to address the bulk of the senior officers of the Navy; it was clearly such a unique chance to make certain points that he wanted to—and did—leave with them.

AMERICAN COMMENT.

At this point I want to mention the general American comment on the Exercise as a whole. While paying tribute to the production and the general

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running of the Exercise they felt it did not study any particular problem. Several of us tried patiently to explain that it was not meant to, that it was intended to be a general survey of the shape of things to come. They would not accept this, however; to their way of thinking an Exercise of this type should consist of a detailed examination of a specific problem from every aspect. To be honest I must add that one of them did say: "but we could not run one in America. What would happen would be an admiral would be nominated and he would collect four captains who would get sixteen commanders and the whole lot would argue and achieve nothing."

OTHER ITEMS OF IMPORTANCE.

I have intentionally omitted from the above account one or two items which were outside the main run of the proceedings.

On the first day Field Marshal Montgomery gave a short talk before dinner on the aims and objects of the Western Union forces. There is no need to remark on his effectiveness as a speaker, and this talk was no exception to his usual high standard. He came, however, under rather hot fire in the short discussion which followed.

His visit had been timed to precede the official dinner he was attending, to which the Army Council, Air Council and some Ministers were invited in order to meet Their Royal Highnesses the Dukes of Gloucester and Edinburgh. This dinner showed the Painted Hall at its best, and its aftermath was so cheerful that I feared for the wakefulness of some of the audience next day !

On the third evening, that is in the middle of Part II of the Exercise, a short play by Commander Stephen King-Hall was staged. This play was specially written by him for Exercise TRIDENT to voice a certain point of view, and was brilliantly acted by members of the B.B.C. repertory companymembers whose names are well-known and who gave their services voluntarily. To my mind one of the most interesting things about this play, which was easy to compare with the Joint Planning and Area Combined Headquarter conferences which had been staged a few hours before, was the enormous gulf between the performance of the amateur naval actors, however experienced, and the professionals. The latter were in an entirely different class. My other criticism, and I make it with all due diffidence, is that the points in the play were made too crudely and blatantly. They would have been far more telling if they had been put over with subtlety and by inference. The stiletto is often more effective with educated people than the brickbat. It is easy to be carping, however, and it was a first class entertainment most generously contributed by Commander King-Hall and the B.B.C. actors and actresses on top of all their normal work.

I must also mention the three very amusing "flashes" which were inserted to remind the audience of the need for security. They were all ridiculous and designed to get a quick laugh, and all centred round a mysterious bearded foreign agent who apparently obtained access to the stage with the utmost ease, but they served their purpose and were worthy of their place in the programme.

EXHIBITION.

No description of TRIDENT would be complete without a word on the exhibition. This was staged in a series of class rooms in King Charles block and covered every form of maritime activity in the future. The models (many of them working ones), displays and diagrams were quite excellent, and one could have spent hours looking at them had the programme permitted. The interest

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of the exhibition was heightened by technical officers being present at the stands who took a delight in explaining and demonstrating their equipment. Great credit is due to the organizers and to all those unnamed officers and men who must have put in hours of work making the exhibits, and I hope it is some recompense to them to know that during the three weeks the exhibition was open (during the two sessions and the intervening week) nearly two thousand persons visited it.

Now a word of praise for the many people who helped to make TRIDENT the success it was. The Royal Naval College authorities and the TRIDENT naval staff go without saying, but special mention is perhaps allowable of the three W.R.N.S. officers and one electrical officer who did all the scene shifting and lighting effects under the naval stage manager. There were also large numbers of officers and civilians at the Admiralty and elsewhere who did a great deal of work in providing information and in making diagrams and lantern slides. On a different plane there were establishments like the Royal Air Force Photographic establishment at Medenham and the Royal Naval School of Photography at Ford who made models, and of course all the outside authorities who wrote and produced the demonstrations.

VALOR.

NOTE.—I hope to be able to include some comments on the Exercise from the Royal Air Force point of view in the November issue.—Hon. EDITOR.

ULTIMATUM.

THIS is the story of the *Ultimatum*. It is an account of a very ordinary commission, but it is the story of a submarine that never missed her target. And there are very few, other than those who were serving in submarines in the Mediterranean in 1943 and 1944, who have ever heard of the *Ultimatum*.

The Ultimatum was originally the P34, which had had a successful commission with the famous 10th Submarine Flotilla in the Mediterranean. Whilst the P34 was afterwards undergoing a refit at Devonport, submarines which had been built during the war and had only been called by their pendant numbers were given names, and the P34 became the Ultimatum.

Even the refit had its excitements. Bombs were still falling on Plymouth, and one night a near miss blew in the front of the Continental Hotel, where the officers were living. The refit was followed by a strenuous working-up programme in the Clyde, where the *Forth* acted as depot ship for the 3rd Submarine Flotilla and working-up submarines. The working-up programme was planned so that not a moment was wasted, and after a sea-going inspection by Commander (S/M), she was packed off without delay to a working-up patrol in the comparative safety and inactivity of the North Sea. The *Ultimatum* had an uneventful first patrol but suffered considerably, as did other submarines out at the time, by some of the worst weather of the year.

Her main motors had been giving trouble ever since they were flooded as a result of a very heavy depth charge attack during her first commission, and after the heavy buffeting she received on this first patrol she had to go into dock at Newcastle to have one of her main motors renewed, when the opportunity was taken to put right all the defects which had occurred since her refit, and which were very numerous.

Finally, in August, 1943, after calling at Blyth, where the submarine training school had moved from Fort Blockhouse for the duration of the war, and after spending four exacting days in the Clyde re-working-up and passing out again, she sailed for the Mediterranean, carrying out an anti-U-boat patrol in the Bay of Biscay on the way. This was boring and uneventful. Nothing was sighted. After about a week she moved on to Gibraltar. One night while off the coast of Portugal, the *Ultimatum* was suddenly exposed by a "Leigh-light" Wellington. She dived hurriedly, but even before the O.O.W. had left the bridge the aircraft had roared overhead. No bombs were dropped. After a few minutes the *Ultimatum* gingerly stuck up her radar mast. The aircraft was still milling about, but eventually it flew away and the *Ultimatum* surfaced and continued on to Gibraltar, shortly afterwards picking up a British aircraft report of a U-boat which had been sighted but not bombed. The position given was sixty miles from the *Ultimatum*, the course 180° different and the description quite unlike her; but the time of the attack was the same.

After surfacing on the last evening before arrival at Gibraltar the Italian armistice was announced on the news. It seemed as though the *Ultimatum* had arrived too late—there would be nothing doing in the Mediterranean now, where the war was over; but, although submarine activity considerably decreased from now on owing to the ever increasing scarcity of targets, the war continued. In Gibraltar, the Ultimatum's officers met the crew of the Wellington bomber who had sighted them on patrol, as was by this time proved. The captain of the Ultimatum went out on an anti-U-boat patrol in a "Leigh-Light" Wellington and was most impressed at the range at which they picked up small objects by radar and the skill at which they closed and attacked. In the case of the Ultimatum, the captain of the aircraft, who had been warned of the presence of a British submarine, hesitated to drop any bombs, although his position, according to his reckoning, was sixty miles from that of the British submarine, because he thought it might be possible that one or the other was out of position. The Ultimatum was very glad that he did.

After a few days at Gibraltar, the submarine left on her next patrol to the Marseilles-Toulon area, being operated by Captain (S/M), Fifth Submarine Flotilla, based in the Maidstone at Algiers. Life generally in this area was pleasant and quiet. The weather was delightful. During the day, the Ultimatum closed to about four miles off the coast, and during the night opened out to about ten miles to surface, charge her batteries and keep a sharp look-out for any ship trying to slip past in the dark. There were a number of German U-boats still using Toulon as a base, and it was the hope and aim of every British submarine in this area that one day they would sight and sink a German U-boat as, indeed, several had done already. On one occasion one British submarine sighted no less than three on one day and certainly sank one of them. One feature of this neighbourhood, however, was the almost complete absence of any activity at sea by the enemy; but after a week or so the Ultimatum was rewarded one afternoon by the sight of a "convoy." Not a convoy by Western Approaches standards, but a tug towing several barges escorted by seven small craft, presumably anti-submarine vessels. The Ultimatum approached to a close range because the captain reckoned that he could spread his torpedoes along the string of barges and sink more than one. 'Eventually came the order, "Fire one" and the first torpedo of the commission was fired. As the order "Fire two" was given, there was a very big explosion that upset the submarine, causing her to dive at a steep angle and bury herself in soft mud about two hundred feet below the surface. There seemed little else to do but to stop everything and stay put. Nothing could be heard on the asdics, and of course, as always on these occasions, all the crew had stinking colds, and coughs and sneezes shattered the silence of the ocean bed and frayed the nerves of those who listened and waited. At about midnight, when nothing more had been heard, it was decided to surface. It had not been realized how far the Ultimatum was stuck in the mud; but, after having blown a large amount of air into the main ballast tanks, she broke free with a squelching sound. There followed a rather topsy-turvy existence while she regained trim and headed, submerged, for the open sea. Once clear of the land she surfaced. There was nobody about. For the remainder of the patrol no more targets were sighted. On return to the Maidstone at Algiers it was learnt that the target had been a string of ammunition barges being taken from Marseilles to somewhere along the coast. From the analysis it was realized that the first torpedo was fired at about 300 yards range !--which explained the large explosion which followed. Several of the barges sank and also the tug towing them.

The *Ultimatum* went into dry dock at Algiers for a few days to make good the defects caused by the explosion. It was a full-time job in dock to keep inquisitive Arabs away. Some days earlier an inquisitive Arab looked down a torpedo tube just as the T.I., who only a few seconds before had made sure that all was clear, was testing the bow caps. The Arab was neatly decapitated. The next patrol was again off Toulon. The submarine was now becoming quite familiar with the scenery. After a few days a small merchant ship was sighted and attacked. The ship was sunk. Four torpedoes were fired at her and the attack was such that it might have been a demonstration carried out in the attack teacher at Fort Blockhouse. When reloading, one of the torpedo tubes was found to be defective, so only three torpedoes could be loaded.

The Maidstone was due to leave Algiers shortly and move eastwards to Alexandria and subsequently to the Far East. The Ultimatum was going to call at Algiers at the conclusion of the patrol before proceeding to Malta to join up with the 10th Submarine Flotilla based on Manoel Island. She knew, therefore, that her days off Toulon were numbered and she dearly hoped to sight a U-boat before she left. To this end she always closed in as far as possible to Toulon harbour and dived early while still dark, then running in still closer submerged to be off the harbour entrance at the crack of dawn, as this was the hour that the German U-boats entered. On her last morning on patrol, as it grew light, the asdic operator picked up H.E. which sounded like diesel. The crew waited anxiously as the captain had a good look. He did not like to commit himself until quite sure, but it was a U-boat! It seemed too good to be true. Three torpedoes were fired when the German crew must have been falling in for entering harbour. The Ultimatum waited an interminable time for the explosion of the torpedoes hitting and she had given up hope when there was a bang. Excitedly the captain had a look and the U-boat had disappeared. The Ultimatum's hopes had been realized. She had got her U-boat. But, at the same time, it was appreciated that it was not absolutely certain. A torpedo might be exploded prematurely and the U-boat dived in alarm, but unhurt. The necessity for closing in submerged in the dark towards the harbour entrance under the shadow of the lighthouse on the promontory was appreciated too. The range on firing, determined by the interval between the moment of firing and the sound of the explosion, was 6,000 yards-and only three torpedoes-it was good shooting ! The snag had been that the U-boats threaded their way behind the islands and through the minefields, and it was very difficult to get close enough to have a pot at them before they slipped through the harbour entrance. That night the Ultimatum left her patrol with one torpedo remaining. At Algiers they were unable to confirm that the U-boat had been sunk, which was a bitter disappointment, but at the same time they were unable to confirm that it had not been sunk, which often happened. So it was recorded as a " probable."

The Ultimatum sailed for Malta in a convoy and arrived to join the 10th Flotilla at the beginning of December. There was something about the 10th Flotilla which no other flotilla possessed. I cannot describe it. But it was an influence kept alive by the spirits of Wanklyn and Tomkinson and others who haunted the vaults and corridors of Fort Manoel and later joined the Flotilla at Maddelena when it moved there. While at Malta the other main motor, which had ever been giving trouble, threw its hand in, and the Ultimatum was destined to spend six weeks in the dockyard having another main motor fitted. This fate was accepted with mixed feelings. On one hand there was the chagrin of being delayed before getting a chance to have a shot at another U-boat ; but on the other hand there was the prospect of spending Christmas and the New Year in the flesh-pots of Valletta and Sliema, where a few amenities were just beginning to trickle back after the siege rations. Beer came on the market again before Christmas, but eggs were still 1s. 6d. each. The 10th Flotilla was transferred to Maddelena, an ex-Italian base in Sardinia. This was immediately referred to as the "Scapa of the Med."—for indeed its barren appearance suggested the bleak hills and rugged rocks of that unfriendly anchorage. The only visible difference was the absence of sheep.

So the Ultimatum was glad to leave Malta early in the New Year to join the 1st Flotilla at Beirut, a land flowing with milk and honey. The extravagance of this base was truly amazing after the austerity at Malta. On the way, the Ultimatum carried out an uneventful patrol in the Aegean, where she sank a caique or two by gunfire. After a few days theoretical rest at Beirut, she was soon off again to the Aegean, to hunt the elusive Hun.

The Aegean was protected at either end by large minefields, but these did not keep out the submarines, who merely passed underneath harmlessly at 200 feet. On the first night in the patrol area the *Ultimatum* made out a convoy nine or ten miles away in the bright moonlight. There were several enemy destroyers. While intent on trying to make out which way they were going an aircraft dived on her and dropped a flare. She immediately submerged and watched as best she could through the periscope. From below the convoy was a mass of confused H.E. on the asdics and no information could be obtained. Up above aircraft were dropping flares everywhere and it seemed wise to stay submerged. On return to Beirut it was learnt that those aircraft were British and were attacking the convoy. It was a pity that the *Ultimatum* had not known this at the time.

The 1st Flotilla moved its base from Beirut to Malta, where it replaced the 10th Flotilla, but the *Ultimatum's* crew continued their stay at Beirut, finding their own accommodation and managing to get a day or two free to go ski-ing in the mountains, about an hour's run in a lorry. On finally leaving Beirut she had to go to Port Said to dock in order to change the propellers which, for some reason, made a whistling sound when revolving slowly. Although it wasn't really a loud noise it seemed as though all the world could hear it when there was an enemy destroyer overhead, and the remedy was new propellers. No time was wasted at Port Said, and the Ultimatum had undocked in 48 hours and left for a patrol in the northern Aegean. After waiting a week in a strategical channel without even seeing a fishing boat, she began the journey back to Malta. On the first night a dark object was sighted and approached, and the guns stood by ready for action. After the first round was fired the order was given to go full astern and to cease firing to avoid running down a small Greek fishing boat which was the target! With a little manoeuvring the submarine came alongside, gazing amused at three gabbling Greeks terrified out of their wits and their faces all black from the smoke of the shell which had gone through their sail and brought down their mast. The boat was loaded with drums of oil and potatoes. The drums of oil were holed and tipped overboard and the three men allowed to proceed. Try as the Ultimatum might she could not find the enemy, and nothing more was sighted all the way home.

All was bustle and re-construction at Manoel Island. Social life had expanded proportionately with the advent of the Wrens in the George Cross Island. Ten days passed all too quickly, and the *Ultimatum* was back in the Aegean. For over a fortnight she prowled up and down along the north coast of Crete where Heraklion and Suda Bay were two focal points for enemy shipping, and the Germans had to keep their garrisons in Crete supplied by sea. These garrisons were costly to maintain, as the Germans sent a small supply ship of about 2,000 tons each time escorted by four destroyers. Asdic conditions were perfect at this time of year in this area and the few submarines who were lucky enough to sight these convoys invariably were detected by the escort and severely depth-charged before they had even attacked. But the *Ultimatum* had

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to content herself with attacking and sinking a few caiques by gunfire. At Suda Bay the shore batteries were quick on the trigger and would open fire on a submarine which surfaced within range in under four minutes. Even so, it was not difficult to surface close to a caique, sink it with a few well-aimed shots, and dive again just as the shore batteries opened up. The Greek crews always abandoned ship into a little dinghy they had ready for the purpose and pulled madly away when they saw a submarine surfacing, and as these caiques were being used to supply the German garrisons they were fair game. But even they weren't plentiful, and the *Ultimatum* returned from her patrol to Malta once more without having fired a torpedo.

There followed another short spell at Malta before doing the last patrol with the 1st Flotilla, not without regret for targets were precious few and the 10th Flotilla were having a more lively time on the Riviera. For a change the Ultimatum prowled around outside the Aegean. One night a signal was received to say that there was a German U-boat somewhere in the vicinity and spirits ran high when a dark object was sighted. Chasing U-boats on the surface in the dark is a tricky business, and as there was a good moon the Ultimatum dived. The asdic operator reported that the H.E. was diesel, but could not be sure if it was submarine diesel. The captain could not make the target out through the periscope, so it was decided to surface. If it was a U-boat the torpedoes, which were all ready, would be fired. If it was a motor vessel, the gun would be used. There was a groan of disappointment when, a few moments after surfacing, the gun's crew were ordered to close up. A few rounds were fired, but, as on a previous occasion, the Ultimatum had to go astern to avoid running down her target, which proved to be a small motor caique, but too big to let go. Two Greeks were taken on board. They reported that the captain had fallen or jumped overboard when the first round, which brought down the mast, landed. He was not to be found. The vessel was sunk by throwing fused 11 lb. charges onboard. The Greeks were not perturbed by their experience and seemed glad to have joined the other side. One of them had very useful information as regards to position of the minefields, which coincided, more or less, with the information about minefields which the Ultimatum already possessed. One fine morning a very close examination of a little harbour revealed a number of boats being built, and it was decided that a bombardment would be well worth while. The plan was to go as close as possible, turn round, then surface and blaze away while retiring. If there was any retaliation, a very small target would be presented, besides ensuring that there was enough depth of water should it be necessary to dive. Ammunition and supply parties were all organized and ready and the Ultimatum approached whilst the captain examined everything through the periscope. Suddenly there was a gentle lurch as the Ultimatum ran aground. The motors were stopped and she sank a few feet, leaving the periscope a few feet below the surface when it was right up. As everything was ready for surfacing, the simple thing to do was to surface, turn round and open fire. However, by careful trimming, the Ultimatum was brought off the bottom and turned round submerged and then surfaced. There was no opposition, and after a bit she turned round again because the range was too great, and for another ten minutes blazed away destroying the shipyard, while all the time a little sailing vessel continued sailing unconcerned into harbour with shells whistling past a few feet overhead. It was estimated that about ten completed or partially completed caiques were destroyed, which was certainly the Ultimatum's biggest bag in the Aegean to date. The Greeks onboard her enthusiastically joined in the chain passing ammunition, and the first lieutenant kept flooding a little water in to compensate for the weight of ammunition expended as the water was so shallow that it was necessary to have a very accurate trim on. Finally after over a hundred rounds had been fired, the *Ultimatum* dived and cleared out of the area in case the Germans brought up any unwelcome opposition.

She now entered the Aegean once more and returned to her old billet off Suda Bay where a hospital ship was sighted at anchor. News came that a convoy had left the Piraeus bound for Crete. This was what the Ultimatum was waiting for, and it seemed that it had arrived when, just before she was due to dive at dawn, she sighted two vessels. There was a bright moon and the first streaks of dawn were stealing across the sky, so it was decided to attack submerged, especially as the two vessels could both be heard " pinging." As the Ultimatum dived, the captain saw one of them turn towards as though she had sighted the submarine, which she probably had. The Ultimatum hurried down to 80 feet and then straightened out and slowed up to listen. As she did so, the first pattern exploded, all the lights went out and broken glass tinkled everywhere. Emergency lights and luminous paint gave enough light for the time being, however. Both shallow depth gauges were hopelessly out and the captain's attention was called to the deep depth gauge which showed that the submarine was past the 250-feet mark and rapidly sinking, although on an even keel. A swift survey of damage to important machinery indicated that only the after pump was out of action. Meanwhile, the forward pump was pumping for all its worth. Soon the Ultimatum passed 300 feet, considered the normal safe depth, and when the depth went off the depth gauge, which only registered up to 350 feet, the Ultimatum speeded up and pulled out of her power dive at something like 400 feet and climbed back to 300 feet, but she was still very heavy and the one pump was pumping away as fast as it could. Both the attacking vessels, which were now recognized as German J-boats, could be clearly heard transmitting, and they had the *Ultimatum* very firmly in contact. The latter followed the attackers' movements closely and took what evading action she could. About half an hour later the second pattern was dropped. even closer than the first. Clouds of smoke poured out of the motor room, where the canvas insulation overhead had been set on fire by a short circuit, but the fire was easily extinguished by the L.T.O. and the main fuses remained A little while later another pattern came down, even closer still, it intact. seemed, and the helmsman frantically chased the course which steadied 90° different from the course he had been steering. Examination of the gyro revealed that it was still intact, so presumably the *Ultimatum* had been turned through a right angle by the explosion. After yet another very near miss, both the asdics and the gyro were still intact, which were always the first concern, but it seemed only a question of time before either the main motors, the one pump still pumping, or the telemotor system threw its hand in. The enemy up top had the submarine well in their grip, and nothing that the Ultimatum did eluded them. There was small comfort in the knowledge that these J-boats did not carry many depth charges, but when the asdic operator reported another frequency transmitting up top, spirits sank lower, for that meant reinforcements. Then the asdic operator reported that he could not hear anything up top. He trained the set dead aft. Yes, he could hear the Ultimatum's own H.E.-the set was still working ! It would not be very long before the attackers would be back. The Ultimatum had at last got a trim. After two hours of silence from the enemy, the captain decided to have a look, so the Ultimatum slowly came up to periscope depth and cautiously, very cautiously, the captain raised the periscope. He gave a hurried look round in low power and a slower search in high power. It was a lovely day with the sea's surface rippled by a gentle breeze.

There was no one in sight. The land, under the shadow of which she had dived so hurriedly that morning, was now just visible in the distance. Course was altered back to Suda Bay, where the Ultimatum arrived later that afternoon. The hospital ship weighed anchor and was watched as she moved slowly out of harbour and headed eastwards along the coast. The crew never enjoyed surfacing so much as that evening, and the recall was received to return to Malta where the submarine had to go into dock to repair the damage done by the depth charges. In some places the pressure hull had been stove in and the frames stuck out like the ribs in the belly of a starved horse. Soon, however, the Ultimatum left Malta and joined up with a convoy going west for the first stage of her journey to Maddelena to re-join the 10th Flotilla. When she was due to leave the convoy and proceed northwards an unfortunate German U-boat was detected by British U-boat striking forces, and so the *Ultimatum* was diverted to Bone. where she spent forty-eight hours in order to keep clear of the U-boat hunt. The war had moved on from North Africa and there was only a skeleton naval staff left in Bone, where the harbour showed signs of the intensive bombing to which it had been subjected.

The great advantage of Maddelena was that it was only 36 hours steaming from the patrol areas, and as soon as the Ultimatum had arrived she was off to her old billet in the Toulon area. The eastern part of the Riviera was patrolled. by coastal craft, also based at Maddelena, and the western part by submarines, and for six months no German vessel had got through. There was a little more activity here than in the Aegean, and the asdic conditions were not so good, while enemy counter action was of little consequence. On her next patrol, the Ultimatum saw nothing but the Toulon escort force consisting of a destroyer. rather like a Hunt class, and an anti-submarine trawler. These were old friends of the 10th Flotilla and were seen on patrol off Toulon most days. The Ultimatum watched and studied the destroyer, working out its speed and weave, and reckoned that if she fired at 1,000 yards range from the beam she could not miss : accordingly it was decided to attack this destroyer at the next opportunity. The Ultimatum, however, bumped into the party on a dark night with fog patches about, and a few seconds after sighting them fired four torpedoes. As it happened the trawler was the nearer, in fact at just about 1,000 yards. range when it was hit by two torpedoes and vanished. It seemed imprudent to stay on the surface while the destroyer was not very far away, so the Ultimatum dived and heard a few distant depth charges in retaliation. No more targets were sighted, but she did not return from patrol with all her torpedoes on board, as she had done for the past six months.

The Normandy landings had taken place just before the Ultimatum left Malta and it was obvious that it was only a question of time before the Riviera. would be once more in our hands. On her last patrol she explored another area south of Marseilles. Whilst investigating a Spanish trawler one day she lost all control and surfaced to find that she was entangled in the trawl net. The trawler meanwhile had cut its trawl nets and fled. The Ultimatum cut herself free too. Again, the Germans wisely refrained from allowing any shipping out during the day time, but the Ultimatum was lucky enough to sight a party of landing craft one night, probably carrying stores, and she fired a salvo of torpedoes at them and sank more than one.

Most submarines at the end of a commission abroad returned to either Fort Blockhouse or the *Forth*, where a suitable reception was arranged for them, but the *Ultimatum* slipped home through the backdoor—to the *Cyclops*, depot ship for the 7th Flotilla, at Rothesay. But to the crew themselves, glad to be

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home, it was the end of a very happy commission. There had been hardly any changes in the crew ever since she left Newcastle a year before and there had grown up between them that spirit of understanding which can only be achieved in the face of danger and hardships faced together and a job well done. There is no man in the crew of the *Ultimatum* who would say that there has ever been a happier commission.

The U-boat was confirmed some time after the conclusion of the war from German records and the commanding officer was awarded a bar to his Distinguished Service Cross.

KALAPANI.

ROSES IN DECEMBER.

THE late Sir James Barrie in his Rectorial Address at St. Andrews reminded his audience that someone had once said that God gave us memory so that we might have roses in December; and one of the most valued of mine was recalled by "Theodolite's" letter in the May number of THE NAVAL REVIEW, which I much hope may result in an article on the Surveying Service by an expert.

Happening to meet the Hydrographer a few years after World War I, I mentioned that I had once served in a surveying ship; he was much interested and asked if my name appeared on any chart as one of the surveyors; when I assured him that it had that honour he told me I was entitled to a free copy, and next morning there arrived "With the compliments of the Hydrographer of the Navy" a copy of Chart No. 960:

"Tasmania. Approaches to Hobart Including the D'Entrecasteaux Channel and Derwent River."

This was surveyed by the officers of H.M.S. *Dart*, 1886-88, under the command of Lieutenant and Commander Arthur Mostyn Field, who was himself to be Hydrographer in 1904-1909, and who, being short-handed and pressed for time, asked the Commander-in-Chief, Rear-Admiral Sir George Tryon, for the loan of a midshipman from the *Opal*. Our much-loved captain, Arthur Brooke, offered me the chance which I jumped at, and which resulted in three of the most enjoyable if strenuous months I have ever spent, the memory of which is my explanation of the title I have taken for this article.

The Dart was built as a 470-ton steam yacht and bought by the Admiralty for the Surveying Service; schooner rigged, she was a good sailer; and on our way to Sydney, off the Bass Straits, where it blew pretty hard, she was reported to have done 17 knots for a short time with everything set. As a surveying ship, however, there was not much spare accommodation, and I slept, accordingly, in a bunk right aft in the captain's day cabin, my chest was stowed in a sort of gallery in the engine room, and I was made an honorary member of any cabin whose occupant first vacated it for my bath and dressing.

The daily routine required that, having had our breakfasts, we should be in our boats, equipped and provisioned for the day and ready for lowering at 6 a.m., returning to the ship wherever she might be about 5 p.m. and often later, the rest of the evening being spent in plotting the day's work, the boats' crews washing clothes, etc.—a pretty full life !

My certificate, at which even now I take a furtive glance, records that I "served as a midshipman in H.M. Surveying Ship *Dart* in January, February and March, 1886," and that I had "conducted myself with sobriety" (I was a teetotaller anyway) and that I had "shown much intelligence, zeal and accuracy in the performance of my surveying duties."

As to the first I can only say with all sincerity and gratitude that such spasmodic intelligence as I may have shown was entirely due to the kindness and patience of the experts who, for the first few days, gave me instruction while on their various expeditions. Zeal permeated the whole ship, and I have always regarded it ever since as one of the two outstanding qualities of the Surveying Service; it was extremely infectious, and I am thankful to think that I was credited with catching some of it, either from experts or boats' crews. The other quality, viz. accuracy, was imparted to me by a more direct method and in a single operation.

Some days after I had been promoted to a boat of my own and, after a longish day's sounding, I was told the captain wished to see me, and I was in great hopes that, like Kim, I had "acquired merit." He had my plotted work before him and, pointing to a needle point "fix," asked why I had written the corresponding sounding at the side of the fix (barely 1/16th inch) instead of on the top of it? I answered that I thought that was near enough, to which he replied : "You must learn, my boy, that nothing is near enough in the Surveying Service except absolute accuracy."

I have never forgotten those words, especially when studying a chart; nor the sequel which, he explained with great kindness, involed the re-plotting of three days' work before I went to bed !

I once showed my chart to a young friend of mine who had never seen one before and who asked me: "What are all those funny little numbers all over the sea?" When I feelingly explained that each was a sounding which had been most accurately measured and fixed by a surveyor in a boat, she seemed to find it almost, if not quite, incredible.

While writing this I was suddenly smitten with the desire to recall one or two technical points which I had forgotten, and eventually succeeded in unearthing an article on Nautical Surveying in the Encyclopedia Britannica, one section of which begins: "There is nothing in a nautical survey which requires more attention that the 'fix'." This seemed to ring a strangely familiar bell, so I turned to the index to see who the writer was, and to my delight found that the initials A.M.F. proved to be none other than those of my captain in the *Dart*. I read it all and it was like having a yarn with an old shipmate.

It is not for a "makee learn" surveyor with only three months' experience and 63-year-old memories to presume to write an article on surveying; for all I know the methods of 1886 may have been revolutionized; there may even be a more scientific method of taking a sounding from a boat than with a lead line; but if there is we shall, as in so many other cases, have lost something. I never spent a happier time and never found the boat-work and sounding tiring or monotonous; neither, from their conversation—of which I enjoyed a varied and instructive assortment—did my boat's crew appear to; in fact it was all part of a most fascinating occupation.

Now and then for a change we would be set to erect white-washed stations along the shore by which positions could be fixed, a most popular diversion since it gave the boat's crew a chance of displaying their architectural gifts, of which they took every advantage.

When I read today about the "incentive" said to lie in high wages and short hours I cannot help feeling there is a snag somewhere; my boat's crew and I did many a happy 12-hour day at about a penny an hour, while the result of three years' patient labours of the *Dart's* expert surveyors, the sole guarantee of a safe right of way into those waters, can, or could, be bought by any shipowner or mariner for four shillings; and I am certain that if my coxswain, a priceless little West Countryman called Nancarrol, had been asked to suggest an incentive to ensure greater output he would have had a fit; if the "Owner," as he was called, wanted greater output he had only to ask for it to get as much as he wanted, for the good of the Service.

This may be idealism, but it certainly worked infinitely better and cost very much less than any substitute incentive I have ever heard of since.

In Admiral Field's article, on the selection of stations for triangulation he speaks of the possible necessity of "clearing densely wooded summits" to obtain a clear view of distant objects; and this recalled what I used to describe as my star performance and responsibility, to such of my rather envious messmates in the *Opal* as I could persuade to listen.

One evening I was told to be ready for a good walk with the captain at daybreak next morning. We accordingly set forth to ascend an extremely densely wooded hill near the coast, called Mount Royal, about 2,000 feet high and feeling more, in search of an old surveyor's mark hidden in the forest at the summit. This we eventually found; it is now indicated on the chart by a small triangle, and consisted of the bare trunk of a tree like an out-size telegraph post about 35 feet high with a large and mossy cairn built round its base. After studying this object for a while the captain gave me my instructions, which were :—

- 1. Completely to de-forest a large area round the cairn and pole.
- 2. To hew a suitable topmast, send it up and lash it to the pole, and then cross a yard on which to bend a large calico sail which could be readily seen from afar.
- 3. When all was ready, to mount my theodolite and a heliograph on a selected spot on the cairn (not beside it !) and then take the required angles, flashing to the other observers who would reciprocate.

I hope this is technically correct; any way it is what I had to do.

Two days later I pioneered about half the ship's company, armed with axes, saws, ropes and blocks, up to the summit of Mount Royal, and after two more days we had effected the necessary clearing. Altogether a most cheerful picnic, the only delays being when the foresters stopped work to applaud the downfall of each and every tree.

For the ascent of the pole the carpenter had devised some long spikes, but these were scorned by "Tom," a native of Fiji—one of three that we carried —who, clasping the pole with his hands, walked up to the top with his bare feet to the delighted applause of his shipmates, taking a heaving line with him by which he could haul up and secure a block for the ascent of the less agile. The rest was comparatively easy, and in due course the topmast went up and the yard was swayed across. When the job was done the summit, seen from afar, looked as if a large square bite had been taken out of the forest, and our topsail shone triumphantly in the middle of it. Finally, on the appointed day, Nancarrol and I carefully set up our instruments and the angles were successfully taken.

To this day I carry a scar on my leg from an axe, due to having fallen off the trunk of a tree from which I was directing operations, but with little damage; the only real damage I ever suffered was from the sun when sounding, and our doctor had to oil my face, neck and arms so copiously that I was told I looked like a wet collision mat and was unfit to be seen in soceity at Hobart for two days, when we went up there for recreation.

I was often told that our work was really surveying *de luxe*, and I can well believe it. We had a practically enclosed and summer sea from one to five

miles wide wherein, while sailing to our beats with a spinner over the stern, most excellent fish called flatheads were to be caught and cooked for luncheon. Further, the north shore was occupied by many fruit gardens supplying the jam factories at Hobart, and their hospitable owners would sometimes bring us tea in the evenings, while at all times we were welcome to pick as much fruit as we liked, and I have often seen the boat's crew returning from a raid with two or three buckets full.

Finally, our brief visits to Hobart for rest and leave-giving were always arranged to synchronize with the local race meetings, dances, etc., at which A.M.F. was always a most popular guest.

A few weeks ago we were privileged to entertain a lady from Melbourne, and I was just about to ask her if she knew Tasmania when she produced a book of photographs and asked me if I had ever been to Hobart! The photos turned out to have been taken, by all strange chances, in the D'Entrecasteaux Channel, where she and her friends go for sailing picnics; she tells me the flatheads, fruit and factories still flourish.

It was these various coincidences which suggested the foregoing notes in case they may be of any interest to members.

Looking at my chart one day I found that my name had been given to a point on South Bruny Island at the south end of the Channel, and seem to remember being told that this was an honour paid to a surveyor on his first effort. It was after I had left, so I do not remember "Hopwood Point"; but if any member should chance to pass it I would be glad to know if any rose trees grow there; if not perhaps he would plant one for me and I will gladly reimburse him.

The Surveying Service is, I think, the most silent part of the Navy, the perfection of its work being taken so much for granted, and perhaps I may be allowed to suggest a "thought for today" to any who contemplate joining it :

"No man seeth the piston, but it driveth the ship none the less."

RONALD A. HOPWOOD.

NAVAL PRIZE MONEY.

NAVAL PRIZE MONEY.¹

THE subject of Naval Prize Money is once more in the public eye, through the announcement last week by the Admiralty that they are now ready to receive applications from those who became entitled to share in the grant through their service in the Navy during the war, but are now no longer members of the Service.

Forms on which applications are to be made are to be obtainable at post offices, in most of which the regulations governing the grant are to be displayed. For the benefit of those who do not know whether or not they are among those entitled to share it may be repeated that the qualification is to have performed 180 days' service at sea as members of the Royal Navy and Royal Marines, or as members of the crews of H.M. ships in certain civilian capacities (such as canteen employees), or as members of the Royal Artillery maritime companies who manned anti-aircraft guns afloat.

It is more than a year ago that Mr. Dugdale, Parliamentary Secretary to the Admiralty, announced that the work of investigating "entitlement" had been going on for some time, but would take much time more—as it actually has. It is now announced that "in view of the magnitude of the task, some months may elapse before an individual claim is settled." It would thus seem clear that a large staff has been employed, in all, over a period of years to work out the allocation of the f4 millions granted to the fighting men out of the $f10\frac{1}{2}$ millions received by the Treasury from the proceeds of Prize.

COMPLEX CALCULATIONS.

The result of these immense, protracted and complex calculations is to be the payment of a sum, varying according to the rank in which each participant served from $\pounds 4$ for an ordinary seaman to $\pounds 40$ for an admiral of the fleet. Truly, as our classically educated ancestors would have exclaimed, "*parturiunt montes*; *nascetur ridiculus mus.*"² What has been the cost of this lengthy and unnecessary investigation, or what it will be by the time the distribution has been completed, has not yet been stated; but it seems probable that information on the point may be sought in Parliament.

I have called the investigation, which has absorbed the clerical labours of so many civil servants who might have been better employed, "unnecessary," because it must already have been done once. Every man who served during the war received a gratuity on discharge, based on rank achieved and length of service, both of which were then on record and had to be consulted when gratuities were being computed. If the triffing sums now to be distributed, or something like their equivalent based on the same scale instead of one differing from it only in unimportant respects, had been added to naval gratuities in lieu of Prize Money, the financial result would have been practically the same, officers and men would have received their money promptly instead of years afterwards, and the whole costly organization for working out the pittances need never have been set up at all.

¹ The following article by Rear-Admiral H. G. Thursfield appeared in "Shipbuilding and Shipping Record" of the 9th of June, 1949, and is reproduced by kind permission of the Editor of that journal.—Hon. EDITOR.

² "The mountains are in labour they will bring forth but a ridiculous mouse !"

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Moreover, if the reasons for complete departure from the old system of distribution had been explained at the time, illustrated by the example of the First World War, the Prize Money distribution of which was not completed until five years after it came to an end, there could have been no valid complaint from anyone.

Prize Money, indeed, as an institution is out of date—a fact which has been belatedly recognized by our rulers in the decision that it will never again be paid in future. It was out of date already a century ago, when privateering was abolished by agreement of nearly all civilized Powers in the Declaration of Paris though that particular implication of the Declaration was not fully recognized at the time. That it was out of date by the time the First World War was fought quickly became obvious from the complexity of the arrangements that had to be made to share it out on something like the old lines, and the immense waste of labour that they entailed.

THE ORIGIN OF PRIZE MONEY.

When it was first instituted it was a salutary reform, substituting legal confiscation of enemy property seized at sea for mere pillage. But our seamen to-day do not need to be bribed to refrain from pillage—they have never regarded it, as their ancestors did, as a cherished and time-honoured right. Moreover, even in the hey-day of Prize, when admirals acquired respectable fortunes and seamen sometimes received—and generally quickly dissipated—some hundreds of pounds apiece, there were recognized to be anomalies in the system which led to injustice in its results. Ships on some stations had golden opportunities of making valuable prizes, while those on others had few or none.

Since the old system was recognized to be clearly unworkable in 1914 it seems curious that it should not have been recognized then how anomalous it was to make the size of the Navy's war gratuity dependent on the accident of the amount that might be realized, through the working of an out-of-date legal principle, as "Droits of the Crown" out of the whole sum accumulated as the proceeds of enemy property seized afloat in the conduct of the operations of war.

THE "CRUIZERS ACT."

The precise distinction between the archaic categories of "Droits of Admiralty" and "Droits of the Crown" need not detain us here. The famous "Cruizers Act," passed in the reign of Queen Anne, followed earlier enactments in forbidding pillage at sea, and prescribed that all seizures at sea must be made in legal form, and were not valid until so declared by the prize court; it also prescribed that everything condemned by the prize court became the property of the Crown. The Crown promptly granted the proceeds, following earlier traditions, to the actual captors, laying down the proportions in which they were to be shared by them.

The chance of enrichment through Prize Money so held out induced seamen to put up with the low pay and the hardships of life in sailing ships, against which they would undoubtedly have rebelled—as they actually did in 1798—far more often than they did; and they also made it possible to enforce the prohibition against looting or pillage, for which heavy penalties were prescribed. It is recorded, for instance, that a certain midshipman, John Hervey, put in charge of a prize in 1761, was convicted by court martial of having made away with some of her cargo—two trunk cases of iron ware, a case of pictures, a cask of Delph ware and a cask of wine. The sentence was that he was to be disrated to seaman, be flogged round the Fleet with a halter round his neck, 72 lashes in all, and to wash down the heads of his ship for the next three months ! The proportions in which the Prize Money was to be shared were revised from time to time by the proclamation making the grant, issued afresh whenever war broke out. They varied with rank, roughly in the proportion of pay—on the principle that reward must be proportionate to responsibility. The Commander-in-Chief of the station took what some regarded as a disproportionately large share, though it was through his dispositions that prizes were picked up at all. Apart from him, only those on board the ship or ships that actually made the capture took shares, the smallest share going to "swabbers, ordinary trumpeters, barber, seamen, volunteers by letter and marine soldiers " to quote the Cruizers Act.

A RECORD CAPTURE.

When Saunders was Commander-in-Chief in the Mediterranean in 1762 two ships of his fleet took a Spanish treasure ship of value over half a million sterling; Saunders' share of prize money for that capture was $f_{64,963}$, each of the lieutenants in the ships engaged got some $f_{13,000}$ and the share of a seaman or marine was f_{485} . That was perhaps a record for a single capture, but for the admiral even small captures might well add up to something like the same sum over a period of months. Dr. Johnson at the same period thought himself passing rich on a pension of f_{300} a year, so the feelings of an able seaman receiving but a tithe of the share of those who took the treasure ship can be imagined.

In 1914 there had been no Prize Money for a century, and it was decided, very reasonably, that the old system of granting it only to those who actually made the captures would serve no good purpose, inasmuch as the cream of the Navy was serving in important fleets, and would have no chance of sharing in the richest rewards. So it was decided that the whole sea-going fleet should share ; but the disproportion between the largest and the smallest share was substantially scaled down. Still, the Commander-in-Chief—who, as Mr. Churchill remarked, was the only man on either side who could lose the war in an afternoon—got about £3,000, and an able seaman £25, which was, perhaps, a fair measure of their respective responsibilities. Some £14 million was granted to the Navy in all, and the final working out of its division took five years from the end of the war.

To-day the disproportion has been scaled down even further, for the admiral gets no more than ten times the share of the youngest boy—a distribution which the latest Admiralty announcement describes as "more equitable" than the 1918 scale. Why it is more equitable has never been explained. An equal share for everyone with the qualifying period of sea service to his credit might be defensible, if the Prize Money were regarded—as it might well be—as a fortuitous windfall. But it is difficult to understand how a scale which rates a commanderin-chief at no more than ten times the importance, value or merit of the lastjoined boy can have any basis in equity, common sense, or even reality.

THE YEARS OF ACHIEVEMENT.

THE old stagers naturally think that the Golden Age was some time in the past. Here is a case where it certainly seems to be so. I was giving a lecture last year on the history of naval fire control. As part of its preparation I made out a large wall chart, "A hundred years of fire control, 1860 to 1960." There was a scale of years at the left hand edge, about an inch to a year. Opposite the appropriate dates were marked, in various columns, events like naval actions, wars and treaties, typical classes of ships, weapons, armour and equipment, speeds of ships, torpedoes and aircraft.

Ranges of effective range finding, gun fire, and of torpedo running, targets and practice methods, distances of effective communication by signal, types of internal communications, gyro compasses, rangefinders, fire control tables and predictors, stabilization and remote power control gear, etc., formed another column.

A further column contained the names of some of the leaders and pioneers, the drivers and the creators, who were mainly responsible, in one way or another, for new developments.

As the picture gradually pieced itself together it soon became clear that progress is not continuous; there are periods of apparent stagnation and periods of notable progress. The Golden Age, in the matters under consideration, was clearly the period between 1904 and 1914. These years had a very high density of important development. They showed more progress in our own naval material than any other period of ten years either before or since.

The picture presented by these years is quite remarkable; we start in the pre-Dreadnought era, and we end with the Queen Elizabeth in full commission, carrying those same magnificent fifteen-inch guns which now form the main armament of the Vanguard. We see the change in the submarine from a dangerous experiment to a reliable and essential part of the fleet, the inception and development of radio communications (all but radar), the change in the torpedo from the short range cold running to the long range heater, the effective development of rangefinders, gyro compasses, director systems (more precise than anything we have now) fire control tables and equipment.

On the broader aspects of things we see the change from universal coal burning to full oil-fired ships, from the reciprocating main engine to the turbine, and the turbine and the diesel engine in use for electric supply.

During a General Election in that period, which I remember well, a slogan of one of the political parties was :—"We want eight, and we won't wait." That was eight capital ships of the super-*Dreadnought* type, to be laid down in the one year's building programme. It was done, and those eight ships were among those that fought at Jutland.

When we come to the names of the men concerned we find, on the naval side, Scott, Fisher, Dumaresq and Dreyer, among others, and beside them are Barr, Stroud, Anschutz, Elmer Sperry, Henderson, Arthur Pollen, Charles Parsons, Yarrow and Thorneycroft; truly a noble company. Try making a chart for yourself; you will find it an interesting exercise. It will show you, as it did me, how many gaps in your knowledge of modern naval history remain to be filled.

In my chart I rigorously excluded everything in a project or experimental stage and included only things that were effective parts of ship's normal and regular equipment. This is the only test. On account of this ruling there were many things in the nineteen twenties, thirties and forties which had to be excluded, having only reached the stage of promising experiments.

Cutting out these instances of "nearly but not quite" led to some rather disturbing thoughts. Why was the early promise of slow wanderer compasses not fulfilled? Why was the development of the artificial horizon, or stable vertical, on which all effective anti-aircraft fire must depend, so slow? H.M. ships *Nelson* and *Rodney* had two compartments each allocated to "Master Stabilising Elements"; but they were never fitted, and we hardly have a really effective one yet. How was it that possibly the most promising remote power control system in the world at its time (1938) was not more rapidly developed, and why (remote power control having been an object for many years) was it that, when adequate power systems came along, it was found that the mountings (with very few exceptions) were not suitably designed for their application.

It may be said that progress was easier to make in those old pre-1914 days; we had not got so far as to reach the really difficult bits; now we are nearing the asymptote, every advance, even a small one, demands a disproportionate effort, like the last half knot of speed in a full power trial. Everything costs so much nowadays, and we cannot afford it.

There is something in this, but it is not the whole story. In my experience, the development work of the past is nothing to the advances that may lie ahead. The more we learn, the wider becomes the vision of future possibilities, not only of potential new achievement, but of improving the effectiveness, durability and ease of handling of the stuff we have already got.

We must, however, go about the work in the right way, and I believe that the men of those progressive years could teach us a lesson. There seemed to be more freedom of effort and feeling of worth-while-ness about the work than now, perhaps because the administrators and organizers were fewer, and achievement was the object of the leading and dominating minds. I fancy that nowadays there are too many trying to administer the work of too few. In any creative work, be it music, architecture, painting or weapon design, the quality of the product depends far more on execution than on supervision, but the highest prizes are now assumed to lie in the field of administration. As evidence I would ask you to read "The Small Back Room,"¹ It is a book which every naval officer should read. It gives a vivid (and remarkably true) picture of some aspects of weapon development at the present day.

After reading it get back, if you can, with an effort of memory by the elders, and by reading contemporary matter by the younger men, to about 1909 and then consider whether "The Small Back Room" is likely to give anything of a true picture of the times of forty years ago.

H. C.

¹ "The Small Back Room," by Nigel Balchin. (Collins, 5s.) First published in 1943; fourth impression, March, 1949.

ON LOYALTY.

THROUGHOUT historical times loyalty has been considered a chief military virtue. It has been highly prized, and many eminent men have given their particular specifics for obtaining and retaining it. Most of us are familiar with the principles considered, and I do not wish here to add anything to their well-found and well-tried recipes, but rather to point the need for thought on the other side of the picture : the necessity for requiring loyalty and of giving it ; or, simply, of being loyal.

To be loyal includes appearing to be loyal; and, though most of us are never consciously disloyal, how often are we consciously loyal? How many times have we served under "unpopular" officers, have criticized them, not only in the presence of our equals (though in fact one is hardly ever equal in seniority and therefore in responsibility)—but even, it may be, in the presence of juniors even of ratings, the wine steward for instance? How many of us have received an unpopular and irritating order—an apparently thoughtless and ill-considered one—and have equally thoughtlessly communicated it to our subordinates, it may be in words, it may be in tone alone, in such a way that it is clear that we personally disagree with the order? How many of us are innocent of trying to court a cheap popularity in such a thoughtless fashion . . . Disloyal? Perish the thought !—Yet so we have appeared.

It is normal in many sea-going ships that the shoreside staff should be criticized ; from our words-and anyone may hear them-you would sometimes think that we were being run by a set of purblind numbskulls. Yet-apart from the obvious fact that only the staff know the whole situation and the general pattern into which our particular unit must be fitted, and that we are but exhibiting our own shortsightedness in our indefensible and unnecessary criticisms-how many of us remember that the staff is composed of the same sort of chaps as ourselves; that they have their difficult problems too; and that not only are we being disloyal to them, but that our constant carping criticism is undermining the confidence in that particular staff of all who hear us—to the detriment of the Service and ourselves? Too often such criticism is merely the expression of one's own feeling of self-importance. The Admiralty Office is a pretty imperturbable edifice, and to some may seem fair game for "poking charlie" too; but remember that too much of this undermines confidence and is disloyal-and that rather, for every criticism we hear of the Admiralty, some praise for things well done is not out of place and may right the balance.

There is another and I hope less common form of disloyalty to the staff but it has its own real bad effect too. I mean the commanding officer who, when faced with some impossible request, optimistically forwards it to his "D" or admiral for a decision—knowing all the while in his own mind that it will be refused—yet unwilling to incur the unpopularity and imagined stigma of turning the request down or of explaining its impracticability himself to the rating. In fact, an attempt to transfer responsibility for an unpopular decision from himself, where it lies, to his superior. A disloyal act, at the least. And do we always require loyalty? Have we always taken instant and remedial action when some disgruntled rating—even a "Chief "—has muttered some highly insubordinate though barely audible remark about some other officer or senior rating unpopular with us too? Do we often impress on our petty officers the necessity for loyalty, in words and in example, to their juniors, and to each other as well? Do we all realize that unguarded criticism of anyone in authority weakens that very authority from which our own depends?

Leading seamen and petty officers have to be recommended before promotion. How often does that recommendation include an assessment of the man's loyalty? Not only to the country and the Service, but loyalty to his superiors as well? Have we ever in our minds refused a recommend to a man on the grounds that his loyalty is not apparent—and I have met several confirmed petty officers who corresponded to that description?

We should be loval to our subordinates too: we may rebuke and punish the bad worker, and we may praise the good one—but how often do we reward him? What privilege does the good worker get over the bad one? Or what privilege does the bad worker lose through being a slacker? After all, the good worker has probably "dug-out" and is probably "carrying" the slacker—a fact of which he may be keenly conscious. Do we reward him—give him the " plum " jobs? As often as not he gets the unpleasant jobs-especially if he's a petty officer. Of course, it is true that a good man will be rewarded by the increase to his prestige and self-respect if he's picked for a job, and he appreciates it, but too often this "picking" is not necessarily for the difficult job which requires more ability, but for the unpleasant job which requires more loyalty and may even penalize-loss of leave, time off, etc. We're all guilty of thisdon't we think : "Difficult and unpleasant job back late better give it to Petty Officer so-and-so he won't drip "? And the bad or below average petty officer has a soft time as a result. And the good man notices it, of course, and even his inherent loyalty, first to us, secondly to the Service, is sapped away, and his self-respect begins to go-he begins to feel he's been "had for a sucker." It's a common enough error in civil life, in these days of payment by time and not by results, but need we bring it into the Service? Can't we retain incentives for good work, and reward it when given? And incidentally, how often is the slacker, the go-slow man, actually punished for slacking? Most punishment in the Navy is for crime—rarely for not pulling one's weight. And in a democratic world whence the realm of "private" punishment has been banished for ever—leaving a vacuum—the slacker gets away with it and we are being disloyal to the good men. There are still many petty officers whom we know have to be "watched" when they are "duty"—how often do we think of reversion?

Many of us are prone to regard our men too impersonally—to refer to them, and treat them, merely as "bodies"—so many units to be used for work. It betrays, of course, an inefficiency in ourselves, for we should know our men better : but it is also fundamentally disloyal to them—a casual and contemptuous way of referring to sailors is soon aped by our immediate subordinates—and you may be quite sure that the sailor reads the lesson. General Eisenhower had something to say about this in his war memoirs, and high time too.

In placing the need for loyalty in the forefront I have no intention of advocating a policy of stifling criticism, but merely to point out in this era of laxity of speech that there is a wrong place for criticism, that there are wrong people to whom to make criticisms, and that all criticisms in the Service should

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be generous and, most important of all, should leave out personalities. Anything else is disloyal or gives the appearance of disloyalty.

To summarize: great leaders of men can win personal loyalty to a high degree: most of us cannot hope to attain to their stature in this respect. But all of us can command some loyalty to ourselves, all of us can require it in others, and we can all give it to our seniors, our juniors and, of course, our messmates. I know of two senior officers (to my mind—and no doubt in the Admiralty's opinion too !—excellent men) who were unpopular because, although most efficient in practically every Service way, they had not the gift of being able to " put themselves over " to large and widespread naval communities. There was considerable and general criticism of them by both senior and junior officers and by ratings. A bad state of affairs. How different their Commands would have been if they had had the loyal help of all their subordinates—and that particular part of the Navy over which they presided would be better and more efficient for it now. Let me finish by reminding that " He that is not with me is against me "—in this matter at least.

LAMPRAY.

PROSPECTS OF EMPLOYMENT FOR RETIRED OFFICERS.

IF a ship lies alongside the dockyard wall, after even a short time the glistening paint work becomes dull and lustreless; the white scrubbed decks and bright work soon look uncared for, and with them goes the resplendent glory. The ship is not being used for its proper purpose or to its full capacity; deterioration and decay set in. So with the retired officer who is unemployed deterioration is just as quick, and it is much more difficult to repair the ravages of despond even if it is possible ever to patch morale. No one can view this wastage of material without regret, yet so far the wastage of man-power is not given sufficient thought.

The fall in the value of the f sterling and the big rise in the cost of living have created a situation where it is no longer a matter of choice but one of necessity that officers should obtain jobs in civilian life on retirement. It is essential for them to go to work again immediately on retirement, in order to bridge the large gap between the full pay received on the active list and the amount they will get on the retired list. Officers on the active list have difficulty in living within their means; so meeting the new difficulty is not just a question of tightening their belts in order to keep within their new income; the gap is so big that drastic steps must be taken if a fall in the standards of living, with its consequent effect on morale, is to be avoided. It is purely and simply a matter of economics.

It is of interest that until quite recently officers were presumed to be drawn from classes with private means—substantial private means. But these days are over and need never again be seriously considered. The new pay code states categorically : "The scale of pay and the rates of marriage allowance have been planned on the basis that officers' remuneration will be sufficient without supplement from private means." The fulfilment of this promise must entail some continued consideration after the compulsory retirement at an early age.

To become an officer in the Fighting Service a youth has to undergo the most rigorous selective tests and then undergo years of intensive training, training which is becoming still more intensive with the increasingly large part that science plays in modern warfare. It is obvious that all officers cannot attain the top of the tree, and the system of pruning starts shortly after they reach the age of forty. Those who are lucky enough to be selected for promotion to commander or captain, but who do not continue in the higher ranks, find themselves with a pension which is totally inadequate to support and educate their families, yet seemingly are too old to get a job in civil life. The country owes a debt to these officers, which it can repay by ensuring them a livelihood after they have ceased their active service career.

The Government have to some extent appreciated this and "accept the principle that men and women who undertake a period of regular service in H.M. Forces should not thereby be deprived of an opportunity of re-entering industry and commerce at a level appropriate to their age when they leave the Service," and they have organized a scheme whereby officers, after they retire, may be given a six months' course of business training, with a view to assisting them to obtain posts in civil life. But even though it is stated that training grants will be given during this course, they are subject to a means test, and the course implies no assurance of a post at the end of the training. Few officers could afford to avail themselves of this luxury on their pension unless there was a fair certainty of future employment, and it is extremely doubtful whether any amount of business training would ever enable a retired officer to compete with a younger and more experienced civilian on level terms in the eyes of prospective employers.

At this stage, perhaps, it may be as well to consider the present organization, and what steps are necessary to improve it. For the Navy, an appointments branch is established in the Ministry of Labour, consisting of two serving officers who are lent to the Ministry of Labour to interview and assist officers in obtaining employment in civil life. They act as the link between the business world and the aspiring applicant, and it is their duty to try and place the most suitable ex-officer in the most suitable job that comes to their notice. Their help in this respect, however, is not very substantial, as they would be the first to The age of the ex-Regular officer is an inevitable and ever damning admit. handicap, and may mean that he is never seen, much less considered, on the short lists for any jobs. Firms are approached and informed of the qualifications of retired officers by means of a series of forms and written propaganda. It is doubtful if this impresses, for example, the hard-headed business men from the North Country, even assuming it gets further than the waste paper basket. It is hard to believe that the liaison between the Ministry of Labour and business on this level can be very close. As one example, a captain, R.N., C.B.E., has tried for more than eighty jobs but has only been interviewed twice. He is now registered at the local employment exchange where he has become a class and a group. He is drawing the dole. It is not just a matter of applying for a job; the important thing is to get an interview, to be seen, and to be able to state one's case.

The next greatest handicap of ex-Regular officers, apart from age, is lack of knowledge of ordinary business ethics and practices. It is therefore important to utilize the qualities they already possess, first of which must be integrity and leadership; these qualities must be turned to the requirement of civil life. Officers have other qualities—personality, a trained mind, an ability to think and plan, a knowledge of life. Familiarity with foreign countries, the Dominions and Colonies should in itself be of value to the business world when it is necessary to advertize and push British goods in order to compete in a buyers' market.

The age of the officers concerned means that they more than probably still have large family commitments to fulfill, commitments for which they could not make provision out of their pay in the stern race for promotion. They are too young to retire gracefully, yet seemingly too old to obtain employment in civilian life without substantial help and guidance. It is equally ridiculous to think that one day a man can be earning up to $f_{1,500}$ a year for doing work which is largely connected with welfare and administration, and the next day be worth nothing at all. It is unquestionable that he must have some ability which can be used, and which if properly directed could be used to the national benefit as well as to his own.

If the country is ever to regain a balanced economy it must be wrong that so many educated men, with years of useful life ahead of them, are pensioned off at such an early age as useless. Such a step can only quicken a lowering of morale and mean that a considerable section of the public becomes a drag on the remainder. It is very important to do everything that is possible to preserve

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the morale of this potential Reserve, and morale cannot be maintained if officers are forced to take unsuitable jobs such as bus conductors, postmen, liftmen,. door-keepers in hotels; they begin to think like bus conductors etc.; but even retired officers must live. Such a lowering of status must affect their outlook and lower their value as officers when they return to the Service in an emergency. If they are known to have obtained such employment it is bad propaganda, bad for discipline, and must have a very bad influence on recruiting.

Before the war a number of officers used to get jobs as superintendents and secretaries to hospitals, bursars to public schools, secretaries to golf clubs; but one by one each of these openings has been closed, a furtherance of the "closed shop" policy; each section of the public endeavours to protect itself by unions and associations. Before an ex-officer can now obtain a job as a secretary to a golf club he has to show that he has done a six months' course at a first-class golf club and joined the Association of Golf Secretaries. It is not impossible to get an honorary job as golf secretary without these qualifications, but it would would be extremely difficult to get a paid job without them. The position is constantly changing. It is governed by supply and demand like any other commodity, and the demand falls off without sufficient advertisement.

Some large firms have already found methods of absorbing and using ex-Regular officers successfully. Surely these methods could be examined and possibly extended to other large firms. When officers leave the Service they require practical help in making the necessary connections and contacts with the business world. They must lack this experience ; and it is felt that, shortly beforeretirement, they should be prepared for their new work.

Those who do get jobs in civilian life do, extraordinarily well; but there is no organization for keeping a track on these people and their work, and learning from their experience.

The sellers' market is dead; the time has come when it is necessary to push. the goods if any real success is to be achieved, and this must be done through personal contact. It should not be too difficult to find avenues in which the services of keen ex-officers can be utilized; their quality of leadership alone must be of some value to big firms. Leadership involves a close understanding and relationship with men, and it may even be that leadership is the answer tothe menace of the Communist shop steward. It is not, however, suggested that welfare or personnel managers are the only appointments that can be filled. adequately by ex-officers. Other openings could surely be made for them in the Colonial Service. It is obvious that we do not wish to find jobs for men in businesses where their inclusion in the organization would create ill-feeling; it might be thought by the employees already in the firm that they were losing a job which would normally have fallen to them by right ; yet there are countless jobs in which officers could be usefully employed and which are only a continuation of their work in the Service. It has long been said that trade follows. the flag, and the average naval officer with his knowledge of the world would have an advantage which should prove of value.

So little information is at present available as to what jobs are obtained by the ex-Regular officer who retires in the normal way on completion of his time for pension. The promulgation of information on this subject would do much to relieve the anxiety of the officer approaching the end of his time in the Service. This information is available in the case of men through the Regular Forces. Employment Association under the auspicies of the R.N.B.T. Officers have nosuch facility. The following is an extract from the Report of the Royal Commission on population, published on the 21st of June:---

"The expected large increase in the number of the old makes it clearly desirable that they should contribute more by their exertions to the general economic effort of the community. Further improvement in the national standard of living may depend increasingly on how far this object can be obtained. High pensions conditional on retirement operate, however, against increased employment of the old. With further ageing, competition for promotion in employment may be expected to increase, with increasing frustration of the young. This would reinforce the demand for earlier retirement which on other grounds is against the national interest. The reduced proportion of young workers in the labour force may reduce the flexibility and efficiency of the economic system by making changes of occupation or locality more difficult. The fall during the next ten years in the number of young men is of special significance for national defence, but a small rise in average family size could soon arrest it."

It is essential to employ those who are employable. When they retire, officers are still virile and comparatively young. They may be too old for the Fighting Services, but they are not too old to work; so many of them want to work but cannot find suitable work without help. This problem is a new one, one which has arisen since the war; it is an urgent one and will become more urgent if steps are not taken to check the disease in its early stages; it must be tackled in new ways. Never has there been a greater need and never has there been a greater opportunity to do something constructive than the present time.

SEER.

PROMOTION OF OFFICERS,

MAY I put in a plea for the "passed over" lieutenant-commander? I am not one myself, but I nearly was; so nearly that I had to think hard what I was to do if My Lords finally decided that I was unfit for higher rank, and it seemed to me that I would have got a very bad bargain indeed.

Let us work it out. I wake up one morning to find that I have been told in so many words that I am unfitted to hold the rank of commander. I can never rise any higher in my profession. I am a dud. I am only about 38; so, "All right," I say, " if I cannot make a success in the Navy I'll try something else"; but can I?—No. Quite apart from the fact that I am not allowed to retire until I am 40, I am held by something far more powerful—my pension. What officer nowadays can afford to throw up a possible £475 a year?

So after much thumbing through the Appendix to the Navy List I find that if I want my full pension I must go on in a job in which there is no further promotion for another seven years, by which time I shall probably be too old to get another job anyway. But wait; what is this? I can retire on a reduced pension after 22 years from the age of 21, i.e. at 43. That's better. I need only go on for another five years. But what am I going to do—even for five years? With the best will in the world I cannot raise much enthusiasm for a Navy that has cast me aside. I can do my job, yes; but I'm going to make jolly sure I get every week-end off and get home by 1600 every day. As to money, I'm going to save as hard as I can until I retire. That old monkey jacket will have to see me out, and I'm not going to waste money on a new cap badge.

That is the situation as a "passed over" must and does, as we know, see it. His ambition is killed, his keenness gone, his uniform deteriorates; and nobody could call him either a smart, good or efficient naval officer.

The remedy to my mind is never to tell him that he is passed over until he has reached an age at which he can retire on full pension. This would mean extending the zone until a man is 43. There need be no definite upper limit to the zone—simply that a lieutenant-commander on reaching the age of 43 is no longer eligible for promotion.

I am not suggesting that many promotions need be made from the top five years of the zone. The majority of promotions can, as at present, be made between four and seven years seniority; but if only an occasional officer with over eight years "in" could be promoted it would provide a wonderful fillip for the remainder of that seniority, and no officer need ever feel that he had no further chance.

Apart from individual feelings on the matter, the Service as a whole should benefit because the older lieutenant-commanders, feeling they still had something to live for, would carry out their jobs far more efficiently and there would be none of this "letting go both ends" which, as we all know, only too frequently occurs. One argument against this scheme which I am sure would be raised is that there are many jobs which, although "backwaters", have got to be done by someone, and the passed over lieutenant-commander is just the person. I submit this is entirely the wrong principle. If the job is such a backwater then give it to an older man altogether. There must be many retired lieutenant-commanders who would welcome re-employment in a backwater job. The principle is already carried out in a number of cases; the Ordnance Department is one example. Let it be extended to all jobs which do not merit a high grade officer and let us have the older lieutenant-commanders in jobs which their age and experience fit them for, and which, because they are not filled by passed overs, need not be regarded as dead ends.

PORTHOLE.

THE EDUCATION OF NAVAL OFFICERS.

I HAVE been mentally brewing this for months, and now "Ephah" has caused it to boil over with his heretical article in the May number under the above heading.

I'm not attempting to deal here with defects in the system of training acting sub-lieutenants, but must make a vigorous protest against "Ephah's" reflections on Greenwich, the omission of which from the war time syllabus was a disaster. It may have been forced on their Lordships by circumstances, but it will be felt by those to whom it applied for the rest of their lives. Greenwich is the only course for sub-lieutenants which could not, in the most favourable circumstances, be carried out equally well in a ship, and often widens a naval officer's outlook just in time. By the "most favourable circumstances" I mean an unlimited choice of ships and staff and unrestricted finance, and am not suggesting that it is practicable now to remove the sub-lieutenants' technical courses from their Establishments.

However, I must leave this particular argument, because there are serious defects in earlier training which matter even more. There is a great deal of disquiet in sea-going ships on this subject, in spite of the fact that up to the present the material is no worse than it has ever been. There is a decline in manners, but that is a national tendency, and probably has something to do with parental absence or neglect and an over-dilution of the officers sent to training establishments during the war.

The real trouble is that we have all got a bit scared by the sudden and rapid technical developments of recent years and have now gone too far in providing for technical training and lost sight of the fact that man-management and seamanship are the basic essentials, that the Royal Navy's pre-eminence hitherto has been based on them, with such successful results that technical inferiority, as compared with the U.S. and pre-war German Navies, has been outweighed, and, it must be admitted, accepted too readily. Because this is bad don't let us undermine our foundations by neglect or lack of pride in them.

In any big ship's wardroom now the executive officers are in a minority. This puts a particular responsibility on them because the others cannot help looking on their sea jobs as interludes in their professional life, instead of regarding an occasional shore job as an interlude between ships. It has been pointed out *ad nauseam* that commanders and above get very little sea-time, but luckily we haven't reached a stage yet where these distinguished persons have forgotten their first ten or fifteen years in the Service, spent predominantly in sea-going ships and depending for promotion on making a success of their sea-going jobs. It will be a bad day if it ever becomes otherwise.

All this is relevant to my point, which is that midshipmen must have enough sea-time to get the sea into their bones before they start their serious technical training. One of the greatest assets we have, as compared with the other Services, is the opportunity for imbuing youths of $17\frac{1}{2}$ -20 with the spirit of the Service by sending them to sea in the organic, human, imperfect, lovable thing which is one of His Majesty's ships ; and the trouble at the moment is that they are not getting enough of it.

"Ephah" says that a midshipman gets sixteen months in a sea-going ship after leaving the training cruiser. That is on paper. In fact he gets a year if he is not unlucky, due to leave between appointments, time spent on passage and the necessity for fitting in his seamanship board when ships are together or at the base. At least two months of this are spent refitting, when it is difficult to make full use of the time. The results of this shortage of time are manifold, and I will mention only the worst.

(1) The senior midshipmen are either non-existent or so little senior to the new group that, instead of the former bringing the latter up as they used to, the existence of two groups simply complicates the problem of good training and useful employment for all midshipmen.

(2) The "four phases" which a midshipman should, and used to, pass through are not completed, and he goes to his courses—and what is worse emerges from them—as a sub-lieutenant, lacking the confidence and balance which gunroom life formerly gave the vast majority of those who were privileged to enjoy it. This is at the root of the matter of the Sub's prestige which is touched on by "Ephah." (May number, page 148 line 19.)

(3) A fairly extensive range of instruction has to be got through in a year, which adds to the difficulty of giving each midshipman long enough at each of the ship's duties which he ought to do. In fact he may not get through all the duties. For instance, I am quite sure the job of "Tanky" is worth doing, particularly by those who do not become navigators subsequently; but, if each is to get real benefit from it you cannot get more than, say, five through in an effective ten months, quite apart from the amount of irritation which it is reasonable to expect the navigating officer to endure. Thus the alternatives open are not covering the ground, or covering it superficially at a pace which is out of rhythm with natural human development.

It has been suggested that one of the objects of the training cruiser is to eliminate the necessity for much of the instruction which was formerly suffered at the hands of "Schoolie" and others in three years of gunroom life, thus enabling the midshipman to concentrate on learning to become an officer when he joins the fleet. I like the idea, but it fails miserably because a year is far too short, and my experience in the last two years is that midshipmen are so ignorant on leaving the training cruiser that most of the instruction is still necessary.

It is extremely rare to find a new midshipman who can handle a power boat competently, those that can often being sailing enthusiasts whose pleasure in the art of boat-handling for its own sake has developed their feeling for boats of all sorts. Both the groups of midshipmen of whom I have had recent personal experience started from zero as boat-handlers on joining the ship, and none of them admitted to having heard of any theory to throw light on the behaviour of boats of varied hull design, or of kitchen rudders, or of screw and rudder effects; the idea that they were responsible for the behaviour of personnel embarked in their boat was quite novel to them. The explanation seems to be that there are far too many cadets in the training cruiser, and too little boatwork on the average cruise, for more than a small proportion to get any real practice. Moreover, those that show aptitude naturally tend to get more than their share for the simple reason that the modern fast motor boat is such an unsuitable article that, if not well handled, it spends most of its life inboard surrounded by shipwrights and replete with E.R.A.s and electricians. (I hope someone will write an article on the unsuitability in the Service of the hard-chine fast motor boat both as a means of training and as a reliable form of transport.) I must however hark back to the "four phases" referred to above.

A new midshipman should join his first ship with an awareness of his own youth, his ignorance and the humbleness of his station, but with a keenness which will withstand if necessary a sudden outburst of impatience from the commander, a snub from a leading hand or an unjust piece of coercion from the Sub. or any other of his seniors. He must realize that a young leading hand will be much harder for him to get on with than an old petty officer, and that both of them start with more experience than he has, and that his keenness, previous training and education give him an advantage which, if properly developed, will enable them to accept his leadership willingly when the time is ripe. The "no confidence with humility" stage is therefore Phase One.

Phase Two is entered when the midshipman knows the ship, can run a boat reasonably well, and understands the duties of the officer of the watch well enough to be a useful midshipman of the watch. He now feels he knows what it is all about and usually gets inflated with over-confidence, until something occurs which deflates him and brings him down with a bump. It is part of the job of the snottie's nurse to even out the bumps by judging when to feed in new responsibilities and so checking the over-confidence before it becomes obvious in the form of uppishness or laziness or both. Alternatively he may be able to alleviate the results of an unduly abrupt deflation by a word at the right moment to the victim, or perhaps by putting a point of view to the commander. In any case some oscillation of confidence occurs in all adolescents and is bound to be more violent in an enterprising person who sticks his neck out a bit than in one who plays for safety.

At the end of Phase Two, then, the midshipman has realized that after all there is a good deal more to this business of commanding men than merely knowing the words, and he has perhaps learnt a thing or two about the reactions of ratings to different officers. He is still a bit lacking in confidence but determined now to take charge of his boat, and his coxswain and crew, and no longer content just to get alongside without smashing the gangway, nor to be a mere scapegoat for his crew if they don't man the boat promptly when called away. He may be lucky in having a coxswain who is man enough to buttress his authority and gradually turn the real command over to him, or he may be less lucky and have to have a showdown with his coxswain before his authority is truly acknowledged; but in any case he is passing through a critical stage where he can be helped or hindered by every officer with whom he comes in contact, especially the officer of the watch and his divisional officer. Here again the snottie's nurse must be on the alert to mitigate the effects of ill-judged reprimands from inexperienced officers, or to stiffen the resolve of a midshipman who has perhaps bitten off more than he can chew for the time being.

Phase Three is the transition of the midshipman into the responsible junior officer willing and able to learn from every exercise and harbour drill in which his ship takes part, but still conscious of his own deficiencies in professional knowledge. It is at this stage that a change of ship used to be of such great benefit; but alas! he is now so near his exam that he feels shadowed by its proximity and tends to swot seamansnip queries in the gunroom instead of taking a full part in the life of the ship. And this will be accentuated if he has gone to a new ship, because it won't seem to him worth while to establish his position, get to know the men in his division or do any of the important things which take time and a calm approach.

Phase Four is never, and cannot be, reached under present arrangements. It is the time one enjoyed most, and learnt most oneself—when one was allowed to be O.O.W. with real authority within the limits imposed by K.R. & A.I.;

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the time when the commander regarded a senior midshipman as an effective substitute for a lieutenant in general drill or as O.O.W. in harbour. When the divisional petty officer regarded the divisional midshipman as the deputy divisional officer and came to him naturally in the absence of the O.O.D. It may not have lasted for more than two months before one's seamanship board, but if it happened at all it meant that one went to courses with the feeling of having won a major battle and had a sound foundation for the technical instruction of courses, and came to sea again as a sub-lieutenant with a good idea of what was expected of a lieutenant.

At the present time the best that one can hope for is that a midshipman will have got part of the way through Phase Three. Many good ones only reach the end of Phase Two and evidently return to sea after their courses with the same lack of confidence as they had when they left it. Thus the present day sub-lieutenant is unsure of himself, and as a commissioned officer is less willing to admit his ignorance and ask questions than he was as a midshipman. Moreover he is less kindly (even if less roughly) dealt with from above and is very liable to get rattled if chased. Whereas a midshipman can be chased pretty hard without losing face it is bad for a ship's company to see an officer, at times vested with all the responsibility and authority of the O.O.W., being got on the run, and most harmful to the officer himself.

The disquieting thing about the effects of the training cruiser is that midshipmen join their first ship at the most tiresome stage in Phase Two, thinking they know everything and that they have at last come to sit back for a bit without being driven. Unfortunately they prove to be back at the beginning of Phase One instead of Phase Three after the first few weeks, only without the enthusiasm. Had they gone to an ordinary ship eight months earlier instead of to the training cruiser they would be ending Phase Two, or, if backward, entering upon it by the time they put their patches up, as in fact occurred before the *Frobisher* was commissioned for training duties in 1933.

In short, the training cruiser is not worth its place because it does not succeed in imparting enough professional knowledge to the cadet to justify the loss of eight months in which he might have been learning in the only possible way to become an officer. It could only be justified if the midshipman had a further two years to do before courses, and even this is on the short side, particularly if it is considered essential to include carrier training in the syllabus.

There then remains the simple fact that the enthusiasm with which a cadet leaves Dartmouth makes him a far better subject for training in the Fleet than he is when he has finished his time in the training cruiser—probably he has been through too many supervised stages, or perhaps it is that he compares the atmosphere in his new ship unfavourably with that in the training cruiser, without realizing how unavoidably artificial the latter must be. But the fact is that too many midshipmen arrive in the Fleet with an attitude which has to be broken down before any progress can be made, and their knowledge is not such as to excuse their lack of humility.

Therefore let us dispense with the training cruiser and revert to the excellent scheme whereby each term of the last year at Dartmouth was enlivened by a week's cruise in a small ship (with comparable arrangements for Special Entry cadets) followed by at least two years in the gunroom.

And don't let us think we can produce executive officers for the King's Ships by sending them to more shore establishments and more specially staffed training ships. We are already "course-mad," and there's nothing like real life for learning about real life.

D. M.

THE NAVY-AND MARRIAGE.

THE NAVY—AND MARRIAGE.

VI.

"SPUNYARN," in his article on "Marriage and the Navy," seems to have divided the officers and ratings into two separate camps: (i) those who get married and have a nice, easy life ashore, and (ii) those who remain batchelors and are thus forced to spend a hard and ill-paid time at sea. I cannot believe he intends to give this impression, neither can I believe he really means "marriage and the Navy cannot go hand-in-hand." Is it necessary that one should remain single in order to climb to flag rank?

"Spunyarn" declares a batchelor interest; I declare a married interest and equally a Service one. At the moment I am ashore in a job where I have to work harder than I would afloat, but my turn, like everyone else's, will come for a sea job. Surely it is well known that a recommend from sea is essential for promotion except in exceptional and obvious cases. How, then, can a wifebound officer or man who always seeks a job ashore ever rise in the ladder? The answer is that he won't—he will be "thinned out " in the well-known process and good riddance to him; a man who can't control his wife will never gain the respect of his subordinates.

As regards allowances, I agree that "Spunyarn's" suggestion is a good one. But an allowance of some sort is essential to compete with the exorbitant cost of *existing* which obtains on all foreign stations now. I cannot agree that all young married officers maintain an exalted standard of living. Some of them may live temporarily beyond their means in a state of "eat, drink and be merry ..." Has "Spunyarn" ever heard of "face," the all-pervading feature of life in the Orient? It would be better to call it prestige ; the Navy has to hold its own against all-comers, especially in these days of emancipation and equalization.

Surely marriage is the natural state of man when he grows up—his wife helps him, looks after him, keeps him from getting too big ideas, and his children keep him young. But there is a great deal of room left over to fit in his zeal and energy for the Navy and to increase his efficiency and skill in his job. How can he deal with and advise on welfare cases if he has no personal experience ? What a dull and stale body of men the personnel of the Fleet would become if they were all batchelors !

I suggest "Spunyarn" gets a job ashore and gets married !

RHOMBIC.

VII.

A SUMMARY.

WE HAVE HAD "Marriage and the Navy" in the February, 1949, number of the NAVAL REVIEW and "The Navy—and Marriage, I—V" in the May number. "Spunyarn" as "Juniper" says, did trail his coat and go around with a chip on his shoulder so that the married men rose like trout to a hatch of May fly. W.S.D., who did not follow the fashion and reveal his (? batchelor) interest, summed the matter up neatly by saying :

"All those who want to go to sea Should put away matrimony To serve his ship as best he can Must be the aim of every man."

(I apologise for upsetting his scansion in the editor's interest.)

In all this flailing after marriage and the consequent allowances some fundamentals have emerged, but have not yet been stated in round terms. The first is that :—

(a) it is the natural state of adult man (say over 25) to be married.

You can't get away from that by running our affairs after the American pattern or by any other means.

The second is that :—

(b) it is the natural state of a married man to wish to set up a home and live in it with his wife and family.

Several conclusions spring from those two fundamentals. All of them stem from a third incontestable which is that :---

(c) naval service tends to quarrel with the married state and with home life in general.

The aspirant naval officer must weigh that fact with others when he joins the Navy; but as he does not then know or appreciate the married state he is not in a position to assess its true impact on his attitude to the Navy. The change of attitude towards the Navy that marriage may bring is a factor that should not be ignored and accounts for my feeling that for this and other reasons it might be advantageous for officers to be allowed a favourable chance to leave the Navy after their "first 12."

As regards pay and allowances, "Spindrift" sets out admirably the married officer's situation at sea and ashore, at home and abroad, and shows how the seagoing officer is set to leeward all the time. There is surely a fourth fundamental here which has been ignored by—amongst others—the architects of the 1946 pay code. It is that :—

(d) the remuneration of an adult officer must be based on his natural state as an adult man, i.e. living at home with his wife.

The whole of our social arrangements are based on the assumption that man and wife live together and, consequently, that is the cheapest as well as the most congenial way to live. The Services' pay and allowances start from the opposite pole and so cause dissatisfaction. I agree that time away from home must count heavily against inclination to continue to serve, despite any financial inducements, and I suggest that it must count more heavily in the case of the rating than the officer because the latter is—or should be—more of an idealist and more far-sighted.

My first conclusion is therefore the simple one that you cannot have it both ways in this world; you cannot enjoy the privilege of service in the Royal Navy without some dislocation of your home life. You must weigh this when you decide to join and remember that dislocation of home life comes the way of other walks of life as well—if you decide against the Navy and become an engine driver you might have to do a lodging turn. My second conclusion is that if dissatisfaction, with its attendant and resultant evils, is of concern to "them,"

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"they" must revise the system of remuneration so as to make life financially practicable for the adult officer in his natural state as well as in the unnatural states so often engendered by the exigencies of the Service.

I confess that I do not find life financially practicable, whatever my state, but I continue to enjoy it, and the privilege of serving in the Royal Navy, the more because I am married and have three children.

SISKIN.

VIII.

"SPUNYARN" REPLIES.

I FEEL vastly relieved. I had feared I would be lynched by the wedded and perhaps indeed deserved to be; but not for the case, only for aspects of its presentation.

For the vitriol that spilt with the ink I apologize, and change to softer shell for the second salvo.

Of the critics, three missed my principal point. "The style of the allowances positively encourages search for the shore job."

And indeed it does.

Obviously I grant the admirals and captains their paramount Service interest. My comment was directed principally at the levels where ideals require replacing by incentives.

Among these categories are junior officers—a few, and senior ratings—very many who are too much married. And these are men expected to transmit energy, initiative and resolution : the very men indeed who should be dispelling the notion that the Navy is a nursemaid to all.

Believe me they don't.

Yet why should they?

What incentive can compete with double pay for a job on the doorstep?

Spunyarn.

And with this I think we may consider the subject closed.—Hon. EDITOR.

S.S. ORDINARY SEAMEN.

HAVING newly completed more than two years in the Training Squadron, I have recorded a few observations, hoping to provoke more thought and discussion on this most important subject of TRAINING SEAMEN.

My two main contentions are :---

- (a) We are not getting a high enough standard of seamen recruit.
- (b) We are not making the most of those we get.

To deal first with (a) above :

"Hope" (N.R., Feb., 1949, p. 22) states that the entry is above the national average. It would be interesting to know where seamen come among the entries. Are they the "dim-wits"; or, if not, who is dimmer?

Comparison with National Service entrants was most markedly to the advantage of the National Service men. As the Royal Navy can practically take its pick of the N.S. entries, the standard should be high. It is; and great, therefore, is our responsibility to make the fullest use of them. If we were able to give these men interesting work and a stimulating life we might recruit some good men from this source. As it is, very few indeed sign on, and from my experience none of the best. A "Task Force Organization," proposed by "Spunyarn" (N.R., Feb., 1949, p. 37) would undoubtedly change this to our advantage. At present the time-expired National Service man is a poor recruiter, and this should not be.

I do not wish to run down the S.S. entry unfairly, but I state as a fact that the general level of intelligence is not high, and of education and upbringing deplorably low. One out of about five hundred may be worth considering as a possible C.W. candidate; and, though this is not the only criterion by which they should be judged, it is perhaps revealing.

I am aware that the Boy Entry is the front door into the Royal Navy as a seaman (and I have no recent experience of the type of boy now volunteering), but I claim that there is too much differentiation against the S.S. man. There are no grounds for any differentiation—any worse training—except those of expediency; to produce a useable product quicker.

Though some S.S. recruits are not particularly interested in the Navy, having joined primarily to dodge being called up for the Army, a good proportion of them are extremely keen when they join and—given the right training—could be very good. No doubt just as good as the average boy entry.

This brings me to (b) above—that our training falls short of what is needed.

First, let me say that I am not criticizing those applying the system, only the system itself.

To restate my wild generalization, which is largely true, the S.S. ordinary seamen now joining are unintelligent, uneducated and badly brought-up. What, then, must be the objects of the general training to fit them as seamen in the Royal Navy? We have to start by repairing the wide gaps that those responsible at home and school have left in their upbringing. I suggest, therefore, that our objects should be :—

Firstly, to mould them into decent citizens—clean, fit, disciplined and reasonably educated—who can look after themselves and live together, take a pride in themselves and the Service, and a live interest in the job of a seaman and in the Navy as a career.

Secondly, to introduce them to the various aspects of a seaman's job so that on leaving they can satisfactorily undertake the duties of an ordinary seaman in a sea-going ship, possessing the groundwork on which they will have enough interest to build more knowledge.

The short-term object is, in fact, to produce men "ready" for draft in the shortest time possible, looking like sailors and having at least the minimum knowledge necessary. Over-emphasizing the short-term object is most undesirable and harmful to the long-term and broader object, which is to train men to be assets to the Service and the country. The men must be disciplined, but they must also be interested. Discipline and interest are hard to inculcate side by side in a much condensed and inflexible course.

The aims of a seamen's training ship or establishment are similar whether the inmates are C.S. boys or S.S. ordinary seamen. Why, then, do we train boys ashore and "men" afloat?

The C.S. boy is under closely-supervised training for a minimum of eight months, followed in most cases by a further period in the Training Flotilla based on Rosyth. It will be generally conceded that this training is a good start, even if all too short. The S.S. youngster, whose raw material may be just as good, if less raw, having had a further two years of civilian life in which to set into bad habits, becoming in consequence less malleable and less inclined to discipline—he is given only a four months' course, or half that of his younger brother even if we disregard the training flotilla time. The reason for this is undoubtedly pure expediency—the paramount need for men for the third-class courses and for sea-going drafts. Nothing but dire need could justify it.

If, then, dire need so restricts the time available for the training of these young men, do we get the best value from the very short time available by training them afloat? I claim that we do not.

I suggest that the Training Squadron itself grew up from expediency, and we now accept it, without questioning whether it is the best system. In my view a shore establishment is far superior to a ship for early training. This seems also to be the Admiralty view, as it is the system adopted for training the boys the "front door entries." In a shore establishment strict discipline is much more easily enforced; the youngsters can be completely segregated from the ship's company, and continuous supervision is easier. Continuous close supervision in a ship is not possible, and a man can early and easily learn to dodge—a powerful habit, once formed. These inherent disadvantages are, of course, much aggravated and added to during a dockyard refit. Shore establishments are spared this.

The second clear advantage of shore over ship is that facilities for games and recreational activities of all kinds are far better.

Thirdly, one can expect and get more from the instructors if they are ashore in comfortable quarters, with the opportunity to have their families a short bus-ride from their work, rather than being dependent on boats, and possibly weatherbound. Add to these disadvantages in their eyes that their job (afloat) is regarded in the barracks as "Home Shore Service" but does not entitle them to instructor's pay or training service leave.

It will be said in opposition to the Shore Establishment proposal that the men will go to sea knowing nothing of how to live in a ship. True, to some extent, but they will not have lost the thrill of joining their first ship or of going to sea for the first time. They will be by that much the keener. Their Training Establishment should be within striking distance of a naval port, with a Training Flotilla maintained—at least partly—for their benefit. During their four months' training (if that is all they can be allowed) they should spend about a week in a destroyer or frigate. This will teach them much practical seamanship, crystalizing the whole seamanship course. They will also learn all they need to know to introduce them to ship life without destroying the novelty or thrill of it.

The only advantages I can see in a Training Squadron, rather than a Training Establishment with attached destroyers, are :—

(a) A sea-going command for a rear-admiral and a few captains, and rather more sea-going appointments for commanders and below.

(b) Some large ships which would otherwise be immobilized in Reserve are part-manned and so capable of a limited mobility and at least of giving a brave display so that the G.B. public is bluffed and does not realize our true paucity of fighting strength. (But is this an advantage?)

Even if no suitable establishment is at present available, I urge that the principle of a Training Squadron should not be accepted as permanent without very careful consideration. If the advantages of shore training are conceded, a site should be earmarked and designs worked out for building when money allows. It seemed to me a pity that H.M.S. *St. George* (Gosport) was handed back to the Army, as that might have been most suitable. Failing that, what are the uses planned for H.M.S. *Bruce*, which has proved so successful as a Boys' Training Establishment, but is now closing down to meet the demands of economy?

BASHAN.

FORMS AND FRUSTRATIONS.

This is a *cri de coeur* which, though echoed in many another breast, threatens to be completely choked into silence by the growing avalanche of forms, returns and directions. The paperchase has degenerated from a youthful pastime into an adult vice, with the hares showing signs of outnumbering the hounds. And there is cunning in the mad abandon with which they mark the way of their passing : the trail is not merely too evident, it is waist-high and growing higher. In it theirate hounds will eventually be brought to a turgid halt. The field for criticism is measureless ; and a general attack will not, for that reason, meet with success. The particular, in the shape of our own house, offers more hope.

Taking a list of returns for one Command, I sat down with a paper and pencil. As this is intended as an example, it would be tedious to go into details and invidious to mention at what level the various returns found their final "IN"-trays. It is sufficient to take the case of the hardest done by, that is the smallest units, who naturally have to return the full number. These harassed unfortunates have to deal with 152 per annum. (If there are those who are not perturbed, they merely illustrate what we have come to.) These ranged from three on the daily to 32 on the monthly list. Even the simplest occupies an hour by the time its details have been obtained, verified, typed on the *pro* forma or signal pad, and despatched. And how many units of our scarce man-power are involved in the process? Half-a-dozen at least. (Think it out, all you who might lightly have invented it.) At the other end of the scale, of course, are the multi-foolscap forms in quintuplicate which require considerable thought and sometimes entail arresting the turning wheels while they are dealt with.

What can be done about this? There is the story of an American admiral, apochryphal though it may be, which stands as an awful warning. On the day America entered the war, this C.-in-C. ordered every ship in his Command to land all typewriters except only one for each ship's secretary. A gesture, this, to warm the fighting man's heart. Alas! he was only a simple sailor; for never had the chairborne ashore been presented with such an opportunity. The deluge of paper descending on that Command was so great that the machines had to be recalled to deal with it.

The spread of the disease has been so insidious that we are becoming unable to visualize the true meaning of free-will and self-reliance. Now our lives are so circumscribed and directed from above that little initiative is left. Be sure that the worst evil of form-filling is not the waste of time, energy and paper involved. The real harm is in the reduction of the orbit in which so-called responsible officers can wield their power and the means wherewith to do it. And no one seems to heed. What is there left to the commanding officer who has regularly to report what work he has done and for how long; who has been punished and why; what the state of his equipment is; who has been told to do what; in what state will he be a fortnight hence? I am not being facetious, merely interpretive, for that is what many returns ask in a less bare-faced way. This will breed a type who is only interested in complying with the letter of the law, not the spirit—a yardarm squarer. When the scope for leadership is taken away there will be no leaders. When the leaders go ——?

Back to our specimen list of returns. I tried to apply a criterion by which to judge the merits of each item. As this appears to be a pioneer effort it is open to correction, but these were the three standards :

- 1. Lessons to learn. Progress depends on this; therefore this type of report is essential.
- 2. Vital statistics. The operative word here is "vital." The statistician performs a useful function in modern life, but give him his head and he will start analysing the variable factor in the suspender value of trouser buttons. *He* is not entirely to blame; he is an enthusiast; figures are in his blood and, to be truthful, he can produce interesting and often correct theories on almost anything. Few of them are vital.
- 3. Promotion and advancement returns. While these are necessary it is interesting to note here another example of the "planner's" mind. The rating is assessed as a man. In the case of the officer, however, it is recommended that his qualities be treated arithmetically to produce, we are assured, a more standard assessment. In probably no other case is it so hard to eliminate the subjective view as when we attempt to sum up our fellows. For once this would appear to be an occasion when the scientific objective approach should be rejected as unnatural, impersonal and entirely at variance with human inclinations. One either knows instinctively or by knowledge born of experience whether a man is good, bad or indifferent—or one does not. If you don't like the way he drinks his soup there is probably a sound reason for it; and if the reporting officer has a bias his senior should know it and weight his own opinion accordingly.

Well, applying the above three standards to the list of returns I estimated that the Command would function no less efficiently, probably more so for reasons given already, if at least 50 per cent. of the items had never been thought of. If I were to give chapter and verse an outcry would arise from many little empires, probably demanding, among other things, a review of the estimate. That would provide a clue for making a further, say, 10 per cent. cut.

Two particularly unnecessary types of return, to my mind, need highlighting. The first is the blank return. The inference is either that you don't trust the responsible officer under you to keep awake, or else you yourself need reminding of how many units are your responsibility. The second return is of the type which wants frequently to know how many officers and men are borne. Now, there exist, no doubt, large and elaborate organizations to deal with appointments and drafting, and it is presumed that the most detailed records are kept. Why, then, this return? If we were a Service of amorous Amazons, there might be occasional need to check on any increases.

Can the powers not say to their subordinate : "this is the work required of you; this is the standard "—and leave it at that? Constantly to chivvy him with interim enquiries indicates distrust of the very abilities that led them to select him for the job. The results will show whether their choice was right. If it is not—well, there are precedents for that solution. And there are such things as Admirals' Inspections. How did we fare in that other world when, to quote Admiral Hopwood :

"With Marconi yet undreamed of, None to call, or heed their prayers, They had none of our good fortune, We, alas! have none of theirs."?

Is the present standard of training capable of imbuing commanders with the same confidence in their abilities as "Our Fathers" had when setting off to tackle some distant mission?

As has been said, the most serious aspect of this matter is the tendency insidiously to undermine those same traits of character which the Service professes to instill. A ruthless hand is needed; but the lead must come from the top, for the bigger fleas breed lesser fleas.

MATE.

In the May issue of THE NAVAL REVIEW, page 187 ("R.O.F."), there occurs the phrase "The officers employed by the Chief Inspector of Naval Ordnance need no bouquets from me." "Sirius" goes on to make it clear that he did intend to hand out a bouquet, but without presumption.

I have only very recently been accepted into the Naval Ordnance Inspection Department; so recently that I cannot be accused of propaganda or self advertisement if I let fall any bouquets. I am in the position of a naval officer pressing forward into a hitherto unknown sphere to which I have committed myself.

The plain truth is that the Navy, as a whole, is practically unconscious of the functions, or even the existence, of the officers of "C.I.N.O.'s pool," and only a minute proportion of active service officers have any real idea of the scope of the work done by them.

It is not generally realized that C.I.N.O. is the immediate technical adviser to both D.N.O. and D.U.W. and to do this duty his web must be, and is, very wide: more than half of the so-called inspecting officers are employed in the design, development and research of new weapons and in the improvement of existing naval armaments. All the officers in the department have been recruited from active service naval and Marine officers, and these have the essential background that ensures awareness of the problems facing the users of the weapons. C.I.N.O.'s R.M. officers, for example, advise on the suitability of small arms and Army weapons for naval use and safety in ships. To illustrate the evils which result from a lack of this background—it is said that a certain Navy once held a competition to select a new optical gunnery instrument. The winning model was selected by that Navy's inspectorate whose officers had no Service experience; and it was duly sent to sea for trials. The user, when he came to operate the instrument, found that accurate stabilization was necessary and no ancillary gear had been supplied to achieve this. The inspectorate was asked how the stabilization was to be done and their answer was that a rating should be stationed at each of the four legs of the instrument and should adjust the screwed feet as necessary !

Such is the experience of C.I.N.O.'s officers that they frequently fill inter-Service posts. For most of the last war one of these officers was in charge of all five of the proof ranges which dealt with Army as well as naval guns; no Army officer with the necessary qualifications and experience could be found.

The vast majority of the work of inspection officers is done behind the scenes before the weapons ever reach the user : officers are stationed at all the ordnance factories, and others inspect ruthlessly the work of private firms. Permission was sometimes granted to private firms working on Army and R.A.F. contracts for "factory inspection," i.e. gauges were supplied to the firms and the firms were trusted to reject or accept their own products. No such permission was ever given to firms performing naval contracts, and it is certain that this action was justified by results. Many of them had the unenviable job of telling Big Business that, by reason of their inferior work, their profits must fly out of the window. Many were the times when the potentates of the Ministry of Supply

QUALITY.

had to be firmly told that what was good enough for the other Services was not good enough for the Navy. During the First World War there was no inspectorate of naval ordnance as we now know it : during that war capital ships, cruisers and small craft, together with thousands of men, were immolated by their own ammunition without enemy action. The tragedies of the Vanguard, Natal and Bulwark had no counterparts in the Second World War.

Recognition, official or unofficial, of the work of C.I.N.O.'s officers has been negligible : this may be because they are neither "fish, flesh, fowl nor good red herring." They are naval and Marine officers in spirit and in profession, but are paid on civilian rates which compare but poorly with naval pay. The department has been rudely described as the "haven for the unpromotable," a libel, if ever there was one, since the age of entry precludes "passed overs" although a very few special cases have been allowed and have fully justified themselves. They have also been called "inverted Micawbers—always waiting for something to turn down." Their responsibility is large, but it is only their few failures that reach the limelight : they hear of them quickly enough, but their successes are taken as a matter of course.

Much of the work done by these officers is soul-destroying routine requiring constant meticulous care. (At one time in the war they supervised a civilian inspection strength of over 25,000.) On the efficient work of one 20-m.m. fuse fired against an attacking aircraft may the safety of a ship depend : the inspectors, alas 1 do not know which fuze out of several million that one will be.

Some officers had their more active share in the last war. One escaped from Switzerland, after that country was entirely surrounded, disguised as a *Mittel Europa* business man and bearing with him the manufacturing technique for the Oerlikon gun and a bag of sorely needed industrial diamonds. Had he not made his escape the Navy might have been deprived of the Oerlikon when it was most needed. The story of his escape through hostile country is an epic in itself. Another officer hopped, like any hungry flea, along the coast of North Africa and up the leg of Italy, always available at the last base captured. Yet another of these officers, in the invasion days of 1940, moved an entire experimental establishment of 120 men and 126 tons of stores from the East Coast to South Wales in two-and-a-half days from the time of receipt of the movement order : nine days later the establishment was working. One spent four years as senior officer in a Japanese prison camp, and the sins of others were visited upon him. He had, as an inspecting officer, experienced such injustice in the past which may have helped him in this adversity.

I would like to make one point clear to those naval officers who come into contact with "the local ordnance inspecting officer." The department of C.I.N.O. has no connection with the C.I.D. I have found that there is sometimes a suspicion that the N.O.I.O.'s visits are prompted by a desire to incriminate the user for failures that occur : such is very far from the case and is a disastrous attitude because it may lead to failures not being reported and consequently no remedial action is taken. The inspecting officer is as anxious as the gunnery officer to find the truth, and is an ally and not a foe.

I consider that the officers of Naval Ordnance Inspection Department can be justifiably proud of the work done to ensure the safety to the user and the destruction to the enemy that was achieved in the last war. I hope that sufficient volunteers will continue to enter the department to make certain that the high standard is maintained and that the Navy, as whole, will not regard C.I.N.O.'s "pool of officers" as being filled from the waters of Lethe.

PISCES.

AN INTERPRETER BRANCH.

WITH several brilliant exceptions, the English have been indifferent linguists in the past. Our once dominant world position and our physical isolation from Europe led to a situation where the Europeans had to study us and our language, while we could afford to ignore theirs. (If you wish to borrow $\pounds 10,000$ from an Eskimo, it would be in your own interest to learn Eskimo; the Eskimo would not feel a similar obligation to learn English.)

But to-day we are no longer isolated and no longer dominant. If English is still being taught abroad, it is not to suit our convenience but that of the U.S.A. We are no longer the Eskimo; we have to look for him. Forced to study the affairs, opinions and languages of other nations—a project which we should have undertaken of our own free will many years ago—we find ourselves in a maze of ideologies and closed frontiers. On the knowledge we gain will depend not only peace time problems but the success or failure of our Intelligence in time of war.

The need for officers to speak foreign languages is thus apparent, and, judging from the catalogue of distinguished names in the Interpreters' Section of the Navy List, has always been apparent. But is it right to judge from the Interpreters' List? An alarming number of 2nd class certificates (anything down to 60 per cent. in the final examination) are listed, and most officers have not continuously practised their specific languages for many years. If this List is assumed to be the Interpreters' Pool for the Navy then it must also be assumed that all officers therein are able and willing to be employed as interpreters when and for as long as they are called upon. Apart from rusty and inadequate knowledge, many officers would be reluctant to allow their careers to be thus sidetracked, and most departments unwilling to release their officers for any length of time, for such purpose.

To-day, a conscientious officer with a gift for languages, although he is given occasional opportunity for foreign study, must be reluctant, for the sake of his particular branch, continually to ask for courses in languages. (I know, for example, that my own short-staffed branch was caused serious inconvenience during the war by the number of its officers seconded for interpreters' duties.) He is further told, rightly under the present circumstances, that his progress in his own career depends on his prowess in his professional subjects. His alternative, to study and pass language examinations in his spare time, is never entirely satisfactory, for although he may master the grammar it is rarely that he may converse for long periods with the natives of the country whose language he is studying.

What I have to propose is an Interpreter Branch, organized on the lines of any other specialist branch. Officers would be selected from volunteers either at the end of their time at Dartmouth or on passing in as a Special Entry cadet. The qualities required, apart from an obvious talent for languages, need be no different than for any other officer. Possibly, an ability to keep one's mouth shut might be included, as a paradoxical virtue; and a flair for mixing with all classes. Cadets thus selected would pass through the training ship in the ordinary way, but would receive instruction in their own languages much as cadets (S) are at present instructed in supply and secretarial duties. While in the training ship, and later as midshipmen with the Fleet, the aim should be to give young interpreter officers as full an insight as possible into all branches of the Navy; the languages at this early stage should come second.

On passing as acting sub-lieutenant, the officer should then be sent abroad for a period of study in his first language, followed by a period of N.I.D. on the background of the country in question. His aim thereafter must be to master as many languages as he can, and I *mean* "master"; to obtain for himself a sound and useful knowledge of his particular countries including their history, geography and character. Before such a scheme could be in full working order it would be necessary to select volunteers from any officer able at the next and subsequent Civil Service examinations to obtain at least 75 per cent. in at least one language.

Any capable linguist, given the necessary encouragement at an early stage, should have an excellent knowledge of five European languages by the age of thirty-two; and Cantonese, Mandarin and Japanese could be mastered by his opposite number at the same age.

I cannot see why this or a similar cadre of practised, well-informed experts should not be the basis for the best Intelligence Service in the world. With such a body, there is no problem about which we would lack information, no situation in which we would find ourselves ignorant.

Many officers, myself among them, know that their best service to their country lies in their languages. At present, we dare not persevere in them for the sake of our careers. Within a framework such as I have tried to set out we could devote all our time to interpreting Babel for our own Service.

J. C.

EXTRA-SENSORY PERCEPTION IN SUBMARINE DETECTION.

A RECENT correspondence in the "Sunday Times" on the subject of water divining recalled to my mind an incident which occurred during the fall of France.

I was returning to England from Malta and, in the manner of those days, I and a few other naval officers disembarked at Marseilles to travel across France by train, thus gaining a few days extra leave. Any anxiety we might have felt as to our safety in a country whose northern provinces were already occupied by the invader and whose army was in full and disorderly retreat was alleviated by the fact that our fellow passengers on the train consisted of a battalion of the Scots Guards. This made our journey not only safe but positively luxurious, since it seemed that the regiment believed strongly in the maxim "Any fool can be $uncomfortable \ldots$ "

Thus it came about that I found myself on board a Channel steamer crossing from Cherbourg to Southampton in May, 1940. Sharing my cabin was an elderly lieutenant-commander who had just evacuated one of the Channel ports— Dieppe I think it was—in the face of the German advance. He told me that he had found his civilian avocation of great value in the previous weeks because the Germans had been regularly mining the harbour and he, as a professional metal diviner, had found it easy to locate the mines and blow them up before they did any harm.

"I used to work in South Africa," he said, "as a gold diviner. One of the big mining companies employed me to locate auriferous reefs for them. When the Germans started dropping magnetic mines I felt sure that as a skilled diviner I would have no difficulty in pinpointing them.

"It so happened," my friend continued, "that the French port commander with whom I was friendly was himself an amateur water diviner or dowser. He and I went out in a wooden boat with our divining rods and we got unmistakable reactions which were confirmed when we sent divers down. From then on the port was never closed for a day. We disposed of the mines as fast as they were laid by means of regular patrols up and down the harbour and in any suspected area.

"One cold wet day when we were tired of sitting in the boat I decided to experiment with a method of divining which I knew had occasionally achieved some success with highly skilled operators. Using a large scale chart of the harbour and a small divining rod I carefully traversed the area of the harbour just as we had done in the rowing boat. To my great satisfaction I found that the divining rod reacted over the chart just as well as it had in the boat, and we were able to plot the mines on the chart with considerable accuracy. We made no more trips in the boat after that. Of course we got reactions to a lot of 'non-mine' contacts, anchors and so on, but we also found all the mines the Germans ever laid without stirring from the N.O.I.C.'s office.

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EXTRA-SENSORY PERCEPTION IN SUBMARINE DETECTION.

"I am now going to the Admiralty," my friend went on, "to see if I can help in U-boat location. If I choose a suitable metal which I can divine, such as the lead in the U-boat's battery, then I can plot the U-boats on a chart just as well as I did the mines, provided the range is not too great, of course."

That was the story my cabin-mate told me. He was entirely matter of fact about it and was quite hurt when I expressed doubts. He pulled out of his luggage a chart covered with plotted positions and showed how the position where the mines were exploded agreed almost exactly with the positions he had divined in his office. He also claimed to have actually followed one of our submarines moving in Portland harbour by means of a chart of that area.

I did not give much credence to this story at the time, although it was told me with such conviction and gravity. But the "Sunday Times" correspondence confirmed one part of it at least. One letter referred to the curious fact that dowsing (for water) could be successfully carried out on a large scale Ordnance Survey map. As far as I know this statement has not been challenged.

Extra-sensory perception, of which dowsing is an example, has as yet no scientific explanation. If one unexplained phenomenon such as dowsing can be accepted, another phenomenon cannot fairly be rejected on the grounds that it cannot be explained away scientifically.

In view of the importance attached to any method of detecting submarines, I feel sure that full investigation of the extra-sensory method has already been carried out. Perhaps it is the one method which we are keeping up our sleeve for use with deadly effect at the correct psychological, or psychic, moment.

Any comments ?—Hon. EDITOR.

W.

FAR EAST FUN AND GAMES.

THERE was a group round the fire discussing voluntary work in all its various aspects. Charles—as usual—was holding forth.

"One of the more exhausting tasks that falls to the lot of the average naval officer," he was saying, "is that of sports officer in a ship or naval establishment. The planning for a major operation in war time is child's play compared to that required to produce a complete team together at the right ground, wearing the correct colours, and approximately at one and the same time. It goes without saying that officers are on the whole far worse than ratings in this respect."

He indicated to the steward to re-fill all the glasses, and continued.

"The wrinkles that you may observe upon my noble brow are mainly the result of being sports officer to the Fourth Submarine Flotilla on the China Station at one time in the pre-war days. It is a curious thing, but the first information that one invariably receives on arrival in China is that ' the station is nothing to what it was ten years ago.' This fact was duly impressed on me at great length, both by the taipans in the Hong Kong Club and by the senior officers in the depot ship, and I have no doubt that much the same sort of eyewash was dealt out to them in their youth. Judging by the standard of life enjoyed at that time, all I can say is that, working progressively backwards and upwards, so to speak, China must undoubtedly have been a sort of Paradise a few years ago.

"In those days the submarine flotilla spent most of winter in Hong Kong, where the facilities for games were unrivalled, and a very full programme was enjoyed by all. The submariners' hockey team that year happened to be well above average, and, as far as I can remember, were unbeaten the whole season. The latter point, however, is immaterial compared with the fact that they were a very jovial crowd, and every match was great fun.

"Someone had the bright idea that we should challenge the British community up in Canton to a game, and it was left to me to 'fix it.' Those two innocent little words involved such minor items as booking tickets in the steamer, arranging accommodation for the team the other end, estimating the cost of the trip, etc. But all was eventually done successfully.

"The team had three weeks' notice of the game, but I was not in the least surprised when, the day before we left, two members cried off. One was the centre forward—('Frightfully sorry, old boy, but my wife says we promised to go to the races with some taipans ashore ')—and the left back, having taken the trouble to glance at the duty officers' list, discovered that he was ' day on ' in the depot ship. However, I was prepared for something of the sort, and had two reserves on tap who were only too willing to come along.

"The Hong Kong to Canton steamers leave at ten p.m.—(as you will remember)—from one of those piers on the Bund down by West Point, and by some amazing fluke, a quarter of an hour before that time, no less than eight of the team had arrived (one of them minus his hockey stick), and were conducting

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a small sing-song in the saloon. The remaining three arrived in rickshaws and a high state of exhilaration at five minutes to ten; they had seen fit to include in their gear for the week-end an assortment of those particularly loathsome and very life-like paper snakes that one used to buy, and playfully chased some squealing Chinese girls round the upper deck. With a sigh of relief I saw the gangway come in, and soon the lights of Hong Kong were dropping astern. After distributing the cabin tickets like a sort of glorified nursemaid, and persuading two of the sub-lieutenants that the captain was quite capable of navigating without the aid of the beer that they had generously tried to take up on the bridge, I went to bed.

"We arrived at Canton in the forenoon and, after meeting our hosts, had a wander round the British Settlement. There had been a spot of bother a short time previously, and the latter was still ringed round with barbed wire defences. This of course did not prevent two of the team drifting off into the shopping centre of Canton, where they lost their way, and returned to find everyone else on the field ready to start. Despite this, and the well-meaning efforts of our hosts to hamstring us with an enormous lunch, the submariners managed to win a fairly light-hearted game, and a return match was fixed for the next day after breakfast.

"The Club put up a very fine dinner-dance for us that night, which the whole local community attended. As far as I remember, dinner started about ten o'clock, and the dance went on all night. When we took the field next morning, our goalie was still in his dinner jacket, and there was a row of "horse's necks" behind each goal. Oddly enough, it was a very good game. This was followed by the usual Sunday session at the Shameen Club, at the end of which we had to hurry over lunch to catch the four o'clock boat back to Hong Kong. We left from a jetty only two hundred yards away from the Club, and what appeared to be the whole population came to see us off. The captain of the Canton team led the farewell cheers wearing a rickshaw coolie's hat, and, just to make quite sure we would not be dull on the trip back, several of their team came with us, whether by design or accident I never discovered.

"This week-end was voted such a success by one and all that we decided to try and repeat the performance at Macau," went on Charles, pausing to light his pipe. Mary remarked that she thought Macau was a sort of parrot. Someone explained gently, and Charles continued.

"This was only a one-day show, or rather I should say a day-and-a-night show, Macau being somewhat nearer than Canton, but the preliminary work involved was, of course, just as extensive. This time, by dint of giving the team a month's notice of the match, and by reminding each one of them personally every few days in the meantime, the whole team were actually present and correct when the boat sailed at nine o'clock on a sunny morning in January from Hong Kong. A pleasant idle forenoon was spent on deck, as the ship glided over the water between the many islands scattered around the estuary of the West River, and at lunch time we arrived at Macau.

"The British consul had kindly drawn up an ambitious programme for us, which started with a visit to the greyhound races. This was the fashionable thing to do on a Sunday afternoon there, and all Macau was present, dressed in its Sunday best; this enabled the team to 'study form' in more ways than one, and I realized that a sharp eye would have to be kept on some of the younger members if a full team was to be fielded for the match. Greyhound racing was in its infancy in those far-off days, and we were all unsophisticated enough to

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appreciate the speed and beauty of the hounds flashing over the hurdles, without worrying too much about the more sordid side of money-making, apart from the fact that few of us had more than a few dollars anyhow.

"The hockey match was at five o'clock before a large and very excitable crowd. The Macau team were mostly young schoolboys, only too obviously in the pink of condition, whereas the most you could say about our team was that they were pink. However, we played away, and I think the score was two all just before the end, when, encouraged no doubt by the cries of the very partisan crowd, the local team introduced some very questionable tactics. After our centre-forward had had his legs mown from under him inside the circle with only the goalie to beat, our umpire very rightly awarded a penalty bully, as a result of which we scored the winning goal. Pandemonium thereupon broke out on the touchline, and a man actually fainted on the spot, either from rage or excitement. When the final whistle went a few minutes later our umpire wisely dived into the consulate car, from which point of vantage (as the saying goes) he viewed with scorn his baffled pursuers.

"There was a very good dance at the Club that evening, but it finished at midnight, and as the boat back to Hong Kong did not sail till three a.m., all the team sallied forth to a spot of gambling in the nearest 'fan tan' den. The night-life in Macau—of which the fan tan dens were the main attraction—was pretty sparkling in those days, and I was more than astounded to find that all the team managed to drag themselves away and catch the boat. Not only that, but all was peace and quiet on the way home."

Charles paused and looked round. "Are you all frightfully bored with all this?" he asked.

"Pretty well," was the reply, "but as I've got a sore throat and the wireless is broken, there's no alternative. Carry on."

He mumbled something inaudible, and continued; "Another rather outstanding match that I can remember was a few years later in Hong Kong against a team of Japanese schoolboys. They were on tour in the East, combining no doubt a spot of espionage with hockey, and they played three games in the Colony, one of which was against the Navy. It was fixed for three o'clock on a Saturday afternoon on the Navy ground in Hong Kong, and a fairly large crowd collected to watch. At two forty-five the Japanese team, in immaculate white shirts and shorts, were marched onto the ground by their trainer, and, splitting up into two groups, spread out across the ground and did a few physical jerks. They then manned one of the goals and indulged in some shooting practice. A few minutes before the game was due to start the Navy side rolled up in twos and threes,—one chap had been playing squash, I remember—and, after a short delay while the shirts were fetched from a nearby club where they had been sent in error, the game started.

"The Nips cracked off at a furious pace and scored two goals almost before we had touched the ball at all; it became increasingly obvious as the game progressed that we should have to produce of our best to save a *debâcle*, let alone win. There was no further score at half-time, but there were some pretty black looks directed at us from the touchline. Then, as in many other naval operations, the weather intervened in a decisive manner, fortunately in our favour. It began to drizzle, and most of the Japanese team were wearing specs.; these they had to keep taking off to wipe the rain away, and whilst they were so employed, we slipped in a couple of goals. Five minutes before the end I *emember being left with only the goalie to beat, and I can hear to this day the bellow of rage from all sides as I shot wide. However, on the nick of time we bundled one in somehow, and the honour of the Service was upheld.

"The Japs didn't win a single game in Hong Kong, and they all subsequently committed hara-kiri, so I was told. Ah, those were the days!"

As Charles finished, the door opened and a young man came in. He was a friend of one of the members in our party, and joined the group round the fire. After the usual casual preliminaries, he mentioned that he was sailing for the China Station within the week.

"You'll have a good time out there, my boy," said Charles ; " but of course, it's nothing to what it was ten years ago."

W. S. D.

NAVAL SERVICING CRAFT.

IN THE NAVAL REVIEW of May, 1946, an article appeared calling attention to a little known section of the Naval Service, namely the Harbour Craft or, as it is now officially described, the Naval Servicing Craft. It was shown how these craft came into considerable prominence during World War II, especially in connection with invasion operations, regrettably more due to their failures than their achievements. Better results were obtained, however, in the Eastern theatre where special arrangements had been made for the administration and maintenance of the craft.

Following upon these events, the Board of Admiralty ordained that a nucleus organization should be set up both inside and outside the Admiralty to ensure that, in future emergencies, action would be taken to ensure adequate provision of craft and that the maintenance of large numbers of I.C.-engined boats would be adequately provided for.

In the three years following the issue of these instructions, considerable progress has been made toward the achievement of this aim. In consequence a marked increase in the interest shown by naval authorities in Naval Servicing Craft matters is discernible on all sides. It is therefore thought that a few words on the work involved will be of general interest to members and give a picture of the present and future organization for the craft.

The first stages in implementing the Board decisions ran concurrently and consisted :

- (a) in sorting out and indexing the craft now in existence ;
- (b) in investigating practice in maintenance procedure, past and present, and formulating from this some constructive policy that could be expected to yield the best results compatible with economy of personnel and equipment.

In spite of the large quantity of data available in the Admiralty to assist in (a) above, the work was rendered much more difficult and complex by the speed of post-war reduction and by rapid dispersal of personnel. Many craft were still on their way either by freighter or under their own "steam": more still lay awaiting allocation in ports in India and Ceylon and were thus disowned by the local naval authority when the final whistle blew. The identities of craft requisitioned for service in the United Kingdom were fairly well recorded in the Admiralty by the end of the war ; but the same could not be said for those requisitioned locally in ports abroad. Thus reports of redundant craft contained many not previously heard of, while others appeared under local aliases, both of which took much time and labour to check and identify. Due to these and other difficulties this stage is not fully complete to-day, although it is only in the more distant foreign stations that any uncertainty now remains. The extreme speed with which bases had to be closed down to maintain the required rate of demobilization threw a heavy strain on the diminished staffs, and it was not surprising that accurate reports on craft disposed of and remaining could not be made to the Admiralty.

NAVAL SERVICING CRAFT.

Turning now to the maintenance and material angle, mentioned previously as (b), it was necessary first to find some practical basis upon which to found a permanent organization. The foundation must obviously be one of practical experience, and full advantage had to be taken of lessons learnt. The first task was therefore to collect and collate every bit of material under this heading on which hands could be laid. Apart from Far Eastern operations, only outline data were available on maintenance procedure, and that only for the larger " boat pools" in the United Kingdom and abroad. Information on methods and procedure previous to the last war was scanty and vague, and enquiries seemed to occasion some surprise. Already many war-time ports and bases were closing down, and it was vital to collect as much material as possible before the experienced personnel were dispersed beyond recall. Efforts were therefore concentrated on collecting data of maintenance personnel and equipment used for N.S.C. from ports in the United Kingdom. This was done by official letter, and personal visits to as many ports and bases as were functioning early in 1946. A careful note was made of all improvements recommended, whether by official letter or over a glass of gin in the mess, and a general survey of the craft in service was made at the same time. Thus, by the assimilation of opinions freely expressed and the willing co-operation of those whose duty it had been to operate and maintain the craft, a foundation plan began to emerge. It became evident that early estimates of maintenance personnel based on minor landing craft practice could not be applied in the case of N.S.C. with reasonable economy. The main reason for this was that numbers and types of craft operating in ports were infinitely variable and depended on availability as well as on the functions and characteristics of the place. The "flotilla maintenance party" system was therefore impracticable and had to be replaced by a scale system ranging from 12 to 200 craft.

The analysis of reports and collation of data from which foundation policy emerged occupied, with other urgent daily problems, several months. Discussions and consideration within the Admiralty of the proposals put forward and eventual Board approval occupied until the end of 1947 and the beginning of 1948.

Opportunity was taken to reduce the number of types of craft in service while extensive reduction was in progress so as to ensure that the craft remaining in service should be those found to have been most satisfactory in the past. At the same time every endeavour was made to exclude all foreign and "fancy" engine types from among the post-war craft to facilitate maintenance problems.

The administrative structure initiated at the close of the war in the Eastern theatre was examined and modified for peace-time use and established in all Commands, thereby defining responsibility for Naval Servicing Craft as a whole. The term Naval Servicing Craft, previously understood as referring only to harbour craft under naval (as opposed to civil) control, is now applied to all craft, tugs and lighters whose primary role is servicing H.M. ships and bases whether they be attached to naval authorities or to dockyards and other civil departments. The craft under these two main headings are designated "Servicing Craft, Fleet," and "Servicing Craft, Civil," respectively. The measures described in this article refer, unless otherwise stated, to the Servicing Craft, Fleet.

While these discussions went on in the Admiralty, naval authorities outside were organizing their craft on lines known to be in accordance with intentions and ideas obtaining in the Admiralty departments concerned and, in the case of Home Stations, in close co-operation with them.

The work of sorting out unwanted craft and framing peace-time complements of boats for harbour service, although proceeding on agreed lines, produced innumerable administrative teasers, many of which had to be dealt with on Admiralty level. The probable commitments of the Home Ports and bases, such as the Reserve Fleet, were continually changing in nature, at the same time urgent demands for reduction of man-power were reverberating from above. However, order was gradually evolved out of the post-war chaos of craft, maintenance became organized and supervized by the local senior officer, and the heavy back-log of defective craft systematically tackled. In the absence of declared Admiralty policy each step of this reorganization was discussed personally with officers in the Admiralty concerned with the setting up of the N.S.C. organization, thus expediting the eventual publication of approved policy and reducing the possibility of error or misunderstanding. Tribute must be paid at this point to the forbearance of maintenance captains and commanders and other harassed members of commanders-in-chiefs' staffs in listening to, and endeavouring to put into practice, the theoretical "chatter" of planning enthusiasts (of whom the present author was probably amongst the worst offenders !).

Following on the action roughly outlined, administrative and maintenance policy and procedure was eventually approved for application to Servicing Craft, Fleet, and promulgated by A.F.O. Craft under civil administration have now reverted to pre-war procedure but are subject to overall co-ordination with Servicing Craft, Fleet. For peace-time purposes this division of craft is quite convenient, since the majority of civil craft are of the tug and lighter type, while naval authorities are almost entirely concerned with M.F.V., fast and slow motor-boats and open launches (H.L.(P)). All civil-operated craft and nearly all naval-operated craft are manned in peace time by civilians, but maintenance of naval craft is mostly done by naval ratings, with, in some cases, a small nucleus of civilians.

The allocation and general administration of naval craft is now carried out by officers on the staffs of commanders-in-chief or local senior officers (e.g. R.N.O. Clyde) and the technical administration by appropriate engineer officers. The work of maintenance is grouped as far as possible in the centralized bases, and such bases now exist at Portsmouth, Devonport, Rosyth and Clyde areas. Abroad the position is not so clear cut, but the maximum possible centralization both of administration and maintenance is carried out.

In the Admiralty all matters concerning allocation and procurement of Servicing Craft, Fleet, is centralized in the Movements Department by the Deputy Director, Movements/N.S.C., who has his own docket markings and is more or less independent of the rest of the department. A list of Servicing Craft, Civil, is maintained in the department, but executive action is with the parent departments.

All matters concerning maintenance and repair of naval craft are co-ordinated by the Director of Craft and Amphibious Material (D.C.A.M.) who acts through the professional departments responsible for providing personnel and equipment generally. D.C.A.M. is thus the clearing house for all "material" matters concerning naval operated craft, especially those in maintenance commanders' pools which have no parent Admiralty department. In consequence of the amount of general data and information on all aspects of N.S.C. operation that comes his way, he is consulted by most authorities on their N.S.C. problems and is generally " in the picture " both as regard naval and civil admintered craft.

In addition to the responsibilities mentioned, D.C.A.M. is also chairman of the Inter-Service Marine Craft Committee which is a sub-committee of the Joint Warlike Stores Committee (J.W.S.C.) and is responsible for inter-Service rationalization and standardization of small marine craft. Since this committee includes within its purview the tugs and lighters operated by civil departments of the Admiralty, it will be seen that D.C.A.M. will in a short time be very fully informed on all material aspects of Naval Servicing Craft as a whole, and in a strong position to act on behalf of all users should the necessity arise.

With the administration and supervision of the craft developing on the lines described, a definite improvement in the serviceability and reliability of navalcontrolled servicing craft is now noticeable. Not only should this continue to improve, but it can be confidently anticipated that in a future emergency the nucleus organization now in being could rapidly expand, to meet increased requirements on the same principles as those now established, always provided, of course, that the necessary personnel are made available. Similarly, such expansion, involving requisition and new construction, will proceed on planned lines, and the adequate provision of craft will be accompanied by properly organized maintenance arrangements with the greatest possible inter-Service co-operation.

By measures such as these it is hoped that, in the fullness of time, the organization of harbour servicing in its broadest sense will reach the high pitch of efficiency for which our Service is so justly renowned.

H.

THE NEED FOR A NAVAL FREIGHTER TRANSPORT.

At the conclusion of the recent war many of H.M. ships were employed on duties for which they were not designed and which it is safe to assume their builders never expected them to carry out.

By far the most important of these tasks was the trooping run from England to Australia carrying all kinds and conditions of passengers, and then perhaps the ferry service between Australia and Hong Kong. Originally several ships were engaged on this latter duty, but by the end of 1946 only one was left, namely the *Bonaventure*. Her undoubted value in the immediate post-war period was such that the question concerning the desirability of the introduction of a somewhat similar type of ship into the post war fleet springs to mind.

Many of the jobs on which the *Bonaventure* was employed would no doubt not be within the scope of a naval freighter transport in peace time, but on the other hand such a ship or ships would provide first class training for officers and ratings in the stowage and lifting of cargo, and there would be some offset to the running costs in the saving of expenditure through the transport of naval stores and passengers in a naval "bottom."

Before enlarging on this it will perhaps be as well to give a slight picture of the kind of ship the *Bonaventure* was. She was laid down on the 9th of December, 1941, at Greenock as the Clan Line cargo ship *Clan Campbell*. Her dimensions, etc., were as follows :—

Length .		••			•••	487 feet.
Beam .					•••	63 feet.
Standard J				•••		9,166 tons.
Seagoing I (D.L.	Displace Draug	ement ht).	•••	•••	•••	11,144 tons.
Engines .			•••	•••	•••	Twin screw superheated triple expansion with Bauer Wach exhaust turbines. I.H.P. 8,300.
Speed .			•••		•••	15 knots at 85 r.p.m.
Endurance		•••		•••	•••	15 knots—3.59 tons per hour= 3,900 miles.
						12 knots— 2.17 tons per hour= $5,080$ miles.
Fuel .	•••	•••	•••	•••	•••	Oil-1,065 tons. Coal-320 tons.

Two boilers were dual fired : conversion of the coal bunkers to fuel tanks would raise the endurance at 15 knots to 5,250 miles and at 12 knots to 7,240 miles.

Originally designed as a five-hold heavy lift cargo ship she was purchased by the Admiralty while building and was completed as a depot ship for X-craft. To do this Nos. 1, 3 and 5 holds were converted to storerooms, auxiliary machinery spaces, etc., and No. 2 hold became the workshop space for the craft when lifted inboard, while No. 4 hold was the magazine for the side charges. A total of six craft could be carried and they were stowed on the fore and after well decks and in No. 2 hold. Lifting arrangements consisted of a 50-ton derrick forward and a 40-ton derrick aft in addition to other smaller derricks.

When the war ended orders were received to land the XE-craft at Sydney for scrapping and that the *Bonaventure* was to be employed on the transfer of stores and heavy equipment from Australia to Hong Kong for the rehabilitation of the Colony, and also on ferrying naval drafts, civilians, ex-internees, etc., between ports as far apart as Colombo and Kure, Sydney and Shanghai.

To carry out these duties certain alterations were made, mostly by ship's staff. Chief among these were :—

- (a) All surplus machinery was removed from No. 2 hold and the craft chocks were also removed from there and from the upper deck.
- (b) The side charge racks in No. 4 hold were cut out.
- (c) Special storerooms for XE-craft stores were turned into additional messdecks, mail rooms and stowage for "cabin freight."

As a result of these alterations approximately 4,000 shipping tons of cargo could be carried, and the following accommodation was made available for passengers :---

Cabin and dormitory accommodation-70 officers or women/children.

Troop deck accommodation—350 ratings.

Lavatory and washing facilities for these numbers were hardly sufficient and fresh water had to be strictly rationed, but for sea trips of up to fourteen days amenities could be classed as "reasonable."

Alterations completed, the *Bonaventure* was speedily in service, and the following table gives brief details of lifts between September, 1945, and June, 1946.

Date	Voyage	Cargo	Tonnage	c		Passengers			
			,	Serv Offic M.	ers	Ratings	Male	Civilians Female	Children
Sep./Oct., 1945	Sydney-Hong Kong	Motor transport, miscellaneou stores and building materia		20		276			_
Oct./Nov., 1945	Hong Kong-Sydney	Empties and mails	. 50	12		335	12	16	-
Dec., 1945	Sydney-Hong Kong	Cased Aircraft, heavy machinery and mechanical equipment		7	47	182			_
Jan., 1946	Hong Kong-Subic	Mails	. 5	2			8	10	4
Jan., 1946	Subic-Hong Kong	3 tugs and 1 M.F.V	. 280	14		38	—	—	
Feb., 1946	Hong Kong-Sydney	Mails, firebricks and ammun tion cases	i- 100	1	2	73	58	70	36
March, 1946	Sydney-Hong Kong	Mails, building materials, M/ and Naval stores	Г 4, 400	38	7	328	12	13	2
April, 1946	Hong Kong-Sydney	Motor transport and mails .	50	11	2	52	27	12	8.
May, 1946	Sydney-Hong Kong	Salvage gear, steel plate, mail M/T and stores	s, 4,400	44	3	372	11	19	. 1
June, 1946	Hong Kong-Singapore	Mails	20	28	4	53	· · · · ·	_	_
June, 1946	Singapore-Colombo	Mails	5	10	1	172	3	—	—
June, 1946	Colombo-Singapore	Mails and mechanical equip ment for Cable & Wireles Ltd		8	3	133			_
June, 1946	Singapore-Hong Kong	Timber, tea and other prov sions, mails and salvage gea		11	7	180	3	2	1
	Totals	··· ··· ··· ··· ·	16,760	206	76	2,194	134	142	52

By the end of May, 1947, these totals had been raised to :---

Cargo, 33,438 tons.

Passengers, 5,876.

This latter number included 425 civilians, whose ages ranged from a baby barely three months old to an old lady of 74, and whose nationalities were a complete cross section of the United Nations.

Had sufficient time for conversion been available it is calculated that No. 5 hold could have been turned into a refrigerated hold and a grand total of 7,000 shipping tons of cargo could have been carried. Passenger accommodation could also have been increased to 80 cabin passengers, 50 senior and 350 junior ratings.

Having thus briefly given the details of the *Bonaventure* and touched on her employment, it is now time to consider the case for the inclusion of such a ship in the post-war fleet. There is of course already the fleet replenishment ship *Bulawayo* (ex German *Nordmark*) which flies the White Ensign : she is a naval manned tanker of some 22,000 tons with a speed in the neighbourhood of 20 knots whose duties are mainly fleet replenishment at sea and as such is outside the proposals now put forward.

The dimensions, duties and general usefulness of a naval freighter transport are considered to be as follows :—

DIMENSIONS.

The ship should be of 10,000 tons displacement, with a speed of not less than 15 knots and a good endurance. She should have four holds, one of which should be refrigerated, and her cargo capacity should be about 6,000 shipping tons. Heavy lifting gear to cope with heavy machinery and boats up to M.F.V. size is essential. Passenger accommodation for 100 in cabins and 350 on troop decks would be adequate for normal peace time runs.

DUTIES.

Routine service from the United Kingdom to the Far East calling at Gibraltar, Malta, Colombo and Singapore, with possibly occasional voyages to Bermuda, Simonstown, etc.

Outward cargo would be naval and victualling stores for foreign stations, returning with empties and possibly provisions produced locally, e.g., rum, tea, groundnuts, etc., and in the refrigerated hold meat and fruit. As regards passengers, she would be available for normal naval trooping duties and would also carry Admiralty civilians and, where possible, naval families. Surplus passenger accommodation, if any, could be offered to the Army and Air Force, and would provide an insight into naval life for the officers and men of those two Services.

GENERAL.

The ship would be R.N. manned, and though her complement would not be large enough to work her cargo in port and stevedore labour would have to be employed, much useful experience would be gained in cargo handling and stowage, and at the same time a valuable insight would be given into some of the duties of the Merchant Navy. The voyages would be of particular value to National Service men serving with the Navy, who at present cannot expect to go much beyond the Mediterranean. Service in a naval freighter transport would broaden their outlook by showing them parts of the world they would not otherwise have the good fortune to visit, and they would also be given first class training in seamanship.

In time of war the ship would be valuable as the nucleus of the fleet train and a reserve of officers and men with experience of the work in such ships would have been built up. One of the many lessons to be learnt from the last war is that one can no longer expect to fight in well defined areas, and that bases, with complete facilities for a large fleet, must be capable of being installed

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in the most remote places; a ship or ships of this type would be invaluable for duties in this connection as a floating base.

In conclusion it only remains to record that in mid-1947 the *Bonaventure*, the seventh H.M. ship of her name, returned to England and was paid off. Later she was handed back to the Clan Line, whose flag she now flies under the name of *Clan Davidson*.

T. P. G.

THE ROYAL HELLENIC NAVY, 1822 TO 1949.1

PART II.

DURING the evacuation of Greece in April and May, 1940, the Luftwaffe took heavy toll of allied warships. With inferior A/A armament, the Greeks could do little against dive bombers; but it is to their credit that they did their utmost to co-operate with British forces, scuttling what ships remained afloat in Salamis Dockyard. The conduct of Commander Pezopoulos, commanding officer of the destroyer Hydra, mortally wounded when his ship was attacked by a formation of aircraft in the Saronic Gulf, inspired those surviving of his crew to go down with him. The only ships to reach Alexandria were the historic cruiser Averoff, seven destroyers, three old torpedo boats, five submarines and a small number of auxiliary craft.

The beginning of 1942 found the Greek Navy still recovering from its wounds. Its personnel had increased to 240 officers and 3,600 men, the addition being either from those who escaped from Greece or from Greek nationals living abroad. Gradually ships were re-armed, worked up and trained to take their share of convoy work and minor operations with units of the British Fleet. They took their share of the heavy fighting in two Malta convoys, besides forming part of Force K where some of the most gallant actions were fought against heavy odds. It is all the more to their credit when one considers they were manning old ships with comparatively light gun armaments. Even the old *Averoff* filled the role of long distance escort against Japanese raiders in the Indian Ocean. Submarines were often successful in interrupting Italian communications, being credited with sinking at least four enemy merchant ships. In December the commanding officer of the Queen Olga, Commander Blessas, was awarded the D.S.O. for his share, with H.M.S. Petard, in attacking and sinking an Italian submarine.

Meanwhile a number of Hunt class destroyers building in British shipyards were allocated to the Greek Navy. Officers and men were sent to England for training prior to commissioning the ships for service in the Eastern Mediterranean. These were renamed *Pindos*, *Kanaris*, *Miaoulis* and *Adrias*. In addition, a number of small craft were taken over, some converted to minesweepers. By the end of the year the personnel had risen to over 6,000 officers and men.

In May, 1943, three of the new destroyers took part in operations off Tunisia that ended the North African campaign, and later the Queen Olga assisted in the bombardment of Pantellaria. During the invasion of Sicily, the Pindos assisted H.M.S. Easton to sink U.458 and the Adrias later took an important part in convoying troops across from Africa. The Queen Olga was selected by Admiral of the Fleet Sir Andrew Cunningham to accompany his force that escorted the Italian Fleet in surrender to Malta. This ship distinguished herself later in a successful night action off Cape Spartivento in company with H.M.S. Jervis when, on the night of 1st/2nd June, they intercepted two enemy supply ships escorted by one destroyer and a torpedo boat. All were sunk. During the subsequent operations in the Dodecanese, the Queen Olga was sunk by aircraft at

¹ Continued from N.R., February, 1949, p. 51.

Leros with the loss of her captain, together with six officers and sixty-three men. A few weeks later the *Miaoulis*, in company with H.M.S. *Hursley*, sank two E-boats and caused two more to be abandoned.

Another of the more memorable episodes occurred in October when the *Adrias* and H.M.S. *Hurworth* were operating in support of Leros. The *Adrias* struck a mine that blew off her bows. The *Hurworth* turned to help and almost immediately struck another, after which she sank leaving few survivors, most of whom succeeded in reaching the Turkish mainland. Meanwhile the *Adrias* had eighteen men killed, three missing and twenty-eight wounded. Her commanding officer, Commander Toumbas, after appreciating the damage, decided to make the Turkish coast. At five knots he accomplished a fine feat of seamanship, patching up the damage and eventually reaching Alexandria five weeks later, after a hazardous voyage in enemy-controlled waters of over 500 miles. Entering harbour one forenoon at eight knots all ships present cleared lower deck to cheer his arrival. For this exploit he was awarded the D.S.O. In Salamis Dockyard the following inscription was placed on a monument in Greek and English :—

"Remember that on October 22nd, 1943, 134 British officers and men of H.M.S. *Hurworth*, commanded by Commander R. Wright, D.S.O., R.N., nobly risked and lost their ship and lives to save the company of H.H.M.S. *Adrias*, which was in peril."

In the light of these events it is tragic to relate those that occurred in the Royal Hellenic Navy during the early part of 1944. To understand their occurrence one must study the situation in Greece. During the German occupation the pattern of resistance had followed that of other occupied countries. Guerilla bands were operating behind the lines with British support, the most notable and powerful being the E.A.M. (National Liberation Front). This was entirely Communist inspired. Propaganda, strikes, sabotage and demonstrations were organized with fanatical efficiency, while British equipment, weapons and money were dropped in the country to assist the guerillas who were soon tying down a large number of Axis troops. By the end of 1943 a third of the Greek mainland was freed, organized by a central G.H.Q. Antagonism with the Royalist and Right Wing resistance groups spread until at the time of the Liberation they were actually fighting each other. Hitherto it had been the British policy to support all parties fighting the Axis, and assistance was provided irrespective of their politics. It was, however, a difficult policy to implement, as each side was intent on eliminating the other as a sideline to fighting the Axis. While the "Government in Exile," with its H.Q. in Cairo and the King at its head, was officially recognized by Britain, "elections" had been held in the mountains by people who had set themselves up as the "Government of Free Greece." Thus Communist propaganda infiltrated into the Armed Forces, but nowhere so effectively as in the Fleet. Besides their usual doctrine, the E.A.M. sought to discredit the Government in exile for refusing to recognize the so-called " real liberators" of their country. Gradually there spread amongst the more susceptible members of ships' companies the will to resist authority, until on the 6th of April in Alexandria the crisis arose when the *Pindos* mutinied against her officers, and the Greek Admiralty, situated at the Boat Club, was seized by the Communists. The revolt quickly spread to other ships, officers being forced to leave, sometimes by swimming ashore. British warships in port were made ready to deal with the ugly situation that required delicate handling. The depot ship Hephaistos lay in the middle of the harbour, and alongside the jetties and British warships, about ten smaller craft. Drastic and violent action was employed to deal with the mutineers, of whom the hard core was prepared to fight the matter out until the bitter end. As an observer of the final struggle between Loyalist elements and Communists the gun battles fought in the early hours of the 23rd of April proved that resistance could be overcome but not without considerable bloodshed. Subsequently there were many and various repercussions, and the unpleasant affair was not cleared up for many months when all ships were finally purged of disaffection.

Large scale naval operations in the Aegean began in September, 1944, when cruisers and destroyers, including units of the Royal Hellenic Navy, together with a force of four escort carriers, began to take offensive action against the enemy's shipping and island garrisons. One by one Axis groups were effectively mopped up until on the 15th of October the 15th Cruiser Squadron anchored in Phaleron Bay. All ships carried troops and equipment for the Liberation of Greece. They were supplemented two days later by the Averoff carrying members of the Greek Government and escorted by a number of destroyers and small craft. A tumultuous welcome awaited the Anglo-Greek Forces in Athens although there was evidence of a dangerous undercurrent of political rivalry. This continued for two months until matters were brought to a head by the question of reconstitution of the Army which the Communists wished to be mainly E.L.A.S. and therefore under their control. The Government intended to base the new National Army on the forces which had returned from the Middle East. including the "Sacred Brigade" that had fought with the Eighth Army in the desert. Three days before the date the E.L.A.S. were given to lay down their arms, the Communists in Athens called a general strike in protest. During a demonstration in Constitution Square the police were obliged to open fire and seventeen people were killed. On the 6th of December heavy fighting broke out between the E.L.A.S. and the Greek National Army. With their superior numbers the Communists soon began to get the upper hand. It was a tragedy that British troops, who had been sent to liberate the country and restore law and order, should have been drawn into the conflict through the necessity of dealing with what eventually turned out to be a terrorist minority anxious for power. There was no alternative for the British Commander, General Scobie.

Ample evidence went to show the stabilizing effect of the presence of British ships in Greek ports during the troubles, and the popularity, which was sometimes embarrassing, of their officers and men. At the Piraeus, the formation of a naval brigade from Greek naval volunteers was an unqualified success. The people were enthusiastic at seeing Greek uniformed forces, and in their first action the Naval Brigade held ground, capturing ninety-seven E.L.A.S. prisoners. In the Cyclades Islands where E.L.A.S. troops were disarmed, national enthusiasm ran high, and the presence of British and Greek waiships greatly enhanced morale. The co-operation between them was excellent throughout, where considerable restraint had to be shown by the White Ensign in many a difficult situation. Schooners and caiques manned by Greek seamen worked with British M.L.'s and other craft in the suppression of piracy and the prevention of gun-running. It was not always a matter of sinking at sight but of patrols and cutting-out expeditions to seize rebel caiques without bloodshed.

Gradually the tide turned after the timely arrival of British reinforcements, our troops in support of the National Army having fought several bitter and bloody battles in the Athens area. By January, 1945, the rebels had been completely defeated and a surrender was signed at Varkisa, an agreement that has since been criticized for its leniency in that it allowed the Communists to go away, only to come back and fight another day. In the year that followed Greece experienced peace in every sense but the political.

THE ROYAL HELLENIC NAVY, 1822 TO 1949.

It was the policy of the British Government to undertake the initial reequipment of the Royal Hellenic Navy, the reconstruction of dockyard buildings and workshops and all the necessary measures to put the Service back on its feet. There was much to be done. Considerable air raid and demolition damage had been done to the Arsenal at Salamis and training establishments at Skaramanga. personnel problems had to be straightened out, a system of recruiting and training reinstituted, harbours cleared of wrecks and large areas swept clear of mines. In September, 1945, Admiral Voulgaris, then acting as Prime Minister and Minister of Marine, approached H.B.M. Ambassador with the request for the formation of a Naval Mission to assist the Royal Hellenic Navy to maintain its standard of efficiency and organization on British lines. Negotiations were started and a contract drawn up for discussion. The Senior British Naval Officer. Greece, was appointed as Head of the British Naval Mission and a number of his staff appointed as members. Early in 1946 a further number of ships, including three modernized Hunts, were loaned by the British Navy, but the situation soon arose whereby the British Government realized they could no longer maintain the financial burden. The British Naval Base at Piraeus was closed down as the Greek Navy took over more and more responsibility.

In September, 1946, a plebiscite was held to ensure popular approval of the King's return from abroad, which resulted in a large majority in his favour. However, it was not long before the Communists again began to agitate the the country. Clashes between the bandits and the gendarmerie became a frequent occurrence until in December it became critical.

The Greek Government was therefore obliged to take full military measures against the bandits. These measures were put into operation by April, 1947. The major role of the Navy was to carry out patrols covering the whole coast-line to prevent bandit infiltration by sea. This was particularly effective in the Gulf of Corinth where all movement to and from the Peloponnese was stopped. Subsidiary to patrol, warships supported amphibious raids, lifted troops and supplies, moved political prisoners to island prisons, carried out minesweeping operations and finally provided gun support to the G.N.A. and Gendarmerie.

During subsequent operations in the Gulf of Corinth, a number of successful indirect bombardments were carried out, and since then there has been good reason for the bandits to develop a hearty respect for naval gunfire. The mere presence of a warship, however small, at some important point has often turned the scales and deterred the enemy from committing himself to attack.

Meanwhile, it is satisfactory to note, the British Naval Mission has been able to continue its work of advising on post-war re-organization, in spite of the fact that the Greek Government has been obliged to divert some of the energies of the Navy to the temporary tasks outlined above. Progress has been made in setting up the training organization both ashore and afloat. Schools have been rebuilt, textbooks translated, officers trained in England in all the specialist qualifications, modern methods of instruction introduced and an adequate quantity of useful training equipment installed. An escort vessel, converted to a training ship, has made a number of successful cruises. Greater progress would naturally have been accomplished were it not for the conflicting requirements of operations. The dockyard is now standing on its feet and capable of dealing with small refits and structural alterations. The ammunition depot has been rebuilt and organized on a sound basis. The British Naval Store system has been gradually introduced in ships and in the Yard, where they are finding it no easy task to cope with the quantities of equipment of all descriptions arriving monthly by freighter.

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In conclusion, it should be noted that serving personnel now amount to 14,300 officers and men, more than double the 1939 figure. Amongst the 100 officers are four admirals, 18 captains and 31 commanders. Due to the break in continuous entry of cadets during war years, there are 34 lieutenant-commanders and only 32 lieutenants. The majority of junior officers have received very little training. It will take some time to adjust this ill-balance and build up a strong nucleus of well-trained officers. As regards the lower deck, 2,000 conscripts are admitted twice yearly into the Service and given three months' training before going afloat. A move is being made to extend the period of conscription from two to three years. Morale and discipline are good. Apart from two isolated cases of sabotage in 1947, resulting in discovery of a Communist plot, the Service is now purged of undesirable elements. There remains an unstinted admiration of the British Navy and the part it played during the war in the Mediterranean theatre. It is their wish they should continue being trained on British lines, and with British ships and equipment. By reason of their experience in the present operations one can be sure that they would prove themselves able to cope with similar circumstances should the world be plunged into another war. It is comforting to feel that we have such a good ally as the Royal Hellenic Navy.

TRIDENT.

YANGTSE RAPIDS-1899-1901.

RECENT events on the Yangtse are fresh in the memory and still await, it is to be hoped, their compensatory sequel in some form. In this connection, the rediscovery of H.M.S. *Woodcock's* bell, of which an account appeared not long ago in the Press, recalls a naval achievement probably quite unknown today.

It was about the time of Queen Victoria's Diamond Jubilee, and in the days when insults to the flag were wont to be replied to by putting into practice her universal remedy: "let a warship be sent," that the late Mr. Archibald Little—a China merchant and an uncle of the present Admiral Sir Charles Little—being concerned with the opening-up of trade to the rich inland province of Sze Chuen made representations to the British Government that passage of the rapids above Ichang might be accomplished by steam vessels and thus save much delay.

Ichang is 1,000 miles up river from Shanghai and 400 above Hankow. The journey by steamer from the river's mouth to either place was all plain sailing except that, in those days, there were no lights on the river and a famous pilot named Mobsby was reputed to be the only man who was competent to navigate after dark. This expert was credited with knowing several thousand magnetic courses by heart for every reach of the river in the 600 miles between Shanghai and Hankow. Less gifted river-farers usually anchored at dusk, as far as steamer traffic was concerned. A few miles above Ichang begins the great mountain barrier which terminates the plains through which the River Yangtse runs on its thousand-mile journey to the sea. Here, in consequence, the stream narrows, the gorges close in, and rapids begin to occur. From a width of sometimes a mile the banks approach one another to within a few hundred yards.

To press home his point, Mr. Little built a steam-launch, the *Lee-Chuan*, and took her up the rapids to Chungking which—1,300 miles from the sea—was the objective at which he arrived. Although she was only a small craft, this feat impressed the Home Authorities sufficiently for them to take practical methods to support the venture and to endeavour to decide the question.

Chinese junks, of course, made the passage fairly regularly but slowly, and running to no particular time-table such as would be required if a trade-service was to pay, and with an average loss by shipwreck of five per cent. at least.

The Admiralty now (1898) sent out—in packing cases—four gunboats; the Woodcock and Woodlark to Shanghai and the Sandpiper and Snipe to Hongkong for the Canton river. Lieutenant H. D. R. Watson (now Admiral Sir Hugh Watson) was appointed on the 3rd of September of that year to H.M.S. Tamar, the depot ship at Hongkong "for the shallow-draft steamer Woodcock," at that date still in her packing-cases.

He was ordered to put her together and then to experiment with her in the upper river; the *Woodlark* to remain in her sections until it was seen how he got on. Lieutenant Ian Plunkett Barton was appointed to command the latter, but died not long afterwards at Hankow. He was replaced by Lieutenant H. E. Hillman, now a commander, retired after long service as Admiralty pilot for the

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Lower Yangtse, with the Chinese Maritime Customs Department and as harbour master at Shanghai; with an intervening period of service in the Royal Navy during the 1914-18 war. Commander Hillman is an expert cartographer and his charts made during the period he was in the *Woodlark* earned him the Shadwell surveying prize.

Lieutenant Watson completed the construction of his ship in March, 1899, and took her to Ichang whence, on the 3rd of April, he set off in a kwadsa, or houseboat, on a reconnaissance above the town. Examining the river carefully as he went for expecially dangerous spots, accompanied by his coxswain, C.P.O. Bartlett, he reached the rapid named Hsin Lung, some 156 miles up, and returned to Ichang on the 13th of May

He now made his first attempt with the ship and, by the 18th of May, had got her over this rapid when Bartlett was taken ill and the *Woodcock* had to return to Ichang where the coxswain died and was buried ashore. After one more shorter exploratory trip the Commander-in-Chief, Admiral Sir Edward Seymour, hoisted his flag in the *Woodcock* and went up in her to below the Yeh rapid, some 47 miles above Ichang. This personal experience of the conditions to be expected, and of Watson's methods for meeting them, convinced the C.-in-C. that the matter could be taken further and, on returning to Ichang and thence to Shanghai, he ordered the completion of the *Woodlark* and the mounting of a combined effort to reach Chungking and, possibly, further.

Lieutenant Watson was to lead and to be in command and Lieutenant George Chetwode (then first lieutenant of the gunboat Esk on the lower river and now Admiral Sir George Chetwode) was lent to the expedition, the little ships having no executive officer other than their captains. He embarked accordingly, when the time came for a start, in the *Woodlark*. This was not to be, however, until the spring of 1900, as a rapidly-falling river made the passage of the rapids above Ichang an impossibility until then. When it is realized that there is a rise and fall of as much as 100 feet between the high and low water seasons, and that even a rise of three feet will make a difference as to the course to be steered, it will be very obvious that the height of the river had a tremendous bearing on the proceedings.

Whilst we are waiting for it to rise, let us take a look at the particulars of the two ships which, incidentally, had been originally intended for Kitchener's Nile campaign, but were not ready in time. Of about 200 tons fully loaded, they were 145 feet long by 24 feet beam with a draught of 3 feet. Their twinscrew enginges developed 550 h.p. and a speed of about 11 knots, the screws working in "tunnels" for protection. Actually, on trials with a draught of 23 inches only, the *Woodcock* made $12\frac{1}{2}$ knots. Their complement was about thirty officers and men including Chinese stewards and a Chinese pilot in each.

Early in the New Year Watson and Hillman, with Surgeon Burniston, went up by house-boat to Chungking to have a further look at the rapids, arriving there on the 23rd of February, thirty days after leaving Ichang. They left again on the 3rd of March, reaching Ichang again nine days later, which demonstrates the difference between up-river and down-river speeds.

Three weeks later—5th of April to be exact—the full expedition set out. In the *Woodcock*, in addition to Watson, were Mr. Giles, a consular officer, and Surgeon Keith. In the *Woodlark*, besides the captain, Chetwode, Sir G. Taubmann Goldie of the Colonial Service (a guest) and Burniston. The bare details of the journey tell that they reached Chunking on the 7th of May—the first steamships (for Little's *Lee-Chuan* was only a small steam-boat) ever to pass the rapids. I have extracted a few facts concerning their subsequent movements from a diary kindly lent me by Admiral Watson which relates that on :

"May 13th. H.M.S. *Woodcock*, having on board H.B.M. Consul General at Chungking (Mr. M. F. A. Fraser) proceeded up river to Sui Fu, about 200 miles above Chungking and at the mouth of the Min River which enters the Yangtse from the north and gives access to Cheng Tu, the Viceregal capital of Sze Chuaen, and arrived there on May 17th. She was now about 2,000 miles from the sea.

May 19th. She left Sui Fu and rejoined Woodlark at Chungking on 21st.

May 23rd. Lt. Hillman took *Woodlark* halfway to Sui Fu, to the town of Lu Chao which was as far as his coal would carry him, returning to Chungking on May 30th."

Both ships were back in Ichang by the 2nd of June, and the first venture ended.

Their return coincided with the outbreak of the Boxer rebellion in the north when an international force under the British naval C.-in-C., Sir Edward Seymour, fought its way from the sea to Pekin to the relief of the European legations. These operations, which entailed much hard fighting and much hardship too, are also forgotten today. It nearly cost the British Navy the life of the then Captain Jellicoe who was badly wounded, and brought honours and early promotion to Lord Beatty (then commander of Sir Edward's flagship) and to Lord Keyes (then Lieutenant in command of a destroyer). It also earned a Victoria Cross for a Marine officer—Major Lewis S. T. Halliday—and for Midshipman Basil J. D. Guy, R.N.

Amidst all these stirring events, Sir Edward found time whilst on his dangerous road to Pekin to wire his congratulations to Watson and those under him on the successful termination of his journey. Rear-Admiral Bruce from Wei Hai Wei also sent him a telegram.

The Boxer rising had, of course, its repercussions elsewhere in China, and it was held to be desirable to send men-of-war to Chungking to protect British interests; but the coal problem prevented the *Woodcock* and *Woodlark* from returning until stocks had been laid out on the banks ahead of them which had been the previous procedure.

By this date, however, Mr. Little had completed the construction of a paddle steamer especially for upper-river service and had named her the *Pioneer*. She was now taken over by the Admiralty but very wisely left in command of her Merchant Navy skipper, Captain Plant, who had a first-rate knowledge of river-work over rapids. Lieutenant R. E. Chilcott was embarked in her with some sixty seamen and marines from ships of the China Squadron, and she went up to Chungking.

Early in 1901 the *Woodcock* was off up-river again, having onboard Lieutenant G. B. Powell who was to take over and command the *Pioneer* now commissioned into the Service as H.M.S. *Kinsha*. Captain Plant remained for a while to help the new commanding officer with his river lore.

By the 20th of May, Watson and his ship were back in Chungking. But his time on the river was now coming to and end and his relief—Lieutenant Hugh G. C. Somerville (who afterwards reached flag rank)—was on his way. Early in August the latter finished the last 400 miles or so of his journey on a pony, having to ride overland from Ichang to Chungking to reach his new command. Watson remained in command for some time whilst Somerville was learning the ropes.

During this period the *Woodlark* with the new consul-general at Chungking, the present Sir Ernest Wilton, on board, went up the Min River to Kiating, the

nearest port to Cheng Tu—viceregal capital of Western China—Somerville and the consul-general going overland to pay an official call on the Viceroy. At this time it was rumoured that the Dowager Empress, discouraged by the events taking place at Pekin, was contemplating retirement to this city. It turned out, however, that her ultimate destination was Siam. Just before this trip Watson and the then Mr. Wilton had made the journey in chairs from the mouth of the Min River to Pingshan Hsien, 40 miles further up the Yangtse and the highest point navigable for a steamer. The *Woodcock* was afterwards taken up to this point by Watson's successor.

Before descending the Min River again Watson, accompanied this time by a missionary named Upcraft and Little's agent, Mr. Nickson, ascended the 11,000-foot mountain Omei on foot and stayed in the Buddhist monastery on the summit. From here they could watch the sunrise on the snow-clad mountains of Tibet and see the "Glory of Buddha"—the setting sun to the westward.

It was this journey which enabled the statement to be made in the House of Commons that "recently the British Navy had journeyed so far into the interior of China that the mountains of Tibet were in sight "— which, if not strictly true in the sense that the public was intended to take it, no doubt drove home the ubiquity of the Senior Service in Victorian-Edwardian days.

Concerning this journey Admiral Watson, after describing the ruins of an ancient bronze temple on the summit, remarks:

"it was news to me that Buddha flew from India to that mountain on the back of an elephant! It must have oeen so, however, for I myself saw the 17-hand bronze elephant erected in a temple on Mt. Omei in memory of that early aerial adventure!"

It was not until the end of November, 1901, Somerville having been delayed during a trip made in the *Kinsha* to view the rapids once more, that her original captain finally left the *Woodcock* and went down-river for Shanghai and home leaving a British naval base established in the heart of China with H.M. ships *Woodcock* and *Kinsha* lying off it.

Three years after the *Woodcock's* original ascent of the rapids the first man-of-war of another nation, the French gunboat *Olry*, reached thus far. A German ship, the *Sui-Hsiang*, had made the attempt in December, 1900, but had been totally wrecked at the Kung Ling rapid—no doubt to the displeasure of the then German War Lord—and the attempt was not repeated.

Such are the bare facts of this pioneering achievement—an achievement for which the survivors today vie with each other in attributing the credit. I have been fortunate enough to become possessed of the personal accounts of some of them, and all pay tribute to the determination and seamanship of the leader; he in turn particularly stresses the support and magnificent surveywork and charting of his fellow commanding officer.

Admiral Chetwode's main role was as assistant in these matters. "My special job," writes he, "was to take soundings continually with a Thompson sounding machine. Despite the rumours as to the great depths, I never failed to reach bottom, and the greatest depth was just over 100 fathoms in the Wushan (Witches) Gorge." As the tubes did not function in fresh water, a fact which at first had been overlooked, a depth recorder operated by springs governed by the pressure of water (which had fortunately been included in the stores) was eventually used. Concerning Lieutenant Hillman's particular part in the proceedings

he remarks: "Hillman and I fixed the longitude of our various stopping places by running 'meridian distances' and a sketch survey was made of all the rapids. To get the latitude for working out the morning sights I used to land every night after dinner and take Spica in artificial horizon, half a dozen sights before the star came to the meridian—the actual meridian altitude—and then six more after it had passed. In the morning Hillman and I used to land again and take at least ten sights each for longitude to get a big mean. His fair charts of our surveys were a joy to behold-so beautifully drawn that they looked more like a chart from a copper-plate."

The high-light of the expedition's experiences, however, was probably the repair of the Woodlark after an accident at the Niu Kou Tan rapid. Here an unusally long backwater ran up the left bank, of which the gunboat was making full use, when a junk suddenly dropped down on top of her, and she had to enter the rapid without sufficient helm on to meet it. As the result the ship hit the steep-to bank opposite at speed and, getting right across the stream, nearly capsized. She was straightened up, however, and run down the river to beach bows-on in a little sandy bay where there was no current.

The bow section of the ship, which weighed fourteen tons, was concertina-ed back, and Chetwode was given charge of the operation of getting the damaged portion disconnected whilst Webber, the engineer officer, built a new section ashore by "cannibalising" with plates taken from all over both ships and straightening what could be straightened.

The ship was out of touch with all sources of supply, but fortunately had on board the two big spars sent out with the sections from England for use as a sheers on the assumption that there would be no crane big enough where she was assembled. These spars were employed as bearing-off fenders when the ship secured to the bank at night. There was also the big three-fold tackle which went with them.

The accident had occurred in the forenoon and, by tea-time, the section had been unbolted and hoisted ashore, when the real hard work started. The rebuilding of the plating was fairly easy, but the stem-post, a solid steel twoinch forging, was twisted into fantastic shapes.

For twelve days and nights the two ships' little Onions forges,¹ placed together, were kept going, during all of which time some portion of the stem-post was in their fire. Fortunately also there was a first-class E.R.A. boiler-maker with them and, at whatever hour of the day or night the portion was hot enough. he was roused out and beat it straight. After this part of the job had been completed the re-connection of the rebuilt section was comparatively easy, and the ship proceeded on her way.

Here, indeed, was an example of that determination and ingenuity which the impossibility of calling in assistance has so often brought out in our seastory from the days of Drake and Anson—both confronted with similar mishaps.

I have mentioned the use made of the backwaters, and a little space only remains to enlarge on this subject and on the methods of "rapid-crawling" employed. It had been, I think, Watson's original intention to make use of native "trackers" to tow the ships over the worst bits, as was the custom with

¹ known always by naval sailors as "O'Nions"---presumably to soften the impact of such a name !

junks, and a considerable weight of copper "cash" had been embarked with which to pay them. The rate was: 1,000 cash = one string; one string = one dollar. This was apart from a certain amount of bullion in the shape of silver "shoes," the only medium other than the cash.

This method was, however, only used once, when, from some misunderstanding (the "Roar of the Rapid" made verbal orders difficult in any case), the *Woodcock* was eased out into the stream from the backwater before the trackers were ready, and several were pulled off the bund onto the rocks beneath, broken legs and arms resulting. Other methods were therefore sought. The *Woodlark* got up under her own power on all occasions, every stoker in the ship making it a point of honour to go down to the stokehold, whether on watch or not, when shut down for forced draught before a bad rapid. At the "peak" of the rapid where the main stream forms a big obtuse angle, the stem of the ship would come out of the water like a fast planing boat. It was then a case of "will she, won't she?" and only once, on the occasion of the accident, she didn't.

With the *Woodcock*, however, which had worn stern glands, some assistance had generally to be given, and this was achieved by running out a light steel wire to the bank and bringing it to the capstan. Exceptional handling was required for this operation and was forthcoming.

Contretemps occurred sometimes, nevertheless, as when, on one occasion, the rock to which the wire was attached came away and, after whirling downstream for a while, the ship brought up on it in mid-stream, necessitating a complicated and tricky bit of anchor work to get her safely going again.

Observations taken during the trip with a Walker log veered out into midstream gave a maximum speed of current as 18 knots—this was at Yeh Tan. This demonstrates the necessity for backwater navigation and the tricky business of deciding when and where to emerge into the main stream, particularly since the length of the backwater was not always all that could be desired. It can be imagined that descending the river was a process liable to be crowded with incident, and that, once committed to the stream at its average speed, no deviations of course could be accepted.

Finally, in view of recent events on the Yangtse, a comparison of the Chinese outlook on foreigners then and now may deserve a concluding paragraph.

In 1928 (as noted in a contemporary) Admiral (now Admiral of the Fleet) Sir Reginald Tyrwhitt, Commander-in-Chief, China, with his flag in H.M.S. *Hawkins*, when in the vicinity of Wuhu found himself in the middle of a battle between Nationalists and Communists. Both sides ceased firing until he was past and mutual guards of honour were mounted.

A similar atmosphere existed at the beginning of the century. Whilst it is true that "foreign devils" were not popular in that ageless empire whose intelligent inhabitants saw in their encroachments a dubious future for their own established customs, way of life, and vested interests, a dislike which culminated in the Boxer rebellion, visitors were treated officially with courtesy and consideration.

From Ichang to Chungking, all the way up the river and on to the Min River and Kiating, the Chinese Mandarin officials did their utmost to help the gunboats in their expedition to open up trade on the upper river, an objective in which the Chinese merchants themselves were naturally interested. Admiral Watson lays stress on the helpful and kindly relations which he had with these officials and, indeed, with all the Chinese in the upper Yangtse. The expedition also received great assistance from the European Chambers of the Imperial Maritime Customs—particularly at Ichang during the planning of the venture.

British consular officers at Ichang and Chungking co-operated fully, as this Service always does when called upon. Their excellent relations with the Chinese Civil Authorities in the vicinity of their posts and the appointment of a consular officer to accompany the gunboats in 1900 made things very much easier for their commanding officers in their dealings with the Chinese officials on the way up. This assistance was supplemented by the local knowledge of the missionaries of all denominations. Finally, mention should be made of and tribute paid to the Rev. Père Chevalier of the Observatory at Shanghai whose excellent book of charts of the upper Yangtse was invaluable in supplementing the sketchy Admiralty charts of those early days.

AMPHIBIAN.

BOOKS.

"MINES, MINELAYERS AND MINELAYING."

By Captain J. S. COWIE, C.B.E., R.N.

(Oxford University Press. 18s.)

CAPTAIN COWIE has undertaken the task of producing a history of the submarine mine, and how it has been, is, and should be used. He has succeeded. To misquote Macaulay's essay on Dr. Johnson, this book is "well compiled, well arranged, well written and well printed."

Captain Cowie points the way to his subject in an Introductory Chapter and, as in many other books, this chapter is worth reading again immediately after the book has been read through. Chapter II takes us from 1585, when the Dutch blew up several hundred unfortunate Spaniards at Antwerp, to the end of the American Civil War, and is interesting in showing how basic methods, still in use, were suggested, adopted, discarded and re-adopted. Chapter III carries the story on to the outbreak of the First World War, and includes the Russo-Japanese War, in which the mine was first shown to the world as a major weapon. It also includes the technical developments that brought the mine to the stage from which its modern history commences.

These first chapters tell the story internationally; but after this the author, rightly in my opinion, confines himself mainly to our own British development of the art and science.

The First World War is described in two chapters—up to and including 1916; and 1917–18. These chapters show how we, starting practically from scratch as regards mines and the way to use them, but, fortunately, with a good sweep, developed methods of manufacturing and laying enormous numbers of reliable weapons in accordance with plans which became more and more an integrated part of the higher direction of the war. The second of these chapters, (V), also describes the inception and first use of magnetic and acoustic mines, a useful and sometimes needed reminder that we, the British, were the pioneers in this technical advance. A useful feature of these chapters is a recapitulation of the arguments used at the time in favour of and against various items of our These arguments, depending as they do quite as much on mining policy. geographical and economic conditions as on technical considerations, represent the inception of coherent minelaying planning and, taken in conjunction with developments in the Second War, provide a valuable basis for study of the subject in the future.

Chapter VI, "Between the Wars," tells of technical consolidation and development. It is a heartening chapter. In the face of financial stringency the team of sailors, scientists, engineers, manufacturers and, far from least, storekeepers really got and kept together, with the result that, when the call came, we were ready, not only with the prototypes of practically every type of mine used in the Second World War, and their antidotes, but with the jigs and tools to make them, how they were to be stored and looked after, and how supplied. Incidentally, we owe a debt to Mussolini and his Abyssinian War, which gave us just the time needed to bring our designs to a stage of "periodic finality," and ensured that the arrangements for producing each main type were complete in every detail. In addition to all this concrete preparation, an immense amount of scientific knowledge was collected and collated in connection with every sort of influence a ship might have on the space surrounding her : and this knowledge, easily accessible, became vitally important to our defence, as well as to out attack, during the conflict which followed.

The Second World War is also described in two chapters, VII being devoted to the Campaign in British Waters, and VIII to that in Enemy Waters. Unlike the First War, we entered this one with a definite minelaying object, and plans for the initial stages of the campaign were in existence. Stocks to meet the first six months estimated requirements were suitably placed, with ships to lay them, and dormant contracts for re-inforcements were in the hands of selected manufacturers, who had been provided with the necessary jigs and tools. In the event, the first six months of the campaign went almost exactly as planned, and we were just scraping the bottom of the barrel when the new supplies began to come in. Thanks to this foresight, we were always able to plan ahead, even when the overall events of the war took unpleasant and unexpected turns.

Of the mines laid in British Waters, about half went into the system of minefields between Scotland and Iceland, and Captain Cowie discusses this gigantic operation at some length. It was, and is, a highly debatable subject. The expenditure of national effort was immense, and that at a time when we were being stretched to our limit. The concrete achievement, in the shape of sunken ships, was very small. A very large proportion of the U-boats that crossed the system got through safely. On the other hand, to the best of my knowledge, not a single enemy surface vessel even attempted to cross the area, which could not have been adequately patrolled, either from sea or air, before 1942 at the earliest. The *Bismarck* was almost certainly driven to take the fog-free side of the Denmark Strait, thereby ensuring her location. In my opinion, the decision to lay the system was correct, though it might perhaps have been done with fewer mines and more bluff. But our experience showed that you always had to back up your bluff sooner or later with a very real threat.

The Campaign in Enemy Waters started, as might have been expected, very much where it left off in the last war and developed, thanks chiefly to the aircraft mines and to the aircrews who laid them, into a menace that well-nigh throttled all coastal traffic in enemy waters. While this menace was developing, and right up to the end, a steady series of small offensive operations was carried out by ships, coastal craft and submarines, especially where great navigational accuracy was required and where this accuracy was difficult for aircraft, as in off-shore channels; and these operations, always carefully planned within a plan, had their full reward. But the outstanding and overwhelming feature was the mining campaign from the air. The aircraft can go where nothing else can, and it can go there again and again. It had its limitations, of course. In the war, only ground mines were laid from aircraft, and this limited the depth of water in which minefields could be placed. This was not a serious limitation in the North Sea or English Channel, or on the Atlantic coast, but it did limit operations in the Mediterranean, and must have done so to some extent in the Within these broad limits, however, an opportunity for combining Pacific. art and science was presented ; and was taken to an extent that has rarely been seen in the whole history of warfare; and to Captain Cowie must largely be

given the credit for the artistic side of the combination. He tells the story modestly and well, and I will not spoil it by trying to compress it. He was well supported by the whole-hearted co-operation of Bomber Command, inspired by the personal drive and interest of their Commander-in-Chief, Sir Arthur Harris, and by the scientists and technicians who provided an instrument on which he could display his talents to the full.

These chapters on World War II also tell the story of the enemy's minelaying campaign and how we dealt with it, and bring out the close interlocking of our mining and minesweeping organizations.

There follows a chapter on the Mine in International Law, which left me gasping at the futility of the whole thing, as it was probably intended to do. The final chapter entitled "Retrospect and Prospect" sums up the author's views, and provides a foundation upon which planners, both amateur and professional, for the next minelaying campaign, can build with confidence. As stated earlier, I recommend that the Introductory Chapter be then read again.

There are three Appendices—The Mathematical Chances of a Ship Striking a Mine—and Principal British Minelayers in both World Wars, with the mines they laid and their losses. There are numerous simple semi-technical sketches in the text, mostly illustrating mine mechanism developments, and some good photographs of minelayers. The weakest feature of the book is the maps at the end, but these are quite adequate for the purpose for which they are intended.

Captain Cowie tells his story in the most simple and straight-forward manner, and the book is so easy to read that it seems short. In spite of this I have not been able to pick up any omission of importance, nor any mis-statements. Controversy, theory and personality have been rigidly excluded, and, except in the first and last chapters, one can read on with the feeling that here are the facts, and here is why and how they happened.

What stands out from the pages is the importance, and the reward, of real team work. The decision that planted the scientists and the engineers at the end of the First World War right alongside the sailors and almost half in the water has brought forth its fruit an hundredfold. Fanciful ideas from the shore and impossible requirements from the sea were immediately subjected to friendly but instructed critical examination in the presence of their proposers, and what emerged was what was wanted and what worked. Though the team was but a small nucleus, it had its tentacles in touch with the outside world : the civilians with all sorts of technicians, manufacturers and scientific institutions : and the sailors with the Navy at large, from whom they were drawn, and to whom they returned.

With the outbreak of the Second World War, this team work was intensified, and all concerned were encouraged to feel, by personal contacts, that their particular work was being followed by the rest of the team. For example, officers—and not only commanding officers—of even quite small minelayers got quite into the habit of dropping in at the Admiralty to see the Operations Staff there, who in their turn paid as frequent visits as possible to the minelayers. This direct contact paid excellent dividends in the confidence between operators and operated, who understood what they were asked to do instead of regarding the Admiralty as an impersonal and soulless machine. This was the more important as the minelayers seldom stayed long under one command, and could easily have drifted into the feeling that they were nobody's children. Having held both ends of the stick, I cannot over-emphasize the importance of this

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good feeling. This personal contact was also maintained with the R.A.F. and was even more important in getting the two Services to think the same way. It hardly needs saying that the suppliers, designers, scientists and manufacturers were personally known to one another and to the planning and operating staff, and, though this sometimes led to telephonic abuse and table-banging, it always got the answer the quickest way.

The excellent relations between minelayers and minesweepers have already been referred to, and the pooled experience of both parties unquestionably led to better minelaying, and to safer and more rapid and efficient minesweeping.

I have already written about the art of minelaying. It is an art, and I do not think it can be learned, at any rate in its highest form. Reasonably good minefields can be planned by anyone of intelligence—and countered by anyone of equal intelligence. But the combination of positioning, timing and composition of an outstanding mining campaign requires something more—an intangible—and this the author has. He will agree with me, however, that the man who had it in the highest degree was the First Sea Lord, the late Admiral of the Fleet Sir Dudley Pound.

I have left the Foreword to the last, because I want to express my pleasure that Admiral Sir Robert Burnett, who started his brilliant career as a fighting Admiral in the First Minelaying Squadron, has commended the book to its readers in such well-chosen and characteristic terms. I humbly follow his example. The book should be read by all those, and not by only those in the Services who may eventually be concerned in the higher direction of war. Non-technical readers need not be afraid : it is all made quite simple, and the illustrations really do illustrate.

R. H. De S.

"ASSAULT FROM THE SEA."

By Rear-Admiral L. E. H. MAUND, C.B.E. (Ret.)

(Methuen. 25s.)

I SUSPECT that Admiral Maund intended originally to produce two books—a history of Combined Operations in World War II and an account of his personal experiences.

It is clear, however, that the difficulty of separating the two matters proved too great; for the author was involved intimately from the start in the build up of Combined Operations and he also commanded the *Ark Royal* at a critical stage of the war, following this with a job in charge of Fleet Air Arm activities in the Eastern Mediterranean.

He has been forced therefore to bundle the two into one, and as a result the book fails adequately to cover both subjects. The major part describes only the aspects of Combined Operations in which the author was directly involved or interested—and his experience was wide. On the other hand, the three chapters in which the author describes his time in the *Ark Royal* when serving with Force H and in running the disembarked Fleet Air Arm squadrons in the desert are most interesting and produce a refreshingly sane account of the hard times which the Eighth Army endured before Alamein, showing most convincingly that if a small proportion of the air force, which was being wasted in the desert, had been diverted to attacks on Rommel's vulnerable sea communications, the crisis of the summer of 1942 would never have arisen. These chapters, however, have no place in a book entitled "Assault from the Sea" and they interrupt the flow of the narrative. I do not therefore propose to mention them again, important though they are.

This book comes at a time when "Their Finest Hour" is appearing on the bookstalls and provides many of the details required to complete the broad picture so magnificently painted by Mr. Churchill. The accounts of the development of landing ships and craft corresponds closely with that of the master; I think however that Mr. Churchill is given less than his fair share of the credit for these achievements, and indeed the author appears to be unnecessarily critical of the great Prime Minister throughout.

The book itself starts with an account of the activities—or rather lack of activities—in Combined Operations between the wars, and shows how the setting up of the Inter-Services Training and Development Centre (I.S.T.D.C.), although tardy, did much to stimulate thought, planning and a certain amount of production. Admiral Maund was the naval member of the Centre, and his account of the exercises in which Montgomery's brigade was landed at Slapton in 1938 is the best I have read. I have always felt that the General's wartime planning must, for some time, have been dominated by memories of that fiasco.

Then came the war and with it the immediate closing down of the I.S.T.D.C.—this was to be a purely continental struggle, said Whitehall, no landings would be required ! And so the author went off to set up Loch Ewe as a fleet refuge.

But he was soon back with his first love and found himself embarking for Norway as Chief of Staff to the Naval Commander—who incidently he did not meet for several days. There he got his first experience of a bad command set-up—a theme which re-occurs time after time in later chapters. His account of the confusion, muddle and despair of that unfortunate campaign is only too clear and brings out many new points.

Then to the Admiralty, where he was to be a naval member of the Directorate of Combined Operations, which was just forming. Now is described in much detail the build-up of the Combined Operations machine—the design and production of landing ships and craft, the administrative problems involved, the setting up of combined training centres, the problems of finding the officers and men required to man this strange fleet and of teaching them how to use it properly.

It is a fascinating story, well told, which makes one realize what must have been involved in such phenomenal expansion. The help given to—and later returned manyfold by—the U.S.A. is clearly described, and he also tells of the raids which were carried out in 1940—more with the idea of keeping up morale than for any practical purpose, although some useful lessons were learnt.

Then, after the digression which I have already mentioned, the author tells of his time when chairman of the Combined Operations Committee in the Middle East.

The raids on Tobruk and on other parts of the Mediterranean make good reading, and the planning for Sicily is given in interesting detail; as is the setting up of a combined training centre in the Suez Canal area. Training for Sicily, and the reports of Madagascar and from North Africa showed the necessity for a competent beach group organization for unloading stores and vehicles and generally controlling the beaches. An interesting point is made that the divisional generals and the brigadiers were always persuaded publicly to admit that the officer in charge of the beach required even more outstanding executive ability than the divisional and brigade commanders.

Sicily, Salerno and Anzio are briefly covered, and there is a good report on the setting up of the C.T.C. at Tripoli, when the training facilities were brought to the troops rather than the troops brought to the C.T.C.

In 1943 Admiral Maund was flown out to India to take over the post D.C.O. (India) and he gives a brief account of the organization which provided men, ships and craft for the great amphibious operations planned by the Supreme Commander.

Finally, he flew home in the spring of 1944 to take charge of the organization which refitted and then despatched to the Eastern theatre landing ships and craft as they were released from Europe.

The author ends with a chapter which sums up the experiences of the past history of amphibious warfare, stresses the many lessons learnt and gives some thought for the future.

His experiences are unrivalled, he has the faculty of looking at the broad picture, and his conclusions on this most important form of warfare are sound and useful, especially in his emphasis on the fact that no two operations are ever the same—each one must be planned with an open mind by ingenious and inflexible officers. Perhaps the other point to remember is that never again must Combined Operations be allowed to become a "private Navy," looked down upon by the deep water school and expecting lower standards of discipline and performance.

In his analysis of the causes of our failure to take any interest in amphibious between the wars and of the reason for our appalling unpreparedness in 1939 he is equally sound. Where I cannot agree with him is in his cure for these faults of the past—a supreme Chief of the Imperial Staff, reigning over the Chiefs of Staff Committee. This is not the time to embark on an argument on this subject on which reams of paper have already been covered. Sufficient be it to say that I believe that it was weakness among the men who manned the machine rather than the machine itself which allowed the country to become so completely unprepared for a type of operation which every lesson of the past, and indeed every peep into the future, show to be one of the main springs of our strategy— Assault from the Sea.

There are some irritating minor mistakes in the book, both of fact and of grammar; but otherwise it contains some good descriptive writing. There is also some duplication, due presumably to the mixture of two subjects. This, I think, is a pity; for, as a clear exposition of lessons learnt and re-learnt in building up the great organization of Combined Operations, of mistakes made and made again and of the blind self-satisfaction of our peace time policy, it is probably unequalled.

Admiral Maund has written a book which should be in every Service library and on the shelves of any Admiralty Division or department which is responsible for or involved in any future expansion.

BLAKE.

"THE SECOND WORLD WAR."

Volume II—" THEIR FINEST HOUR."

By WINSTON S. CHURCHILL.

(Cassell. 25s.)

It will be remembered that the first volume of Mr. Churchill's memoirs ended with his visit to Buckingham Palace on the 10th of May, 1940, when his Majesty confided to him the task of Prime Minister at one of the darkest and most sombre hours in our long history. Far from being daunted at this prospect he records that of all the posts which had fallen to him this was the one he liked best; for, as he explains, "power in a national crisis, when a man believes he knows what orders should be given, is a blessing." And that it proved a blessing both to Britain and to the world itself all but a few now acknowledge.

The theme of the volume, which takes us to the end of 1940, is, the author tells us, the story of "How the British people held the fort alone till those who hitherto had been half blind were half ready." It was to cover a period to include the catastrophic fall of France, the Dunkirk evacuation, Italian treachery, Hitler's preparations for the invasion of England, the Battle of Britain, Oran and Dakar, and the gathering U-boat peril, a bright spot at the close of the year being General Wavell's brilliant desert victory against immense Italian odds.

On all these subjects Mr. Churchill speaks with that clarity and splendour of phrasing with which we have long become familiar. And not the least important part of the narrative consists of those memoranda, minutes and directives which he poured out in a steady stream. Nothing escaped his vigilance, and his directives always made abundantly clear what he had in mind and what action he considered necessary. He records his obligation to H.M. Government for permission to reproduce certain official documents, but it is regretted that in very few cases are we vouchsafed the departmental replies to some of his very pertinent queries.

In all the press of work at the Admiralty one message, I am sure, must have amused its harrassed inmates :

"Prime Minister to First Lord.

Surely you can run up a new Admiralty flag. It grieves me to see the present dingy object every morning."

I wonder if there was a flag lieutenant to the Board in war-time!

The volume is divided into two books: "The Fall of France" and "Alone." The former includes all the tragic happenings as a result of France's unpreparedness and describes in great detail Mr. Churchill's efforts to induce her to carry on the fight from North Africa, loyally backed up as he was then and always by his Cabinet colleagues. The proposal of "an indissoluble union" between France and Britain was a War Cabinet one, to which at first his reaction was unfavourable. But in spite of its "acting like a tonic" when first communicated to the French Premier, M. Paul Reynaud, the French Cabinet would have none of it. The defeatist section, led by Marshal Pétain, refused even to examine it. Then followed the struggle to prevent the surrender of the French Fleet. Admiral Darlan had given his assurance that there was no question of doing it : "it would be contrary to our naval traditions and honour." But, nevertheless, Article 8 of the Armistice imposed by Hitler on France prescribed that the French Fleet "shall be collected in ports to be specified and there demoblisized and disarmed under German or Italian control." Admiral Darlan, in a subsequent letter to Mr. Churchill, written three weeks before his assassination, claimed that he had kept his word since no French ship was ever actually manned by the Germans or used by them against us.

The story of Dunkirk has been told so often and so fully that even Mr. Churchill's description can add little to it. He underlines Admiral Ramsay's masterly handling of Operation DYNAMO and the gathering of the "Little Ships," for it was primarily to that officer's skill, organization and forethought that so much of the credit belongs—a credit which even yet does not seem to have been publicly acknowledged.

Mr. Churchill felt bound to warn the House of Commons to prepare itself for hard and heavy tidings; but when he mentioned quite casually at a subsequent Cabinet Meeting: "Of course, whatever happens at Dunkirk, we shall fight on," he was taken aback at the warmth and cordiality of the reception which his statement evoked.

Everyone who had a boat of any kind, steam or sail, put out for Dunkirk, and the preparations, fortunately begun a week earlier, were now aided by the brilliant improvizations of volunteers on an amazing scale. No less than 861 vessels of all kinds, British and Allied, played their gallant part, of which 243 were sunk. And what a debt is owed to the R.A.F. and its naval counterpart !

"Hour after hour they bit into the German fighter and bomber squadrons, taking a heavy toll, scattering them and driving them away. Day after day this went on, till the glorious victory of the Royal Air Force was gained. Wherever German aircraft were encountered, sometimes in forties and fifties, they were instantly attacked... and shot down in scores."

"But," he goes on, "all the provess in the air would have been vain without the sea... Perfect discipline prevailed ashore and afloat. The sea was calm. To and fro plied the little boats, gathering the men from the beaches as they waded out or picking them from the water... Their numbers alone defied air attack. The Mosquito Armada as a whole was unsinkable. In the midst of our defeat glory came to the Island people united and unconquerable.... The destroyers played the predominant part. Nor must the great part played by the personnel ships with their mercantile crews be overlooked."

But he sounds a much-needed note of warning :

"We must be very careful not to assign to this deliverance the attributes of a victory. Wars are not won by evacuations."

Following close on the Dunkirk evacuation and the French defeat and surrender came naturally Hitler's plan for the invasion of England—Operation SEA LION—and he discusses very fully all the pros and cons. Sea power, he says, when properly understood is a wonderful thing which had hitherto made the passage of an army across salt water an almost impossible feat. "But now there was the air." And he discusses what effect this development produced upon the invasion problem. Besides, there was a third factor. What preparations had the Germans secretly made? Had they prepared a vast armada of special landing craft needing no harbours or quays?¹ Mr. Churchill sets out all the considerations in great defail, the First Sea Lord giving as his considered opinion the probability that a total of some hundred thousand men might reach

¹ And the author recalls that such an idea had risen in his own mind in 1917 when, as Minister of Munitions he was considering the plan for the capture of Sylt and Borkum.

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"THE SECOND WORLD WAR."

these shores without being intercepted by naval forces, but adding that, unless the enemy had achieved air mastery, maintenance of supplies seemed practically impossible.

An invasion area comprising practically all the East and South Coasts from Cromarty to North Cornwall was visualized, with Ireland as an ugly alternative; but when it came to studying Operation SEA LION in the light of captured German documents it was found that only part of the South Coast of England had been considered. The German naval and military Staffs had been at loggerheads by no means for the first time—and whereas the military demanded a series of landings from Dover to Lyme Regis with an ancillary landing at Ramsgate, the naval Staff considered the most suitable area was between North Foreland and the Needles. After lengthy discussions General Halder, Chief of the Army Staff, delivered himself of the opinion that from the Army view-point the Navy's proposals were complete suicide. "I might," he said, "just as well put the troops that have been landed straight through the sausage-machine." But both Army and Navy authorities agreed that air superiority was a necessary and vital pre-requisite ; and so, as Mr. Churchill puts it : "Both the older Services passed the buck to Reichmarschal Georing," who " with soaring ambition was determined to achieve spectacular victory with his Air Force alone."

And so we come to Book II, "Alone"; and to that epic struggle The Battle of Britain, a victory surely as great as any in our history. Mr. Churchill concludes his chapter thus :---

"All played their part. At the summit the stamina and valour of our fighter pilots remained unconquerable and supreme. Thus Britain was saved. Well might I say in the House of Commons: 'Never in the field of human conflict was so much owed by so many to so few.'"

And with the victory went Hitler's dream of the invasion of England.

But now the *blitz* was on us with all the concentrated fury of German baffled hopes, and Mr. Churchill tells a great tale of terrible sufferings so gallantly borne by those heroic folk who more often than not had no protection other than their own flimsy roofs. And with that came the problem of the Unexploded Bomb. Their rapid disposal was obviously of the highest importance, and the author tells us how splendidly volunteers pressed forward for the deadly game. He cites one case which brings back vividly to my mind the story of "The Gallant Little *Campeador*."¹ Here it is :

"One squad I remember which may be taken as symbolic of many others. It consisted of three people—the Earl of Suffolk, his lady private secretary and his rather aged chauffeur. They called themselves 'the Holy Trinity.' Their prowess and continued existence got around among all who knew. Thirty-four unexploded bombs did they tackle with urbane and smilling efficiency. But the thirty-fifth claimed its forfeit. Up went the Earl of Suffolk and his Holy Trinity. But we may be sure that, as for Mr. Valiant-for-truth, 'all the trumpets sounded for them on the other side.'"

He then passes to what he calls "The Wizard War." He claims, and justly, that had British science not proved superior to German we might well have been defeated—and destroyed. He frankly admits that he knew nothing of science, but that as a Minister he had had considerable practice in handling things he did not understand. And so he took to his aid his "trusted friend and confidant of twenty years," the scientist Frederick Lindemann.²

German bombers at the outset had used cross-bearings by radio beams to guide their bombers over this country, but our scientists countered this by the

¹ N.R., February, 1941, p. 104.

² Afterwards Baron Cherwell.

use of "Meacons," stations which led the aircraft astray. The enemy soon tumbled to this and developed a radio beam which enabled him to bomb us by day and night. We riposted by devising an apparatus to bend the beam, with the result that many of their bombs fell comparatively harmlessly in the open country. The German reply was the "Y apparatus," but this we had already foreseen and prepared for; we were thus able to nullify its use and deflect the bombers, the unintentional bombing of that hub of neutrality, Dublin, being a possible result.

All through this volume Mr. Churchill bears witness of the great help and encouragement which, so far as his high office allowed, he received from President Roosevelt. The threat of invasion, as well as the entry of Italy into the war with her large number of submarines, raised acutely the problem of destroyers, and early in the war the Prime Minister asked the President for "the loan of forty or fifty of your older destroyers to bridge the gap " until new construction came along. Gradully American informed opinion came to realize our urgency, and a suggestion reached us through our Ambassador in Washington, Lord Lothian, that an exchange might be effected between the fifty "old but reconditioned" craft and the lease of bases in Bermuda and the West Indies. Naturally such a "swap" entailed much heart-burning, especially on this side of the Atlantic, for, as Mr. Churchill points out, "there was no comparison between the intrinsic value of these antiquated and inefficient craft and the immense permanent strategic security afforded to the United States by the enjoyment of the island bases." So the deal went through; we got our fifty destroyers and the Americans got ninety-nine year leases of naval and air bases in Newfoundland and the West Indies. One day perhaps we shall have a first-hand account of how those fifty "antiquated and inefficient" vessels were licked into shape by us for the strenuous service for which they were so badly needed. It should make interesting reading.

In a chapter headed "The Mediterranean Passage" the author tells the story of how, under Admiral Sir Andrew Cunningham's great leadership and fighting spirit, superior Italian naval forces were out-manoeuvred and outfought, until by the close of the year "the British Navy had once more firmly established itself in the Mediterranean."

But, although with Admiral Cunningham in the Eastern base and Admiral Somerville with Force H. controlling the Western exit to the Mediterranean it was possible to carry out the important Operation known as HATS to pass reinforcements to Admiral Cunningham in the shape of the Valiant and Illustrious, the Admiralty were firmly of opinion that it was not advisable to pass to Egypt by that route such important military stores as the much-needed armoured vehicles. A somewhat sharp argument ensued, but Admiral Pound held his ground and all General Wavell's reinforcements were accordingly despatched by the Cape route. At the same time the Malta air defences (originally consisting of the three famous and most gallant old Gladiators, "Faith," "Hope" and "Charity") were strengthened by Admiral Somerville who flew in twelve Hurricanes from the Argus. But it is sad to read that another attempt, in November, resulted in a loss of nine out of fourteen aircraft and their gallant pilots. They also were launched from the Argus four hundred miles to the westward of Malta, but ran out of fuel due to a sudden shift of wind, and perished in the sea. "Never again were the margins cut so fine."

In the matter of Oran Mr. Churchill makes it clear that Admiral Somerville viewed Operation CATAPULT with disfavour and was strongly of opinion that " the use of force should be avoided at all costs." The admiral added that Captain Holland, lately our naval attaché in Paris and with keen French sympathies,

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considered "offensive action on our part would alienate all French wherever they are." Nevertheless he was told that it was H.M. Government's firm intention that "if the French will not accept any of your alternatives they are to be destroyed." And since the French admiral would not even meet Captain Holland, Admiral Somerville had no alternative, with the results we all know. Mr. Churchill claims that :

"the elimination of the French Navy . . . produced a profound impression in every country. Here was this Britain which so many had counted down and out . . . striking ruthlessly at her dearest friends of yesterday and securing for a while for herself the undisputed command of the sea."

We will leave it at that.

Mr. Churchill devotes a whole chapter to Dakar, and it does not make pleasant reading. It will be recalled that the political balance at Dakar was or may have been capsized by the arrival from Toulon of the four Vichy cruisers. Timely warning was sent by our consul-general at Tangier on the 9th of September to the Foreign Office and to Admiral North¹ at Gibraltar, to the effect that a French squadron might try to pass the Straits proceeding westward to an unknown destination. Soon afterwards this was corroborated by our naval attaché in Madrid who confirmed that three French cruisers had left Toulon and meant to pass through the Straits on the morning of the 11th. This went to the Admiralty with a repeat to Admiral North. And then there seems to have occurred in Whitehall one of those amazing combinations of bad luck so frequent in human At the Foreign Office air raids had caused incoming messages to affairs. accumulate, and the Tangier one (not being marked "Important") was not distributed until the 14th. Also instant action was not taken, as it should have been, on the Madrid message by the officer responsible at the Admiralty. who allowed it to go forward in the usual way with the First Sea Lord's telegrams. For this mistake the officer "received in due course the expression of their Lordships' displeasure."

However, Admiral Somerville with Force H went in pursuit, but failed to intercept these cruisers before they reached Dakar. What harm was actually done cannot be said; opinions vary: but when the expedition under Admiral John Cunningham, with General de Gaulle commanding the French forces, arrived at Dakar on the 23rd of September, resistance was so strong as to cause an abandonment of the attempt.

After telling of the doings of ocean raiders—and the heroic action of the *Jervis Bay* in taking on the *Scheer* single-handed and so saving the great majority of her convoy—the author speaks of the far graver dangers of the U-boat peril. The Admiralty, with whom he says he lived " in the closest amity and contact," were fully alive to their grave responsibility in bringing in safely our much-needed food and raw materials. With the seizure by the enemy of the whole French seaboard, and the prompt installation of bases for U-boats and co-operating aircraft, we were forced, in the absence of the use of any Southern Irish ports, to route our ships round Northern Ireland, while on the East Coast and in the English Channel our small traders, in their unavoidably rigid routeing, ran a perpetual gauntlet from mines, aircraft and E-boats. The last half of 1940 showed very heavy shipping losses, and in the last two months all other factors in the war were dwarfed by the "mortal significance" of the estuaries of the Mersey and Clyde. At his suggestion the control of the North-Western Approaches was transferred from Plymouth to Liverpool, and an improvized system was at once got going, but the complete installation of the new Command,

¹ who, Mr. Churchill emphasizes, "was not in the Dakar circle."

with all its necessary headquarters, operation rooms, communications etc., inevitably took time, and it was not until February, 1941, that all was in working order. "Henceforward this became [under Admiral Sir Percy Noble] almost our most important station."

But the neutrality of Southern Ireland and all that it meant to us was always present in Mr. Churchill's mind, and he writes to Mr. Roosevelt in December:

"You will realise also that our merchant seamen, as well as public opinion generally, take it much amiss that we should have to carry Irish supplies through air and U-boat attacks . . . when de Valera is quite content to sit happy and se us strangled."

Among other measures of defence he tells of what he calls a "carpet of dynamite" in the shape of a submerged minefield three miles broad and sixty miles long at the approaches to the Mersey and Clyde. Here, he truly says, was defensive *in excelsis*. How effective it was it is hard to say. Captain Cowie speaks of the effectiveness of these minefields as being "difficult to judge, as the subsequent transfer of U-boat activities to the Atlantic may well have been due to other causes."¹

The book concludes (as I have said) with General Wavell's brilliant victory resulting in the capture of "about five acres of [Italian] officers and two hundred acres of other ranks," the result of which was to have a very direct effect on the success of the subsequent Abyssinian campaign.

An interesting appendix of 78 pages follows, consisting of the Prime Minister's personal minutes and telegrams from May to December; their perusal is abundantly worth while, touching as they do on every conceivable subject. But running through them all, and indeed through the whole book, is that spirit of attack which dominated his strategy and his very nature.

And so ends 1940. "The Battle of Britain was won. The Battle of the Atlantic had now to be fought," and the New Year opens with an inspiring message from His Majesty the King to his Prime Minister. We now look forward keenly to the telling of that great struggle.

A book to read and read again.

M. M.

"THE WHITE HOUSE PAPERS

Of HARRY L. HOPKINS."

By ROBERT E. SHERWOOD.

(Eyre & Spottiswoode, 1948 and 1949, 2 vols., 25s. each.)

WHEN a second-eleven reviewer has the privilege of noticing a major work in THE NAVAL REVIEW, any nervousness he may feel is in no way lessened by the circumstance that, in this case, the book runs to nearly a thousand pages. Obviously, then, short of paraphrasing the rather skilful synopsis printed on the jacket, I cannot usefully summarize the contents; for, though it might be a good exercise in précis-writing to try, the result would be notably dull to

¹ "Mines, Minelayers and Mine-laying." p. 137.

read. Which brings me to my first point ; that I did find parts of these volumes very dull, and think that most British readers will skip the not very edifying or intelligible bits relating to American party politics as swiftly as I did.

As, moreover, the first volume was published in Britain last year, I have forgotten what the big-shot reviewers said of it, if indeed I ever read their criticisms. Therefore I am thrown back on my own resources, and for once cannot employ my favourite method of dismissing the book in two lines and using the rest of the space to trot round my own views on some subject dimly connected with the theme. In what follows, however, I shall not assume that members have read Volume I, but will try to give a running commentary on the points that struck me as interesting from the beginning of the book to what I choose to regard as its bitter end.

In the first place, this work does not seem to have the authoritativeness of Mr. Churchill's "The Second World War," and in the second place it almost necessarily lacks the Homeric style in which those mighty memoirs are told. Nor would it be fitting if it had those qualities, for Mr. Sherwood's book, although very fully documented, is expressly the story of a man who, if something greater than an intermediary, was at any rate no more than an *eminence grise*. Hopkins did not initiate policy, and would not have held his somewhat vague position in the conduct of affairs had he sought to do so; nor did he bear the responsibility for decisions.

A former charity organizer, he was an ardent New Dealer who was appointed principal administrator of the enormous relief budget spent on public works; none of the money stuck to his fingers and he ran the show economically with a very small staff. Mr. Sherwood holds that this experience stood Hopkins in good stead, when he later had to marshal the prodigious programmes of war production and supply, and asserts that it gave Hopkins a wonderful insight into what the people thought, which was to prove of incomparable value to the Roosevelt administration. The first assessment is very likely true and is also, in my view, the reason why Hopkins was afterwards able to get alongside the mind of Stalin with such precision and effect; the second assertion is (from similar considerations) obvious nonsense. When people are on relief they don't think about anything else.

When war broke out in September, 1939, Roosevelt was nearing the end of his Presidential term, and the author notes that it is one of the classical weaknesses of the American Constitution that, at such periods, a President can exercise but little authority in the conduct of foreign affairs. It is doubtful if he would have been justified in urging any forward policy with regard to the war, for, according to the Elmo Roper poll of public opinion (which Mr. Sherwood regards as reliable) over three-quarters of those then canvassed were against the U.S.A. entering the war, and only 2.5 per cent. in favour of intervention. Moreover, nearly 30 per cent. were opposed even to trading with the belligerents ; and this hard core of isolationism, in Mr. Sherwood's view, remained at about that figure for some considerable time afterwards.

Nevertheless, one of Roosevelt's first acts was to write a friendly letter to Mr. Churchill (11th September) hoping that the latter would keep in touch with him, thus beginning a correspondence that ended with his death and ran to about 1,000 letters on each side. Mr. Churchill has recorded that, at the end of the year, he was "persevering" in this exchange—" but with little response." However, at the time of the fall of France the correspondence bore fruit when Roosevelt asked anxiously what would be the disposal of the Home Fleet if a German invasion succeeded, and was told (in effect) that, in such an event, there would be no Home Fleet left to dispose of ¹. This was what Roosevelt had hoped to hear—that we meant to fight—and he responded by immediately arranging the shipment of a large quantity of war material to Britain, including half a million rifles; achieved by an intricate fiddle with the law and in the teeth of his protesting advisers. Though this entirely personal decision can be regarded as no more than strategic common sense, it was in fact one of the great moral decisions made by a great President, and made moreover on the brink of an election campaign in the full knowledge that it would be highly unpopular with the electorate.

In June, 1940, Roosevelt had laid the foundations of a bi-partisan (or, as we should say, coalition) administration by appointing Republicans as Secretaries of War and Navy, and in the same month he approved the formation of the National Defence Research Council, to mobilize scientific effort; and of the National Defence Advisory Committee to control labour, production, food and prices. Shortly afterwards he arranged for the transfer of some fifty "flush deck" destroyers (the Town class) to Britain; and here again contrived to do so by manipulating the law instead of trying to have things out with Congress. The law said that war material could only be transferred if it were certified as useless for the defence of the United States, but Roosevelt circumvented it by making the transfer of the destroyers a *quid pro quo* for the lease of British West Indian bases, so that the U.S. Navy was able to certify that the country profited from the deal as a whole.

Yet, with the election campaign at its height, Roosevelt still had to be very cautious about saying anything that might imply a possibility of American intervention—" Your boys are not going to be sent into any foreign wars," he assured parents when the first numbers were drawn for drafting young men into the Army under the Selective Service Act; though the Archbishop (now Cardinal) of a church that has often been censured for isolationism came out in favour of the measure in very much stronger terms. Towards the end of the year the re-elected President won the battle for Lend-Lease before it began by one of his homely similes :

"Suppose my neighbour's house catches fire, and I have a length of garden hose \ldots ."

which made it all sound so natural and simple, and paved the way for the tremendous implications of the "arsenal of democracy" broadcast made at the end of the year. That broadcast coincided with the great fire raid on London from which St. Pauls so narrowly escaped, and the author notes that the Germans frequently timed major offensive operations to synchronise with Roosevelt's speeches, in a "see what you'll get if you try it" attitude.

When these speeches were made, and indeed at all times thereafter, Roosevelt had no stronger motivating force than to avoid the mistakes made by Woodrow Wilson—or so says Mr. Sherwood. Roosevelt's determination to avoid mistakes such as peace without victory, and honourable surrender based on Fourteen Points, seems to have been almost an obsession, and I mention it thus early in my account because it seems certain that the idea of "unconditional surrender" was firmly fixed in his mind long before America entered the war.

One of the things that struck me most forcibly was Roosevelt's apparent reluctance to place reliance in the State Department—corresponding to our Foreign Office—and his tendency to short-circuit his ambassadors abroad. This was in keeping with his deliberate policy of not allowing the extra work and

¹ See also Chap. XX of Vol. II of Mr. Churchill's "The Second World War."

new problems involved by the war to be dealt with by the permanent departments; he seems to have felt that they, if left to it, would inflate their staffs and budgets in a way that would afterwards be difficult to reduce. But one passage is evidence of something more than mere reluctance to accept advice. A draft speech of the President's containing the phrase "there are also American citizens, many of them in high places, who, unwittingly in most cases, are aiding and abetting these (fifth column) agents," was returned with the suggestion that the words in italics should be excised. Roosevelt asked who had suggested that, and, when told it was the State Department, altered the wording to read "there are also American citizens, many of them in high places, especially in the State Department, who (etc., etc.)."

So far there has been almost nothing about Harry Hopkins in this review. He comes into the picture now—a lean, gangling, untidy figure, "an animated piece of shredded wheat . . . combining the purity of Saint Francis of Assisi with the sharp shrewdness of a race-track tout "—despatched by Roosevelt to talk turkey with Mr. Churchill in January, 1941. The preceding paragraph hints why the President did not choose to entrust the mission to a diplomat de carrière; moreover, the anti-British Ambassador Kennedy had left London and had not yet been replaced by Mr. Winant. The reason why he sent Hopkins was that he trusted him implicitly. He knew that Hopkins knew his (the President's) mind, and was confident that Hopkins would never go beyond his brief and start making policy on his own account; and that confidence was never misplaced. That is the nearest I can get to defining the position occupied by Harry Hopkins in those eventful years, though I am uneasily conscious that it does not quite tally with the definition eminence grise which I used earlier in this review.

Of his mission, Hopkins on arrival in London used the revealing words: "I want to try and get an understanding of Churchill and of the men he sees after midnight." There can be no doubt that he succeeded in this, and no doubt that Mr. Churchill soon came to repose the same trust in Hopkins that Roosevelt did. Moreover, it is quite plain from these volumes that Winston Churchill and Harry Hopkins became close personal friends. (You would not expect the King's First Minister and the President of the United States to become bosom chums in the same way; nor did they). The importance of this trust and friendship was to prove of inestimable value to the allied cause. The conversations at the beginning of 1941 convinced Hopkins of three things :---First, that Britain meant to fight. Second, that, although sorely in need of material from America, Britain had the power to offer determined resistance to an invasion. And, third but not least, that Mr. Churchill was "the one and only person over here with whom you (Roosevelt) need to have a full meeting of minds." Finally, that "this island needs our help now, Mr. President, with everything we can give them."

Hopkins, says the author, was enormously popular with his British hosts, "who like Americans best when they are making the least effort to be anything else."

Mr. Sherwood notes that, in his "give us the tools and we will finish the job" speech made in February, 1941, Mr. Churchill declared that "this is not a war of large armies firing immense masses of shells at one another" and that it would not become one—another instance of a conviction that was to find repeated expression, and one that Roosevelt also held at that time. Whereas we did not even look like beginning to win the war until it became just that.

A passage that interested me is one in which Hopkins assures Mr. Sherwood that the President was no hard-boiled cynic, but an idealist. "You can see the

real Roosevelt when he comes out with something like the Four Freedoms. And don't get the idea that these are any catch-phrases. *He believes in them*!" Elsewhere in the book, it is stated that when Roosevelt coined this phrase he had no idea what the third Freedom was or ought to be. I refrain from comment.

The first Anglo-American staff talks, held in conditions of extreme secrecy from January to March, 1941, did little more than state the principle of "Germany first," but this was of enormous importance as it invested America with the "highest degree of strategic preparedness that any non-aggressor nation has ever had before entry into war." (I quote; I do not justify.)

At the end of May, Roosevelt proclaimed a state of "unlimited national emergency," whatever that might mean, but refused to go farther. It had been confidently expected by his supporters and by us that this month would mark American entry into the shooting war; but Roosevelt, who a year before had led public opinion in measures of aid for the democracies, was now very cautious. Mr. Sherwood does not quite know why; elsewhere he records the President's preference for travelling at a moderate pace in all vehicles except his own wheel-chair. One of the few positive instructions that Hopkins had from the President when he made his second visit to Britain in the summer of 1941 was that no indication might be given as to if or when America would enter the war. Hopkins then went to Moscow, "where in two days he had gained far more information about Russia's strength and prospects than had ever been vouchsafed to any outsider," but this, I fear, is not so much a tribute to Hopkins as to the purpose of his mission, which was to find out what material aid Stalin wanted from America. In August the President and the Prime Minister met for the Atlantic Conference, the only thing resulting from which was a publicity hand-out called the Atlantic Charter.

In October, the torpedoing of two American destroyers in the Atlantic aroused almost no belligerent feeling in the United States; there were not then any "drafted" men in the U.S. Navy, and the opinion seems to have been that it was tough on the sailors, but that was what they'd joined for anyway. Roosevelt said of it that "we do not propose to take this lying down," but did nothing. The first volume ends with Pearl Harbour and Mr. Churchill's immediate visit to Washington to concert plans for victory.

Volume II begins with the "winter of disaster" of 1941-2. The next important job for Hopkins was a visit to London in April to secure agreement on the date of the invasion; and after some discussion it was agreed that this should be launched in 1943. These negotiations were punctuated by urgent cables from Roosevelt proposing that India be granted self-government forthwith, to which Mr. Churchill very properly replied that, so far from assisting in the defence of India, such a measure would make the task impossible. It was not until six months later that he delivered a massive public rebuke to this piece of interference in a phrase of which the significance was perhaps missed by some of us at the time; he had " not become the King's First Minister in order to preside over the dissolution of the British Empire." Hopkins, whose visit had had a tonic effect in Britain, returned to America " greatly encouraged about everything."

However, Mr. Molotov, visiting Washington in May, 1942, insisted upon a Second Front that year, and that was promised him by Roosevelt. Mr. Churchill, in Washington a month later, observed that a premature attempt to invade France was the one thing that could lose us the war, and left behind him a growing sense of concern that the Second Front would not be established that year or the next. Roosevelt thereupon toyed with the notion of setting aside the "Germany first" strategy and of committing the main American effort to the Pacific theatre; but eventually he sent off Hopkins again to seek definitive agreement as to "another place for U.S. troops to fight in 1942." As we know, this was North Africa (TORCH), since the British Chiefs of Staff turned down Eisenhower's plan for a limited operation to sieze the Cotentin peninsula. Operation TORCH, a brilliant feat of arms, was marred only by the political mess-up and subsequent storm over the Darlan deal, for which General Eisenhower took full responsibility in words that deserve quotation :

"I believe in a theatre commander doing these things without referring them back to his home Government and then waiting for approval. If a mere General makes a mistake, he can be repudiated and kicked out and disgraced. But a Government cannot repudiate and kick out and disgrace itself—not, at any rate, in wartime."

I may here give it as my opinion that the American who, in his own sphere, comes out of these memoirs with the greatest credit is Eisenhower; and it is of interest to read the estimate that what weighed most heavily with Roosevelt and Mr. Churchill in appointing him to the supreme command " was the tremendous admiration and affection for him of the British officers who had served with him, most importantly Admiral Cunningham."

It is also interesting to find that, with the end of the North African campaign in sight, there was no clear idea of "where to go next" until the Casablanca meeting in January, 1943. The Quebec meeting in August confirmed the date of OVERLORD as the 1st of May, 1944, but it is clear from the book that Mr. Churchill's opposition to this or indeed any other major operation in northwest Europe, was not overcome until the Teheran Conference in November. Here, "Roosevelt sat in the middle, by common consent the moderator, arbitrator and final authority." It is no flight of fancy to say that he now saw himself as the only possible link between the archaic imperialism of Britain and the stark communism of Russia, and that it was this attitude that was responsible for the lack of a common front between America and Britain both at Teheran and Yalta. For how much else it may prove to have been responsible, no man yet can say.

Hopkins collapsed when he got home from the Teheran meeting and was gravely ill for more than six months, and when he recovered he found that his position and influence with the President had waned considerably. His last mission was to Moscow, where President Truman sent him after Roosevelt's death in April, 1945, to try to straighten out American relations with Russia ; he did manage to bring about a temporary improvement. He died in January, 1946.

Reading the discreetly watered-down reports of the momentous conferences and the carefully paraphrased versions of the important cables, one is left without a clear understanding of how it was that Harry Hopkins was able to exercise the very great influence on affairs that he undoubtedly did. He himself described his functions as those of a "catalyst," which is a chemical that promotes or sustains reactions between other substances. If my smattering of inorganic chemistry is correct, the exact working of catalysts is also a matter that is not fully understood.

It might have been expected that Hopkins, who had been associated with the development of the atomic bomb from the beginning, would have left behind him some record of the decisions that caused it to be first used when it was :

but it must be remembered that the successful test of the bomb at Los Alamos did not take place until three months after Roosevelt's death, by which time Hopkins had severed all his connections with official business.

The most astonishing statement in the book concerns a visit paid by Mr. Eden to Washington in March, 1943, when he told the President and Hopkins that the Poles were being very difficult :

"He told a story of how the British Government wanted to turn a cruiser over to the Poles and Sikorsky insisted on naming it *The Lemburg* after the city over whose sovereignty Russia and Poland are bound to have a bitter fight. Eden stated that he told Sikorsky that naming the cruiser *The Lemburg* would merely irritate the Russians and there was no earthly reason for giving it that name, because Lemburg is not a seaport. However, Sikorsky insisted and would not take the cruiser when the British refused to permit it to be named *Lemburg*."

Apart from the fact that the correct spelling is Lemberg, it is quite inconceivable that General Sikorsky should have "insisted" on calling a warship by the German name for the ancient Polish city of Lwow. Messrs. Roosevelt, Hopkins and Sherwood, whose profound ignorance of European history and even geography is repeatedly exposed by these volumes, would not of course be expected to know any better, but I think it rather incautious of Mr. Hopkins to have attempted to attribute this intrinsically apocryphal story to Mr. Eden, of all people.

We are given many instances of this ignorance of foreign affairs at high level. Another occurred when Ibn Saud said "No" to Roosevelt's plea that more Jews be admitted to Palestine. "The President seemed not to fully comprehend what Ibn Saud was saying to him, for he brought the question up two or three times more." It is this extraordinary and at times even child-like ignorance that makes Roosevelt's continued refusal to rely on the State Department and his ambassadors abroad the more remarkable. It seems a great pity that this policy caused Mr. Winant to be so often short-circuited ; we are given a notable instance of his quality in a letter he wrote to Hopkins in September, 1944. Unfortunately it is too long to quote in full, but the theme of it was "there has seeped into this country through military channels a belief that the British Navy is not wanted in the Pacific."

This book is almost necessarily as much about Roosevelt as it is about Hopkins. With the latter's place in affairs I have tried to deal in this review; of the former it suffices for me to quote the American Service journal "Yank":—

"He was the Commander-in-Chief, not only of our armed forces, but also of our generation."

Towards the end of the book Mr. Sherwood voices the fear that America may not always have a fit holder for the office that was tailored by the Foundling Fathers to the tremendous measurements of George Washington. Another and more foreseeable danger is that inherent in the powerlessness of the President in foreign affairs during his last year of office.

These volumes are capably written, but dull in parts. There is an irritating absence from the text of important dates, by no means made up for by the complete exclusion of footnotes, which are omitted because the author personally dislikes them. (The book should have been put into a format aimed at pleasing the reader, not Mr. Sherwood). What should have been footnotes—to be skipped if the reader chose—have instead been gathered together as "notes" at the end of the second volume. The index is adequate.

SIRIUS.

"C/O G.P.O. LONDON."

With the Women's Royal Naval Service Overseas.

By ROSEMARY CURTIS-WILLSON.

With a Foreword by Admiral of the Fleet The Viscount Cunningham of Hyndhope.

(Hutchinson 12s. 6d.)

I MUST confess that I thought the time for war reminiscences was over—over, that is, unless the author is a well-known household name. However, here is a literary camel that seems to have got through the eye of the publisher's needle, and it makes good reading—except for rather too many *clichés*. The reviewer, however, has a keen ear for a *cliché*, and maybe others are not so pernickety !

Rosemary Curtis-Willson, the author, was of course extremely lucky to get so many foreign drafts. She appears, by her photograph and by various hints that she most modestly lets fall about herself, to be an earnest, brainy young woman, gaining the immediate confidence of those in authority who chose her for these assignments.

At the first call for volunteers to "go foreign" she presented herself, but she was under age. However, after working for a time at the R.N. Barracks, Portsmouth, surrounded by "Chiefies", "Stripeys" and various well-delineated characters, she had orders at last to report to the Royal Naval College, Greenwich, to join a draft for an unknown destination overseas—conjectures being assisted by the tropical kit and that cumbersome and rarely worn monstrosity, the topee.

After an amusing journey in convoy with, however, " no wrecks and nobody drownded," they arrived at Suez, via Capetown, and from thence to Alexandria. Here they lived in a Roman Catholic convent and were most assiduously cared for by the nuns.

The Wrens were very welcome in Alexandria, and with disarming directness we are told: "Women there were in plenty in Cairo and Alexandria, but their function was not companionship." On her eight-mile journey down to the docks every day the author noticed all the army traffic, lorries, trucks, tanks and Bren carriers, rumbling along unceasingly. In the docks work never ceased, while out in the harbour idle French ships lay at anchor—a dumb reminder of the defeat that must be avoided at all costs.

After three months of working in the dockyard there came the famous Flap, and the evacuation of all the Wrens. It was all a great muddle, with hot, tired and hungry Wrens being bundled in and out of empty ammunition wagons, and going they knew not where or why. At last, after reaching Ismailia, the dusty party embarked in two lighters which took them onboard the s.s. *Princess Kathleen*, a 6,000-ton ship that had been used as an Italian prisoner of war transport. She had a Chinese crew, and about fifty women and children

passengers as well. They eventually dropped anchor in Suez Bay, and, although they did not know it, the Flap was over and the Wait had begun.

They spent three weeks aboard the *Princess Kathleen*, mostly in acute discomfort, and with no work to do at first, except to try and get the filthy vessel into a fairly presentable state. This they did—until they were suddenly given the entire records of the *Medway*, which had been sunk, to type out in triplicate. This had to be done in a week, but, by dint of great staff work and constant watches, this was achieved.

Then the position in the desert became more secure and the Wrens were once more established ashore, this time in tents, a few miles north of Suez, a camp known as the Aviary! The author became a typist at Port Tewfik and seems here to have had rather a good war, with plenty of dances, swimming and picnics.

Her next assignment was in Ismailia, as the captain's secretary's writer rather a backwater it seems, so again plenty of time for fun and games, and "cuppas" with the Marines in the mail office. Then she went back to Alexandria, which by all accounts seemed by far the best place in which to be.

The trawler base where she worked became commissioned as H.M.S. *Prometheus*. There were about forty boats to administer and, besides logging correspondence, rendering returns, and typing and filing, Miss Curtis-Willson also appears to have been kept busy "finding the captain his pencil, feeding the five thousand with sticky cakes, flirting with the commander, and worshipping them all !"

Alexandria as usual was fun, with plenty of work and plenty of play, with all sorts of people, who came and went, creating that atmosphere so peculiar to Service life of making friends "with whom one feels completely bound up, equally conversant with each other's views, homes, relations and aspirations, and then phut! a draft chit to the other end of the earth, and the thread is broken—usually for ever!"

One very true observation is made here : "The war seldom obtruded, mainly because we were in it." I remember now that all the conversations I heard, and letters I got, during the war, which harped on it and worried and bothered and fussed about it, all came from civilians or from people who were out of touch with events. People in or around any scene of warlike activity rarely mentioned the war or wrote about it in letters.

At last seasonal leave was granted, and from here the book becomes something of a Guide to the Middle East, though withal very well described, and must bring back some nostalgic thoughts to those who spent any time there. The author went to Palestine first, and her descriptions of Jerusalem and its Biblical associations are excellent. She found the Church of the Holy Sepulchre garish and tawdry, and the Church of the Nativity in Bethlehem, ironically enough, so divided within itself that the Roman Catholic, Armenian and Greek Churches had each their own private route of approach to the Crib, so that none should trespass on each other's flagstones! Nazareth was refreshingly different, being far more natural and uncommercialized.

After eighteen months in Egypt, Miss Curtis-Willson had further leave in Cairo, and, like millions of others, gaped at the Sphinx and the Pyramids, the former, not as she had imagined it, gazing unblinkingly into vast illimitable deserts, but "surveying, with almost perceptible longing, the fleshpots of Cairo!"

Soon after this came the O.T.C. selection board which she passed; and after an uneventful journey home she found herself at Framewood Manor, near

Stoke Poges—the O.T.C. had unfortunately been moved from Greenwich where she had, among other things, to learn to "keep up an unaccustomed standard of ladylike behaviour, to eliminate the excessively naval slang from daily speech, to keep the jacket buttoned at all times, to sit in a chair instead of lounging, and always be ready to make lucid and well-informed conversation with one's superiors at any time!"

Her first job as a third officer was on the staff of the Commander-in-Chief, Portsmouth, at Combined Headquarters, Southwick, in May 1944. All nationalities seemed to be working in "the tunnel" as it was called, a system of tube-shaped offices below the fort, and a nightmare place to work in, airless and stuffy, and lit only by the hard daylight strips which flickered along the walls. They got little or no sleep, and all the time the tanks and lorries rumbled along the main road through Fareham.

"The ever mounting tide of excitement rose to its peak about the 3rd or 4th of June. Two important convoys of large ships had left their Scottish ports, one east and one west, and were making their way southward ships were sailed down the Thames and the Bristol Channel, to make their way slowly round the coasts to the great Clapham Junction points in the Channel from which they would eventually turn southwards. All this we were aware of in a dazed and vague manner as we plodded through signal after signal in the information centre."

The actual D-Day excitement was naturally intense, especially in the plotting room where the author worked; all this is well described, but of course later things settled down and she became more or less redundant.

On asking for another draft abroad she got one ; this time to Quebec for five weeks to handle the ciphering and deciphering of signals between London and the Prime Minister, who was holding another conference with President Roosevelt. She saw a good deal more of the white bread, steaks and pineapple on board the *Queen Mary* than she did of Mr. Churchill ; the great man's suite was guarded by a Marine sentry and he rarely emerged.

They had eight days in Quebec in great luxury, with breakfast in bed every day and anything they wanted by merely telephoning down for it ! On the way back the ship was full of American troops, who appeared to exist in the most abysmal ignorance of life in England, and even showed no curiosity. One of them asked if there were horses in England !

After this flutter the author set sail once more ; this time for Ceylon, and up the Suez Canal again—this time in a Dutch ship. How omnipotent sounds the Superintendant, East Indies—" her jurisdiction extended across the Indian Ocean to Mombasa and north into India, as far as Bombay, Delhi and Calcutta, and even up to Aden !"

The author's destination was the R.N. Air Station at Katukurunda as captain's assistant secretary, and everybody worked, ate and slept on the station, which made it all very self-contained and companionable. She dealt mainly with advancements, allowances, grouses and queries, but seems to have got in her usual quota of sightseeing in jungles and temples.

At last came VJ-Day and, after the packing up and endless good-byes which seem to have been something of a prima donna's farewell, she left Ceylon and also the Navy, for good.

On looking back, the book is really rather full of trivialities, but all set against an exotic and well-described background. The style is pleasant and flows easily, and these experiences will no doubt raise a great *schwarmerei* in the bosoms of those who have served in the many places here mentioned.

P.A.

"PERCHANCE."

A short history of British naval aviation.

By B. J. HURREN.

(Ivor Nicholson & Watson, Ltd., 1949. 10s. 6d.)

My earliest recollection is of falling out of my pram in sheer terror when, as my nurse was wheeling me along a path near Farnborough Heath, the army airship *Beta* suddenly loomed up over an adjoining pine wood. Later, as a schoolboy on holidays during the First World War, I spent all day and every day on the same heath watching the many different types of British and French aeroplanes that came to the Royal Aircraft Factory for test; but I was never after that badly bitten by the aviation bug, and indeed one did not join the Navy (in my day) if one had been.

Three commissions served in aircraft carriers is something; but I doubt if I am really qualified to review a book with the sub-title of this one. Mr. Hurren, however, is very fully qualified to write it. With experience as a carrier pilot before and during the war, he was employed for part of the latter in the M.A.P. and is therefore a shrewd judge of the material and supply position as it affected the Navy—a very important matter. Moreover, as an executive of an aircraft manufacturing company that has long been prominent in supplying the Navy (though not always to the latter's delight) he has the knowledge and contacts necessary for a full and complete account. Finally, he has spent seven years in collecting material for the book, of which the preface opens with an ungracious reference to the Admiralty Library.

The work is divided into three sections. The first, called "Decks Cleared, 1909–1919," takes up about half the text. The second, "Perchance, 1919– 1939," covers the inter-war years. The third is called "The Noon of Doing," which Mr. Hurren seems to think is the title of Geoffrey de Holden-Stone's fine poem "Peradventure" written on the eve of the last race for the Schneider Trophy and quoted in full in the forefront of the book. I feel that it would have helped the author a little and his readers a lot if he had divided his material into shorter chapters. As it is, the long first part is annoyingly full of matter that does not belong there at all. Thus it is both confusing and irritating, when trying to follow the author's account of pre-1919 developments, to find oneself sidetracked into a summary of the Schneider Trophy races (series 1929-1932); especially since they had no connection whatsoever with naval aviation, apart from the unfortunate participation of the late Lieutenant G. J. Brinton, R.N. Even more odd, in this gallery, is the sudden incursion of a description of the attempts made by the Germans to supply the Afrika Korps by air in 1943, and the results thereof. In short, one finds that the author has made little effort to follow his own plan; the story as told by him lacks its logical (or chronological) sequence, and at times the reader is persuaded that the order of the paragraphs has been decided by a lottery.

Mr. Hurren is, it seems to me, a very uneven writer. I recall a war-time book of his called "Eastern Med." which delighted me with the forthright

" PERCHANCE."

vigour of its language and the rather acid tang of its humour¹; but here there is little of that in evidence, and the author seems to have thought that, by subtitling his book a "History," he has bound himself to write "cessation of hostilities" every time he wants to say "end of the war," while at the same time retaining the right to use ephemeral slang words such as "flannel." A reviewer has to be careful in criticizing literary style, partly because of the risks run by dwellers in glass houses who throw stones for a pastime, and partly because there is little sense in this sort of thing if the meaning of what the author has written is clear.

I therefore thought to be fair by submitting the book to the test of three random page openings in succession, to see if my eye would light on one of the passages (there were far too many of them, it seemed) which have to be read more than once to clear the meaning. The first opening was all right; the second gave this :---

"The danger was that if an agitation were started for a revival of a Naval Air Service, the already tremendously expanded R.A.F. (1934—1936), and still rising R.A.F., might step in and demand amalgamation of the present Fleet Air Arm—in which it had had many R.A.F. officers and *all* the other rank personnel for more than 15 years !—with the flying boat squadrons, to form a Marine Command of the R.A.F."

While the third opening produced this :—

"By the outbreak of war in 1914 it is very little appreciated now—a generation later—that the first aircraft to alight on water; the first aircraft to fly off the deck of a warship under way; the first successful seaplane; the first aircraft with folding wings; the first aircraft to carry a torpedo and to mount a 2-pounder gun—all these and possibly other firsts had been won by British endeavour."

However, perplexity over passages of this kind was turned to real delight by the caption of one of the excellent photographs. Under a picture of the Fairey "Swordfish" the author writes that its superlative record is "a fulsome tribute to private enterprise," which, for an official of the Fairey Aviation Company, is pretty rich!

Until the very end of the First World War, there were no aircraft carriers within the modern meaning of the term; the Grand Fleet, therefore, made use of seaplane carriers to a limited extent, but these could not be regarded as a reliable arm. As the author points out, though, there were at the date of the armistice over 100 aeroplanes borne in the capital ships and light cruisers; a battleship or battle-cruiser would carry on her superimposed turrets a Sopwith Pup fighter for anti-Zeppelin work and a Sopwith "one-and-a-half strutter" for reconnaissance. An extraordinarily interesting account of prime authenticity, dealing with this early ship flying and with the first deck-landing trials in the Furious, was written for the journal "Engineering" in 1946² by Squadron-Leader F. J. Rutland, D.S.O., D.S.C., A.M., who was personally concerned in or responsible for most of the work. It seems a pity that Mr. Hurren should not have followed that account in dealing with this phase; as it is, the relevant passages in his book seem to approximate more closely to the earlier and somewhat deficient chronicle supplied by Commander P. Bethell's paper "Ship Flying and Aircraft Carriers." 3

The book is plentifully furnished with interesting statistics, and one set of figures not hitherto published gives the strength of the R.N.A.S. at the date

¹ See N.R., August, 1943, p. 269.

² "Engineering," July 5, 12, 19, and August 2, 1946.

³ "Engineering," 1943. See N.R., November, 1943, p. 367; and August, 1943, p. 274.

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of its absorption into the R.A.F. on the 1st of April, 1918; viz. 55,165. This seems large, but the great majority were H.O. ratings, and the number of longservice officers and men was only 1,418. I do not think the author is correct in saying that such a small permanent force had, for that reason, little or no chance of post-war survival; because it had been expressly laid down when the R.N.A.S. was formed in 1914 that it should "form part of the Military Branch of the Royal Navy." Nevertheless, he gives a fairly full account of the numerous commissions, boards, official enquiries, committees, and sub-committees that first brought about the suppression of the R.N.A.S. and subsequently permitted the institution of the Fleet Air Arm. It is not and could not be a very clear account, because few of the eminent nobs on these boards and committees understood what was being discussed; though they were superb at producing orotund recommendations, of which the following is a fair sample :—

"The principal need, as regards co-operation and correlation, is closer co-ordination."

In actual fact, the principal need is that three Services should not quarrel among themselves; because, if they do, the above is the sort of decision they are likely to get.

Mr. Hurren records the names of the R.N. and R.M. officers who joined Netheravon in June, 1924, as the "first course" of naval pilots. The original course for observers had been begun three years earlier, and from this there sprang a type of officer who was, as the author remarks, particularly well-suited to the planning and direction of operations. The two tribes merged with the collection of R.A.F. officers posted for duty afloat—it was obligatory that not less than 30 per cent. of the pilots should be furnished by the R.A.F., and for several years necessary that all senior administrative posts connected with ship flying should be so filled. The result, which might have been expected to be quite chaotic, was usually a very happy and quite efficient ship, "but that did not make the system right," as the journal "Flight" observed when the clumsy dual-control arrangement was brought to an end.

Mr. Hurren asserts that Marshal of the Air Force Lord Trenchard served as an involuntary helpmeet of the Navy in regaining control of its air component, in that his speeches and letters to the Press united the large company of naval men in Parliament. No doubt there is some truth in this, but I seem to remember from Lord Chatfield's autobiography that far more drastic action than that had to be taken to compel the change. However that may be, the change came not a moment too soon ; for, as will be recalled, its completion was announced in May, 1939. With this, we come to the end of the second part of the book.

The third part opens with a shrewd summary of the Ministry of Aircraft Production under Lord Beaverbrook; the author holds that the outcome of the Battle of Britain—that turning-point in the war—was determined long before the M.A.P. was established. But one of Lord Beaverbrook's schemes to increase output was to restrict production to five types of aircraft, none of them naval types; the result therefore was to retard the supply of new aircraft to the fleet by some two years. This appalling revelation ought to burn holes in the page of THE NAVAL REVIEW without any italics, but I am anxious that it should not be missed.

In the remaining fifty pages Mr. Hurren attempts to summarize the principal naval air actions of the war, a task probably beyond the powers of any writer. In the course of this, he notes with disquiet that no new fleet carrier was built for the Royal Navy throughout the war; and that, in contrast to American

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practice, we continued to regard the battleship and not the carrier as the backbone of a task force, though admitting that our liability to engagements in the narrow seas was some justification for this. He finds that "the Navy is resuming on the whole its absurdly supercilious attitude to flying in general and its own Naval Air Arm in particular"; and one hopes that this is not true while fearing that it may be.

The book concludes with a very interesting note on the cost of constructing airfields: "... when it comes to the question as to whether the State should subscribe ... for the support of an adequate number of airfields for a strong air force, it is clear that in places where geographical conditions permit it is far more economical to have aircraft carriers." With this I agree, though I can't accept Mr. Hurren's conclusion that "every function of the battleship, except the ramming of dock gates, can be more effectively fulfilled by the intelligent use of air power." (What about the *Scharnhorst* action, which indeed he cites as an instance where it was necessary to retain the battleship as the prime striking force?)

The book is very interestingly illustrated with photographs of carriers and aircraft old and new. The index is defective. There are a number of minor mistakes as to fact, which makes one doubt if all the author's material comes from reliable sources; and there is no bibliography. Finally, as I have said, the continuity of the book is confused and the style of it so involved in places as to make if difficult to understand. This will not become a standard work and does not deserve to; a worthy history of British naval aviation still waits to be written.

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"BRIEFED TO ATTACK."

Malta's Part in African Victory.

By Air Marshal SIR HUGH LLOYD.

(Hodder and Stoughton. 18s.).

"COURAGE," says Air Marshal Lloyd, "is sheer will power, and no man has an unlimited stock of it, so that officers and men [on Malta] would be worn out after a short period like a suit of clothes." This observation accords with the briefing by the then Chief of the Air Staff—now Lord Portal—of the prospective A.O.C. Malta before he left England: "Your main task at Malta is to sink Axis shipping from Europe to Africa. You will be on the Island for six months as a minimum and nine months as a maximum, as by that time you will be worn out." But Air Marshal Lloyd stayed in Malta a good deal longer than nine months and was not worn out beyond repair, as he is still serving in an appointment of great importance.

Let it be said at once that this book is not intended for the student of strategy. The author does not fail to keep the reader in touch with the overall strategical situation in the Mediterranean and elsewhere, but the book is the author's own story of the fight for survival of MALTA \mathcal{G} . Detween June, 1941, and July, 1942, as he saw it as A.O.C. It is also Air Marshal Lloyd's tribute to those

who served under him and to those many, civilians and Service people, British and Maltese, who helped to keep the aircraft in the air and fight them.

By the time the new A.O.C. reached Malta the island was already much battered, the enemy was on the borders of Egypt and was sending in supplies through Tripoli, Benghazi and Tobruk. In close collaboration with the Flag Officer, Malta (Admiral Ford, who had "not even a destroyer for my old age") a careful study was made of the enemy's methods of sailing and routeing convoys, and many successful attacks resulted. Those liable to route and sail convoys in the future may care to note that the authorities at Taranto were regarded as "unhelpful" in that convoys were sailed to no set routine, unlike the methods of those at Naples whose regular sailings resulted in many more sinkings.

But by the end of October, 1941, Malta had been forced to the defensive as Kesselring stepped up the tempo of his attacks on the island, and the remainder of the book tells how those attacks were beaten off. To one who knows Malta from pre-war commissions in the Mediterranean but has not been there since, the book gives a real and colourful picture of life on the island and especially of the existence round the airfields during that bizarre period. The story of the struggle for airfield serviceability is well told, and the author conjures up a vivid picture of the construction of runways and pens by means of "swarms of Maltese, each with his little cart."

The A.O.C.'s other principle "headache" was serviceability of aircraft, and he regarded the whole problem of maintenance as the Achilles heel of the air defence of Malta. As Malta was a staging post for aircraft on passage to Egypt he solved a very small proportion of the problem by keeping new aircraft and sending on battered ones, a procedure which earned him some opprobrium. But the only real answer was hard slogging in the face of incessant attack.

This and the airfield problem lead one to reflect on the increasing immobility of air forces; the more swift and powerful their punch the stronger and more complex must be the body behind the punch. Strength of runways, fuel and endurance problems of jet aircraft, direction complexities and the consequent increase of technical skill required of the personnel are all contributors to immobility. It is, however, important that air forces should be mobile, as the current need to despatch air re-inforcements to Hong Kong has shown.

These reflections have led momentarily away from the personal nature of the book which is full of swiftly drawn pen-pictures of personalities of all walks of life. There was Corporal Osborne who "stood in the cockpit of a Swordfish, dizzy with petrol fumes, yet attempting to put out a fire in the back seat—and under the aeroplane was a loaded torpedo"; there was Archbishop Caruana who "was a most enthusiastic airman and demanded details about superchargers, boost pressures, variable pitch propellors and so on"; there were the innumerable Maltese children in the "ditch" who called "Hail Air Marshal" as the A.O.C.'s car drove by.

The author naturally does not include a self-portrait; and as our Regulation No. 5 does not allow discussion of personalities readers must find out for themselves more about the A.O.C. whom the Axis called an "unmitigated Cretan," who received eleven offers of marriage and to whom an old farmer in India offered half his patrimony and hoped that he would go and live with him.

So much for the matter in this eminently readable and graphic personal narrative.

The photographs are numerous and excellent, and the foreword is by Lord Tedder whose theatre of responsibilities at that time included Malta. Achilles,

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whose heel was maintenance, stands with shield upraised and dagger drawn on the cover of the book : that Achilles is reproduced whom the ladies of England had made of bronze cannon captured by Wellington and placed in Hyde Park to commemorate his victories.

There are a few things which call for mention, principally the author's tendency to dart from theme to theme without warning; but such a tendency is not out of keeping with the ebb and flow of that life on Malta. I looked in vain for an index and would like to have seen recorded in the book that resounding message sent by Mr. Churchill when Malta was at the height of her struggle. I cannot refrain from quoting it;

"The eyes of all Britain and indeed of the whole British Empire are watching Malta in her struggle day by day, and we are sure that success as well as glory will reward your efforts."

G.H.S.

"VISION AHEAD."

By Air Commodore P. HUSKINSON, C.B.E., M.C.

(Werner Laurie, 1949. 11s. 6d.)

THE writer, a Harrovian, was seconded to the Royal Flying Corps in 1915 and had a very distinguished career as a combat pilot in the war that followed. After that he became an armament specialist ; not so much because he wanted to as because the Air Ministry enjoined that all Regular officers should specialize and offered a bonus of up to twelve months' seniority to such as did. Air-Commodore Huskinson calls this scheme in turn "misguided," "inept," " unfortunate" and "fantastic," and thus early in the book gives us a foretaste of the flood of forthright language that he is to pour out on many policies and plans and persons. The advanced armament course, anyway, can have been no good at all—" I could hardly have learnt less about armaments if I had gone by mistake to a school for advanced organ-grinders."

Subsequent service between the wars included a staff appointment in which the principal task was to acquire ranges for air bombing and gunnery practices. This considerable achievement was in itself an advanced course in unarmed combat with officialdom major and minor; and that seems to have been just as well, because it was followed by a period in command of a bomber group, whereof the author's brief account records collisions with and severe censure of :

> The Air Ministry ; Its Lands Branch ; Its Works officers ; The Treasury ; The airfield contractors.

In 1938 Huskinson became one of the R.A.F. members of the Ordnance Board, which was then and is now an inter-Service advisory body on armaments responsible to the appropriate directors in the Service ministries (in the case of the Navy, the Director of Naval Ordnance). Personally I have a good deal of respect for it, some of this originating from a story my father liked to tell. He, an artillery

officer, designed in 1914 a new howitzer and submitted his sketch through the usual channels. In due course it came back with a minute from the Ordnance Board to the effect that "the Board's records of Marlborough's wars show that a field-piece for use in the Low Countries must have a minimum clearance of nine inches between the wheels and carriage; the proposed design does not achieve this and the Board cannot therefore recommend it for adoption."

Though Air Commodore Huskinson does acknowledge a certain charm of quaintness about the Ordnance Board he says he discovered opposition almost from the first—" the subtle but implacable resistance of the Army," which he affects to explain by a genealogical tree showing (quite erroneously) the whole set-up to be a dependency of the War Office. His letters were ignored, his projects were stifled or neglected, he was obstructed at every turn. The whole machinery of the Board was obsolete and inefficient ; there was far too much red tape about it, and many of its officers were unfitted to perform their duties. This round and wholesale abuse of the Ordnance Board by one who was later to become its vice-president is a disturbing and a puzzling thing ; because, if it had really been as bad as this, one would expect to find that the Board had since been abolished. However, I learn on enquiry that it still exists, and tend to believe that it was not quite as bad as the author makes out.

As far as he was concerned, the functions of the Ordnance Board were to some extent superseded by two bodies of his own creation; to wit, an Air Armaments Board to eliminate gun troubles in the R.A.F., and the Static Detonation Committee to oversee the development of aircraft bombs. The only thing I know about the Air Armaments Board is that its president (Admiral Osborne) was at the same time President of the Ordnance Board, a fact of some significance in assessing the validity of the author's strictures on the latter. As for the Static Detonation Committee, my lips must be sealed, because I know too much.

Nevertheless, it is permissible for me to comment at large on the thesis that desperate ills demand desperate remedies. There is no question at all that the ills suffered by R.A.F. weapons at the time that Group Captain Huskinson (as he then was) took office were desperate indeed. To find no aircraft guns exceeding rifle calibre was bad enough; but to find that the H.E. bombs were "as useless as a bag of cement," and the incendiary bombs "if anything, worse," was a shocking discovery to make; and the author made it from a series of common-sense trials which he devised and executed in August, 1939. There is not space here to speculate why this astonishing state of affairs had remained undiscovered by his predecessors in the air hierachy¹, and there was not time then for anything but the most drastic high-priority measures to set things right.

Hence we arrive at the desperate remedies. Here again there is no question that these were effective, and that the weapons used by the R.A.F. in the latter half of the war were of appalling lethality, though some of us may question the taste displayed in reproducing (p. 143) a photograph of the damage done to Cologne Cathedral as proof thereof. It is only the methods that were employed to enforce these remedies that abide our question—methods familiar to all in any way concerned with the development or manufacture of war material. Under Lord Beaverbrook, who at the critical phase was made Minister of Aircraft Production, these measures were carried through by persons whom Mr. George,² his spiritual predecessor, had called the "men of push and go." They pushed and they shoved and they shouted and they hounded—and this book is largely

¹The author indicates that the 250-lb. and 500-lb. G.P. bombs were not put into production until 1938; though I fancy it was nearer 1928.

²Minister of Munitions in the First World War.

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a record of pushing and shoving and shouting and hounding; and they slashed red tape—plenty of instances of that in these pages; and they got what they wanted. (And, I may note in passing, the money went.)

—"Well, why not? Just the job! That's what's wanted in a case of that kind—had to do the same thing in a minor way lots of times myself. What's wrong with it?" I think I hear readers asking this, and it demands an answer.

In my observation, this bald-headed insistence on fulfilling your own requirements at any cost has got to be qualified by asking " at any cost to whom? " and it is only when this secondary question is examined that we can see the effects of this kind of policy. The economy of a country devoted to an all-out effort on the development and production of war material is elastic only in the sense that if you push it out in one place you will pull it in everywhere else; in other words, if I cause my pet project to override all other priorities in manpower and material and everything else, yours is going to suffer. And yours did suffer, too; because Mr. Hurren in his book "Perchance" (reviewed elsewhere in this number) states flatly that the effect of the Beaverbrook policy at the M.A.P. was to delay the production of improved naval aircraft by two years. From the little I know of Lord Beaverbrook I don't suppose he cared a fish's teat about that; and there is no evidence anywhere in this book that Air Commodore Huskinson even dimly realizes that that sort of policy has this sort of result. I believe it comes to this; that, whoever you are, England doesn't expect every man to do your duty, and you do her no service if you choose so to misread the immortal message.

Air Commodore Huskinson, who became Director of Armament Development at the M.A.P. in 1940, was, on the night of 15th of April, 1941, watching the blitz from the window of his flat, with the object of learning more about German bombing tactics and bomb performance. The building received a direct hit from which he sustained injuries that left him totally blind. He refused to be daunted by that, and with astonishing courage and resolution continued in the direction of air armament matters until the end of the war, having faith in his country, his cause, and (not least) in himself. The circumstance recalls Chesterton's lines to E. C. Bentley :

> "We have seen the city of Mansoul, even as it rocked, relieved; Blessed are they who did not see, but, being blind, believed."

The advance in air armaments during the late war was more spectacular than that in any other sphere. Much of it is chronicled in this book, and as a sheer record of material progress does not rank for notice in THE NAVAL REVIEW. Bombs, high explosives, incendiaries (including persistent abortive attempts to find some form of incendiary pellet that could be dropped to set the German pine forests ablaze); rocket projectiles—deemed by the author the "most effective weapon in the whole range of aircraft armament,"—the development of all these is dealt with in some detail. In my view, the account is in many places tendentious, inaccurate or defective.

For instance, it is quite untrue that there existed in 1942 no efficient technique for measuring the blast performance of bombs in static tests.—The explosive that so signally increased the power of Bomber Command's raids was not RDX, and it was not adopted for that purpose in 1942.—How can it have been possible for the author to have been watching the blitz from the roof of Thames House *early in 1940*? The German combined incendiary and explosive bomb was not copied from ours, nor even the idea. The chapter on the Moehne dam raids is even less informative as to the weapons used than Wing Commander

Gibson's contemporary account,¹ for which however the author cannot be blamed, as he cites security restrictions. This is interesting, and typical too, because to my certain knowledge the leading particulars of this weapon and its principle of operation were promulgated throughout the German and Italian forces directly after the raid. But the blazonry on the shield of Service security organizations is, as will be recalled : "On a stable door shut, with a horse gone ; an ostrich rampant, with its head in the sand or sable."

One point I would like to have seen covered is the question of "bigger and more beautiful bombs," to use the disgusting and much-publicized phrase coined by Lord Beaverbrook. The 4,000-lb. bomb was first used in 1941; the 8,000-lb. bomb—which consisted of two 4,000-lb. ones put together—in 1942. The 12,000-lb. bomb in turn consisted of three 4,000-lb. sections, and was first used in 1944. In my observation, the accuracy of the bombing did not warrant the concentration of explosive energy represented by the 8,000-lb. bomb, let alone the 12,000-lb. monstrosity; in other words, a bomber would have done better to carry two (or three) 4,000-lb. missiles and drop them in a "stick." I suspected at the time and I believe now that the successive increase in the weight of individual H.E. bombs had more value as home propaganda than it had in effect.

Air Commodore Huskinson ends his book with a plea for revising the system of selecting and training armament specialists for the R.A.F. Here we should have no business to follow him were it not for the fact that the Naval Air Arm is to some extent in the same boat. That the situation is a difficult one can be seen from the fact that senior R.A.F. officers and the squadron's armament specialist do not normally aviate, and therefore have no modern user knowledge. It is as if naval guns were never fired, controlled, or even seen to fire, by anyone above the rank of sub-lieutenant. This in itself is not a circumstance that helps in the development of efficient air armaments, and, as a back number in a dim technical post myself, I can see the very disturbing implications of it. To my mind, the R.A.F. was even worse served than is implied by this circumstance from the fact that the armament officer of a group or squadron was denied Air Staff status, or (as we should say) was not a member of the Ops. Staff. Hence it could happen—and more than once did—that a squadron detailed to attack dockside targets or port installations was bombed-up with anti-submarine bombs, which are expressly designed not to explode on impact.

This book contains some excellent photographs and an inadequate index. I think it was the lady novelist Ouida who, in her description of a boat race, said that—" all rowed fast, but none rowed faster than our hero at stroke," and I was meditating on how far this description fitted Air Commodore Huskinson when a chance circumstance sent my mind back to my Sub's courses, and to the brazen voice of Petty Officer Keech, our instructor, as he informed me and all north Portsmouth :—" Mr. ——, you're the only one of the whole squad in step!"

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1 " Enemy Coast Ahead."

"A HISTORY OF THE ROYAL AUSTRALIAN NAVAL COLLEGE."

By F. B. ELDRIDGE.

(Georgian House, Melbourne. 42s.)

WHILE the chief interest in this finely produced and illustrated volume will naturally be felt by the officers of the Royal Australian Navy it deserves notice in THE NAVAL REVIEW, so many of whose members have served in Australian waters or have been shipmates of those who have passed through the College.

The Royal Australian Navy may be said to have been born in 1909 with the decision to build up a Pacific Fleet Unit, and in 1911 Captain B. M. Chambers, Royal Navy, was lent from England to start a new College for Australian officers. There were many delays because of differences of opinion about the site, but finally it was decided to build in Jervis Bay, a large land-locked stretch of water some eighty miles south of Sydney, and meanwhile to adapt existing buildings near Geelong in Victoria, where the first-term of cadets joined in 1913. The Jervis Bay establishment was completed in 1915 when the cadets moved there and remained until 1930. Unfortunately the full scheme for the Royal Australian Navy proved too ambitious to be realized, and the "overhead" expenses of the fine buildings and establishment at Jervis Bay were too high for the reduced number of young officers required.

The world depression in 1930 caused a radical overhaul of defence expenditure, and it was decided regretfully, but no doubt wisely, to move the cadets to Flinders Naval Depot, the main entry and training establishment for R.A.N. ratings, some forty miles south of Melbourne. There the establishment for cadets—or rather the cadet-midshipmen as they are called in Australia has been installed ever since and in the course of time the buildings and grounds have been much improved and many amenities have been added.

The author, Mr. F. B. Eldridge, was for many years senior master at the College and has traced its peregrinations in detail as well as the considerations and negotiations that gave rise to them. He also describes the method of entry and the system of training, instruction and recreation of the young officers. From the start of the Royal Australian Navy all ranks of society have been drawn upon for its officers and from the moment of entry—which is by a combination of qualifying examination and interview—the State bears the whole cost of the boys training and maintenance including even his pocket money. The system has now stood the test of over a generation's experience and has certainly justified the faith of its founders. Two members of the first term to join are now flag officers and one of them, Rear Admiral J. A. Collins, C.B., is First Naval Member of the Australian Naval Board, the professional head of his Service.

The volume contains a mass of information of domestic interest to the College and its alumni, and concludes with several tables of statistical information and a full biographical supplement of war services.

R. M. C.

CORRESPONDENCE.

W. S. C.'s COMMENT ON THE NAVY.

SIR,-You may like to print the following extract from my diary. It contains high praise of the Royal Navy which I venture to think is fully justified and worthy to be permanently recorded.

Yours truly, R. P. D.

"In a very good speech to the Navy Club on 19th October, 1948, General Ismay told us that during the war it was Mr. Churchill's habit to rely on the Navy to do the impossible, and the Navy set a deplorable example by always doing it.

"He quoted one of Winston's remarks :----

'I pay no attention to what the Navy says it can do, or will do, before the event. I know that when the time comes it will achieve everything that is asked of it.' "1

THE HON. EDITOR,

THE NAVAL REVIEW.

NOTICE BOARDS.

SIR,—May I have space to raise a minor matter, though a most important one? All will agree that good NOTICE BOARDS are essential for a good ship's organization. Unfortunately good notice boards are both rare and hard to get. This letter is a plea that Their Lordships should give to the small subject of notice boards some of the emphasis and attention they have given-with such excellent results-to the larger subject of bathrooms.

Requirements (by all ships) .- Every ship needs notice boards, which must be :-

- (a) Well-sited.
 - Well-lit. (b)
- Well-kept .--- i.e. properly sub-divided, notices properly hung. No notice should (c) remain posted for five minutes after it is out of date.
- Arresting, eye-catching, interesting. (d)
- (e) Read.

(d) and (e) refer to the notices rather than the boards, but they will be easily achieved if the first three requirements are met.

Notice boards cannot be properly kept unless covered.

Present State.-Present failings seem to be that, where boards exist, both numbers and specifications are inadequate. Too often one sees tattered and yellowing notices hanging from one pin, precariously (and painfully) stuck into a large expanse of the hardest plywood, from which the green baize is peeling and a broken glass cover has long since been removed.

Proposed Action .--- It is suggested that either :-

- (a) Notice boards be designed in two or more patterns and produced in quantity as items of Naval Stores, or
- (b) A permissive order be issued entitling ships in commission to draw stores or make demands on dockyard work until their notice boards have reached the standard deemed necessary, which would be achieved in future construction.

I suggest that the second alternative is preferable, being more flexible, and that such an order should authorize the number of notice boards to be "as required by the executive officer," and lay down the following requirements.

- (a) Corticene backing, for easy drawing-pinning ;
- (b) Internal strip-lighting;
- (c)
- Capable of locking ; Perspex front (not glass or wire-mesh). (đ)

¹ See Frontispiece.—Hon. EDITOR.

CORRESPONDENCE.

The size of boards would vary with requirements and with bulkhead space available. All boards should, however, be made to take a particular number of foolscap sheets, allowing a small space between notices and room for headings. If notice boards are to be store articles I suggest two sizes would meet most requirements, the larger capable of taking two rows of four sheets of foolscap, and the smaller two rows of two sheets.

To sum up.—I suggest that this is a case where a little thought and a very little expense would materially help executive officers of ships and pay a handsome dividend in increased efficiency (and contentment).

Yours truly, Bashan.

THE HON. EDITOR,

THE NAVAL REVIEW.

H.M.S. SHANGRI-LA.

SIR,—I write, not as a captious critic, but as an honest seeker after information, when I ask whether my distinguished colleague is correct in his rendering of the order "lie to"? I, and, I believe, all my contemporaries, understood the expression to be "light to."

Yours truly,

W. A. H. K.

THE HON. EDITOR, THE NAVAL REVIEW.