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RECOMMENDATIONS

BY

ADMIRAL SIR REGINALD HENDERSON K.C.B.
1911.

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THE NAVAL FORCES OF THE COMMONWEALTH.



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RECOMMENDATIONS

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- INTRODUCTORY.
- PART I.—THE COMPLETED FLEET.
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By Authority:
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Melbourne, 1st March, 1911.

SIR,

In accordance with the request made to me by the Commonwealth Government, I have the honour to forward herewith for the consideration of that Government my Recommendations in regard to the general administration, organization, distribution, &c., of the Naval Forces of the Commonwealth.

2. In your letter of 11th August, 1910, you stated, on behalf of the Government, that "the main points on which we wish to have the benefit of your experience are—

"(a) the best position for the Central Naval Base, and the works necessary to make it effective ;

"(b) the positions for secondary bases for the service of a Fleet, and what we should, in your opinion, do to make them of best service in any Naval operations.

"We shall also be glad of your views as to the location and character of the training schools for preparing *personnel* for our Naval Service, to include both officers and men and all branches of the Service ; and on any other Naval matters upon which you may care to express an opinion."

In subsequent conversation with you I learnt that, as far as practicable, all action necessary in the first stage of the development of the Commonwealth Fleet was being deferred until the receipt of my Recommendations, and that it was the desire of the Government that I should embody in my Report my views as regards all the measures to be taken, both forthwith and in the future, in the formation of the Fleet.

3. I have not, therefore, restricted my Recommendations to any special points, but have tendered advice on all the steps which, in my opinion, should be taken.

4. In order to gain full knowledge of Australian conditions and resources, more especially in regard to its harbours and their suitability for Naval Bases, I have visited the following harbours :—

Western Australia.

Fremantle (including Cockburn Sound).
Bunbury.
Albany.

South Australia.

Port Adelaide (including Largs Bay, &c.).
Port Lincoln.
Wallaroo.
Port Victor.

Northern Territory.

Port Darwin.

Queensland.

Thursday Island.
Cooktown.
Cairns.
Townsville.
Rockhampton (including Keppel Bay).
Gladstone (Port Curtis).
Maryborough.
Brisbane (including Moreton Bay).

New South Wales.

Port Stephens.
 Newcastle (and Lake Macquarie)
 Broken Bay.
 Sydney (Port Jackson).
 Botany Bay.
 Wollongong.
 Port Kembla.
 Jervis Bay.
 St. George's Basin and Sussex Inlet.
 Twofold Bay.

Tasmania.

Launceston and River Tamar.
 Devonport.
 Burnie.
 Hobart.
 D'Entrecasteaux Channel.
 Huon River.
 Port Esperance.
 Port Arthur.
 Norfolk Bay.
 Frederick Henry Bay.

Victoria.

Port Western.
 Port Phillip generally (including Port Melbourne, Williamstown,
 Geelong, Corio Bay).
 Portland.

5. I have also fully considered from charts, plans, and reports, the following harbours, which I had not opportunities of visiting:—

Western Australia.

Broome.
 Cone Bay (King Sound).
 Wyndham.

Papua.

Port Moresby.

Queensland.

Bowen (Port Denison).

New South Wales.

Kiama.

6. Although I have confined my attention as regards the question of Naval Bases to the ports of the Commonwealth and its dependencies (this being the scope of my present service), yet it has been necessary for me, when reviewing the whole Naval situation in the South Pacific, to give consideration to the positions of New Zealand, Fiji, and other portions of the Empire in the Pacific; and my proposals will admit of any future Naval developments in New Zealand and the Pacific Islands being readily fitted into one complete scheme.

7. I desire to express my high appreciation of the courtesy shown, and the assistance rendered, to me by the Their Excellencies the Governors of the respective States, the Resident of the Northern Territory, the State Governments and their officers, the local authorities at all the places which I have visited, and by the Australian people generally. By their aid I have been enabled to carry out my investigations under most favourable conditions.

8. All the arrangements for my tour were made by Captain Creswell, C.M.G., Director of the Commonwealth Naval Forces, assisted by Staff Paymaster A. M. Treacy, C.N.F., both of whom accompanied me. I have to thank these officers for the most satisfactory and efficient manner in which all these arrangements were carried out.

9. In establishing a Fleet of her own and developing her own Naval resources, Australia is taking a large share in the inauguration of an Imperial movement, which must result in strengthening the Sea Power of the Empire. I wish, however, to emphasize especially the fact that, although the Government may propose and guide, and although the Naval Administration may organize and foster, the Naval development of the Commonwealth, yet the ultimate success of this development rests, and must continue to rest, with the Australian people; upon their sincere and whole-hearted support and co-operation depends the efficiency of their Fleet. Moreover, it will be to the *personnel* of that Fleet that the people will entrust the guardianship of their homes.

I have full confidence that the people of this great country will show that they retain those maritime instincts which are the proud heritage of our race, and that they are determined to support their Government in having an ideal Naval Force imbued with the Naval traditions of our past, thoroughly efficient in every respect; a Force to which every officer and man will be proud to belong.

10. In conclusion, I would express the hope that my Recommendations will assist and facilitate the Government in the furthering of their wise Naval policy.

I have the honour to be,

Sir,

Your obedient servant,

REG. HENDERSON,

Admiral (retired).

The Hon. the Minister of State for Defence.

INTRODUCTORY.

Australia heretofore has trusted to the Mother Country for her protection, which has depended on the Command of the Sea, or, in other words, upon Sea Power, and this Sea Power has enabled Australians to remain undisturbed in their magnificent country and allowed them to arrive at their present condition of great prosperity. Australia has now determined to take her share of the defence of her own territory, and it is certain that it must still rest on the Sea Power of the Empire.

2. Once the Command of the Sea is lost by the Empire, no local system of defence, Naval or Military, could secure Australia's autonomy, and she would be the prey of the strongest Maritime Power.

3. Any Nation that threatens or attacks the Sea Power of the Empire must be an enemy of Australia and of the whole Empire.

4. Unity of purpose in this matter with regard to all parts of the Empire will give great strength to the Sea Power of the Empire, and, too, unity of control in War of all the Naval Forces of the Empire is of paramount importance.

5. The primary object of an Australian Navy, therefore, should be the immediate support of the rest of the Empire's Naval Forces in their determination to retain the Command of the Sea.

6. The geographical position of Australia, its immense coast-line, sparsely populated districts, large shipping and coasting trade, and over-sea communications, require that the secondary object should be the protection of ports and shipping from raids and incursions by hostile ships and cruisers.

7. Field Marshal Viscount Kitchener of Khartoum has well set forth the strategic position of Australia in his Memorandum on the Defence of Australia, in which he says—

“It is an axiom held by the British Government that the Empire's existence depends primarily upon the maintenance of adequate and efficient Naval Forces. As long as this condition is fulfilled, and as long as British superiority at Sea is assured, then it is an accepted principle that no British Dominion can be successfully and permanently conquered by an organized invasion from over-sea.

“2. But, in applying this principle to Australia, considerations of time and space cannot be disregarded. The conduct of a great War depends upon the calculated and proper combination of Naval, Military, and Diplomatic Forces, and it is quite conceivable that, in the future, as in the past, National considerations may require the concentration of British Naval Forces in one or other theatre of operations. It follows that, in seas remote from such a concentration, the British Naval Forces may find themselves for the moment inferior in force to an actual, or potential, enemy. In such a situation, although our ultimate superiority at Sea might not be a matter of doubt, some time might elapse before our Command of the Sea was definitely assured in all waters. It therefore becomes the duty of all Self-governing Dominions to provide a Military Force adequate, not only to deal promptly with any attempt at invasion, but also to ensure local safety and public confidence until our superiority at Sea has been decisively and comprehensively asserted. For this reason it has been agreed that the Home Forces of the United Kingdom should be so organized as to compel an enemy contemplating an invasion to make the attempt on such a scale as to be unable to evade our Naval Forces. The same arguments apply to Australia, and its Land Forces should be calculated and organized on this basis.”

8. The Military Policy of the Commonwealth is thus based on two assumptions—

(a) That the Sea supremacy of the Empire will be maintained, though some period may elapse after the outbreak of hostilities before the Command of the Sea becomes effective.

(b) That the Naval Forces in Australian waters will be of sufficient strength to preclude an enemy who attempts invasion on a large scale from evading them during such a period.

9. The Commonwealth Naval Forces will, therefore, be required to share in attaining (a), to fulfil (b), and also to render protection on the high seas to merchant shipping, upon which the commerce, and, therefore, the prosperity, of Australia depend; and it is, with these requirements in view, that I make the following Recommendations.

STRENGTH OF THE COMMONWEALTH FLEET.

10. In the first instance it is necessary to find some basis on which to determine the strength of the Fleet that should be maintained by the Commonwealth.

11. Being girt by the sea and having no inland frontiers to protect, Australia is compelled to regard the sea itself as her first and natural line of defence. If Australia were an independent Nation the Sea Power required by her to render her immune from aggression would be determined by the Sea Power of her possible enemy or enemies; her existence in a state of independence could only be assured by the maintenance of an Australian Naval Force equal to, if not greater than, that of the possible enemy. The enormous cost of modern Navies, coupled with the present comparatively small population of the Commonwealth, place the contemplation of such an Australian Fleet beyond the bounds of practical politics, and outside the purview of my Report.

12. Australia cannot, therefore, at the present time do more than undertake her share of the burden now borne, almost entirely, by the Mother Country; as the provision of adequate Naval Defence is essential to every Australian who desires to preserve his nationality, it would seem just to assess such share in proportion to population.

13. Population might be taken as a basis also, because War affects all the members of a Nation, not only the Government and its Armed Forces; because it is on each individual that the duty of defending his country should, and would in the last resource, fall; because the strength of a Nation must to a great extent, more especially where Universal Service obtains, depend upon its population; and, finally, because it is the people by their votes, where all are equal, who decide the policy of their Government.

14. The population of the United Kingdom may be taken as approximately 45 millions, the population of the Commonwealth as $4\frac{1}{2}$ millions, a proportion of 10 to 1. In 1910 the United Kingdom voted approximately £10,000,000 for Naval purposes for the current year; on this basis Australia's annual Naval provision would be £4,000,000 now, increasing in later years proportionately to population.

15. Australia's over-sea commerce, which is the life-blood of her prosperity and wealth, should also furnish a measure of her share in the benefits, and of the obligations, arising from the maintenance of the Sea Power on which such commerce depends for its very existence.

16. For the year 1909, the total value of the exports and imports of the United Kingdom and Australia are recorded as follows, approximately:—

| | | | | |
|--------------------|---------------------------|--------------|-----|----------------|
| United Kingdom | ... | ... | ... | £1,094,000,000 |
| Australia—Over-sea | ... | £116,000,000 | | |
| | Inter-State (sea traffic) | 46,000,000 | | |
| | | | | £162,000,000 |

17. On the basis of over-sea trade Australia's share would thus be approximately 11 per cent., and on the total sea trade 15 per cent., of the Naval Expenditure of the Mother Country.

18. I have thought it reasonable, therefore, to frame my proposals on the assumption that Australia desires to possess, as early as practicable, a Fleet whose annual cost approximates to this proportion, increasing gradually as the population and wealth of the Commonwealth grow. For this expenditure I am recommending the provision of a Fleet which should fulfil the requirements laid down in paragraph 9.

19. In order to obtain the necessary efficiency with the minimum cost, *continuity of policy* is essential, and the development of the Commonwealth Naval Forces must proceed on definite lines with a definite goal in view, so that each step taken will advance the completion of the whole, and the development must be regulated by her resources both in population and in wealth.

20. During the period of Naval development the Commonwealth will have the advantage of benefitting by the experience of the British Navy, and of obtaining from that Navy such *personnel* and *materiel* as she may require.

21. The first step towards the development of a Commonwealth Navy has already been decided upon, namely, the building of the "Fleet Unit," which comprises—

One Armoured Cruiser,
Three Protected Cruisers,
Six Torpedo-boat Destroyers,
Three Submarines.

22. The mere possession of ships does not make a Navy, though to a great extent the number and size of the vessels do regulate the provisions which are essential for its maintenance, of which provisions the following are the most important :—

A.—CONTROL AND ADMINISTRATION.

Selection and appointment of a Naval Board which by the reputation and qualifications of its members will command not only the confidence of the Commonwealth, but will possess also the confidence, loyal sympathy, and support of the Navy it administers.

B.—PERSONNEL.

Adoption of such conditions of service in the Commonwealth Navy as will compare favourably with the conditions of employment on shore in Australia, and, under a system of pensions for long service, State insurance, or annuities, attract suitable men to devote the best part of their lives to the Naval profession.

C.—TRAINING.

Adoption of definite and thorough systems of Training which will secure to the Commonwealth an efficient Naval *personnel*.

D.—NAVAL BASES.

Protection of selected Naval Bases.

Complete equipment of Principal Naval Bases and selected Sub-bases with all necessary plant and accessories essential to the maintenance of Modern War Vessels.

E.—COMMUNICATIONS AND INTELLIGENCE SYSTEMS.

Organization of a complete and efficient system of communications and intelligence.

F.—NAVAL RESERVES.

Regulation of the Entry, Training, &c., of the Naval Reserve Officers and Men.

G.—STORES.

Efficient arrangements for the supply, and immediate readiness, of all Naval Stores and requirements.

23. All these provisions must be organized and developed concurrently with the building of the vessels, but it is necessary to emphasize the fact that, while a modern war vessel can be built within two years of her being ordered, the *personnel* require a period of training varying at the earliest from nine years and a half for a Lieutenant to six years for a Petty Officer and two years for an Able Seaman, before each is fitted to take his place in such a vessel.

24. As regards the provision of ammunition, ordnance, shipbuilding, *materiel*, and naval stores, &c., generally, I am of opinion that it will be an advantage to the Commonwealth, either by the establishment of Government workshops, or by encouraging private enterprise, to build up the plant and power necessary to accomplish the whole of the manufacture of these, but that the progressive advancement should be slow and gradual with small beginning and ever-increasing accomplishment until all the requisites of a ship of war, including the largest guns, can be manufactured in Australia.

25. The determining factors which have guided me in my recommendations as to the composition and distribution of the Fleet (to be maintained on the above financial basis) are—

Primarily.

The future Imperial responsibilities in the Pacific and their attendant Naval obligations, as far as can be foreseen from the probable political situation, in conjunction with similar Imperial responsibilities and obligations in other parts of the world.

Secondarily.

- (a) The local Naval needs of the Commonwealth in Australian waters.
- (b) The possible assumption by the Commonwealth of responsibility for the peace patrol duties of the South Pacific generally.

26. I have divided my Recommendations into three parts, comprising—

PART I.—THE COMPLETED FLEET (the goal to be attained).

PART II.—THE INITIAL STAGE—REQUIREMENTS OF THE FLEET UNIT AND FIRST SEVEN YEARS (the foundation).

PART III.—SUCCESSIVE STAGES OF DEVELOPMENT (culminating in the completed Fleet).

APPENDICES, as shown in the list on page 25, those noted as Confidential being printed separately.

PART I.—THE COMPLETED FLEET.

1. The Completed Fleet to be composed as follows :—

- 8 Armoured Cruisers.
- 10 Protected Cruisers.
- 18 Destroyers.
- 12 Submarines.
- 3 Depôt Ships for Flotillas.
- 1 Fleet Repair Ship.

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2. This Fleet would when fully manned require a *personnel* of approximately 15,000 officers and men, divided as follows :—

| Commissioned Officers— | | | | | | |
|---|-----|-----|-----|-----|-----|--------|
| Executive and Engineer | ... | ... | ... | ... | ... | 461 |
| Medical | ... | ... | ... | ... | ... | 54 |
| Accountant | ... | ... | ... | ... | ... | 63 |
| Subordinate Officers— | | | | | | |
| Executive | ... | ... | ... | ... | ... | 96 |
| Accountant | ... | ... | ... | ... | ... | 11 |
| Warrant Officers— | | | | | | |
| Executive | ... | ... | ... | ... | ... | 201 |
| Engineer | ... | ... | ... | ... | ... | 43 |
| Accountant | ... | ... | ... | ... | ... | 6 |
| Petty Officers and Men— | | | | | | |
| Seamen | ... | ... | ... | ... | ... | 5,865 |
| Stokers | ... | ... | ... | ... | ... | 5,290 |
| Artisans | ... | ... | ... | ... | ... | 591 |
| Miscellaneous (including both Officers and Men) | ... | ... | ... | ... | ... | 1,151 |
| Total | ... | ... | ... | ... | ... | 13,832 |
| Under Training and on passage | ... | ... | ... | ... | ... | 1,012 |
| Grand Total | ... | ... | ... | ... | ... | 14,844 |

3. The Fleet to be divided into two Divisions as follows :—

EASTERN DIVISION.

| Class of Vessel. | Number. | | |
|--|---------------------|--------------------|--------|
| | In Full Commission. | With Reduced Crew. | Total. |
| Armoured Cruiser | 3 | 1 | 4 |
| Protected Cruiser | 3 | 2 | 5 |
| Torpedo-boat Destroyer | 8 | 4 | 12 |
| Submarine | 3 | — | 3 |
| Depôt Ship for Torpedo boat Destroyers | 2 | — | 2 |
| Fleet Repair Ship | — | — | — |
| Total | 19 | 7 | 26 |

WESTERN DIVISION.

| Class of Vessel. | Number. | | |
|--|---------------------|--------------------|--------|
| | In Full Commission. | With Reduced Crew. | Total. |
| Armoured Cruiser | 3 | 1 | 4 |
| Protected Cruiser | 3 | 2 | 5 |
| Torpedo-boat Destroyer | 4 | 2 | 6 |
| Submarine | 9 | — | 9 |
| Depôt Ship for Torpedo-boat Destroyers | 1 | — | 1 |
| Fleet Repair Ship | 1 | — | 1 |
| Total | 21 | 5 | 26 |
| Grand Total of both Divisions | 40 | 12 | 52 |

4. The Divisions to be divided into Squadrons and Flotillas, and the peace distribution to be as follows :—

| Squadron or Flotilla. | Composition. | Principal Base. | Sub-bases. |
|---------------------------|--|-------------------|---------------------------------------|
| EASTERN DIVISION. | | | |
| First Main Squadron ... | 4 Armoured Cruisers (1 with reduced crew) | Sydney ... | Thursday Island |
| First Cruiser Squadron | 5 Protected Cruisers (2 with reduced crew) | Sydney ... | Thursday Island |
| First Destroyer Flotilla | 6 Destroyers (2 with reduced crew) 1 Depôt ship | Brisbane ... | Thursday Island Townsville |
| Second Destroyer Flotilla | 6 Destroyers (2 with reduced crew) 1 Depôt ship | Port Western ... | River Tamar Hobart Port Lincoln |
| First Submarine Flotilla | 3 Submarines | Port Stephens ... | Sydney Brisbane |
| WESTERN DIVISION. | | | |
| Second Main Squadron | 4 Armoured Cruisers (1 with reduced crew) 1 Fleet Repair ship | Fremantle ... | Port Darwin Port Western |
| Second Cruiser Squadron | 5 Protected Cruisers (2 with reduced crew) | Fremantle ... | Port Darwin Port Western |
| Third Destroyer Flotilla | 6 Destroyers (2 with reduced crew) 1 Depôt ship | Fremantle ... | Albany Cone Bay Port Darwin |
| Second Submarine Flotilla | 3 Submarines | Port Western ... | River Tamar Hobart Port Lincoln |
| Third Submarine Flotilla | 3 Submarines | Port Lincoln ... | River Tamar Hobart Port Western |
| Fourth Submarine Flotilla | 3 Submarines | Fremantle ... | Albany Cone Bay Port Darwin |

5. For purposes of recruiting, Australia should be divided into two Recruiting Areas, Eastern and Western, to man the Eastern and Western Divisions respectively—

| Area. | Main Recruiting Centre. | Sub-centre. | States Included. | |
|---------|-------------------------|---------------------------------|-------------------|-------------------------|
| | | | State. | Population in Millions. |
| Eastern | Sydney | Brisbane Newcastle | Queensland | 0.57 |
| | | | New South Wales | 1.62 |
| | | | Total | 2.19 |
| Western | Melbourne | Adelaide Hobart Fremantle | Tasmania | 0.18 |
| | | | Victoria | 1.30 |
| | | | South Australia | 0.41 |
| | | | Western Australia | 0.27 |
| | | | Total | 2.16 |

6. Naval Depôts and Schools to be established at—

Sydney—Naval Depôt; Gunnery, Signal, Wireless Telegraphy, and Cookery Schools.

Port Western—Naval Depôt; Torpedo School.

7. The following list contains the names of the places affected by the above proposals, in geographical order, from Thursday Island to Port Darwin, *via* the South, showing for what purpose each will be required:—

| | | | |
|--|-----|-----|---|
| Thursday Island | ... | ... | Fleet Secondary Base; Destroyer Base. |
| Townsville | ... | ... | Destroyer Sub-base. |
| Brisbane | ... | ... | Destroyer Base; Submarine Sub-base; Recruiting Sub-centre. |
| Port Stephens | ... | ... | Submarine Base. |
| Newcastle | ... | ... | Recruiting Sub-centre. |
| Sydney | ... | ... | Fleet Primary Base; Naval Depôt; Gunnery, Signal, Wireless Telegraphy and Cookery Schools; Main Recruiting Centre (Naval College and Boys' Training Ship will also be at Sydney). |
| Hobart | ... | ... | Destroyer Sub-base; Submarine Sub-base. |
| Beauty Point (River Tamar) | ... | ... | Destroyer Sub-base; Submarine Sub-base. |
| Melbourne (or its vicinity) | ... | ... | Main Recruiting Centre. |
| Port Western | ... | ... | Destroyer Base; Submarine Base; Naval Depôt; Torpedo School. |
| Adelaide | ... | ... | Recruiting Sub-centre. |
| Port Lincoln | ... | ... | Submarine Base; Destroyer Sub-base. |
| Albany | ... | ... | Destroyer Sub-base; Submarine Sub-base. |
| Fremantle | ... | ... | Fleet Primary Base; Destroyer Base; Submarine Base; Recruiting Centre. |
| Cone Bay (or other port on N.W. Coast) | ... | ... | Destroyer Sub-base; Submarine Sub-base. |
| Port Darwin | ... | ... | Fleet Secondary Base; Destroyer Sub-base; Submarine Sub-base. |

(NOTE.—See Appendix F as to which of these places will be used also as Head-quarters for training of Naval Reserves.)

8. Though I have divided the proposed Fleet into two Divisions (each of which should be under the command of an Admiral or Commodore), and have allocated certain bases and Sub-bases to the Squadrons and Flotillas of each Division, it is not intended that their sphere of employment should be restricted to the vicinity of the ports so named; in order to give all officers and men the opportunity of gaining acquaintance with the whole of the waters of Australia, ships of the two Divisions should be interchanged from time to time, and at least once a year the two Divisions should meet for Fleet Tactics and Exercises under the Senior Admiral, and for manœuvres, in which one Division would be opposed to the other.

9. Excellent centres for such purpose in the summer time are Hobart and its vicinity, Jervis Bay, and Port Lincoln; in the winter time ships should work on the Northern Coast.

10. Port Western is a very good harbour, and *until Cockburn Sound (Fremantle), which is far more important from a strategical point of view, is ready*, this port should be utilized by the Western Division as one of its principal anchorages, and as a place where ships should be able to replenish with coal or oil fuel.

11. Port Stephens is also a very good harbour. My proposals only suggest its use as a Submarine Base for the present, but it should be surveyed and examined thoroughly, and land reserved, with a view to possible requirements of future Naval expansion.

12. The Second Destroyer Flotilla, which is based on Port Western, could easily be utilized in time of war for service with the main Fleet or elsewhere, as might be required; and in peace time it should be exchanged at times with other Destroyer Flotillas, which are employed under more trying conditions of climate, &c.

13. Cone Bay (King Sound) is suggested as the Destroyer Sub-base, which is required on the North-west Coast, though I have not visited it myself. I am informed that it is better protected in bad weather than Broome, but as surveying is now being carried out in that part of the coast, I suggest that this information should be confirmed, and it may be that a more suitable harbour than either could be selected.

14. In connexion with my recommendations as to Port Darwin and also Fremantle I desire to express, from a Naval point of view, the urgent necessity of establishing railway communication between those places and the centres of population, manufactures, and resources which are required for the maintenance of a Fleet.

15. I have not made any special proposals as regards Fleet Auxiliaries required for the services of the Fleet, as I consider that there are sufficient suitable merchant ships available in Australian waters to meet the needs in time of war. The necessary preparatory arrangements should, however, be completed in peace time, so that prompt action can be taken in war.

16. The above gives the general outline of the goal to be attained; in Parts II. and III. and in the Appendices further details of the requirements are embodied, with proposals as to how, and by what steps, they should be reached. Complete proposals as to Wireless Telegraph Stations are contained in Appendix E.

PART II.—THE INITIAL STAGE (1911-1918).

I.—THE REQUIREMENTS OF THE FLEET UNIT.

II.—THE REQUIREMENTS OF THE HARBOUR TRAINING ESTABLISHMENTS.

III.—THE ADDITIONS TO THE FLEET UNIT TO BE EFFECTED BY 1918, AND THEIR REQUIREMENTS.

The preparatory measures which should be taken in hand forthwith are those necessary to meet the requirements of the Fleet Unit on its arrival in Australia. The actual vessels of which the Fleet Unit is to be composed have been decided on, viz. :—

- 1 Armoured Cruiser,
- 3 Protected Cruisers,
- 6 Torpedo-boat Destroyers,
- 3 Submarines.

2. The further measures to be taken may be divided under the same headings as shown in the introductory remarks, paragraph 22.

A.—CONTROL AND ADMINISTRATION.

3. A Naval Board should be constituted, without delay, on the lines laid down in Appendix A.

B.—PERSONNEL.

4. Appendix B contains detailed information as to entry, training, &c., of the *personnel* required.

5. It is recommended that the requirements of the Commonwealth Completed Fleet should be divided over four eras, consisting respectively of—

| | |
|---------------------|--------------------|
| First Era —7 years | } Total, 22 years. |
| Second Era—5 years | |
| Third Era —5 years | |
| Fourth Era.—5 years | |

6. These fixed eras are suggested only as a convenient guide to a procedure by which the recommendations embodied in this Report can be carried out gradually, and by which the growth of the Fleet in size and number of vessels can proceed concurrently, as far as practicable, with the entry and education of the *personnel* that it will require.

7. The total period of 22 years is taken as the maximum required, the higher ranks of officers cannot be obtained in a shorter period, and a period of 22 years is also convenient because it is the length of service, from the age of 18, which continuous service men in the Mother Navy are required to complete to be eligible for pension, and is the period which is recommended for adoption for "long service" in the Commonwealth Fleet.

8. Should the Commonwealth desire to hasten the completion of their Fleet and its requirements, it would be easy to do so, as regards the provision of the lower ranks and ratings required, by a proportionate increase in the numbers to be entered annually, but provision of the higher grades could not be accelerated appreciably.

9. It is specially recommended that the First Era should cover seven years, as this longer era will give the Commonwealth time and opportunity for devoting her energies to providing and equipping the necessary Harbour Establishments, Naval Bases, &c., as well to putting the recruiting system on a sound basis.

Moreover, the requirements of *personnel* for the Fleet Unit with those for the various Harbour Establishments (which must be established in the Initial Stage) and the small additional requirements of the vessels proposed to be added to the Fleet Unit during the First Era will, together, be greater than those of the subsequent shorter eras.

10. The total numbers of ranks and ratings that will be required in the First Era are :—

| | | |
|--|--------|-------|
| (a) <i>Personnel</i> required for manning the Fleet Unit | ... | 2,501 |
| (b) <i>Personnel</i> required for manning Harbour Establishments and for administration | ... .. | 1,137 |
| (c) <i>Personnel</i> required for manning the additions to the Fleet Unit to be made by 1918 (viz., 6 Torpedo-boat Destroyers, 3 Submarines, 1 Depot Ship) | ... | 746 |
| Total | ... .. | 4,384 |

PERSONNEL REQUIREMENTS OF THE FLEET UNIT.

NOTE.—The proposals as to obtaining ranks and ratings from the Mother Country are made subject to the concurrence of the Admiralty.

11. Of the 2,501 required for the Fleet Unit the following ranks and ratings cannot be provided by Australia in the two years available, and must, therefore, be obtained from the Mother Country, under the agreement made at the Imperial Conference of 1909 :—

| | | | |
|--|-----|-----|-----------------|
| Commissioned Officers | ... | 98 | } Total, 1,623. |
| Subordinate Officers | ... | 12 | |
| Warrant Officers | ... | 34 | |
| Chief Petty, and other Petty, Officers | ... | 406 | |
| Leading Ratings | ... | 305 | |
| Other Ratings | ... | 768 | |

The balance, 878, should be provided by the Commonwealth by the time the vessels of the Fleet Unit arrive in Australia.

12. As regards the 144 officers required from the Mother Country it is recommended that, as far as compatible with efficient manning of the vessels, they be selected by the Admiralty from Australians and from volunteers for service in Australia—

- (a) They should be lent for three years' service in the Australian Fleet, counting their service as service in the Mother Fleet, on their return to that Fleet.
- (b) Those who volunteer, on the expiration of their three years' service, for transfer to the Commonwealth service, and are recommended, to be allowed to do so if required by the Commonwealth and if the Admiralty concur.
- (c) Officers so lent to draw Australian rates of pay and allowances while in the Commonwealth Naval Service, but not to receive any Naval pay from the Mother Country during such time.
- (d) The Commonwealth to provide passages to England for officers returning to the Mother Fleet after three years' service, and to continue officers on full pay up to the date of arrival in England and completion of "Foreign Service" leave according to usual scale.

13. The 1,479 ratings required from the Mother Country should, as far as practicable, be selected from Australians and from volunteers for service in Australia. They should be obtained as follows :—

- (a) 816 ratings to be recruited, if available, in the United Kingdom from (i) ratings who have completed time for pension in the Mother Navy and left the active service, provided that not more than two years have elapsed since their discharge to pension; such men should be entered into the Commonwealth service for a term of engagement of five years; and from (ii) ratings in the Royal Fleet Reserve who have completed not less than seven years' and not more than twelve years' service in the Mother Navy before their transfer to the Reserve, provided that not more than two years have elapsed since their transfer; such men should be entered into the Commonwealth service for a term of engagement of either five or seven years.

NOTE.—These men would not be part of the active service *personnel* of the Mother Navy, and could, therefore, be more easily spared. The adoption of this proposal as to recruiting in the United Kingdom will allow time during which Australia can recruit and train her own men, and it will, during such period, provide the Commonwealth temporarily with reliable and efficient ratings. At the end of their Australian engagements these ratings could be re-engaged for further short periods, if found desirable, or others could be similarly recruited in their places, until sufficient ratings recruited in Australia were available to fill their vacancies. Such of these ratings as hold non-substantive ratings (*i.e.*, special gunnery or torpedo qualifications) should go through a short re-qualifying course in one of the Home training establishments prior to their embarkation in the vessels of the Fleet Unit, so that their knowledge may be brought up to date.

I would suggest that these men should, on engagement, be given the option of having *either* a free passage home on completion of their engagement or "assisted passages" to Australia for their wives and families at the time of engagement.

- (b) 103 ratings (Officers' Stewards and Cooks) should be recruited in the United Kingdom for non-continuous service, being entered as required for vessels of the Fleet Unit; they should be replaced subsequently by Australians as convenient, being provided by the Commonwealth with passages back to the United Kingdom if they wish to return.
- (c) 560 ratings should be *lent* from the active service *personnel* of the Mother Navy for periods of three years. These ratings would be drafted by the Admiralty as required, and should draw Australian rates of pay and allowances while in the Commonwealth Naval Service.

NOTE.—Should the numbers available from source (a) not prove adequate, it would be necessary to increase the number required to be lent under (c).

14. The number of ranks and ratings to be recruited in Australia for the Fleet Unit is 878.

15. It is recommended that the ratings in the Commonwealth Navy eventually should be composed approximately as follows :—

Three-fourths of total number to be engaged for "continuous service" (*viz.*, engagement for twelve years from the age of eighteen, with the option of re-engaging for a further ten years).

One-fourth of total number to be engaged for "short service" (*viz.*, engagement for seven or five years).

If the first "short service" engagement can be fixed at seven years instead of five, the building up of the Commonwealth's Australian-recruited *personnel* will be greatly facilitated. A greater proportion would be inclined to re-engage after seven years than after five (*i.e.*, re-engage to complete the "long-service" period of 12 years), and the growth of the Commonwealth Fleet Reserve (see Appendix F), which Reserve will not be needed in the early stages of the Commonwealth Navy, would be retarded.

16. Officers of all branches of the Commonwealth Navy, except Medical Officers, Chaplains, and Naval Instructors, should be entered under similar conditions to those obtaining in the Mother Navy. (*See* Appendix B.)

17. Ratings of all branches, except certain Artisan ratings, Officers' Stewards and Cooks, Bandsmen, and Sick Berth ratings, should be entered under similar conditions to those obtaining in the Mother Navy (*see* Appendix B), except that, as recommended in paragraph 15, a term of seven years is proposed instead of a term of five years for the first engagement for "short service" men.

18. It is not recommended that a corps of Royal Marines should be established in Australia, as the introduction of Royal Marines does not appear to be necessary in the initiation of a new Navy. Their places in the complements of vessels will be filled by additional seaman ratings.

19. I am of opinion that the duties and work of Seaman and Stoker ratings should be assimilated and combined, and recommend that this course be pursued with all *continuous service* Seaman and Stoker entrants until the time arrives for a selection to be made from them of men to qualify for Gunnery and Torpedo ratings. Men who qualified in such ratings would then be appropriated permanently to the Seaman branch; the remainder should continue to fulfil both duties until they attain a "Leading rating," when they should be allocated as Leading Seamen or Leading Stokers, and remain in their respective branches permanently. Men should be given the advantage of choosing between the two branches when compatible with the requirements of the service.

20. In view of the substitution of Seamen for Marines in ships' complements, the duties of Officers' Stewards will have to be performed by some other ratings; a proportionate increase in the number of Officers' Stewards, 2nd and 3rd Class, is, therefore, recommended; having regard to the fact that such substitution will to a small extent affect the fighting efficiency of the *personnel* as a whole, it is recommended that all Officers' Steward Ratings, 2nd and 3rd Class (who will be Non-Continuous Service Men), should be given a training similar to that required for the old rating of "Trained Man" in the Mother Navy, and no Steward entered in the 3rd Class should be eligible for advancement to the 2nd Class unless he has been so trained.

21. As regards the Chief Petty Officer rating of Electrician now existing in the Mother Navy, it is considered that the amalgamation of this rating with that of the Armourer Branch would be advantageous. It is, therefore, recommended that the rating of Electrician should not be introduced into the Commonwealth Navy, but that additional Armourer's Crews should be entered, certain of whom (on attaining the rating of Armourer's Mate) would be trained specially in the Torpedo School in Electrical and Torpedo work. A Torpedo Branch of the Armourer ratings would thus be constituted in which men would advance, similarly to those who remained in the Gunnery Branch, to the rating of Chief Armourer. The total complements of ships would not be altered by this proposal, but Armourers for Torpedo work (of various grades of rank) would replace the Electricians.

22. Thus, on the assumptions that the proposals will meet with the concurrence of the Admiralty, and that the ratings to be obtained from the United Kingdom will be available, the immediate measures to be taken by the Commonwealth for the provision of the 878 ranks and ratings required for the vessels of the Fleet Unit are as follows :—

NOTE.—Though tabulated consecutively these measures should be undertaken *concurrently*.

- (a) Formulate the conditions of service and give them every possible publicity.
- (b) Establish and open recruiting centres, and develop recruiting, as shown in Appendix C. [

- (c) Acquire the *Sobraon* as a training ship for boys, and, as soon as she is ready, recruit 100 boys between the ages of 15½ and 16½, and train them so that they may be available to join the vessels of the Fleet Unit on its arrival in Australia.
- (d) Erect Barracks and Naval College at Sydney.
- (e) Erect Barracks at Port Western.
- (f) Arrange for the transfer to the Commonwealth Service of such Australians now belonging to the Imperial Service and serving in certain of H.M. ships on the Australian Station and elsewhere, as volunteer for transfer; for those who volunteer for such transfer to remain in the ships in which they are now serving until required by the Commonwealth; for such volunteers for transfer to be invited to effect a re-engagement for service of five or seven years in the Commonwealth Navy. Such transferees as are recommended and qualified for promotion should be advanced to the "Leading rating" of their respective grades and should be sent to the United Kingdom to qualify in Non-substantive ratings, &c., preparative to embarking in the vessels built in the United Kingdom for Australia. The cost of men so transferred and cost of subsequent training to be borne by the Commonwealth from 1st July, 1911.
- (g) All recruiting in Australia hitherto performed by the Imperial Naval Authorities for service in the Imperial Navy to cease forthwith, and such recruiting to be taken over at once by the Commonwealth.
- (h) The vessels of the Imperial Navy now employed in training Australasians to continue recruiting and training for the Commonwealth Navy; men so recruited to be available for service in any Commonwealth vessels as required by the Commonwealth, their cost from date of entry being borne by the Commonwealth.
- (i) Pending the arrival of the Fleet Unit in Australia, and the construction of the above-mentioned Barracks, temporary arrangements to be made for the accommodation and preliminary training of certain Artificer, Artisan, and other ratings in the Naval Barracks at Garden Island and in the Depot ship *Penguin*, where they might be examined as to fitness by the Naval Authorities and employed as assistants to the existing staff of that establishment, the cost being borne by the Commonwealth.

23. Of the 878 ranks and ratings to be provided by the Commonwealth for the Unit—

143 should be entered for continuous service, viz. :—

OFFICERS.

2 Assistant Clerks (Accountant Branch Subordinate Officers).

RATINGS—ENGAGEMENT FOR 12 YEARS.

- 25 Engine-room Artificers (Chief Petty Officers).
 5 Electricians (dependent on continuance of rating. If rating be discontinued, enter 5 additional Armourers' crews).
 6 Shipwrights (Leading rating).
 2 Blacksmiths' Mates (Leading rating).
 6 Armourer's crews (or 11 as above). A.B. rating.
 5 Second Cook's Mates or Cook's Mates. A.B. rating.
 88 Seaman Boys from *Sobraon* (of whom 14, if trained in time, should be Signal Boys and 7 Buglers).
 2 Boy Writers (Accountant Branch).
 2 Ship's Steward Boys (Accountant Branch).

And 735 ranks and ratings should be entered for non-continuous service (viz., 7 or 5 years; 7 years preferred as regards ratings)—

OFFICERS.

- 9 Surgeons (see Appendix B).
 4 Chaplains (see Appendix B).

RATINGS.

- 1 Chief Bandmaster (Chief Petty Officer).
 4 Sick Berth Stewards (Medical Branch), Petty Officer.
 4 Plumbers' Mates (Artisan Branch). Leading rating.
 4 Painters, Second Class (Artisan Branch). Leading rating.
 1 Band Corporal. Leading rating.
 1 Second Sick Berth Steward (Medical Branch). Leading rating.
 464 Able Seamen or Ordinary Seamen to be recruited or obtained by transfer from Imperial ships as above.
 200 Stokers to be recruited or obtained by transfer from Imperial ships as above.
 10 Carpenter's crews (Artisan Branch).
 3 Cooper's crews (Artisan Branch).
 5 Sick Berth Attendants (Medical Branch).
 22 Bandsmen.
 3 Ship's Musicians. (Note.—This is a Leading rating in the Mother Navy.)

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PERSONNEL REQUIREMENTS OF HARBOUR ESTABLISHMENTS.

24. The *personnel* required for the several Harbour Establishments, &c., amounts to a total of 1,137 ranks and ratings, distributed as follows :—

| | Details. | Ranks and Ratings. | Total. |
|--|----------|--|--------|
| 1. Cadets' Training College, Sydney | 128 | ... | 128 |
| 2. Naval Barracks, Sydney | 259 | ... | ... |
| (a) Gunnery School | 42 | Attached to the Naval Barracks, Sydney | 321 |
| (b) Signal School | 10 | | |
| (c) Wireless Telegraph School | 7 | | |
| (d) Cookery School | 3 | | |
| 3. Training Ship <i>Sobraon</i> , Sydney | 99 | ... | 99 |
| 4. <i>Personnel</i> now allotted to H.M.S. <i>Penguin</i> for Dockyard duties at Garden Island | 185 | ... | 185 |
| | | | 733 |
| 5. Fremantle | 10 | ... | 10 |
| 6. Naval Barracks, Port Western | 240 | Attached to the Naval Barracks, Port Western | 292 |
| (a) Torpedo School | 42 | | |
| (b) Destroyer Base and Submarine Base | 10 | | |
| 7. Thursday Island | 9 | ... | ... |
| 8. Brisbane | 14 | ... | ... |
| 9. Port Stephens | 11 | ... | ... |
| 10. Port Lincoln | 11 | ... | ... |
| 11. Beauty Point (River Tamar) | 6 | ... | ... |
| 12. Townsville | 9 | ... | 102 |
| 13. Albany | 10 | ... | ... |
| 14. Cone Bay (or other port on N.W. Coast) | 6 | ... | ... |
| 15. Hobart | 11 | ... | ... |
| 16. Port Darwin | 9 | ... | ... |
| 17. Board of Administration | 6 | ... | ... |
| Grand Total | 1,137 | ... | 1,137 |

25. The *personnel* (128) proposed for the Cadets' Training College is considered sufficient to undertake the training of 120 Naval Cadets at one time; this complement does not include the Professorial Staff. It is considered that an annual entry of 30 Naval Cadets will be sufficient to meet and maintain the number of officers of the Military Branch (566) required for the Completed Fleet.

26. At an annual entry of 30 and at the rate of wastage experienced in the Mother Navy, the Commonwealth should possess approximately—

(a) In 9½ years—

| |
|--|
| 6 Lieutenants, |
| 6 Sub-Lieutenants, |
| 24 Acting Sub-Lieutenants, |
| 76 Midshipmen, |
| 27 Naval Cadets in Training Ship at sea, |
| 114 Naval Cadets in the College. |
| — |
| 253 |
| — |

(b) At the end of the twelfth year 46 Lieutenants, 23 Sub-Lieutenants, and remaining ranks as at (a)—Total, 310.

(c) At the end of the 22nd year as a possible maximum—

| |
|--|
| 26 Commanders, |
| 214 Lieutenants, |
| 23 Sub-Lieutenants, |
| 24 Acting Sub-Lieutenants, |
| 76 Midshipmen, |
| 27 Naval Cadets in Training Ship at sea, |
| 114 Naval Cadets in College, |

making in all a total of 504 officers of the Military Branch.

27. The Naval Barracks at Sydney, which include Gunnery School, Signal School, Wireless Telegraphy School, and Cookery School should be capable of accommodating a *personnel* of 2,000 ranks and ratings, including the proposed complement (see paragraph 24) of 321 ranks and ratings. This complement is considered to be sufficient to carry out the entry and preliminary training of the *personnel* required for the Eastern Division of the Fleet, and for the qualification and re-qualification of the Lower Gunnery ratings, Lower Signal ratings, Lower Wireless Telegraphy ratings, and Lower Cook ratings, required by the Completed Fleet.

28. The *personnel* proposed for the complement of the Training Ship *Sobraon* (99 ranks and ratings) is considered to be sufficient to undertake the training of approximately 300 boys at one time.

It is recommended that the entry of boys be effected as follows:—

| Year. | Entries. |
|--|----------|
| 1911-12 100 | |
| 1912-13 150, plus wastage on first year's entry. | |
| 1913-14 200, plus wastage on first and second years' entries. | |
| 1914-15 250, plus wastage on first, second, and third years' entries. | |
| 1915-16 300 | |
| 1916-17 300 | |
| 1917-18 300 | |

Calculating the foregoing entrants to waste at approximately 4 per cent. per annum, and allowing for the following allocation of each year's entry to the Signal and Wireless Telegraph branches—

| Year. | Signal Branch. | Wireless Telegraph Branch. |
|-------------------------|----------------|----------------------------|
| 1911-12 14 ... 6 | | |
| 1912-13 20 ... 6 | | |
| 1913-14 20 ... 6 | | |
| 1914-15 20 ... 6 | | |
| 1915-16 25 ... 6 | | |
| 1916-17 25 ... 6 | | |
| 1917-18 25 ... 6 | | |

It is anticipated that by the end of 1918 (end of First Era), there should be from this source approximately 1,460 ratings in the Fleet, comprising 1,289 Seamen or Stokers, 134 Signal ratings, 37 Wireless Telegraph ratings, graded respectively as follows:—

| | |
|----------------------------------|--|
| Seaman or Stoker | 63 Leading ratings, 449 Able Seamen or Stokers, 249 Ordinary Seamen, 259 boys at sea, 269 boys in <i>Sobraon</i> . |
| Signal Branch | 11 Leading ratings, 51 Signalmen, 23 Ordinary Signalmen, 24 Signal boys, 25 boys in <i>Sobraon</i> . |
| Wireless Telegraph Branch | 5 Leading ratings, 15 Telegraphists, 5 Ordinary Telegraphists, 6 Wireless Telegraph boys, 6 boys in <i>Sobraon</i> . |

29. DOCKYARD PERSONNEL.—The *personnel* (185 ranks and ratings) now allowed and borne in the complement of H.M.S. *Penguin* for working the Dockyard Establishment at Garden Island are provided by the Mother Navy. It is considered that this number of ranks and rating should be retained in their existing positions until such time as the Dockyard Establishment at Cockatoo Island is taken over by the Commonwealth as a Naval Dockyard, when a revision of the complement will be necessary; it is considered that it should then be practicable to reduce the complement of Garden Island to a very small number.

30. FREMANTLE.—Of the *personnel* (10) proposed for Fremantle it is considered that two only need be appointed at present, viz., one Commander or Senior Lieutenant and one Petty Officer Gunner's Mate.

31. PORT WESTERN.—The Naval Barracks at Port Western, which include the Torpedo School and Destroyer Base and Submarine Base should be capable of accommodating a *personnel* of 2,000 ranks and ratings, including the proposed complement of 292 ranks and ratings (see paragraph 24). This complement is considered to be sufficient to undertake the entry and preliminary training of the *personnel* required by the Western Division of the Fleet and for the qualification and re-qualification of the Lower Torpedo Ratings required by the Completed Fleet.

32. THURSDAY ISLAND.—The *personnel* (9) proposed for Thursday Island is not required to be appropriated immediately. It is, however, desirable that, as soon as work is commenced on this Base, a Commander or Senior Lieutenant should be appointed, the balance of the complement being completed as required.

33. BRISBANE.—Brisbane being a Destroyer Base which will be in early use by a Flotilla it is desirable that half the total complement proposed (14) be appointed by the time the Fleet Unit arrives in Australia, viz.:—

| |
|---|
| 1 Commander or Senior Lieutenant. |
| 1 Warrant Officer (Torpedo Gunner). |
| 1 Seaman Petty Officer (Gunner's Mate). |
| 1 Engineer Commander or Senior Engineer Lieutenant. |
| 1 Stoker Petty Officer. |
| 1 Stoker. |
| 1 Leading Signalmen. |

34. PORT STEPHENS.—Port Stephens being the first Submarine Base to be developed it is desirable that the following ranks and ratings be appointed before the Fleet Unit arrives in Australia:—

| |
|---|
| 1 Lieutenant, |
| 1 Seaman Petty Officer (Torpedo Gunner's Mate), |

and the balance of the complement proposed (11) as soon as required.

35. PORT LINCOLN.—The complement (11) proposed for Port Lincoln will not be required at present. A Warrant Officer should be appointed as soon as work is commenced on this Submarine Base.

36. BEAUTY POINT (RIVER TAMAR).—The complement (6) proposed for Beauty Point will not be required at present.

37. TOWNSVILLE.—This port is a Sub-base for the Flotilla based on Brisbane; of the complement proposed (9) 1 Warrant Officer and 1 Seaman Petty Officer (Torpedo Gunner's Mate), should be appropriated before the Fleet Unit reaches Australia, and the balance of the complement as required.

38. ALBANY.—The complement (10) proposed for Albany will not be required at present.

39. CONE BAY (OR OTHER PORT ON THE N.-W. COAST).—The complement (6) proposed for Cone Bay will not be required at present.

40. HOBART.—Of the complement (11) proposed for Hobart, 1 Lieutenant and 1 Seaman Petty Officer (Gunner's Mate), should be appointed by the time the Fleet Unit reaches Australia.

41. PORT DARWIN.—The complement (9) allowed to Port Darwin will not be required for the present.

42. Thus of the total *personnel* (1,137 ranks and ratings) required to form the complements of all Harbour Establishments, &c.—

- (a) Those allocated to the respective Barracks and the Training College and the *Sobraon* will have to be provided as soon as they can be accommodated in their respective establishments.
- (b) Ranks and ratings required for H.M.S. *Penguin* and Garden Island are already there and should be maintained (*see* paragraph 29).
- (c) The ranks and ratings required for the other ports named will have to be supplied as these places are developed.

43. To provide for these requirements (1,137) it is recommended that—

- (a) 522 ranks and ratings be lent by the Active Service of the Mother Navy.
- (b) 223 ratings be entered for five or seven years from the Pensioners and Royal Fleet Reserve men in the United Kingdom.
- (c) 217 ranks and ratings be supplied by the Commonwealth Permanent Naval Forces.
- (d) 175 ranks and ratings be supplied by the Commonwealth, being entered for non-continuous service.

Of (a) 185 ranks and ratings are already at Sydney.

- (c) 89 ranks and ratings are not required at present, and should be otherwise utilized in the interim.

44. In addition to the above needs, it will be necessary to provide certain Tenders for sea-going instruction with special reduced crews, when the Gunnery and Torpedo Schools are in full work, and an attendant vessel for the first Submarine Flotilla on arrival.

ADDITIONS TO UNIT TO BE EFFECTED BY 1918.

45. The following additional vessels should be provided between 1913 and 1918:—

| | | | | | | |
|---------------------------|-----|-----|-------------------------|--------|--------|--------|
| 1 Depôt Vessel | ... | ... | } to be ready by end of | } 1914 | | |
| 3 Submarines | ... | ... | | | } 1916 | |
| 3 Torpedo-boat Destroyers | ... | ... | | | | } 1917 |
| 3 Torpedo-boat Destroyers | ... | ... |  |  |  |  | 1918 |

46. The addition of these vessels involves the addition of 746 ranks and ratings to the *personnel*. Subject to the progress of recruiting, they should be provided as follows:—

- 337 ranks and ratings to be lent from the Active Service *personnel* of the Mother Navy.
- 205 ratings to be entered for five or seven years from Pensioners and Royal Fleet Reserve Men in the United Kingdom.
- 49 Continuous Service ratings to be provided in the Commonwealth.
- 155 Non-continuous Service ranks and ratings to be provided in the Commonwealth.

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DEPÔT VESSEL FOR DESTROYERS.

47. It is very desirable that the Depôt Vessel should be provided as soon as practicable for service with the Torpedo-boat Destroyers. She should be of about 5,000 tons displacement, and be smooth-sided, without sponsons or other obstructions, so that Destroyers can lie alongside her; she should be capable of steaming at least 15 knots, and be armed sufficiently to be able to beat off the attack of any armed mercantile cruiser.

It is recommended that her armament should consist of two 6-inch guns and two 4-inch guns; the former to be pivot mounted with light shields, one on the fore-castle and the other on the poop; the latter to be mounted one on each side, and to be of the same pattern as those mounted in the Destroyers.

The Depôt Ship should carry also four good searchlights and a good power-worked derrick capable of lifting 5 tons.

She should have turbine engines and consume oil fuel, of which she should be able to stow at least 1,000 tons.

She should be fitted with a powerful distilling plant, a good wireless telegraph installation, also with air compressors and an ice machine.

She should stow not less than 24 spare torpedoes for the Flotilla, and have a small workshop capable of carrying out minor repairs to the Flotilla and to torpedoes.

Good accommodation, including large mess deck, spare cabins, bath rooms, and a roomy Sick Bay, is desirable.

C.—TRAINING OF PERSONNEL.

48. Details as to the several systems of Training recommended are contained in Appendix B.

D.—NAVAL BASES AND SUB-BASES.

49. The work to be done at the several Naval Bases and Sub-bases enumerated in Part I. is shown in complete form in Appendix D.

E.—COMMUNICATIONS AND INTELLIGENCE.

50. Appendix E contains details of the scheme as recommended.

The following steps should be taken in 1911-13:—

Erect Wireless Stations at—

| | |
|------------------------|--------------------------|
| Sydney (two stations). | } Medium-power Stations. |
| Fremantle, | |
| Brisbane, | |
| Thursday Island, | |
| Port Western, | |

These Stations to be erected as soon as possible; the remainder of those named in Appendix E to be erected subsequently, but as soon as possible. The cost to be met by Post Office Votes.

Visual Signal Stations should be established as necessary to complete the scheme laid down in Confidential Appendix H.

F.—NAVAL RESERVES.

51. The scheme for Naval Reserves is contained in Appendix F.

The enrolment in 1911 of Cadets under the Defence Act of 1909 necessitates immediate action as regards those who will be required for Naval Service as the Naval Reserve.

The transfer of the Australian portion of the Imperial Royal Naval Reserve from the Imperial authorities to the Commonwealth in 1912 or 1913 also renders necessary certain measures in the next two years.

A Head-Quarters Administrative Staff should be appointed *forthwith*, consisting of—

- Director of Naval Reserves (Captain).
- Assistant to Director (Commander).
- Secretary to Director (an Accountant Officer).
- Clerical Staff (say, three Clerks).

District Commandants and Staffs should be appointed at the places named in Appendix F.

The numbers of Cadets and Men to be enrolled in each year are shown in Appendix F.

G.—STORES.

52. A statement as to the Reserves of Stores to be provided for the maintenance of the Fleet Unit is contained in Appendix G.

PART III.—SUCCESSIVE STAGES OF DEVELOPMENT, CULMINATING
IN THE COMPLETE FLEET (1918-1933).

The measures to be taken subsequent to those given in Part II. in order to reach the final requirements outlined in Part I. are recommended to be taken in hand as follows :—

(A.)—PROVISION OF ADDITIONAL SHIPS.

2. The ships required to complete and maintain the Fleet should be provided as follows. This does not include the provision of vessels to replace others as they become worn-out (*see* paragraph G.) :—

| Era. (See paragraph 5, Part II) | Year. | Ships to be provided— | | | | | |
|--|-----------|-----------------------|--------------------|-------------------------|------------|-------------|--------------------|
| | | Armoured Cruiser. | Protected Cruiser. | Torpedo boat Destroyer. | Submarine. | Depôt Ship. | Fleet Repair Ship. |
| Total at end of First Era ... | 7th year | 1 | 3 | 12 | 6 | 1 | ... |
| Second Era, 1918-1923 ... | 8th year | ... | ... | 6 | ... | 1 | ... |
| | 9th year | 1 | ... | ... | ... | ... | ... |
| | 10th year | ... | 1 | ... | ... | 1 | ... |
| | 11th year | 1 | ... | ... | ... | ... | ... |
| | 12th year | ... | 2 | ... | 6 | ... | ... |
| Total at end of Second Era ... | ... | 3 | 6 | 18 | 12 | 3 | ... |
| Third Era, 1923-1928 ... | 13th year | ... | ... | ... | ... | ... | 1 |
| | 14th year | 1 | ... | ... | ... | ... | ... |
| | 15th year | 1 | ... | ... | ... | ... | ... |
| | 16th year | 1 | ... | ... | ... | ... | ... |
| | 17th year | ... | 2 | ... | ... | ... | ... |
| Total at end of Third Era ... | ... | 6 | 8 | 18 | 12 | 3 | 1 |
| Fourth Era, 1928-1933 ... | 18th year | ... | ... | ... | ... | ... | ... |
| | 19th year | 1 | ... | ... | ... | ... | ... |
| | 20th year | ... | ... | ... | ... | ... | ... |
| | 21st year | 1 | ... | ... | ... | ... | ... |
| | 22nd year | ... | 2 | ... | ... | ... | ... |
| Total at end of Fourth Era (Complete Fleet) ... | ... | 8 | 10 | 18 | 12 | 3 | 1 |

(B.)—PROVISION OF ADDITIONAL PERSONNEL.

The Second Era.

3. The increase to be made to the Fleet in the Second Era (1918-1923) involves the provision by the end of 1923 of 3,860 *additional* ranks and ratings, consisting of—

| |
|--|
| 163 Commissioned Officers (all branches). |
| 26 Subordinate Officers (all branches). |
| 57 Warrant Officers (all branches). |
| 716 Chief and other Petty Officers (all branches). |
| 509 Leading ratings (all branches). |
| 2,253 Seamen, Stokers, and others. |
| 136 Boys. |
| <hr/> |
| 3,860 |

4. Subject to the progress of the Recruiting, it is proposed that the above numbers be provided as follows :—

| | Active Service, Mother Navy. | Pensioners and Reserves, United Kingdom. | Commonwealth. | |
|------------------------------------|---------------------------------|--|------------------------|----------------------------|
| | | | Continuous Service. | Non-continuous Service. |
| Commissioned Officers ... | 66 | ... | 70 | 27 |
| Subordinate Officers ... | ... | ... | 26 | ... |
| Warrant Officers ... | 17 | ... | 10 | ... |
| Chief and other Petty Officers ... | 100 | 295 | 209 | 21 |
| Leading ratings ... | 100 | 100 | 284 | 25 |
| Seamen, Stokers, &c. ... | ... | ... | 1,413 | 840 |
| Seamen, Boys, &c. ... | ... | ... | 136 | ... |
| | <hr/> | <hr/> | <hr/> | <hr/> |
| | 313 | 395 | 2,239 | 913 |

Third Era.

5. The increase to be made to the Fleet (*see* paragraph 2) in the Third Era (1923-1928) involves the provision by the end of 1928 of 3,574 *additional* ranks and ratings, consisting of—

| |
|--|
| 119 Commissioned Officers (all branches). |
| 40 Subordinate Officers (all branches). |
| 56 Warrant Officers (all branches). |
| 607 Chief and Petty Officers (all branches). |
| 471 Leading ratings (all branches). |
| 2,127 Seamen, Stokers, &c. |
| 154 Seamen, Boys, &c. |
| <hr/> |
| 3,574 |

6. Subject to the progress of the Recruiting, it is proposed to provide the above numbers as follows :—

| | Active Service, Mother Navy. | Pensioners and Reserves, United Kingdom. | Commonwealth. | |
|------------------------------------|---------------------------------|--|------------------------|----------------------------|
| | | | Continuous Service. | Non-continuous Service. |
| Commissioned Officers ... | * | ... | 94 | 25 |
| Subordinate Officers ... | ... | ... | 40 | ... |
| Warrant Officers ... | ... | ... | 56 | ... |
| Chief and other Petty Officers ... | ... | ... | 586 | 21 |
| Leading ratings ... | ... | ... | 441 | 30 |
| Seamen, Stokers, &c. ... | ... | ... | 1,307 | 820 |
| Seamen, Boys, &c. ... | ... | ... | 154 | ... |
| | <hr/> | <hr/> | <hr/> | <hr/> |
| Totals ... | ... | ... | 2,678 | 926 |

* NOTE.—By the end of 1928 there should be a considerable number of Australian Commissioned Officers, and though they may not be senior enough to fill all vacancies in the complements, they will be able to effect the reliefs of officers of the Mother Navy who have been previously lent to the Commonwealth and who are employed in the vessels added in the former periods.

Fourth Era.

7. The increase to be made to the Fleet (see paragraph 2) in the Fourth Era (1928-1933) involves the provision by the end of 1933 of 2,424 *additional* ranks and ratings, consisting of—

| | | |
|--------------|--------------------------|-----------------|
| 78 | Commissioned Officers | } all branches. |
| 26 | Subordinate Officers | |
| 34 | Warrant Officers | |
| 390 | Chief and Petty Officers | |
| 318 | Leading ratings | |
| 1,466 | Seamen, Stokers, &c. | |
| 112 | Seamen, Boys, &c. | |
| <u>2,424</u> | | |

8. Subject to the progress of the Recruiting, it is proposed to provide the above numbers as follows :—

| | Active Service, Mother Navy. | Pensioners and Reserves, United Kingdom. | Commonwealth. | |
|---------------------------------------|---------------------------------|--|------------------------|----------------------------|
| | | | Continuous Service. | Non-continuous Service. |
| Commissioned Officers | * | ... | 60 | 18 |
| Subordinate Officers | ... | ... | 26 | ... |
| Warrant Officers | ... | ... | 34 | ... |
| Chief and other Petty Officers | ... | ... | 378 | 12 |
| Leading ratings | ... | ... | 300 | 18 |
| Seamen, Stokers, &c. | ... | ... | 906 | 560 |
| Seamen, Boys, &c. | ... | ... | 112 | ... |
| | ... | ... | 1,816 | 608 |

* NOTE.—By the end of 1933 the Commonwealth Navy should be in a position to effect the relief of all but the higher ranks of Officers and some few Chief and other Petty Officers, &c., who have been lent by the Mother Navy from time to time.

(C.)—TRAINING OF PERSONNEL.

(D.)—NAVAL BASES AND SUB-BASES,
ETC.

9. The training of *personnel*, the work on the Naval Bases and Sub-bases, and provision of the other requirements of the completed Fleet should be proceeded with as shown in the Appendices.

APPENDICES.

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APPENDIX A.

CONTROL AND ADMINISTRATION.
PROPOSALS AND GENERAL REMARKS.*Introductory Remarks.*

Under the Naval Forces Act of 1910 power is taken to constitute a Naval Board with such functions "as may be prescribed."

Under the Regulations and Standing Orders for the Naval Forces of the Commonwealth at present in force "the Naval Board shall, subject to the control of the Minister, be charged with the administration of all matters relating to the Naval Forces," and "the Members of the Board shall severally exercise such powers and perform such duties as are from time to time assigned to them by the Minister."

The Board does not, however, appear to have any executive authority or control over the Naval Forces. The Regulations as to the government of the Forces are, "the Director and every member of the Naval Forces permanently employed shall faithfully and diligently employ the whole of their time in the service of the Commonwealth, and shall in all things obey the orders and directions of the Government." "All orders and directions of the Government with respect to the administration of the Forces shall be communicated by the Board, and Commandants will issue the necessary orders to give effect to them."

The control of the Naval Forces, under present conditions, is, therefore, exercised by the Government (*i.e.*, the Minister of Defence) through the Naval Board, but the Naval Board has no powers of its own, and is merely a mouth-piece.

In considering the question of the control of a service such as the Navy there are two points to be met—

- (a) The system must admit of complete parliamentary control and responsibility; but as far as possible such control should in practice be restricted to matters of policy and finance, and the power of Parliament to interfere in matters of detail in the government and administration of the Navy should be reserved for very exceptional circumstances.
- (b) The controlling authority should be such as will have the full confidence of the Officers and Men of the Service, whose careers are intrusted to it, and should contain Naval Officers whose sole interest would be to maintain the Navy in an efficient state by providing for all its needs. The enormous value to the Naval Service of obtaining and retaining the confidence and loyal support of the *personnel* to its Governing Body cannot be too much emphasized.

In the Mother Country these two requirements are met by the appointment of a Board of Admiralty on which there are two political members and four Senior Naval Officers of reputation; this Board is responsible as a whole for the government of the Navy, and is appointed, and acts, as a single authority.

I recognise that there is great difference between the conditions as regards the Naval Forces in the Mother Country and the Commonwealth; in the former both the Navy and the Board of Admiralty have been established for a long period, and have stood the test of time and experience; in the latter both the Navy and its controlling authority have to be created, and must necessarily be experimental. Nevertheless, I consider that a Board constituted on the lines of the Board of Admiralty, and having responsibility as a whole, would meet the requirements of the Commonwealth better, and would be well qualified to foster and develop the Australian Fleet. It is essential, too, that the controlling authority in Australia should have and retain the full and complete confidence of the Admiralty.

Ministers are here to-day and gone to-morrow; their responsibility ends with their tenure of office, whereas the Navy is a living and growing organism, the creation of years, for which continuity of policy is essential. It should not be within the power of the Government of the day, for financial or any other reasons, to take steps which may have disastrous effect at a future date on the safety of the Commonwealth unless such steps are carried out with the full knowledge and approval of the people of Australia, who would have to bear the consequences; a Board on which Senior Officers of the Navy sit is not likely to suffer any such steps to be taken without protest.

In further development of this proposal, I consider that the annual Estimates of Expenditure as framed by the Board should be signed by each member of the Board, and be subject to alteration by Parliament alone.

I have dealt rather fully with this matter, as I view it as being of paramount importance to the well-being of the Commonwealth Naval development, and I cannot too strongly express my hope that the Navy will be kept outside party politics. "It must be distinctly recognised that a National Force maintained at a high standard of efficiency can only be produced by the work of years, and that such work must be steady and continuous; any divergence from the policy decided on may, and probably will, lead to chaos and useless expenditure of money." (*Lord Kitchener in his Memorandum on the Defence of Australia.*)

RECOMMENDATIONS AS TO THE CONSTITUTION OF THE NAVAL BOARD.

The Board recommended is as follows:—

1. The Minister of State for Defence (or for the Navy, should a separate Naval Department be created later),
2. First Naval Member (to be a Senior Officer of the Commonwealth Navy not below the rank of Captain),
3. Second Naval Member (to be a Senior Officer of the Imperial Navy not below the rank of Captain),
4. Third Naval Member (to be a Senior Officer of the Commonwealth or Imperial Navy not below the rank of Captain),

5. Finance and Civil Member (to be a member of Parliament, of the Senate when the Minister is in the House of Representatives and *vice versa*, or as an alternative this member might be a Senior Naval Accountant Officer or a Civilian Accountant),

With a Permanent Secretary of the Board.

I also recommend that this Board should have a Naval Representative (at the outset a Captain in the Imperial Navy should be selected) in London, to be attached to the staff of the High Commissioner, to be accommodated with an office in the Admiralty Building, and to be allowed personal access to the members of the Admiralty Board, and to the various Admiralty Departments; this officer to be the channel of communication between the Commonwealth Naval Board (whom he would represent, and from whom he would receive instructions), and the Home Board of Admiralty. This officer would, in fact, represent the Commonwealth Naval Board in the same way that the High Commissioner represents the Commonwealth Government, and he would be under the orders of, and receive the support when necessary of, the High Commissioner. He could be most useful in maintaining uniformity between the two Boards, and in insuring harmonious action when both Boards had to act in concert, and in watching generally over the Naval interests of Australia. This position should be held later by an officer of the Commonwealth Navy.

The selection of an Imperial Officer for 2nd Naval Member is recommended because the Commonwealth Fleet is, and must continue for a very considerable time to be, dependent to a great extent on the *personnel* of the Imperial Navy, and it is desirable that such officers and men should know that they are represented by one of their own officers on the Board under which they will be serving.

The Naval Board should act as a whole, its orders being issued under the signature of its Secretary, but for matters of routine it would be convenient to allocate to each member certain special spheres of supervision, *e.g.*:—

1. *The Minister.*—President of the Board and general supervision; represent Department in Parliament; to be referred to by the Member of the Board concerned on all questions of policy and important matters; to represent to the Governor in Council all senior appointments, commands, &c.
2. *First Naval Member.*—War preparations, Naval Intelligence, Naval Ordnance, Fleet Exercises, Manœuvres, Gunnery and Torpedo Exercises, &c., Naval Works, advise as to senior appointments.
3. *Second Naval Member.*—*Personnel* and Reserves, Discipline, Stores, Victualling, Medical.
4. *Third Naval Member.*—Construction and engineering of ships, repairs, control of Naval Dockyards and Bases.
5. *Finance and Civil Member.*—Finance, contracts, legal questions.
Permanent Secretary (does not vote as a member of the Board).—Charge of the clerical staff, and responsible for the clerical duties of the Department; responsible for safe custody of confidential books and documents; signs Board Orders "by order of the Naval Board."

In the case of the Board of Admiralty, under the *Admiralty Act 1832*, "any two Commissioners may exercise and execute" all the legal powers of the Admiralty (*e.g.*, issue of Court-martial warrants, disciplinary orders, &c.), and it would probably be convenient to obtain such legal powers for any two members of the Naval Board.

Under the Naval Board there would be various administrative departments, who would be responsible to the Board as a whole, but for general work would, as a rule, deal with the particular Member concerned with the work of the Department.

The following departmental heads would be required:—

- Accountant-General—(Examination of accounts, preparation of Estimates, &c.)
- Director of Naval Construction and Dockyards—(Preparation of plans of ships, supervision of their construction, deal with repairs and alterations to vessels, advise on Dockyard requirements and administration.)
- Director of Works—(Preparation of plans for docks, buildings generally, supervision of their construction, repairs, and alterations, &c.)
- Director of Stores, Victualling, and of Naval Contracts—(Purchase and supply of Naval and Victualling Stores.)
- Director of Naval Ordnance—(Gunnery and Torpedo matters, including purchase and supply of materiel.)

The Naval and Clerical staff that would be required to assist the above may be taken approximately

as—

- 1 Commander as Private Secretary to Minister.
- 1 Commander as Assistant to 1st Naval Member and as President of Intelligence Committee.
- 1 Clerk as Private Secretary to 1st Naval Member.
- 1 Clerk as Private Secretary to 2nd Naval Member.
- 1 Clerk as Private Secretary to 3rd Naval Member.
- 1 Clerk as Private Secretary to Finance Member.
- 20 Clerks for Secretary's and other Departments.

I would add that I consider it essential to the efficiency of the Department that the control of its Staff should rest in the Department, and that the Commonwealth Public Service Commissioner should have no authority over any of them such as he now possesses.

Similarly, I consider that the system under which certain expenditure on Naval buildings is controlled by the Department of Home Affairs is unsound; all such work should be under the Naval Department.

I have not touched upon the legal difficulties that may arise as regards the control of the Commonwealth ships and their crews when outside Australian waters, as I understand that this matter will be discussed in England during 1911.

APPENDIX B.

ENTRY, TRAINING, AND EMOLUMENTS OF PERSONNEL.

(A.)—RANKS AND RATING TO BE ENTERED ANNUALLY.

(i.)—Numbers to be Entered.

These numbers are shown in Part II., Part III., and Appendix C.

(ii.)—Periods of Engagement.

First Engagement—

(a) *Boys—Long Service.*—For twelve years from reaching age of eighteen (parent's written consent required).

(b) *Men—Long Service.*—Twelve years, see Part II., paragraph 15.

Short Service.—Five or seven years, see Part II., paragraph 15 (to be followed by a period of 7 or 5 years in the Fleet Reserve, see Appendix F.).

Second Engagement—

Long Service.—Ten years.

Short Service.—Seven or five years (*i.e.*, to complete twelve years).

Third Engagement—

Short Service.—Five, seven, or ten years (*i.e.*, to complete seventeen, nineteen, or twenty-two years, those who complete seventeen or nineteen to be allowed, if required, to re-engage further to complete a total of 22 years).

(B.)—OFFICERS.—ENTRY AND TRAINING.

(i.)—Officers of the Military and the Engineer Branches.

Entry and First Training.—It is recommended that the common system of entry, as in the Mother Navy, should be followed, and that the period and nature of training should be assimilated as far as practicable to those in force in the United Kingdom (*i.e.*, four years' training from the age of twelve to thirteen at a Naval College on shore, followed by six months at sea in a specially selected vessel and three years to three years and four months in the Fleet).

Qualifications for Promotion to Acting Sub-Lieutenant.—To have service as Midshipman as above and have passed the necessary examination for rank of Lieutenant in Seamanship.

Qualifications for Confirmation in Rank of Sub-Lieutenant.—To have passed the examinations for rank of Lieutenant in—

| | | |
|--|---|---|
| Navigation, Gunnery, Torpedo, Pilotage, | } | Courses and examinations, similar to those in the Mother Navy, to be carried out in Australia. |
|--|---|---|

Qualifications for Promotion to Rank of Lieutenant.—At least six months' service at sea as a Sub-Lieutenant, and satisfactory certificate from his Commanding Officer, promotions to be made as requisite to fill vacancies on the Lieutenant's list, but Sub-Lieutenants to be promoted on attaining four years' seniority whether vacancies exist or not. Accelerated promotion to be awarded for special proficiency in examinations.

Qualifications for "Specialist" Lieutenants.—Lieutenants who apply to qualify specially in Gunnery, Torpedo, Engineering, Navigating, or Submarines, and are recommended by their Commanding Officers and selected, should be required to complete one year's service as a Watchkeeping Officer in a vessel of the Mother Navy and then go through the prescribed course in the Mother Country, on completion of course to return to Australia, those who pass the necessary examination to be appointed as Lieutenants (G), (T), &c. To render officers eligible for command of Destroyers, they should be required to pass an examination similar to that required in the Mother Navy.

Qualifications for Promotion to Rank of Commander.—To be by selection to fill vacancies from Lieutenants who have completed at least four years' service as Lieutenant, of which three years must have been in a ship-of-war at sea, and who have passed the prescribed examination (as far as practicable, except in cases of promotion for war service or special service, the average seniority for promotion should be kept at the average which obtains at the time in the Mother Navy, and as a general rule no Lieutenant should be promoted who has less than eight years' seniority in that rank).

To render all Lieutenants, except "specialists" as above, eligible for promotion they should be required to serve for two years in a vessel of the Mother Navy.

Qualifications for Promotion to Rank of Captain.—To be by selection to fill vacancies from Commanders who have completed two years' service as Commander, of which one year must have been in a ship-of-war at sea (as far as practicable, except in cases of promotion for war service or special service, the average seniority for promotion should be kept at the average which obtains at the time in the Mother Navy).

Qualifications for Promotion to Flag Rank.—By seniority to fill vacancies, provided that a Captain has served for six years, of which three years must have been in command of a ship-of-war at sea; the first two years of the qualifying service must be in command of a ship-of-war at sea.

[In the case of Captains (Engineering) the qualifications for promotion to Rear-Admiral (E) should be the same as those that may be adopted in the Mother Navy.]

Qualification for Advancement in Flag Rank.—By seniority, to fill vacancies.

(ii.)—Accountant Officers.

Entry.—To be selected by open competition, provided they satisfy the physical standard required, and to be entered as Assistant Clerks between the ages of 17 and 18.

Qualification for Advancement to Rank of Clerk.—One year's service as Clerk and passed the prescribed examination.

Qualification for Advancement to Rank as Assistant Paymaster.—Three and a half years' service from date of entry as Assistant Clerk and passed the prescribed examination.

Qualification for Advancement to rank of Paymaster.—By seniority to fill vacancies, to have passed the prescribed examination and to have served for two years in a ship of the Mother Navy.

Qualification for Advancement to Rank of Staff Paymaster.—Four years' seniority as Paymaster.

Qualification for Advancement to Rank of Fleet Paymaster.—Four years' seniority as Staff Paymaster.

Qualification for Advancement to Rank of Paymaster-in-Chief.—By selection, to fill vacancies.

(iii.)—Medical Officers.

To be entered as Surgeons for three years, with the option, if their services are required, of extending their service for further periods up to a maximum total of nine years; on completion of three years' service, or more, to be eligible for Naval Reserve, if required; those who join the Reserve to be paid a retaining fee up to the age of 40.

To have the rank of Surgeon on entry, to be eligible for advancement to rank of Staff Surgeon on completing eight years' service on active list, or on active and reserve lists, and on passing the necessary examination. I suggest that the Australian Medical Association be consulted as to general conditions of entry, pay, qualifications, &c., of Medical Officers, and as regards the provision of hospital accommodation for Naval patients, the provision of additional Medical Officers in time of war, and the training of sick berth staff, &c.

I am of the opinion that it is not necessary to establish a large Naval Medical Staff for service in times of peace, if arrangements can be made, by a system of retaining fees to civilian medical practitioners, to civilian nurses and to hospital attendants, for adequate *personnel* and accommodation to be available in time of war.

(iv.)—Chaplains and Naval Instructors.

Chaplains to be entered for temporary services as required under similar regulations to those in force in the United Kingdom as regards temporary service. Naval Instructors to be entered similarly as required.

(v.)—Warrant Officers.

To be appointed, as required, from ratings who have qualified under the same conditions as those laid down in the King's Regulations. Gunners, Torpedo Gunners, Signal Boatswains, and Warrant Telegraphists to be required to have completed the prescribed qualifying course in a Gunnery, Torpedo, Signal, or Wireless Telegraph School in the United Kingdom.

(vi.)—General.

The ages and periods of non-employment governing retirement to be the same generally as those laid down in the King's Regulations for the Mother Navy.

(C.)—PETTY OFFICERS AND MEN—ENTRY AND TRAINING.

(i.)—Seamen and Stoker Ratings.

There will be three systems of entry—

(a) as boys, between the ages of 15½ and 16½; to carry out one year's training in boys' training ship and then not less than 6 months' service at sea to qualify for the rating of ordinary seaman. Specially-selected boys to be placed in an "advanced class" after 11 weeks' course, and to receive higher training. To engage for "continuous service" (*i.e.*, 12 years from age of 18). These boys will be trained both as Seamen and Stokers (see Part II., paragraph 19).

(b) as men, between the ages of 18 and 25; to engage for "short service" (*i.e.*, 5 or 7 years). To be entered as Ordinary Seamen or as Stokers, 2nd Class. Those entered as Ordinary Seamen to carry out 6 weeks' training in Naval Barracks, 6 weeks' training in a sea-going vessel as supernumeraries, and then to be drafted as part complement of a sea-going vessel; those entered as Stokers, 2nd Class, to carry out 1 month's training in Naval Barracks, 2 months' training in a sea-going vessel as Supernumeraries, and then to be drafted as part complement of a sea-going vessel.

(c) as men, between the ages of 18 and 25, for stokers only; to engage for "long service" (*i.e.*, 12 years). To be entered and trained in the same way as Stokers, 2nd Class, entered under (b).

Qualifications for Advancement to Able Seamen, Leading Ratings and Petty Officer Ratings.—To be similar to those in force in the Mother Navy. Acting Leading Stokers should be required to have served for three months in a Torpedo-boat Destroyer in order to render them eligible for confirmation in rating. (See Part II., paragraph 19, as regards the allocation of long-service Seamen and Stoker ratings to their respective branches.)

Special Qualification of "Higher Ratings"—Selected Seamen ratings to be sent to the Gunnery or Torpedo Schools in the United Kingdom in order to qualify for higher gunnery or torpedo ratings.

Selected Stokers who have attained the rating of Leading Stoker or Stoker Petty Officer to be sent to the Naval Mechanics' School in the United Kingdom to qualify for the rating of Mechanician.

Qualifications for Advancement to the Rank of Warrant Officer.—To be similar to those in force in the United Kingdom; Gunners and Torpedo Gunners to be required to go through the prescribed course in a Gunnery or Torpedo School in the United Kingdom before confirmation in rank.

(ii.)—*Signal Ratings and Telegraphist Ratings.*

To be entered in the same way as boys under (i.), for continuous service from the age of 18; the Signal Boys and Boy Telegraphists required to be selected similarly to "Advanced Class" boys.

Boys' Training Course and Qualification for Advancement to the Ratings of Ordinary Signalman and Signalman, and to Leading and Petty Officer Signal Ratings.—To be similar to those in force in the Mother Navy.

Boys' Training Course and Qualifications for Advancement to the Ratings of Ordinary Telegraphist and Telegraphist, and to Leading and Petty Officer Telegraphist Ratings.—To be similar to those in force in the Mother Navy except that—

(a) The boys' 8 weeks' course of wireless telegraphy should be carried out in the Naval Barracks at Sydney instead of in the training ship, the instruction being given by the staff of the Wireless Telegraph School.

(b) Petty Officer Telegraphists may be rated "acting" but should not be confirmed in their rating until they have completed the prescribed course in a Naval Wireless Telegraph School in the United Kingdom.

Qualifications for Advancement to Warrant Officer (Signal Boatswains and Warrant Telegraphists) and to Commissioned Rank.—To be similar to those in force in the United Kingdom, but officers not to be confirmed in warrant rank until they have completed the prescribed course in a Naval Signal or Wireless Telegraphy School in the United Kingdom.

(iii.)—*Engine-room Artificers.*

To be entered for "short" (not less than seven years) or "long" service.

To be entered direct as Acting Engine-room Artificers, 4th Class, between the ages of 21 and 28, the qualifications for the rating being the same as those required for "direct entry" Engine-room Artificers in the United Kingdom. Qualifications for advancement to higher classes, to rating of Chief Engine-room Artificer, and to Warrant and Commissioned rank, to be similar to those in force in the United Kingdom, except that two years' service in a ship of the Mother Navy should be required before advancement to the rating of Chief Engine-room Artificer, 2nd Class, or to Warrant rank.

(iv.)—*Artisan Ratings.*

(To be entered for "short" or "long" service.)

Note.—Those marked * should be entered for "long service" only.

| | | | |
|--|-----|-----|---|
| Carpenter ratings (including Shipwrights*) | ... | ... | } Qualifications for entry and for advancement to be similar to those in force in the United Kingdom (see Part II. as to procedure for first entries and as to special training required for Armourer ratings). |
| Armourer ratings* | ... | ... | |
| Blacksmith ratings* | ... | ... | |
| Plumber ratings | ... | ... | |
| Painter ratings | ... | ... | |
| Cooper ratings | ... | ... | |

(v.)—*Accountant Branch.*

(Writer and Ships' Steward Ratings.—To be entered for long service.)

To be entered as Boys, between the ages of 15½ and 16½, and advanced to higher ratings and to Warrant rank under similar conditions to those in force in the United Kingdom.

(vi.)—*Ships' Police Ratings.*

(Masters-at-Arms and Ships' Corporals.)

To be obtained from suitable Petty Officers (Seamen or Stokers) who volunteer for transfer, and to be advanced to higher rating or to Warrant rank, under similar conditions to those in force in the United Kingdom.

(vii.)—*Ships' Cook Ratings.*

(To be entered for "long" service.)

To be entered as 2nd Cook's Mates, and advanced to higher ratings and to Warrant rank under similar conditions to those in force in the United Kingdom.

(viii.)—*Officers' Stewards and Officers' Cooks*

(To be entered for "short" service (5 years), but to be allowed to be discharged at the end of a ship's commission.)

To be entered as Boy Servants if under age of 18 and trained in the Naval Barracks; others, over age of 18, to be entered as Officers' Stewards, 3rd Class, or Officers' Cooks, 3rd Class. To be required to qualify as "Trained men" before receiving the 2nd Class rating (see Part II., paragraph 20); otherwise, to be given higher ratings under similar conditions to those in force in the United Kingdom.

(ix.)—*Band Ratings.*

(To be entered for "short" service, 5 years.)

Special conditions to be laid down.

(x.)—*Various.*

Butchers, lamprimmers, tailors, divers, to be obtained from suitable and qualified volunteers in the ship's complement, additional remuneration being given for the duty; facilities for training in these "non-substantive" ratings should be afforded.

(D.)—*EMOLUMENTS OF OFFICERS AND MEN.*

General Remarks.

The rates of emoluments for officers and men should be calculated on the following bases:—

(a) The rates paid in the Mother Navy.

(b) The higher rates of wages paid in Australia to those employed in civil occupations than in the United Kingdom.

(c) The higher cost of living in Australia than in the United Kingdom.

2. A system of pensions or annuities is essential to an efficient Naval Service. It is necessary that Naval Officers and the higher ratings among the men should be able to regard their Naval employment as a professional career, and so devote their whole energies and intelligence to the Naval Service; this necessity cannot be insured unless such officers and men have an assured competence, modest though it may be, for life. It is also necessary to efficiency that the Government should feel able to dispense with the active service of officers who may have rendered good service but who are not considered fitted for advancement and yet have reached an age which renders them unsuitable for service in a junior rank; the retention in active service of officers for a considerable time after they have been passed over for promotion is detrimental to the Navy, and does not make either for efficiency or economy. When no pension system is in force, the hardship of dispensing with the services of such officers and putting them out of employment without pay falls too heavily upon them; this would result inevitably in their being retained in appointments for which they were unfitted, and moreover would cause such appointments to be closed to more suitable younger officers.

3. It is suggested that, as far as practicable, employment for retired officers should be found in connexion with the Naval Reserves, an allowance in addition to pension or annuity being granted for such services, and all retired officers and pensioned men (provided they are fit for active service in the rank or rating held by them when retired or pensioned) should be liable to Naval service in war or emergency, and conform to such conditions as to residence, reporting themselves, &c., as may be prescribed.

Scheme of "Deferred Pay" or Annuities.

4. The following system of "deferred pay" is recommended in preference to the pension system in force in the Mother Navy. The latter system has the disadvantage that, although a pension is regarded as a deferred payment, yet the individual concerned has no vested interest in the sum so deferred, and can only receive benefit from it, in the form of a pension, if he completes a definite period of service; in the event of his death before or after completing such period the deferred pay (or any portion of it) is forfeited, and does not form part of the deceased's estate—a comparatively small compassionate allowance may be granted to an officer's widow or children, or to the widow of a man killed in action, on duty, &c., e.g.—

(a) A seaman who completes 12 years' service and then leaves the Navy receives no deferred pay, although if he wished, and is permitted, to re-engage for a further 10 years, he would receive a pension on completion of the total of 22 years' service, the first 12 years reckoning as part of the pensionable service; or

(b) In the case of a man who dies in, say, his 21st year of service, no benefit from deferred pay would accrue to his next-of-kin.

5. It is, therefore, strongly recommended that the "deferred pay" should be the property of the individual by whom it is earned, though not payable to him or his estate except under certain conditions.

6. The following are the principles of the system recommended:—

- (a) A definite amount per diem to be deferred for each officer or man, but to be considered as a portion of his emoluments.
- (b) The account of each officer or man to be credited with the amount so deferred, and with interest thereon; the interest—
- to be allowed at the rate of $3\frac{1}{2}$ per cent.;
 - to be added to each individual's account annually;
 - to be computed annually on the amount standing to the credit of the individual at the end of the previous year.
- (c) On retirement or resignation in the case of an officer, or on discharge in the case of a man, the actuarial equivalent of the accumulated amount of his contributions to be granted to him. Persons dismissed from the Navy for misconduct should forfeit all claim to deferred pay.
- (d) In the case of death of an individual whilst in the service, the full amount of accumulated deferred pay, with interest to date of death, to be payable to his estate.
- (e) Encouragement to be given to men to remain in the Navy for long service by making the amount of the "total emoluments" larger for men who engage for "long service" (*i.e.*, first engagement of 12 years), and by further increasing it for men who re-engage to complete 22 years (second engagement of 10 years). Men who re-engage to complete 12 years during, or after, completing a first "short" engagement of 5 or 7 years to earn deferred pay, from the date of re-engaging, at the same rate as men who engage for a first period of 12 years. Men who may be allowed to leave the Navy at their own request after re-engaging not to receive deferred pay at a higher rate than that earned during their last completed engagement.
- (f) Each Good Conduct Badge to carry with it 2d. per diem additional "active pay," and 1d. per diem additional "deferred pay"; Good Conduct Medal to carry with it a further additional 1d. per diem "deferred pay."

APPLICATION OF NEW RATES OF PAY, ETC., TO OFFICERS AND MEN NOW SERVING IN THE COMMONWEALTH PERMANENT NAVAL FORCES.

It is recommended that officers and men now serving in the Commonwealth Permanent Naval Forces should be given the option of adopting the new rates of pay and allowances from 1st July, 1911; and that officers and men who adopt the new rates should be credited with "deferred pay," without interest, at the rates laid down for the various ranks and at the short-service rates laid down for the various ratings, for the time they have served in the various ranks and ratings, since joining the Naval Forces in Australia. The acceptance of these conditions should involve retirement or discharge at the ages laid down in the King's Regulations for the Mother Navy.

From 1st July, 1911, they would, if they continued to serve, be credited with "deferred pay" under the new scale.

HALF-PAY FOR OFFICERS.

It is recommended that officers unemployed should be placed on half-pay of their rank, such pay to be the actual half of the active pay (to be paid direct to the officer), the officer if he becomes ill while on half-pay (see paragraph 3 as to officers on full pay), to be entitled to Naval medical attendance by Medical Officer salaried by the Naval Service, provided the officer resides or attends at a place where such officer is available, but not to receive allowance for uniform or rations; half the "deferred pay" of his rank to accrue to his superannuation fund for the period during which he is on half-pay.

2. It is considered that no officer below the rank or relative rank of Commander should be placed on half-pay, except—

- At his own request.
- For misconduct.
- For illness due to misconduct or imprudence.

3. Officers on full pay who become unfit for service owing to illness, except as at 2 (c), should be granted sick leave on full pay under similar regulations to those now in force in the Mother Navy.

PROPOSED SCALES OF EMOLUMENTS.

NOTE.—These Tables are put forward, as a basis for further consideration, at the request of the Minister for Defence.

The following tables show the scales of emoluments proposed for officers and men of the Commonwealth Navy:—

Table I.—Subordinate and Commissioned Officers.

" II.—Warrant and Commissioned Warrant Officers, and others promoted from these ranks.

" III.—Petty Officers, Men, and Boys.

2. In the tables the term "active pay" is used to denote the actual cash payment made to each individual as salary or wages.

3. An allowance for provision of uniform ("Uniform Allowance") at the rate of 1s. a day for officers is recommended, as this is an additional expense that officers have to bear in comparison with persons employed in a civil capacity, and should therefore be regarded apart from their salary.

4. The value of the daily rations of each individual is fixed at 1s. 2d., and the value of the provision of medical attendance at 3d. per diem. The equivalents of both these "emoluments" are granted in the Mother Navy, though the value would differ slightly.

TABLE I.—EMOLUMENTS PROPOSED FOR SUBORDINATE AND COMMISSIONED OFFICERS OF THE COMMONWEALTH NAVY.

| Rank. | Seniority in Rank. | Emoluments per Diem. | | | | | Total Emoluments. | Remarks. |
|-------------------------|--------------------|----------------------|------------------|---|-----------------|--------------|----------------------------------|----------|
| | | "Active Pay." | | Additional Emoluments.* | | | | |
| | | Mother Navy. | Australian Navy. | Value of Rations, Medical Attendance, Uniform Allowance.† | "Deferred Pay." | | | |
| Assistant Clerk | On entry | s. d. 2 6 | s. d. 3 0 | s. d. 2 5 | s. d. .. | s. d. 5 5 | .. .. |  |
| Midshipman | On promotion | 1 9 | 5 0 | 2 5 | .. | 7 5 | .. .. |  |
| Clerk | " | 4 0 | | | | | | |
| Sub-Lieutenant | " | 5 0 | | | | | | |
| Engineer Sub-Lieutenant | " | 7 6 | | | | | | |
| Assistant Paymaster | Under 4 years | { 5 0 to 7 0 } | 10 0 | 2 5 | 4 0 | 16 5 | .. .. |  |
| Lieutenant | On promotion | 10 0 | | | | | | |
| Engineer Lieutenant | " | 10 0 | | | | | | |
| Assistant Paymaster | Over 4 years | 10 0 | 12 0 | 2 5 | 5 0 | 19 5 | Short service. No "deferred pay" | |
| Surgeon | On appointment | 14 0 | | | | | | |
| Chaplain | " | 12 0 | | | | | | |
| Naval Instructor | " | 12 0 | 17 0 | 2 5 | .. | | " " " | |
| Lieutenant | Over 4 years | 10 0 | | | | | | |
| Engineer Lieutenant | " | 12 0 | | | | | | |
| Assistant Paymaster | Over 8 years | 11 0 | 15 0 | 2 5 | 5 0 | 22 5 | Short service. No "deferred pay" | |
| Surgeon | Over 4 years | 17 0 | | | | | | |
| Naval Instructor | " | 12 0 | 20 0 | 2 5 | .. | | " " " | |
| Lieutenant | Over 8 years | 12 0 | | | | | | |
| Engineer Lieutenant | " | 16 0 | | | | | | |
| Paymaster | On promotion | 15 0 | 18 0 | 2 5 | 6 0 | 26 5 | Short service. No "deferred pay" | |
| Staff Surgeon | " | 20 0 | | | | | | |
| Naval Instructor | Over 8 years | 14 0 | 24 0 | 2 5 | .. | | " " " | |
| Lieutenant | Over 12 years | 14 0 | | | | | | |
| Engineer Lieutenant | " | 18 0 | | | | | | |
| Staff Paymaster | On promotion | 18 0 | 21 0 | 2 5 | 6 0 | 29 5 | Promoted by seniority | |
| Lieutenant | Over 16 years | 16 0 | | | | | | |
| Engineer Lieutenant | " | 20 0 | | | | | | |
| Fleet Paymaster | On promotion | 21 0 | 24 0 | 2 5 | 6 0 | 32 5 | Promoted by seniority | |
| Commander | " | 22 0 | | | | | | |
| Engineer Commander | " | 24 0 | | | | | | |
| Fleet Paymaster | Over 4 years | 25 0 | 27 0 | 2 5 | 8 0 | 37 5 | Promoted by selection | |

* The additional emoluments in the Mother Navy include value of rations and medical attendance, and "pension rights"; but no allowance is given for uniform.

† Value of rations = 1s. 2d.; medical attendance = 3d.; uniform allowance = 1s. Total, 2s. 5d.

TABLE I.—EMOLUMENTS PROPOSED FOR SUBORDINATE AND COMMISSIONED OFFICERS OF THE COMMONWEALTH NAVY—continued.

| Rank. | Seniority in Rank. | Emoluments per Diem. | | | | | Remarks. |
|--------------------------|--------------------|----------------------|------------------|---|-----------------|-------------------|-----------------------|
| | | "Active Pay." | | Additional Emoluments.* | | Total Emoluments. | |
| | | Mother Navy. | Australian Navy. | Value of Rations, Medical Attendance, Uniform Allowance.† | "Deferred Pay." | | |
| s. d. | s. d. | s. d. | s. d. | s. d. | | | |
| Commander .. | Over 4 years .. | 22 0 | } 30 0 | 2 5 | 8 0 | 40 5 | |
| Engineer Commander .. | " .. | 30 0 | | | | | |
| Fleet Paymaster .. | Over 8 years .. | 29 0 | | | | | |
| Commander .. | " .. | 22 0 | } 33 0 | 2 5 | 8 0 | 43 5 | |
| Engineer Commander .. | " .. | 33 0 | | | | | |
| Fleet Paymaster .. | Over 12 years .. | 33 0 | | | | | |
| Captain .. | On promotion .. | 22 6 | } 36 0 | 2 5 | 11 0 | 49 5 | Promoted by selection |
| Engineer Captain .. | " .. | 35 0 | | | | | |
| Captain .. | Over 3 years .. | 27 6 | } 39 0½ | 2 5 | 11 0 | 52 5 | Promoted by selection |
| Engineer Captain .. | " .. | 40 0 | | | | | |
| Paymaster-in-Chief .. | On promotion .. | 38 0 | | | | | |
| Captain .. | Over 8 years .. | 33 0 | } 42 0½ | 2 5 | 11 0 | 55 5 | |
| Engineer Captain .. | " .. | 40 0 | | | | | |
| Captain .. | Over 12 years .. | 33 0 | } 45 0½ | 2 5 | 11 0 | 58 5 | |
| Engineer Captain .. | " .. | 40 0 | | | | | |
| Rear-Admiral‡ .. | On promotion .. | 60 0 | } 60 0 | 2 5 | 14 0 | 76 5 | |
| Engineer Rear-Admiral .. | " .. | 60 0 | | | | | |
| Vice-Admiral .. | " .. | 80 0 | } 80 0 | 2 5 | 14 0 | 96 5 | |
| Engineer Vice-Admiral .. | " .. | .. | | | | | |
| Admiral .. | " .. | 100 0 | 100 0 | 2 5 | 14 0 | 116 5 | |

* The additional emoluments in the Mother Navy include value of rations and medical attendance, and "pension rights"; but no allowance is given for uniform.

† Value of rations = 1s. 2d.; medical attendance = 3d.; uniform allowance = 1s. Total, 2s. 5d.

‡ A Captain appointed as Commodore, 2nd Class, to receive 10s. in addition; a Captain appointed as Commodore, 1st Class, to receive same "active pay" as a Rear-Admiral.

ADDITIONAL ALLOWANCES.

In addition to the above rates, the following special allowances should be paid to officers while performing special duties. These allowances should be added to the "active pay" but would not increase the "deferred pay":—

| Nature of Allowance. | Per diem. | Per annum. |
|--|-------------------|------------------------|
| | | |
| <i>I. Officers of the Military Branch.</i> | | |
| (a) Table money to Flag Officers and Commodores, under similar regulations to those in force in Mother Navy—varying according to rank and appointment held | from 10 0 to 90 0 | 182 10 0 to 1,642 10 0 |
| (b) Allowance in lieu of servants to Flag Officers serving in shore appointments in Australia | from .. to .. | 200 0 0 to 500 0 0 |
| (c) Command money—Captains— | | |
| Battleship or 1st Class Armoured Cruiser .. | 18 0 | 328 10 0 |
| Any other ship or establishment .. | 12 0 | 219 0 0 |
| When appointed Chief of the Staff .. | 18 0 | 328 10 0 |
| All Flag Captains .. | 12 0 | 219 0 0 |
| When employed on special service, but not in command of a ship or establishment .. | 5 0 | 91 5 0 |
| (d) Command money—Commanders, Lieutenants, or Sub-Lieutenants— | | |
| Commander or Lieutenant— | | |
| Sea-going vessels .. | 3 0 | 68 8 9 |
| Other vessels or establishments .. | 2 6 | 45 12 6 |
| Commander when employed on special service, but not in command of ship or establishment .. | 2 6 | 45 12 6 |
| Sub-Lieutenant in command of ship or torpedo-boat .. | 2 0 | 36 10 0 |
| (e) Allowance in lieu of servants— | | |
| Captains serving in shore establishments in command .. | .. | 125 0 0 |
| Captains serving in shore establishments not in command .. | .. | 40 0 0 |
| Commanders serving in shore establishments, whether in command or not, if not provided with a naval servant .. | .. | 40 0 0 |
| (f) Navigating allowance— | | |
| Commanders .. | 5 0 | 91 5 0 |
| Lieutenants, if passed for 1st class ships .. | 4 0 | 73 0 0 |
| Lieutenants, if not passed for 1st class ships .. | 2 6 | 45 12 6 |
| Sub-Lieutenants .. | 2 6 | 45 12 6 |
| (g) Gunnery or Torpedo allowances—Lieutenants .. | from 1 0 to 4 0 | 18 5 0 to 73 0 0 |
| Physical Training allowance—Lieutenants .. | 2 6 | 45 12 6 |
| (h) Allowance to Senior Lieutenants— | | |
| Of a ship allowed a Captain in command but not a Commander .. | 2 6 | 45 12 6 |
| In other cases .. | 1 6 | 27 7 6 |
| (i) Flag allowance— | | |
| Commander for executive duties in Flagship .. | 5 0 | 91 5 0 |
| Commander for navigating duties in Flagship .. | 5 0 | 91 5 0 |
| Lieutenant for navigating duties in Flagship .. | from 2 6 to 5 0 | 45 12 0 to 91 5 0 |
| <i>II. Officers of the Engineer Branch.</i> | | |
| (j) In charge of machinery of a ship .. | from 1 0 to 5 0 | 18 5 0 to 91 5 0 |
| (k) To senior Engineer Officer next in rank to Engineer Officer in Charge .. | from 1 0 to 2 6 | 18 5 0 to 45 12 0 |
| (l) Flag allowance— | | |
| Engineer Officer of Flagship .. | from 2 6 to 5 0 | 45 12 6 to 91 5 0 |
| (m) Allowance in lieu of servants— | | |
| To Engineer Captain employed on shore .. | .. | 40 0 0 |
| To Engineer Rear-Admiral employed on shore .. | .. | 125 0 0 |
| <i>III. Officers of the Accountant Branch.</i> | | |
| (n) When appointed as Secretary— | | |
| (i) Secretary to a Commodore, 2nd Class. (Total "active pay" not to exceed 18s. per diem) .. | 5 0 | 91 5 0 |
| (ii) Secretary to a Rear-Admiral or Commodore, 1st Class, or Vice-Admiral, 2nd in Command. (Total "active pay" not to exceed 24s. per diem) .. | 6 0 | 103 10 0 |
| (iii) Secretary to a Commander-in-Chief or to a Flag Officer in large independent command. (Total "active pay" not to exceed 36s. per diem) .. | 9 0 | 164 5 0 |
| (iv) Secretary to a Commander-in-Chief or as at (iii), after five years' service under (iii). (Total "active pay" not to exceed 44s. per diem) .. | 9 0 | 164 5 0 |
| (o) Assistant Paymaster acting as Senior Clerk to a Secretary paid under (n) (iii) or (iv) .. | 2 6 | 45 12 6 |
| (p) Assistant Paymaster when in charge of accounts of a ship or establishment .. | 2 6 | 45 12 6 |
| (q) Accountant Officer of a Flagship or Naval Barracks of or above the rank of Paymaster .. | from 2 6 to 5 0 | 45 12 6 to 91 5 0 |
| (r) Allowance in lieu of servants to Secretaries (under (n) (ii), (iii), or (iv)), or to a Paymaster-in-Chief employed on shore in Australia .. | .. | 40 0 0 |
| <i>IV. Officers of the Medical Branch.</i> | | |
| (s) Flag allowance to Senior Medical Officer of a Flagship or Naval Barracks .. | from 2 6 to 5 0 | 45 12 6 to 91 5 0 |

ADDITIONAL ALLOWANCES—continued.

| Nature of Allowance. | Per diem. | | Per annum. | |
|--|-----------|----------|------------|---------|
| | s. d. | £ s. d. | £ s. d. | £ s. d. |
| <i>V. General for Officers of all Branches.</i> | | | | |
| (t) Lodging allowance* when not provided with quarters— | | | | |
| (i) Flag Officers | 6 3 | 114 1 3 | | |
| (ii) Captains, and Officers of equivalent rank | 5 0 | 91 5 0 | | |
| (iii) Commanders, and Officers of equivalent rank | 5 0 | 91 5 0 | | |
| (iv) Lieutenants over 8 years' seniority, and Officers of equivalent rank | 3 9 | 68 8 9 | | |
| (v) Lieutenants under 8 years' seniority, and Officers of equivalent rank | 3 9 | 68 8 9 | | |
| (vi) Sub-Lieutenants, and Officers of equivalent rank | 2 6 | 45 12 6 | | |
| (vii) Midshipmen, and Officers of equivalent rank | | | | |
| (u) Torpedo-boat Destroyer pay, while actually living on board Torpedo-boat Destroyers in commission— | | | | |
| (i) Lieutenants and above, and Officers of equivalent rank | 1 6 | 27 7 6 | | |
| (ii) Sub-Lieutenants, and Officers of equivalent rank | 1 0 | 18 5 0 | | |
| (iii) Midshipmen, and Officers of equivalent rank | | | | |
| (v) Torpedo-boat pay, while actually living on board Torpedo boats in commission— | | | | |
| (i) Lieutenants and above, and Officers of equivalent rank | 3 0 | 54 15 0 | | |
| (ii) Sub-Lieutenants } and Officers of equivalent rank | 2 0 | 36 10 0 | | |
| (iii) Midshipmen } | | | | |
| (w) Submarine pay | | | | |
| All Officers | 6 0 | 109 10 0 | | |
| (x) Navigating Parties of ships not in commission— | | | | |
| (i) Lieutenants and above, and Officers of equivalent rank | 3 0 | 54 15 0 | | |
| (ii) Sub-Lieutenants, and Officers of equivalent rank | 2 0 | 36 10 0 | | |
| (iii) Midshipmen, and Officers of equivalent rank | 1 6 | 27 7 6 | | |
| (y) Allowances to Interpreters, to officers employed in surveying, "Field Allowances, &c., at various rates as in Mother Navy. | | | | |

* Travelling allowance at four times this rate per diem should be paid in lieu of lodging allowance to officers travelling on duty or staying on duty in a place for less than fourteen days.

TABLE II.—EMOLUMENTS PROPOSED FOR WARRANT OFFICERS AND COMMISSIONED WARRANT OFFICERS OF THE COMMONWEALTH NAVY, AND FOR OFFICERS PROMOTED FROM THESE RANKS.

| Rank. | Seniority in Rank. | Emoluments per Diem. | | | | Total Emoluments. | Remarks. | | | |
|------------------------------------|--------------------|----------------------|------------------|---|-----------------|-------------------|--|-----|-----|-------|
| | | "Active Pay." | | Additional Emoluments.* | | | | | | |
| | | Mother Navy. | Australian Navy. | Value of Rations, Medical Attendance, Uniform Allowance.† | "Deferred Pay." | | | | | |
| | | s. d. | s. d. | s. d. | s. d. | s. d. | | | | |
| Gunner (and Gunner T.) | On promotion .. | 5 6 | | | | | In Mother Navy, these officers receive in addition, Gunnery, &c., Allowance of 1s. to 1s. 6d. per diem | | | |
| Boatswain | " .. | 5 6 | | | | | | | | |
| Signal Boatswain | " .. | 5 6 | 10 0 | 2 5 | 4 0 | 16 5 | | | | |
| Warrant Telegraphist | " .. | 5 6 | | | | | | | | |
| Carpenter | " .. | 5 6 | | | | | | | | |
| Artificer Engineer | " .. | 8 6 | | | | | | | | |
| Warrant Writer | " .. | 7 0 | | | | | | | | |
| Head Steward | " .. | 8 0 | | | | | | | | |
| Chief Master-at-Arms | " .. | 7 0 | | | | | | | | |
| Instructor in Cookery | " .. | 5 6 | | | | | | | | |
| Above Ranks .. | After 4 years .. | Various | | | | | 10 6 | 2 5 | 4 0 | 16 11 |
| | After 8 years .. | " | | | | | 11 0 | 2 5 | 4 0 | 17 5 |
| | After 12 years .. | " | 11 6 | 2 5 | 4 0 | 17 11 | | | | |
| Chief Gunner | On promotion .. | 10 0 | 12 0 | 2 5 | 5 0 | 19 5 | Are designated "Commissioned Warrant Officers" | | | |
| Chief Boatswain | " .. | 10 0 | | | | | | | | |
| Chief Signal Boatswain | " .. | 10 0 | | | | | | | | |
| Chief Warrant Telegraphist | " .. | 10 0 | | | | | | | | |
| Chief Artificer Engineer | " .. | 11 6 | | | | | | | | |
| | " .. | | | | | | | | | |

* The additional emoluments in the Mother Navy include value of rations, medical attendance, and "pension rights"; but no allowance is given for uniform except a gratuity of £25 on promotion to Warrant Officer, and a further gratuity of £50 on promotion to Lieutenant or equivalent rank.
† Value of rations = 1s. 2d.; medical attendance = 3d.; uniform allowance = 1s. Total, 2s. 5d.

TABLE II.—EMOLUMENTS PROPOSED FOR WARRANT OFFICERS AND COMMISSIONED WARRANT OFFICERS OF THE COMMONWEALTH NAVY, ETC.—continued.

| Rank. | Seniority in Rank. | Emoluments per Diem. | | | | Total Emoluments. | Remarks. |
|---|--------------------|------------------------------|------------------|---|-----------------|-------------------|--|
| | | "Active Pay." | | Additional Emoluments.* | | | |
| | | Mother Navy. | Australian Navy. | Value of Rations, Medical Attendance, Uniform Allowance.† | "Deferred Pay." | | |
| | | s. d. | s. d. | s. d. | s. d. | s. d. | |
| Commissioned Warrant Officers as above | After 4 years .. | { 11 0 to 12 6 12 0 | 13 0 | 2 5 | 5 0 | 20 5 | Lieutenants, &c., promoted from below Commissioned Warrant rank for gallantry, &c., to receive the ordinary rates of pay of Lieutenants, &c. |
| | After 8 years .. | { 13 6 to 13 6 | | | | | |
| Lieutenants and Officers of equivalent rank promoted from Commissioned Warrant rank | On promotion .. | { 13 0 to 14 6 14 0 | 16 0 | 2 5 | 6 0 | 24 5 | |
| | After 4 years .. | { 15 6 to 15 0 | | | | | |
| | After 8 years .. | { 16 6 to 16 6 | | | | | |
| | | { 18 0 to 18 0 | | | | | |

* The additional emoluments in the Mother Navy include value of rations, medical attendance, and "pension rights"; but no allowance is given for uniform except a gratuity of £25 on promotion to Warrant Officer, and a further gratuity of £50 on promotion to Lieutenant or equivalent rank.
† Value of rations = 1s. 2d.; medical attendance = 3d.; uniform allowance = 1s. Total, 2s. 5d.

ADDITIONAL ALLOWANCES.

In addition to the above rates, the following special allowances should be paid to Warrant Officers and Commissioned Warrant Officers while performing special duties; these allowances should be added to the "Active Pay" but would not increase the "Deferred Pay." (Lieutenants, &c., promoted from Warrant rank or Commissioned Warrant rank would be dealt with, as regards additional allowances, under the Regulation laid down above for Lieutenants, &c. :—

| Nature of Allowance. | Per diem. | | Per annum. | |
|--|-----------|----------|------------|---------|
| | s. d. | £ s. d. | £ s. d. | £ s. d. |
| <i>I.—Officers of the Military Branch.</i> | | | | |
| (a) Command money, when in command of a ship or torpedo boat | 2 0 | 36 10 0 | | |
| (b) Navigating allowance | 2 0 | 36 10 0 | | |
| (c) Gunnery or Torpedo allowance to Gunner, or Torpedo Gunner, while employed in lieu of a Gunnery or Torpedo Lieutenant | 1 0 | 18 5 0 | | |
| <i>II.—Officers of the Engineer Branch.</i> | | | | |
| (d) In charge of machinery of a ship or torpedo boat | 1 0 | 18 5 0 | | |
| (e) To Senior Engineer Officer next in rank to Engineer Officer in Charge | 2 0 | 36 10 0 | | |
| | 1 0 | 18 5 0 | | |
| <i>III.—General, for Officers of all Branches.</i> | | | | |
| (f) Lodging allowance* when not provided with quarters | 3 6 | 63 17 6 | | |
| (g) Torpedo-boat Destroyer pay while actually living on board T.B. Destroyers in Commission | 1 0 | 18 5 0 | | |
| (h) Torpedo Boat pay while actually living on board Torpedo Boats in Commission | 2 0 | 36 10 0 | | |
| (i) Submarine pay | 6 0 | 109 10 0 | | |
| (j) Navigating parties of ships not in Commission— | | | | |
| (i) Chief Warrant Officers | 2 0 | 36 10 0 | | |
| (ii) Warrant Officers | 1 6 | 27 7 6 | | |
| (k) Surveying, &c., at various rates as in Mother Navy. | | | | |

* Travelling allowance, at four times this rate per diem, should be paid in lieu of lodging allowance to officers travelling on duty, or staying on duty in any place for less than 14 days.

TABLE III.—EMOLUMENTS PROPOSED FOR PETTY OFFICERS, MEN, AND BOYS OF THE COMMONWEALTH NAVY.

NOTE.—The "Active Pay" shown under "Australian Navy" is the *average* proposed for each grade; it may be necessary to vary it for different classes in each grade.

| Rating. | Seniority in Rating. | Emoluments per Diem. | | | | | Remarks. |
|------------------------------------|---------------------------|----------------------|------------------|--|------------------|-------------------|----------|
| | | "Active Pay." | | Additional Emoluments.* | | Total Emoluments. | |
| | | Mother Navy. | Australian Navy. | Value of Rations, Medical Attendance, Clothing Allowance.† | "Deferred Pay."‡ | | |
| | | <i>s. d.</i> | <i>s. d.</i> | <i>s. d.</i> | <i>s. d.</i> | <i>s. d.</i> | |
| Boy (Seaman), 2nd Class | .. .. | 0 6 | 1 0 | 1 11 | .. | 2 11 | .. .. . |
| Boy (Seaman), 1st Class | .. .. | 0 7 | .. | .. | .. | .. | .. .. . |
| Boy Telegraphist | .. .. | 0 7 | .. | .. | .. | .. | .. .. . |
| Signal Boy | .. .. | 0 7 | .. | .. | .. | .. | .. .. . |
| Boy Writer | .. .. | 1 0 | 1 6 | 1 11 | .. | 3 5 | .. .. . |
| Ship's Steward's Boy | .. .. | 0 7 | .. | .. | .. | .. | .. .. . |
| Boy Servant | .. .. | 1 0 | .. | .. | .. | .. | .. .. . |
| Band Boy | .. .. | 0 8 | .. | .. | .. | .. | .. .. . |
| Ordinary Seaman | On rating | 1 3 | .. | .. | .. | .. | .. .. . |
| Stoker, 2nd Class | .. .. | 1 8 | .. | .. | .. | .. | .. .. . |
| Ordinary Signalman | .. .. | 1 3 | .. | .. | .. | .. | .. .. . |
| Ordinary Telegraphist | .. .. | 1 3 | .. | .. | .. | .. | .. .. . |
| Acting Ship's Steward's Assistant | .. .. | .. | .. | .. | .. | .. | .. .. . |
| Acting 3rd Writer | .. .. | .. | .. | .. | .. | .. | .. .. . |
| Second Cook's Mate | .. .. | 1 8 | 3 0 | 1 11 | 1 4 | 6 3 | .. .. . |
| Acting Sick Berth Attendant | .. .. | 1 4 | .. | .. | 1 0‡ | 5 11‡ | .. .. . |
| Ordinary Bandsman | .. .. | .. | .. | .. | .. | .. | .. .. . |
| Officer's Steward (3rd Class) | .. .. | 1 3 | .. | .. | .. | .. | .. .. . |
| Officer's Cook (Class) | .. .. | .. | .. | .. | .. | .. | .. .. . |
| Able Seaman (short service) | .. .. | 1 5§ | .. | .. | .. | .. | .. .. . |
| Stoker | .. .. | 1 10 | .. | .. | .. | .. | .. .. . |
| Officer's Steward (3rd Class) | Over 3 years | 1 6 | 3 9 | 1 11 | 1 0‡ | 6 8‡ | .. .. . |
| Officer's Cook (Class) | .. .. | .. | .. | .. | .. | .. | .. .. . |
| Able Seaman (long service) | On rating | 1 8§ | .. | .. | .. | .. | .. .. . |
| Stoker | .. .. | 2 1 | .. | .. | .. | .. | .. .. . |
| Signalman | .. .. | 1 11 | .. | .. | .. | .. | .. .. . |
| Telegraphist | .. .. | 1 11 | .. | .. | .. | .. | .. .. . |
| Ship's Steward's Assistant | On confirmation in rating | 1 4 | .. | .. | .. | .. | .. .. . |
| 3rd Writer | .. .. | 2 0 | .. | .. | .. | .. | .. .. . |
| Sick Berth Attendant | .. .. | 2 0 | 4 6 | 1 11 | 1 4 | 7 3 | .. .. . |
| Officer's Steward, 2nd Class | On rating | 1 9 | .. | .. | 1 0‡ | 6 11‡ | .. .. . |
| Officer's Cook, 2nd Class | .. .. | 1 9 | .. | .. | .. | .. | .. .. . |
| Cook's Mate | .. .. | 2 0 | .. | .. | .. | .. | .. .. . |
| Bandsman | .. .. | 1 5 | .. | .. | .. | .. | .. .. . |
| Cooper's Crew | On entry | 2 6 | .. | .. | .. | .. | .. .. . |
| Carpenter's Crew | .. .. | 2 4 | .. | .. | .. | .. | .. .. . |
| Armourer's Crew | .. .. | 2 4 | .. | .. | .. | .. | .. .. . |
| Leading Seaman | On promotion | 1 10§ | .. | .. | .. | .. | .. .. . |
| Leading Stoker | .. .. | 2 4 | .. | .. | .. | .. | .. .. . |
| Leading Signalman | .. .. | 2 1 | .. | .. | .. | .. | .. .. . |
| Leading Telegraphist | .. .. | 2 1 | .. | .. | .. | .. | .. .. . |
| Sailmaker's Mate | On rating | 2 1 | .. | .. | .. | .. | .. .. . |
| Leading Ship's Steward's Assistant | .. .. | 1 10 | .. | .. | .. | .. | .. .. . |
| 2nd Writer | .. .. | 3 0 | .. | .. | .. | .. | .. .. . |
| 2nd Sick Berth Steward | .. .. | 2 3 | .. | .. | .. | .. | .. .. . |
| Officer's Steward, 2nd Class | Over 3 years | 2 0 | 4 10 | 1 11 | 1 6 | 8 3 | .. .. . |
| Officer's Cook, 2nd Class | .. .. | 2 0 | .. | .. | 1 2‡ | 7 11‡ | .. .. . |
| Leading Cook's Mate | On rating | 2 3 | .. | .. | .. | .. | .. .. . |
| Band Corporal | .. .. | 2 0 | .. | .. | .. | .. | .. .. . |
| Ship's Musician | .. .. | 2 0 | .. | .. | .. | .. | .. .. . |
| 2nd Cooper | .. .. | 2 10 | .. | .. | .. | .. | .. .. . |
| Leading Carpenter's Crew | .. .. | 2 8 | .. | .. | .. | .. | .. .. . |
| Armourer's Mate | .. .. | 2 8 | .. | .. | .. | .. | .. .. . |
| Blacksmith's Mate | .. .. | 2 9 | .. | .. | .. | .. | .. .. . |
| Plumber's Mate | .. .. | 2 5 | .. | .. | .. | .. | .. .. . |
| Painter, 2nd Class | On entry | 2 5 | .. | .. | .. | .. | .. .. . |
| Shipwright | .. .. | 4 0 | .. | .. | .. | .. | .. .. . |

* The additional emoluments in the Mother Navy include value of rations and medical attendance, and "pension rights," but certain clothing gratuities are granted instead of a daily clothing allowance.
 † Value of rations = 1s. 2d.; medical attendance = 3d.; clothing allowance = 6d.; total, 1s. 11d.
 ‡ For ratings who have entered for "short service."
 § Exclusive of Gunnery, Torpedo, &c., allowances.

TABLE III.—EMOLUMENTS PROPOSED FOR PETTY OFFICERS, MEN, AND BOYS OF THE COMMONWEALTH NAVY—continued.

| Rating. | Seniority in Rating. | Emoluments per Diem. | | | | | Remarks. |
|--|----------------------|----------------------|------------------|--|------------------|-------------------|--|
| | | "Active Pay." | | Additional Emoluments.* | | Total Emoluments. | |
| | | Mother Navy. | Australian Navy. | Value of Rations, Medical Attendance, Clothing Allowance.† | "Deferred Pay."‡ | | |
| | | <i>s. d.</i> | <i>s. d.</i> | <i>s. d.</i> | <i>s. d.</i> | <i>s. d.</i> | |
| "Leading Ratings" in previous page | Over 3 years | Various | 5 1 | 1 11 | 1 6 | 8 6 | .. .. . |
| Petty Officer (Seaman) | On rating | 2 8\|\| | .. | .. | .. | .. | .. .. . |
| Yeoman of Signals | | 3 0 | .. | .. | .. | .. | .. .. . |
| Petty Officer (Telegraphist) | | 3 0 | .. | .. | .. | .. | .. .. . |
| Stoker Petty Officer | | 2 10 | .. | .. | .. | .. | .. .. . |
| Sailmaker | | 2 6 | .. | .. | .. | .. | .. .. . |
| Ship's Steward, 1st Class | | .. | .. | .. | .. | .. | |
| 1st Writer | | 4 0 | .. | .. | .. | .. | .. .. . |
| Sick Berth Steward | | 3 2 | .. | .. | .. | .. | .. .. . |
| Officer's Steward, 1st Class | | 2 3 | .. | .. | .. | .. | .. .. . |
| Officer's Cook, 1st Class | | 2 3 | 5 10 | 1 11 | 1 9 | 9 6 | These are all designated "Petty Officer ratings" |
| Ship's Cook | | 2 9 | .. | .. | 1 4‡ | 9 1‡ | .. .. . |
| Bandmaster | | 2 10½ | .. | .. | 2 3§ | 10 0§ | .. .. . |
| Cooper | | 3 2 | .. | .. | .. | .. | .. .. . |
| Carpenter's Mate | | 4 6 | .. | .. | .. | .. | .. .. . |
| Armourer | | 3 6 | .. | .. | .. | .. | .. .. . |
| Blacksmith | | 3 0 | .. | .. | .. | .. | .. .. . |
| Plumber | | 3 0 | .. | .. | .. | .. | .. .. . |
| Painter, 1st Class | | 3 0 | .. | .. | .. | .. | .. .. . |
| Ship's Corporal, 2nd Class | | 2 4 | .. | .. | .. | .. | .. .. . |
| Ship's Corporal, 1st Class | | 3 0 | .. | .. | .. | .. | .. .. . |
| "Petty Officer ratings" as above | Over 3 years | Various | 6 1 | 1 11 | 1 9 | 9 9 | .. .. . |
| | | .. | .. | .. | 1 4‡ | 9 4‡ | .. .. . |
| | | .. | .. | .. | 2 3§ | 10 3§ | .. .. . |
| | | .. | .. | .. | 1 9 | 10 0 | .. .. . |
| .. .. | Over 6 years | .. | 6 4 | 1 11 | 1 4‡ | 9 7‡ | .. .. . |
| | | .. | .. | .. | 2 3§ | 10 6§ | .. .. . |
| Chief Petty Officer | On rating | 3 4\|\| | .. | .. | .. | .. | .. .. . |
| Chief Stoker | | 3 6 | .. | .. | .. | .. | .. .. . |
| Chief Yeoman of Signals | | 3 10 | .. | .. | .. | .. | .. .. . |
| Chief Petty Officer Telegraphist | | 3 10 | .. | .. | .. | .. | .. .. . |
| (Chief) Ship's Steward | | 3 0 | .. | .. | .. | .. | .. .. . |
| Chief Writer | | 5 0 | .. | .. | .. | .. | .. .. . |
| Chief Sick Berth Steward | | 4 2 | 6 8 | 1 11 | 2 0 | 10 7 | These are all designated "Chief Petty Officer ratings" |
| Officer's Chief Steward | | 3 0 | .. | .. | 1 6‡ | 10 1‡ | .. .. . |
| Officer's Chief Cook | | 3 0 | .. | .. | 2 6§ | 11 1§ | .. .. . |
| Chief Ship's Cook | | 3 6 | .. | .. | .. | .. | .. .. . |
| Chief Bandmaster | | 3 6 | .. | .. | .. | .. | .. .. . |
| Chief Carpenter's Mate | | 4 9 | .. | .. | .. | .. | .. .. . |
| Chief Armourer | | 4 0 | .. | .. | .. | .. | .. .. . |
| Master-at-Arms | | 4 0 | .. | .. | .. | .. | .. .. . |
| "Chief Petty Officer" ratings as above | Over 3 years | Various | 6 11 | 1 11 | 2 0 | 10 10 | .. .. . |
| | | .. | .. | .. | 1 6‡ | 10 4‡ | .. .. . |
| | | .. | .. | .. | 2 6§ | 11 4§ | .. .. . |
| | | .. | .. | .. | 2 0 | 11 1 | .. .. . |
| .. .. | Over 6 years | .. | 7 2 | 1 11 | 1 6‡ | 10 7‡ | .. .. . |
| | | .. | .. | .. | 2 6§ | 11 7§ | .. .. . |
| | | .. | .. | .. | 2 0 | 11 4 | .. .. . |
| .. .. | Over 9 years | .. | 7 5 | 1 11 | 1 6‡ | 10 10‡ | .. .. . |
| | | .. | .. | .. | 2 6§ | 11 10§ | .. .. . |
| | | .. | .. | .. | 2 0 | 11 7 | .. .. . |
| .. .. | Over 12 years | .. | 7 8 | 1 11 | 1 6‡ | 11 1‡ | .. .. . |
| | | .. | .. | .. | 2 6§ | 12 1§ | .. .. . |

* The additional emoluments in the Mother Navy include value of rations and medical attendance, and "pension rights," but certain clothing gratuities are granted instead of a daily clothing allowance.
 † Value of rations = 1s. 2d.; medical attendance = 3d.; clothing allowance = 6d.; total, 1s. 11d.
 ‡ For ratings who have entered for "short service."
 § After completing 12 years' man's service and re-engaging for a further 10 years' service.
 || Exclusive of higher Gunnery and Torpedo Allowances, &c.

TABLE III.—EMOLUMENTS PROPOSED FOR PETTY OFFICERS, MEN, AND BOYS OF THE COMMONWEALTH NAVY—*continued.*

| Rating. | Seniority in Rating. | Emoluments per Diem. | | | | | Remarks. |
|--|----------------------|----------------------|------------------|--|-----------------|-------------------|--------------------------------|
| | | "Active Pay." | | Additional Emoluments.* | | Total Emoluments. | |
| | | Mother Navy. | Australian Navy. | Value of Rations, Medical Attendance, Clothing Allowance.† | "Deferred Pay." | | |
| | | <i>s. d.</i> | <i>s. d.</i> | <i>s. d.</i> | <i>s. d.</i> | <i>s. d.</i> | |
| Mechanician .. | On rating .. | 4 6 | 6 11 | 1 11 | 2 0 | 10 10 | Must be "long service" ratings |
| | After 3 years .. | 5 0 | 7 2 | 1 11 | 2 6§ | 11 4§ | |
| | After 6 years .. | 5 6 | 7 5 | 1 11 | 2 0 | 11 1 | |
| | After 9 years .. | 6 0 | 7 8 | 1 11 | 2 6§ | 11 7§ | |
| | After 12 years .. | 6 6 | 7 11 | 1 11 | 2 0 | 11 4 | |
| Engine-room Artificer Electrician .. | 4th Class .. | 5 6 | 7 5 | 1 11 | 2 0 | 11 4 | Must be "long service" ratings |
| | 3rd Class .. | 5 9 | 7 8 | 1 11 | 2 6§ | 11 10§ | |
| | 2nd Class .. | 6 0 | 7 11 | 1 11 | 2 0 | 11 7 | |
| Chief Engine-room Artificer Chief Electrician | 1st Class .. | 6 6 | 8 2 | 1 11 | 2 6§ | 12 1§ | Must be "long service" ratings |
| | 2nd Class .. | 7 0 | 8 8 | 1 11 | 2 0 | 12 7 | |
| | 1st Class .. | 7 6 | 9 11 | 1 11 | 2 6§ | 13 1§ | |
| | | | | | 2 0 | 12 10 | |
| | | | | | 2 6§ | 13 4§ | |

* The additional emoluments in the Mother Navy include value of rations and medical attendance, and "pension rights," but certain clothing gratuities are granted instead of a daily clothing allowance.

† Value of rations = 1s. 2d.; medical attendance = 3d.; clothing allowance = 6d.; total, 1s. 11d.

‡ After completing 12 years' man's service and re-engaging for a further 10 years' service.

ADDITIONAL ALLOWANCES FOR PETTY OFFICERS, MEN, AND BOYS

(a)—GOOD CONDUCT BADGES AND MEDAL.

It is recommended that Good Conduct Badges and Good Conduct Medals be awarded as follows for all ratings up to and including Chief Petty Officers, but Good Conduct Badges should not be worn by Chief Petty Officers:—

(ii) The qualifying service should be—

| | | |
|-------------------------|---------|---|
| For one Badge .. | 3 years | } provided the man's conduct has been as required by the Regulations. |
| " two Badges .. | 8 " | |
| " three Badges .. | 13 " | |
| " Good Conduct Medal .. | 15 " | |

(iii) These Badges and Medals should entitle their holders to the following emoluments:—

| | "Active Pay." | "Deferred Pay." |
|-------------------------|---------------|-----------------|
| | <i>d.</i> | <i>d.</i> |
| One Badge .. | 2 | 1 |
| Two Badges .. | 4 | 2 |
| Three Badges .. | 6 | 3 |
| Medal and three Badges* | 6 | 4 |

* "Deferred Pay" not to be earned by Medal except during period when the holder has also three Good Conduct Badges.

(b)—MISCELLANEOUS ALLOWANCES.

The following allowances should be granted in addition to the emoluments in Table III., being added to the "Active Pay," but no increase should be made in "Deferred Pay":—

(The allowances marked * refer to non-substantive ratings, and should be paid so long as the man remains qualified under the Regulations; others, so long as he is performing the special duty, &c.)

| | Per Diem. <i>s. d.</i> |
|---|---------------------------|
| Diving,* Artificer Diver } exclusive of extra pay while actually employed } | 0 6 |
| Diver ... } in diving } | 0 1 |
| Diving Instructor, while performing the duty ... | 0 8 |
| Engineer's Writer.—To Stoker rating, while performing the duty... | 0 |

(b)—MISCELLANEOUS ALLOWANCES—*continued.*

| | Per Diem. <i>s. d.</i> |
|--|------------------------------|
| Engines, Charge Allowance.—To Chief or other engine-room Artificer, while in charge of machinery of ship or torpedo boat ... | 1 0 |
| Field Allowance, while employed in military operations on shore, all ratings ... | 0 6 |
| Gunner's Mate* } open to Leading Seamen, and to Chief and other { | 0 8 |
| Torpedo Gunner's Mate* } Seaman Petty Officers ... } | 0 8 |
| Gunlayer, 1st Class,* open to { Gunner's Mates, in addition to pay as such } | 0 8 |
| { Leading Seamen, not Gunner's Mates } | |
| { Chief and other Seaman Petty Officers, not } | |
| { Gunner's Mates ... } | |
| Gunlayer, 2nd Class* } open to Able Seamen and Leading Seamen and { | 0 6 |
| Leading Torpedo Man* } to Chief and other Seaman Petty Officers } | 0 6 |
| Gunlayer, 3rd Class* } | 0 2 |
| Seaman Gunner* } open to Able Seamen and Leading Seamen (see | Table III., Remarks Column). |
| Seaman Torpedo Man* } | |
| Coxswain of Torpedo Boat.*—Open to Chief and other Seamen Petty Officers not receiving pay for any other non-substantive rating... | 0 7 |
| Lamp-trimmer } To Able Seaman or Stoker doing duty as { Lamp-trimmer } | 0 2 |
| Butcher ... } Butcher ... } | |
| Leave Allowance.—When leave granted exceeds two days (in lieu of rations)... | 1 2 |
| Physical Training Instructor (open { 2nd Class* } | 0 3 |
| { to Leading Seamen and Chief { 1st " " } | |
| { or other Seaman Petty Officers) { Staff " " } | 0 6 |
| Yeoman of Stores.—Open to Chief Stoker or Stoker Petty Officer ... } | 0 2 |
| Lodging Allowance, when not provided with quarters— | 0 4 |
| Chief and other Petty Officers ... | 2 0 |
| Leading Ratings ... | 1 9 |
| Others ... | 1 6 |
| Travelling Allowance, at four times the rate of Lodging Allowance. | |
| Torpedo-boat Destroyer pay, while actually living on board— | |
| Torpedo-boat Destroyers in Commission— | |
| Chief and other Petty Officers ... | 0 8 |
| Leading Ratings ... | 0 6 |
| Others } Men ... | 0 5 |
| { Boys ... | 0 3 |
| Torpedo-boat pay, while actually living on board— | |
| Torpedo-boats in Commission— | |
| Chief and other Petty Officers ... | 1 3 |
| Leading Ratings ... | 1 0 |
| Others } Men ... | 0 9 |
| { Boys ... | 0 6 |
| Submarine pay—Chief and other Petty Officers } | 2 6 |
| Leading Ratings ... } | |
| Others ... } | 2 0 |
| Navigating Parties of ships not in Commission— | |
| Same rates as Torpedo-boat pay ... | |

APPENDIX C.

RECRUITING.

(I.)—PROCEDURE.

For the purposes of recruiting there will be two Recruiting Areas, Eastern and Western (see paragraph 5 of Part I.). Eastern, including Queensland and New South Wales. Western, including Tasmania, Victoria, South Australia, and Western Australia.

2. The main Recruiting Centre for the Eastern Area will be Sydney, and there will be Sub-centres at Brisbane and Newcastle. The main Recruiting Centre for the Western Area will be Melbourne, and there will be Sub-centres at Adelaide, Hobart, and Fremantle. Recruiting will also be carried out by all Naval Reserve Commandants mentioned in Appendix E.

3. A Retired Officer should be detailed at Sydney and also at Melbourne as Chief Recruiting Officer to be in charge of the recruiting of each Recruiting Area; the Naval Reserve Commandants (see Appendix F) should be in charge of the recruiting at the sub-centres acting under the instructions of the Chief Recruiting Officer of their area as far as recruiting work is concerned. The Chief Recruiting Officers should be provided with convenient offices in the cities of Sydney and Melbourne.

4. As far as practicable the requirements of the Fleet should be divided equally between the two Recruiting Areas, and each area should, if possible, supply the needs of the portion of the Fleet affiliated to it.

5. The numbers which each area is required to supply should be furnished by the Naval Board to the Chief Recruiting Officers annually, before the commencement of the financial year. Chief Recruiting Officers should then have authority to recruit up to such numbers, and as necessary to maintain the numbers, reporting periodically to the Naval Board the numbers entered, &c.

6. Each Chief Recruiting Officer should be provided with such Clerical and Recruiting Staff as may be found necessary; the Naval Reserve Commandants at Recruiting Sub-centres should each be supplied with a staff for Recruiting work.

7. Arrangements for the Medical examination of Recruits should be made at each Recruiting Centre and Sub-centre (Naval Medical Officers being utilized where available), and also at all other places named as Naval Bases or Sub-bases in paragraph 7 of Part I.

8. Under the Defence Act every male inhabitant of Australia between the ages of 14 and 26 is registered by a Military Area Officer, and either attends for training, or re-registers, annually. The Area Officers and their Instructional Non-Commissioned Officers will, therefore, be in a favourable position for assisting Naval Recruiting. It is suggested that the Military Board should be asked to sanction such Officers and Non-Commissioned Officers being made Naval Recruiters, a capitation allowance for each recruit *finally entered* being paid from Naval Funds to the Officer or Non-Commissioned Officer, under a similar system to that pursued in the United Kingdom as regards the Marine Recruiting Staff. If this proposal be adopted it will be unnecessary to provide a Naval Recruiting Staff at other places than those named as Recruiting Centres and Sub-centres.

9. Naval Recruiting pamphlets, &c., should be distributed by the agency of the Area Officers and their Staff, and should be displayed in all Post-offices.

10. Recruiting from persons liable to be trained under the Defence Act who are allotted for training in the Naval Forces would be carried out by the Naval Reserve Commandant (see Appendix E).

11. The procedure to be followed in the case of persons recruited by Military Area Officers or their Non-Commissioned Officers would be—

- (a) If recruited by Non-Commissioned Officer to be taken before the Area Officer for his inspection.
- (b) If the Area Officer considers him a desirable candidate he will cause the recruit to be medically examined (by the Medical Examining Officer who carries out the examination laid down in Article 144 of the Defence Act).
- (c) If the Medical examination is satisfactory, the Area Officer will send the recruit to the nearest Recruiting Centre, Sub-centre, Naval Base, or Sub-base. If to one of the latter three, the Naval Reserve Commandant will, if he is satisfied with the recruit, send him on to the Centre, where he will be again examined by a Naval Medical Officer, and, if found fit, be entered into the Navy.

12. Persons recruited by Naval Reserve Commandants, after having been medically examined locally and found fit, should be sent direct to the Centre of their Recruiting Area

(II.)—REGULATION OF ENTRY OF PERSONNEL.

(Total personnel required—14,844.)

1. *War Requirements of the Sea-going Fleet.*—The total of the complete sea-going complements of the ships of the Fleet Unit is 2,501, the total of the complete sea-going complements of the completed Fleet (including these 2,501) is 13,105.

2. *Peace Requirements of the Sea-going Fleet.*—It is proposed that a certain proportion of the vessels shall be manned in peace with reduced crews (*viz.*, 2 Armoured Cruisers, 4 Protected Cruisers, 6 Torpedo-boat Destroyers). This would set free 1,734 of the 13,105; *i.e.*, the number required to man the Fleet in peace time will be 11,371.

3. *Peace Requirements of Harbour Establishments.*—The Harbour Establishments (including Central Administration, Naval Barracks, Training Establishments, &c.) will require, in peace time, a total personnel of 1,137, exclusive of those under training.

4. *Additional Requirements.*—In addition to the total peace requirements of paragraphs 2 and 3 (*i.e.*, 12,508), provision must be made for new entrants into the Navy, as such persons cannot be regarded as effective units until embarked in the Fleet, and cannot, therefore, be counted as part of the numbers mentioned in paragraphs 1, 2, or 3.

The actual periods after entry during which new entrants remain “non-effective” must necessarily depend upon the length of the preliminary courses of training which may be laid down for their rank or rating, varying from four years for Naval Cadets to three months for some short-service ratings.

Allowing for the different periods of preliminary training, it is estimated that the number of “non-effectives” may be taken as a constant figure of 750.

This increases the peace requirements from 12,508 to 13,258, and the war requirements from 13,105 to 13,855.

5. *Further Requirements.*—It is necessary also to provide for the training and re-qualification of the “Specialist ranks” and Higher Gunnery, Higher Torpedo, and other specially skilled ratings; which, it is proposed, should, in the earlier stages of the Australian Navy, be carried out in the United Kingdom, in order to avoid the very heavy initial expenses which would attach to the provision by the Commonwealth of the necessary plant, &c.

These “higher ratings” will be required to re-qualify at intervals of three years (except that men within two years of completing their term of engagement would not be allowed to do so unless they re-engaged for a further term).

Under the arrangements proposed in Part I. the ships of the Australian Navy will, as a general rule be kept in commission with complete complements for a certain period, and then in commission with reduced crew for another period; during the latter period they would undergo minor refit, and their crews go through the prescribed courses of training and re-qualification; the ships would then be brought up to full complements for another period, and so on, until necessary for them to undergo general refit in Dockyard.

One-third of the “higher ratings” should be sent to the United Kingdom to *re-qualify*, and also a proportion of the lower ratings to *qualify* for higher and skilled ratings (the proportion being determined by the annual “wastage” in the latter ratings), during each year.

While such ratings are absent from Australia, whether in the United Kingdom or on passage, they are not available for the Australian Fleet, and provision must, therefore, be made for meeting the war needs of the Fleet without them, *i.e.*, they are additional to both the peace and war needs of the Fleet.

In view of the time occupied on passage, the length of the qualifying and re-qualifying courses, it is considered that 16½ per cent. of the total number of “higher ratings” required will be absent for re-qualification, and that lower ratings to the extent of 7 per cent. of that number will be absent for qualification; these figures would be constant, and make a total of 305 (see Table on next page).

It is recommended, in view of the courses being approximately of 3 months’ duration, that the ratings for re-qualification should be sent to the United Kingdom at half-yearly intervals; the ratings for qualification should be sent annually.

The peace requirements are thus brought up to 13,563 (13,258 + 305); but for war it is estimated that 43 of these higher ratings (see Table on next page) could be provided from Harbour Establishments, leaving a balance of 262, which brings the war requirements up to 14,117 (13,855 + 262).

6. *War Requirements of Harbour Establishments.*—The war complements of the Harbour Establishments, with the numbers allowed for the Central Administration, would be 727; thus the total war requirements of the Navy become 14,844 (14,117 + 727).

TABLE SHOWING THE ADDITIONAL "SPECIALIST RANKS" AND "HIGHER RATINGS" NEEDED TO MEET WAR REQUIREMENTS.

| | (a) | (b) | (c) | (d) | (e) | (f) |
|--|--|---|---|---|--|---|
| | Total Allowed to the Fleet for all Services. | One-third of Total (a) to Re-qualify each Year. | Half of (b) to be sent to United Kingdom every Half-year to Re-qualify. | 7 per cent. of (a), representing Number required to be sent to United Kingdom each year to Qualify. | Numbers Available in Harbour Establishments. | Numbers to be Added to Fleet (c) + (d) - (e). |
| <i>Specialist Ranks.</i> | | | | | | |
| Gunnery, Torpedo, &c., Officers .. | 253 | 86 | 45 | 19 | 12 | 52 |
| <i>Specialist Ratings.</i> | | | | | | |
| Chief and other Yeomen of Signals .. | 84 | 28 | 14 | 5 | 2 | 17 |
| Petty Officer Telegraphists .. | 24 | 8 | 4 | 2 | .. | 6 |
| Estimated Number of Senior Carpenter Ratings .. | 30 | 10 | 5 | 2 | 7 | .. |
| Chief Armourers and Armourers .. | 50 | 17 | 8 | 3 | 4 | 7 |
| Electricians .. | 86 | 26 | 13 | 5 | .. | 18 |
| <i>Higher Gunnery Ratings.</i> | | | | | | |
| Gunnery Mate, Gunlayer, 1st Class .. | 17 | 6 | 3 | 2 | .. | 5 |
| " " Other .. | 73 | 24 | 12 | 4 | 8 | 8 |
| Gunlayers, 1st Class .. | 48 | 16 | 8 | 3 | .. | 11 |
| " " 2nd Class .. | 284 | 94 | 47 | 18 | .. | 65 |
| Torpedo Gunnery Mates .. | 61 | 20 | 10 | 4 | 3 | 11 |
| " " Coxswain .. | 25 | 8 | 4 | 2 | 1 | 5 |
| Leading Torpedo-men .. | 176 | 58 | 29 | 11 | 2 | 38 |
| Candidates for Mechanician .. | .. | .. | Not calculated | .. | .. | .. |
| Engine-room Artificers qualified in Hydraulics .. | 17 | 6 | 3 | 2 | .. | 5 |
| Engine-room Artificers qualified in Electricity and Torpedo .. | 21 | 7 | 4 | 2 | 1 | 5 |
| Physical Trainers, 1st Class .. | 16 | 5 | 3 | 1 | 2 | 2 |
| " " 2nd Class .. | 35 | 11 | 6 | 2 | 1 | 7 |
| Totals .. | 1,300 | 430 | 218 | 87 | 43 | 262 |
| | | | 305 | | | |

Thus, although 305 ranks and ratings will be in the United Kingdom at the same time to qualify or re-qualify (columns (c) and (d), if 262 ranks and ratings (column (f) are added to the Fleet *personnel*, this number, plus those available in Harbour complements (262 + 43), are sufficient to meet War requirements in the absence of the 305.

REGULATION OF ANNUAL ENTRIES.

Naval Cadets.

If the annual entry of Cadets be fixed and maintained at 30, and the first entry be made in 1912 (wastage being calculated at the rate of 2½ per cent. per annum), such entry should produce—

| By end of | Commander. | Lieutenant. | Sub-Lieutenant. | Acting Sub-Lieutenant. | Midshipmen. | Cadets at Sea. | Cadets in College. | Totals. |
|-----------|------------|-------------|-----------------|------------------------|-------------|----------------|--------------------|---------|
| 1918 ... | ... | ... | ... | ... | 26 | 27 | 114 | 167 |
| 1923 ... | ... | 46 | 23 | 24 | 76 | 27 | 114 | 310 |
| 1928 ... | ... | 150 | 23 | 24 | 76 | 27 | 114 | 414 |
| 1933 ... | 26 | 214 | 23 | 24 | 76 | 27 | 114 | 504 |

Assistant Clerks.

If the first entry of Assistant Clerks be made in 1912 and the annual entry be fixed at first at 3 and be maintained so that for the first 11 years any wastage be made good by additional entries, and after 11 years the entry be regulated according to the needs of the Fleet, such entry should produce—

| By end of— | Fleet Paymaster. | Staff Paymaster. | Paymaster. | Assistant Paymaster. | Clerk. | Assistant Clerk. | Totals. |
|------------|------------------|------------------|------------|----------------------|--------|------------------|---------|
| 1918 ... | ... | ... | ... | 7 | 8 | 3 | 18 |
| 1923 ... | ... | ... | ... | 22 | 8 | 3 | 33 |
| 1928 ... | ... | 3 | 11 | 26 | 8 | 3 | 51 |
| 1933 ... | 6 | 12 | 11 | 26 | 8 | 3 | 66 |

Boy Writers.

The annual entry of Boy Writers should not fall below 4, any wastage being made good by additional entries as necessary. If the first entry, aged 16 years, be made in 1912 the rate of entry proposed should (subject to vacancies) produce—

| By end of— | Warrant Writer. | Chief Writer. | First Writer. | Second Writer. | Third Writer. | Boy Writer. | Totals. |
|------------|-----------------|---------------|---------------|----------------|---------------|-------------|---------|
| 1918 ... | ... | ... | ... | 4 | 16 | 8 | 28 |
| 1923 ... | ... | ... | 8 | 16 | 16 | 8 | 48 |
| 1928 ... | ... | 12 | 16 | 16 | 16 | 8 | 68 |
| 1933 ... | 2 | 26 | 20 | 16 | 16 | 8 | 88 |

Ship's Steward's Boy.

The annual entry of Ship's Steward's Boys should not fall below 4, any wastage being made good by additional entries. If the first entry, aged 16 years, be made in 1912 the rate of entry proposed should (subject to vacancies) produce—

| By end of— | Chief Steward. | Ship's Steward. | Ship's Steward Assistant. | Ship's Steward Boy. | Totals. |
|------------|----------------|-----------------|---------------------------|---------------------|---------|
| 1918 ... | ... | 4 | 16 | 8 | 28 |
| 1923 ... | ... | 16 | 24 | 8 | 48 |
| 1928 ... | ... | 24 | 36 | 8 | 68 |
| 1933 ... | 2 | 32 | 46 | 8 | 88 |

Ship's Cook Ratings.

The annual entry of Second Cook's Mates should not fall below 10 for the first 12 years, any wastage being made good by additional entries as necessary. After 12 years this rating should be allowed to waste and entries be regulated as required. If the first entry be made in 1912 the rate of entry proposed (subject to vacancies) should produce—

| By end of— | Cookery Instructor. | Chief Ship's Cook. | Ship's Cook. | Leading Cook's Mate. | Cook's Mate. | Second Cook's Mate. | Totals. |
|------------|---------------------|--------------------|--------------|----------------------|--------------|---------------------|---------|
| 1918 ... | ... | ... | 10 | 30 | 20 | 10 | 70 |
| 1923 ... | ... | 20 | 15 | 45 | 30 | 10 | 120 |
| 1928 ... | ... | 30 | 20 | 60 | 40 | 10 | 160 |
| 1933 ... | 2 | 40 | 30 | 70 | 60 | 10 | 212 |

Engine-room Artificers (Chief Petty Officers).

Engine-room Artificers (direct entry) are entered as Acting Engine-room Artificers, 4th Class. After one year's service in this grade they are confirmed in the rating of Engine-room Artificer, 4th Class, in which grade they serve for two years; and are then advanced, if suitable, to Engine-room Artificer, 3rd Class, in which grade they serve for four years, and are then, if suitable, advanced to Engine-room Artificer, 2nd Class, in which grade they serve for five years, and then, if suitable, are advanced to Engine-room Artificer, 1st Class.

Engine-room Artificers after five years' confirmed service can be examined for the rate of Chief Engine-room Artificer, 2nd Class, and, if successful, may be so rated; after six years' service as Chief Engine-room Artificer, 2nd Class, they may be advanced to Chief Engine-room Artificer, 1st Class.

The entry of Acting Engine-room Artificers, 4th Class, should in 1912 be 25, and from 1913 to 1923 annually 30. After which date it will probably be found necessary to increase the annual entry to 40. Calculated on the foregoing and allowing a wastage of 4 per cent. per annum such entries should produce—

| By end of— | Chief Engine-room Artificer, 1st and 2nd Class. | Engine-room Artificer, 1st Class. | Engine-room Artificer, 2nd Class. | Engine-room Artificer, 3rd Class. | Engine-room Artificer, 3rd Class. | Acting Engine-room Artificer, 4th Class. | Total. |
|------------|---|-----------------------------------|-----------------------------------|-----------------------------------|-----------------------------------|--|--------|
| 1918 ... | * * | ... | ... | 97 | 57 | 30 | 184 |
| 1923 ... | * * | ... | 104 | 102 | 57 | 30 | 293 |
| 1928 ... | * * | 89 | 108 | 118 | 75 | 40 | 430 |
| 1933 ... | * * | 165 | 127 | 132 | 75 | 40 | 539 |

* NOTE.—The advancement to the rating of Chief Engine-room Artificer being dependent upon examination the numbers in these ratings have not been estimated, but it is considered safe to assume that, if the entries are effected as proposed, the vacancies for Chief Engine-room Artificers in the completed Fleet, viz., approximately 128, will have been mainly filled, some of whom by the end of 1928 will also be eligible for promotion to the Warrant Rank of Artificer Engineer, for whom there are some 40 appointments in the completed Fleet.

Seamen Boys.

Seamen Boys who should be recruited as near to the age of 16 as is practicable (see Appendix B). From this source the following branches will have to be supplied:—Seamen, Stokers (in limited numbers), Signal, Wireless Telegraphy, Ship's Police, and Sailmakers. It is also from this source that the future Warrant Officers (Gunners, Boatswains, Signal Boatswains, Warrant Telegraphists, and Chief Masters-at-Arms) will be obtained.

One hundred Seamen Boys should be entered in 1911-12, 150 in addition to the wastage on the first entry, in the year 1912-13, 200 in addition to the wastage in the first and second entries in 1913-14, 250 in addition to the wastage in the first, second, and third years' entries in the year 1914-15. In 1916 and subsequent years, the entry should be 300 annually. If the 4 per cent. wastage per annum be experienced it will be necessary in 1923 to increase the annual entry of Boys by 50, and probably to provide additional Training accommodation. If the entries are effected as proposed above and a wastage of 4 per cent. per annum obtains such entries should produce the following numbers distributed in their several ratings:—

| By end of— | Sobran Boys. | Boys at Sea. | Ordinary Ratings. | A.B. Rating. | Leading Rating. | Petty Officer Rating. | Chief Petty Officer. | Warrant Officer. | Total. |
|-----------------|--------------|--------------|-------------------|--------------|-----------------|-----------------------|----------------------|------------------|--------|
| 1918—Seamen ... | 269 | 259 | 249 | 449 | 63 | ... | ... | ... | ... |
| Signal ... | 25 | 24 | 23 | 51 | 11 | ... | ... | ... | ... |
| Wireless ... | 6 | 6 | 5 | 15 | 5 | ... | ... | ... | ... |
| Total 1918 ... | 300 | 289 | 277 | 515 | 79 | ... | ... | ... | 1,460 |
| 1923—Seamen ... | 269 | 259 | 249 | 1,012 | 254 | 146 | ... | 10 | ... |
| Signal ... | 25 | 24 | 23 | 82 | 33 | 34 | ... | 2 | ... |
| Wireless ... | 6 | 6 | 5 | 20 | 9 | 11 | ... | 1 | ... |
| Total 1923 ... | 300 | 289 | 277 | 1,114 | 296 | 191 | ... | 13 | 2,480 |
| 1928—Seamen ... | 319 | 306 | 294 | 1,485 | 381 | 400 | 80 | 80 | ... |
| Signal ... | 25 | 24 | 23 | 101 | 51 | 54 | 11 | 7 | ... |
| Wireless ... | 6 | 6 | 5 | 29 | 12 | 14 | 1 | 1 | ... |
| Total 1928 ... | 350 | 336 | 322 | 1,615 | 444 | 468 | 92 | 88 | 3,715 |
| 1933—Seamen ... | 319 | 306 | 294 | 1,869 | 530 | 530 | 120 | 120 | ... |
| Signal ... | 25 | 24 | 23 | 110 | 90 | 66 | 17 | 10 | ... |
| Wireless ... | 6 | 6 | 5 | 28 | 20 | 20 | 1 | 2 | ... |
| Total 1933 ... | 350 | 336 | 322 | 2,007 | 640 | 616 | 138 | 132 | 4,541 |

Electrician.

If the Chief Petty Officer rating is not amalgamated as proposed it will be necessary to enter not less than 5 annually, commencing in 1912.

Calculated on a 4 per cent. per annum wastage such entry should produce—

| By end of— | Acting Electrician, 4th Class. | Electrician, 4th Class. | Electrician, 3rd Class. | Electrician, 2nd Class. | Electrician, 1st Class. | Chief Electrician, 1st Class, 2nd Class. | Totals. |
|------------|--------------------------------|-------------------------|-------------------------|-------------------------|-------------------------------|--|---------|
| 1918 ... | 5 | 10 | 16 | ... | ... | ... | 31 |
| 1923 ... | 5 | 10 | 16 | 16 | ... | ... | 47 |
| 1928 ... | 5 | 10 | 16 | 31 | ... | ... | 62 |
| 1933 ... | 5 | 10 | 16 | 40 | as promoted after examination | ... | 71 |

NOTE.—After eight years' service, including five afloat, an Electrician may, if he possesses a certificate after examination, be advanced to Chief Electrician, 2nd Class, and after six years' service as Chief Electrician, 2nd Class, may be advanced to Chief Electrician, 1st Class.

Armourers.

If the Electrician rating is not amalgamated into the Armourer rating it will be necessary to enter not less than 7 Armourer's Crews annually. If, however, the Electricians are amalgamated with the Armourers, the entry should be not less than 12 annually, commencing in 1912. Calculated at a 4 per cent. per annum wastage an annual entry of 7 should produce—

By end of—
 1918 ... 43 } Armourer ratings are entered as Armourer's Crews. They undergo a course of instruction
 1923 ... 66 } in the Gunnery School, and if qualified go to sea as Armourer's Crew, from which grade,
 1938 ... 86 } after qualifying in Gunnery and Torpedo Schools, they are advanced in vacancies to
 1933 ... 103 } Armourer's Mate; similarly from this grade to Armourer, and ultimately to Chief Armourer

The advancement in all cases is dependent on qualifications and on vacancies.

Blacksmiths.

This rating is entered as Blacksmith's Mate, and is advanced to the rating of Blacksmith after examination in a Dockyard. The total number required for the proposed completed Fleet is 30 Blacksmiths and 29 Blacksmiths' Mates.

It is considered that this rating should be entered as required and advanced when qualified to fill vacancies in the Fleet—

| Required by end of— | Blacksmith's Mates. | Blacksmiths. | Total. |
|---------------------|---------------------|--------------|--------|
| 1918 ... | 9 | 12 | 21 |
| 1923 ... | 17 | 19 | 36 |
| 1928 ... | 25 | 26 | 51 |
| 1933 ... | 29 | 30 | 59 |

Shipwrights.

From this source and from passed Leading Carpenter's Crew ratings, Carpenters' Mates, and Carpenters (Warrant Officers) are obtained. The annual entry of this rating should not fall below 7. Assuming that a certain number of Leading Carpenter's Crew ratings will be eligible for transfer to Shipwright ratings, and calculating on a 4 per cent. per annum wastage, an entry of 7 per annum should produce—

| By end of— | Shipwrights. | Carpenter's Mate. | Chief Carpenter's Mate. | Carpenter. | Total. |
|------------|--------------|-------------------|-------------------------|------------|--------|
| 1918 ... | 38 | 5 | ... | ... | 43 |
| 1923 ... | 43 | 19 | ... | 4 | 66 |
| 1928 ... | 48 | 22 | 4 | 12 | 86 |
| 1933 ... | 47 | 30 | 6 | 20 | 103 |

NOTE.—These numbers may be increased by the transfer of qualified Leading Carpenter's Crew ratings.

RECRUITING OF NON-CONTINUOUS SERVICE RATINGS.

Officers.

Medical Officers ... } See Appendix B for conditions of
 Chaplains ... } entry and service.
 Naval Instructors ... }

The following numbers of these officers (who should be entered as required) will be wanted for service in the proposed Fleet:—

| By end of— | Surgeons. | Chaplains. | Naval Instructors. |
|------------|-----------|------------|--------------------|
| 1918 ... | 13 | 5 | 1 |
| 1923 ... | 31 | 10 | 3 |
| 1928 ... | 45 | 15 | 6 |
| 1933 ... | 54 | 19 | 8 |

Lieutenants, Royal Naval Reserve.

One of these officers is allowed to the complement of each armoured cruiser. The following numbers will be required:—By end of 1918, 1; 1923, 3; 1928, 6; 1933, 8.

Artisan Ratings.

The Plumber, Painter, Cooper, and Carpenter's Crew Branches of the Artisan Class should be entered as they are wanted in the lowest grade of the class direct from the shore for periods of five or seven years' Non-continuous Service, and they should be advanced as necessary when qualified. Carpenter's Crew Ratings who have been rated Leading Carpenter's Crew may, if qualified, be transferred to fill vacancies in the Shipwright Class. On being so transferred, they should effect engagements for Continuous Service, time served in the Non-continuous Service engagement being allowed to count towards completion of the Continuous Service engagement. The following numbers are required by the Fleet:—

| By end of— | Leading Carpenter's Crew. | Carpenter's Crew. | Plumber. | Plumber's Mate. | Cooper. | Cooper's Crew. | Painter, 1st Class. | Painter, 2nd Class. |
|------------|---------------------------|-------------------|----------|-----------------|---------|----------------|---------------------|---------------------|
| 1918 ... | 10 | 15 | 7 | 7 | 8 | 8 | 6 | 7 |
| 1923 ... | 19 | 31 | 11 | 12 | 12 | 13 | 10 | 12 |
| 1928 ... | 31 | 46 | 15 | 18 | 16 | 15 | 14 | 17 |
| 1933 ... | 37 | 56 | 17 | 22 | 18 | 17 | 16 | 21 |

Sick Berth Ratings.

For entry and conditions of service see Appendix B. They should be entered as required and advanced in their ratings as necessary.

The following numbers are required for the Fleet :—

| By end of— | Chief Sick Berth Stewards and Attendants. | Sick Berth Stewards and Attendants. | Total. |
|-------------|---|-------------------------------------|--------|
| 1918 | 1 | 27 | 28 |
| 1923 | 1 | 45 | 46 |
| 1928 | 2 | 59 | 61 |
| 1933 | 2 | 69 | 71 |

Band Ratings.

Bands are allowed to Armoured Cruisers ; Flagships have nine additional Bandmen.

Bands similar to those allowed to Armoured Cruisers are also proposed for the Barracks at Sydney and at Port Western.

Assuming that the second Flagship of the Fleet is commissioned in the Third Era the following Band ratings will be required :—

| By end of— | Bandmaster. | Band Corporal. | Bandmen. |
|-------------|-------------|----------------|----------|
| 1918 | 3 | 3 | 48 |
| 1923 | 5 | 5 | 74 |
| 1928 | 8 | 8 | 122 |
| 1933 | 10 | 10 | 148 |

Ship's Musicians.

Small vessels, such as protected Cruisers of the Bristol Class, are allowed a rating called Musician, who holds a Leading rating.

This rating should be entered as wanted for Short Period engagement. Required by end of 1918, 4 ; 1923, 7 ; 1928, 9 ; 1933, 11.

Printers.

This special rating is only carried in Flagships. They are entered direct from the shore. Required by end of 1918, 1 ; 1923, 1 ; 1928, 2 ; 1933, 2.

Officers' Stewards and Cooks.

The Marine Corps provides Ward Room Officers Servants in the Mother Navy, a definite number being allowed to each class of vessel. It being proposed that the Commonwealth should not establish a Corps of Marines it becomes necessary to provide Officers' Servants from some other source. I have therefore added a number of 2nd and 3rd Class Stewards to the authorized complement of each ship, such addition being equal to the number of Marine Servants allowed. At certain of the Shore Training Establishments in the United Kingdom, Boy Stewards are entered and employed as Officers' Servants, the number borne being dependent on the number of officers accommodated in each Establishment.

These Boy Servants remain in such Establishment a definite time and then proceed to sea as Stewards Third Class, or Second Class in vacancies. It is recommended that the same course be adopted in the Commonwealth Navy, and in assessing the complements of the respective Barracks at Sydney and Port Western twenty Boy Stewards have been allocated to each. It is from this source that the Stewards (Officers' Servants) who are borne in the complements in lieu of Marines should be drawn, the respective Barracks recruiting and training additional Boys as others are rated and drafted to sea.

Officers' Stewards and Cooks should be entered direct from the shore, as required, for short periods of Non-continuous Service, viz., seven or five years.

They may be entered as 1st Class, 2nd Class, 3rd Class, or Boys, Boys effecting engagements to commence at the age of eighteen.

The number of these ratings required by the Fleet, &c., assuming that the Harbor Establishments will be completed by 1918, are as follows :—

| By end of— | Chief Steward or Cook. | 1st Class. | 2nd Class. | 3rd Class. | Boy. |
|-------------|------------------------|------------|------------|------------|------|
| 1918 | 5 | 46 | 171 | 39 | 40 |
| 1923 | 5 | 85 | 234 | 65 | 40 |
| 1928 | 7 | 124 | 310 | 89 | 40 |
| 1933 | 7 | 148 | 358 | 105 | 40 |

* Number of boys to be regulated as necessary according to number of officers borne in establishments. Officers appointed to Out-Ports should, when no official accommodation is provided, be given an allowance in lieu of a servant.

Non-continuance Service Seamen.

It has already been proposed that efforts should be made by the Commonwealth to obtain not less than 464 volunteers from the Australasian Seamen now serving in certain ships of the Mother Navy employed on the Australian Station, such volunteers to transfer their services from the Mother Navy to the Commonwealth Navy, and if practicable to be induced to effect re-engagement for seven years further service in the Commonwealth Navy.

This number (464) should be ready to embark in the vessels of the Unit on its arrival in Australia.

If this number (464 Seamen) is obtained in time to embark in the vessels of the Unit, and be permanently maintained by recruiting as wastage occurs, it will not be necessary to recruit any additional Seamen for Short Service until 1919. In 1919 an additional 100 Short Service Seamen must be recruited for five years' engagement, and 100 in addition to wastage must be added each year until 1923, when together with the 464 quoted above the total Short Service seamen borne should be 1,000, which number must be maintained.

From 1924 to 1933 the number of Seamen supplied to the Fleet by the Training Ship *Sobraon*, and the recruiting quoted above, will not meet the requirements of the Fleet, and having regard to the proportion of Short Service men recommended to be borne in the Fleet, it will be necessary to recruit in 1924, and in subsequent years, an additional 50 Short Service Seamen annually for five-year engagements, so that by 1928 a total Short Service Seaman force of 1,250 may be obtained, which number must be permanently maintained, and will be sufficient for the complete Fleet in 1933 ; such men will not, as a rule, advance above the rating of Able Seaman :—

| By end of— | Ordinary Seamen. | A.B.'s. | Leading Seamen. |
|-------------|------------------|---------|-----------------|
| 1918 | ... | 464 | * |
| 1923 | 108 | 892 | * |
| 1926 | 166 | 1,084 | * |
| 1933 | 166 | 1,084 | * |

* Short Service Able Seamen not advanced unless they effect re-engagements.

Continuous Service Stokers.

The number of Stoker ratings (including Chief and Petty Officers) required for the complete Fleet by the end of 1933 amounts to approximately 4,800 ratings.

It has been recommended previously that 200 Stoker ratings be obtained either by transfer of volunteers from Australasians now serving in certain ships of the Mother Navy in Australian waters, or be recruited and engaged for Continuous Service or for seven years in the Commonwealth Navy, and be ready for embarkation in the Unit on its arrival in Australia.

In 1913, and subsequently annually until 1919, one hundred (100) Stokers for Continuous Service must be recruited. In 1919 this annual entry must be increased to 200, and in 1924 again increased to 300, which annual entry must be continued. By which system of recruiting, at 4 per cent. per annum wastage, there should be borne in the Fleet by 1933 a total of 3,496 Continuous Service Stoker ratings, divided in their several grades at the end of each period as follows :—

| By end of— | Stoker, 2nd Class. | Stoker, 1st Class. | Leading Stoker. | Stoker, Petty Officer. | Chief Stoker. | Mechanician. | Warrant Mechanician. |
|-------------|--------------------|--------------------|-----------------|------------------------|---------------|--------------|----------------------|
| 1918 | 100 | 442 | 82 | 74 | ... | ... | ... |
| 1923 | 200 | 747 | 270 | 263 | ... | 12 | ... |
| 1928 | 300 | 1,377 | 400 | 400 | 100 | 24 | ... |
| 1933 | 300 | 1,668 | 700 | 600 | 180 | 48 | * |

* NOTE.—Warrant Mechanicians are to be borne in the ships of the Mother Navy, replacing a corresponding number of Artificer Engineers.

Non-continuous Service Stokers.

As shown above, the Fleet will require approximately 4,800 Stoker ratings in 1933, of which number there should be approximately 3,500 Continuous Service ratings borne, thus having regard to the number of Short Service ratings to be borne in the Fleet.

Some 1,200 Short Service Stokers must be recruited by 1933. I therefore recommend that in 1914, and annually until 1919, 100 stokers be recruited for five years' engagement until the number so recruited amounts to 500, and that in 1919, and annually to 1925, 200 must be recruited, by which year the total Short Service Stokers borne should be 1,200, which number must be maintained, that is to say, whatever the wastage, it must be at once replaced by additional recruiting. By this system of recruiting there should be borne in the Fleet at the end of 1925, and at the end of each period the following numbers of Short Service Stoker ratings, the majority of whom will not advance above the rating of Stoker, 1st Class :—

| By end of— | Stoker, 2nd Class. | Stoker, 1st Class. | Leading Stoker. | Total. |
|---------------|--------------------|--------------------|-----------------|--------|
| 1918 | 100 | 400 | * | 500 |
| 1923 | 200 | 800 | * | 1,000 |
| (1925) | 200 | 1,000 | * | 1,200 |
| 1928 | 200 | 1,000 | * | 1,200 |
| 1933 | 200 | 1,000 | * | 1,200 |

* Not advanced to Leading Stoker unless they effect re-engagement.

GROWTH OF PERSONNEL PROPOSED TO BE RECRUITED IN AUSTRALIA.

The following table shows the estimated growth of the *personnel* proposed to be recruited in Australia :—

TABLE SHOWING GROWTH OF PERSONNEL PROPOSED TO BE RECRUITED IN AUSTRALIA.

| Rank or Rating. | 1918. | 1923. | 1928. | 1933. | Remarks. |
|--|--------------|--------------|--------------|--------------|----------|
| Captain | .. | .. | .. | 26 | |
| Commander | .. | .. | .. | 214 | |
| Lieutenant | .. | 46 | 150 | 214 | |
| Sub-Lieutenant | .. | 23 | 23 | 23 | |
| Acting Sub-Lieutenant | .. | 24 | 24 | 24 | |
| Midshipman | 26 | 76 | 76 | 76 | |
| Cadets at Sea | 27 | 27 | 27 | 27 | |
| Cadets in College | 114 | 114 | 114 | 114 | |
| Total | 167 | 310 | 414 | 504 | |
| Fleet Paymaster | .. | .. | .. | 6 | |
| Staff Paymaster | .. | .. | 3 | 12 | |
| Paymaster | .. | .. | 11 | 11 | |
| Assistant Paymaster | 7 | 22 | 26 | 26 | |
| Clerk | 8 | 8 | 8 | 8 | |
| Assistant Clerk | 3 | 3 | 3 | 3 | |
| Total | 18 | 33 | 51 | 66 | |
| Warrant Writer | .. | .. | .. | 2 | |
| Chief Writer | .. | .. | 12 | 26 | |
| First Writer | .. | 8 | 16 | 20 | |
| Second Writer | 4 | 16 | 16 | 16 | |
| Third Writer | 16 | 16 | 16 | 16 | |
| Boy Writer | 8 | 8 | 8 | 8 | |
| Total | 28 | 48 | 68 | 88 | |
| Chief Steward | .. | .. | .. | 2 | |
| Ship's Steward | 4 | 16 | 24 | 32 | |
| „ Steward Assistant | 16 | 24 | 36 | 46 | |
| „ Steward Boy | 8 | 8 | 8 | 8 | |
| Total | 28 | 48 | 68 | 88 | |
| Cookery Instructor | .. | .. | .. | 2 | |
| Chief Ship's Cook | .. | 20 | 30 | 40 | |
| Ship's Cook | 10 | 15 | 20 | 30 | |
| Leading Cook's Mate | 30 | 45 | 60 | 70 | |
| Cook's Mate | 20 | 30 | 40 | 60 | |
| Second Cook's Mate | 10 | 10 | 10 | 10 | |
| Total | 70 | 120 | 160 | 212 | |
| Chief Engine-room Artificer, 1st Class | .. | .. | .. | .. | |
| „ „ „ 2nd Class | .. | .. | .. | .. | |
| Engine-room Artificer, 1st Class | .. | .. | 89 | 165 | |
| „ „ 2nd Class | .. | 104 | 108 | 127 | |
| „ „ 3rd Class | 97 | 102 | 118 | 132 | |
| „ „ 4th Class | 57 | 57 | 75 | 75 | |
| „ „ Acting, 4th Class | 30 | 30 | 40 | 40 | |
| Total | 184 | 293 | 430 | 539 | |
| Warrant Officers | .. | 10 | 80 | 120 | |
| Chief Petty Officers | .. | .. | 80 | 120 | |
| Petty Officers | .. | 146 | 400 | 530 | |
| Leading Seamen | 63 | 254 | 381 | 530 | |
| Able Seamen | 449 | 1,012 | 1,485 | 1,869 | |
| Ordinary Seamen | 249 | 249 | 294 | 294 | |
| Boys at Sea | 259 | 259 | 306 | 306 | |
| „ in <i>Sobraon</i> | 269 | 269 | 319 | 319 | |
| Total | 1,289 | 2,199 | 3,345 | 4,088 | |
| Carried forward | 1,784 | 3,051 | 4,536 | 5,585 | |

TABLE SHOWING GROWTH OF PERSONNEL PROPOSED TO BE RECRUITED IN AUSTRALIA—continued.

| Rank or Rating. | 1918. | 1923. | 1928. | 1933. | Remarks. |
|--|------------|------------|------------|------------|----------|
| Brought forward | 1,784 | 3,051 | 4,536 | 5,585 | |
| Signal Boatswain | .. | 2 | 7 | 10 | |
| Chief Yeoman of Signals | .. | .. | 11 | 17 | |
| Yeoman of Signals | .. | 34 | 54 | 66 | |
| Leading Signalman | 11 | 33 | 51 | 90 | |
| Signalman | 51 | 82 | 101 | 110 | |
| Ordinary Signalman | 23 | 23 | 23 | 23 | |
| Signal Boy at Sea | 24 | 24 | 24 | 24 | |
| „ „ in <i>Sobraon</i> | 25 | 25 | 25 | 25 | |
| Total | 134 | 223 | 286 | 365 | |
| Warrant Telegraphist | .. | 1 | 1 | 2 | |
| C.P.O. Telegraphist | .. | .. | 1 | 1 | |
| Petty Officer Telegraphist | .. | 11 | 14 | 20 | |
| Leading Telegraphist | 5 | 9 | 12 | 20 | |
| Telegraphist | 15 | 20 | 29 | 28 | |
| Ordinary Telegraphist | 5 | 5 | 5 | 5 | |
| Boy Telegraphist | 6 | 6 | 6 | 6 | |
| „ in <i>Sobraon</i> | 6 | 6 | 6 | 6 | |
| Total | 37 | 58 | 74 | 88 | |
| Chief Electrician, 1st Class | .. | .. | .. | .. | |
| „ „ 2nd Class | .. | .. | .. | .. | |
| Electrician, 1st Class | .. | .. | .. | .. | |
| „ 2nd Class | .. | 16 | 31 | 40 | |
| „ 3rd Class | 16 | 16 | 16 | 16 | |
| „ 4th Class | 10 | 10 | 10 | 10 | |
| „ Acting, 4th Class | 5 | 5 | 5 | 5 | |
| Total | 31 | 47 | 62 | 71 | |
| Chief Armourer | .. | .. | .. | .. | |
| Armourer | .. | .. | .. | .. | |
| Armourer's Mate | .. | .. | .. | .. | |
| „ Crew | .. | .. | .. | .. | |
| Total | 43 | 66 | 86 | 103 | |
| Blacksmith | 12 | 19 | 26 | 30 | |
| Blacksmith's Mate | 9 | 17 | 25 | 29 | |
| Total | 21 | 36 | 51 | 59 | |
| Carpenter | .. | 4 | 12 | 20 | |
| Chief Carpenter's Mate | .. | .. | 4 | 6 | |
| Carpenter's Mate | 5 | 19 | 22 | 30 | |
| Shipwright | 38 | 43 | 48 | 47 | |
| Total | 43 | 66 | 86 | 103 | |
| <i>Non-continuous Service Ranks and Artisan Ratings.</i> | | | | | |
| Leading Carpenter's Crew | 10 | 19 | 31 | 37 | |
| Carpenter's Crew | 15 | 31 | 46 | 56 | |
| Plumbers | 7 | 11 | 15 | 17 | |
| Plumber's Mates | 7 | 12 | 18 | 22 | |
| Cooper | 8 | 12 | 16 | 18 | |
| Cooper's Crew | 8 | 13 | 15 | 17 | |
| Painters, 1st Class | 6 | 10 | 14 | 16 | |
| „ 2nd Class | 7 | 12 | 17 | 21 | |
| Total | 64 | 120 | 172 | 204 | |
| Sick Berth Ratings | 28 | 46 | 61 | 71 | |
| Medical Officers | 13 | 31 | 45 | 54 | |
| Chaplains | 5 | 10 | 15 | 19 | |
| Naval Instructors | 1 | 3 | 6 | 8 | |
| Carried forward | 2,204 | 3,757 | 5,480 | 6,730 | |

TABLE SHOWING GROWTH OF PERSONNEL PROPOSED TO BE RECRUITED IN AUSTRALIA—continued.

| Rank or Rating. | 1918. | 1923. | 1928. | 1933. | Remarks. |
|--|--------------|--------------|---------------|---------------|-------------|
| <i>Non-continuous Service Ranks and Artisan Ratings—continued.</i> | | | | | |
| Brought forward | 2,204 | 3,757 | 5,480 | 6,730 | |
| Lieutenants, R.N.R. | 1 | 3 | 6 | 8 | |
| Bandmaster | 3 | 5 | 8 | 10 | |
| Band Corporal | 3 | 5 | 8 | 10 | |
| Bandsman | 48 | 74 | 122 | 148 | |
| Total | 54 | 84 | 138 | 168 | |
| Ships' Musicians | 4 | 7 | 9 | 11 | |
| Chief Steward or Cook | 5 | 5 | 7 | 7 | |
| 1st Class Steward or Cook | 46 | 85 | 124 | 148 | |
| 2nd Class Steward or Cook | 171 | 234 | 310 | 358 | |
| 3rd Class Steward or Cook | 39 | 65 | 89 | 105 | |
| Boy Steward or Cook | 40 | 40 | 40 | 40 | As required |
| Total | 301 | 429 | 570 | 658 | |
| <i>Continuous Service Stoker Ratings.</i> | | | | | |
| Warrant Mechanics | .. | .. | .. | .. | |
| Mechanicians | .. | 12 | 24 | 48 | |
| Chief Stokers | .. | .. | 100 | 180 | |
| Stoker Petty Officers | 74 | 263 | 400 | 600 | |
| Leading Stoker | 82 | 270 | 400 | 700 | |
| Stoker, 1st Class | 442 | 747 | 1,377 | 1,668 | |
| „ 2nd Class | 100 | 200 | 300 | 300 | |
| Total | 698 | 1,492 | 2,601 | 3,496 | |
| <i>Non-continuous Service Seamen.</i> | | | | | |
| Able Seamen | 464 | 892 | 1,084 | 1,084 | |
| Ordinary Seamen | .. | 108 | 166 | 166 | |
| Total | 464 | 1,000 | 1,250 | 1,250 | |
| <i>Non-continuous Service Stokers</i> | | | | | |
| Stokers, 1st Class | 400 | 800 | 1,000 | 1,000 | |
| „ 2nd Class | 100 | 200 | 200 | 200 | |
| Total | 500 | 1,000 | 1,200 | 1,200 | |
| <i>Previously included in Seamen Ratings.</i> | | | | | |
| Chief Master-at-Arms | .. | .. | .. | 2 | |
| Master-at-Arms | .. | .. | 20 | 30 | |
| Ships' Corporals | .. | 20 | 60 | 90 | |
| Sailmaker | .. | .. | .. | .. | |
| Sailmaker's Mate | .. | .. | .. | .. | |
| Butcher | 5 | 15 | 30 | 40 | |
| Lamp Trimmer | 5 | 15 | 30 | 37 | |
| Tailors | 5 | 15 | 30 | 44 | |
| Total | 15 | 65 | 170 | 243 | |
| Grand Total Recruited | 4,226 | 7,772 | 11,254 | 13,521 | |

APPENDIX D.

NAVAL BASES AND SUB-BASES.

(A) COMPLETE REQUIREMENTS.

(B) ORDER IN WHICH WORKS SHOULD BE TAKEN IN HAND.

(NOTE.—A complete list of the Bases and Sub-bases is given in paragraph 7 of Part I.)

(A) COMPLETE REQUIREMENTS.

I.—FLEET PRIMARY BASES.

(SYDNEY; FREMANTLE).

GENERAL REQUIREMENTS.—The general requirements of these Fleet Primary Bases are—

- Docks capable of receiving the largest vessels when in an injured condition.
- Work-shops capable of effecting any repairs to, or replacements required in, hull machinery, fittings, or armament of all types of vessel; to include facilities for lifting out and replacing the heaviest weights, such as guns, gun-mountings, and machinery.
- Provision of the necessary equipment and supplies for replenishment of all naval ordnance, naval stores (including coal and oil) and provisions.
- Easy and safe communication with the manufactories of ship-building material, ordnance, and ammunition.
- Facilities for the rapid coaling of ships.
- Necessary equipment for testing chain cables.
- Safe storage for reserves of ammunition and explosives.
- Moorings and wharfage for ships under repair or in reserve.
- Satisfactory arrangements for reception and treatment of the sick and wounded.

SPECIAL REQUIREMENTS.—The following are special requirements at the places named:—

SYDNEY.

- The necessary alterations to be made to the large dock on Cockatoo Island and its approaches, so as to render it available for the largest vessels in the Fleet.
(It is desirable that Messrs. Mort and Co. should be encouraged to improve their Woolwich dock in the same way.)
- Sheers, or a crane, capable of lifting the heaviest weights (say, 100 tons), to be placed on Cockatoo Island.
- Cockatoo Island Dockyard to become a Naval Dockyard for the building of warships and for effecting warships' repairs.
- Garden Island to be transformed gradually into a storage-ground for Naval ordnance (guns and gun-mountings) and Naval stores generally; a work-shop might be retained on Garden Island, with some of the existing plant, so as to enable a ship's artificers to use it for carrying out minor repairs without recourse to Dockyard (*i.e.*, Cockatoo Island) assistance.
- The storage of ammunition and explosives to be transferred from Spectacle Island to some other convenient position (not yet definitely selected); Spectacle Island to be connected (eventually) to Cockatoo Island and form part of the Naval Dockyard.
- Victualling stores to be kept in the building now used for that purpose.

The following are also required at Sydney for the training, &c., of the *personnel* of the Fleet:—

- College for training of Naval Cadets (site on Middle Head recommended).
- Boys' training ship to be moored in Rose Bay (acquisition of New South Wales' training ship *Sobraon* recommended); the Royal Naval recreation ground in Rose Bay to be utilized as a drill and recreation ground for the boys, and any future reclamation land in Rose Bay to be reserved as a Naval recreation ground.
- Naval Barracks, including Gunnery
Signal
Wireless Telegraphy } Schools
Cookery

to be erected on the mainland on a site selected.

FREMANTLE.

(a) SPECIAL REQUIREMENTS.—The harbour of Cockburn Sound, including Owen's Anchorage and Jervoise Bay, to be examined thoroughly *as soon as possible* by experts, with a view to locating the site of the future Naval Dockyard. The site should include space for graving docks, building slips, work-shops, storehouses, and all plant, &c., for the building of ships and for the repairs and maintenance of a Fleet. It appeared to me that a site in the vicinity of Jervoise Bay was best suited for Naval Dockyard requirements. A channel for deep-draught ships would have to be dredged through the Parmelia and Success Banks, and slight dredging would be required in other places. It would probably also be necessary that a short breakwater should be thrown out from Woodman's point.

I understand that plans and estimates have been framed for carrying out of a great part of this dredging, and I am sure that it will prove of the greatest benefit not only to the Navy but also to Merchant Shipping and Commercial interests, as it would greatly relieve the pressure on Fremantle Harbour for shipping accommodation which the future must inevitably bring.

In the interim, the needs of the Fleet will be met by—

- 1st. The completion of the dock now building at Fremantle and of the repair and refitting shops proposed to be attached thereto at as early a date as possible.
- 2nd. The temporary provision of a base for six destroyers and three submarines in the Swan River.
- 3rd. The dredging of the channel, so that large vessels can find a safe anchorage in Cockburn Sound.
- 4th. The provision of adequate reserves of coal and oil fuel, &c.

- (b) A large area of land should be reserved for Naval purposes, so as to allow of considerable future expansion.
- (c) A site to be selected for storage of ammunition and explosives.

II.—FLEET SECONDARY BASES.

(THURSDAY ISLAND; FORT DARWIN.)

GENERAL REQUIREMENTS.—The general requirements of these Fleet Secondary Bases are—

- (a) A good sheltered anchorage or moorings for a large Fleet.
- (b) Satisfactory arrangements for storing stocks of coal, oil fuel, lubricating oil, &c.
- (c) Facilities for rapid coaling.

THURSDAY ISLAND.

SPECIAL REQUIREMENTS.—Thursday Island has a very important strategical position at the entrance to the Torres Straits and at the head of the Barrier Passage, in which passage Torpedo-boat Destroyers could act with great advantage:—

- (a) Bertie Bay (Goode Island) appears to be harbour best suited for use as the Base, and it should be surveyed thoroughly and examined with a view to enlarging the anchorage and space available for large ships, and also to giving a safe and secure anchorage for Torpedo-boat Destroyers.
- (b) This will also be a base for Torpedo-boat Destroyers, and should have all the requirements laid down under III., including an Iron Floating Dock and a work-shop adequate to carry out Destroyers' repairs.

PORT DARWIN.

SPECIAL REQUIREMENTS.—Port Darwin is a good harbour, and occupies a very important strategical position. It should develop gradually into as important a base as, say, Hong Kong, possessing Docks (either Floating or Graving) capable of receiving the largest ships and machine shops, &c., adequate for carrying out any repairs to war-ships.

Later, at Port Darwin there should also be maintained reserves of coal, oil, and naval stores and provisions.

Owing to the lack of proper land communications and of population, no steps can be recommended to be taken at Port Darwin at present; but when the north to south transcontinental railway line is completed, Port Darwin's position will be valuable, and measures should then be put in hand to make it a useful Naval Base.

In the interim it should be utilized by the Fleet as an anchorage, the Fleet providing for its protection as a Base if required in war time.

A thorough survey and examination of the harbour should be undertaken forthwith, and sites for docks, dockyard, &c., allocated and reserved for future developments. (See also V. as to its requirements as a Destroyer Sub-base.)

III.—DESTROYER BASES.

(THURSDAY ISLAND, BRISBANE, PORT WESTERN, FREMANTLE.)

GENERAL REQUIREMENTS.—The general requirements of these Destroyer Bases are—

- (a) A graving dock or floating dock or slip capable of receiving a Destroyer, and possessing facilities for rapid docking, cleaning, and undocking. Special cradles must be provided in the case of slips for Destroyers.
- (b) Work-shops adequate to deal with Destroyers' repairs.
- (c) Wharfage accommodation for six boats (two deep), (or a hulk suitable for this purpose) with facilities for adjusting gyroscopes.
- (d) Adequate reserves of oil fuel, lubricating oil, and boiler water, with facilities for rapid handling.
- (e) Reserve stocks of the following:—
 - Bottom Composition.
 - Spare Propellers.
 - Plates suitable for small repairs or temporary repairs to a badly damaged Destroyer.

THURSDAY ISLAND.

SPECIAL REQUIREMENTS.—(See remarks under II, as a Secondary Fleet Base.)

BRISBANE.

SPECIAL REQUIREMENTS.—Requirements are already provided; necessary local arrangements should be made as to supplies of stores required, repairs, docking, &c.

PORT WESTERN.

SPECIAL REQUIREMENTS.—The dock accommodation at or near Melbourne should be utilized for Destroyers, and so render provision of a dock at Port Western unnecessary.

In addition to its use as a Destroyer Base, and also (see IV.) as a Submarine Base, Port Western will be the training centre for the Western Fleet, for which purpose the following will be required:—

- (a) Naval Barracks, including Torpedo School, to be erected on the fore-shore between Sandy Point and Stony Point. (The necessary land should be reserved now.)
- (b) A land-locked range for the adjustment of repaired or new torpedoes.

Also, as a temporary measure until Fremantle is completed to Fleet requirements, adequate supplies of coal, oil fuel, &c., must be maintained to meet the needs of the Western Fleet. (See paragraph 10 of Part I.)

FREMANTLE.

SPECIAL REQUIREMENTS.—(See remarks under I, as a Primary Fleet Base.)

IV.—SUBMARINE BASES.

(PORT STEPHENS, PORT WESTERN, PORT LINCOLN, FREMANTLE.)

GENERAL REQUIREMENTS.—The general requirements of these Submarine Bases are—

- (a) A graving dock, floating dock, or slip, capable of receiving one submarine at a time, possessing facilities for rapid docking, cleaning, and undocking.
- (b) Small work-shops.
- (c) Enclosed wharfage accommodation for four boats, with facilities for adjusting gyroscopes. If desirable a suitable hulk might be used, but the structure must not be coppered. Good sleeping and other accommodation is required for all officers and men either on shore or in the hulk.
- (d) Storage for adequate reserves of oil fuel.

PORT STEPHENS.

SPECIAL REQUIREMENTS.—Suitable site to be selected, and necessary land reserved.

Land should also be reserved for further expansion, in case required, on the south side of Salamander Bay.

PORT WESTERN.

SPECIAL REQUIREMENTS.—(See remarks under III. as a Destroyer Base.)

PORT LINCOLN.

SPECIAL REQUIREMENTS.—(a) As a temporary measure the slips on the Adelaide River should be utilized.

- (b) Port Lincoln harbour should be examined with a view to determining the most suitable position for a Submarine Base (and Destroyer Sub-base, see V.)
- (c) Land to be reserved for the erection of the establishments that will be required eventually, and also a site selected for a small graving dock, floating dock or slip. (A floating dock would be the most suitable.)

(See also V. as to its requirements as a Destroyer Sub-base.)

FREMANTLE.

(See remarks under I. as a Primary Fleet Base.)

V.—DESTROYER SUB-BASES.

TOWNSVILLE, HOBART, BEAUTY POINT (RIVER TAMAR), PORT LINCOLN, ALBANY, CONE BAY (or other port on N.W. Coast), PORT DARWIN.

GENERAL REQUIREMENTS.—The general requirements of these Destroyer Sub-bases are—

- (a) Wharfage accommodation, or smooth water anchorage, for six Destroyers.
- (b) Adequate reserves of oil fuel, lubricating oil, and boiler water.

SPECIAL REQUIREMENTS.—Each harbour to be examined and site selected. (See also II. as to Port Darwin, and IV. as to Port Lincoln.)

VI.—SUBMARINE SUB-BASES.

BRISBANE, HOBART, BEAUTY POINT (RIVER TAMAR), ALBANY, CONE BAY (or other port on N.W. Coast), PORT DARWIN.

GENERAL REQUIREMENTS.—The general requirements of these Submarine Sub-bases are the same as those of the Submarine Bases (see IV.) with the exception of the docking and repairing facilities.

SPECIAL REQUIREMENTS.—None (but see III. as regards Brisbane, II. as regards Port Darwin, V. as regards Hobart, Beauty Point, Albany, and Cone Bay).

VII.—GENERAL.

Generally it is desirable that the health and comfort of the men should be cared for by the provision of suitable recreation grounds and canteens at the principal Naval ports, this matter being of the greatest importance in the case of the crews of submarine boats, who, whilst in their boats, lead a life of considerable discomfort due to the cramped space available.

(B) ORDER IN WHICH THE WORKS SHOULD BE TAKEN IN HAND.

FIRST STAGE.

SYDNEY.

- (a) Effect necessary alterations to the Sutherland Dock (Cockatoo Island) and its approaches to make it suitable for a modern armoured cruiser.
- (b) Provide sheers and necessary appliances on Cockatoo Island for lifting the large t guns and weights (say, 100 tons).
- (c) Build the Naval College for Cadets.
- (d) Acquire site for, and build, the Naval Barracks and Schools (gunnery, signal, wireless telegraphy, and cookery schools.)
- (e) Acquire the training ship *Sobraon*, prepare her for training boys, acquire necessary land for boys' drill, recreation, &c.
- (f) Establish a new store for ammunition and explosives in anticipation of these stores being removed from Spectacle Island; full and adequate provision should be made for modern ammunition.

FREMANTLE.

- (a) Proceed with, and complete, the construction of the dock and of the repair shops and machinery, including sheers, &c., connected therewith.
- (b) Undertake thorough survey of Cockburn Sound and the surrounding land; reserve necessary land; dredge out channel so as to make the anchorage suitable for a fleet of large vessels.
- (c) Make arrangements for storage of coal, oil fuel, &c.
- (d) Establish *temporary* Destroyer and Submarine Bases in the Swan River.

PORT WESTERN.

- (a) Acquire site for, and build, Naval Barracks, including Torpedo School.
- (b) Survey land, and reserve portions required.
- (c) Obtain the requisite legal powers to close parts of the harbour for the purposes of Whitehead Torpedo practice and adjustment.
- (d) Establish the Destroyer and Submarine Bases.

THURSDAY ISLAND.

- (a) Survey and examine thoroughly Bertie Bay.
- (b) Establish the Destroyer Base.
- (c) Provide a small floating dock, and work-shops capable of dealing with one Destroyer

BRISBANE.

Establish Destroyer Base.

PORT STEPHENS.

- (a) Survey and examine thoroughly the harbour, and reserve land on south side of Salamander Bay.
- (b) Establish Submarine Base.
- (c) Provide floating dock and work-shops.

GENERAL.

All the above works should be put in hand as early as possible, and should be proceeded with, as far as circumstances will admit, simultaneously, so as to be completed by the time that the Fleet Unit arrives in Australia.

SECOND STAGE.

PORT LINCOLN.

- (a) Examine thoroughly the harbor and surrounding land.
- (b) Establish Destroyer and Submarine Bases.
- (c) Reserve land as requisite.

BEAUTY POINT (River Tamar.)

Acquire necessary land and establish Destroyer and Submarine Sub-bases.

TOWNSVILLE.

Establish Destroyer Sub-base.

THIRD STAGE.

ALBANY
CONE BAY (or other port on N.-W. Coast) } Establish Destroyer and Submarine Sub-bases.
HOBART

PORT DARWIN.

It is useless to establish works at this important place until the Transcontinental Railway is completed. On the completion of the railway, Port Darwin should be developed into a Fleet Secondary Base as the Commonwealth Fleet grows.

SUBSEQUENT YEARS.

(As the Fleet increases.)

FREMANTLE.

Development as a Fleet Primary Base to be completed.

PORT WESTERN.

Provide works for repairing and re-adjusting torpedoes.

GENERAL.

Also establish, at Hobart or at such place as may be found desirable—

- (a) College for Sub-Lieutenants,
- (b) Navigation School,
- (c) "War College" for Senior Officers.

APPENDIX E.

COMMUNICATIONS AND INTELLIGENCE SYSTEM.

The Fleet will rely for its Communications and for its "Intelligence" System upon—

- (a) Its own methods of inter-communication between ships of the Fleet,
- (b) Wireless Telegraph Stations on shore,
- (c) Visual Signal Stations on shore,
- (d) Land telegraph lines and cables,
- (e) Communication by wireless telegraphy or by visual signalling with merchant ships,
- (f) Special Naval Intelligence centres.

(a) *Inter-communication between War-ships.*

2. This will be attained by training the necessary *personnel* (see Appendix B) in Wireless Telegraphy and visual signalling, and supplying the ships with the requisite apparatus.

(b) *Wireless Telegraph Stations on Shore.*

3. The complete scheme of Wireless Telegraph Stations considered necessary for Australia, from a Naval point of view, comprises—

- (a) A system of High-Power Stations. These stations are required primarily to transmit messages from the Central Authority to the Fleets at sea when the latter are within the effective range of these stations, and, secondarily, to inter-communicate between themselves as an alternative means to the land lines or cables. Such stations are, however, not suitable for the purpose of *inter-communication* with ships or small-power stations.
- (b) A system of Medium-Power Stations. These stations are required for the normal ship-to-shore communication purposes of the Fleet. Many of these stations will be able to do a large amount of ordinary commercial working, and should be encouraged to do so.

4. Three High-Power Stations will eventually be required. They should be capable of sending a message to a first-class ship at any hour of the day or night at a distance of 1,250 miles oversea, and of inter-communicating between themselves. These stations should be situated in the neighbourhood of Sydney, Port Darwin, and Perth. Owing to the great range and power of these stations the exact position of the sites should be determined more with reference to technical suitability and possibility of defence from marauders than to their geographical situation.

5. Of these three stations, the one in the neighbourhood of Sydney is required *now*; the station near Perth will be required when the Western division of the Fleet approaches completion and Fremantle becomes an important Naval port.

The Port Darwin station will not be required until the developments of British Wireless Telegraphy render it desirable.

6. Thirteen Medium-Power Stations will be required eventually at or near the following places:—

| | | |
|-------------------|----------------|----------------------------|
| *Thursday Island. | *Sydney. | *Fremantle. |
| Port Moresby. | *Port Western. | Cone Bay (or other port on |
| Townsville. | Port Lincoln. | N.W. Coast). |
| *Brisbane. | Hobart. | Port Darwin. |
| Port Stephens. | Beauty Point. | |

7. Of these stations Port Western will be able to do the commercial work for Melbourne, Port Stephens will be able to do the commercial work for Newcastle, Port Lincoln will be able to do the commercial work for Adelaide.

8. At the places (Sydney, Fremantle, Port Darwin) where two stations, one high power and one medium power, are required, the stations should not be within 5 miles of one another.

9. The Medium-Power Stations should be capable of communicating with a first-class ship at a distance of 500 miles oversea at any hour of the day or night, on any selected wave length between 600 and 2,200 metres.

10. The stations marked * are required as soon as possible; the remainder should be completed concurrently with the Naval Establishments which are required at the places (see Appendix D).

11. All Wireless Telegraph Stations should be under the direct control of the Postmaster-General, and he should take the necessary steps to restrict all non-Naval traffic at any time that the Naval authorities may desire it.

12. Should the Postmaster-General be unable for any reason to undertake to establish and maintain a Wireless Telegraph service in all respects suited to the requirements of a modern navy, it will be necessary for the Naval authorities to establish and maintain stations of its own, and to formulate its own system, with all the attendant disadvantages of duplication and divided control. This matter of Wireless Telegraphy, involving the whole subject of rapid and distant communication, is of the highest importance in the distribution and disposition of Fleets.

13. It is of the highest importance that all Wireless Telegraph Stations should be efficiently connected with the land line telegraphic system of the country, and arrangements must be made to place these connecting lines at the disposal of the Naval authorities in times of national emergency.

14. Each of the Wireless Telegraph Stations mentioned should have a private telegraph line direct to the nearest centre of Local Intelligence (see Confidential Appendix H), and should also be connected to the general telegraphic system of the country. Arrangements should be made to "switch through" such post-offices as are not kept open continuously so as to insure an unbroken day and night communication between the Wireless Telegraph Station and Head-Quarters.

15. The stations at Port Western, Port Stephens, and Port Lincoln should also have private and direct lines to the central post-offices of Melbourne (or Port Melbourne), Newcastle, and Adelaide respectively so as to enable commercial messages for those ports to be dealt with rapidly.

16. Though telephone instruments are useful for ordinary purposes, telegraph instruments are necessary for the transmission of *coded* messages, and such messages constitute the bulk of Naval work. The private lines referred to in paragraphs 14 and 15 should be fitted with both types of instruments (telephone and telegraph).

17. Appended below is an outline scheme of a Wireless Telegraph service which has been drawn up with a view to meeting the difficulties which, as experience in European waters has shown, are likely to arise when Wireless Telegraph traffic becomes an important factor.

(c) *Visual Signal Stations on Shore.*

An elaborate system of Visual Signal Stations is not now of such vital importance as it was before the developments of Wireless Telegraphy, which have so greatly extended the range of communications. A properly equipped and controlled system of Visual Signal Stations may be of great value, both as a system for reporting the movements of hostile or foreign shipping, and as a channel of communication between a Central authority and friendly shipping.

The existing system of commercial signal stations should be organized and consolidated so as to comply with the scheme laid down in the Confidential Appendix H. In the future, as development progresses, other stations will be required, and the scheme laid down must from time to time be re-organized to suit the changing conditions of mercantile traffic and the probable war requirements of the Navy.

As time goes on all men at these signal stations should be required to become sufficiently expert in all forms of Marine Signalling to communicate readily with passing merchant ships or with men-of-war, and also to become expert telegraphists.

(d) *Land Telegraph Lines and Cables.*

Arrangements should be made by the Postmaster-General for "priority" to be given to Naval messages in time of emergency or war.

(e) *Communication with Merchant Ships.*

Every effort should be made to encourage signalling, whether by wireless telegraphy or by visual methods, between British merchant ships and the vessels of the Fleet, and also visual signalling between British merchant ships and shore stations, as merchant ships will be able in time of emergency or war to furnish most valuable information.

(f) *Special Naval Intelligence Centres.*

These Centres should be established as necessary (see Confidential Appendix H).

NAVAL INTELLIGENCE COMMITTEE AND GENERAL ORGANIZATION.

(See Confidential Appendix H.)

ORGANIZATION OF A WIRELESS TELEGRAPH BRANCH OF THE GENERAL POST OFFICE.

1. Wireless Telegraphy is of the utmost importance to a modern Fleet, but no revenue can be returned from Naval working. A considerable revenue can, however, be drawn from a well-organized system of commercial stations. In this paper it is sought to show how a Wireless Telegraph branch can be organized so as to provide the necessary unflinching and rapid communication for men-of-war, the best possible communication for merchant steamers, and also give to the Government absolute control over all shore stations and most of the ships operating in Commonwealth waters. Such an arrangement will provide great advantages for the collection and dissemination of Intelligence in time of National emergency.

2. With this object in view it is recommended that the Commonwealth Government should take the whole matter of Wireless Telegraphy in Australian waters firmly into its own hands from the first, making it a Commonwealth monopoly similar to the land telegraphic systems.

3. The Commonwealth should erect, maintain, control, and operate all Wireless Telegraph Stations that may be required either for public or private services. It should be independent of all established companies, undertaking the manufacture of its own instruments and the training and control of its own operators. For this purpose it is necessary for the Commonwealth to secure the rights to manufacture certain patented articles, and to enjoy the use of certain patents. The Commonwealth will thus be free to carry out any experiments they may desire for the advancement of the system.

4. The Government should also require that all ships registered in Australian ports and fitted with wireless apparatus should carry apparatus manufactured and operated by the Commonwealth.

5. The administration necessary to create and control such a system will involve a public service analogous to that performed by the Telegraph Department of the General Post Office, with which it must in any case act in close concert. The whole of the complications due to dividing the charges and revenues between two or more Departments can be avoided by making the Wireless Telegraphy Department a branch of the Post Office; and it should be possible for a message handed in on board any ship fitted with wireless telegraphy, and in touch with a Commonwealth shore station, to be delivered at any selected post-office without going outside the control and authority and responsibility of one Department. The wireless telegraph office of a liner will in fact become analogous to a country post-office.

6. It is, therefore, recommended that the Wireless Telegraphy Service should become a branch of the Post Office.

7. The successful creation of such a service depends very largely on the personality of the Official who is the actual responsible head of this branch, he himself being responsible directly to the Postmaster-General. He must be personally responsible for the design and construction of all instruments, the erection and proper equipment of all stations, and for the training and discipline of all operators.

8. In addition to this he must be in close touch with the Naval authorities, for in all moments of national emergency the Naval authorities must have entire and undisputed control over all and every installation at the disposal of the Commonwealth.

9. By careful framing of the traffic regulations and organization of signalling it should be possible to render unnecessary any change from the Peace to the War organization, but the wishes of the Naval authorities as to the working or closing of any station in times of war or strained relations must be rigidly and immediately complied with.

10. It must also be recognised that the major part of the wireless traffic will always be oversea to a station on board a ship, and the conditions and limitations of seafaring life must, therefore, be perfectly understood by the head of such a service. In the training of shore operators sea conditions should be inculcated, and generally it must be recognised that the organization is a semi-Naval one.

11. The head of such a department should, therefore, be a competent electrical and mechanical engineer, and in addition to being in every way thoroughly up to date in all aspects of both theoretical and practical wireless telegraphy he should have had experience in the handling of wireless traffic of several ships and stations at the same time.

12. The staff necessary for the control of such a service is as follows:—

- One Chief Official in Charge, personally and directly responsible to the Postmaster-General.
- One Assistant, to help in every possible way and be trained with a view to relieving the Chief eventually.
- One Manager of the factory, responsible to the Chief for the economical administration of the factory and for the quality of the materials and for the workmanship of the output.
- One Instructor, responsible to the Chief for the training of young operators; he will in time require subordinate assistants who should be selected from suitable men qualified as "operators in charge."
- About six clerks, one to act as secretary to the Chief, one to take charge of the fair drafts and reproductions of the necessary specifications, the others for general office duties.
- Two Electrical Draughtsmen.

13. The Chief or his Assistant should do most of the lecturing to the classes under instruction on the actual subject of wireless, and the Chief must be personally responsible for all examinations.

14. The Assistant should be personally responsible to the Chief for the testing of all new apparatus.

15. It has been found unsatisfactory to employ two different classes of men simultaneously in the stations, one to do the signalling and one to take charge of the machinery. It will be noticed that in this scheme all men are so trained as to be able to undertake either duties. This plan has two great advantages—it allows of all hands at the station being used for either work in moments of emergency, and it greatly facilitates the matter of promotion. The second senior man at each station should be specially responsible for the machinery and for the instruction of the junior members of the crew.

16. The outline of the details of training and of the career of an operator are as follows:—Candidates should present themselves for examination after attaining the age of 18; this examination should be chiefly literary. Men must be able to write quickly and legibly, and to express themselves clearly, and must have a sound knowledge of the first four rules of arithmetic and of the decimal system. They must have "very good" characters and be physically fit. Candidates to fill vacancies will be selected from the men who satisfy these requirements, and should be engaged for not less than seven years, with the option, if suitable, of re-engaging for further periods up to the age of 50.

They must then undergo a six months' course, the first four months to consist of elementary electricity, including all the instruments with which they will afterwards come in contact, and school work. All the time the men are under instruction they should be practised twice a day, half-an-hour at a time, at making and taking in signals by the Morse code in the forms in which they will have to deal with it. It is impossible to set too high a standard in this particular. They should then do a qualifying examination, and, if successful and they are considered suitable, they should do a final course of two months at the study of practical and theoretical wireless, internal combustion engines, secondary cells, and the regulations governing signalling by wireless telegraphy. This course must include the use of a file, a soldering iron, and a spanner, and the instruction in signalling should be continuous. They should then pass for "Junior Operator," and go to a station or ship as junior operator for one year. They should then be capable of taking charge of the installation of a liner, or of taking a watch at a shore station. If satisfactory they should be rated as Senior Operators, and be so employed.

17. After three years as Senior Operators, men who are recommended and selected should go through an advanced course of six months to qualify for charge of a wireless station. This should be a stiff course, with the object of weeding out all but the very best men. After passing this examination men should be placed on a roster for charge of outlying wireless stations, going first to small stations, then to one of the medium-power stations, and finally to a high-power station. No man should be put into the advanced class to qualify as operator in charge who has not had at least two years' experience in charge of an installation at sea. All these appointments should be made by selection, tempered by certain limitations as to the time served at each station. The mere fact of having qualified should not necessarily imply that a man will be employed in that capacity. A regular scale of complements must be laid down for each class of station, and entries must be arranged to supply the requirements of the ships and shore stations. The Postmaster-General must have power to discharge a man for incompetence, insubordination, improper divulgence of information, or for failure to pass the intermediate and final examinations for junior operator. The standard required to pass as a junior operator, as far as skill at signalling and knowledge of the regulations governing wireless signalling, should be enforced upon all persons desiring to operate private installations for experimental or other purposes. No person should be granted a licence unless he declares that every person who is going to work the apparatus is possessed of a certificate of competence from the Postmaster-General showing that he is up to this standard. The standard of signalling should be at least twenty words of ordinary English prose per minute to qualify for a licence, and twenty-five words per minute for junior operators.

18. Some graduated scheme of annuity or deferred pay should be established for men who have served for 22 years or more.

19. It is not practicable in this paper to lay down definite rates of pay, but the operator having charge of a high-power station should not receive less than £300 a year, with a house in addition. There should be small allowances for men serving at stations in isolated districts.

20. All wireless operators must be up to the highest Post Office standard of skill in manipulating the ordinary Morse key and sounder. Men who have served in the wireless telegraphy branch of the Commonwealth Navy should, if they desire, be allowed to join the wireless telegraph branch of the Post-office in the position of senior operator, provided that they had held the substantive rating of Petty Officer Telegraphist for at least the last three years of their service, and can satisfy the Postmaster-General that they are acquainted with the regulations governing the signalling by wireless telegraphy, which may be in force in the Post-office service, and are in all respects satisfactory in regard to character, and that vacancies exist for them. Men joining from this source should be especially appointed to those stations which do most Naval work, as they will there be using codes and methods of procedure which have previously become second nature to them, and they will be in touch and in sympathy with the operators in the men-of-war.

APPENDIX F.

NAVAL RESERVES.

There are four different classes of Naval Reserves in Australia :—

- I. The Australasian Branch of the Imperial Royal Naval Reserve, at present controlled by the Commander-in-Chief of the Australian Squadron. This consists of the following numbers, and will (except the New Zealand portion of this Reserve) be taken over by the Commonwealth Government on the arrival of the Fleet Unit :—

| Rank or Rating. | Total numbers on 31st December, 1910, exclusive of New Zealand portion. |
|-------------------------|---|
| Lieutenant | 4 |
| Sub-Lieutenant | 6 |
| Qualified Seaman | 23 |
| Seaman | 203 |
| Qualified Stoker | 25 |
| Stoker | 156 |
| Total | 417 |

The officers serve till the age of 45, and are required to perform 28 days' drill per annum.

The men engage for five years at a time (not allowed to enrol after age of 54), and are required to perform—

Seamen—28 days' drill per annum.

Stokers—21 days in first year.

14 days in subsequent years.

The officers are recruited from Mercantile Marine Officers as for the Home R.N.R.

The men are recruited—

Qualified Seamen and Qualified Stokers from men who have served as Australasians in Imperial ships for at least three years.

Seamen and Stokers from the Mercantile marine, fishing craft, &c.

- II. The Commonwealth Naval Militia (to be called Naval Reserve under the Naval Defence Act 1910) entered from civil occupations for three years' service, being required to drill for 21 days each year.

- III. The Commonwealth Naval Volunteers—Entered for voluntary service, composed wholly of Cadets.

- IV. The persons who are liable under the Defence Act to be trained in the Junior or Senior Cadets or in the Citizen Forces and who are allotted to the Naval Forces,

and there will also be a fifth class, viz :—

Those men who have completed 5, 7, or 12 years' service in the Commonwealth Navy and have transferred to the Reserve (the "Fleet Reserve.")

It is recommended that no further entries be made into the Australian portion of I., and that men now serving therein should on completion of their current engagement be discharged, but given the opportunity, if under the age of 35, of re-enrolling in the Commonwealth Naval Reserve for 5 years under the conditions to be laid down for that Reserve.

It is recommended that Officers under I. should be transferred to the Commonwealth Naval Reserve under the conditions to be laid down for that Reserve.

It is recommended that no further entries be made to the Naval Militia, and that Officers and men therein should be transferred, if they are willing, to the Naval Volunteer Reserve under the conditions to be laid down for that Force.

It is recommended that no Cadets be entered into the Naval Volunteer Reserve in future except those enrolled under the Defence Act and allotted to the Naval Forces; Naval Volunteer Cadets now serving to whom the Defence Act may apply should be retained in the Naval Forces. All such cadets should continue with the Naval Volunteers for the remainder of their period of service under the Defence Act.

Persons liable for service under the Defence Act and allotted to the Naval Forces, whether as Cadets or later, should come under the conditions to be laid down for the Naval Volunteer Reserve, and should be encouraged to remain in that Reserve after the period of their obligatory service in the Citizen Forces expires.

Men transferred to the Reserve after a period of at least five years in the Regular Forces should be entered into the FLEET RESERVE under the conditions to be laid down for that Reserve.

It is recommended that the strength of the Reserve *personnel* to be attained eventually should, at first, be fixed on a basis of about 30 per cent. of the total numbers there will be in the Active Service when the Fleet is completed, *i.e.*, an eventual total Reserve of about 5,000.

Of this number it is probable that from 2,000 to 3,000 will be provided from those who have served in the Fleet (*i.e.*, from the Fleet Reserve); the remainder should be provided by men who are in their second year or subsequent service (*i.e.*, age of 19 and above) under the Defence Act (Naval Volunteer Reserve).

The number of Cadets to be allotted for Naval Service on 1st July, 1911, should be based on the requirements of 1st July, 1916, say 2,000, to be obtained as follows, allowing for wastage :—

| | | | | |
|------------------------|-----|-----|-----|------------------|
| 1st year Senior Cadets | ... | ... | 800 | } approximately. |
| 2nd year Senior Cadets | ... | ... | 750 | |
| 3rd year Senior Cadets | ... | ... | 700 | |
| 4th year Senior Cadets | ... | ... | 650 | |

The number of Officers, R.N.R., to be entered should not exceed 100 Sub-Lieutenants and Lieutenants.

The number of Officers, R.N.V.R., should be regulated according to the number of men in the R.N.V.R. at any time, observing that as a general rule such Officers would not be professionally qualified to replace Active Service Officers afloat though available for shore and harbour service.

It is recommended that the conditions of service and training of the Reserve Forces should be on the lines of those in force for corresponding Reserves in the United Kingdom, amended as necessary to meet Australian conditions. Officers and men who may be detailed for special harbour or shore service in time of war should be trained in such duties in peace time in lieu of, or in addition to, the ordinary courses laid down.

Administrative Staff.

The following Head-Quarters Staff should be appointed forthwith :—

Director of Naval Reserves (a Captain).

Assistant to Director (a Commander).

Secretary (a Naval Accountant Officer).

Clerical Staff (say, three Clerks).

And "District Commandants" at the following places, of such ranks as may be found desirable :—

Thursday Island.

Townsville.

Brisbane.

Port Stephens.

Sydney.

Port Melbourne.

Hobart.

River Tamar.

Port Adelaide.

Port Lincoln.

Albany.

Fremantle.

Cone Bay.

Port Darwin.

These Officers would also perform the following duties :—

(a) Take charge of all Naval Establishments (except at Sydney and Fremantle or other port where an Officer is specially appointed for charge of Naval Establishments).

(b) Act as Recruiting Officer for the area allotted to the port.

(c) Act as Naval Harbour Master.

(d) Act as Intelligence Centre Officer.

These "District Commandants" should be provided with such Instructional Petty Officers and Staff as may be necessary.

APPENDIX G.

FINANCIAL ESTIMATE.

The following estimate of cost must be regarded as a very rough approximation; it has not been possible with the data, and in the time available, to furnish an accurate statement of the probable cost of the Completed Fleet, &c.

2. In calculating the cost of the *personnel* an average expenditure per head of £150 per annum (about 8s. 3d. per diem) has been taken as the basis, on the assumption that the average scales of pay attached to Appendix B are adopted, and that the proportions of the various ranks and ratings to one another remain constant. This sum of £150 per annum includes "active pay," "deferred pay," allowance for uniform or clothing, and cost of rations.

3. The expenditure on the Naval Forces may be divided into "non-recurring" and "recurring" charges.

I.—NON-RECURRING CHARGES.

4. The non-recurring charges are—

(a) The Initial Expenditure on the construction of ships until the Fleet is completed, *i.e.*—

| Ships. | Estimated Initial Cost. |
|-----------------------------------|-------------------------|
| The Fleet Unit | £3,500,000 |
| 7 Armoured Cruisers | 14,000,000 |
| 7 Protected Cruisers | 3,150,000 |
| 12 Torpedo-boat Destroyers | 1,080,000 |
| 9 Submarines | 810,000 |
| 3 Depot Ships... .. | 600,000 |
| 1 Fleet Repair Ship | 150,000 |
| Total | £23,290,000 |

| | |
|--|-------------------|
| Of which there has already been expended in 1909 to 1911 | £910,000 |
| " " " " voted for expenditure in | |
| 1911-1913 (Act No. 18, 1910) | 2,590,000 |
| | £3,500,000 |

Leaving a balance to be provided in 1913-1933 (20 years) of £19,790,000
i.e., an average, per annum, of 989,500

(b) The Initial Naval Expenditure on Dockyards, Naval Barracks and Schools, Naval bases and Sub-bases, &c. (See Appendix D.) These are designated Naval "Works."

It is not practicable to furnish in this Report any estimate as to the cost of the "Works" recommended, and they should be taken in hand (in the order shown in Appendix D) as money is available, in some cases there should be some revenue returnable for the benefits accruing to commercial interests.

It is desirable, however, that the "Works" should be carried out as early as possible, and the accompanying Financial Table shows approximately what money would be available annually for this purpose.

(c) The Initial Expenditure on establishing *Reserves* of Stores (including coal, oil, ammunition, guns, gun-mountings, torpedoes, &c.), exclusive of the *annual* expenditure on the stores used by the Fleet.

It is estimated that the Reserves of Stores that would be necessary for the completed Fleet would be—

| Item. | Approximate Cost. |
|--|------------------------|
| Coal (36,000 tons) | £30,000 |
| Oil (20,000 tons) | 60,000 |
| 2 years' supply of permanent sea stores | } say, 500,000 |
| 2 " " consumable sea stores | |
| 2 " " repair stores | 180,000 |
| Reserve of guns | } say, 1,230,000 |
| " gun-mountings | |
| " torpedoes | |
| " ammunition | |
| Total | say, £2,000,000 |

The stores to be provided as Reserves for the Fleet Unit would cost about £600,000, and the remainder should be provided gradually at an average annual cost of £70,000 per annum.

(NOTE.—Arrangements should be made with the Admiralty for the Commonwealth to take over from them all suitable Naval stores there may be at Sydney when the Fleet Unit arrives.)

II.—RECURRING CHARGES.

5. The Recurring Charges are—

(a) Annual allowance for the depreciation of ships (*i.e.*, for their replacement when worn out). As soon as the Fleet is completed, the non-recurring charges for the construction of ships will cease, and the construction of vessels, as necessary to replace others worn out, will be defrayed from the annual depreciation allowance.

For this purpose it is considered that ships will require replacement as follows:—

| Description of Vessel. | Approximate. | |
|-------------------------------|-------------------------------|-------------------------------|
| | Period for which Serviceable. | Value of Annual Depreciation. |
| | Years. | £ |
| Armoured Cruiser | 20 | 100,000 |
| Protected Cruiser | 20 | 22,500 |
| Torpedo-boat Destroyer | 15 | 6,000 |
| Submarine | 15 | 6,000 |
| Depôt Ship | 20 | 10,000 |
| Fleet Repair Ship | 20 | 7,500 |

On that basis, the value of the annual depreciation of the Completed Fleet would be £1,242,500 and after 1933 such sum would be required as an annual average for construction of new vessels to replace those worn out.

During the four eras in which this Fleet is being completed, this sum should include the cost of construction of new vessels (an annual average of £989,500, *see* paragraph 4 (a) above), and thus there would be an annual balance of £253,000 available for expenditure on replacement of worn-out vessels. In 20 years this would amount to £5,060,000, and would provide the "replacement" vessels that would probably be required during these 20 years, *viz.* :—

| Vessels to be Replaced. | Era. | Cost. |
|----------------------------------|-------|------------------|
| | | £ |
| 6 Torpedo-boat Destroyers | } 3rd | 540,000 |
| 3 Submarines | | 270,000 |
| 3 Submarines | | 270,000 |
| 6 Torpedo-boat Destroyers | } 4th | 540,000 |
| 3 Protected Cruisers | | 1,350,000 |
| 1 Armoured Cruiser | | 2,000,000 |
| Total | | 4,970,000 |

(b) Annual cost of *personnel*, at £150 per head (including cost of administration staff) :—

| | |
|--|------------|
| Number of <i>personnel</i> in 1912-13, say, 3,444, cost | £516,000 |
| " " " " 1932-33, 14,844, " " " " | 2,226,600 |
| <i>i.e.</i> , an increase in 20 years of 11,400, cost | £1,710,600 |
| An average increase per annum of 570, cost | 85,530 |

(c) Annual cost of maintenance of ships in commission (repairs, sea stores, fuel, naval ordnance, stores, &c.), at the following rates per annum :—

| Ship (in full Commission). | Annual Cost of Maintenance. |
|---|-----------------------------|
| Armoured Cruiser | £100,000 |
| Protected Cruiser | 25,000 |
| Torpedo-boat Destroyer | 12,000 |
| Submarine | 5,000 |
| Depôt Ship | 12,000 |
| Fleet Repair Ship | 12,000 |
| Thus, the maintenance of Fleet Unit (1913-1914) would be | 262,000 |
| " " " " Completed Fleet (1933-34) " " | 1,226,000* |

* A deduction of 40 per cent. being made in the annual cost of ships "with reduced crews." (See paragraph 4, Part I.)

(d) Annual cost of maintenance of Dockyards, Buildings, Training Establishments, &c. (*i.e.*, of "Naval Works").

This cannot be estimated for the same reasons as those given above (paragraph 4 (b)); the expenditure should be met out of the balance available for "Works."

(e) Cost of Naval Reserves.

On a basis of an eventual total Reserve of 5,000 ranks and ratings it is considered that £100,000 per annum would cover all expenditure necessary, varying from 1912-13, say, £20,000, to 1932-33, £100,000, at an average increase per annum of £4,000.

FINANCIAL TABLE.

6. The following table embodies the preceding estimates :—

| Era. | Year. | " Non-recurring " Charges. | | Recurring Charges. | | | | | Total. | Balance available for Expenditure on " Works " if, say, £3,000,000† is Voted Annually. |
|-----------|---------|----------------------------|---------|--------------------|--------------------|--------------------------------------|--|-------------------------|--------|--|
| | | Construction. | Stores. | Construction. | Personnel. | | Cost of Maintenance of Ships in the Fleet. | Cost of Naval Reserves. | | |
| | | | | | Building of Ships. | Establishment of Reserves of Stores. |  |  |  |  | Depreciation Fund for Replacement of Ships. | (Number.) | Cost. |
| £ | £ | £ | £ | £ | £ | £ | £ | £ | £ | |
| 1,000 | 1,000 | 1,000 | 1,000 | .. | 1,000 | 1,000 | 1,000 | 1,000 | 1,000 | |
| 1st | 1911-12 | 1,295* | 50 | .. | (670) | 100 | 36 | 10 | 1,491 | 1,509 |
| | 1912-13 | 1,295* | 300 | .. | (3,444) | 516 | 200 | 20 | 2,331 | 669 |
| | 1913-14 | 989 | 220 | 253 | (4,014) | 601 | 262 | 24 | 2,349 | 651 |
| | 1914-15 | 989 | 120 | 253 | (4,584) | 686 | 274 | 28 | 2,350 | 650 |
| | 1915-16 | 989 | 120 | 253 | (5,154) | 771 | 274 | 32 | 2,439 | 561 |
| | 1916-17 | 989 | 70 | 253 | (5,724) | 856 | 289 | 36 | 2,493 | 507 |
| | 1917-18 | 989 | 70 | 253 | (6,294) | 941 | 320 | 40 | 2,613 | 387 |
| 2nd | 1918-19 | 989 | 70 | 253 | (6,864) | 1,026 | 351 | 44 | 2,733 | 1,267† |
| | 1919-20 | 989 | 70 | 253 | (7,434) | 1,111 | 418 | 48 | 2,889 | 1,111 |
| | 1920-21 | 989 | 70 | 253 | (8,004) | 1,196 | 518 | 52 | 3,078 | 922 |
| | 1921-22 | 989 | 70 | 253 | (8,574) | 1,281 | 545 | 56 | 3,194 | 806 |
| | 1922-23 | 989 | 70 | 253 | (9,144) | 1,366 | 645 | 60 | 3,383 | 617 |
| 3rd | 1923-24 | 989 | 70 | 253 | (9,714) | 1,451 | 725 | 64 | 3,552 | 948† |
| | 1924-25 | 989 | 70 | 253 | (10,284) | 1,536 | 737 | 68 | 3,653 | 847 |
| | 1925-26 | 989 | 70 | 253 | (10,854) | 1,621 | 797 | 72 | 3,802 | 698 |
| | 1926-27 | 989 | 70 | 253 | (11,424) | 1,706 | 897 | 76 | 3,991 | 509 |
| | 1927-28 | 989 | 70 | 253 | (11,994) | 1,791 | 997 | 80 | 4,180 | 320 |
| 4th | 1928-29 | 989 | 70 | 253 | (12,560) | 1,876 | 1,027 | 84 | 4,299 | 701† |
| | 1929-30 | 989 | 70 | 253 | (13,130) | 1,961 | 1,027 | 88 | 4,388 | 612 |
| | 1930-31 | 989 | 70 | 253 | (13,700) | 2,046 | 1,127 | 92 | 4,577 | 423 |
| | 1931-32 | 989 | 70 | 253 | (14,270) | 2,131 | 1,127 | 96 | 4,666 | 334 |
| | 1932-33 | 989 | 70 | 253 | (14,844) | 2,226 | 1,186 | 100 | 4,824 | 176 |
| | | 22,370‡ | 2,000 | 5,060 | .. | .. | .. | .. | .. | 15,225 |
| | 1933-34 | .. | .. | 1,242 | (14,844) | 2,226 | 1,226 | 100 | 4,794 | 216 |

* Already voted (Act No. 18 of 1910), but may be divided differently between the two years.
† If £3,000,000 is voted in 1st Era; £4,000,000 in 2nd Era; £4,500,000 in 3rd Era; £5,000,000 in 4th Era.
‡ £910,000 has already been provided in 1910-11.



