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1915

THE PARLIAMENT OF THE COMMONWEALTH OF AUSTRALIA

REPORT

FROM THE

JOINT PARLIAMENTARY COMMITTEE of PUBLIC ACCOUNTS

upon

THE SMALL ARMS FACTORY, LITHGOW, NEW SOUTH WALES.

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# THE COMMONWEALTH OF AUSTRALIA.

COMMITTEE OF PUBLIC ACCOUNTS.

No.19 of 1913.

An Act to provide for a Joint Parliamentary Committee of Public Accounts.

(Assented to 19th December, 1913.)

- BE it enacted by the King's Most Excellent Majesty, the Senate, and the House of Representatives of the Commonwealth of Australia, as follows:-
  - 1. This Act may be cited as the Committee of Public Accounts Act 1913.
  - 2. (1.) As soon as conveniently practicable after the commoncement of this Act, and thereafter at the commencement of the first session of every Parliament, a joint committee of nine members of the Parliament, to be called the Joint Committee of Public Accounts (in this Act referred to as the Committee), shall be appointed according to the practice of the Priliament with reference to the appointment of members to serve on Joint Select Committees of both Houses of the Parliament.
  - (2) Three members of the Committee shall be members of, and appointed by, the Senate, and six members of the Committee shall be members of, and appointed by, the House of Representatives
    - 3. The duties of the Committee shall be -
      - (a) to examine the accounts of the receipts and expenditure of the Commonwealth, and to report to both Houses of the Parliament any items in those accounts or any circumstance connected with them to which they think that attention should be directed.
      - (b) to report to both Houses of the Parliament any alteration which the Committee think desirable in the form of the public accounts or the method of keeping them, or in the mode of receipt control issue or payment of the public money;
      - (c) to inquire into and report upon any questions in connection with the public accounts which are

referred to them by either House of the Parliament;

- (d) any other duties assigned to the Committee by Joint Standing Orders approved by both Houses of the Parliament.
- 4. Where any matter is inquired into by the Committee and the Committee has lapsed or ceased to have legal existence before reporting on the matter the evidence taken before the Committee may be considered by the succeeding Committee as if the evidence had been given before the succeeding Committee.
- 5. The Committee may take evidence on oath or affirmation, and the Chairman of the Committee or the member acting as the Chairman may administer oaths or affirmations to witnesses appearing before the Committee.
- 6. Any person who wilfully gives false evidence on oath or affirmation before the Committee shall be guilty of an indictable offence.

  Penalty: Five years' imprisonment.
- 7. Every Committee of Public Accounts appointed under this Act shell hold office as such Committee and may exercise all powers conferred upon it for the term of the Parliament during rhich it is appointed.

Extracted from Journals of the Senate, and Votes and Proceedings of the House of Representatives -

Journals of the Senate.

Thursday, 22nd October, 1914.

11. JOINT COMMITTEE OF PUBLIC ACCOUNTS. - The Minister for Defence (Senator Pearce), pursuant to notice, moved - That in accordance with the provisions of the Committee of Public Accounts Act 1913, the following Senators be appointed members of the Joint Committee of Public Accounts, viz:- Senator Bakhap, Senator Blakoy, Senator Stewart.

Question - put and passed.

Votes and Froceedings of the House of Representatives.
Friday. 27th November. 1914.

6. PUBLIC ACCOUNTS COMMITTEE (Joint). - Mr. Fisher moved, pursuant to notice, That, in accordance with the provisions of the Committee of Public Accounts Act 1913, the following Members be appointed Members of the Joint Committee of Public Accounts, viz:

Mr. Charlton, Mr. Burchell, Mr. W. Maloney, Mr. Fowler, Mr. Atkinson, and Mr. John Thomson.

Debate ensued.

Question - put and passed.

#### PROCEEDINGS OF THE COMMITTEE.

The Committee first mot in Melbourne on the 4th December, 1914, and at that meeting elected Mr. Matthew Cherlton, M.P., Chairman, and Mr. John Thomson, M.P., Vice Chairman.

It was decided to inquire into the general financial position of the Commonwealth Small Arms Factory, Lithgow, New South Wales, and the taking of evidence was commenced on the 9th February 1915.

Altogother 30 meetings have been held in Melbourne. Sydney and Lithgow and 22 witnesses from the Departments of Home Affairs. Defence, and Treasury, the Audit Office, and the Small Arms Factory have been examined.

The Committee regret the delay, converting in presenting their Report owing to difficulty experienced in securing the attendance of Mr. C. A. Wright the Manager to give his evidence.

#### C WASONWEALTH OF AUSTRALIA.

# REPORT OF THE JOINT COMMITTEE OF PUBLIC ACCOUNTS

#### under

THE COMMITTEE OF PUBLIC ACCOUNTS ACT 1913, upon the COMMONWEALTH SMALL ARMS FACTORY, LITHGOW, NEW SOUTH WALES.

#### INTRODUCTION.

- 1. The Defence Act 1903-9 Part VI. section  $63^{\mbox{d}}$  provides for the establishment of a Small Arms Factory.
- 2. On the 25th July 1906 Captain Collins the Officer in Charge of Commonwealth Offices London was asked by the Acting Secretary Department of Defence for an estimate of the cost of a Small Arms Factory, together with particulars in regard to the output and details of vorking expenses. After considerable correspondence the Minister for Defence instructed Engineer Commander Clarkson, on the 23rd June 1978, to proceed to England and make arrangements in conjunction with Captain Collins for obtaining the necessary machiner, and tools.
- Subsequent to the departure of Engineer Command.r.Clarkson for England a site for the Factory was on the 7th July 1908 acquired at Lithrow.
- 4. Extensive enquiries were made by Engineer Commander Clarkson in England and in America and traders were called for simultaneously in Australia and Great Britain. Four tenders were received, and that from the Fratt and Whitney Coy. U.S.A., was recommended to the Department of Defence by Capt. Clarkson and accepted by the Minister on the 17th July 1909.
  - 5. The particulars of the accepted tender are as follow:-

Amount of Tendor.	Time re- quired.	Estimated Buildings	Cost Motive Power	Total Capital Outlay	Annual Interest on Cap- ital at 4%	Annual Doprecia- tion at 5%	Total Annual Expendi- ture.
£68,144	l year	£16,000	£8,000	£92 <b>,1</b> 44	£3,686	£4,607	£8,293

6. The contract was for a plant capable of manufacturing at the rate of fifty M.J.E. short rifles of the latest approved War Office pattern, with sword beyonets and scabbards complete, per working day of 8 hours when operated by 144 unskilled and not more than two skilled Australian workmen; the workmen to be instructed by the Contractors free of cost to the Commonwealth. The staff to include all labour other than that required for supervision, clerical duties,

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tool room staff, ongine and boiler tending, and shop labouring. The Tenderer to furnish a sketch design of the factory showing the general lay out and floor space proposed to be occupied by the machines supplied, the space required for driving power, offices, store rooms etc.

- 7. The annual expenditure as represented by interest on capital and depreciation was calculated on an output of 15,000 rifles per annum at the rate of 11/1 per rifle.
- 8. The cost of manufacture per rifle for labour and material was given by Pratt & Whitney to be £2/18/- (vide Parliamentary Paper No.32 of 1909).
- 9. Based on the foregoing figures the cost of producing a rifle, inclusive of interest on capital, depreciation, labour, material etc. was set out at £2/9/1. The price paid to the War Office at that time was about £4/6/- per rifle. It appeared therefore that the establishment of a factory in Australia would buring about a decrease in the cost of rifles.
- 10. Shortly after the 12th May 1912 the plant was taken over from the contractors by the Department of Defence and on the 8th June following the Governor-General formally opened the Fectory.

## REPORT.

11. The Joint Committee of Public Accounts have the honour to report that they have enquired into the general financial position of the Small Arms F ctory, Litagow, and desire to submit the results of their investigations together with certain recommendations for the future working of the factory.

#### BUILDINGS.

- 12. The Committee find that the completed cost of the buildings greatly exceeded Captain Clarkson's estimate of £16,000. This is due to several causes. First the estimate while providing for buildings sufficient for housing the plant and machinery did not over ther buildings equally necessary for the establishment of a complete factory. In framing the estimate, Captain Clerkson was unaware of the physical features of the site choson, which entailed considerable expense in excavating and levelling. The distance of the factory from the nearest port and consequent heavy expenditure in hauling and conveying material also added to the cost.
- 13. Additional buildings and alterations were considered necessary and the Einister for Defence then obtained the assistance of the Director General of Works with the result that several alterations in the designs were found advisable. The Department of Home Affairs was instructed to make provision accordingly.
- 14. The premises which now constitute the factory, were designed and the erection was carried out by the Department of Home Affairs. They include 'in addition to such buildings as were considered necessary by Captain Clarkson for housing the plant) residences, caretaker's cottage, luncheon room, bloycle shelters, staff quarters, roads, water supply, drainage, fencing, steam heating, and a rifle testing range.

15. It was also found, after consideration of climatic and other conditions, that the building for housing the plant, originally intended to be of iron, would be unsuitable. In an iron builing considerable additional expense would be necessary in providing steel stanchions and frames sufficiently substantial to carry the strain of the transmission machinery. As good bricks were available locally, and the cost of conveying iron could be avoided it was decided to erect brick buildings.

# MACHINERY AND PLANT.

- 16. The tender of the Pratt and Whitney Coy. U.S.A., was for the supply of machinery, tools etc. at a cost of £76,144 including power plant £8,000, the whole to arrive in Australia within one year.
- 17. The tender of the Pratt and Whitney Coy, was accepted for machinery, tools, etc. for £68,144, excluding power plant.
- 18. It was afterwards decided to have the power plant manufactured in Australia and arrangements were made with the Government of New South Wales to carry out this work at a cost of £7,980. In addition to the contract for power plant accessories brought the total up to £11,000.
- 19. The conditions of the contract in regard to the machines, gauges, etc. were to turn out a rifle interchangeable in all parts with the M.L.E. rifle. The Pratt & Whitney Coy. shortly after the acceptance of the tender intimated that, owing to a discrepancy occurring between the drawings and model rifles supplied by the British War Office, they would be unable to complete the contract in the time stipulated, therefore the time from acceptance of tender to delivery of plant was 2½ years.

# POWER PLANT.

- 20. Apprehension existed as to whether high-speed engines culd be satisfactorily constructed in Australia, but a tender from the New South Wales Government Dockyard for 27,980 was accepted. Some difficulties and breakdowns occurred, but were evercome by the Dockyard without additional expense to the Commonwealth and the plant has since proved highly satisfactory.
- 21. Considerable time elapsed in completing the Power contract and this, with the delay in finishing the buildings, resulted in two and a half years having expired before the buildings, machinery, and plant were ready to commonce operation.
- 22. Owing to the several delays above-referred to, the penalty connected with the Pratt and Whitney Company's contract could not be exacted.

#### COST OF SUPERVISION.

23. An item £1,875 appearing in Home Affairs expenditure as cost of supervision etc. covers the salary of Mr. Ratchiffe who was engaged to assist in the designing and laying out of the buildings, and erection of the machinery. The cost of advertising and the preparation of blue print copies of plans are also included in this amount. No account is taken of the services of officers of the Department of Home Affairs under this heading.

24. An earlier arrangement provided for payment to the Works Branch of the several State Governments, a sum equal to six per cent on all work exceeding £100 in value. At present some Departments are charged by the Commonwealth Works Branch ten per cent.

#### STORES.

## Raw Material etc.

- 25. Contracts for the supply of stores including raw material are arranged by inviting tenders. Tenders are opened in the presence of the Manager, Assistant Manager and Accountant, and recommendations for acceptance are submitted to the Minister.
- 26. Successful tenderers are mainly English firms with Australian Branches. Orders are initiated by the Storekeeper, prepared by the Accountant and signed by the Manager. The responsibility of keeping sufficient stores in stock rests with the Storekeeper.

#### Component Parts.

- 27. Minor component parts as manufactured are taken into stock and subsequently issued to be converted into major components, which are returned to the store to avoid wastage and reissued for assembling into rifles. Component parts are also issued to branches of the Department of Defence for the purpose of repairing rifles.
  - 28. Records of component parts are kept by a card system.

#### FACTORY CAPACITY.

29. The capacity of the factory as set out in the original specifications was for "an output at the rate of 50 M.L.E. short rifles of the latest approved War Office pattern with sword bayonous and scabbards complete per working day of 8 hours when operated by 144 unskilled and not more than 2 skilled Australian workmen. This staff to include all labour other than that required for supervision, clerical duties, tool room staff, engine and boiler tending and shop labouring." Working under Australian conditions this should mean an output of 15,000 rifles per annum.

#### STAFF AND LABOUR.

- 30. The pay sheet for fortnight ending 2nd March 1915 includes the following employees:- Rifle manufacture 339, charger making 17, Non-productive (maintenance) 79, Distributed over maintenance, construction and minor production 43, or a total of 478. To this are to be added Manager, Assistant Manager, Chief Inspector, Chemiat and Office staff (9 permanent and 6 temporary officers) total 19 or a grand total of 497.
- 31. It is not improbable that the contractors to some extent underestimated the No. of men that would be required to produce the specified output. Allowing for this there still remains a considerable discrepancy which is to be accounted for by the different industrial conditions under which Small Arms Factories are manned in America and Australia.

#### OUTPUT.

- 32. An effort has been made to increase the output of the factory by working overtime. The hours now worked having been increased from 48 to 68 per week.
- 33. The overtime hours are paid for at time and half rate resulting in an increase of 50% on the ordinary wages sheet without a corresponding increase in the output.

#### COSTS.

- 34. In the "Precis of proceedings in connection with tenders for machinery" for the Small Arms Factory submitted to Parliament on the 21st July 1909 the following particulars are set out as Pratt and Whitney's guaranteed cost of producing a rifle material and labour £2/18/-. Interest on capital and depreciation 11/1, Total £3/9/1. The result of the investigations made by the Committee show that this amount has been greatly exceeded.
- , 35. The procis also shows the estimated cost of the buildings, machinery, motive power etc. required for the factory to be 292,144, whereas we find the actual cost has been 2179,146. 6. 1. This is subject to depreciation at the accepted average rate of 7½ per annum which amounts to 212,988. This distributed over the gueranteed capacity of the factory shows an amount of 17/3 per rifle.
- 36. The total cost of the factory including land (22900.0.9) viz: £182,046. 6. 10 is subject to an interest charge at the rate of 4% per annum amounting to £7,281. 17. 0 or 9/8 per rifle.
- 37. For the purpose of purchasing raw material etc. an amount is made available to the factory by the Treasury through a Trust Account, and the amount expended bears an interest charge of 4,5 amounting to £4,729. 15. 0 or 6/3 per rifle.
- 36. As previously stated 497 persons are employed at the factory. Taking the amount paid for wages and salaries shown on the pay sheet for the fortnight ending 2nd March 1915, as an average for the year, the sum paid annually would amount, on the guaranteed capacity of the factory, to £4/10/- per rifle.
- $39\, \bullet$  . To these amounts must be added 14/6 the value of material used in the manufacture of the rifle.
- 40. On the guaranteed output of 15,000 rifles per annum the figures quoted in the immediately preceding paragraphs show that each rifle costs £6. 17. 8 to produce.
- 41. In attempting to ascertain the actual cost of the rifles the Committee, owing to various causes, have been unable to arrive at a definite cost. It was found that it was difficult to ascertathe value of components completed or in progress through the factory, also those supplied to the Department of Defence for repairs to rifles. The cost of the first 500 rifles produced was given by the Examiner of Accounts (Mr. Cantwell) at £18.15.0 each. It is now computed by the Committee that rifles are approximately costing £7/12/10, this amount including in the labour cost 50% additional for overtime rates of pay.
- 42. The omission at the inception of the factory to provide a larger supply of tools, and the derengement of the original scheme by eagerness to produce finished rifles before the manufacture of a large number of all components had been sufficiently advanced, are factors which have militated against the production of rifles closer to the original estimated cost.

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### STATEMENT OF ACCOUNTS.

43. The first and only statement of accounts to date was completed up to the 30th June 1913, forwarded for audit on the 30th November 1914 and presented to Parliament on the 16th April 1915.

#### RECOMMENDATIONS.

#### SITES FOR BUILDINGS.

44. The experience at Lithgow shows that considerable expense and delay had occurred owing to plans of buildings with estimate of costs having been prepared without a knowledge of the site. The Committee recommend that in future sites should first be secured and plans prepared for buildings suitable to each particular site.

#### BUILDINGS:

- 45. The Committee are of opinion that there should be one Construction or Works Department which would be responsible for the erection of buildings for all Departments of the Commonwealth Service.
- , 46. That the Requisitioning Department should give full particulars to the Constructing or Works Department of contemplated work in ample time to enable sketch plans and supplementary information to be supplied to the Department requiring the work to be done. When the sketch plans are finally concurred in by both Departments the papers should be forwarded for approval to the Minister requiring the service so that provision may be made on the estimates.

#### SUPERVISION.

47. We recommend that in order to show the cost of supervision of works an average per centage rate be struck by dividing the total value of work done in any one State by the total expense of the Branch Office in that State, together with a fair proportion of the cost at the Central Office.

#### STORES.

- 48. The responsibility of keeping sufficient stores and raw material in stock at the Small Arms Factory now rests with the Storekeeper. This does not appear to be a satisfactory arrangement, and in the opinion of the Committee the Manager should take the full responsibility. He should provide for emergencies and other such factors as contribute to a sure, cheap and adequate supply of all essentials required for the output of the factory.
- 49. The keeping and checking of stores is not as satisfactory as could be desired. We are of opinion that stock should be taken by some person other than those directly responsible for the keeping of stores. Stock sheets should be made out at each time of taking stock and be left in the custody of the Manager.
- 50. It has been found that although Australian steel is of suitable quality the small quantity required has not warranted the creation of the necessary plant by any private firm. The Manager stated in evidence that steel for rifle barrels could be manufactured by the Government on a commercial basis.

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51. Up to the present imported timber has been used for rifle stocks, but as a result of experiments carried out a timber in every way suitable has been found in the Queensland Haple. Some difficulty has however been experienced in obtaining sufficient quantity of seasoned timber, but this is being provided against.

#### COSTS.

- 52. It has already been shown vide paragraph 40 that the cost of producing rifles on the guaranteed output of the factory is £6. 17. 8 each. Your Committee are of opinion that this amount should be reduced and have taken considerable evidence bearing on the question.
- 53. Owing to the heavy overhead charges, including interest and depreciation on buildings, machinery and plant consequent on the large expenditure in erecting and equipping the factory, together with interest on advances by the Treasury for the purchase of material, stores, etc. it is in the highest degree desirable to further increase the output of the factory. It appears to us that the running or working hours of the factory should be increased by the establishment of a second shift. The requirements of the Commonwealth will be at least equal to the increased output. The evidence indicates that the difficulty of obtaining and training sufficient men to give effect to this proposal should not extend beyond a period of six months. A certain percentage of the employes will not need to be duplicated.
- 54. We consider a second shift preferable to one of twelve hours, as being more effective in increasing the output and reducing the cost. It would also be less tiring to the men and would provide the Commonwealth with a greater number of efficient workmen.
- 55. Improvements in the output and a consequent reduction in cost will be attained by a better system of co-ordination whereby a constant flow of component perts would be maintained.

#### STATEMENT OF ACCOUNTS.

- 56. Your Committee are of the opinion that a statement of accounts showing the position of the factory should be prepared and presented to Parliament not later than the 30th September each year or as soon after that date as the Parliament may be sitting.
  - 57. That such statement of accounts should at least show -
    - (a) The Capital account of the factory including land, buildings and plant.
    - (b) The amount written off for depreciation being at an average rate of 7½% extended over the whole factory on the scale accepted by the Auditor General.
    - (c) The amount of money advanced by the Treasury, the amount returned, the amount still owing and the interest charged.
    - (d) The value of finished products and sales of scrap material.
    - (e) The expenditure for salaries, wages, material etc.
    - (f) An account of all Stores.

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- g) The product that is in course of manufacture.
- (h) The cash balance unexpended in London.

58. A subsidiary statement should also be submitted with the statement of accounts showing an itemized list of the products of the Factory with the cost.

In conclusion we desire to say that the evidence tendered shows that the Australian made rifle is a satisfactory weapon.

Chairman.

In Chareton

27th May, 1915.