# ESTIMATES COMMITTEE

# Fifty-Fourth Report 1956-57

# MINISTRY OF DEFENCE—ORDNANCE FACTORIES (CRGANISATION AND FINANCE)



LOK SABHA SECRETARIAT NEW DELHI March, 1957

#### CORRIGENDA

Fifty Fourth Report of the Estimates Committee on the Ministry of Defence, Ordnance Factories-Organisation & Finance.

Contents Page, line 15: for 'Beard' read 'Poard'

Page 7: omit lines 3 and 4 from below.

Page 8, para 18, line 10: for 'or' read 'on'

Page 18, heading above para 40: for 'Directors' read 'Director'

Page 19, para 41, line 3: for 'of' read 'to'

Page 22, line 5: for 'their' read 'there'

Page 23, para 48, line 10: for 'is' read 'it'

Page 26, para 51: substitute lines 12-14 by "were likely to press a view not in consonance with the Finance Ministry's view, the Financial Adviser arranged to obtain the views of all concerned prior to the meeting of the Board. As suggested in"

Page 31, para 62, last line: for 'Ordinance' read 'Ordinance'

Page 65, S.No. 19, line 4: for 'lights' read 'light'

Page 65, S.No.21, lines 6-7: for 'responsisibilities' read 'responsibilities'

Page 69, S. No. 34, line 5: for 'formed' read 'formed'

Page 69, S. No. 34, line 6: for 'three' read 'there'

Page 70, S. No. 38, last line: for 'Fiv' read 'Five'

Page 72, S. No. 43, line 4. for 'obsecrve' read 'observe'

Page 74, S. No. 51, line 2. omit '&'

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#### 1956-57

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- Shri A. R. Shirali-Deputy Secretary.
- Shri C. S. Swaminathan-Under Secretary.
- \*Resigned on the 20th Nov., 1956.
- ••Died on the 6th October, 1956.
- ••• Ceased to be a Member upon his election to Rajya Sabha on on the 18th December, 1956.

#### INTRODUCTION

I, the Chairman of the Estimates Committee having been authorised by the Committee to submit the report on their behalf, present this Fifty Fourth Report on the Ministry of Defence—Ordnance Factories—on the subject of 'Organisation and Finance'.

The Committee wish to express their thanks to the Officers of the Ministry of Defence for placing before them the material and information that they wanted in connection with the examination of the estimates. They also wish to thank Shri S. L. Kirloskar and Shri D. S. Mulla for giving evidence and making valuable suggestions to the Committee.

> BALVANTRAY G. MEHTA, Chairman, Estimates Committee.

New Delhi; The 22nd March, 1957.

#### INTRODUCTORY

#### (a) General

1. In keeping with our foreign policy and in accordance with the directive for the promotion of international peace and security contained in Article 51 of the Constitution, our Defence Forces are primarily intended to preserve the territorial integrity of the country and for its defence from external aggression and will not join with aggressive intent any race for armaments, even in respect of conventional lethal weapons, much less of nuclear weapons. It is, ever, a lesson of history that no country, however, pacific its general policy may be, unless protected naturally, can afford to risk a slackening in its military strength vis-a-vis the neighbouring countries and recent international events have by no means served to extenuate In the present day world, the military strength of a country is judged not merely by the number of its forces but also by the operational efficiency and effectiveness of its equipment and weapons, such as tanks, guns and aeroplanes. In this connection the Hoover Commission on organisation of the Executive Branch of the Government of the U.S.A. in its "Report on Business Organisation of the Department of Defence" has rightly observed as follows:—

"The management of the Defence establishment is no longer principally one of managing tactical operations. Of equal importance today is the development and production of implements, supplies and services of war—and this aspect of Defence management has come to require as much specialized knowledge and expert direction as is traditional in the command of tactical operations."

The development and production of modern and up-to-date Defence equipment and armaments in sufficient quantities so as to meet the needs of the Defence Forces for long periods are, therefore, of paramount and fundamental importance in the maintenance and defence of our independence.

2. The development and production of Defence equipment and armaments were the sole responsibility of the Government Ordnance Factories in India during the British regime. The position remained unaltered with the attainment of independence and the future development of the Defence Industries will also continue to be the exclusive responsibility of the State in terms of the Industrial Policy Resolution of the Government, unlike as in the U.S.A. and, to some extent, in the U.K., where private enterprise is also considerably and actively associated with the manufacture of Defence equipment.

#### (b) Historical Evolution.

- 3. The origin of the Ordnance Factories in this country dates back to the early nineteenth century when the British Government began establishing the Ordnance Factories in India to ensure regular supply of munitions to their forces stationed in India mainly because of the long period required in bringing defence stores from U.K., as also the fear that the supplies by sea might be cut off by enemy action during war. Prior to the First World War in 1914 and in fact even till the beginning of the Second World War in 1939, there were only the following eight Ordnance and Clothing Factories in India:—
  - (1) Metal & Steel Factory, Ishapore, West Bengal.
  - (2) Gun Carriage Factory, Jabalpur, Madhya Pradesh.
  - (3) Ammunition Factory, Kirkee, Bombay State.
  - (4) Cordite Factory, Aruvankadu, Nilgiri, Madras State.
  - (5) Rifle Factory, Ishapore, West Bengal.
  - (6) Gun & Shell Factory, Cossipore, West Bengal.
  - (7) Harness & Saddlery Factory, Kanpur, Uttar Pradesh.
  - (8) Ordnance Clothing Factory, Shahjahanpur, Uttar Pradesh.
- 4. These factories were set up between 1834 and 1915. Of these only six could really be considered as Ordnance Factories in they were making arms and ammunition while the other two viz. Harness and Saddlery Factory, Kanpur and Ordnance Factory, Shahjahanpur were only making leather items and clothing for the Army. These Ordnance Factories were established on ad hoc basis to suit the requirements of Colonial Forces stationed in India and produced, prior to the commencement of World War II, munitions of a comparatively older type because the role of the Army in India in those days was limited to fighting comparatively poorly armed armies of countries surrounding India. They really functioned as subsidiaries to the Royal Ordnance Factories in U.K. and depended on the latter, to a very large extent, for the supply of important components, major assemblies and high Explosives. Modern arms required by the Armed Forces to fight better equipped enemy forces were obtained from U.K. during these years.

A little before the outbreak of World War II, another Ordnance Factory for the manufacture of high explosives was set up at Kirkee in the neighbourhood of the Ammunition Factory, Kirkee. Apart from this, no action was taken between 1915 and the outbreak of World War II, to increase the number and the scope of the Ordnance Factories in India. The pressure of events during the last World War, however, necessitated considerable expansion in their number

and scope and as a result the following eleven new factories were set up:

- (1) Ordnance Factory, Amritsar, Punjab.
- (2) Bren Gun Factory, Secunderabad.
- (3) Ordnance Factory, Dohad, Bombay.
- (4) Ordnance Factory, Lucknow.
- (5) Mathematical Instruments Office, Calcutta.
- (6) Ordnance Factory, Khamaria, Madhya Pradesh.
- (7) Ordnance Factory, Ambernath, Bombay State.
- (8) Ordnance Factory, Muradnagar, Uttar Pradesh.
- (9) Ordnance Factory, Katni, Madhya Pradesh.
- (10) Ordnance Factory, Raipur, Dehradun, Uttar Pradesh.
- (11) Ordnance Parachute Factory, Kanpur, Uttar Pradesh.

In addition two transplantation projects for the Calcutta area factories, were set up hurriedly at Kanpur in view of the fear that the Calcutta area might be overrun.

- 5. After the end of World War II, the Ordnance Factories at Amritsar, Lucknow and Dohad, the Bren Gun Factory at Secunderabad and the Mathematical Instruments Office at Calcutta were either closed down or transferred to other departments while Ordnance Factory, Khamaria was placed on care and maintenance.
- 6. At the time of partition, there were thus 16 Ordnance Factories of which one was placed on care and maintenance. Since then, two other factories viz.. Ordnance Factories, Wadala and Bhusawal. which were also set up during the last war and were worked throughout the war by the Corps of Royal Engineers, were taken over as Ordnance Factories in 1948. Further, of the two transplantation projects at Kanpur, one was retained as an Ordnance Factory while the other one, which was utilized by the Royal Air Force during the last war as a Maintenance Unit, was formed into a small arms factory. Later the Ordnance Factory, Khamaria restored and a new project for the manufacture of modern ammunition was also initiated in it. Besides, another factory for design, development and prototype fabrication of Defence stores and the manufacture of Machine Tools, was also established at Ambernath in 1953.
- 7. There are at present thus 20 Ordnance and Clothing Factories in India, of which the Ordnance Factory, Wadala, has been placed on 'care and maintenance' basis from early 1956, due to considerable reduction in the services' requirements of jerricans which this factory was producing.
- (c) Government plants worked by Private Factories on Agency basis
- 8. Besides the above Ordnance and Clothing Factories, there are two Benzene/Toluene Plants at Jamshedpur and Hirapur/Kulti for the supply of toluene required by the High Explosives Factory. Kirkee for the production of TNT. These plants were erected in

1943-44 in the works of the two premier steel companies, viz. Tata Iron and Steel Co. and the Indian Iron and Steel Co., as they are ancilliaries to the Coke Oven plants, existing in these Factories and were worked by the firms in whose premises they are located, on an agency basis. With effect from 1st October, 1956, the Jamshedpur plant has, however, been sold to M/s. Tisco who have agreed to guarantee supply of toluene to the Ministry of Defence on an 'as required basis.'

#### (d) Ordnance Factories Re-organisation Committee

- 9. The problem of organising and managing Ordnance Factories to undertake manufacture of a much larger variety of Defence stores than before, so as to make the country ultimately self-sufficient in Defence requirements, has arisen only since independence, since prior to it the Ordnance Factories were functioning as a part of the British Armament Production Plan and were neither intended nor designed for the manufacture of all the armaments required for the defence of an independent country. During the last war, the Ordnance Factories were expanded a great deal and were working to the maximum capacity but their expansion was not controlled and planned with reference to the country's requirements, and resulted in unbalanced plant and machinery in the factories. During the immediate post-war period some modifications and re-arrangements of the plant and machinery were, no doubt, made, but due to considerable fall in the requirements of the Ordnance Stores, coupled with the uncertainty of the requirements in view of the political situation, by 1954 considerable amount of surplus labour sulted in the Ordnance Factories on account of which certain amount of manufacture of civil trade items was also undertaken, so as utilise the idle capacity. At the same time, there was considerable clamour for increasing the civil production in the Ordnance Facto-The Government of India, therefore, appointed early in 1954 a Committee under the Chairmanship of S. Baldev Singh, ex-Defence Minister, to undertake a comprehensive examination of the various problems confronting the Ordnance Factories. The composition of the Committee and its terms of reference will be found at Appendix I.
- 10. The Baldev Singh Committee submitted its report to the Government in December, 1954. Specific recommendations of this Committee have, wherever necessary, been discussed at relevant places in subsequent chapters.

#### ORGANISATIONAL SET-UP

#### (a) Historical

11. Until the beginning of the Second World War in 1939, the Ordnance Factories formed part of Master General of Ordnance (M.G.O.) Branch of the Army and were administered by the M.G.O. through the Director of Ordnance Factories. Early in 1940, the control of Ordnance Factories was transferred to the Director General of Munitions Production, a newly formed organisation under the then Department of Supply with its office at Calcutta. quarters of the Ordnance Factories Organisation was also transferred to Calcutta and the post of the Director of Ordnance Factories was upgraded to that of Additional Director-General of Munitions Pro-In 1946, the control of the Ordnance Factories was again reverted to the Deputy Chief General Staff in the Army, who had taken over the functions of the Master General of Ordnance. General, **Ordnance Factories** Director post World War II, abolished was was during created Ordnance by that of Director of replaced a and hostilities. 1948. Factories on termination of In of the post was again raised to that of Director General of Ordnance Factories with the appointment of an I.C.S. Officer to that post. the same time, the Director General of Ordnance Factories being the head of an organisation which manufactured arms and ammunition for all the three Services, was placed under the direct administrative control of the Ministry of Defence.

# (b) Present set-up

12. A chart showing the existing organisational set-up of the Ordnance and Clothing Factories, from the Minister of Defence downwards, is placed at Appendix II.

# (c) Defence Production Board

# (i) Recommendations of Baldev Singh Committee

13. The Baldev Singh Committee, which had been set up undertake a comprehensive examination of the problems confronting Ordnance Factories. came to the that the departmental form of management was not suitable for the efficient working of the Ordnance Factories and that management on the pattern of nationalised industries, which are run on the company system, might work more efficiently and satisfactorily. time, they apprehended certain difficulties in changing over from the departmental system to the company system of management and, in consequence, recommended (a) a Production Board with a Controller General of Defence Production of high status as its Chairman and with the Defence Secretary and Service Chiefs as Members for effecting co-ordination between the Ordnance Factories on the one hand and civil sector on the other, for meeting the Defence requirements in peace and in an emergency and also (b) a Board of Management for the Ordnance Factories with clearly defined but wide powers so that most of the problems pertaining to the Ordnance Factories could be settled by the Board without further reference to other Departments or Ministries. The Board of Management was to consist of:—

Chairman - Secretary, Ministry of Defence.

Members - Director General, Ordnance Factories

Financial Adviser, Ministry of Finance (Def.)

2 representatives of the Services nominated by the Chiefs of General Staff.

l representative of Railway Board.

2 representatives from Private Sector.

That Committee further recommended that the Board should be given autonomy within its budget allotment to follow its own policy in regard to (a) purchase of stores, (b) determination of the grades and number of staff required from time to time and their recruitment, as and when necessary, (c) undertaking of capital works, (d) replacement and addition (except for new projects) of plant and machinery, (e) acceptance and execution of civil trade work as well as determination of levels of stocks to be held, (f) organisation of sales, etc. It was also pointed out that if the Board was not given adequate powers it would not improve matters and would merely result in the introduction of an additional authority between the Ministry of Defence and the Director General of Ordnance Factories which would make matters worse. That Committee also considered this recommendation as one involving a fundamental change in the form of management of factories which would go far to improve their working and efficiency.

# (ii) Setting up of the Board

- 14. These recommendations were examined by Government and it was decided that the constitution of two Boards, as suggested by the Baldev Singh Committee, would result in confusion and that consequently there should be only one Board whose composition might be a combination of that suggested for the two Boards, except for the private industrialists, who might be brought into the picture through an Advisory Committee to be set up for the purpose. As a result, one year after the original recommendation, a Defence Production Board consisting of the following was set up by the Government:—
  - (1) Minister for Defence Organisation.—Chairman.
  - (2) Defence Secretary-Vice-Chairman.

#### Members

- (3) Controller General of Defence Production.
- (4) Master General of Ordnance.

(5) Air Officer-in-Charge, Technical & Equipment Services, Air Headquarters.

(6) Chief of Material, Naval Headquarters.

(7) A senior representative of the Ministry of Finance (Def.)

(8) Director General, Ordnance Factories.
(9) Scientific Adviser, Minister of Defence.

(10) A deputy to Scientific Adviser.

(11) A deputy to the Controller General-Secretary to the Board.

The aims and functions of the Defence Production Board were declared to be as follows:—

(a) to deal with all policy and important matters concerning production in the Ordnance Factories;

(b) to co-ordinate research, development and design activities in the three services (viz., Army, Navy and Air Force) with production in Ordnance Factories; and

- (c) to secure effective liaison with civil industry for meeting requirements both in peace and in an emergency and also for purposes of utilising idle capacity in the Ordnance Factories for production of civilian goods.
- 15. While setting up the Defence Production Board it was indicated by Government that the question of delegating powers to it was under consideration. However, even one year and 3 months after the Board was set up, which itself was done two years after the Baldev Singh Committee was set up to recommend re-organisation of the Ordnance Factories and one year after it had submitted its recommendations, the Government have not thought it sufficiently urgent or even necessary to invest it with any powers in spite of the clear and emphatic recommendation of the Committee in this respect.
- 16. The Committee understand that on an average the Board meets once in two months. They feel, however, that at best the meetings of the Board with such large and diverse Membership would merely serve as inter-departmental and inter-service meetings to iron out differences though, it was explained that, proposals for better organisation of production of stores also come up for discussion.
- 17. The important decisions on policy, production, etc. so far taken the Board are listed at Appendix III. appear that while some them are self-evident of are nature. most the others such had already been recommended by the Baldev Singh Committee in December, 1954. It was explained to the Committee that making the Minister for Defence Organisation as the Chairman of the Board and including in it the Defence Secretary and the Financial Advisor, Ministry of Finance (Def). it could take certain decisions which need not go further upto the Cabinet for approval. Ministry of Finance (Def.) it could certain final decisions. However, even the repre-

the Ministry of Defence agreed **se**ntatives absence of effective powers which the Board ought possess, it had not entirely succeeded in carrying out the various objects for which it was set up. The Committee are not surprised that this should be so since by its very composition and absence of autonomous powers, the Board could hardly be expected to serve the purpose for which the Board of Management was recommended by the Baldev Singh Committee, since every proposal coming up before it would have undergone examination by a hierarchy officials at various levels and would have come up before the Board only because no agreement could be reached at lower levels, possibly for justifiable reasons, and to expect sudden agreement at the Board meetings would be rather difficult particularly if the disagreeing party was the Finance Ministry.

#### (iii) Suggestions for a better set-up

18. The Committee are of the firm view that all industries in the Public Sector, whether Defence or Civil, irrespective of whether there is any profit motive or not, should be run in the manner which all industries are intended to be run anywhere in the world and not by a departmental system of management which in the case of Ordnance Factories continues as before even after the setting up of the much heralded Defence Production Board. It is an accepted principle that the best form of management of industries is the company system of management which facilitates their running as far as possible or sound business principles. It was pointed out to the Committee that the Ordnance Factories had to undertake a great deal of secret work in the production of Defence Stores which was very dissimilar to that done in the civil production units and that the company system of management was not, therefore, very appropriate to the organisation of the Ordnance Factories, an argument which had possibly been accepted by the Baldev Singh Com-The Committee do not, however, appreciate this point of view since they notice that the Hindustan Aircraft Limited which undertakes as much secret work of the Defence Ministry as the Ordnance Factories, though on a much lower scale, is running quite successfully under the company system of management without, it is hoped, resulting in any leakage of Defence secrets. connection it would also be of interest to point out that in U.K. considerable potential for the manufacture of Defence stores exists in the Private Sector and the Royal Ordnance Factories themselves work under the Ministry of Supply (as was also the case in India during the war-time) while in the U.S.A. the private sector accounts for a substantial portion of the manufacturing of Defence Stores, though considerations of security in those countries are, presumably, of as much importance as in this country. The Committee are only too painfully aware that the company system of management of industries in the Public Sector in India has by no means universally succeeded entirely in working them on sound business principles

and production methods, for a variety of reasons but mainly because of lack of experience, lack of sufficient and effective decentralisation of authority and the inability of those controlling these industries to get away from their official background. At the same time, this system of management is still admittedly better suited for industries than the departmental system and the Committee have no doubt that its advantages are bound to be noticed with the passage of time and with experience. They, therefore, feel that the question bringing the organisation of the Ordnance Factories under a company system of management or under a corporation to be set up by an Act of Parliament needs to be reviewed and examined afresh by Government in the light of the remarks made however, the Government reach the same conclusion as before, and decide that the company system was not practicable, the Committee would commend to Government the standing example of the organisation of the Railways for adoption in the organisational set-up of the Ordnance Factories. They hope that it would be possible to set up at an early date a statutory and autonomous Board analogous to the Railway Board for the administration and running of the Ordnance Factories in an efficient manner and on business principles, subject, of course, to the limitations inherent in the working of a Defence industry even as in the case of H.A.L. Under either system, the Board should be directly responsible to the Defence Minister, who might retain certain reserve powers so as to ensure effective control over it. The Committee consider, as was pointed out by the Baldev Singh Committee over two years ago, that this re-organisation of the top set-up of the organisation of the Ordnance Factories is a fundamental change of very great importance necessity if the Defence industry is to work not as a Government department bogged in red tapism, but economically and efficiently, the necessity and argency for which cannot be over-emphasized since they affect the very security and independence of the country.

# (iv) Membership of the Board

19. The membership of the Defence Production Board already been mentioned in para 14. There is no non-official industrialist on the Board for almost the same reasons for which bringing the Ordnance Factories under a company system of management is not considered desirable. The Committee do not feel very happy with this view. They consider that private industrialists have an important role to play in assisting the defence production in the country as explained in para 24 later in the report. While Government servants connected with industries in the public sector are available to Government full-time, in the course of their normal duties, for rendering assistance in their respective spheres in the matter of defence production, it is not so in the case of private industrialists, who have their own industries and business to run and it is necessary to take special steps to enthuse them sufficiently to enable them to play an effective role in the national defence production. For this purpose, the Committee consider it necessary to associate a few prominent industrialists with the Delence Production Board while the others could be associated through associate advisory committees or boards. In addition, their presence would be advantageous in that they would also bring to bear on the affairs of the Ordnance Factories business-like methods, procedure and atmosphere. In this connection, the Committee would refer to the position existing in U.K. where the Board of Management of the Ordnance Factories consists of the following:—

Chairman—Controller of Supplies (Munitions)

Deputy Chairman—Mr. C. F. K. Hague of Babcock and Wilcox

Ltd.

#### Members

Deputy Secretary (B)

Deputy Controller of Supplies (Munitions Production)

Director General of Ordnance Factories

Director of Organisation & Methods

Dr. Jas Taylor of I.C.I. Ltd.

Mr. H. A. Benson of Cooper Bros. & Co.

(This represents the position in 1952. The latest position is not known.)

The Committee, therefore, recommend that irrespective of whether the Government agree to have the company system of management for the Ordnance Factories or a statutory and autonomous Defence Production Board, the Board of Directors in one case and the Board in the other, should be a compact body consisting of those who will be usefully and directly connected with the organisation and the working of the Ordnance Factories, e.g., Controller General Defence Production, Director General Ordnance Factories, Financial Adviser etc. and two or three private industrialists. The Committee do not consider it necessary that the Board should also have on it representatives of the Defence Science Organisation (Research) and of the Design and Development Establishments of the Services, whose activities, they feel, should be co-ordinated by the Controller General Defence Production through associate or advisory boards or Committees.

# (v) Chairmanship of the Defence Production Board

20. As at present constituted, the Defence Production Board has the Minister for Defence Organisation as its Chairman. The presence of the Minister for Defence Organisation on the Board, no doubt, makes it fairly high-powered to take decisions during its meetings without necessarily having to go to another authority for further approval. The Committee do not, however, consider that the arrangement under which the Minister is the Chairman of what is intended to be an Executive Board is very satisfactory as they feel that the Minister should not associate himself with the actual execution of the policies of Government. Besides, the association

of Minister for Defence Organisation might even deprive the Board of its usefulness, as members who are mostly officials are likely to feel embarrassed and might even hesitate to express their views freely. For similar considerations, the Committee would also not consider satisfactory the appointment of Defence Secretary as the Chairman of the Board.

21. The Committee have already recommended that two or three private industrialists should be members of the Defence Production Board. They would as a further step recommend that the Chairman of the Board should also be drawn from the category of private industrialists. While making this recommendation, they have particularly in view the worthy and outstanding example of the Air India International Corporation of which an eminent private industrialist is the Chairman. One of the other members preferably the Controller General Defence Production may, however, be made the Vice-Chairman.

#### (vi) Tasks facing the Defence Production Board

22. The problem of defence production for an independent country is a stupendous one, and the Defence Production Board as the top authority in this matter has a very vital role to play in shaping policies and in their execution. In all these matters it is fundamental that the Defence Production Board should approach the tasks facing it keeping in view the dictum that "before effective action is achieved, it must be decided what is to be done, how it is to be done and who is going to see that it is done". It is unfortunate that 10 years after independence the country is still not self-sufficient in defence production while other countries have marched ahead in this vital matter. It should be the Defence Production Board's aim to set right this unsatisfactory position and augment the country's defence potential in all respects on an emergency basis. At the same time, it is also the Board's responsibility to make a realistic assessment of the defence potential of the country in relation to its requirements and to advise the Government to what extent the military strength of the country should be augmented by imports from foreign countries in various matters such as modern and up-to-date including aircraft, tanks and other weapons, arms and ammunition, so as to be prepared for all eventualities.

# (d) Defence Production Advisory Committee

23. For securing effective liaison with the civil industry for meeting requirements in peace as well as in an emergency, the Government have constituted a Defence Production Advisory Committee under the Chairmanship of the Minister for Defence Organisation. Besides the members of the Defence Production Board, the Advisory Committee will consist of one representative each from the Ministry of Production, Railways, Labour, Heavy Industries and Works, Housing and Supply. In addition, it will have such private industrialists and representatives of other Ministries as may be invited from time

- to time. The Committee regret to observe that this Committee, which was set up on 2-1-1956, indirectly as a result of the recommendation of the Baldev Singh Committee, which submitted its report on 17-12-1954, has so far held only one meeting on 16-4-1956 to which also no private industrialists were invited.
- 24. No country, whatever be its resources, can afford to keep during peace-time its defence production of warlike stores at a level which will meet all the Defence requirements in an emergency when the requirements amount to several times its normal peace-time requirements. For this purpose a certain amount of reserve capacity has to be kept in the Ordnance Factories themselves. It has, however, to be realised that, whatever the extent of this reserve capacity, the Ordnance Factories cannot by themselves meet all the requirements in an emergency and that wars now-a-days are total wars which necessitate the mobilisation of the entire industrial potential in the country in the struggle for survival. It is, therefore, of paramount importance that capacity to undertake, when required, manufacture of Defence stores at short notice and to a substantial extent in the civil production units in the public sector as well as in the private sector is available and is developed. The importance of association for this purpose, of private industrialists in the Defence production cannot, therefore, be over-emphasised. Yet the Committee observe that while the recommendation of the Baldev Singh Committee for the association of two private industrialists on the Board of Management of the Ordnance Factories was not accepted, no attempt has yet been made even to make a success of the alternative Defence Production Advisory Committee which was set up. It reflection on the state of affairs that one or two prominent industrialists, whom the Committee had occasion to meet, were not aware of the existence of the Defence Production Advisory Committee. The Committee consider this as very unbusinesslike and unsatisfactory for a Ministry which is charged with the responsibility of being always prepared with plans to defend the country in an emergency and to secure the full mobilisation of the country's resources at short notice for the purpose. While it was explained that some efforts were being made by the Defence Ministry to get a few items of stores manufactured indigenously both directly and through the Development Wing of the Ministry of Commerce and Industry, the Committee feel that a revolutionary change in this attitude of complacency on the part of the Defence Ministry in the important matter of Defence Production, is called for and hope that it would be possible to secure for this purpose, the whole-hearted co-operation of the Indian industrialists (and also the production units in the Public Sector) by working the Defence Production Advisory Committee more effectively.
- 25. In this connection, the Committee would also like to point out that the arrangement under which private industrialists are to be associated with the Defence Production Advisory Committee, only as and when necessary and not on a regular or permanent basis, is

not likely to enthuse the industrialists sufficiently which is so necessary for successful results. They, therefore, recommend that this arrangement should be altered so as to provide for the association of the industrialists with the Advisory Committee on a regular basis. For this purpose, they also suggest that, if necessary, the Advisory Committee may be assisted by a number of Sub-Committees each dealing with certain specific allied problems relating to Defence Production with the industrialists and other civil production units directly concerned with the subject, represented on it.

26. As at present constituted the Minister for Defence Organisation is also the Chairman of the Defence Production Advisory Committee. The Committee's comments and recommendations in para 20 in respect of the Chairmanship of the Defence Production Board equally apply in this case also.

#### (e) Controller General of Defence Production

- 27. A post of Controller General of Development and Production had first been recommended by the Armed Forces Re-organisation Committee in April, 1952, as a co-ordinating authority, who was to act more or less as Chairman of a Policy Board, for the following organisations:—
  - (1) Defence Science Organisation:
  - (2) Ordnance Factories; and
  - (3) Technical Development Establishment under the Master General of Ordnance which is responsible for design, development and inspection.

The post of the Controller General Defence Production was intended to replace the post of Master General of Ordnance. No action was, however, taken to implement this recommendation and it was reiterated by the Baldev Singh Committee in their report submitted towards the end of 1954. In view of the high status intended to be accorded to this post, it seemed obvious that he would have to be of status higher than a Secretary to Government. Instead, however, the Government sanctioned a post of Controller General of Defence Production about a year back of the status of a Joint Secretary to Government, to be in official hierarchy next to the Defence Production Board of which he was to be the administrative and executive His main functions are to coordinate research, development and design activities of the three Services with the production in Ordnance Factories and to secure effective liaison with civil industry for meeting Defence requirements. A chart showing the organisational set-up of the Controller General Defence Production and the functions of the various sections of his office is given in Appendix IV. The Controller General Defence Production is assisted by 15 officers and 73 other staff.

28. In so far as the Controller General Defence Production's functions in regard to research are concerned, he is assisted by a Research Conunittee. The Committee regret to observe, however,

that the Research Committee has not even started functioning as yet. The importance of research work, fundamental and applied, in matters relating to the Defence Production of an independent country, cannot be over-emphasized. It was earlier mentioned in para 19 that research, design etc. activities should be co-ordinated by the Controller General Defence Production through associate or advisory boards or committees. The Committee, therefore, hope that every effort will be made to make a success of the Research Committee.

29. In so far as the Controller General Defence Production's functions in regard to liaison with civil industry are concerned, he is assisted by the Imported Stores and Raw Materials Screening Committee since replaced by the Defence Production and Supply Committee with the following composition and functions:—

#### Composition

#### Chairman

Controller General of Defence Production.

#### Members

Scientific Adviser to the Ministry of Defence.

Master General of the Ordnance.

Chief of Material, Navy.

Air Officer-in-Charge, Technical & Equipment Services, Air H.Q.

Additional Financial Adviser (II).

Director General of Ordnance Factories.

Director General of Supplies and Disposals.

Chief Industrial Adviser, Ministry of Heavy Industries.

Director of Coordination.

#### Secretary

Director of Production.

#### **Functions**

- (1) To examine lists of defence stores at present being imported with a view to establishing indigenous manufacture.
- (2) To assess capacity in the country both in Ordnance Factories and outside to meet defence requirements.
- (3) To make recommendations regarding conflict of priorities.
- (4) To recommend policy for stocking raw materials, particularly strategic materials.

- (5) To recommend the placing of educational orders in respect of stores whose indigenous production is being newly developed.
- (6) To examine mobilisation plans for defence production and make recommendations relating to such plans.
- (7) To examine bottlenecks in production and make recommendations for their removal.
- (8) To examine the provisioning procedure of the Services and the Director General of Ordnance Factories in so far as it affects production and to make appropriate recommendations.

The Committee have referred to the functions as well as the composition of this Committee in their report on "Army Stores" and do not propose to dwell on them here. However, it will bear repetition to mention here that to make this Committee effective, industrialists should also be actively associated with it. Once this is done, the Committee would suggest that the question of merging the Defence Production and Supply Committee and the Defence Production Advisory Committee so as to avoid unnecessary duplication of Committees should also be considered.

- 30. The Committee were informed in regard to the achievements of the Controller General Defence Production and the improvements made since the post was created, that the Ministry was still feeling its way and was trying to co-ordinate what was being done in various departments. One of the items of work besides those mentioned earlier, taken up by the Controller General Defence Production, it is understood, relates to the standardisation of stores used by the three Services. It was explained, however, that it was an item on which it would take at least 10 years to achieve any satisfactory results and that it was a continuous but slow process. A beginning had been made with electronics items.
- 31. The post of Controller General Defence Production meets the longstanding and important need for the co-ordination of the various activities relating to Defence Production which were carried out by a number of organisations either under the Ministry of Defence itself or others. Its importance was stressed by the Armed Forces Re-organisation Committee in 1952 and the Ordnance Factories Re-organisation Committee in 1954. While there was considerable delay in creating the post and appointing an officer to it, the Committee find that the officer since selected holds in addition a Joint Secretary's post in the Ministry of Defence. Since he is also the executive head of the Defence Production Board as well as of the Research Committee and the Defence Production and Stores Committee and is also a member of the Defence Production Advisory Committee, it is evident that he holds a pivotal post being responsible for and controlling the entire activities of Defence Production.
- 32. The Committee have heard certain complaints that in important and pressing policy matters relating to Defence Production

in general and production in Ordnance Factories and design and development activities in particular, decisions and directions are rarely given with any reasonable measure of promptness and sometimes even long periods elapse before they are given. They feel that the tardy manner in which some of the important recommendations of the Baldev Singh Committee, are being examined, e.g., preparing of plans for mobilisation of resources in an emergency, the question of decentralisation of authority to secure business like and efficient working of Ordnance Factories etc. is to a certain extent a measure of the complaints mentioned above.

The Committee are aware that the post of Controller General Defence Production has been in existence for only I year and that it might not have been possible for him to do away altogether with the inertia, indecision and complacency among the authorities concerned. They hope, however, that it would be possible for him, assisted as he is by 15 Gazetted Officers and 73 other staff, to pursue vigorously his activities for ensuring co-ordination among different authorities for which his post was created and for keeping the defence production at the optimum level by cutting down red tape and paper work so as to keep the country fully prepared for all emergencies. It should also be his constant endeavour to stream-line and rationalise the organisation for Defence Production in general and of the Ordnance Factories in particular. At the same time to a considerable extent the measure of his success is also the success of the activities of the Defence Production Board, Defence Production Advisory Committee. the Research Committee and Defence Production and Supply Committee of which he is an important member and the executive authority.

## (f) Directorate General of Ordnance Factories

## (i) Office of Director General of Ordnance Factories

- 33. The Ordnance and Clothing Factories are administered and controlled by the Director General of Ordnance Factories whose headquarters office is located at Calcutta. He is responsible to the Ministry of Defence, through the Controller General of Defence Production, for the efficient management and operation of the Factories.
- 34. The Director General of Ordnance Factories is assisted in his work by two Deputy Directors General (one in-charge of administration and the other in-charge of production), nine Assistant Directors General and 39 other Gazetted Officers of various ranks besides a Ministerial staff of 337 persons. An organisational chart of his office is placed at Appendix V.
- 35. The Director General of Ordnance Factories exercises control over production matters arising in the Factories through the Deputy Director General, Ordnance Factories (Production). All matters of policy as well as difficulties and problems of production of important stores, civil trade work, planning for emergency, development of new and important stores, general production control and proce-

dure in Ordnance Factories are normally dealt with by the various Assistant Directors General in-charge of different branches of production such as Ammunition, Ordnance, Engineering etc. Matters requiring attention of the Director General, Ordnance Factories are normally put up to him through the Deputy Director General, Ordnance Factories (Production) when a decision is required on important policy and procedural matters.

- 36. Among the officers at headquarters since 1953-54 one Assistant Director General is in-charge of the entire civil trade production in the Ordnance Factories, which amounts to nearly Rs. 4 crores per annum. The extent of civil production in the Ordnance Factories is a policy question which requires a very high level decision and the Committee will refer to it in a subsequent report on Production. However, once the extent and nature of civil production is determined, it is necessary that the facilities available for the purpose are put to the most efficient use by canvassing maximum orders in consultation with the indentors and users, by undertaking production promptly and efficiently and by selling the marketable production in a businesslike manner, which would need a sound Sales Organisation. The Committee understand that the Baldev Singh Committee had recommended the setting up of such an Organisation but that this has not been done yet. They were informed, however, that it had been decided to recruit an officer with commercial experience for more intensive and extensive tapping of the market. In view of the importance and potentialities of civil production in Ordnance Factories, the Committee feel that the question of the Organisation for this purpose including the Sales Organisation needs to be examined carefully so as to determine whether it would be necessary to have more officers and representatives at the headquarters of the Director General of Ordnance Factories at certain regional headquarters and in the Ordnance Factories themselves.
- 37. At the headquarters of the Director General of Ordnance Factories there is a Statistical Quality Control Section in-charge of an Assistant Director General. This Section was introduced only towards the end of 1955 and is still in an experimental stage. In a large industrial undertaking like the Ordnance Factories working on a monopolistic basis, Statistical Quality Control is of very great importance. It is, therefore, rather surprising that it should have been introduced only in 1955 and that it should still be on an experimental basis. In this case also, the Committee feel that there is scope for examining the organisation with reference to the position existing in similar industries so as to determine whether it would be necessary to have more officers and staff not only in the headquarters but also in the Ordnance Factories themselves, working directly under the Superintendents.

Later in this report, while discussing the cost accounts organisation, the Committee have suggested that there should be under the Director General of Ordnance Factories at headquarters and under each Superintendent of a Factory, a cell to interpret vital statistics revealed by cost accounts data so as to enable initiation of action to improve efficiency. The feasibility of such functions being performed by the Statistical Quality Control Branch may also be examined.

38. In a subsequent report on staff matters, the Committee will have occasion to point out various anomalies in regard to the employment of staff and increase in their numbers and the necessity to fix norms and workloads for all categories of staff etc. They have also heard complaints that paper-work in the Director General Ordnance Factories' Office and in the Ordnance Factories has increased greatly. The Committee would suggest that the question of opening 'Organisation & Methods' Division in the Offices of the Controller General Defence Production and the Director General of Ordnance Factories to constantly examine these problems should be considered.

#### Chief Security Officer and Chief Medical Officer

39. There is a Chief Security Officer (and a Security Officer) and a Chief Medical Officer (and a Deputy Assistant Director, Hygiene) in the Headquarters Office of the Director General of Ordnance Factories, who are responsible for the internal security and fire fighting arrangements and medical and hygienic arrangements respectively, in all the Ordnance Factories. Their responsibilities in these matters are discharged through a Security Officer and Medical Officer respectively, attached to each Ordnance Factory. mittee had some doubts whether the headquarters organisation in these matters was necessary and whether at the factory level, the respective functions could not be performed by local Military or They were, however, informed that the Civil Officers. Officers at the Factories level were junior officers (either Captains or at the most Majors) and needed some guidance and supervision from a Chief Security Officer at Headquarters, who could co-ordinate security matters and be also available to the Director General of Ordnance Factories for advice. It was also explained that the post of Chief Medical Officer was required at Headquarters for the administration of Factory hospitals and dispensaries and for co-ordination of matters relating to industrial Hygiene, industrial medicine, prevention of occupational diseases, devising of fatigue-reducing and accident prevention measures as well as sanitation and malaria prevention in the Ordnance Factories' estates. However, the Committee feel that this question should be examined afresh in the light of the doubts expressed by them earlier.

# (ii) Powers of the Directors General of Ordnance Factories

40. The Director General of Ordnance Factories controls a vast organisation consisting of 67,000 men, the annual outturn of which amounts to Rs. 15 crores approximately even in peace time and thus holds a key position in the very important field of Defence Production in the Ordnance Factories, comparable only to that of the Managing Director of a commercial concern. The Committee need

hardly add that the selection of an officer to hold such an important post should be based on highest considerations of merit, drive and integrity. At the same time, if he is to discharge his functions and responsibilities satisfactorily and efficiently, it is necessary that he should be delegated sufficient powers, authority and discretion, comparable to that of the Managing Director of a limited company in the public sector.

41. Most of the powers which have been vested in the Director General of Ordnance Factories in regard to the various matters pertaining of Ordnance Factories, e.g., recruitment, purchase of stores, plant and machinery, etc., are exercisable only subject to the concurrence of the Associated Finance. The Committee understand that the Director General of Ordnance Factories' powers were greatly enhanced in recent years compared to what they were before. They also understand that even the present powers were not considered entirely sufficient and commensurate in a number of cases, with the responsibilities carried by the Director General of Ordnance Factories and that if he is to function on business principles and keep his organisation prepared for emergencies, it was felt that they should be increased. They were told that this question is discussed from time to time by the Defence Porduction Board and Government. The Committee recommend that the question of further delegation of powers to the Director General of Ordnance Factories consistent with his responsibilities should be examined afresh at the higest level in the light of the present day conditions and the remarks made above, and necessary orders issued at an early date.

# (iii) Need for an Executive Board

42. The Committee have recommended in the above paragraph that authority consistent with responsibilities should be delegated to the Director General of Ordnance Factories. At the same time, they are aware that it is by no means sound to vest excessive authority in a single individual. In most commercial concerns to avoid concentration of authority in the Managing Director, he is assisted by a Board of Management with well defined powers, of which the Managing Director is the Chairman. This is particularly necessary in concerns where the Managing Director is a non-technical man. The Committee suggest that in the case of the organisation of the Ordnance Factories also, it would be a step in the right direction to have an Executive Board for the management of day-to-day affairs of the Ordnance Factories with the Director General of Ordnance Factories as its Chairman, and with sufficient powers, as suggested in para 41. It was explained that even at present in the of the Director General of Ordnance Factories, the Deputy Directors General and the Assistant Directors General work in a functional manner but the Committee feel that it would be of great advantage to have the Executive Board suggested above, consisting of the Director General of Ordnance Factories and the Deputy Directors General and one or two selected Assistant Directors General and

also the Deputy Financial Adviser (Factories) and the Controller of Defence Accounts (Factories) as its members. In addition, when discussing problems of particular regions or Ordnance Factories, it should co-opt the Superintendents of one or two Local Ordnance Factories on the Board so as to ensure prompt disposal of business. It should also maintain minutes of meetings, meet regularly at least once a week or fortnight and have definite rules of procedure. In this connection, it might be mentioned that in U.K. the Royal Ordnance. Factories have also an Executive Board consisting of the following:—

Chairman-Director of Ordnance Factories

Deputy Director General of Ordnance Factories

The four Group Directors

Chief Superintendent R.O.F. Woolwich

Under Secretary/General and Labour

Assistant Secretary/R.O.Fs.

[The Estimates Committee of the House of Commons had recommended in 1952 that the Director of Accounts should also bemade a member.]

(This represents the position in 1952. The latest position is not known.)

[The Committee were glad to be informed, after this report had been almost finalised, that the Defence Production Board had recently accepted the proposal of an Executive Board for the D.G.O.F. with almost the same composition as suggested above.]

# (iv) Inspection of Factories

43. The Committee understand that there was no system of regular annual inspections—technical and administrative—of Ordnance Factories by the Director General of Ordnance Factories or his Deputies, though, it was explained that, normally all Factories got inspected once a year and, in some cases, even more than once, according to the requirements of each case, e.g., while setting up of a new project or unit etc., and that the result of these inspections was recorded in the form of inspection or tour notes. that these casual inspections should be replaced by regular inspections for the purpose of carrying out a detailed examination of the various production activities and staff problems of the Factories, of the extent of implementation of the various instructions Director General of Ordnance Factories etc. with particular reference to the detection by an on-the-spot study of uneconomical and wasteful methods of production, employment of excessive staff etc. In the Committee's view, such a system of regular inspections, if conducted by a central technical team headed by an officer of sufficient seniority could help to improve the general tone of administration and to bring about economy in production.

- (v) Location of the Office of the Director General of Ordnancer Factories at Calcutta
- 44. The Headquarters Office of the Director General of Ordnance Factories is at present located at Calcutta, where it was transferred from Simla in 1940. Calcutta appears to have been chosen, then because of the necessity of maintaining close liaison with the organisation of the Director General of Munition Production at Calcutta which was formed during the last war and to whose control the Ordnance Factories were transferred. The continuance of the Headquarters at Calcutta in spite of the various changes which have taken place since then was explained as partly due to historical reasons but mainly due to the following reasons:
  - (i) It is necessary for the Headquarters of the organisation of the Ordnance Factories to maintain close and constant co-operation with the Heavy Engineering and other Engineering industries, which were until recently clustered around Bengal or were nearer Calcutta than any other industrial centre.
  - (ii) There would be considerable difficulties in making a large scale movement of ministerial staff of the D.G.O.F's Office since they are disinclined to move out of Calcutta.
  - (iii) Even if Delhi were selected from the point of view of maintaining better co-ordination with the Controller General Defence Production and Services, there might be difficulties in shifting the Headquarters because of the congestion in Delhi both in the matter of Office and residential accommodation.

As regards the first item, the Committee feel that the advantages of locating the Director General of Ordnance Factories Headquarters at Calcutta on the ground that it is the centre of the Engineering and Metallurgical industries in India, have been counterbalanced now by the disadvantages of its vulnerability as evidenced by the last war and distance from the border, its general state of unrest and the location of substantial metal industries including the new steel projects in other parts of India. Further, viewed from the aspect of having the Headquarters at a centrally situated place, with the resultant economy in various matters, the location of the Office Calcutta hardly seems to be satisfactory since it is situated at almost one corner of the country, resulting in considerable expenditure on account of the travelling allowances on tours of officers and staff and for the Calcutta allowances for those stationed there. Further, the distant situation of the Headquarters Office from Delhi is also not conducive to close co-operation and co-ordination between Director General of Ordnance Factories on the one hand and the Services, the Defence Ministry, the Controller General Defence Production, the Director General, Supply and Disposals etc. on the other hand, which are so very essential in such matters as removing the various bottlenecks in the production programmes of Factories e.g., suply of drawings, specifications, changes in priorities of manufacture, obtaining sanctions, policy decisions, orders etc., delays in receipt of materials etc. and above all to reduce paper work and red-tape. As regards the difficulty of their being congestion in Delhi, it might be possible to arrange a mutual transfer or exchange with some other office at present situated in Delhi. In this connection, a reference is invited to the Committee's recommendation in para 19 of their Forty-Third Report regarding the I.A.C. Headquarters. The Committee, therefore, recommend that the feasibility of shifting the Director General of Ordnance Factories' Office to Delhi or to a more central place than Calcutta be carefully considered again at the highest level.

#### (g) Ordnance Factories

#### (i) Organisation

- 45. Each Ordnance Factory is under the charge of a Superintendent (except a small factory which is under the charge of a Works Manager) who is assisted by Works Manager/Managers and Assistant Works Managers in the Gazetted Cadre and other supervisory staff in the non-gazetted and non-industrial cadre. In addition, each Ordnance Factory has a Security Officer, a Medical Officer and Labour Officers, depending on the labour strength.
- 46. An Ordnance Factory is generally divided into four main groups, under two Works Managers viz:
  - (i) Administration Group
  - (ii) Pre-Production Group
  - (iii) Production Group
  - (iv) Engineering (Maintenance) Group.

These groups are further subdivided into different sections. In majority of small factories there is only one Works Manager.

- (ii) Powers of Superintendents and need for Factory Board
- 47. Earlier in the report the importance of the post of the Director General of Ordnance Factories and the necessity of delegating sufficient authority to him, to be exercised in consultation with an Executive Board, have been stressed. The Superintendents of Ordnance Factories at their level are by no means of much less importance as they are directly responsible for the efficient running of the organisation of an important unit in Defence Production. They have the direct responsibility of controlling and managing a large labour strength and of ensuring by firm but tactful persuasion, efficient and economic production. The Committee consider that the Superintendents of factories should also be delegated sufficient authority in all matters consistent with their responsibility, and further that it should be watched by the Director General of Ordnance Factories centrally, that authority delegated is properly and sufficiently exercised

and that unnecessary references are not made to him. The Committee understand that the powers of Superintendents were only recently enhanced to their present limits, but they feel that there is still scope for a further review. They also consider that the powers should be exercised by the Superintendents in consultation with a Factory Board to be set up for each Ordnance Factory consisting of himself, the Works Managers, one or two selected Assistant Works Managers, the Factory Accounts Officer and also, where necessary, the Labour Officer for the efficient day-to-day conduct of work, with rules similar to those recommended for the Executive Board of the Director General of Ordnance Factories.

#### (iii) Location of Ordnance Factories

48. The Ordnance Factories are at present situated in various parts of the country. Prior to the Second World War, three of the eight Ordnance Factories were located near Calcutta. During the war-time expansion of the Ordnance Factories, it was to a considerable extent arranged to have two or three Factories capable of doing a particular class of work, so as to provide alternative sources supply of defence stores and to avoid "having all eggs in one basket", which is so very vital, especially during emergencies, when Ordnance Factories and lines of communication are the maim targets of air attacks. Under the present arrangements is also happens that an item of production has to pass through 3 or 4 Ordnance Factories before the final product is obtained. This very often results in heavy transportation charges, but it is inevitable to a considerable extent, it was explained, due to Security considerations. The Committee understand that various factors e.g. nearness of sources of raw materials, and destinations of finished products, power, water, nature and level of terrain, labour, strategic security etc. are given full consideration before deciding the final location of Ordnance Factories. were told, however, that while all these factors were being considered before setting up new Factories, there was little or choice in the case of existing Factories. This question examined by the Ordnance Factories Re-organisation Committee who felt that the question of siting of Factories needed very urgent consideration and also recommended a number of modifications in the plant and machinery existing in the various Ordnance Factories soas to rationalise the output, some of which have been carried out. The Committee feel, however, that the question of the location of Ordnance Factories with reference to security considerations as also of their rationalisation with a view to economic and efficient output needs to be constantly kept under review by the Defence Production Board and the Controller General of Defence Production.

# (h) Management of Ordnance Factories producing non-warlike stores

49. The Committee find that of the 20 Ordnance Factories in India, 6 Ordnance Factories manufacture Defence Stores, which by no means could be called war-like stores, or those involving secret nature of production, namely Harness and Saddlery Factory, Kanpur

'Clothing Factory, Shahjahanpur, Ordnance Parachute Factory, Kanpur, Ordnance Factory, Dehra Dun, Ordnance Factory, Bhusawal, and Ordnance Factory, Wadala, the last of which is placed on care and maintenance. The other Ordnance Factories manufacture ammunition and explosives, the production of which could certainly be considered of a secret nature. The Committee feel that if it is not possible to constitute the latter category of Ordnance Factories into the company system of management, it would still be worthwhile and advantageous to consider the feasibility of handing over the other category of Ordnance Factories to the Production Ministry for being managed under the company system so as also to facilitate the enlargement of their scope for the production of a large variety of In this connection, it was pointed out to them Ministry of Defence was almost the sole client of all these Ordnance Factories and as such handing them over to the Production Ministry would, without increasing the efficiency, only succeed in interposing another Ministry between the user and the supplier. mittee are not, however, able to appreciate this argument since the Clothing Factories were actually managed by the Clothing Directorate during the war time and not by the Ministry of Defence while in U.K. all the Ordnance Factories are managed by the Ministry of Supply. It was also mentioned to them that at one stage question of handing over the Clothing Factory at Shahjahanpur to the Private Sector or to somebody else had been examined but dropped when it was learnt that the Railway Ministry, who were buying their clothing from outside, were not satisfied with arrangements and were thinking in terms of setting up a factory of their own, since it was thought that it was a better arrangement to have a factory, which produced stores entirely for one Ministry, under that very Ministry instead of under some other authority. The Committee feel that it would still be an advantage if the Ministry which had specialised in production methods, even though its present experience might not be very great in this line, should be responsible for the running of industries which could be safely run In this connection, it was pointed out that the Ministry of Production itself had more than once during informal discussions asked the Director General of Ordnance Factories to take over the National Instruments Factory, Calcutta and to control it along with the Ordnance Factory, Dehra Dun, to which it is allied, as was indeed done during the war, but that this suggestion was not found acceptable to the Director General of Ordnance Factories even though it might be the best arrangement since it was felt that the Director General of Ordnance Factories had already a very heavy load work. In consequence, a Co-ordinating Committee of which Director General of Ordnance Factories is the Chairman, had been set up to co-ordinate the activities of the two Factories, namely, the National Instruments Factory and the Ordnance Factory, Dehra Dun, thus indicating the necessity and desirability of having for these two factories a Common management under the Ministry of Production, since the Ministry of Defence could not possibly manage both. The Committee also feel that it would be an additional advantage if the

Defence Ministry, which was probably overburdened, could be relieved of the responsibility of managing industries which are not of a strictly security nature as it would enable that Ministry to concentrate on Defence matters which are of vital importance to the defence of the country. At the same time, if placed under the Production Ministry, it might also enable these factories to be fitted into the general industrial development in the country by undertaking production of a greater variety of stores instead of producing only the requirements of the Defence Ministry. The Committee, therefore, recommend that the question of transferring the control of the Ordnance Factories which produce non-warlike Stores from the Ministry of Defence to the Ministry of Production should be examined seriously and a decision taken expeditiously without keeping it under consideration for long.

It has already been mentioned earlier that two plants for the production of Benzene/Toulene were set up by Government on an agency basis in factories belonging to the two premier steel factories in the private sector and that they have been working as such for the last about 13 years. The Committee feel that the feasibility of extending such agency arrangements to the production of other items of non-lethal stores, required by the Ordnance Factories and Defence Services in other production units in the private sector, should be constantly kept under review.

#### III

#### FINANCE & ACCOUNTS

#### (a) Ministry of Finance (Defence)

- 50. The entire Finance & Accounts Organisation pertaining tothe Ministry of Defence functions under the Financial Adviser, Defence (Finance) who is the principal representative of the Finance Ministry in the field of Defence expenditure and is responsible for dealing with all Defence matters having a financial bearing. far as financial matters are concerned, he is assisted by Additional Financial Advisers and Deputy Financial Advisers, each dealing with certain aspects of Defence expenditure and no proposal for expenditure pertaining to the Ministry of Defence can be sanctioned without the concurrence of the Financial Adviser or his representatives who are also members of the various Committees of the Defence Ministry and of the Services Headquarters. In so far as the Accounts responsibilities of the Financial Adviser are concerned, they are performed through the organisation of the Controller General of Defence Accounts under whom work a number of Controllers of Defence Accounts. Of the various Officers under the Financial Adviser, one Deputy Financial Adviser and one Controller of Accounts attend whole-time to the Finance and Accounts matters respectively pertaining to the Ordnance Factories.
- 51. A senior representative of the Ministry of Finance (Defence) is a member of the Defence Production Board as well as the Defence Production Advisory Committee referred to in Chapter II. Committee understand that of the six meetings which the Defence Production Board held so far, three were attended by the Financial Adviser while the remaining three were attended by his represen-They also understand that so far there had been no case where the Financial Adviser disagreed with the Defence Ministry's view at a meeting of the Defence Production Board. It was further explained by the Financial Adviser that in matters of sufficient importance, where there were indications that the Desence Ministry were likely to press a view not arranged to obtain the views of all concerned in consonance with the Finance Ministry's view, the Financial Adviser suggested prior to the meeting of the Board. para. 17, the Committee feel that this might make it difficult for the Defence Production Board to functions effectively. They would like to refer in this connection to the role of the Financial Commissioner, Railways in regard to Railway expenditure. The Financial Commissioner, Railways is a member of the Railway Board and, though a representative of the Ministry of Finance attached to the

Ministry of Railways, functions as Secretary to the Ministry of Railways in financial matters. The Committee understand that though the Financial Commissioner, Railways had the right of approach to the Finance Minister in matters where he differed from the Minister of Railways, it had been used very sparingly.

On the other hand, during their tours and discussions the Committee heard several complaints of bickerings between the administrative authorities and the financial authorities, (who were accredited to the Defence Ministry but did not work under them) and of consequent irksome delays in such important matters as for example replacements of plant and machinery. It is not the intention of the Committee to suggest that this is a situation which is peculiar to the Ministry of Defence. They feel, however, that the arrangement obtaining on the Railways under which the Financial Commissioner, Railways functions as a member of the autonomous Railway Board but with certain reserve powers, and under which his representatives at the lower levels work under the General Manager of each Railway Administration but with a right of approach to the Financial Commissioner, Railways, if necessary, is less liable to such bickerings and delays than that existing in other Ministries and Departments. They, therefore, suggest that a similar system be adopted with advantage at least in the case of Ministries dealing with industrial projects and commercial matters and in the Ministry of Finance (Defence) in so far as defence production is concerned. The Committee have already recommended that the Defence Production Board should function in exactly the same autonomous manner as the Railway Board so as to ensure more businesslike work than at present and hope that with this reform it would be possible to make the functions and the position of the Financial Adviser, Ministry of Finance (Defence) and his organisation analogous in all respects to that of the Financial Commissioner, Railways and his organisation so as to facilitate the quick achievement of the objective aimed at.

# (b) Deputy Financial Adviser (Factories)

- 52. The post of Deputy Financial Adviser (Factories) was created in April, 1952 for the purpose of financial control over the activities of the Ordnance Factories. He is the representative of the Financial Adviser attached to the headquarters of the Director General of Ordnance Factories. Prior to April, 1952, the Controller of Defence Accounts (Factories) Functioned as ex-officio Deputy Financial Adviser (Factories) in addition to his own duties. He was, however, assisted by a whole time Assistant Financial Adviser.
- 53. The Deputy Financial Adviser's office consists of 6 Officers, nine Assistants, three Upper Division Clerks etc. The total expenditure incurred on his organisation during the last three years was as under:—

1953-54	•	•	•	•	•	Ra.	1,16,570
1954-55	•	•	•	•	•	Rs.	1,16,646
1955-56	•	•		•		Rs.	1,18,623

The function of the Deputy Financial Adviser is to render financial advice to the Director General of Ordnance Factories and to the Defence Ministry and to carry out financial scrutiny of proposals put forward by them. All proposals for fresh expenditure in respect of works, plant and machinery, provision of stores and establishment initiated by the Director General of Ordnance Factories require the Deputy Financial Adviser's prior concurrence. The Deputy Financial Adviser also advises the Director General of Ordnance Factories on the annual estimates and also watches the progress of expenditure against Budget grants and allotment and examines important irregularities. He also deals with appeals against internal audit decisions. On all important matters involving large financial implications and questions of policy, the Deputy Financial Adviser (Factories) seeks, at his discretion, the advice of the Additional Financial Adviser.

#### (c) Controller of Defence Accounts (Factories)

- 54. The Controller of Defence Accounts (Factories) is responsible to the Ministry of Finance (Defence) through the Controller General of Defence Accounts and the Financial Adviser, Ministry of Finance (Defence) for all accounting matters etc. pertaining to the Ordnance Factories. His main office is attached to the office of the Director General of Ordnance Factories at Calcutta. He has, however, Branch Offices attached to each Ordnance and Clothing Factory. The various Branch Offices attached to the Ordnance and Clothing Factories function not merely on behalf of the Controller of Defence Accounts (Factories) but also tender financial advice to the Superintendents of the Factories more or less on behalf of the Deputy Financial Adviser (Factories).
- 55. The main office is responsible for the compilation and audit of the store and production accounts of the Factories and pay accounts of civilian gazetted officers and establishment employed therein and the Technical Development Establishments as also of the office of the Director General of Ordnance Factories. The main duties of the Branch Accounts Offices attached to the various Ordnance Factories are maintaining wage records, preparation of wage rolls for the industrial labour, allocation of labour charges to production, maintenance of store accounts, audit of local purchase and other contractors' bills, maintenance of cost and production cards, allocation of overhead expenses to production, mechanical compilation of cost, labour and other tabulations, internal audit and financial advice to Factory Superintendents.
- 56. The authorised strength of the organisation of the Controller of Defence Accounts (Factories) comprises of 48 officers, 1794 Class III staff, 88 key punch operators and 179 Class IV servants. The expenditure on this organisation during the last three years was as under:—

1953-54			•		•	Rs.	60.04 lakhs
1954-55	•			•			60.55 ,,
1955-56	•	•	•	•	•	Rs.	60.53 ,,

57. During the visits of the Sub-Committee of the **Estimates** Committee to the Ordnance Factories an impression was gathered that there was a feeling that in certain factories the strength of the Accounting staff was somewhat excessive. They were, however, informed by the Financial Adviser that a continuous review of the staff strength was conducted with reference to the fluctuations in the workload. They find, however, that in spite of this continuous review, the expenditure on the organisation of the Controller Defence Accounts (Factories) had not shown any decrease in spite of the falling workload in the Ordnance Factories over the last few years. They also find that no comparative study of the accounting staff in the various Ordnance Factories inter se as well as with that obtaining in other State Industrial Undertakings and Factories in the Private Sector had ever been undertaken. They feel that such a comparison would be useful in determining the standard strength of the staff in this respect as also their duties. They suggest, therefore, that such a comparative study be undertaken at an early date, and further, that in the light of it, a fresh review of the accounts staff in the Ordnance Factories be conducted.

# (d) Separate existence of Deputy Financial Adviser (Factories) and Controller of Defence Accounts (Factories)

58. It has been mentioned earlier that a separate post of Deputy Financial Adviser (Factories) was created in April, 1952 to render financial advice to the Director General of Ordnance Factories and to examine proposals for fresh expenditure in connection with the Ordnance Factories which functions were previously performed by the Controller of Defence Accounts (Factories). The Committee feel that Finance and Accounts are complementary to each other especially in a manufacturing concern and it would, perhaps, be advantage if they are performed by one Officer as was the position prior to 4|52 and is still the position in each of the Ordnance Factories. In this connection, the Committee would like to refer again to the practice obtaining on the Railways where the financial and accounting duties are performed by the Financial Adviser and Chief Accounts Officer who functions under the General Manager of the Administration but has the right of approach Financial Commissioner. Railways. if necessary. feel that this arrangement could be adopted with an industrial undertaking like the Ordnance Factories so that one Officer, who might be designated as Financial Adviser and Accounts Officer, be all the time available to the Director General of Ordnance Factories for advice, as in any commercial concern even in the Public Sector, so as to ensure businesslike execution of work. They understand that a similar recommendation had been made by the Baldev Singh Committee two years ago. They also understand that the question of placing the Deputy Financial Adviser (Factories) and the Controller of Defence Accounts (Factories) under the administrative control of the Director General of Ordnance Factories is already under consideration of the Ministry of Defence as a part of general policy. They hope that an early decision would be taken in the matter in the light of the above remarks.

- 59. In connection with the question referred to in the above para. the Committee would like to point out that one of the essential principles of the theory of separation of audit from accounts is that the accounts organisations should be placed under the administrative authorities who would thereby be made to realise their responsibilities in budgetary and financial matters. However, in the matter of defence expenditure while the accounts were separated from audit about 30 years back, they were placed under the Ministry of Finance (Defence) and not under the administrative authorities, with the result that the lack of co-operation and coordination between the administrative authorities and those in charge of budgetary, financial and accounts matters continues as before. The Committee hope that it would be possible to rectify this state of affairs at an early date.
- 60. The Committee have already recommended in para 42 that at the level of the Director General of Ordnance Factories he should be assisted by an Executive Board consisting of himself and a few other senior officers including the Deputy Financial Adviser (Factories) and Controller of Defence Accounts (Factories), both of whom may be replaced by the Financial Adviser and Chief Accounts officer when appointed, as suggested above. They have also recommended that at the factory level the Superintendent should be assisted by a Factory Board consisting of himself and a few other senior officers, including the local Accounts Officer. They feel that the association of the Accounts Officers with the management in this manner would go a long way in inducing among them a feeling that they are equally responsible for management and execution of important defence work and also in bringing about harmonious relations between the executive and the Accounts Officers.
- (e) Question of financial concurrence before exercise of Powers by Director General of Ordnance Factories etc.
- 61. Most of the powers delegated to the Director General of Ordnance Factories and Superintendents of Factories, are at present exercisable by them only after obtaining prior concurrence of the associated finance, viz. Deputy Financial Adviser (Factories) and Factory Accounts Officers. Even though a number of relaxations had recently been allowed in this respect, the Committee formed an impression during their tours and discussions that there was a general feeling of disatisfaction among the executive authorities over this arrangement which was considered by them to be very irksome and responsible for most of the delays in the smooth functioning of the Factories. The executive authorities also felt that the existing financial control crippled, to a large extent, their initiative and

freedom of action which was essential in an industrial undertaking like the Ordnance Factories and, therefore, advocated elimination of this system of control.

62. The Committee have already recommended in para. 58 the adoption of the Railway pattern of finance and accounting administration in the organisation of the Ordnance Factories. They feel that, with this reform, most of the difficulties felt and delays caused at present would be resolved to a considerable extent. At the same time, they do not consider it either sound or desirable to do away altogether with financial control and scrutiny over the proposals of the executive and administrative authorities. They would point out that such financial control is recognised even in the case of Corporations and Limited Companies in the public sector, e.g., the Hindustan Aircraft Limited, the Air Corporations etc. where the Financial Manager, Financial Controller, etc. are required to be consulted in every financial matter and in case of disagreement with the General Manager have the right of reference to the Board of Directors/Corporation for final decision. The Committee consider such reserve powers for finance representative necessary and desirable in the present circumstances and have, therefore, already recommended that they should be provided for in a modified manner in the revised set up of the organisation of the Ordinance Factories.

# (f) Presentation of Budget

- 63. The provision of revenue expenditure of the Ordnance and Clothing Factories is made under several main heads of Major Head 58, Demand No. 12 of Defence Services Estimates. The major portion of the provision is, however, made under Main Head 5, Sub-head A of the above Major Head. The details of the items shown under this Sub-head are given below:—
  - (1) Pay of Staff
  - (2) Purchase of Material
  - (3) Transportation charges
  - (4) Maintenance of buildings
  - (5) Customs Duty
  - (6) Miscellaneous expenses
  - (7) Civil Production Agency Factories
  - (8) Directorate of Factories.

The provision for the expenditure on the organisation of the Controller General of Defence Production is made under the Ministry of Defence while provision for expenditure on the various Military Officers and staff attached to the Ordnance Factories as Security Officers, Medical Officers, Technical Development Establishment, etc. is made under the centrally controlled Heads in the Defence Budget such as Pay of Army Officers, etc. The provision for expenditure on pay and allowances of personnel of Ordnance Factories on leave, deputation etc. in U.K. and on procurement of stores required by

Factories through the High Commissioner for India in U.K. is made under Main Head 8, Sub-head B. Expenditure of a capital nature on works and plant and machinery for Ordnance Factories is provided for under Major Head 86—Defence Capital Outlay—and is included in the total provision made for the Army under this Head. The provision for expenditure on pay and allowances of the organisation of the Controller of Defence Accounts (Factories) and his sub-ordinate offices attached to each Factory is made in the total provision for the Defence Accounts Offices under Main Head 3, Sub-head (1), while the expenditure on pay and allowances etc. of the office of Deputy Financial Adviser (Factories), which is attached to the Head-quarters Office of the Director General of Ordnance Factories, is provided for in the Budget Provision et the Ministry of Finance.

- 64. As regards the receipts of the Ordnance Factories, they are shown separately under Demand No. 12 under the following heads:-
  - (1) Proceeds from sale of surplus and obsolete stores.
  - (2) Value of work done for non-military departments, other Governments and Private Bodies.
  - (3) Sale of stores in Civil Production Agency Factories.
  - (4) Receipts from disposal of surplus lands, buildings, etc.

It will thus be seen that the budget provision for various items connected with the organisation and set up of the Ordnance Factories is spread over a number of Major and Minor Heads, making it very difficult to get an overall picture of the total expenditure on these Factories. Further, the receipt side shows only the value of work done for non-military departments, other Governments and private bodies, etc. but does not indicate the value of work done for the Army, Navy and the Air Force. Thus the present form does not also show at one place the anticipated total capital and revenue expenditure on all Ordnance Factories on the one hand and the estimated receipts, including the value of issues to the various parties, on the other. The Committee consider such a presentation of all budget figures relating to the organisation of the Ordnance Factories as very desirable so as to facilitate proper appreciation of the financial working of the organisation which apart from the Railways, is, perhaps, the largest monopolistic production unit in the public sector In this connection, they would like to point out that in U.S. a separate Vote (Demand) for the expenditure solely on the Ordnance Factories is being asked for since 1951-52 as a result of the recommendation made by the Estimates Committee of the House of Commons of 1950-51 and also a statement is set out in such a way as to display the current and capital expenditure on these factories on the one hand and the various receipts on the other so as to show the net outlay on running these factories. The Committee, therefore, recommend that the estimates on account of expenditure on the Ordnance Factories in India be also asked for as a Demand and that a statement similar to that prepared in U.K. may also be submitted to the House along with the Budget Estimates.

- (g) Form of Budget, System of Accounting and Expenditure Control
- 65. The Committee feel that the details under which the estimates for expenditure on Ordnance Factories are, at present, asked for, as mentioned in paragraph 63, do not indicate sufficiently the break-up of the expenditure under various heads. They, therefore, suggest that the following improvements may be made in the presentation of the estimates:
  - (1) Pay of staff should be shown separately for supervisory staff, non-industrial staff and industrial staff.
  - (2) Expenditure on allowances may be shown separately.
  - (3) (i) Expenditure on the various training Schemes in the Ordnance Factories, (ii) expenditure on the inspection staff, (iii) expenditure on repairs and maintenance of plant and machinery, and (iv) expenditure on miscellaneous operating expenses such as fuel and oil, etc. may also be shown separately.
  - (4) Expenditure on welfare activities may be shown separately.

As regards the receipt side, it has already been suggested earlier that the value of work done for the various Military Departments may also be shown.

66. The existing form of Budget and the system of accounting of expenditure of the Ordnance Factories (in common with the system obtaining in the Defence Services as a whole) are primarily designed to ensure that the expenditure does not exceed the corresponding budget allotment. Even the control over expenditure is generally confined to watching the progress of expenditure against allotments, the existence of appropriate sanctions for expenditure and the observance of cannons of financial propriety. In short, the whole system aims at meeting requirements of Appropriation Audit only, and very little attempt is made to correlate expenditure to performance and outturn. The system of managerial control which is meant to reveal wastages and inefficiency and to help in a flexible adjustment of expenditure, almost concurrently with changes in performance, is also almost non-existent. Since the Ordnance Factories are industrial undertakings, producing defence stores, the Committee consider that there should be a system by which actual expenditure could be readily compared and correlated to out-turn, and that the form of the Budget should also exhibit this co-relation to the extent possible. They would, therefore, recommend that, in the interest of efficiency and economic functioning of not only the Ordnance Factories but all other undertakings in the public sector, the system of correlating actual expenditure with performance and of managerial control, be introduced therein. They feel that with an improved and modern cost accounts system it should be possible to enforce such a control. In this connection the Committee would also refer to their recommendations contained in paras. 19-23, 31-32 and 86-90 of their thirtyfirst report on Finance and Accounts in the Ministry of Railways which are reproduced in Appendix VI.

# (h) Capital Assets

67. The value of the capital assets in the Ordnance and Clothing Factories as on the 1st April of the last five years is shown below:—

				1-4-52	1-4-53	1-4-54	1-4-55	1-4-56
					(I	in lakhs of	Rupees)	
			•	94·72 1008·81 1219·60 116·99 23·19	96·04 1225·74 1306·78 116·18 16·02	96·07 1280·63 1410·20 116·65 15·77	96·09 1288·08 1382·66 139·58 20·58	96·10 1445·09 1409·50 136·15 19·64
(i) Building	s . ery	•	•	445·09 16·98	383.36 27·42	466·25 29·60 3415·17	546·23 31·95 3505·17	479·47 16.81 3602·76
	Buildings Machinery Other Items Gas and Wate Unfinished I (i) Building (ii) Machine	Buildings Machinery Other Items Gas and Water m Unfinished Items (i) Buildings (ii) Machinery	Buildings Machinery Other Items Gas and Water mains Unfinished Items (i) Buildings (ii) Machinery	Buildings Machinery Other Items Gas and Water mains Unfinished Items (i) Buildings (ii) Machinery	Lands	Cands	(In lakhs of Lands	Cin lakes of Rupees

# (i) Expenditure in the Last Three Years

68. The expenditure in connection with the Ordnance Factories booked under the various heads during the last three years is given below:—

					1953-54	1954-55	1955-56
				•	(În l	akhs of Ru	pees)
ı.	Main Head 5	•	•		1504.03	1441-41	1305 · 88
2. 3.	Main Head 8 (Charges in England) Capital Expenditure:	•	•	•	86 · 57	<b>58 · 6</b> 6	15.43
3.	(i) Works				153.80	135.73	112-28
4	(ii) Plant and Machinery.  Expenditure on pay and allowand		of staff	of	107 · 47	91.64	95.32
₩.	C.D.A. (Factories) and his subord	inate	offices		60.04	60.55	60.53
5.	Expenditure on pay and allowan (Factories)	ces	of D.F	.A.	1 · 17	1 · 18	1.19
	TOTAL .	•	•		1913.08	1789 · 17	1590-63

69. The receipts on account of Ordnance Factories under various heads for the last three years are given below:—

	1953-54	1954-55	1955-56
•	(In I	akhs of Rup	ees)
Proceeds from sale of surplus and obsolete stores. Value of work done for non-military departments,	0.17	1 · 23	5.90
other Govis, and private bodies	176-12	272 · 21	394 · 57
Other Misc. Receipts	56.58	19.65	24 · 34
Sale of stores in civil production Agency Factories Receipts from disposal of surplus lands, buildings,	12.86	21.83	17.85
etc.	• •	0.25	1.27
TOTAL	245 · 73	315-17	443 · 93

# (j) Developmental Expenditure

70. The developmental expenditure on the Ordnance Factories during the various years of the 1st Five-Year Plan was as follows:—

									(Cı	rores of Rs.)
1951 52	•	•	•	•	•	•	•	•	-	2.49
1952-53					•	•	•	•	•	2.45
1953-54				•	•	•	•	•	•	2.61
1954-55	•	•	•	•	•	•	•	•	•	2.28
1955-56	•			•		•	•			2.07

It would be observed that this works out to about 13% of the total annual expenditure on Ordnance Factories mentioned earlier and also less than 7% per year of the capital assets of the Ordnance Factories which themselves are at a very much low level, as compared to the current prices.

71. It is understood that the Ordnance Factories propose to incur the following expenditure for capital investment during the period of the 2nd Five Year Plan under the following heads:—

(i)	New Projects	•	•	•	•	•		•	Rs. 33 crores (approximate) excluding the projects already approved by Govt. 1
(ii)	Replacement	and	mod	dernisa	tion	of	Plant	and	
• •								•	Rs. 6 crores (approximate).
(iii)	Buildings	•	•	•	•	•	•	•	Rs. 10 crores (approximate)
						T	OTAL	. Rs	3. 49 crores (approx.)

It will be observed that this amounts to less than 1% of the total expenditure proposed during the period of the 2nd Five Year Plan. The Committee are not aware to what extent the expenditure proposed above will actually be incurred, as apart from such questions as the availability of resources and the ways and means position, the procurement of necessary equipment, plant and machinery and other connected items, the depressing fact remains that the Defence authorities have been consistently able in the last few years to spend far less than what they planned to, a matter which will be referred to in the next paragraph. The Committee hope that every effort will be made by the Defence Ministry to fulfil their plan fully by taking sufficient and timely action for the various minaries necessary for the purpose so that not only will the production capacity of the Ordnance Factories have improved but funds required by other authorities will not be kept away from them and at the same time not spent by the Defence Ministry themselves. They would suggest for this purpose that firm annual programmes and targets should be carefully laid down in advance and systematic reviews should be conducted at frequent intervals so as to avoid any shortfall in the expenditure and targets laid down.

# (k) Shortfall of Expenditure

72. The original appropriation and actual expenditure under Main Head 5 (A), Main Head 8 (Charges in England) and Major Head 86—Capital Expenditure—in respect of Ordnance Factories during the last three years are as follows:—

Year	Mair		ain Hea rges in F			Major Head 86 (Capital Expenditure)			
	Original Apprn.	Actual Exp.	% of saving	Original Apprn.	Actual Exp.		Original Apprn.	Act. Exp.	% of saving
		(	(Figures	in lakhs	of Rup	ees)			
			_		-				
1953-54	1910-24	1504 · 03	21.3	162.0	86 · 57	46.6	490.00	261 · 27	46.7
1953-54 1954-55	1910·24 1805·80	1504·03 1441·41	21·3 20·2	162·0 112·00	86 · 57	-	490·00 340·00		46·7 33·1

It will be seen that a shortfall of actual expenditure below the original appropriation occurred under all the heads and that in some cases it was abnormally high, particularly under Main Head 8 and under Capital Expenditure. The Committee regret to observe that although this aspect of defective preparation of Budget Estimates and over-estimation of the spending capacity had been the subject of adverse comments in successive Audit Reports on the Defence Services and the Reports of the Public Accounts Committee on the Appropriation Accounts of the Defence Services, there has not been any marked improvement in the position. Further while the percentage of saving has no doubt been falling as compared to earlier years, it is mainly due to the original appropriation itself being low instead of there being any improvement in the spending capacity in the important matter of defence production. In this connection, the Committee would like to endorse the remarks of the Public Accounts Committee contained in paragraphs 9 and 10 of their 19th Report that effective action should be taken by the Ministry **Defence** in consultation with the Ministry of Finance (Defence) evolve a better mechanism of budgetary control and at the same time they would like to recommend that positive steps in the matter of taking timely action in regard to placing of orders for plant and machinery and for surrender of funds not required should be taken. Further, the Committee also feel that the present machinery is not quite competent to work efficiently in the production of military requirements and that an overhaul of the present system of management in favour of Company or Board system is called for. In this connection, a reference is also invited to para. 18 of this report.

# (1) Analysis of Expenditure and Outturn

73. The figures of actual expenditure in regard to Ordnance Factories under the various detailed heads and the value of outturn

during the last three years and the budgetted figures for 1956-57 are as follows:—

1	Description of the Items				1953-54	1954-55	1955-56	1956-57
1.	Pay of staff (excluding	Acc	counts	and		(In la	khs of Rs.)	
	Finance staff	·			884 · 63	929 · 11	923·62	908.00
2.	Purchase of Materials		•		509.07	417.51	438 · 32	475.00
3.	Stockpile	•			29 · 11	16-95	5.32	2.05
4.	Minor Maintenance		•	•	55.59	60.01	68 · 59	73.00
5.	C. P. Agencies Fys.		•		15.7	15.78	15.66	13.90
6.	Charges in England		•	•	86.57	58 · 66	15-43	43.20
7.	Capital Expenditure							
	(i) Works			•	153.80	135.73	112.58	150.00
	(ii) Plant and Mach.	•	•	•	107.47	91 · 64	95.32	160.00
8.	Value of outturn .				1451 · 89	1697.99	1501 · 10	

74. The pay of staff (excluding Accounts, Finance and Inspection staff as well as military officers working in the Ordnance Factories as Security Officers, Medical Officers, etc.) bore the following ratio to (i) the total revenue expenditure, i.e. under main heads 5 and 8 only and (ii) the value of outturn:—

Year				Ratio of the extaff to	xpenditure on pay o total Exp.
				(i.e. under main heads 5 & 8)	value of outturn
1953-54				52.9 %	60 9 %
1954-55	•			58 %	54 7%
1955-56	•			60 %	61 · 5 %

- 75. It will be seen that the ratio of pay of staff to the total expenditure as well as to the total of outurn has been showing an upward trend in the last few years. While the Committee are aware that to a certain extent this is due to the presence of surplus labour in the Ordnance Factories during these years, they feel that this reason alone does not fully explain the rise in expenditure on the pay of staff. They will have occasion to refer to this question again in the Chapter on 'Staff' in a subsequent Report.
- 76. It will also be observed that the expenditure on minor maintenance as well as its ratio to the value of capital assets has been steadily rising in the last few years. The Committee feel that the Capital assets are probably becoming increasingly obsolete and that this is a matter which should be viewed with concern and efforts made to improve the position.

- 77. The statement given above will also indicate that the expenditure on Charges in England and Capital Expenditure on Works and Plant and Machinery have also registered a fall in the last few years. While it cannot be denied that, to a certain extent, this might be due to the tapering of the two Projects, which were taken up in the earlier years, namely one at Khamaria and the other at Ambernath, the Committee feel that the fact the plant and machinery etc., most of which has to be imported in the Ordnance Factories requires considerable modernisation and improvement would indicate the necessity of drawing up plans and for taking timely action to implement them so as to improve the capacity and the efficiency of the work in the Ordnance Factories. The Committee hope that the comments made above will be fully taken into account while implementing the Projects proposed under the 2nd Five Year Plan.
- 78. The break-up of the out-turn broadly among the various indenting departments, for the last three years, is as follows:

	 	1953-54	1954-55	1955-56			
		(Figures in lakhs of Rs.)					
Issue to Army Issue to Navy Air Force and others Issue to Civil Industries		1153.37 47.39 167.93	1192.97 64.22 392.66	893.71 66.74 445.93			

It will be observed that the extent of work done for the Navy, Air Force etc. is increasing in recent years, though it meets only a small portion of their total requirements. The Committee are glad to observe that the civil production in the Ordnance Factories has been steadily rising. The Committee will have occasion to refer to this question in the Chapter on Production in their subsequent Report.

79. The Committee do not consider it worthwhile to compare the total out-turn with the total expenditure, since the former actually represents only the cost of production. A worthwhile comparison could only be in terms of physical quantities so as to enable a comparison to be made of the cost of production per unit. It is for these reasons that they have suggested earlier the system of managerial control.

# (m) Annual Accounts

80. The annual accounts of the Ordnance Factories which contain various details of their production activities, for example, production accounts, finished stock account, the statement of assets and liabilities, capital account, stores account, etc. are marked 'confidential' and are not published in the Commercial Appendix to the Appropriation Accounts of the Defence Services. The Committee understand that the decision to keep them confidential was taken after the last war, before which they were being published. The

Committee realise the expediency of this action but would refer to the recommendation in para. 64 that a statement showing the current and capital expenditure on the one hand and the various receipts on the other, so as to show the net outlay on running these factories be submitted to the House along with the Budget estimates as in the U.K. and suggest that it may also show broadly to the extent possible the activities which are reflected in the annual accounts.

# (n) Cost Accounting

# (i) Organisation

81. It has been mentioned earlier that the entire accounts organisation pertaining to the Ordnance Factories works under the Controller of Defence Accounts (Factories). In consequence, cost accounting, which is one of the principal functions of the Controller of Defence Accounts (Factories), and the staff responsible therefor, attached to the various Ordnance Factories, are not the responsibility of the Director General of Ordnance Factories and the Superintendents of the Ordnance Factories. The Committee do not feel entirely happy with this arrangement. It has to be realised that cost accounting is a subject of great importance in manufacturing industries and its sphere of activity stands midway between the general accountant and the engineer. Its usefulness extends to others than the cost accountant and includes the engineer, the general accountant and the manager, each of whom has to be brought into contact with the cost data for the efficient and economic working of the industry. It is, therefore, very necessary that there should be perfect co-ordination between the factory management and the cost accounting organisation in regard to the various types of data required by them within reasonable time, after the process to which it The Committee understand that this co-ordination does not obtain in an adequate measure under the present set-up and arrangement and that the Director General of Ordnance Factories as well as the Superintendents of the Ordnance Factories are not satisfied with it. While the Financial Adviser was agreeable to the transfer of cost accounting work to the D. G. O. F.'s establishment, he felt that the latter might find it difficult to maintain a cadre of cost accountants in a contented manner in view of the limited chances of promotion under his organisation compared to those available to them under the Controller General of Defence Accounts on whose strength they are borne at present. While the Committee feel that this difficulty itself could be surmounted by borrowing cost accounting staff from Audit and Accounts Offices, as is done by a number of State undertakings, at the same time they are particular that any alteration in the present set-up should not lead to an arrangement under which the cost accounts staff are hampered by frequent factory instructions which might well be prejudiced because of the critical nature of the cost accounting work. The Committee have already recommended that the organisation of the Controller of Defence Accounts (Factories) as in any manufacturing industry, should work under the administrative control of the Director General of Ordnance Factories subject, of course, to certain reserve powers and feel that, once this is done, the difficulties experienced at present in securing greater coordination between the cost accounts staff and the factory staff might not continue to the same extent. At the same time, they consider that the Director General, Ordnance Factories and the Superintendents of Factories should each have a cell working under him to interpret to him the various statistics furnished by the cost accounts branch, so as to enable him to initiate necessary action for the purpose of controlling costs and of improving the efficiency.

# (ii) System

- 82. A description of the system of cost accounting followed in Ordnance Factories will be found at Appendix VII. It is clear therefrom that costing is not done during the process of manufacture but only after the warrant is closed or closed short. The executive authorities themselves obtain figures of cost of production after the lapse of another long period. In short, the present cost accounting system in the Ordnance Factories is only a historical collection of facts long after the event, done more for purposes of accounting and record than for any other useful purpose. The Committee can hardly consider such a system satisfactory particularly in a monopolistic industrial concern, the economy and efficiency of which are of vital concern to the country.
- 83. The Baldev Singh Committee had characterised two years back the cost accounting system in Ordnance Factories as outdated and unsatisfactory and had stressed the necessity of bringing it in line with modern ideas so as to make it useful to the executive authorities of the Ordnance Factories. The Committee understand that a Departmental Committee was appointed to study the question in detail and to make recommendations with a view to improving the standard of cost accounting in Ordnance Factories. They regret to observe, however, that in spite of the criticism of the Baldev Singh Committee, the system continues unchanged as before.
- 84. The modern conception of cost accounting is more than that of just recording the expenditure on labour, overheads and materials used in manufacturing products. To justify its existence, a cost accounting department must record and analyse all costs of production and report these data to the responsible persons in charge of manufacturing industries in such form that they are aided in directing and controlling the operations of the industry towards its efficient and economic working. In fact, it has been said that the best obtainable picture of the working practice and accomplishment of a manufacturing concern is given in well-designed cost and operating reports, the major objectives of which are:
  - (i) to furnish the maximum amount of information from both operating and cost angles;

- (ii) to present in the most practical way, the facts that reveal actual working conditions and situations; to facilitate effective supervision of plant operation and to aid in attainment of high standards of efficiency and therefore of economy; and
- (iii) to aid in determining policies.

Intelligent use of cost and operating reports in an Industry is known to make it possible to

- (i) Plan operation systematically in advance.
- (ii) Obtain efficient operation.
- (iii) Reduce to a minimum spoilage, waste and loss.
- (iv) Improve processes, methods and procedure.
- (v) Conserve resources.
- (vi) Secure low costs.
- (vii) Secure rapid turnover of working capital.

85. In this connection it would be useful to repeat the summing up by an American author (Franklin) in respect of value of cost reports:

"Cost accounting must present to the executive the fair, complete costs of his units of production; it must tell the story of the use and waste of his materials; it must illustrate in operation and in groups, the productivity of his labour; it must picture values and returns, in units and by divisions, of his expenses and their relations to labour operations and sales; it must marshal facts illustrative of the movements and relations of productions and sales, and of changing situation as may be desired, or of the comparative values of methods; and it must do these things with the minimum of time and exertion on the part of the executive; for too much cost system, too many figures, defeat the real purpose of cost accounting."

86. It is also necessary that the types of reports must be fitted to the needs of executives in various positions requiring different information so as to derive the maximum advantage. The importance of fitting reports to the organisation is stressed by an American author (Dawes) in these words:

"Accounting, and particularly cost accounting, will reach its greatest development and have its full value in those companies whose accounting executives in fact, whose full accounting organization, realise and practise the principle of "Accounts for Operators" instead of "Accounts for Accountants." While there are certain basic principles of book-keeping and auditing that must be followed and cannot be sacrificed to the whims of operating men, nevertheless the accounting system, and particularly the cost accounting system, should be designed primarily for the use of the

operators of the business and not the cost department. Any cost system that is imposed upon the operators by the cost department instead of being developed from the operations is bound to fail of its purpose and probably will instill in the minds of the operating men an aversion for, and prejudice toward, cost accounting that will be more injurious. It will be seen from this, therefore, that if the cost accounting system is to fit the operations, the reports resulting from the system must not only fit, but also reflect the operations clearly and accurately. It is very important, therefore, in the installation of a cost system to have in mind the type of reports that will be most useful to the operators and then to work back from those reports to the installation of cost methods that will produce them."

Even if cost reports are accurate and of useful types, they lose value to the operating executives unless they are prepared and distributed promptly, in time for inefficiency to be controlled. The emphasis in modern management's philosophy is upon planning for the prevention of inefficiency as far as possible. The accounts departments responsibilities for the translation of managements' plans into budgets and for the preparation of cost and other reports comparing the actual results with the budgeted or standard expectations are two of the steps in preventing and controlling inefficiency. However, its responsibility goes further; the work must be completed quickly, so that the reports are timely, which means that they must be received by each operating executive while the activity is still in process or vivid in his memory, or in time to prevent a continuing action that would be less than satisfactory.

- 87. The Committee fail to understand why under the present cost accounting system followed in the Ordnance Factories, the cost data and reports cannot be made available to the executive authorities at the end of a reasonable interval after a particular process of manufacture. They do not have in view instantaneous preparation of cost data by electronic devices but they understand that the D.G.O.F. would be satisfied if it could be made available after a week or even a fortnight instead of as at present. The Committee recommend that immediate steps should be initiated by the Financial Adviser to secure this reform.
- 88. The Committee also recommend as a further step in the process of establishing complete control over all factors, which are subject to the influence of management, the introduction of the system of standard costing under which standard costs or predetermined costs are prepared in advance of operations according to a carefully planned method of making a product or rendering a service and serve the purpose of cost analysis and cost control.
- 89. Cost analysis for managerial control purposes involves the comparison of actual with anticipated or predetermined costs, to

determine what variations have occurred, their extent and causes, to discover conditions underlying each cause, and to develop or revise policies, plans, methods, and practices for the purpose of eliminating unfavourable conditions, and to apply these procedures to situations requiring improvement.

- 90. The purpose of analysis is to obtain control over costs. This is done by discovering and correcting defects in methods, physical facilities, man-power and organization. Cost analysis touches upon and affects the work of everyone in the industrial establishment. Thus its possibilities as a working tool should be clearly understood, and its procedures continually employed in attempting to, secure lower costs, and in upgrading and improving operating performance.
- 91. Cost control is defined as the guidance and regulation of the internal operations of a business by means of modern methods of costing, through the measuring of manufacturing and sales performance.

The definition emphasizes the fact that control is a matter of executive action; for such control to be effective, the executive acts on information obtained by a process of analysis.

- 92. The Committee understand that standard costing was introduced recently in two Ordnance Factories and that the results of experience gained in its working in those Factories showed that the system required simplification and certain modifications for its being introduced in all Factories in respect of major repetitive items of manufacture as a regular feature.
- 93. The Committee recommend that in the light of the remarks made above the entire cost accounting system at present followed in the Ordnance Factories may be had comprehensively examined by the experts e.g., the Cost Accounts Branch of the Ministry of Finance and the modern cost accounting system, as obtaining in advanced countries, may be adopted and introduced, without any further delay. They suggest for the purpose that the system of costing obtaining in the Royal Ordnance Factories in U.K. may also be examined with a view to its introduction in India in the Ordnance Factories as well as in all other industrial undertakings in the public sector if found suitable.
- 94. While on the subject, the Committee would also refer here to the question of the personnel of the Cost Department. Proper personnel to operate a cost system is just as important as the system itself. A weak system with a strong personnel may survive, while a strong system with a weak personnel is likely to fail. Persons selected to operate the system should possess a sound technical knowledge of accounting procedures, not only of cost accounting but of general

accounting as well. They should possess sufficient vision to enable them:

- (i) to trace the effect of changes in cost on operations;
- (ii) to detect errors and irregularities that may creep into the records;
- (iii) to visualise the various manufacturing operations.
- 95. The Committee would suggest that for the efficient working of the cost department, suitable and selected personnel may be had specially trained for the purpose both in India and abroad.

## (o) Renewal and Reserve Fund

- 96. A Renewal and Reserve Fund for the Ordnance Factories in India was sanctioned for the first time with effect from the financial year 1924-25 so as to ensure that a certain sum was set aside annually to cater for the wastage of capital assets, such as plant and buildings in use and to maintain their efficiency. A percentage of the bookvalue of the plant, representing annual depreciation together with the residual book-value of plant and buildings discarded during the year was credited to the Renewal and Reserve Fund and charged off to the Revenue. The Fund could be drawn upon to meet the expenditure on (a) renewals and replacements of machinery, plant buildings rendered necessary by ordinary wastage, (b) any expenditure due to obsolescence, arising from any cause, which did involve additions or alterations to buildings, and (c) any expenditure due to obsolescence, arising from any cause, primarily undertaken to increase efficiency but which incidentally might have increased capacity or which involved additions or alterations to buildings. The Fund was, however, held in abeyance from the Accounts of the year 1939-40 on account of the outbreak of war and owing to the revised basis of allocation of Defence Receipts and charges between Government of India and the British Government. The Committee were informed that the question of its resuscitation after the war had been considered but that it had been decided that there was no need for such a Fund. A proforma account of the Fund is, however, maintained to show receipts and expenditure on account of Renewal and Reserve Fund.
- 97. The reasons leading to the decision not to revive the Fund have been explained by the Ministry of Finance (Defence) as follows:—

"In a commercial concern, existence of such a Fund might be considered essential since it would put a limit up to which funds would be available for meeting the company's cost of replacements of its assets. The position of the Ordnance Factories is somewhat different. As State Organisations and as essential facilities for the needs of the Armed Services, they must be kept fully equipped and efficient and funds must be found from the Defence Budget.

Owing to the present tendency of rise in prices, and also high cost due to improvements in Plant and Machinery, etc., the renewal and replacement of plant and machinery in Ordnance Factories, has necessarily to be at a cost much higher than the original cost of the items to be replaced. The R & R Fund built up in the orthodox way—depreciation based on original costs—would not provide the needed resources when renewal becomes due.

There is, perhaps, no objection in principle to the revival of the Fund. In that case, the Fund would have to be built up by contributions from the Revenue and to that extent it would produce additional strain on the Revenue budget, while the tendency in recent years has been to explore the possibility of financing as many items as possible from the capital budget.

At present, all expenditure on account of plant and machinery for Ordnance Factories is met from the Defence capital outlay budget. The financing of expenditure on replacement of plant and machinery will obviously have to be determined with reference to the ways and means position of the Government from time to time and the creation or the renewal of the Fund would not imply that replacements could be automatic without correlation to the availability of money.

In the Defence Ministry's second Five-year Plan a total provision of 15 crores has been made for plant and machinery including about 9 to 10 crores for replacements and renewals. This figure has been accepted in principle by the Defence Committee of the Cabinet for purpose of planning, although it would be subject to review from year to year. Planned programme for replacement of plant and machinery is being worked out and implemented accordingly. The creation of the R & R Fund would not, therefore, by itself improve the situation immediately, so far as finding financial resources for implementing the Renewal and Replacement programme."

- 98. The Committee understand, however, that the Ministry of Defence and the Director General of Ordnance Factories feel that a real Renewal and Reserve Fund would considerably assist in proper submission of their proposals for the urgent problem of replacement of outdated and obsolete plant and machinery in the Ordnance Factories and that they would very much favour the resuscitation of the R & R Fund.
- 99. The contributions to the Renewals and Reserve Fund are, at present, calculated at the rates given in Appendix VIII which in the case of plant and machinery, are based (i) not on the straight-line method but on the depreciated value at the end of each year.

and (ii) on the expectancy of a life of 40-42 years for a machine and not on its present-day life while modern machines are stated to be built for a much shorter life, normally about 20 years. The Committee feel that even if a mere proforma account of the R & R Fund is kept, the annual depreciation charged off the production account and credited to the proforma R & R Account should be determined on some realistic basis. They would, therefore, recommend that the rates of contribution to the R & R Fund may be examined afresh with reference to the present day life of plant and machinery and suitably revised so that the correct charges on this account may be reflected in the production accounts of Factories.

100. The contribution to and expenditure from the proforma R & R Account during the 5 years, from 1950-51 to 1954-55, are as follows:—

Yea	r							Contribution in lakhs of rupees	Expenditure in lakhs of rupees
1950-51								121.66	12-44
1951-52								118-11	15.64
1952-53	•							131.56	13.77
1953-54			•					129.96	24.77
1954-55	•	•	•	•	•	•	•	133.01	27.49
				-	<b>TOTAL</b>			634.30	94.11

The total amount at the credit of the Fund as on 1st April 1955, stood at Rs. 910-97 lakhs.

It will be seen from the above that as against a credit of Rs. 634 lakhs to the R & R fund in the last five years, an expenditure of Rs. 94 lakhs only has been incurred therefrom. Further, even the credits mentioned above, as pointed out earlier in paragraph 99, had no relation to the actual life of the machinery and were considerably depressed both on account of the original cost of the machinery being low and on account of the long life assumed for it, though not warranted by circumstances. The reasons for this disproportionately low expenditure were attributed to various factors, such as (1) sanctioning of money (2) placing of orders, and (3) actual deliveries. In effect, the figures would indicate that sufficient care and attention had not been bestowed on the replacement and modernisation of plants and machinery which has become outdated in most cases, a subject which will be referred to again in a subsequent report.

101. The Committee attach great importance to the question of modernisation of the Ordnance Factories so that they have uptodate equipment installed in them. They therefore consider that all measures which would facilitate the achievement of this end shall be adopted. It is obvious that the present arrangements are not by any means satisfactory particularly as the Ministry of Defence and the Director General of Ordnance Factories strongly feel that a real R&R Fund would considerably facilitate their work. It needs no

special mention that it is a healthy practice to set aside every year from the revenues a sum for meeting the expenditure on the replacement of plant and machinery. While the Committee are aware that the Ministry of Finance (Defence) have weighty reasons to offer against the resuscitation of the R & R Fund, they feel that this question needs to be examined again at the highest level in the light of a realistic assessment of the condition of the plant and machinery in the Ordnance Factories and the present circumstances and a decision taken on it without any delay. In this connection, they would draw attention to their earlier recommendation that the Ordnance Factories should be constituted into either a corporation or a company or into an autonomous Board like the Railway Board and hope that an early decision on this issue would facilitate a quick decision on the question of the R & R Fund. If, however, the Government still consider that there is no need for a R & R Fund, the question of placing more funds at the disposal of Director General of Ordnance Factories for replacement of plant and machinery should be considered.

## (p) Financial Review

102. The Deputy Financial Adviser (Factories) annually prepares a Financial Review on the working of the Ordnance Factories. So far, since the creation of the post in 452, only two Reviews—one covering the two years 1952-53 and 1953-54 and the other pertaining to 1954-55—have been prepared. It is observed that the first Review was prepared in 755 and the second in 556, i.e. over a year after the close of the year to which it pertained. The Committee hope that it would be possible for these Reviews to be prepared more expeditiously. They further hope that it would be possible in future for the Director General of Ordnance Factories to take more prompt and energetic action on the comments made by the Deputy Financial Adviser in his reports.

# (q) Losses

103. The total losses under various heads written off by the competent authorities, in respect of Ordnance Factories during the last four years are as follows:—

Particulars	1952-53	1953-54	1954-55	1955-56
1. Over-issue of Pay and	Rs.	Rs.	Rs.	Rs.
wages 2. Losses due to theft, fraud,	7,570	1,033	14,343	905
etc	19,202	1.23.023	41,793	1,65,768
actual balance not caused by			F	
theft, fraud etc.	. 1,03,346	5,82,969	4,89,211	2,50,297
4. Loss in transit	1,20,746	1,28,808	1,75,820	89,657
5. Losses due to other causes	5,19,532	14,11,376	2,44,727	10,89,894
TOTAL	7,70,396	22,47,209	9.65,894	16,36,521

It will be observed that the losses on an average amount to over 2% of the annual expenditure excluding pay and allowances of staff and capital expenditure, and over 3% of the annual purchases of materials. The Committee feel that this is rather on the high side. The losses have been particularly heavy during 1953-54 and 1955-56. Further, the losses on account of deficiencies in actual balance not caused by theft, fraud, etc., and losses due to other causes have increased considerably. The Committee feel that the question of these losses should be examined carefully and action initiated to reduce them to the minimum.

New Delhi;

The 22nd March, 1957.

BALVANTRAY G. MEHTA,

Chairman, Estimates Committee.

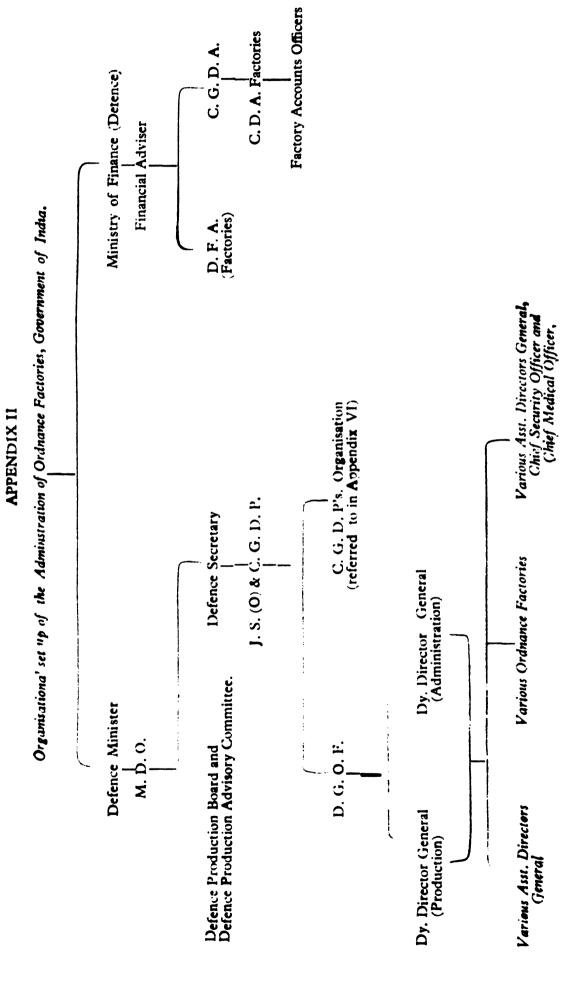
#### APPENDIX I

# The Composition and terms of reference of the Baldev Singh Committee

The Government of India, vide Ministry of Defence Resolution No. 108-A dated 23rd January, 1954, appointed a Committee for the re-organisation of Ordnance Factories. The composition of the Committee was as follows:—

- Sardar Baldev Singh, M.P.—Chairman.
- Shri P. C. Mukerjee, General Manager, Chittaranjan Locomotive Works—Member.
- Shri S. L. Kirloskar, Director, Mysore Kirloskars Ltd., Harihar—Member.
- Shri S. Vaish, Chartered Accountant of Messrs. S. Vaish & Co., Kanpur—Member.
- Shri S. J. Shahaney, Assistant Director General, Ordnance Factories—Secretary.
- 2. The terms of reference of the Committee were:—
  - (a) to examine the present organisation, procedure and methods of production in the Ordnance and Clothing Factories with reference to the probable demands of the Defence Services, with a view to suggesting proposals for improvement and ensuring maximum efficiency in production and also with a view to increasing the ability of the factories to produce a larger variety of specialised Defence stores for meeting the requirements of the Defence Services in the shortest possible time;
  - (b) to examine the system under which the Ordnance and Clothing Factories at present undertake work for civil departments and private trade, with a view to suggesting measures for the maximum utilisation for civil production of surplus capacity which may exist from time to time. The recommendations should include proposals regarding the methods of fixing prices, regarding the manufacture of articles for stock in anticipation of orders, regarding the method of marketing the production, the type of goods to be produced and other connected matters:
  - (c) to examine the distribution of the load between the various Ordnance Factories, including the question of transportation between Factories:

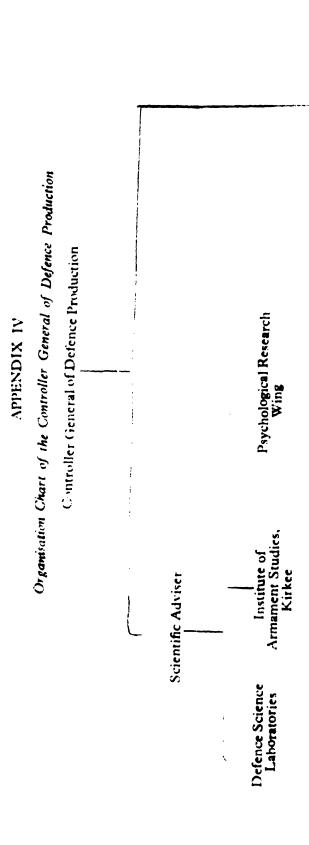
- (d) to examine measures for improving quality control so as to reduce the rate of rejections at final inspection. The examination should include the examination of inspection methods at present followed in the Factories and systems of quality control;
- (e) to examine the present system of cost accounting followed in the Ordnance Factories and in particular whether the control of the Cost Accounts Staff should be vested in the management. Recommendations should also be made with regard to the essential indices required in order to measure the efficiency of the working of the Factories and how the timely inspection of these indices should be secured from the Cost Accounts Section; and
- (f) to examine the methods of provisioning for materials and machines now followed, and to consider whether in the interest of efficiency any further delegation of powers is necessary to the Director General of Ordnance Factories or to the Superintendents of Factories, either in regard to administrative/financial or purchase matters. The above examination should also include an examination of the present stock-holdings of Ordnance and Clothing Factories.
- 3. Vide Ministry of Defence D.O.No. 1 2:1:54-D (Prod) dated 1st April, 1954, the first term of reference of the Committee was amended as follows:—
  - "To examine the present organisation, procedure and methods of production in the Ordnance and Clothing Factories with reference to the probable demands of the Defence Services, with a view to suggesting proposals for improvement and ensuring maximum efficiency in production and also with a view to increasing the ability of the Factories to produce a larger variety of specialised Defence stores for meeting the requirements of the Defence Services in the shortest possible time. The examination should be done bearing in mind.
    - (i) how a greater output can be achieved more economically with the present set-up; and
    - (ii) what long-term policy should be pursued to attain greater economy in production".
- 4. Subsequently, vide Ministry of Defence D.O.No. 12154-D (Prod) dated 16th March, 1954, the Committee was requested to particularly interest themselves in an examination of the tasks set to Machine Tool Prototype Factory, Ambernath, taking into account the needs of Defence Services and civil capacity and make recommendations with the object of utilising the capacity at M.P.F. to the maximum. The Government also desired that the Committee should examine whether it is possible and/or desirable to arrange for issues from Factories to the Army being on a costed basis in the same way as for issues to the Navy and Air Force.

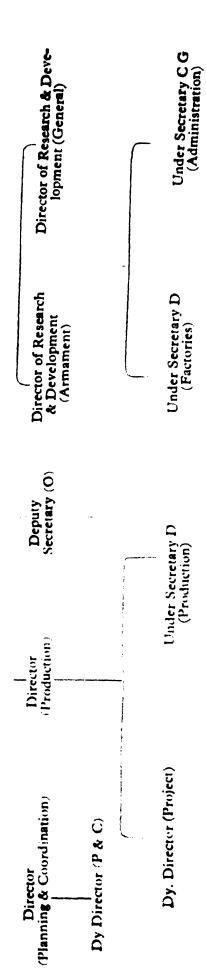


#### APPENDIX III

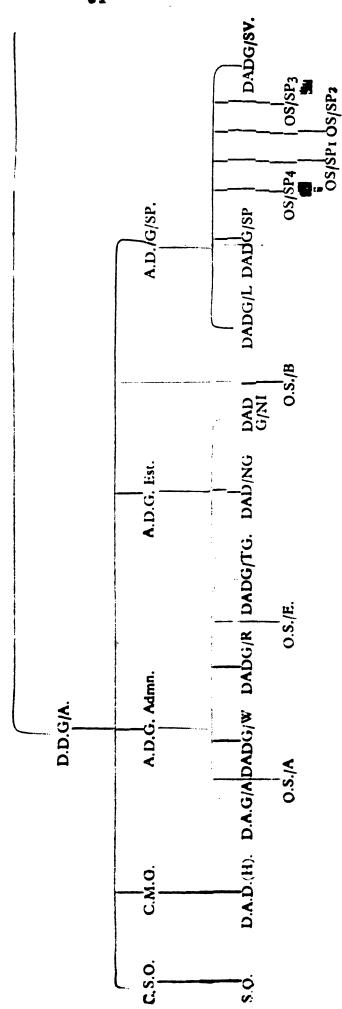
Important decisions on policy, production etc. which have so far been taken by the Defence Production Board.

- 1. Services Inspection staff and responsibilities should come under the control of the CGDP.
- 2. Maximum production efficiency in the Ordnance Factories should be achieved by replacement/modernisation/balancing of the existing plant and machinery.
- 3. Possibilities should be explored for selling the existing stocks of Service rifle to friendly foreign countries to allow for production being carried on for the preservation of skill of workers in the manufacture of this equipment.
- 4. The indenting Departments of the Government should be authorised to negotiate and settle prices direct with Ordnance Factories instead of having to go through the usual channel of the D.G.S. & D.
- 5. With the setting up of the C.G.D.P. Organisation a revised procedure for the initiation, control, progression and closure of Development Projects should be evolved. The revised procedure has been accepted by the Board.
- 6. In order to ensure that the D.G.O.F. obtained sufficient notice to plan ahead and be in a position to initiate the necessary action both in connection with the procurement of raw materials and production, it was decided that:—
  - (a) For demands of recurring nature indents by the Services should be placed on the D.G.O.F. for 3 years' requirements subject to adjustments from time to time.
  - (b) For the non-recurring demands, indents should be firm and placed as much ahead of date of supply as possible.
- 7. Enquiries should be made for the employment of certain foreign experts to assist production in Ordnance Factories.
- 8. A Committee with Defence Secretary as the Chairman and the C.G.D.P. and the Financial Adviser, Ministry of Finance (Defence) as members was appointed to make specific recommendations for a pay structure to be adopted for the gazetted cadre of the Ordnance Factories. This Committee was also instructed to consider such revision in pay as may be necessary in other allied technical services such as Technical Development Establishments etc.



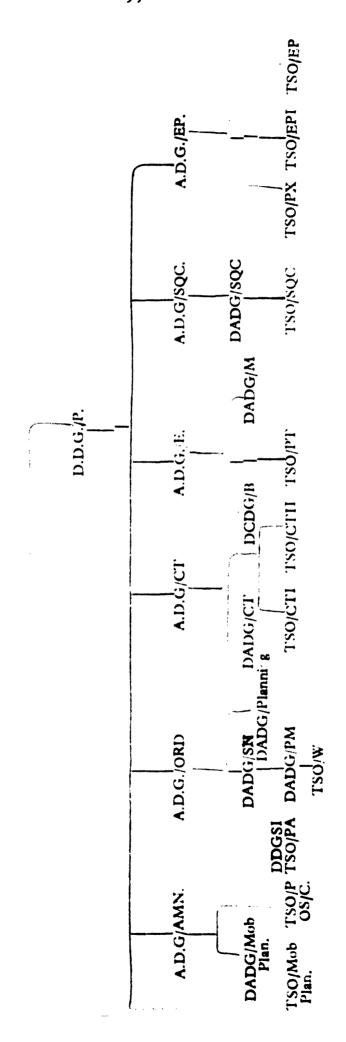


APPEN ORGANISATIONAL CHART OF THE OFFICE OF THE DIRECTOR GENERAL OF



DIRECTOR GENERAL OF ORDNANCE FACTORIES ORDNANCE FACTORIES

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#### APPENDIX VI

Recommendations/remarks of the estimates committee contained in paras. 19-23, 31-32 and 86-90 in their thirty-first report on the Ministry of Railways.

Paras 19-20.

The Committee consider that the procedure adopted for the control of expenditure on the Railways is unsatisfactory and requires improvement. In respect of revenue expenditure, the scrutiny of the money spent and control are at present limited to seeing that the budget allotments are not exceeded, that the expenditure has been properly sanctioned and that the canons of financial propriety are observed. Control is, therefore, exercised largely with a view to fulfilling the requirements of Appropriation Audit. The expenditure actually incurred is not correlated to performance and scrutiny and control are not exercised so as to see whether an increase or decrease in performance is reflected in the related items of expenditure. The Committee would observe that the services rendered by the Railways, namely transport, have a commercial value, and are measurable in quantitative terms. Moreover, they earn a revenue directly related to the quantum of the services. Managerial control would, therefore, reveal wastage and inefficiency and would also help in a flexible adjustment of expenditure almost simultaneously with changes in performance.

#### Paras 21-22.

The first requirement of an efficient system of managerial control is a satisfactory system for analysing and compiling the various statistics of performance. A correlation of the expenditure with performance is the next step necessary. A mere comparison of the total expenses under any particular head either of the various units for the same period or of the same unit for different periods serves no useful purpose since these expenses are affected by very many varying factors.

#### Para 23.

All expenditure should, as far as possible, be expressed in terms of cost per unit of service. No satisfactory unit of comparison can perhaps be evolved in most cases but that an attempt has already been made in this direction in the published Statistics Vol. II of the Annual Report on Railways wherein various service units have been adopted depending in each case on the nature of the expenditure. Para 31.

The Committee realise that a number of steps, as indicated below, will have to be taken before it is possible to institute a managerial control of expenditure under Ordinary Working Expenses:—

(i) The items of expenditure will have to be separately analysed as "controllable" and "non-controllable."

- (ii) It will be necessary to ascertain which statistics of performance should be correlated to the various items of expenditure.
- (iii) An exhaustive study of the various causes affecting each of these correlated performance units will have to be carried out and a procedure for making a quantitative assessment of their effect, as far as possible worked out.
- (iv) To facilitate expenditure control for many items of expenditure, units, such as major sheds, marshalling yards, stations etc. will have to be separately considered and individual attention paid to them.

#### Para 32.

The Committee wish to make it clear that they do not propose that the procedure of managerial control should be adopted in substitution of the existing system of Appropriation Control which will have to continue so long as the present form of Budget continues. They, therefore, suggest that pending reforms in the latter, the new procedure would be an addition necessary in the interests of economy of expenditure and efficiency of working.

#### Para 86.

The form in which the Railway Budget is presented to the Parliament at present suffers from the same defects as have been pointed out in the case of Departmental Control of Expenditure. The Railway Budget is, as in the case of the Civil Budget, a mere appropriation of funds for certain items of expenditure grouped together under Demands without reference to the quantum of service to be performed with the aid of those funds. In the case of the Capital Demands no doubt a list of the major items of expenditure is given in the Works, Machinery and Rolling Stock Programme. But Government have full powers of re-appropriation within the Capital Grants as in the case of the Revenue Grants, and the progress of works is not shown otherwise than in monetary terms.

#### Para 87.

Considered as the Budget of a Commercial Organisation, therefore, the main defect in the Railway Budget is that the funds provided in the Budget are not correlated to performance. The result is that when Parliament sanctions the Budget it is not aware of the quantum of service that will be rendered in the various aspects of Railway activity covered by the Demands, and there is no assurance that if the performance falls short of the anticipations at the time of the Budget, the excess funds will be surrendered and will not be wasted by inefficient working.

#### Para 88

A budget for a commercial organisation like the Railways should be a flexible one, with the estimates of expenditure closely linked with estimates of performance. Such a Budget would be more useful for a managerial control than the present form. To take an example the quantity of coal to be consumed in the Budget year, the rate at which it is expected to be purchased, the total volume of traffic to be moved expressed in Gross Ton Miles, and the target of consumption, viz., pounds per 100 G.T.M. should be stated along with Demand No. 7—Operating Fuel, together with such other relevant information as affect this Head.

#### Para 89

The Committee appreciate that a number of accounting changes are necessary as mentioned by them elsewhere before the form of the Railway Budget could be changed from a financial to a managerial one. Nevertheless they desire that the Ministry should under take without delay an examination of the matter and take suitable preliminary steps to that end.

#### Para 90.

The Committee, however, consider that there is no reason why such information regarding anticipations of performance should not find a place in the Explanatory Memoranda even now. They have examined the detailed procedure adopted in the Ministry for the compilation of the Budget and find that such information is in fact utilised to a large extent in framing the Budget. It is, therefore, merely a question of reproducing all such information, viz., performance targets, the anticipated variations in traffic in detail, the changes in the number of staff required in various categories etc., in the Explanatory Memorandum against the concerned items of expenditure.

#### APPENDIX VII

System of Cost Accounting in Ordnance Factories

The system of Cost Accounting in the Ordnance Factories works as follows:

Manufacture of an item of stores is undertaken on a Manufacturing Warrant against material and labour estimates, concurred in by the local Accounts Officer. The manufacturing warrants indicate the quantity to be manufactured and relevant estimates. A statement of daily booking of labour against each warrant is kept. Similarly, the material demanded against each warrant is related to receipted demand notes which bear the relevant warrant number. Two other elements are also added to the cost viz. (i) "variable overheads" covering power and machinery utilised and non-production labour this element varies in proportion with the actual workload—and (ii) the "fixed charges" which are pre-determined for each shop as a percentage of direct labour, on the basis of total establishment charges not covered by any of the other elements. On completion or closing the warrant, all the labour charges including dearness lowance borne by the warrant, is collected and included under the heading "Labour Charges". Similarly, cost of all materials used against the warrant is collected from the demand notes and after giving relief on account of any material or scrap returned to the stores on return notes, the expenditure is booked under "Material". The variable overheads for each quarter are based on the actual overheads of the preceding quarter and are levied as percentage of the direct labour. The fixed charges are of course pre-determined fixed percentages of the direct labour. The labour plus material plus the variable overheads is the minimum cost of production and when the fixed overheads are added, this gives the actual maximum cost of production.

# APPENDIX VIII

# Rates of Contribution to the Renewals Reserve Pund

								Per ce	nt.	
Buildings		•			٠			ΙÌ		
Plant and Machinery					•			61		
Electric Furnaces.			•			•		10		
Expensive Furnaces		•						30		
Sewing Machines in re	eserve	•		•			•	61		
Sewing Machines in u	. sc	•				·	•	20		
Mains and Meters and buildings, and on the								61		
Electric Installation and	fans in	Factory	quar	ers				1 1	•	
Steel furniture, fixtures	and fitti	ngs .				•		12 j		
Station Wagons, Motor	Cars, V	ans, Lo	rries e	und T	rucks			25		
Temporary Buildings (l	ouilt to w	rar-time	e spec	iticatio	on)	•		20	(straight	line)
Telephone and Telepho	one Mair	<b>15</b> .						61		
Bullock and Bullock co	arts used				th a		vancy	20	'straight	line)

### APPENDIX IX

Statement showing the summary of conclusions/recommendations of the Estimates Committee relating to the Ministry of Defence—Ordnance Factories

Sl. No.	Ref. to Para No. of the Report	Summary of conclusions/recommendations		
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1	15	Even one year and three months after the Defence Production Board was set up, which itself was done two years after the Baldev Singh Committee was set up to recommend re-organisation of the Ordnance Factories and one year after it submitted its recommendations, the Government have not thought it sufficiently urgent or even necessary to invest it with any powers inspite of the clear and emphatic recommendation of the Baldev Singh Committee in this respect.		
2	16	The Committee feel that at best the meetings of the Defence Production Board with such large and diverse membership would merely serve as inter-departmental and inter- service meetings to iron out differences.		
3	17	From the important decisions on policy, so far taken by the Board, it would appear that while some of them are, of a self-evident nature, most of the others are such as had already been recommended by the Baldev Singh Committee in December, 1954. The Committee feel that by its (Defence Production Board) very composition and absence of autonomous powers the Board could hardly serve the purpose for which the Board of Management was recommended by the Baldev Singh Committee.		
4	18	The Committee are of the firm view that all industries in the Public Sector, whether defence or civil should be run as industries are intended to be run anywhere in the world, i.e., not under the departmental system of management but under the Company System of management. The Committee feel that the question of bringing the organisation of Ordnance Factories under a Company System of management or under a corporation to be set up by an		

act of Parliament needs to be reviewed, and examined afresh by Government. In case it is decided not to adopt the Company System of management, the Committee recommend the adoption of the organisational set up of Railways in the Ordnance Factories and the setting up of a statutory and autonomous Board analogous to the Railway Board for the administration of Ordnance Factories in an efficient manner and on business principles. The Board should be directly responsible to the Defence Minister, who might retain certain reserve powers, so as to ensure effective control over it.

The Committee consider it necessary to associate a few prominent industrialists with the Defence Production Board.

The Committee recommend that irrespective of whether the Government agree to have the company management for the Ordnance Factories or a statutory and autonomous Defenc Production Board, the Board of Directors in one case and the Board in the other should be a compact body consisting of those who will be usefully and directly connected with the organisation and the working of the Ordnance Factories e.g., Controller General, Desence Production, Director Ordnance Fact, ries, Financial Adviser, etc. and two or three private industrialists. The Committee do not consider it necessary that the Board should also have on it representatives of the Defence Science Organisation (Research) and of the Design and Development Establishments of the Services, whose activities they) feel, should be coordinated by the Controller General, Defence Production through associate or advisory boards or committees.

The Committee do not consider the appointment of the Minister for Defence Organisation as the Chairman of the Defence Production Board as a satisfactory arrangement. They recommend that the Chairman of the

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Board should be drawn from the category of private industrialists. The Controller General, Defence Produc-

tion may, however, be the Vice-Chairman.

It is fundamental that the Defence Production Board should approach the tasks facing it, keeping in view the dictum that "before effective action is achieved, it must be decided what is to be done, how it is to be done, and who is going to see that it is done". It should be the Defence Production Board's aim to set right the present unsatisfactory position in regard to the country's defence Production and to augment it in all respects on an emergency basis. At the same time, it is also the Board's

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responsibility to make a realistic assessment of the defence potential of the country in relation to its requirements and to advise the Government to what extent the military strength of the country should be augmented by imports from foreign countries in various matters such as modern and uptodate equipment including aircraft, tanks and other weapons, arms and ammunition, so as to be prepared for all eventualities.

- The Committee regret to observe that the Defence Production Advisory Committee which was set up on 2-1-56 has so far held only one meeting to which also no private industrialist was invited.
- The Committee observe that while the recommendation 24 9 of the Baldev Singh Committee for the association of two private industrialists on the Board of Management of the Ordnance Factories was not accepted, no attempt has yet been made even to make a success of the alternative Defence Production Advisory Committee which was set up. The Committee consider this as very unbusinesslike and unsatisfactory for a Ministry which is charged with the responsibility of being always prepared with plans to defend the country in an emergency and to secure the full mobilisation of the country's resources at short notice for the purpose. The Committee feel that a revolutionary change in this attitude of complacency on the part of the Defence Ministry in the important matter of Defence Production is called for and hope that it would be possible to secure for this purpose, the whole-hearted cooperation of the Indian Industrialists (and also of the Production Units in the Public Sector) by working the Defence Production Advisory Committee more effectively.
- The Committee recommend that the existing arrangement under which the private industrialists are to be associated with the Defence Production Advisory Committee only as and when necessary, and not on a permanent and regular basis, should be altered so as to provide for their association on a regular basis.

They also suggest that, if necessary, the Advisory Committee may be assisted by a number of Sub-Committees each dealing with specific allied problems relating to Defence Production, with the industrialists and other civil production units, directly concerned with the subjects represented on it.

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11	26	The Committee recommend that the Chairman of the Defence Production Advisory Committee also should not be the Minister for Defence Organisation.
12	28	The Committee regret to observe that the Research Committee which was to assist the Controller General, Defence Production in regard to research has not yet started functioning. They hope that every effort will be made to make it a success.
13	29	The Committee suggest that to make the Defence Production and Supply Committee effective, industrialists should also be actively associated with it. Once this is done, they would suggest that the question of merging this Committee and the Defence Production Advisory Committee so as to avoid unnecessary duplication of Committees should also be considered.
14	31	Although the need and importance of the post of Controller General of Defence Production to co-ordinate the various activities relating to Defence Production was stressed by the Armed Forces Reorganisation Committee in 1952 and Ordnance Factories Reorganisation Committee in 1954, the Committee find that there was considerable delay in creating the post and appointing an officer to it.
15	32	The Committee feel that the tardy manner in which important recommendations of the Baldev Singh Committee, are being examined e.g., pr paring plans for mobilisation of resources in an emergency, the question of decentralisation of authority to secure business-like and efficient working of or nance Factories etc. is to a certain extent a measure of the complaints of delays in giving decisions on important matters made against the Defence Ministry. The Committee hope that it would be possible for the Controller General, Deffence Production to pursue vigorously his activities for ensuring coordination among different authorities and for keeping the defence production at the optimum level by cutting down red tape and paper work so as to keep the country fully prepared for all emergencies. It should also be his constant endeavour to streamline and rationalise the organisation for Defence Production in general and of the Ordnance Factories in particular.
16	36	In view of the importance and potentialities of civil production in Ordnance Factories the Committee feel that the question of the Organisation for Civil Trade Productucion, including the Sales Organisation needs to be

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examined to determine whether it would be necessary to have more officers and representatives at the H. Q. of the D.G.O.F., at certain regional Headquarters and in the Ordnance Factories.

- The Committee find it rather surprising that in a large industrial undertaking like the Ordnance Factories the Statistical Quality Control section should have been introduced only in 1955 and that too on an experimental basis. They feel that the Organisation for Quality Control at the Office of the D.G.O.F. should be examined to determine whether it would be necessary to have more officers and staff not only in the Head-quarters but also in the Ordnance Factories themselves.
  - Further, the feasibility of entrusting the function of interpreting vital statistics revealed by cost accounts data, so as to enable initiation of action to improve efficiency to the Statistical Quality Control Branch may also be examined.
- The Committee would suggest that the question of opening 'Organisation and Methods Division' in the offices of the Controller General of Defence Production and D.G. O.F. to constantly examine the question of staff strength, increase in paper work etc., should also be considered.
- The Committee had some doubts about the necessity of the posts of Chief Security Officer, the Chief Medical Officer etc., at the Headquarters of the D. G. O. F. They suggest that in the lights of the doubts expressed by them, this question should be examined afresh.
- The Committee feel that the selection of an officer to hold the important post of D. G. O. F. should be based on highest considerations of merit, drive and integrity and that he should be delegated sufficient powers, authority and discretion comparable to that of the Managing Director of a limited company in the public sector.
- The Committee understand that the D.G.O.F's powers were greatly enhanced in recent years. In view of the great responsibilities carried out by the D.G.O.F. and the industrial character of the Ordnance Factories, they recommend that the question of further delegation of powers to the D. G. O. F. consistent with his responsisibilities should be examined afresh at the highest level in the light of the present day conditions.

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- The Committee suggest that to avoid concentration of au-22 42 thority in a single individual and for the management of day to day affairs of the Ordnance Factories, it would be of great advantage if an Executive Board is set up with the D. G. O. F. as its Chairman, and consisting of the D.D.Gs one or two ADGs, DFA (Fys), and the CDA (Fys) as its members. In addition, while discussing problems of particular regions or Ordnance Factories, the Board should co-opt one or two Superintendents of the Local Factories to ensure prompt disposal of business. It should also maintain minutes of meetings, meet regularly at least once a week or fortnight and have definite rules of procedure.
- The Committee feel that instead of the casual inspection carried out at present there should be a system of regular inspection of Ordnance Factories by a Central Team headed by a senior officer for the purpose of carrying out a detailed examination of the various production activities and staff problems of Factories, of the extent of implementation of the various instructions of the D. G. O. F. etc. with particular reference to the detection by an onthe-spot study of uneconomical and wasteful methods of production, employment of excessive staff etc.
- The Committee recommend that for the sake of economy, close cooperation, and coordination between the D. G. O. F. on the one hand and the Services, Defence Ministry, CGDP, DGS&D etc., on the other, as well as reducing paper work and red tape, the feasibility of shifting the Office of D.G. O. F. from Calcutta to Delhi or to some other central place may be carefully considered at the highest level.
- The Committee consider that the powers of the Superintendents of Ordnance Factories should be reviewed so that they might have in all matters authority consistent with their responsibility. It should also be watched centrally by the D.G.O.F. that these powers are properly and sufficiently used. The powers of the Superintendent should be exercised in consultation with a Factory Board to be set up consisting of himself, works Managers, one or two AWMs, the Factory A/c Officer and where necessary the Labour Officer, to advise the Superintendent in the day to day working of the Factory, with rules similar to those recommended for the Executive-Board of the D.G.O.F.

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The Committee feel that the question of the location of Ordnance Factories with reference to security considerations as also of their rationalisation with a view to economic and efficient output needs to be constantly kept under review by the Defence Production Board and the Controller General of Defence Production.

The Committee feel that even if it is not possible to consti-49 27 tute the Ordnance Factories producing warlike stores into the company system of management, it would still be worthwhile and advantageous to consider the feasibility of handing over the Ordnance Factories producing non-war-like stores to the Production Ministry for being managed under the Company system so as to facilitate the enlargement of their scope for the production of a larger variety of stores. They also feel that it would be an additional advantage if the Defence Ministry which was probably overburdened could be relieved of the responsibility of managing industries which are not of a strictly security nature as it would enable that Ministry to concentrate on Defence matters which are of vital importance to the defence of the country.

The Committee therefore recommend that the question of transferring the control of the Ordnance Factories which produce non-war-like stores from the Ministry of Defence to the Ministry of Production should be examined seriously and expeditiously.

The Committee also feel that the feasibility of extending such agency arrangements, as have been set up for the production of Benzene Toulene, to the production of other items of non-lethal stores required by the Defence Services should be constantly kept under review.

The existing procedure whereby the Financial Adviser arranges to obtain the views of all concerned on important matters where there is likely to be a difference of opinion between the Finance and the Defence Ministries before the meeting of the Defence Production Board, makes it difficult for the Board to function effectively. The Committee would like to refer in this connection to the role of the Financial Commissioner. Railways who functions as Secretary to the Ministry of Railways in matters relating to Railway expenditure.

I 2 3 The Committee suggest that the arrangement obtaining on 29 51 the Railways under which the Financial Commissioner. Railways functions as a member of the autonomous Railway Board but with certain reserve powers and under which his representatives at lower levels work General Managers but also with reserve powers may be adopted with advantage in the case of Ministries dealing with industrial projects and commercial matters and in the Ministry of Finance (Defence) in so far as Defence production is concerned. The Committee find that the expenditure on the orga-57 :30 nisation of the Controller of Defence Accounts (Fys) has not shown any decrease in spite of the falling work load in the Ordnance Factories over the last few years and that no comparative study of the accounting staff in the various Ordnance Factories inter se as well as with that obtaining in other State Industrial Undertakings and Factories in the Private Sector had over been undertaken. They feel that such a comparison would be useful in determining the standard strength of the staff in this respect as also their duties. The Committee suggest, therefore, that such a comparative study may be undertaken and in the light of it a fresh review of the accounting staff in the Ordnance Factories may be conducted. .31 58 The Committee feel that Finance and Accounts are complementary to each other especially in manufacturing concerns and that it would be an advantage if they are performed by one officer. In this connection they would refer to the arrangement prevailing on the Railways and would suggest that a post analogous to that of Financial Adviser and Chief Accounts Officer, (Railways) may be created in place of the existing two posts of Deputy Financial Adviser (Factories) and the Controller of Defence Accounts (Factories). 32 59 Under the theory of separation of audit from accounts the accounts organisation should be placed under the administrative authorities. While the accounts of Defence expenditure were separated from audit about 30 years back, they were placed under the Ministry of Finance (Defence) and not under the Administrative Ministry. The Committee hope that it would be possible to rectify this state of affairs at an early date.

The Committee feel that the association of Accounts

Officers with the Management through membership

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of Factory/Executive Board at the Factory and the D.G.O.F's level repsectively would go a long way in inducing among them a feeling that they are equally responsible for management and execution of important defence work and also in bringing about harmonious relation between the executive and the accounts officers.

Even though a number of relaxations had recently been 61-62 34 allowed in the matter of exercising of powers by the Director General of Ordnance Factories and Superwithout prior concurrence of the assointendents ciated Finance, the Committee formed the impression that three was a general feeling of dissatisfaction among the executive authorities over the general system of obtaining prior financial concurrence, which was considered by them to be very irksome and responsible for most of the delays in the smooth functioning of the Factories. The Committee feel that, with the adoption of the Railway pattern of finance and accounting administration in the organisation of Ordnance Factories, most of the difficulties felt and delays caused at present would be resolved to a considerable extent.

They do not, however, consider it either sound or desirable to do away altogether with financial control and scrutiny over the proposals of the executive and administrative authorities. They consider that certain reserve powers for finance representatives as in commercial concerns in the public sector are necessary and desirable in the present circumstances and have therefore recommended earlier the provision of such powers in a modified manner, in the revised set up of the organisation of the Ordnance Factories.

61 The present form of budget estimates in respect of Ordrance Factories does not show at one place the anticipated total capital and revenue expenditure in all Ordnance Factories on the one hand and the estimated receipts, including the value of issues to various parties (e.g. Army, Navy, Air Force, etc.) on the other. The Committee consider such a presentation of budget figures as very desirable so as to facilitate proper appreciation of the financial working of the Ordnance Factories Organisation. The Committee, therefore, recommend that the estimates on account of expenditure on Ordnance Factories be asked for as a separate demand and that a statement similar to that prepared in U. K. may also be submitted to the House along with the budget estimates.

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- The Committee feel that the details, under which the estimates for expenditure on Ordnance Factories are at present asked for, do not indicate sufficiently the break up of the expenditure under the various heads. They, therefore, suggest that the following improvements may be made in the presentation of the estimates of Ordnance Factories:
  - (1) Pay of Staff should be shown separately for supervisory staff, non-industrial staff and industrial staff.
  - (2) Expenditure on allowances may be shown separately.
  - (3) (i) Expenditure on the various Training Schemes in the Ordnance Factories;
    - (ii) Expenditure on the inspection staff;
    - (iii) Expenditure on repairs and maintenance of plant and Machinery; and
    - (iv) Expenditure on miscellaneous operating expenses as fuel and oil, etc. may also be shown separately.
  - (4) Expenditure on welfare activities may be shown separately.

On the receipt side, the value of work done for various departments may also be shown.

66 Since the Ordnance Factories are industrial undertakings producing defence stores, the Committee consider that there should be a system by which actual expenditure could be readily compared and correlated to outturn and that the form of the Budget should also exhibit this correlation to the extent possible. They would, therefore, recommend that in interest of efficiency and economic functioning of not only the Ordnance Factories but all other undertakings in the Public Sector, the system of correlating actual expenditure with performance and of managerial control should be introduced. Committee feel that with an improved and modern cost accounts system i should be possible to enforce such a control. In this connection, the Committee would also refer to their recommendations contained in paras 19-23, 31-32, 86-90 of their 31st Report on Finance and Accounts in the Ministry of Railways.

> In regard to the proposed capital expenditure in the Ord nance Factories during the period of the second Fiv

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Year Plan, the Committee invite attention to the depressing fact that in the past, defence authorities have been consistently able to spend far less than what they planned to spend. They hope that every effort will be made by the Defence Ministry to fulfil their plan fully by taking sufficient and timely action for the various preliminaries necessary for the purpose so that not only will the production capacity of Ordnance Factories have improved but funds required by other authorities will also not be kept away from them. They would, therefore, suggest that firm annual programme and targets should be carefully laid down in advance and systematic reviews should be conducted at frequent intervals so as to avoid any shortfall in the targets.

The Committee regret to observe that although the 39 72 defective preparation of budget estimates and overestimation of the spending capacity had been the subject of adverse comments in successive Audit Reports Public Accounts Committee Reports, there and marked has any improvement not been The Committee the position. would like to endorse the remarks of the Public Accounts Committee contained in paras 9 and 10 of their 19th Report that effective action should be taken by the Ministry of Finance (Defence) to evolve a better mechanism budgetary control. The Committee also recommend that timely action should be taken in regard to placing of orders for plant and machinery and for surrender of funds not required.

Further, the Committee also feel that the present machinery is not quite competent to work efficiently in the production of military requirements and that an overhaul of the present system of management in favour of Company or Board system is called for.

- The ratio of pay of staff to the total expenditure as well as to the total outturn has been showing an upward trend in the last few years. The Committee feel that the existence of surplus labour in the Factories alone does tot fully explain the rise in expenditure on the pay of staff.
- The expenditure on minor maintenance as well as its ratio to the value of capital assets has been steadily rising in the last few years. The Committee feel that

the capital assets are probably becoming increasingly obsolete and that this is a matter which should be viewed with concern and efforts made to improve the position.

- The expenditure on Charges in England and Capital Expenditure on Works and Plant and Machinery have also registered a fall in the last few years. The Committee feel that the fact the plant and machinery etc., most of which has to be imported, in the Ordnance Factories required considerable modernisation and improvement would indicate the necessity of drawing up plans and for taking timely action to implement them so as to improve the capacity and the efficiency of the work in the Ordnance Factories. The Committee hope that the comments made above will be fully taken into account while implementing the Projects proposed under the 2nd Five Year Plan.
- The extent of work done for the Navy. Air Force etc., is increasing in recent years, though it meets only a small portion of their total requirements. The Committee are glad to observe that the civil production in the Ordnance Factories has been steadily rising.
- The Committee do not consider it worth while to compare the total outturn with the total expenditure since the former actually represents only the cost of production. A worth-while comparison could only be in terms of physical quantities so as to enable a comparison to be made of the cost of production per unit. It is for these reasons that they have suggested earlier the system of managerial control.
- The Committee are not happy with the existing arrangement under which cost accounting and the staff therefor are not the responsibility of the D.G.O.F. and the Superintendents of Ordnance Factories. It is necessary that there should be perfect co-ordination between the factory management and the cost accounting organisation in regard to the various types of cost data required by them within reasonable time of the completion of the particular job.

The Committee have already recommended that the organisation of the Controller of Defence Accounts (Factories) as in any manufacturing industry should work under the administrative control of the D.G.O.F

subject, of course, to certain reserve powers. They feel that, once this is done, the difficulties experienced at present in securing greater co-ordination between the cost accounts staff and the factory staff might not continue to the same extent. At the same time, they consider that the D.G.O.F. and the Superintendents of Factories should each have a cell working under him to interpret to him the various statistics furnished by the cost accounts branch, so as to enable him to initiate necessary action for the purpose of controlling costs and of improving the efficiency.

The Committee can hardly consider the existing system of cost accounting, which is only a historical collection of facts long after the event, satisfactory, particularly in a monopolistic industry, the economy and efficiency of which are of vital concern to the country. The Committee regret to observe that, inspite of the criticism of the Baldev Singh Committee, made over 2 years back, about the cost accounting system in the Ordnance Factories, which was characterised as out-moded and unsatisfactory, the system continues unchanged as

before.

- The Committee fail to understand why under the present cost accounting system followed in the Ordnance Factories, the cost data and reports cannot be made available to the executive authorities at the end of a reasonable interval after a particular process of manufacture. They do not have in view instantaneous preparation of cost data by electronic devices, but they understand that the D.G.O.F. would be satisfied if it could be made available after a week or even a fortnight instead of as at present. The Committee recommend that immediate steps should be initiated by the Financial Adviser to secure this reform.
- The Committee also recommend as a further step in the process of establishing complete control over all factors, which are subject to the influence of management, the introduction of the system of standard costing under which standard costs or predetermined costs are prepared in advance of operations according to a carefully planned method of making a product or rendering a sevice and serve the purpose of cost analysis and cost control.
- The Committee recommend that the entire cost accounting system at present followed in the Ordnance Factories.

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may be had comprehensively examined by the experts e.g., the Cost Accounts Branch of the Ministry of Finance and the modern cost accounting system, as obtaining in advanced countries, may be adopted and introduced without any further delay. They suggest for the purpose that the system of costing obtaining in the Royal Ordnance Factories in U.K. may also be examined with a view to its introduction in India in the Ordnance Factories as well as in all other industrial undertakings if found suitable.

- The Committee would suggest that for the efficient working of the cost department, suitable and selected personnel may be had specially trained for the purpose both in India and abroad.
- The Committee feel that even if a mere proforma account of the Renewal and Reserve & Fund is kept, the annual depreciation charged off the Production account and credited to the proforma R & R Account, should be determined on some realistic basis. They, therefore, recommend that the rates of contribution to the R & R Fund may be examined afresh with reference to the present day life of plant and machinery and suitably revised so that the correct charges on this account may be reflected in the production accounts of factories.
- The figures of expenditure from the R & R Fund in the past would indicate that sufficient care and attention had not been bestowed on the replacement and modernisation of plant and machinery in the Ordnance Factories which has become outmoded in most cases.
- The Committee feel that the question of resuscitation of the R & R Fund needs to be examined again at the highest level, in the light of the realistic assessment of the condition of Plant and Machinery in Ordnance Factories and the present circumstances and a decision taken on it without any delay. If the Government still decide that there is no need for a R & R Fund. the Committee suggest that the question of placing more funds at the disposal of the D.G.O.F. for replacement of Plant and Machinery may be examined.
- The Committee observed that the first Financial Review for the two years viz. 1952-53 and 1953-54 was prepared in July, 1955 and the second for 1954-55, in May, 1956

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i.e. over a year after the close of the year to which it pertained. They hope that it would be possible to publish the Financial Reviews on the working of the Ordnance Factories more expeditiously. They further hope that it would also be possible in future for the D.G.O.F. to take more prompt and energetic action on the comments made by the Deputy Financial Adviser (Factories) in his reviews.

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The Committee feel that at present losses in the Ordnance Factories are on the high side and that action should be initiated to reduce them to the minimum.