

1929.

THE PARLIAMENT OF THE COMMONWEALTH OF AUSTRALIA.

JOINT COMMITTEE OF PUBLIC ACCOUNTS.

FIFTH GENERAL REPORT.

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MEMBERS OF THE COMMONWEALTH PARLIAMENTARY JOINT COMMITTEE
OF PUBLIC ACCOUNTS.

(Fifth Committee.)

(Appointed 22nd January, 1926.)

|| Senator WALTER KINGSMILL, Chairman.

Senate.

†\$ Senator HATTIL SPENCER FOLL.
† Senator JOHN BLYTH HAYES, C.M.G.
†§ Senator ALBERT ALFRED HOARE.
***† Senator CHARLES STEPHEN McHUGH.
† Senator EDWARD NEEDHAM.

House of Representatives.

¶CHARLES LYDIARD AUBREY ABBOTT, Esquire, M.P.
†† GROSVENOR ARUNDELL FRANCIS, Esquire, M.P.
SYDNEY LANE GARDNER, Esquire, M.P.
JOHN HENRY LISTER, Esquire, M.P.
PARKER JOHN MOLONEY, Esquire, M.P.
**THOMAS PATERSON, Esquire, M.P.
JOHN HENRY PROWSE, Esquire, M.P.
†† EDWARD CHARLES RILEY, Esquire, M.P.
*The Honorable Sir GRANVILLE DE LAUNE RYRIE,
K.C.M.G., C.B., V.D., M.P.

* Vice-Chairman from 19th June, 1926, to 1st July, 1926; Chairman from 2nd July, 1926; discharged from attendance, 24th March, 1927. † Discharged from attendance, 30th June, 1926. † Appointed 1st July, 1926. § Vice-Chairman from 22nd January, 1926, to 18th June, 1926. Chairman from 19th June, 1926, to 30th June, 1926. || Vice-Chairman from 2nd July, 1926; Chairman from 24th March, 1927. ¶ Appointed 18th June, 1926.
** Chairman from 22nd January, 1926, to 18th June, 1926. Discharged from attendance, 18th June, 1926. †† Vice-Chairman from 24th March, 1927.
†‡ Appointed 24th March, 1927. *** Died 24th July, 1927. ¶|| Appointed 30th September, 1927.

(Sixth Committee.)

(Senators appointed 7th February, 1929.)

(Members of the House of Representatives appointed 14th February, 1929.)

* Senator WALTER KINGSMILL, Chairman.

Senate.

Senator JOHN BLYTH HAYES, C.M.G.
Senator ALBERT ALFRED HOARE.

House of Representatives.

FRANK ANSTEY, Esquire, M.P.
FRANCIS MICHAEL FORDE, Esquire, M.P.
GROSVENOR ARUNDELL FRANCIS, Esquire, M.P.
SYDNEY LANE GARDNER, Esquire, M.P.
ALBERT ERNEST GREEN, Esquire, M.P.
ROLAND FREDERICK HERBERT GREEN, Esquire,
M.P.
†JOHN HENRY PROWSE, Esquire, M.P.

*Appointed Chairman 15th February, 1929. †Appointed Vice-Chairman 21st February, 1929.

FIFTH GENERAL REPORT

OF THE

JOINT COMMITTEE OF PUBLIC ACCOUNTS.

INTRODUCTORY.

The Sixth Joint Committee of Public Accounts, at the request of the Fifth Committee, has the honour to submit the following Report of the latter Committee's proceedings during the term of its appointment.

MEMBERS OF THE COMMITTEE.

On 22nd January, 1926, Senators Hattil Spencer Foll, Walter Kingsmill and Edward Needham were appointed members of the Committee.

On 22nd January, 1926, the following members of the House of Representatives were appointed members of the Committee:—Messrs. Sydney Lane Gardner, John Henry Lister, Parker John Moloney, Thomas Paterson, John Henry Prowse, Edward Charles Riley and the Honorable Sir Granville de Laune Ryrie, K.C.M.G., C.B., V.D.

These appointments were published in the *Commonwealth Gazette* No. 9 of 1926.

At the first meeting of the Committee held on 22nd January, 1926, T. Paterson, Esq., M.P., was elected Chairman, and Senator H. S. Foll Vice-Chairman.

On 18th June, 1926, T. Paterson, Esq., M.P., having accepted the portfolio of Minister for Markets and Migration, was discharged from attendance as a member of the Committee, and Charles Lydiard Aubrey Abbott, Esq., M.P., was appointed to fill the vacancy.

On 19th June, 1926, Senator H. S. Foll was elected Chairman of the Committee and the Honorable Sir Granville de Laune Ryrie, K.C.M.G., C.B., V.D., M.P., was elected Vice-Chairman.

On 30th June, 1926, Senators H. S. Foll, W. Kingsmill and E. Needham were discharged from attendance as members of the Committee, and on 1st July, 1926, Senators John Blyth Hayes, C.M.G., Walter Kingsmill and Charles Stephen McHugh were appointed to fill the vacancies on the Committee.

On 2nd July, 1926, the Honorable Sir Granville de Laune Ryrie, K.C.M.G., C.B., V.D., M.P., was elected Chairman of the Committee and Senator Walter Kingsmill Vice-Chairman.

On 24th March, 1927, the Honorable Sir Granville de Laune Ryrie, K.C.M.G., C.B., V.D., M.P., having been appointed High Commissioner for Australia in London, was discharged from attendance as a member of the Committee, and Grosvenor Arundell Francis, Esq., M.P., was appointed to fill the vacancy on the Committee.

On 24th March, 1927, Senator Walter Kingsmill was elected Chairman of the Committee and Edward Charles Riley, Esq., M.P., Vice-Chairman.

On 30th September, 1927, Senator A. A. Hoare was appointed to the vacancy on the Committee caused by the death on 24th July, 1927, of Senator Charles Stephen McHugh.

MEETINGS OF THE COMMITTEE.

The first meeting of the Committee was held on 22nd January, 1926, and the last meeting on 19th September, 1928. Shortly thereafter the House of Representatives was dissolved and Senators were discharged from attendance.

During its term of office the Committee held 342 meetings at various places as under:—

		EIGHT GENERAL REPORT
		106
Burnie, Tasmania	..	1
Cairns, Queensland	..	1
Canberra	..	1
Cockatoo Island, Sydney	..	4
Devonport, Tasmania	..	1
Faisi, Solomon Islands	..	1
Fiami, Solomon Islands	..	1
Gizo, Solomon Islands	..	1
Hobart	..	7
Launceston	..	3
Melbourne	..	137
Port Moresby, Papua	..	2
Queenstown, Tasmania	..	1
Rabaul, New Britain	..	2
Samarai, Papua	..	2
Scottsdale, Tasmania	..	1
S.S. "Wybia", River Tamar, Tasmania	..	1
S.S. "Mataram", Solomon Islands	..	2
Stanley, Tasmania	..	1
Strahan, Tasmania	..	2
Sydney	..	60
Tailem Bend, South Australia	..	1
Tufi, Cape Nelson, Papua	..	1
Tulagi, Solomon Islands	..	1
Ulverstone, Tasmania	..	1
Woodlark Island, via Samarai, Papua	..	1

On 22nd January, 1928, the following members were appointed members of the Fifth Committee:—Messrs. Sydney T. Parker, John Henry Power, Edward G. Carter, R. H. T. P. F. Stevenson, H. S. Hall, G. C. W. G. C. B., A. D. and examined 211 witnesses.

In conducting its investigations the Committee made many inspections and travelled approximately 25,723 miles—16,591 miles by rail, 8,498 miles by water, and 634 miles by road.

INQUIRIES COMPLETED.

The Committee submitted to both Houses of Parliament the following reports:—

Fourth General Report. Expenditure on Oil Exploration, Development, Refining, &c., in the Commonwealth and Papua—Part 2—Shale Oil, Power Alcohol, Liquid Fuels, &c. Expenditure on Oil Exploration, Development, Refining, &c., in the Commonwealth and Papua—Part 3—Commonwealth Oil Refineries Ltd.

Commonwealth Government Shipping Activities—Interim Report. Pacific Islands Shipping Facilities.

Commonwealth Government Shipping Activities, including Cockatoo Island Dockyard. Communications between Tasmania and the Mainland.

Transport Facilities within the Federal Capital Territory. Housing and Building Costs Generally in the Federal Capital Territory.

The investigations of the Pacific Islands Shipping Facilities and Communications between Tasmania and the Mainland were undertaken by the Committee at the request of the Commonwealth Government, and a special investigation was conducted by the Committee, at the request of the Prime Minister, into the circumstances surrounding the contract secured by the Commonwealth Government Shipping Board from the Sydney Municipal Council for the supply of steam turbo-alternator plant by Cockatoo Island Dockyard for the Bunnerong power house.

SUMMARY OF REPORTS PRESENTED.

FOURTH GENERAL REPORT.

(Report dated 19th February, 1926.) The Fourth General Report outlined the work of the Fourth Committee and gave a summary of the various reports presented to Parliament by that Committee.

EXPENDITURE ON OIL EXPLORATION, DEVELOPMENT, REFINING, ETC., IN THE COMMONWEALTH
AND PAPUA—PART 2—SHALE OIL, POWER ALCOHOL, LIQUID FUELS, ETC.
(Report dated 23rd February, 1926.)

Acting on the recommendation of the Fourth Parliamentary Joint Committee of Public Accounts, the Fifth Committee decided to continue and complete the inquiry into the Expenditure on Oil Exploration, Development, Refining, &c., in the Commonwealth and Papua commenced by the Fourth Committee. The subject of the investigation comprised Shale Oil, Power Alcohol, Liquid Fuels, &c.

Recognizing the incalculable benefit that would accrue if adequate oil supplies could be obtained in the Commonwealth, the Committee made exhaustive inquiries as to the potentialities of Australia's shale deposits as a source of liquid fuel. Evidence placed before the Committee showed that efforts made from time to time to establish the shale oil industry in Australia had not been a commercial success, failure in most cases being due to lack of capital and high working costs. A notable attempt to establish the shale oil industry in Australia, however, was that of the Commonwealth Oil Corporation Ltd. which was formed in London in 1905, with a capital of £800,000, for the purpose of working certain shale deposits in New South Wales. In 1906 the company acquired properties at Hartley Vale and Genowlan. Several tunnels were cut at Newnes and in the Capertee Valley, and a treatment plant was installed in the Wolgan Valley. Owing to the isolated position of the works, much extra expense was incurred, with the result that the total expenditure amounted to £1,796,800. In 1911, when the first destroyers arrived in Australia, the Commonwealth Oil Corporation Ltd. supplied to the Navy 50,000 gallons of fuel oil at a very moderate price. The oil was stated by the Naval Secretary to be of excellent quality. In 1912, the works were closed down for about three years. Subsequently the Corporation went into liquidation. Mr. David Fell was appointed Receiver in New South Wales and Mr. John Fell was called in to give assistance as an oil refinery expert. In 1914, Mr. John Fell took over the concern and became Managing Director of the Commonwealth Oil Corporation Ltd. In giving evidence before the Public Accounts Committee, Mr. Fell pointed out that, as a result of economic and labour conditions, combined with unfair competition arising from importations of mineral oils free of duty and the effect of the agreement between the Commonwealth Government and the Anglo-Persian Oil Co. Ltd. for the establishment of the Commonwealth Oil Refineries Ltd., the works of the Corporation were closed down. During the period of its operations the Corporation produced 25,260,000 gallons of crude oil and crude naphtha.

The disastrous effect of the cessation of operations was fully appreciated by the Public Accounts Committee when it made an inspection of the works in December, 1924. As the losses due to inactivity had amounted to over £80,000, and were continuing at the rate of £1,000 per month, Mr. Fell advised the Committee that he was appealing to the Commonwealth Government for financial aid on the ground that the industry was of national importance and a vital necessity in time of war or other emergency. Recognizing the need for early action, the Committee on 5th January, 1925, addressed the Prime Minister in the following terms:—

“ Pending the discovery in Australia of mineral oil in commercial quantities, it appears to the Committee that the most potent source for the supply of Commonwealth requirements from within its own shores lies in the exploitation of its vast deposits of oil shale.”

In reply to Mr. Fell's representations the Prime Minister intimated that the Government had decided that the making of an advance could not be approved, for the reason that advances to individual concerns was not a matter for the Government but for financial institutions. The Prime Minister added, however, that the Government was prepared to consider any proposals which would ensure the continuance of the industry provided the action required fell within the functions which could be legitimately carried out by the Government.

Further correspondence passing between the Prime Minister and the Committee culminated in a letter from the Committee to the Prime Minister, dated 23rd April, 1925, setting out the considered views of the Committee as to the means which might be adopted to ensure the continuance of the shale oil industry, and submitting, for the Prime Minister's information, four alternative proposals, any one of which, it was considered, would offer a solution of the problem, not only of continuing and retaining the shale oil industry at Newnes, but of rendering adequate assistance to all who were making bona fide efforts to produce oils from Australian shales.

In reply the Prime Minister intimated that he proposed to ask the Conference of Geologists, which was then being convened, to consider the question how best the Commonwealth could

assist financially or otherwise in the promotion of the production of fuel oil in Australia. Upon receipt of the report of this Conference, the Prime Minister added, the whole question would again be carefully considered by the Government in connexion with the proposals of the Public Accounts Committee, and any action that might be necessary or desirable would be taken as early as possible.

A perusal of the resolutions of the Geologists' Conference, however, showed that the only reference to oil shales was a short addendum to recommendations concerning the search for oil in Australia to the effect that the present provision for a bounty under the Shale Oil Bounty Act should be continued. The Committee thereupon directed the Prime Minister's attention to this fact on 2nd July, 1925, and again urged the Government to give serious consideration to the proposals already submitted.

Shale Oil Bounties.

Since 1910 the Commonwealth Parliament had endeavoured to encourage the shale oil industry by means of bounties, the total amounts appropriated for the purpose being £320,000. The amounts paid in bounties to 30th June, 1928, were as follow:—

Year.	Amount paid in Bounty.
1910-1913	8,929
1917-1918	15,009
1918-1919	26,407
1919-1920	16,292
1920-1921	24,406
1921-1922	24,643
1922-1923	18,400
1924-1925	336
1926-1927	705
1927-1928	428
	135,555

It will be noted that since 1922-1923 there has, unfortunately, been very little activity in the shale oil industry.

The Shale Oil Bounty Act, No. 36 of 1926, provides for the continuance of the bounty until 31st August, 1929.

Power Alcohol.

In view of the undesirable position of Australia being dependent on other countries for its oil supplies, the Committee closely investigated the possibilities of the production and utilization of power alcohol in Australia. To this end the Committee obtained much useful information from the Commonwealth Institute of Science and Industry and other authorities.

Evidence showed that enterprises for the production of mineral oils in Australia had not so far proved successful. Climatic conditions in this country were, however, favorable for the growth of plants containing sugars and starch, from which alcohol could be manufactured. There were no scientific or technical difficulties in the way of the production and utilization of power alcohol. The whole problem was one which involved questions of an economic, commercial and fiscal nature.

As to production, by far the most suitable raw material available for distillation purposes was stated to be sugar molasses. It was pointed out, however, that, even if the whole of the molasses wasted in Australia were used for power alcohol, it would not be practicable to supply from that source more than a fraction of the total liquid fuel requirements of the Commonwealth. If, therefore, alcohol were to be distilled on a large scale in the Commonwealth, it would be necessary to find other raw materials. As to whether any particular raw material could be used profitably for the distillation of power alcohol depended on a number of factors, including price at which raw material could be delivered at distillery, distillation costs, cost of denaturation, &c.

As cassava, sorghum and sweet potatoes were either not grown at all or were grown on only a small scale in this country, it was difficult to state definitely whether they could be cultivated profitably as a raw material for distillation purposes. If some stimulus or inducement were offered for the manufacture of alcohol, however, it appeared that there was a favorable opportunity for the establishment of a new and important industry in the Commonwealth.

At the Commonwealth Government Acetate of Lime Factory, Brisbane, the manufacture of alcohol fuel had been carried on for some time. This factory was established during the war to ensure a supply of acetone, an essential raw material for the manufacture of cordite—acetone being produced from acetate of lime, which is derived from molasses. In 1919-20 portion of the stock of molasses was utilized for the production of alcohol, which is also used in the preparation of cordite and other munitions. Two years later, when accumulated stocks of acetate of lime were sufficient to meet peace-time requirements for a number of years, all the molasses available for the factory was diverted to the production of alcohol. Some of this spirit was methylated and sold to hospitals and other users, but subsequently it was proposed to utilize the spirit in the manufacture of alcohol fuel for supply to Commonwealth Departments. This course was approved by the Government in January, 1924, as it would ensure the proper maintenance of the factory plant and buildings, and permit of the retention of the services of the trained staff, and generally assist in maintaining the factory as an effective munitions unit.

As it was known that greater efficiency could be obtained in ordinary motor engines by a blended fuel than by alcohol alone, it was proposed to mix the alcohol produced at the factory with ether, and with benzol procured from the Newcastle Steel Works. Numbers of experiments and severe road trials with mixtures containing different proportions of alcohol, benzol and ether were conducted with satisfactory results, and in August, 1924, the factory commenced supplying the Postal Department in Melbourne. Up to the end of 1925 the factory had manufactured approximately 138,000 gallons of alcohol fuel, which were distributed as follows:—Postal Department, 112,000 gallons; Royal Air Force, 14,000 gallons; Cordite Factory, 11,000 gallons, and Small Arms Ammunition Factory, 1,000 gallons. The alcohol fuel being used comprised:—Alcohol, 67½ per cent.; benzol, 22½ per cent., and ether, 10 per cent.; to which was added, as a denaturant, $\frac{1}{4}$ per cent. pyridine.

Discussing the question of the production of power alcohol generally, Mr. Brodribb, Chief Chemical Engineer of the Munitions Supply Board and Manager of the Cordite Factory, expressed the opinion that it was not an economical proposition unless the output amounted to one or two million gallons, and, further, that such production should be developed in definite areas so as to avoid the heavy cost of distribution and the difficulties attending the interchangeability of alcohol and petrol in motor vehicles.

Giving evidence before the Committee in December, 1924, Mr. A. V. Board, representing the International Sugar and Alcohol Co. of London (a company formed for the purpose of dealing with the production of power alcohol within the Empire) explained that his company proposed to encourage the growth of cassava on the sugar lands of Queensland for conversion into alcohol. The Company's proposals were viewed favorably by the Queensland Government, which guaranteed an advance of £25,000 to enable the Plane Creek Sugar Company at Sarina to erect, in conjunction with its sugar mill, a distillery for experimental purposes on a commercial scale. Mr. Board pointed out that, if alcohol were to be produced on a large scale, crops must eventually be utilized, and, although cassava was the crop he most favored, other starch-bearing crops such as arrowroot and sweet potatoes would be accepted. As cassava had not been grown in Queensland on a commercial scale, Mr. Board anticipated that agriculturists might at the outset get only a small return from their crops. As a result of representations made by Mr. Board to the Tariff Board, an Act of Parliament was passed providing for the payment of a bounty of 4d. per gallon on all power alcohol produced in Australia from cultivated crops, the bounty to extend over a period of five years from 1st January, 1926, and not to exceed £25,000.

Mr. A. J. F. de Bavay, consulting chemist, whose scientific researches and processes were a feature of Australia's industrial development, informed the Committee that he considered the utilization of molasses provided the best means whereby the power alcohol industry could be established in Australia. He had studied the problem for many years, and had discussed the economic practicability of certain schemes under which it was proposed to so treat the Queensland sugar crop that a greater quantity of molasses would be available for use in the production of alcohol in order to lessen the loss on the surplus sugar exported.

During the Committee's inquiry, Dr. W. M. Sinclair, a director of Power Alcohol Ltd. of Sydney, placed before the Committee a proposition for the production of alcohol from prickly pear. By the use of his patented process he estimated that each ton of pear would produce 14 gallons of alcohol at a cost of 6d. per gallon, calculated on a yield of 100 tons of pear to the acre. Allowing for expenses, profit, &c., the Company considered it could produce power alcohol for 1s. 3d. per gallon. Previous evidence placed before the Committee indicated that experiments to utilize prickly pear for the production of power alcohol had been made in other countries as well as Australia, but without results which justified hopes of commercial success.

Evidence also showed that experiments had been conducted with various commodities with a view to ascertaining whether alcohol in commercial quantities could be procured, and it was indicated that an important field of research lay in the discovery of improved methods for converting cellulose materials (i.e. wood, straw, &c.) into fermentable sugars for distillation into alcohol.

Liquid Fuels.

In evidence placed before the Committee it was urged that early attention should be directed to the technical and economic study of means whereby liquid fuels might be derived from coal. The importance of such an avenue of research was being recognized throughout the world, and other countries were giving considerable attention to fuel technology.

The question of fuel research in Australia had been considered at different times by the Institute of Science and Industry. As a result the opinion was formed that the liquid fuel problem in Australia could only be satisfactorily approached by the establishment of an organization comprising the various interests which should co-operate in making a systematic examination of the whole position. At a later stage the Institute convened a conference of persons interested in the liquid fuel problem. The trade interests represented indicated their willingness to subscribe up to £5,000 on a £ for £ basis with the Commonwealth Government for the purpose of collecting all available data concerning the fuel problem, but the desired support was not extended by the Government.

Recognizing the importance of the subject, the Institute of Science and Industry published a Bulletin (No. 24) entitled "The Production of Liquid Fuels from Oil Shale and Coal in Australia", which contains a comprehensive review of the development reached in other countries, and of Australia's resources of raw materials. This valuable preliminary work having been accomplished it was urged that the next step should be to establish a Fuel Research Laboratory to carry out a systematic investigation of selected raw materials and of processes likely to yield successful results under Australian conditions. A Fuel Research Board had been established in Great Britain and Canada.

Another source of oil supply was to be found in the carbonization of coals, and in the recovery of gases during the process of coke-making for the manufacture of benzol. During the war so much importance was attached to the production of benzol that the British Government compelled the large coke-producing works to install benzol distilling plants to save this valuable product from waste. In Australia limited quantities of benzol had been manufactured by various gas companies, but not on a commercial scale. The only large benzol refinery operating in Australia was that installed by the Broken Hill Proprietary Limited at its steel works at Newcastle, where the benzol was produced from the company's coke ovens plant. From this source about $1\frac{1}{2}$ million gallons of benzol were made available each year. In round figures two gallons of benzol were recoverable from each ton of coal; but it was explained to the Committee that, so far as this company was concerned, the production of the motor spirit was merely a by-product of the works, and that the quantity available was entirely dependent on the total output of steel manufactures. Although the company considered that judging by the demand for benzol it would have no difficulty in selling twice the quantity now manufactured, to double the output would cost, it was estimated, from £600,000 to £1,000,000. Such expenditure merely for the production of benzol would not be a commercial proposition, and increased production of benzol could come about only as an integral part of an extension of the steel works—a factor governed by the demand for their products.

Extensive investigations were being conducted in various countries into the carbonization of coals, as it was recognized that the utilization of coal as a source of motor fuel was capable of great development. In evidence tendered to the Committee as to the possibilities of Victorian brown coal as a source of production, it was pointed out that experiments conducted had not been satisfactory. No real distillation brown coal had yet been found in the State. In Germany, where the work of carbonizing brown coal was the most advanced in the world, less than 1 per cent. of the brown coal produced was sent to the distillation works, and even with their high grade brown coal the yield of motor spirit was little more than 1 gallon to the ton, although several gallons of other oils were obtained.

Oil Supplies.

The Committee endeavoured to ascertain the extent of the world's oil reserves, but, owing to diversity of opinion, it was unable to obtain any definite information on the subject. One estimate was set down at 6,000,000,000 tons—representing 60 years supply at the 1920 rate of consumption. High authorities in America held the view that there would be a shortage of petrol in five years. On the other hand, experts were of opinion that it was absolutely

impossible to forecast the reserves of oil still to be drawn from the earth. The colossal increase in the consumption of oil throughout the world had been met by a corresponding increase in production, and, in fact, during recent years, there had been over-production. Further, the general trend in the oil industry was towards improved and more economical means of production and refining; and by the adoption of new methods of extraction it was considered that apparently exhausted fields would yield additional supplies. Oil supplies were also being conserved by further elimination of waste and by increased efficiency in their utilization.

Representatives of oil companies informed the Committee that they were not opposed to the development in Australia of the shale oil, power alcohol, and other liquid fuel industries. They were of opinion, however, that such fuels could not compete commercially with flow oil, and pointed out that efforts to establish such industries in other countries had not proved successful.

The Committee recognized that Australia undoubtedly possessed many sources from which liquid fuels might be derived; but it was clear that such resources could not be satisfactorily exploited without encouragement from the Government. Australia's entire dependence on importation for its oil supplies was a subject for serious reflection, and the necessity for early action in the direction of ensuring the greatest measure of self-containment in the matter of oil supplies could not be too strongly urged.

The successful exploitation of Australia's shale oil deposits would mean much to this country, but evidence showed that, so long as ample supplies of mineral oil were available, production of oil from shale could not be regarded seriously as a commercial undertaking. The Committee was of opinion, however, that Australia's shale oil deposits should be regarded purely as a national reserve and conserved as an insurance against the time when Australia's supplies from overseas might be threatened, and that steps should be taken to have the oil-shale deposits of Australia vested in the Commonwealth.

It was also recommended that the question of the establishment of an Australian Fuel Research Committee to investigate and advise on the better utilization of Australia's coal resources should be considered.

The Committee was of opinion that the recovery of benzol and other by-products should be encouraged. Owing to the absence of recovery plants in almost all the coke-producing works in Australia many valuable by-products were wasted.

The production of power alcohol from various vegetable and other products available in Australia should, in the opinion of the Committee, be scientifically investigated, and, where possible, assisted. From a technological standpoint, molasses formed an almost ideal raw material for the production of alcohol. Molasses was used for this purpose successfully and extensively in other countries, but in Australia it had been used only to a very limited extent. According to expert evidence there were reasonable prospects of producing from molasses a liquid fuel which could successfully compete with petrol on a commercial basis, especially if, during the initial stages, the use of such a fuel were limited to the localities where it was manufactured.

Reviewing evidence concerning the possibilities of various starch-bearing crops, the Committee considered that there was room for doubt as to whether such crops could be grown at a price which would permit of their being utilized for the production of alcohol on a commercial basis. Cassava appeared to be the most favorable of these crops, provided it could be successfully cultivated in the tropical parts of the Commonwealth.

In view of the experiments conducted in the use of prickly pear for production of power alcohol, the Committee recommended that a qualified person should be appointed to fully investigate the matter.

Whilst the Committee would welcome any sound proposals which would help to make Australia less dependent on outside countries for oil supplies, it was of opinion that the present normal channels through which Australia drew her petroleum could not be disregarded. It had to be recognized that the oil industry was one of the best organized in the world, and that the companies operating in Australia had powerful concerns behind them, which provided for the ever increasing demands for their products.

Since the submission of the Committee's report the liquid fuel problem in Australia has engaged the close attention of the Council for Scientific and Industrial Research. As would be realized, many aspects of the problem were of an economic and developmental nature. For that reason, the Council had been in close touch with the Development and Migration Commission in connection with the whole matter. A mutual arrangement had been made whereby the Commission was investigating the possibilities of producer gas driven vehicles through its Committee on Mechanical Transport.

Recently a conference of representatives of the Council for Scientific and Industrial Research and the Development and Migration Commission was held with the Members of the British Economic Mission, the Chairman of the Mission, Sir Arthur Duckham, being a recognised authority on fuels. One of the matters discussed at the conference was the formation of an Australian Fuel Research Committee, as recommended by the Public Accounts Committee.

Serious consideration was being given by the Council to the liquid fuel problem. Under the Science and Industry Endowment Act, two graduates had been sent to Greenwich Research Station of the British Fuel Research Board for special training in fuel research. These two officers had become acquainted with all aspects of the Board's operations, but the main attention of the Board was being given to the question of low temperature distillation of coal. The Council had given serious consideration to the carrying out of such work in Australia, but it had decided that it would be unwise to undertake such work out here, for the reason that arrangements had been made whereby the British Board would furnish the Council with full information regarding its results.

The same remarks applied to research into the production of liquid fuels by hydrogenation, which was being closely investigated in Europe.

With regard to oil shale, a great amount of consideration had been given to this aspect of the fuel problem in close consultation with the Development and Migration Commission. The Council considered it inadvisable to expend any of its limited funds for the purpose of oil shale research, the opinion being that there were other directions in which its funds may be spent with more beneficial results to the nation. The oil shale problem had been mentioned to Sir Arthur Duckham, who expressed the definite opinion that there was no prospect of the oil shale industry becoming economically possible in Australia for many years to come, and that, therefore, there was no justification for oil shale research at present. Sir Arthur Duckham was, of course, speaking entirely from a commercial, not a defence, aspect.

As regards power alcohol, the Council had issued a bulletin on the possibilities of this spirit and related fuels in Australia. As to the power alcohol position generally, very serious consideration was being given to the industry in Australia by the Distillers Company Limited, through its Australian subsidiary company, the Australian National Power Alcohol Co. Ltd., at Sarina, Queensland. According to press reports Mr. A. V. Board, technical director of the company, announced recently that on February 4th, 1929, the company would commence the distribution of a new motor spirit to be known as "Shellkoll," which was a combination of the words "shell" and "alcohol". This spirit in which power alcohol was incorporated in exact proportions with Shell motor spirit was claimed to possess definite anti-knocking and other qualities which would commend it to motor users. For the present the distribution of the spirit would be confined to Rockhampton and the area westward and northward of that city.

EXPENDITURE ON OIL EXPLORATION, DEVELOPMENT, REFINING, ETC., IN THE COMMONWEALTH AND PAPUA.

PART 3—COMMONWEALTH OIL REFINERIES LIMITED.

(Report dated, 25th March, 1926.)

As a result of negotiations between the then Prime Minister (Mr. W. M. Hughes, P.C., K.C., M.P.) and the Anglo-Persian Oil Co., Ltd., an agreement, dated 14th May, 1920, was entered into between the Commonwealth Government and the Anglo-Persian Oil Co. Ltd., providing for the establishment in Australia of an Oil Refinery Company. The agreement, which was approved by Parliament by the passing of the Oil Agreement Act No. 13 of 1920, provided, inter alia, that the capital of the company should be £500,000; that the Commonwealth should subscribe for and be allotted 250,001 shares; that the Anglo-Persian Oil Co. Ltd., should have 249,996 shares and the nominees of the Anglo-Persian Oil Co. Ltd., three shares.

The objects of the Company were set out as:—

- (a) the creation and development in Australia of the industry of refining mineral oil;
- (b) the erection, equipment and operation of a modern refinery or refineries in Australia for refining mineral oil;
- (c) the sale and disposal of the products of refining mineral oil; and
- (d) such other objects necessary and incidental to or expedient for the aforesaid objects as shall be approved by the Commonwealth and the Oil Company and set forth in the Articles of Association.

To ensure the full success and development of the oil refining industry in Australia, the Commonwealth agreed that it would, so long as the prices charged by the refinery for products of refining were considered by the Commonwealth fair and reasonable, but not further and otherwise—

- (a) exercise or cause to be exercised such statutory and administrative powers as it deemed advisable to prevent dumping and unfair competition by importers of refined oils from other countries ;
- (b) refund to the Refinery Company any Customs duty paid by the Refinery Company upon the importation into Australia of crude mineral oil purchased from the Oil Company and refined in Australia by the Refinery Company ; and
- (c) cause to be introduced into the Parliament of the Commonwealth and supported as a Government measure a Bill providing for the imposition of Customs duties on crude mineral oil whenever in its opinion such action was necessary or advisable to prevent unfair competition with the products of crude oil refined in Australia by the Refinery Company.

Under a further agreement, made on the 6th June, 1924, between the Commonwealth Government and the Anglo-Persian Oil Co. Ltd. it was decided to increase the capital of the Refinery Company by £250,000 with shares of £1 each, each party to subscribe for and be allotted 125,000 shares. This increase in capital, it was explained, was necessary to enable the company to undertake the distribution and marketing of its products. The agreement was approved by the Commonwealth Parliament by the passing of the Oil Agreement Act No. 7 of 1924. In 1926-1927 the nominal capital was further increased to £850,000.

Kororoit Creek, near Laverton, was decided upon as the most suitable site for the refinery and an area of about 400 acres was acquired in that locality. On the site was erected an up-to-date refinery capable of dealing with 100,000 tons of crude oil annually, and of being extended to a capacity of 200,000 tons per annum.

To ensure the efficient distribution and marketing of its own products the Company created its own organization and distribution depots in the different States.

Constructional work was sufficiently advanced early in 1924 to permit of arrangements being made for shipments of crude oil. The first shipment arrived at the wharf in March, 1924, and was immediately delivered to the refinery for treatment. By the end of May the Company was placing motor spirit, power benzine, kerosene and fuel oil on the Australian market.

Discussing the general policy of the Board, the Chairman of Directors advised the Committee that, broadly speaking, the Commonwealth Directors on the Board had taken the view that, whilst the Company should be run as a commercial concern, its establishment was primarily intended as an additional source for the supply and refining of oil within the Empire, and to prevent, in time of emergency, any foreign combinations interfering with oil supplies. It was further indicated that the operations of the Company were conducted in such a way as to market the products at a price which would provide for proper amortization and depreciation of plant, and give a reasonable return to the shareholders.

Apart from the fact that the Commonwealth was the predominant shareholder in the concern, the Commonwealth Oil Refineries Ltd. was an ordinary limited liability Company carrying on business in Australia, and enjoyed no special privileges such as exemption from rates, taxation or Customs duty. There was, moreover, nothing in the agreement to prevent the establishment in Australia of other oil refineries.

A review of the oil prices in Australia during the last few years indicated that the establishment of the Commonwealth Oil Refineries Ltd. had undoubtedly been an influence in stabilizing the local market for oil products. Figures placed before the Committee showed that in December, 1922, when the Commonwealth Oil Refineries Ltd. was preparing to enter the Australian market, the price of first-grade motor spirit was 23s. per case, whereas in March, 1926, the price was 17s. per case, and, as a consequence, it was claimed that during that period reductions in the price of petrol alone saved the people of Australia nearly £5,000,000. The reduction in prices had, to a certain extent, synchronized with a fall in price throughout the world ; but it may be said that the presence of the Commonwealth Oil Refineries Ltd., had been a powerful factor in securing to Australia the benefit of price reductions.

As a result of its investigations the Committee was of opinion that the operations of the Commonwealth Oil Refineries Ltd. had been satisfactorily conducted. Having regard to all the circumstances, the Committee considered that the refinery at Laverton was well located and efficiently managed.

The plant working represented one unit of an oil refinery or the equivalent of 2,000,000 gallons of products per month. Owing, however, to the demand for the Company's products, the refinery was working continuously at full throughput, and it appeared to the Committee that, if the business already secured was to be retained and new business catered for, serious attention must immediately be given to the question of increasing the output of the Company, either by the extension of the refinery or by the establishment of a new plant elsewhere. It was stated in evidence that to duplicate the plant at Laverton would occupy about twelve months and cost approximately £170,000, whereas to erect a plant similar to the existing one, say, in or around Sydney, would take more time and would cost, exclusive of land, from £320,000 to £330,000.

The Committee unanimously recommended that early steps should be taken to increase the capacity of the present refinery and, in the event of the demand for C.O.R. products being maintained, to eventually establish another refinery in or around Sydney so that the expensive coastal freights might be avoided.

In addition to increasing the Company's output, the Committee considered that further facilities for bulk distribution should be provided by the Company so that the people of Australia who were financially interested in the Commonwealth Oil Refineries Ltd. could, to a greater degree, participate in its benefits and obtain its products conveniently and as cheaply as possible.

The Committee was of opinion that the necessary increase of the capital of the Commonwealth Oil Refineries Limited should be made to give effect to these recommendations.

Although a minority of the Committee was satisfied that the present management had given general satisfaction, it was of opinion that in view of the fact that the Commonwealth Government owned a majority of the shares in the Commonwealth Oil Refineries Ltd. it should also have a majority on the Board of Directors.

While losses were sustained during the earlier years of the Company's operations, the published accounts of the Company reveal that during the past few years the financial position has greatly improved, as will be seen from the following figures:—

	Profit
Year ended 30th June, 1926	£4,600*
Year ended 30th June, 1927	£69,200*
Year ended 30th June, 1928	£35,600*

The following is an extract from the report of the Board of Directors for the year ended 30th June, 1928:—

"Prices for motor spirit in Australia to-day do not reflect the upward movement which is taking place in the United States of America. On the contrary, whilst the retail price of lightest spirit here remains unchanged at 2s. per gallon as compared with the same period last year, this Company, as well as other distributors, is marketing a good sound spirit at 1s. 10d. per gallon, which is rapidly becoming a recognised grade for cars. Incidentally, it may be mentioned that competition continues to increase through the advent of additional competitors."

The report of the Committee was presented to Parliament on the 25th March, 1926, and on the same day a bill was introduced providing for an increase in the capital of the Company from £750,000 to £850,000.

Since the Committee's report was presented bulk distribution depots have been provided at Adelaide, Sydney, Newcastle and Brisbane, and are being extended every month as finances permit.

PACIFIC ISLANDS SHIPPING FACILITIES.

(Report dated 22nd March, 1927.)

On the 28th August, 1926, the Minister for Home and Territories intimated to the Joint Committee of Public Accounts that "upon the expiry, on the 31st July, 1926, of a contract held by Messrs. Burns, Philp and Co. Ltd., for mail and shipping services between Australia and certain Territories and Islands in the Pacific, Cabinet decided to renew the contract for a further period of twelve months, and gave the following direction, viz., that the Parliamentary Joint Committee of Public Accounts be invited to investigate the question of the shipping facilities to the Pacific Islands served under the contract."

To acquaint itself with the subject matter of the inquiry the Committee made an extensive tour of the islands and ports affected by the services, as well as a close investigation of the services provided under the then existing contract, and heard evidence from a large number of witnesses representative of a wide range of interests.

It was represented to the Committee that the existing shipping facilities were proving a severe handicap to development. Freights from Papua to Europe, via Australia, were probably the highest in the world. While present conditions existed, it was claimed that the investment of capital in the Territory would be restricted. It was urged, therefore, that the subsidy should be increased so as to ensure more equitable freights. To send copra to Sydney for transhipment to Europe was considered economically unsound. Some of the contract vessels were claimed to be unsuitable for the growing needs of the Territories.

A report submitted by the Sydney and Melbourne Chambers of Commerce indicated that, owing to the gradually diminishing volume of trade between the Commonwealth and the Islands, the Commonwealth should assist in every way to procure better freight rates from Australia.

In considering the shipping facilities which should be provided for the Pacific Islands, the Committee had borne in mind the objects of the services, viz., to assist in the development of Australian Territories in the Pacific—Papua, New Guinea and Norfolk Island; to foster Australian trade with those Territories and with the British Solomon Islands and the New Hebrides; and to preserve and advance Australian interests in the Pacific.

The Committee's conclusions may be summarized thus:—

As to trade between Australia and the Territories the Committee recognized that a difficult situation existed. The copra production of the islands approximated 65,000 tons per annum—about one-tenth of the world's production. Australia's requirements of copra were less than 10,000 tons annually. Producers must, therefore, look elsewhere for their markets. If Australia could consume all the copra produced from the Islands there was little doubt that she could practically control the trade of these Territories. The position was, however, that, while the output of copra was steadily increasing, the consumption in Australia was almost stationary. To insist, in the circumstances, on all copra produced in these Territories being brought through Australia was not only uneconomical but unjust. The right of producers to dispose of their commodities to the best advantage must be acknowledged.

Viewing broadly the present shipping arrangements it could not be said that they achieved the objects for which they were instituted. On the contrary, the tendency was for trade to be diverted from its natural channels, and forced to flow by costly and circuitous routes through Sydney.

While there was a regular line of subsidized Australian steamers it could be expected that those steamers would carry the trade from Australia to the Islands, but, with tramp and other steamers available to take produce overseas at low freights, it was only natural that producers would avail themselves of such facilities, with the result that trade from the Islands to Australia was gradually diminishing. The withdrawal of the application of the coastal provisions of the Navigation Act from the Territories of New Guinea and Papua opened the way for competitive shipping facilities for those Territories, which, it was thought, would result in substantial reductions in fares and freights; but there had been no indication of any such competition.

The practice of sending steamers up to 4,000 tons gross from one small outport to another to pick up or set down one or two passengers and a few tons of cargo impressed the Committee as most uneconomical.

As to the subsidized vessels engaged in the Island trade, the Committee directed attention to the general unsuitability and inadequacy of most of the steamers employed. In this connection Burns, Philp and Company Limited, maintained that indecision concerning the contract had militated against a definite programme for the improvement of its island fleet.

After a careful review of all the circumstances, the Committee was of opinion that improved services at lower cost should be obtained if the conditions for their conduct were framed to attract more competition. Short extensions of contracts such as had been provided from time to time could not be expected to give satisfaction. To ensure the best results the Committee was of opinion that contracts for the Islands services should be for a term of five years. To overcome the serious objection to restriction of tendering occasioned by the short time available between the calling of tenders and the commencement of the services, the Committee recommended that a period of at least twelve months should be allowed to enable the successful tenderer to acquire the necessary vessels or to have new tonnage built. In the opinion of a minority of the Committee the Commonwealth subsidy should be available only to Australian firms employing white crews.

The Committee considered that the objects of the Pacific Islands shipping services could best be achieved by conducting two main routes—one serving the Territories of Papua and New Guinea, and the other serving the British Solomon Islands Protectorate and the New Hebrides, together with Norfolk and Lord Howe Islands—these main services to be supported by local or inter-island services. The opinion that there should be only two main services was not, however, unanimous. A minority of the Committee considered that the best interests of Australia and of the Territories and islands would be served by the continuance of separate services, somewhat on the lines of the current routes, but omitting entirely the Rabaul-Solomons service. To meet the requirements of the Territories of Papua and New Guinea, the Committee recommended that these Territories be served by a three-weekly mail service from Sydney, calling at Brisbane, Cairns and Townsville on alternate trips, Port Moresby, Samarai, Rabaul, Kaewieng, Madang, and returning to Sydney by the same ports.

While it was admitted that the New Hebrides service was not justified as a commercial proposition, it was recognized that its continuance was necessary to maintain British prestige in the Islands, and to keep in touch with British and Australian settlers there. Very little cargo was brought to Australia by this service, and the main passenger traffic was between Sydney and Lord Howe and Norfolk Islands. On the other hand, the Solomons provided practically full cargoes to Australia. The Committee was of opinion that the interests of these groups could be best met by combining the present services and instituting a six-weekly service from Sydney to Lord Howe Island, Norfolk Island, Vila (New Hebrides), Vanikoro (Santa Cruz), thence to the Solomons, calling at Tulagi, Russell Group, Giso and Faisi, and returning by the same route. A minority of the Committee did not favor this proposal, which, it was claimed, was not supported by evidence, and which would involve several days extra running time with attendant inconvenience and delay to persons travelling between Australia and the Solomons.

In the conduct of these two main services, it was to be stipulated that the vessels to be engaged thereon should be of adequate capacity to properly cater for the passenger and cargo business offering, and should have an economic speed of not less than twelve (12) knots per hour. Although by these routes, the distance between Australia and some ports which were now served direct would be increased, the additional speed of the steamers as recommended would, to some extent, compensate for this drawback. The Committee was of opinion, however, that there should be no increase in fares and freights between Australia and the various ports by the adoption of these routes. In order that outports and places which had been enjoying a regular call under the present services should not be left without adequate communication, the Committee considered that inter-island shipping should be instituted.

The Committee was of opinion that the Papuan coastal service should include Woodlark Island and that an additional subsidy should be provided for the purpose. It should, however, be made a condition that a more suitable vessel should be engaged in the Papuan coastal services.

The following subsidiary services for the New Guinea inter-island service were suggested by the Committee :—

- (a) Rabaul, north coast of New Britain, Witu, Finschhafen, Singawa, Salamoia Bay, and Morobe, returning by the south coast of New Britain to Rabaul, approximately 950 miles.
- (b) Rabaul, south-west coast of New Ireland, along north-east coast of New Ireland, via Kaewieng to Manus, returning via New Hanover and western coast of New Ireland to Rabaul—approximately 875 miles.
- (c) Madang, north-east coast of New Guinea to Eitape, returning via Maty, Longan and Maron to Madang—approximately 750 miles.
- (d) Rabaul to Buka and Bougainville—Soraken, Numa Numa and ports to Kieta and return to Rabaul—approximately 655 miles.

To serve the places in the British Solomon Islands now catered for by the main route, the following Islands should be visited by an inter-island service:—

Malaita, Gaudalcanal, Ysabel, Rendova, Kulambangra, Vella Lavella and Choiseul, and provision should be made for calls at such other places when and where required.

As it appeared to the Committee that the only purpose served by the New Hebrides inter-island service was to concentrate copra, etc., at Vila, for transhipment to Europe by foreign vessels, it was recommended that the granting of a subsidy for the inter-island service in the New Hebrides be discontinued.

In calling for tenders for the inter-island services, the Committee considered that, in lieu of the usual practice of inviting tenderers to state the amount of subsidy required, and indicate the fares and freights they proposed to charge, the Commonwealth should stipulate the amount of the annual subsidy which would be available, and award the contract on the basis of the passage and freight rates offered, taking into account also the tonnage, speed and type of vessel to be employed. It was anticipated that such a system of tendering would result in much benefit to the settlers in the districts affected.

As an indication of the amount of subsidy which should be sufficient inducement to obtain satisfactory tenders for these inter-island services, the Committee proposed that in respect of the four services in the Territory of New Guinea, £1,000 each be offered, or that a total of £4,000 be made available and apportioned between these services as might be thought fit. The sum of £1,000 was also suggested as a suitable amount for the proposed inter-island service in the British Solomons.

It had been intimated that the contribution to the subsidy by the British Solomon Islands Administration would be increased from £1,800 to £3,000 per annum. The Committee considered this quite a reasonable proposal.

As Lord Howe Island was portion of the State of New South Wales and the congestion in passenger traffic on this service was due largely to tourists visiting this Island, the Committee was of opinion that the State of New South Wales should be approached with a view to its making a contribution towards the subsidy.

Following the presentation of the Committee's report, and in consequence of the recommendations contained therein, tenders were invited for the conduct of various services to Papua, New Guinea, Solomon Islands, New Hebrides, Norfolk Island and Lord Howe Island. Tenders were returnable on the 31st December, 1927, and the new services were to commence on the 1st November, 1928.

The only tenders received were:—

- (1) Messrs. Burns, Philp and Company for services similar to those at present being carried out, viz.:
 - (a) a separate service to Papua;
 - (b) a separate service to New Guinea;
 - (c) a separate service to British Solomons;
 - (d) a separate service to Lord Howe Island, Norfolk Island and the New Hebrides.
- (2) A.U.S.N. Company for a service between Australia and Lord Howe Island and Norfolk Island by vessels trading between Australia and Fiji.
- (3) The Austral-China Navigation Company for a service to Samarai and Rabaul by vessels trading between Australia and Hong Kong.

Burns, Philp's Tender—This tender was receiving the consideration of the Government.

A.U.S.N. Company's Tender—The service proposed to be maintained by this Company did not provide for a call at the New Hebrides. The Government decided that a service was to be provided to the New Hebrides. As the only tender for a service to the New Hebrides was that of Messrs. Burns, Philp and Company, and as the service proposed by that company could not be run in conjunction with that of the A.U.S.N. Company, the tender of the latter Company was rejected.

Austral-China Navigation Company's Tender—The tender submitted by this Company was informal, it not having been accompanied by a deposit. Careful consideration was given, however, to the proposal submitted by the Company, but in view of the fact that Samarai and Rabaul were only to be ports of call in a through service between Australia and the East, and no provision was to be made for serving any other ports in Papua and New Guinea, the proposal was not adopted.

The contribution by the British Solomon Island Administration towards the subsidy in respect of the service to the Solomons has been increased to £3,000 per annum.

COMMONWEALTH GOVERNMENT SHIPPING ACTIVITIES, INCLUDING COCKATOO
ISLAND DOCKYARD.

(*Interim Report, dated 10th August, 1926.*)

In arriving at conclusions as to whether the Commonwealth Government Line of Steamers should be continued, the Committee had to take into consideration the benefits that had accrued to the country by the establishment of the Line, and whether such benefits had outweighed any financial losses that had been incurred as a result of its trading operations. Evidence placed before the Committee showed that not only had the Government Line been directly responsible for actual reductions in freights, but that the existence of the Line had constituted a material restraining influence against proposed increases in freights by other shipping interests. Whilst it was difficult to indicate in figures the value of the services given by the Line, the Committee was of opinion that the shippers and primary producers of Australia derived much benefit from its establishment. The Committee recommended, therefore, that, in the interests of Australia, the Line be continued. In making this interim recommendation, however, the Committee emphasized the fact that its investigations were not completed.

(*Final Report, dated 6th May, 1927.*)

In view of the large sums of public money expended on the Commonwealth Line of Steamers, and of the strong criticism in the press and Parliament in regard to its operations, the Committee deemed it necessary to conduct an investigation into all phases of the Line's activities.

To acquaint itself with the subject matter of the inquiry, the Committee examined the Chairman and members of the Australian Commonwealth Shipping Board, the principal officers of the Line, and many other authoritative witnesses.

The field of investigation covered by the Committee included an exhaustive examination of the operations of the Line—pre-war and post-war; a careful analysis of the finances of the Line, embracing the trading results of all vessels, interest and depreciation; the operations of the Commonwealth Shipping Board under the Commonwealth Shipping Act; and the benefits, direct and indirect, accruing to the Commonwealth from the establishment of the Line.

Whilst fully recognizing the invaluable service rendered to Australia by the Commonwealth Line of Steamers during the war years and the immediate post-war period, the Committee considered that the benefits accruing to the country from its retention as a Government instrumentality were more than outweighed by the heavy losses already sustained, and by the probability of further losses in the future. Having regard to all the circumstances, therefore, the Committee was of opinion that the Line should not be retained as a direct Government activity.

A proposition which appealed to the Committee for the future of the Commonwealth Line was the establishment in Australia, by Australians, of a company which would be free from the influence of any outside shipping bodies, to run the fleet on business lines, with the greatest measure of support possible from the Government in such directions as the granting of mail contracts, the sea-carriage of goods and material, and the transport of immigrants coming to Australia.

As legislative action would be necessary to give effect to the recommendations of the Committee, the Committee was of opinion that there was no justification meantime for the continuance of the existing expensive and inharmonious Board of Directors. It was recommended, therefore, that the appointments of the Members of the Board be terminated simultaneously, and as early as possible.

The weakness of the system of financing the Line by using the proceeds of the sale of its assets as working capital was recognized by the Committee; but as the cash in hand was sufficient to provide working capital for at least two years, alteration of the system was not immediately necessary, particularly in view of the Committee's recommendations concerning the future of the Line.

The opinion that the Australian Commonwealth Line of Steamers should not be retained as a direct Governmental activity was not shared by all members of the Committee. A minority considered that it was of paramount importance to Australia that the Line should be retained, for the following reasons:—

The Line had been a controlling factor in regulating freight rates.

Once the Commonwealth Line was disposed of, there would be a very real danger of the owners becoming associated with, or even part of, the Conference Lines, with consequent detriment to Australia, and increased freights. With such a large overseas trade, it was essential that Australia should have a national shipping line to safeguard its interests.

The Canadian Government found it necessary to operate and extend a Government-owned fleet, notwithstanding the fact that the losses made by the Canadian steamers were much greater than the losses made by the Australian Commonwealth Line.

During the British seamen's strike in 1925, the Commonwealth Line was of great assistance to primary producers in getting their produce abroad. Had the Line not been in existence, there would undoubtedly have been a serious dislocation of trade.

Sale of Ships—Since the report of the Committee on the Commonwealth Government Shipping activities was submitted to Parliament, the Australian Commonwealth Line of Steamers has been sold to the White Star Line Limited for £1,900,000. In the House of Representatives on the 24th April, 1928, the Prime Minister (Mr. S. M. Bruce) presented a statement outlining the negotiations relating to the sale.

On 22nd January, 1928, tenders were invited for the purchase of the Australian Commonwealth Line of Steamers. The conditions of purchase laid down included the following:—

- (a) Offers will be accepted only from natural born British subjects ;
- (b) Tenders should include an undertaking to enter into an agreement and provide satisfactory guarantee or security to—
 1. Maintain the vessels on the British or a Dominion Register for a period of at least ten years ;
 2. Conduct with the existing fleet and/or other vessels of at least equal size, speed and class and with at least equal accommodation for passengers and refrigerated and other cargo for a period of not less than ten years, a minimum service equivalent to that provided by the Line between Australia and Great Britain at present, viz., at least eighteen round voyages per annum.
- (c) Preference will be given to offers containing proposals for safeguarding the interests of Australian exporters and importers in regard to freight rates.

As to (c) there was no definite statement in the original offer of the White Star Line Limited as to how the interests of the Australian shipper would be safeguarded. As the result of negotiation, however, it was agreed that the following conditions should be included in the contract:—

Buyers to guarantee to inaugurate a fortnightly service via the Suez Canal, supplementing present fleet with suitable vessels, as soon as possible after delivery, say, within six months, provided trade justifies it; the establishment in Australia of a responsible body representing all interests concerned, and no general increase in homeward freights to be made without reference thereto. Such body to be selected by the Government and the buyers.

As to the price obtained for the Line, the Prime Minister stated that the Government had given full consideration to the matter, and had come to the conclusion that the price offered was, on the whole, a fair and reasonable one. In the course of his policy speech the Prime Minister made the following comments on the sale of the Commonwealth Line:—

"The Government has relieved the community of a serious burden by its successful sale of the Commonwealth Shipping Line. This has brought about a saving to the taxpayer of over £500,000 a year, while actual improvements will be made in overseas services as a result of the terms of the sale."

COCKATOO ISLAND DOCKYARD.

On 31st January, 1913, the Cockatoo Island Dockyard was taken over by the Commonwealth from the Government of New South Wales.

To carry on the Commonwealth's programme of shipbuilding, a Shipbuilding Board of Control was created in May, 1921. The functions of the Board included the control and supervision of the operations of the Government Shipbuilding Yards at Williamstown and Cockatoo Island. In June, 1921, the management of Cockatoo Island was taken over from the Navy. On 1st September, 1923, Cockatoo Island and Schnapper Island were transferred to and vested in the Australian Commonwealth Shipping Board, in accordance with the provisions of the *Commonwealth Shipping Act* 1923.

At the request of the Prime Minister, the Committee investigated the tender secured by the Shipping Board from the Sydney Municipal Council for the supply of steam turbo-alternator plant for the Bunnerong power house, complaints having been made to the Government that the manufacture of heavy electrical machinery for land purposes was outside the legitimate functions of a Government dockyard, and constituted an unreasonable incursion into the field of private enterprise. It was further contended that considerations other than ordinary commercial principles were responsible for the placing of the order.

After full inquiry, the Committee considered that an incursion into the field of private enterprise, such as had occurred, must be regarded as unequal competition for the following reasons:—

- (a) the Dockyard and the plant had been handed over to the Board at greatly reduced capital value;
- (b) although the Shipping Act provides that the debentures shall bear interest payable half-yearly, and the Board makes provision therefor in its books, no interest has been paid to the Treasury, and the Board consequently enjoys the use of such money without cost;
- (c) whilst provision has to be made by the Board for rates and taxes, no payments on these accounts had been demanded;
- (d) any losses incurred by the Dockyard would have to be made good at the expense of the taxpayers of Australia.

The Committee, with the exception of Senator Needham, and Messrs. P. J. Moloney and E. C. Riley, was of opinion that such an incursion was unfair and undesirable.

It had been admitted, however, that certain mitigating circumstances surrounded the case. It was freely recognised that the maintenance of such an establishment as Cockatoo Island was an essential link in the chain of Australia's defence, and, further, that it was a well-equipped engineering concern with a highly-trained technical staff and a skilled body of workmen who would be difficult to replace in the event of disbandment. Consequently, the directorate, not having, in its opinion, received sufficient work of a nature which might be regarded as strictly within the scope of a Government Dockyard, felt it imperative to secure such work as would enable it to keep the establishment in active and profitable operation and to discharge the obligations imposed upon it by the Act.

With regard to the further contention that "considerations other than ordinary commercial principles were responsible for the placing of the order, inasmuch as the Dockyard quoted £661,224 for a job which included only 55 per cent. of Australian work, whilst a competing Australian firm quoted £619,173, with 96 per cent. of Australian work", the facts elicited by the Committee in evidence showed that of all the tenders received by the Sydney City Council in response to advertisements only two were considered by the Council to be formal, viz., the Australian Commonwealth Shipping Board and the Australian General Electric Company. The technical advisers of the Council recommended the acceptance of the latter tender, but, as a matter of policy, and, presumably, to support local manufacture, the Council decided to give the order to the Australian Commonwealth Shipping Board, on receiving the assurance of its expert that he considered Cockatoo Island Dockyard could carry out the work. The total contract price of the Shipping Board amounted to £666,605, including spare parts, special tools, special condenser and oil cooler tubes, which sum was stated to be comparable with the recommended tender of £628,234 13s., which it exceeded by 5.8 per cent.

The tender of the Australian General Electric Company was said to provide for from only 30 to 36 per cent of the work being done in Australia, whilst detailed figures placed before the Committee showed that the Shipping Board's tender provided for 68 per cent. of Australian work.

Whether the order would have been placed with other Australian firms was, however, another matter. Presumably, had the Australian Commonwealth Shipping Board not been a tenderer, the work would have gone to the Australian General Electric Company which submitted the only other formal tender; but, in that case, it must be remembered that only about 33 per cent. of the work would have been performed in Australia.

Subsequently, however, the power of the Shipping Board to enter into this contract was challenged before the High Court; and, according to the Attorney-General, the view of the High Court was substantially that there was no power in the constitution which enabled the Commonwealth Parliament by statute to authorize a corporation created by it to carry on business of a general kind unconnected with the specific legislative powers of the Commonwealth.

Following the decision of the High Court arrangements were made for the work being performed at Cockatoo Dockyard for the Sydney Municipal Council to be completed elsewhere. As the turbo-alternator contract amounted to £666,605, and the mechanical draft plant contract to £99,898, the loss of such work had an immediate and serious effect on the Dockyard.

Financial Position of Cockatoo Island Dockyard.—Cockatoo Island and Schnapper Island, together with plant, equipment, etc., were taken over by the Commonwealth from the Government of New South Wales at a valuation of £867,716. The assets taken over from the Navy by the Shipbuilding Board of Control in June, 1921, were valued at £1,945,562.

Since the Dockyard was taken over by the Commonwealth Shipping Board, the financial results have been as follow:—

	Net Profit.
1923-24 (Seven months only)	£5,929
1924-25	5,096
1925-26	2,571
1926-27	2,261

No interest on debentures issued to the Treasury had been paid. The amount owing on this account at 31st March, 1927, was £87,585.

The value of assets at 31st March, 1927, was set down at £657,480.

During the Committee's inquiry attention was drawn to the fact that the Royal Commission on the Cockatoo Island Dockyard, in a report, dated 8th July, 1921, recommended that all work in connection with the Fleet, with the exception of minor repairs to be done at Garden Island, should be carried out at Cockatoo Island. The Prime Minister, when introducing the Commonwealth Shipping Bill in 1923, intimated that the Government proposed that the Royal Commission's recommendation should be put into operation, and that all major work for the Navy should be done at Cockatoo. Nevertheless, it was stated, on behalf of the Cockatoo Island Dockyard, that practically the only repair work which Cockatoo carried out for Naval ships was docking, cleaning and painting bottoms and underwater repairs. Representatives of the Naval Board admitted that, generally speaking, the only Naval work sent to Cockatoo was that which could not be done at Garden Island, and whilst the Naval Board recognized the value of having available such an establishment as Cockatoo Island Dockyard, it was of opinion that the transference of repair work from Garden Island to Cockatoo Island would, from a Naval point of view, result in increased expenditure and reduced efficiency. Garden Island, as a Naval establishment, it was explained, contained not only the Naval repair shops, but Naval storehouses, torpedo and gun-mounting stores, and repair shops, oil fuel tanks, wireless and signal station, accommodation for Naval officers and ratings, detention quarters, etc., many of which activities were of a secret and confidential nature.

The Committee considered that the Cockatoo Island Dockyard, which was a well equipped engineering concern, should be retained as a direct Governmental activity, particularly from the point of view of defence. The dockyard was in a position to execute a considerable amount of work for Government Departments.

In the opinion of the Committee, the association of Cockatoo Island Dockyard and the Commonwealth Shipping Line, under the control of the Australian Commonwealth Shipping Board, had resulted in little benefit to either concern; but, until otherwise provided by legislation, the Dockyard would have to remain under the Shipping Board.

The Committee recommended that, when legislative action was taken, the control of Cockatoo Island Dockyard should be removed from the Shipping Board and be vested in a part time Board—directly responsible to a Minister of the Crown—comprising representatives from the Commonwealth Service skilled in engineering and Defence matters, and a financial representative from outside the Service, and that the chief executive officer of the Dockyard should be a general manager responsible to the Board, but not having a seat on the Board.

Whilst, no doubt, more work for the Navy could be carried out at Cockatoo, there was much work of a highly secret and confidential nature which could be handled more satisfactorily by technical Naval officers at Garden Island, which was under Naval discipline. The existing difficulty regarding the place where Naval repair work should be performed would, it was considered, be overcome by the constitution of a Board as recommended by the Committee, particularly if a Naval representative, who could act as a liaison officer between the two establishments, were a member of the Board.

Concerning the complaints made regarding the undercutting of prices, and the passing on of losses on private work to Government work at Cockatoo Dockyard, the Committee was of opinion that such complaints could not, in so far as they applied to the present control, be substantiated, and this view was borne out by the result of a special investigation conducted by the Commonwealth Audit Office.

Speaking in the House of Representatives on 24th April, 1928, on the control of the Cockatoo Island, the Prime Minister (Mr. S. M. Bruce) said :—

“ Honorable members will recall that when the Shipping Board was constituted not only was the Commonwealth Line of Steamers placed under its control, but also the Cockatoo Island Dockyard and its activities. At the present time this Yard is under an act of Parliament controlled by the Shipping Board ; but obviously it is unnecessary to keep the Board in existence merely to carry out one of the functions for which it was created. The Government has fully considered the matter, and has decided to invite tenders for the leasing of the Dockyard, proper safeguards having been taken to ensure that it will be available, if necessary, for defence purposes.”

In his policy speech, delivered on 8th October, 1928, the Prime Minister said :—

“ It is proposed to lease the Cockatoo Island Dockyard upon terms which, while protecting the naval requirements of the Commonwealth, will make the facilities of the Dock fully available for all other classes of work.”

The Government of the Commonwealth of Australia recently invited tenders for the lease of Cockatoo Island Dockyard as a going concern for a term of twenty years, with the option of renewal for a further term not exceeding ten years.

COMMUNICATIONS BETWEEN TASMANIA AND THE MAINLAND.

(Report dated 4th November, 1927.)

Under date 15th March, 1927, the Prime Minister (Mr. S. M. Bruce) addressed the following letter to the Chairman of the Joint Committee of Public Accounts :—

“ From time to time representations have been made by Tasmanian Members of the House of Representatives and Senators that communication between Tasmania and the mainland is far from satisfactory, and have urged the view that there is room for improvement.

Representations on the subject were recently made to the Minister for Markets and Migration whilst visiting Tasmania, a deputation from the Chamber of Commerce waiting upon him and recommending improved shipping communication.

The question has been considered by Cabinet which has decided to invite your committee to make an investigation into the general question of communications between Tasmania and the mainland, and I shall be glad if steps can be taken to give effect to this decision.”

The Committee after hearing preliminary evidence in Melbourne from the Director of Navigation and the Director of Postal Services regarding the existing communications between Tasmania and the mainland, proceeded to Tasmania, where evidence was taken at Hobart, Launceston, Scottsdale, Devonport, Ulverstone, Burnie, Stanley, Strahan and Queenstown. To acquaint itself with the subject matter of its inquiry the Committee sought and obtained statements setting out the existing interstate services and the intermittent calls made by overseas steamers. These services, together with the conditions of the relative contracts, were closely examined. Exhaustive inquiries were also made into the mail services between Tasmania and the mainland.

Evidence heard by the Committee in Tasmania included a statement prepared by, and presented on behalf of, a conference of representative bodies from all parts of the State convened by the Premier of Tasmania. The statement, which was supported by trade and other statistics, indicated that, in the opinion of the conference, the immediate and minimum requirements for improving Tasmania's communications with the mainland of Australia were as follow:—

- (1) Amendment of the Navigation Act, so that oversea vessels calling at interstate ports in pursuit of trade may be used as heretofore for interstate passengers and cargo;
- (2) Amendment of the Orient Mail Contract, so that the Orient mail steamers will be required to include Hobart in their itinerary all the year round, and that it will be obligatory upon them to carry interstate passengers to the extent of the number of passengers offering, consistent with their accommodation available;
- (3) A superior passenger steamer, fitted with refrigerated chambers, for the Hobart-Melbourne service;
- (4) Amendment of the Bass Strait Mail contract to provide for specially designed tourist ships, fitted with oil-burning furnaces or motor engines, and capable of a speed at sea of not less than 18 knots, for the Melbourne-Launceston and Melbourne-North-west Coast routes.
- (5) Improved mail services, steamer and/or aerial.
- (6) Reduced passenger fares and rates of freight.

It was also indicated to the Committee that—

- (7) An improved service between Sydney and Hobart was required; and
- (8) The steamers of the Australian Commonwealth Line should call at Hobart regularly throughout the year.

In view of the general terms of the request under which the investigation was originated the Committee gave attention to other means of communication between Tasmania and the mainland, the possibility of improving the cable communications, and the practicability of inaugurating regular wireless and aerial services being fully explored.

In arriving at its conclusions the Committee gave the fullest consideration to Tasmania's geographical and economic position, the difficulties with which the State had to contend, and the necessity for adequate communication with the mainland to enable Tasmania to develop and progress. If the shipping facilities essential for the well-being of Tasmania could not be made directly profitable, the Commonwealth should, in the opinion of the Committee, help to bear the burden.

The Committee recommended the repeal of the coastal sections of the Navigation Act, the opinion held being that the Navigation Act had failed in its purpose, and that Tasmania had suffered as a result of its operation. These views were not, however, shared by a minority of the Committee who considered that the action suggested would not prove a remedy for Tasmania's disabilities, or lead to the improved services desired by the State. If relief could not be afforded by repealing the coastal clauses of the Navigation Act, the Committee recommended that a seasonal subsidy should be offered as an inducement to shipping companies to provide a better service on the Sydney-Hobart route.

In regard to the Bass Strait service, the Committee was of opinion that it should be improved firstly via Burnie and by means of an 18-knot oil-burning vessel with adequate cargo space and at least half of its passenger accommodation in two-berth cabins, and that public tenders should be called for the service proposed, allowing ample time between the date of closing tenders and the commencement of the service to permit the successful tenderer to obtain the necessary tonnage and to attract competition in tendering. The Launceston service should, it was considered, remain as at present until better facilities were available in the River Tamar.

Regarding fares and freights the Committee was of opinion that there should be no increase at the present stage.

The Committee also considered that the possibility of the early inauguration of a subsidized aerial service to Tasmania should be seriously investigated.

Following the presentation of the report, the Government, after consideration of the recommendations of the Committee, decided to invite tenders for the services described hereunder:—

1. Between Melbourne and Launceston thrice-weekly each way from 16th September to 31st March, and twice-weekly each way from 1st April to 15th September.

2. Between Melbourne and Burnie, thrice-weekly each way from 16th September to 31st March, and twice-weekly each way from 1st April to 15th September, a call to be made at the port of Devonport during a period of eight weeks in the summer of each year in accordance with clause 4 of the Conditions of Contract.

It will be seen that the tenders invited for the Melbourne-Burnie service were practically identical with the Committee's recommendations regarding that service except that it was not stipulated that an 18-knot oil-burning vessel should be used. Observance of the proposed timetable, however, would have necessitated the use of a vessel of much faster speed than the *Oonah*.

As regards the Melbourne-Launceston service the invitation for tenders stipulated the provision of a service of the same frequencies as at present and as recommended by the Committee, namely, thrice-weekly in summer and twice-weekly in winter, but the speed of the vessel was to be accelerated and arrangements made for the mails to be landed at a wharf in deep water near Rosevears when circumstances prevented the vessel reaching the wharf at Launceston by 9 a.m. The latter provision was inserted in order that mails for Hobart would reach that city sufficiently early to permit of delivery of the correspondence being effected by postman on the afternoon of the day on which the steamer arrived at Launceston.

The only tender received was one from the company which is now conducting the service. The tenderer asked for a subsidy of £96,000 as compared with the present subsidy of £30,000, and the Government considered that the advantages offered under the tender were not commensurate with the greatly increased subsidy which was stipulated.

The Postmaster-General's Department is negotiating with the tenderer with the object of arranging for an improved service at a lower cost, but finality in the matter has not yet been reached.

The Prime Minister (Mr. S. M. Bruce), when in Tasmania recently, promised the people of Tasmania an aerial mail service. In the policy speech delivered by the Prime Minister on 8th October, 1928, under the head "Air Communication", the following reference is made to this service:—

"Further services are contemplated between Melbourne and Hobart."

Regarding the recommendation of the Committee concerning the repeal of the coastal clauses of the Navigation Act and the operation of the Navigation Act, the Prime Minister in his policy speech said:—

"Closely linked up with the question of the protectionist policy of Australia is the question of the protection afforded to the shipping industry by the Coastal Clauses of the Navigation Act."

This question has been the subject of inquiries by the Royal Commission on Navigation, and also by the Public Accounts Committee of the Federal Parliament. The evidence collected by these inquiries shows that, while these provisions have given to the Australian Mercantile Marine an effective monopoly of the Australian coastal trade, the shipping facilities on the coast have decreased, notwithstanding a great increase in our population and trade. It is also shown that these decreased facilities, combined with high fares and freights, have operated to the detriment of Australian industries as a whole.

The Government feels that this condition of things cannot be allowed to continue. The Coastal Clauses have failed to achieve the objects for which they were introduced. But the Government does not consider that it follows that all endeavors to establish an Australian Mercantile Marine should be abandoned. It is, however, imperative that new methods should be adopted.

The Government, therefore, proposes that the coastal clauses of the Navigation Act should be repealed and that in lieu thereof protection should be given through tariff provisions to vessels complying with Australian standards of wages and living conditions.

The imposition of duties in this regard would follow the general lines of our tariff policy.

The Government, therefore, proposes to refer to the Tariff Board for inquiry and report the question as to the rate of duty that should be imposed on passengers and cargo carried by British or foreign shipping which may engage in the coastal trade. The Government believes that if a rate of duty were imposed on passengers and cargo carried in competition with Australian shipping around our coast sufficient to give protection to our shipping industry, we would secure fair competition, which should result in a more efficient service, and in reduced fares and freights. From the revenue that would be received from such duties, subsidies could be paid to Australian shipping for services to the less developed portions of Australia. This, whilst assisting the Australian shipping industry, would also serve to assist the development of the outlying or backward portions of the Commonwealth."

The Tariff Board has now been asked by the Government to report upon:—

- (a) The imposition of taxation on cargo, and for passengers carried interstate by overseas vessels;
- (b) Payment of subsidy or bounty to Australian shipping;
- (c) Licensing of overseas vessels to engage in the Australian coastal trade, subject to payment of license fees on a basis to be prescribed;
- (d) By a combination of any of the above means;
- (e) By any other means.

TRANSPORT FACILITIES WITHIN THE FEDERAL CAPITAL TERRITORY.

(Report dated 21st March, 1928.)

In view of the demands of the public for improved transport facilities in the Federal Capital Territory, and recognizing the important part played by an efficient transport system in the industrial and social life of the community, the Committee decided to enter upon an investigation of the transport services controlled by the Federal Capital Commission.

To ascertain the views of all sections of the community on the subject, the Committee heard evidence from a large number of representative persons. Inspections made by the Committee included the Commission's garages, depots and omnibuses, and the mechanical equipment of the costing section.

The investigations of the Committee covered the operations of the Commission's transport fleet, including the city omnibuses, an analysis of the financial position of the Transport Branch, the purchase and sale of cars, garage accommodation, private car hire, footpaths and lighting, traffic control and other minor matters.

Having carefully considered the evidence, the Committee was unanimously of opinion that the existing transport services were entirely inadequate to cope with the traffic offering, and were not in keeping with the needs of the people. To alleviate the disabilities suffered by the public, the Committee made a series of observations and recommendations designed to ensure:—

- (a) More suitable omnibuses ;
- (b) A more frequent service ;
- (c) Observance of time tables ;
- (d) Provision of shelter sheds ;
- (e) Suitable destination boards and distinctive lights on omnibuses ;
- (f) Lights and notice boards at termini and main sections ;
- (g) The provision of check clocks ;

In the interests of public convenience and safety, the adequate provision of street lighting and footpaths was considered by the Committee an urgent necessity. It was urged, therefore, that special attention should be given to these important utilities in connection with the Commission's future constructional programme. For reasons of economy, convenience and safety, the Committee recommended that footpaths should be constructed along the shortest possible routes leading to the various centres of population.

After a close investigation of traffic control, the Committee was satisfied that speed limits should be imposed within the city area. Evidence showed that in other countries the wisdom of speed limits had been recognised.

With a view to regulating charges for motor car hire, the Committee recommended the enactment of legislation on lines similar to that in existence in other capital cities.

The Committee considered that immediate action should be taken to compel owners of vehicles carrying passengers for gain to comply with the law.

The provision of garage accommodation at the Commission hotels was also recommended.

Since the report of the Committee was submitted to Parliament, many of the recommendations made have been adopted. Additional buses have been provided; regulations have been framed for the guidance of drivers and conductors; shelter sheds have been erected; destination boards and distinctive lights have been installed; lights and notice boards have been erected at termini, and check clocks have been installed. Speed limits have been imposed in respect of all classes of motor vehicles in the Territory.

As to the examination of applicants for licenses, it is pointed out that only one testing authority operates in Canberra. The Federal Capital Commission issues motor licenses, and its delegate in this matter is required to satisfy himself that an applicant has recently been examined in Melbourne or Sydney and holds a license in one of those cities, or, alternatively, to require the applicant to be tested by the Canberra police.

Garages have been provided at the Commission's hotels and at Brassey House.

Street lighting has been proceeded with and is being provided as rapidly as available funds will permit.

Special consideration has been given by the Commission to the short-cut footpaths recommended by the Committee. Already a number of these has been constructed, and a further programme has been authorized.

HOUSING AND BUILDING COSTS GENERALLY IN THE FEDERAL CAPITAL TERRITORY.

(Report dated 18th September, 1928.)

In view of the large sums of money expended in connexion with the construction of buildings and houses in the Federal Capital Territory, and of the exceptional circumstances under which the Capital was established, the Committee decided to conduct an investigation into the financial side of the building operations of the Federal Capital Commission.

To enable the Committee to arrive at conclusions as to comparative costs and values, organization, administration and control, the Committee, in addition to taking evidence, made a number of important inspections in other States.

The investigations of the Committee included a careful comparison of building costs and housing conditions as between Canberra and other capital cities, an exhaustive inquiry into the costs of hotels and other buildings, including Government House, and a careful examination of the operations of certain trading activities controlled by the Commission.

As the question of land values was considered inseparable from the inquiry into housing conditions, the Committee sought and obtained evidence as to land sales, rating, and the basis of valuation of all blocks—business and residential—in the city area.

Other subjects reviewed by the Committee included fire insurance, railway freights and rents.

While recognizing that a considerable amount of good work had been done by the Federal Capital Commission, the Committee was unfavorably impressed with the manner in which Commission work had been supervised. It was recommended, therefore, that only fully qualified and dependable men should be employed as Clerks of Works.

The Committee was satisfied that the types of homes provided by the Commission were not in keeping with the tastes of the occupants, and suggested that, in connexion with future construction, the advice of other Government building organizations should be sought.

Having in mind the successful operations of other building organizations (notably the State Savings Bank of Victoria and the War Service Homes Commission) the Committee was of opinion that it should be possible for the Commission to provide homes in Canberra for public servants under terms and conditions relatively as favorable as those attaching to the bodies indicated. To encourage home ownership amongst the public servants the Committee recommended the acceptance of low deposits, having regard to the income and circumstances of the officer.

In view of the high cost of bricks in Canberra the Committee urged that careful consideration be given to the possibilities of other methods of construction. Two schemes investigated by the Committee, viz., the Meenan Patent Concrete Construction System, and the concrete home scheme at Tailem Bend, South Australia, controlled by the South Australian Government Railway Department, impressed the Committee as being worthy of close investigation by the Federal Capital Commission.

The expenditure of £72,545 on Yarralumla House in respect of additions and alterations was viewed by the Committee with dissatisfaction, and conflicting figures furnished by the Commission were criticized.

In view of the unsatisfactory situation created by the inflated prices paid for land in Canberra the Committee urged the necessity for an early revaluation.

With regard to future land sales the Committee recommended that any legislation in contemplation should provide that the fixation of upset prices should be carried out on a definite and sound basis; that the upset prices, not the prices realized, should form the basis of ground rental and rates; and that, where land is sold at a price in excess of the upset price, the excess or premium should be paid in cash by the successful bidder. By this means speculation would be discouraged and the payment of rentals and rates on fictitious values avoided.

As to rates, the Committee considered that the citizens of Canberra should not be called upon to pay more for the services provided for them than ratepayers enjoying similar services in other towns.

Freights charged on the Federal Territory Railway were regarded by the Committee as excessive, and it was urged that steps should be taken to apply to the Federal Territory Railway the through rates from Sydney to Canberra.

~~bsirotz~~ The Fire Insurance rates of the Commission were considered unnecessarily high. The Committee held the view that the rates of the War Service Homes Commission might reasonably be adopted by the Commission.

While recognizing that the Stores Branch was a very useful adjunct to the Commission during the peak period of construction in the Territory, the Committee was of opinion that the retention of the organization could not now be justified owing to the marked restriction of constructional activity in the Territory, and to the lack of continuity of operations. It was therefore recommended that the Stores Branch should be re-organized and placed on a basis to meet the needs of maintenance work only.

~~med~~ Dealing with the financial position of the Federal Capital Commission generally, the Committee was satisfied that the best results would be achieved by definitely establishing the principle that all expenditure of the Federal Capital Commission, other than capital expenditure, should be met from the revenues of the Commission or from the Consolidated Revenue Fund, or, if necessary, from both. The present practice of capitalizing interest was viewed by the Committee with disfavor.

With a view to placing the finances of the Territory on a sound basis, the Committee commended to the consideration of Parliament certain proposals designed to secure closer control by Parliament, sounder principles of accounting, greater simplicity in operation, and an equitable distribution amongst the taxpayers of all expenditure incurred in the Federal Capital Territory.

The Committee was of opinion that the writing down of capital would not solve the problems of the Federal Capital Territory. Having carefully studied the subject from all points of view the Committee was satisfied that no good purpose would be served by writing down capital. On the contrary, the Committee was convinced that there were many obvious objections, apart from financial considerations, to the adoption of such a course.

After a careful analysis of the housing allowances paid to public servants the Committee came to the conclusion that the existing allowances were fairly reasonable. Owing, however, to the uncertainty as to the rating position, the Committee, in its desire to be fair to the public servants, recommended that the whole question of allowances be reviewed by the Public Service Board as soon as definite rates had been decided upon.

The heavy losses on the Commission hotels were viewed by the Committee with concern. Economy in management should, in its opinion, be carefully considered in connexion with any future alterations or additions to the hotels.

A number of serious irregularities of procedure relating to certain contracts having come to the notice of the Committee, the appointment of a competent independent authority to investigate this phase of the Commission's activities was recommended.

That no definite conclusions should be adopted affecting proposed licensing laws while Parliament was not sitting was also recommended, the view of the Committee being that Parliament should have a full opportunity of adjudicating on this question before any proposals became law.

The majority of the Committee deemed it unnecessary to express an opinion on any alteration in the form of administration existing in the Federal Capital Territory. This view, however, was not shared by a minority of the Committee which was dissatisfied with the Commission control and recommended its abolition.

With regard to the recommendations of the Committee, the Federal Capital Commission has advised as follows:—

Concrete versus brick houses—Investigations have been commenced with a view to establishing the comparative costs of the two housing schemes mentioned by the Committee in its report, viz., the Meenan Patent Concrete Construction System, and the concrete housing scheme controlled by the South Australian Government at Tailem Bend, South Australia. With this object in view, communications have been established with Mr. Meenan and Mr. Story. After analysis of the comparative costs of the two schemes, the Commission proposes to consider the advisability of detailing officers of the Architect's Department to visit Singleton and Tailem Bend for the purpose of investigating the two systems in actual operation.

Home designs—The Commission has prepared a series of new designs which in their conception and treatment are entirely different from the work already carried out. These designs are intended to provide for brick dwellings containing a living room, three bedrooms, kitchen, bathroom, laundry, front verandah, rear porch and fuel space. Tenders were recently invited for ten houses, and the prices, viz., £90 to £92 per square, will enable the Commission to provide houses at a weekly rental of under £2, inclusive of ground rental, but excluding rates. Early

this year, the Commission intends to proceed with the erection of a number of two-storied dwelling houses, providing accommodation equal to that above referred to. It is anticipated that these will be erected at a cost which will enable them to be let for 27s. 6d. per week, exclusive of rates.

Revaluation of land—The matter of city valuations was referred by the Commission in July, 1928, to an independent Board of Review. The Board, after investigation, generally confirmed the Commission's valuations, and its recommendations were used by the Commission in its treatment of rates for the years 1928 and 1929.

Unregistered builders—Provision has now been made for the issue of Special Builders' Licenses for limited periods, or for special jobs. Applicants for such licenses are required to lodge with the Commission references of bankers and architects.

Land Sales—With regard to the Committee's recommendation that upset prices should be fixed on a sound and definite basis, and that, where land was sold at a price in excess of the upset price, the excess should be paid in cash, the Commission states that immediately after the last sale the Government was advised that a scheme based upon this principle would be recommended by the Commission in connexion with the next sale.

Rating—All the considerations advanced by the Committee were taken into account by the Commission in determining the rates for 1928 and 1929.

Insurance—Insurance rates are to be reviewed at the end of a complete year's working.

Stores Branch—This branch was being subjected to the closest scrutiny. It was impossible, at present, to do away with the branch altogether, but staffs were being continuously adjusted consistent with requirements.

Railway Freights and Territorial Finance—These matters are engaging the attention of the Home Affairs Department.

Contracts—With regard to the Committee's recommendation that certain contracts entered into by the Federal Capital Commission should be investigated by a competent independent authority, the Home Affairs Department advises that action has been taken in the direction suggested by the Committee.

WALTER KINGSMILL,

Chairman.

Office of the Joint Committee of Public Accounts,

Parliament House,

Canberra, 27th February, 1929.

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