REPORT OF THE COMPTROLLER AND AUDITOR GENERAL OF INDIA

FOR THE YEAR ENDED 31 MARCH 1995
NO 8 OF 1996

Presented in Lok Sabha on 0 8 MAR 1996
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UNION GOVERNMENT - DEFENCE SERVICES
(ARMY AND ORDNANCE FACTORIES)

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TABLE OF CONTENTS

CHAPTER III - ARMY

CHAPTER IV - ORDNANCE FACTORY ORGANISATION

Production

Planning

Manufacturing

Provisioning of stores and machinery

Stores

CHAPTER VI - RESEARCH AND DEVELOPMENT ORGANISATION

CHAPTER VII - BORDER ROADS ORGANISATION

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PREFATORY REMARKS

This Report for the year ended 31 March 1995 has been prepared for submission to the President under Article 151 of the Constitution. It relates mainly to matters arising from the Appropriation Accounts of the Defence Services for 1994-95 together with other points arising from the test audit of the financial transactions of Ministry of Defence, Army and Ordnance Factories including Defence Research and Development Organisations.

2. The Report includes 73 Paragraphs and four Reviews on (i) **Recruitment and training of Army Officers**, (ii) **Hiring of vehicles**, (iii) **Production of artillery training ammunition** and (iv) **Computerisation in Ordnance Factory Organisation.**

3. The cases mentioned in this Report are among those which came to notice in the course of audit during the year 1994-95 as well as those which came to notice in earlier years but could not be included in the previous Reports.

OVERVIEW

The total budget for the Defence Services was Rs 24659.16 cores for the year 1994-95 obtained under five Demands for Grants. Except in the grant in respect of Navy, in all other section in the five Grants there were savings and the total actual expenditure amounted to Rs 24274.55 crores. Ministry of Defence obtained several Supplementary Grants totalling Rs 678.23 crores. Supplementary Grants of Rs 35.84 crores and Rs102.11 crores obtained in respect of Grant No. 21 - Ordnance Factories and No.22 - capital outlay on Defence Services respectively were not required since the overall savings under both grants were more than the amount obtained through Supplementaries. In other two cases, the Supplementary Grants were not fully utilised. Processing such unnecessary Supplementary Grants is suggestive of defective budgetary control.

(Chapter I)

Despite increasing deficiency in officers cadre in Army from 22 per cent in 1990 to 28 per cent in 1994, no plan was formulated to make good the shortage. The actual induction was not sufficient even to cover the average annual wastage. After incurring an average expenditure of around Rs 1.36 lakhs on each student during their schooling of seven years in Sainik Schools and Military Schools, only 3.66 to 6.81 per cent of students joined National Defence Academy (NDA).

Shortfall in utilisation of designed training slots was 32 and 78 per cent in Officers Training Academy (OTA) and in Army Cadet College (ACC) respectively. Although both NDA and ACC undertake graduation courses, unutilised slots in NDA was adequate to cover the total number of trainees in ACC. Training of ACC cadets in NDA would have improved capacity utilisation of NDA with consequent savings.

Savings of Rs 3.12 crores per annum were anticipated on merger of OTA with Indian Military Academy (IMA). Even after an expenditure of Rs 1.75 crores on special repairs and renovations of buildings at IMA for this purpose, OTA had, however, not been merged with IMA so far.

Repeat graduation of graduate Service personnel selected for training in ACC resulted in avoidable expenditure of Rs 1.49 crores besides delay in their induction.

(Paragraph 21)

Stock of an imported ammunition valuing Rs 30.76 crores held in repairable condition since 1982 could not be repaired before expiry of shelf life of its propellant and primer for want of components.

(Paragraph 12)

Inordinate delay of over eight to ten years in procurement of tank simulators had deprived the Army a cost effective way of imparting training to its tank crew. Anticipated savings of Rs 123.52 crores per annum could also not be achieved for want of requisite simulators.

(Paragraph 11)

A unified simulator imported in July 1990 at a cost of Rs 82 lakhs was not utilised for five years. It is stated to be under issue to a new regiment sanctioned in May 1995. Another imported unified simulator costing Rs 82 lakhs received in a defective condition in February 1989 could be commissioned only from November 1993 after carrying out repairs.

(Paragraph 15)

After incurring an expenditure of Rs 119.17 lakhs on site clearance etc., project for construction of accommodation for a mountain division was foreclosed on the ground that there was no possibility of further troop movement to that area.

(Paragraph 63)

Test check of pay accounts maintained by Pay and Accounts Offices revealed overpayments and short recoveries of Rs 52.12 lakhs out of which Rs 26.34 lakhs were recovered at the instance of Audit.

(Paragraph 17)

Works valuing Rs 53.47 lakhs were cancelled on being pointed out by Audit as being unauthorised/in excess of authorisation.

(Paragraph 67)

Defence Research and Development Establishment produced prototypes of a multirole half track vehicle for the Army but failed to satisfy their requirements. Efforts to improve the vehicle continued but even after the Army showed its preference for other cost effective alternatives, an expenditure of Rs 71.94 lakhs was incurred on this project before its termination.

(Paragraph 76)

3500 tubes for kraz vehicles imported at a cost of Rs 65.07 lakhs in May 1994 was found to be defective on inspection but taking advantage of lack of proper safeguards in the contract, Director General of Quality Assurance's demand for replacement was rejected by the foreign supplier. As a result, the vehicles not only remained immobile but an expenditure of Rs 65.07 lakhs became infructuous.

(Paragraph 16)

Twelve Military Engineer Services Divisions paid Rupees One crore to State Electricity Boards as excess/penalty charges for failure to achieve the power factor as also for consumption of less than 75 per cent of the contracted demand.

(Paragraph 64)

375 radio sets imported at a cost of Rs 41.39 crores without maintenance spares, were found to be highly defect prone. Printed circuit boards/modules valuing Rs 40 lakhs were badly burnt during use as a result of which 32 out of 375 sets, costing Rs 3.46 crores, were rendered unserviceable, for want of necessary spares.

(Paragraph 13)

For failure of Ministry of Defence to accept offer of a foreign firm for an ammunition within the validity period, an additional expenditure of Rs 2.10 crores was incurred by procuring the same ammunition from same firm within four months after the lapse of the initial offer.

(Paragraph 14)

Failure of a contractor to complete construction of other than married accommodation at Patiala even within the extended time led to cancellation of the contract and the work was completed at the risk and cost of the contractor. An amount of Rs 30.09 lakhs was found to be recoverable from the firm for substandard work in addition to Rs 99.68 lakhs for the risk and cost construction.

(Paragraph 73)

In spite of Government instructions to the contrary, Air Headquarters accorded sanction for opening of an Air Force School at a station where adequate educational facilities existed. An expenditure of Rs 85.37 lakhs had already been incurred which requires to be regularised by Government.

(Paragraph 66)

Avoidable hiring of vehicles, unauthorised use of transport, inability to recover loss of goods in transit in hired vehicles, incorrect application of hire charges etc. were noticed in a few units/formations. Total amount involved in the above irregularities was Rs 1.82 crores.

(Paragraph 22)

Loss of stores valued at Rs 82.06 lakhs was detected in a Military Engineer Services Division. On enquiry it was found to have been caused by fraud, neglect, improper accounting and inadequate security.

(Paragraph 65)

Lack of co-ordination between Department of Defence Production and Supplies, Army Headquarters and Central Ordnance Depot had resulted in over-provisioning of mounting tripods and blocking of funds to the extent of Rs 51.70 lakhs.

(Paragraph 25)

High strength cement valuing Rs 37.07 lakhs was procured by two Garrison Engineers between April and December 1993, but the material failed to conform to specifications for special purpose use. Timely action could, however, have been taken to use the material as ordinary portland cement. But failure to do so has rendered the entire stock unusable.

(Paragraph 70)

Tripura Small Industries Corporation was paid an advance of Rs 40 lakhs in November 1992 by Border Roads Organisation for supply of bricks for construction of Indo-Bangladesh Border roads, but the Corporation supplied bricks worth Rs 4.87 lakhs only resulting not only in blockage of Rs 35.13 lakhs but also in causing undue delay in implementation of an important central scheme.

(Paragraph 77)

Recovery of unauthorised expenditure of Rs 39.46 lakhs incurred on maintenance of buildings and payment of service charges of an Army Public School was yet to be effected from school authorities.

(Paragraph 69)

Perpetration of irregular accounting and tampering of records fraudulently in the stores accounts of a Garrison Engineer resulted in a loss of Rs 33.18 lakhs.

(Paragraph 72)

Against an authorisation of three quarters at a station, 12 single officer's quarters were already available but construction of six more at a cost of Rs 18.62 lakhs was sanctioned. As the work was yet to commence, there was scope for reviewing the sanction to avoid the expenditure.

(Paragraph 74)

Inordinate delay in execution of a project for married accommodation of sailors at Cochin resulted in an avoidable payment of Rs 44.88 lakhs as compensation in lieu of quarters.

(Paragraph 68)

ORDNANCE FACTORY ORGANISATION

38 Ordnance Factories manufactured and supplied arms, ammunition, equipment components etc. valued at Rs 1869 crores to Defence Forces during 1994-95. The value of their production aggregated to Rs 2808 crores in 1994-95, marginally down from Rs2816 crores during 1993-94. Production of 83 items out of 250 was behind schedule fixed by Ordnance Factory Board (OFB). OFB did not fix target for production of 46 items. While machine hour utilisation was more or less uniform around 75-80 per cent, there was steady decline in utilisation of standard man hours, which dropped from 99 per cent in 1990-91 to 67 per cent in 1994-95. Average stock holding in six factories ranged between 13 to 28 months' requirement against the norm of 6 to 12 months. Sudden short closure of indents by the Services and change in design at advanced stages of production by the users contributed to increase in stock of raw material, work in progress and finished goods.

(Paragraph 30)

An anticipated annual savings of Rs 3 to 5 crores was envisaged in 1983 from specialised training equipment and ammunition in place of service ammunition. Government approved indigenous production of artillery training ammunition at Ammunition Factory, Kirkee in 1988 with a capacity of 5 lakh rounds per annum at an estimated cost of Rs 920 lakhs. The progress of the project has been extremely tardy. Even after overshooting the scheduled date of completion and incurring an expenditure of Rs 471.54 lakhs upto October 1995, the project is yet to be fully operational. Meanwhile, Army has reduced its annual requirement of training ammunition from 4.8/7.75 lakhs to only 1.5 lakh rounds on account of phasing out of one of the guns.

(Paragraph 31)

As a continuation of ongoing process of computerisation, Ministry of Defence sanctioned a project for installing one mainframe computer at OFB and one mini computer in 36 of its factories and two in one factory. Hardware and software costing Rs 7.55 cores were installed at OFB and in ordnance factories by March 1991. In addition, large number of personal computers were also purchased. However, 38 mini computers and the mainframe computer were yet to be installed through Remote Area Business Message system as per design. Out of the total package of 17 interconnected modules of software procured at a cost of Rs 1.69 crores, 15 have not been fully operational more than three and a half years after the period of implementation support by CMC was over in March 1992. As a result, realisation of intended benefit from reduction of inventory, work-in-progress and the cost of production remains a far cry.

(Paragraph 32)

Failure of Ordnance Factory, Ambajhari (OFAj) to carry out crucial bead operation in producing the first 25 lots of a primer coupled with negligence of Ordnance Factory, Chanda (OFCh) to fill 45,421 primers without beading operation in spite of clear stipulation in the technical drawings supplied by the foreign collaborators, resulted in production of 39,485 rounds of defective tank ammunition at a cost of Rs 31.56 crores. OFCh issued the finished rounds to Army without waiting for proof results. Since, the defective primer have not been replaced due to non availability of storage space in OFCh, as of now the entire expenditure of Rs 1.11 crores in filling 45,421 defective primers has become a waste while the usefulness of the entire expenditure of Rs 31.56 crores incurred in producing the tank ammunition is highly uncertain.

(Paragraph 39)

2000 bombs valued at Rs 1.06 crores produced in Ordnance Factory, Dehu Road during 1993-95 were rejected on account of unsatisfactory performance in proof test.

(Paragraph 41)

Failure of Armed forces to provide adequate lead time before sudden withdrawal/ reduction in requirement of bomb manufactured in Ordnance Factories, Kanpur and Dehu Road, stampings forgings in Ordnance Factory, Katni and grenade in Ordnance Factory, Chanda left OFB holding unutilised raw materials, components and equipment valued at Rs 19.46 crores.

(Paragraph 33, 46 and 50)

Stock verification of pig iron in Ordnance Factory, Kanpur revealed shortage of 2645 tonne valued at Rs 59.26 lakhs. This was unauthorisedly charged off from the bin card in March 1994. In another case, shortage of 14,991 components of an ammunition valued at around Rs 29.88 lakhs detected during stock taking in 1990 is yet to be fully investigated.

(Paragraph 55 and 57)

Ordnance Factory Board imported two gear hobbing machines for an armoured vehicle project at Machine Tool Prototype Factory in Ambernath at a cost of Rs 145 lakhs in August 1991. OFB took nearly four years to obtain replacement of defective control system of one of the machines and commissioned it only in March 1995. Meanwhile the installed capacity of the project was reduced from 500 to 200 sets per annum, rendering an investment of Rs 78.74 lakhs redundant.

(Paragraph 53)

Acceptance of defective cone and funnel assemblies valuing Rs 71.98 lakhs and its use in manufacture of 2235 sets of ammunition at Ordnance Factory, Kanpur resulted in wastage besides accumulation of unutilised raw materials and semi-processed components valued at Rs 5.36 crores.

(Paragraph 47)

Ordnance Factory, Katni manufactured 33,500 brass blanks for production of cartridge cases without specific order from OFB. Out of this, 11,500 brass blanks valued at Rs 39 lakhs and 2000 semis valuing over Rs 8 lakhs could not be utilised since 1990 for lack of demand.

(Paragraph 42)

Failure of Ordnance Factory, Medak to detect the defects in inspection of completely knocked down imported engines within the warranty period resulted in an avoidable expenditure of Rs 49.93 lakhs on their repair/rectification.

(Paragraph 48)

Manufacturing flaw resulted in production of unserviceable grenades valuing over Rs 61 lakhs in Ordnance Factory, Chanda.

(Paragraph 43)

Ordnance Factory, Chanda filled in 1005 empties of an ammunition supplied by Ordnance Factory, Ambajhari without proof testing. The entire lot was subsequently rejected. Bulk manufacture of empties by Ordnance Factory, Ambajhari and their filling by Ordnance Factory, Chanda without proof testing resulted in rejection of the entire lot valued at over Rs 58 lakhs.

(Paragraph 44)

While on one hand Metal and Steel Factory, Ishapur (MSF) raised supply order for supply of 231 tonne of imported steel sheets for manufacture of cartridge cases, it commenced manufacturing the cartridges cases from steel sheets obtained indigenously, before the receipt of imported material. 45 to 81 per cent of the cartridge cases manufactured from indigenous steel sheets valued at around Rs 118 lakhs were rejected and the reasons were traced to inherent metallurgical defects. As against this, the rejection rate was 25 to 28 per cent in respect of those manufactured with imported steel sheets.

(Paragraph 36)

Bulk production of 2.94 lakh detonators for a grenade by Ammunition Factory Kirkee without issue of development extract led to a rejection of 28 to 40 per cent against permissible limit of 15 per cent. Higher than normal rejection of detonators resulted in an avoidable loss of Rs 42 lakhs.

(Paragraph 38)

Hasty action by Ordnance Factory, Kanpur to procure finished and semi finished components for production of an ammunition even before trial proof of its design and development resulted in holding unutilised components valued at Rs 6.44 crores for the last 3-5 years.

(Paragraph 34)

Production of 10,005 components of ammunition by Ordnance Factory, Kanpur inspite of directive of OFB cancelling all proof demands older than one financial year resulted in unnecessary expenditure of Rs 40 lakhs.

(Paragraph 35)

In response to an audit observation about delay in procurement of Flexible Manufacturing System (FMS) in 1992, Ministry of Defence had stated that the system would be installed by April 1994 in Engine Factory, Avadi for substituting the imported components with indigenously machined components. The FMS received between January and September 1994, is yet to be made operational. An imported special purpose machine (SPM) which was dependent on machined components from FMS had to use imported machined components valued at Rs 7.70 crores.

(Paragraph 52)

Excessive deficiencies noticed in proof testing of an ammunition produced by Ammunition Factory, Kirkee necessitated issue of 9.32 lakh rounds over the stipulated specification for proof testing resulting in extra expenditure of Rs 69.44 lakhs.

(Paragraph 56)

Chapter I

Accounts of the Defence Services

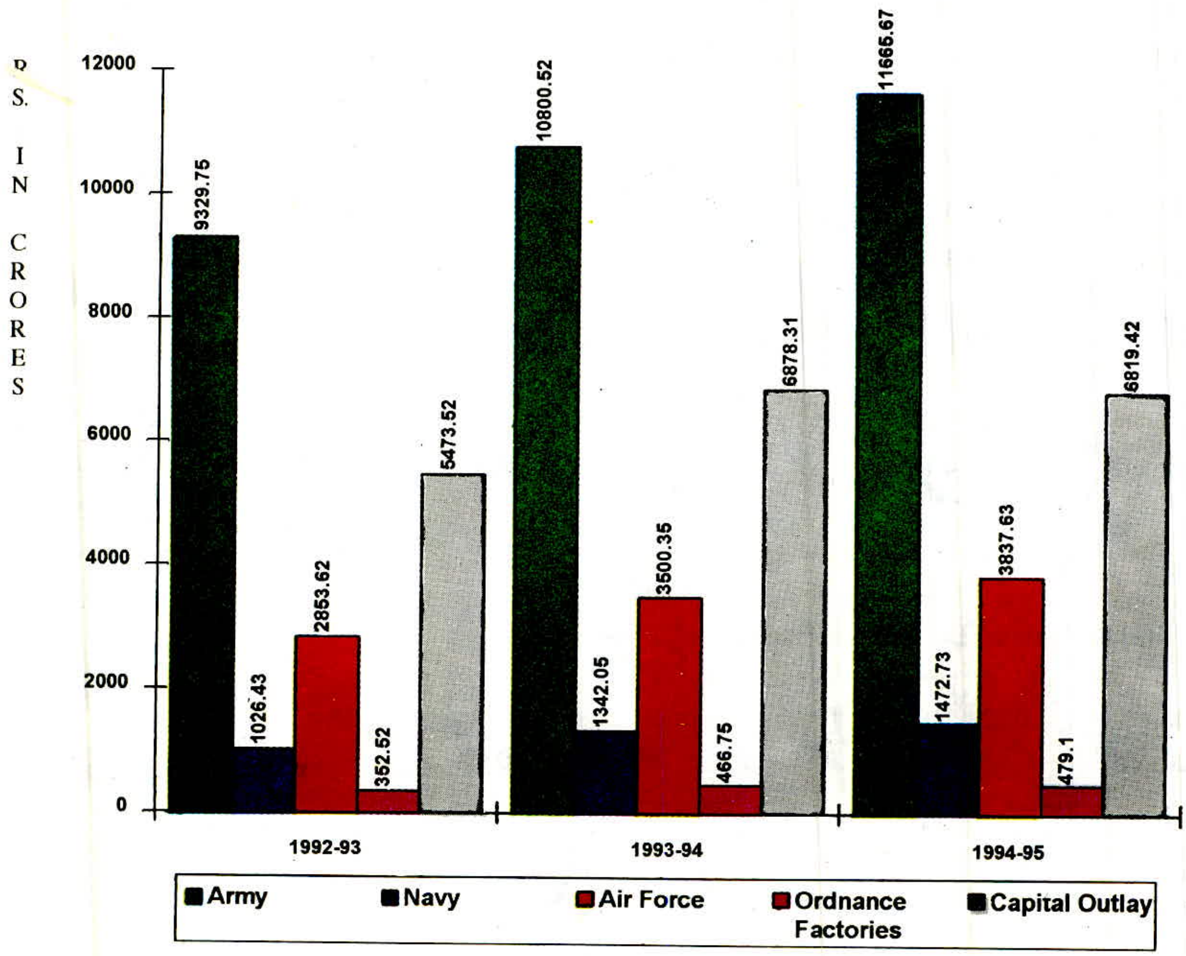
1. Defence Expenditure

The expenditure on major components of defence activities during 1992-95 was as under :-

(Rs in crores)

	1992-93	1993-94	1994-95
Army	9329.75	10800.52	11665.67
Navy	1026.43	1342.05	1472.73
Air Force	2853.62	3500.35	3837.63
Ordnance Factories	352.52	466.75	479.10
Capital Outlay on Defence Services	5473.52	6878.31	6819.42
	19035.84	22987.98	24274.55

The expenditure is represented in the bar chart below : -



2. Budget and Actuals

Summarised position of expenditure during 1994-95 against Grants/appropriations was as under :-

(Rs in crores)

	Original Grant/appropriation	Supplementary Grant	Total	Actual expenditure	Total saving(-) Excess(+)
Revenue					
Army					
Voted	11492.59	256.98	11749.57	11662.07	(-)87.50
Charged	6.79	-	6.79	3.60	(-) 3.19
Navy					
Voted	1387.92	77.87	1465.79	1472.09	(+) 6.30
Charged	2.51	-	2.51	0.63	(-) 1.88
Air Force					
Voted	3695.99	205.15	3901.14	3837.16	(-)63.98
Charged	0.34	0.28	0.62	0.47	(-) 0.15
Ordnance Factories					
Voted	562.26	35.84	598.10	479.09	(-)119.01
Charged	1.40	-	1.40	0.01	(-)1.39
Capital					
Capital Outlay on Defence Services					
Voted	6824.10	102.11	6926.21	6817.35	(-)108.87
Charged	7.03	-	7.03	2.08	(-) 4.95

The savings in Grant No.21 - Ordnance Factories were mainly due to non-materialisation of supplies as well as shortfall in issues by it to other Services during the year while in Grant No.22 Capital Outlay on Defence Services savings were under the segments of land, aircraft and aero-engine, heavy and medium vehicles, construction works of Air Force and Ordnance Factories.

The overall saving in all five Grants of Defence Services under voted' section aggregated to Rs 373.06 crores, which consisted of savings in the Grants for Army, Air Force, Ordnance Factories and Capital Outlay on Defence Services and excess expenditure of Rs 6.30 crores under Grant No.19 - Navy. There was an overall saving of Rs 11.56 crores under `charged' section against overall provision of Rs 18.35 crores for all Grants representing 63 per cent of the provision. The excess under Grant No.19 - Navy would require regularisation under Article 115(1)(b) of the Constitution.

The overall savings under `voted' section during 1994-95 against the provisions increased sharply from Rs 131.10 crores during 1993-94 to Rs 373.06 crores, which is suggestive of deficiency in the system of financial and budgetary control.

3. Control over expenditure

In the following cases Supplementary Grants obtained were not utilised wholly or partially resulting in savings.

i) Supplementary Grant (Voted)

(Rs in crores)

Grant No.	Supplementary Grant	Saving
18-Army	256.98	87.50
20-Air Force	205.15	63.98
21-Ordnance Factories	35.84	119.01
22-Capital Outlay on Defence Services	102.11	108.87

While 34 and 31 per cent of Supplementary Grants obtained under Grants No.18 - Army and Grant No. 20 - Air Force respectively remained unutilised, the entire Supplementary Grant of Rs 35.84 crores and Rs 102.11 crores obtained under Grants No.21 - Ordnance Factories and No.22 - Capital Outlay on Defence Services remained unutilised.

ii) Savings to the extent of more than Rs 5 crores occurred in the following segments where supplementary grants were obtained. Total of re-appropriation from these segments and savings under them exceeded the amount of Supplementary Grant suggesting that the Supplementary Grants were not required. In another case, where Supplementary Grants of Rs 150.87 crores was obtained under Grant No.20, for Stores,total of re-appropriation from this segment and savings was Rs65.88 crores, which constituted over 43 per cent of the Supplementary Grant.

(Rs in crores)

Grant No.	Supplementary Grant	Reappropriation	Savings
18-Army			
101-Pay & Allowances of Army	31.04	(-) 18.31	(-)25.78
110-Stores	44.77	(-)187.33	(-)24.11
19-Navy			
800-Other Expenditure	6.77	(-)4.00	(-)12.67
20-Air Force			
104-Pay & Allowances of Civilians	32.77	(-)4.89	(-)6.62
110-Stores	150.87	(-)8.10	(-)57.78
21-Ordnance Factories			
800-Other Expenditure	14.67	(-)13.24	(-)8.34

4. Injudicious re-appropriation

In the following cases, shown overleaf, where re-appropriations from/to various heads were made, there were savings/excess of more than Rs 5 crores suggesting that re-appropriations made during the course of the year, were not assessed properly.

(Rs in crores)

Grant No.	Sanctioned Grant	Reappropriation	Final Grant	Actual Expendture	Excess (+) Saving (-)
18-Army					
Pay and allowances of Army	4500.34	(-)18.31	4482.03	4456.25	(-)25.78
Pay and allowances of civilians	611.99	(-)6.51	605.48	592.66	(-)12.82
Research and Development Organisation	870.15	(+) 70.00	940.15	938.43	(-)6.72
Stores	4025.16	(-)187.33	3837.83	3813.72	(-)24.11
Works	775.99	(+)45.80	821.79	815.45	(-)6.34
Rashtriya Rifles	14.87	(+)3.90	18.77	36.69	(+)17.92
National Cadet Corps	121.25	(-)2.58	118.67	113.66	(-)5.01
Other expenditure	233.56	(+)34.31	267.87	261.05	(-)6.82
19-Navy					
Pay and allowances of Navy	293.00	(-)8.01	284.99	291.08	(+)6.09
Stores	600.00	(-)1.98	598.02	608.45	(+)10.43
Works	135.99	(+)6.01	142.00	147.92	(+)5.92
Other expenditure	170.00	(-)4.00	166.00	153.33	(-)12.67
20-Air Force					
Pay and allowances of Civilians	148.89	(-)4.89	144.00	137.38	(-)6.62

Stores	2632.37	(-)8.10	2624.27	2566.49	(-)57.78
Works	219.34	(+)34.60	253.94	246.46	(-)7.48
Other expenditure	57.00	(-)3.00	54.00	63.48	(+)9.48

21-Ordnance Factories

Stores	1270.95	(-)137.11	1133.84	1114.95	(-)18.89
Other expenditure	195.00	(-)13.24	181.76	173.42	(-)8.34

22-Capital Outlay on Defence Services

Army

Land	40.00	(-)20.80	19.20	12.58	(-)6.62
Heavy and Medium Vehicles	117.70	(-)30.35	87.35	48.10	(-)39.25
Other equipment	1508.08	(+)94.05	1602.13	1637.36	(+)35.23

Navy

Naval fleet	1132.97	(+)175.11	1308.08	1318.66	(+)10.58

Air Force

Aircraft and Aero-Engine	2264.74	(+)10.09	2274.83	2264.76	(-)10.07
Other equipment	336.10	(+)41.45	377.55	317.33	(-)60.22
Construction works	111.45	(+)13.55	125.00	110.28	(-)14.72

Ordnance Factories

Machinery and Equipment	219.35	(-)137.35	82.00	84.95	(+)2.95
Works	91.07	(-)28.07	63.00	56.72	(-)6.28

5. Persistent Savings

Despite mention made in Paragraph 5 and 4 of Report No.8 of 1994 and No.8 of 1995 of the Comptroller and Auditor General of India, Union Government, Defence Services (Army and Ordnance Factories) respectively regarding persistent savings, large amount of savings exceeding Rs 5 crores in a number of cases persisted during 1994-95, as indicated below:-

(Rs in crores)

Grant No. Minor Head	1991-92	1992-93	1993-94	1994-95
20-Air Force				
Stores	20.15	8.82	7.66	57.78
21-Ordnance Factories				
Stores	13.28	30.91	67.59	18.89
22-Capital Outlay on Defence Services				
Ordnance Factories				
Works	5.12	2.52	2.73	6.28

6. Expenditure incurred without Government sanction

The appropriation under Grant No.19 - Navy included unauthorised expenditure of Rs 75.65 lakhs, on pay and allowances of a Naval Establishment, which was established without approval of competent authority.

7. Non-settlement of Audit Objections

Number of outstanding audit objections had increased from 98,788 as on 30 June 1994 to 1,05,511 as on 30 June 1995. Some of the audit objections relate to the period 1971-72 and could not be cleared even after a lapse of more than 23 years which would, therefore, require special efforts.

8. Non-verification of credit of imported stores

Total number of cases where Certified Receipt Vouchers/ Specification Certificates of Quality in respect of imported stores were not made available to Audit, had gone up from 1226 during 1993-94 to 1307 during 1994-95.

9. Outstanding claims/dues

Mention was being made every year in the Controller General of Defence Accounts' certificate regarding outstanding claims against Railway/Shipping Corporations for losses or damages of stores in transit and outstanding dues for supplies and services rendered on payment by the Defence Services to others including Central Civil Departments, State Governments, Private individuals and institutions etc. A review of the position shows an increasing trend as indicated below :-

a) The claims outstanding against Railways/Shipping Corporations increased from Rs 27.74 crores as on 30 June 1994 to Rs 29.34 crores as on 30 June 1995.

b) The outstanding dues for the services rendered on payment by the Defence Services to others rose from Rs 101.13 crores as on 30 June 1994 to Rs 107.69 crores as on 30 June 1995.

c) The outstanding dues on account of licence fee and allied charges rose from Rs6.34 crores as on 30 June 1994 to Rs 7.61 crores as on 30 June 1995.

d) The amount due for recovery in respect of work done or stores supplied by Ordnance Factories to Civil Departments, Railways and outside bodies etc. rose from Rs 3.97 crores as on 30 June 1994 to Rs 14.32 crores as on 30 June 1995 showing an increase of 261 per cent.

10. Cash loss

The amount of cash losses due to theft, fraud or gross neglect and other causes increased as compared to the year 1993-94 as per details indicated below :-

(In thousand of rupees)

Year	Amount of loss due to theft, . fraud or gross neglect	Percentage increase	Amount of loss due to other causes	Percentage increase
1993-94	4.29		32.70	
1994-95	5.40	26	106.14	225

CHAPTER II

MINISTRY OF DEFENCE

11. Delay in procurement of Simulators

Recognising that use of simulators was a cost effective way of imparting training, an Army delegation visited various European countries in 1985 to identify suitable tank driving, basic and crew gunnery simulators. Based on their recommendations, a proposal for import of 69 number of simulators at a total cost of Rs 25.30 crores was submitted for approval of Cabinet Committee on Political Affairs (CCPA). After the CCPA's approval in November 1985, negotiations revealed that the unit costs of the simulators were not correctly projected in the CCPA note.

In June 1989, a revised proposal for approval of CCPA in principle to import technically suitable and cheaper simulators and also to develop indigenous production was sought and approval of CCPA obtained in July 1989. In the next two years no simulators were imported nor did the indigenisation effort make any progress.

The Army Headquarters (HQ) was aware of the dire need to instal simulators to effect substantial savings in fuel, ammunition and equipment wear and tear. It was estimated by the Army HQ in 1991 that an annual saving of Rs 22 crores would result from induction of simulators. Another delegation visited USA and various European countries and recommended in July 1992, the import of 159 simulators for tanks and Field Artillery from six countries. Offers for 139 simulators (84 simulators for Tanks and 55 simulators for Field Artillery) at an estimated cost of Rs 533 crores were received in November 1993 but not processed till January 1995, when Army HQ reviewed the likely savings from the introduction of simulators and projected an estimated figure of Rs 123.52 crores of annual savings.

Ministry of Defence (Ministry) stated (November 1995) that Army HQ recommended in June 1995 that except forward observer simulators for Field Artillery, the ongoing procurement of other simulators may be withheld pending finalisation of the type and quantity of simulators required for the tank fleet. Accordingly, in September 1995, the Ministry placed an order on a Public Sector Undertaking for procurement of 55 numbers of forward observer simulator at a total cost of Rs 25.38 crores.

It is thus, seen that for the last 10 years lack of decisiveness and forward planning had caused abnormal delay in introduction of a well recognised cost effective method to impart training. According to the estimates of the Army HQ in 1991, an annual saving of Rs 22 crores could have been effected by introduction of simulators. The same authority has, after review in January 1995, revised the estimated annual saving to Rs 123.52 crores.

12. Inordinate delay in repair of imported ammunition

Central Ammunition Depot (CAD), Pulgaon in August 1991 held 34396 rounds of imported ammunition in repairable condition since 1982. The ammunition was procured at a cost of Rs 30.76 crores. The components required for repair were neither imported nor could be produced by Director General of Ordnance Factories as these were out of their production line. In July 1991, a team of officers (Team) consisting of representatives from Ordnance Factories and Quality Assurance Establishment visited CAD for assessing the feasibility of repair of the ammunition. The team found that the cartridge cases were of 1963-76 vintage and that the life of the filled components i.e. propellant and primer was already over. The team recommended that the filled ammunition should be destroyed and the cartridge cases salvaged by suitable modification of primer holes to suit indigenous primers.

As of June 1994, the problem to repair the cartridge cases was not resolved and, according to Army Headquarter, it was difficult to predict how much time would be taken to repair and upgrade the ammunition.

It is, thus seen that 34396 rounds of imported ammunition valued at Rs 30.76 crores, held in repairable condition since 1982 could not be got repaired before expiry of the life of the propellant and primers. In the meantime, the stock of such repairable ammunition had further increased to 77679 rounds valued at Rs 69.47 crores till August 1995. The vintage of this accretion of repairable ammunition (43283 rounds) over and above the life expired 34396 rounds was not made available.

The matter was reported to the Ministry of Defence in June 1995 and their reply has not been received as of December 1995.

13. Non-utilisation of radio equipment sets

The Ministry of Defence (Ministry) in October 1986/September 1987 placed orders on a foreign firm for supply of 375 number radio equipment sets (sets) at a total cost of Rs 41.39 crores. The terms of the contract stipulated supply of spares required for maintenance of the sets for a period of five years, in addition to supply of warranty spares. The warranty for the equipment was twelve months from the date of commissioning or eighteen months from date of delivery whichever was earlier. The sets without five years maintenance spares were received in a Central Ordnance Depot (COD) during 1987 to 1989 and only 13 sets of warranty spares were received during 1989.

After the sets were put to use by Army field units, it was found to be highly defect prone. An Army Base Workshop (ABW) was selected in May 1992 as the nodal workshop for their repair. Repair of sets which developed mal-functioning commenced from August 1992, but as the workshop ran out of the stock of some of the spares essential for carrying out repairs, they had to resort to local purchase and retrieval of spares from other sets. The personnel of the workshop thus rose to the occasion to meet needs of the field units.

Meanwhile, the matter of inadequate supply of maintenance/warranty spares was taken up with the foreign firm whose representatives visited ABW in January 1993 and prepared a list of 89 items for repair of the printed circuit boards (PCBs)/modules of the sets as free warranty replacement. The firm supplied only 22 of these 89 items but disputed supply of the rest.

In February 1995, the ABW indicated that 85 PCBs/modules valuing Rs 40 lakhs were sentenced as beyond economic repair (BER) on account of being badly burnt as a result of which 32 sets costing Rs 3.46 crores were rendered unserviceable.

Ministry stated (October 1995) that wastage of 85 PCBs/modules worked out to only 0.6 per cent of the total number of 13,500 PCBs fitted in 375 sets. They also stated that 32 sets rendered unserviceable as against 375 numbers worked out to only 8.5 per cent. The negligible percentage of burnt out PCBs/ modules was of little relevance to the main issue as these spares have rendered 32 sets costing Rs 3.46 crores unserviceable, while the matter of supply of spares as per contractual provisions had not yet been finalised as of November 1995.

14. Additional expenditure due to non-acceptance of offer within validity

To meet the emergent requirement of the Army for ammunition `X', a Price Negotiation Committee constituted by the Ministry of Defence (Ministry), recommended in July 1990 the procurement of 300 numbers of the said ammunition from a foreign firm at a unit price of \$ 28907, the total cost of which worked out to Rs 15.18 crores at the prevailing exchange rate. Although the offer of the firm was valid till October 1990, the Ministry did not process this offer on account of non-availability of requisite foreign exchange. A contract with the same firm was, however, concluded for supply of the same number of ammunition `X' in February 1991 at a unit rate of $ 32,000, raising the total procurement cost to Rs 17.28 crores. By allowing the firm's initial lower offer to lapse by October 1990 and procuring the said ammunition from the same firm at an increased rate within four months resulted in an additional expenditure of Rs 2.10 crores in foreign exchange.

The case was referred to Ministry in July 1995. In reply the Ministry accepted the facts in December 1995 but reiterated that requisite foreign exchange was not available to conclude the contract in October 1990.

15. Idling of equipment because of Defective Contracts

For imparting training on operation of a missile system, a contract was concluded in July 1986 with country `A' for supply of two numbers of Unified Simulators at a cost of Rs 1.64 crores. The equipment carried a warranty for one year from the date of despatch of the goods. One of the simulators which was despatched by country `A' in July 1990 was received in an Advance Base Ordnance Depot (ABOD) in January 1991 after the expiry of the warranty period and was found defective. Army Headquarters (HQ) had been corresponding with the supplier since April 1992 for joint inspection and rectification of the defects but the supplier declined to carry out joint inspection as the warranty period had already expired. There was no provision in the contract for a pre-despatch joint inspection or even inspection on arrival to ensure the quality of goods supplied. Ministry of Defence stated in December 1995,that joint inspection of the simulator was completed by Army Authorities without the supplier's representative and the simulator was under issue to a new regiment sanctioned in May 1995. Thus, much before deciding as to how and where the simulator would be used, it was procured in 1990 at a cost of Rs 82 lakhs.

Another Unified Simulator procured from country `A' at a cost of Rs 82 lakhs under a contract concluded in April 1987, was despatched in February 1989 and received within the warranty period, but could not be commissioned on account of manufacturing defects in its generator. In November 1990 the matter was taken up with the supplier who repaired the generator (August 1993) which has since been commissioned (November 1993). In this case also, there was no provision for pre-despatch inspection in the absence of which it was not possible for the Army HQ to ensure the quality of the simulators which remained non-operational for about three years after its delivery.

16. Supply of defective wheel tubes

Ministry of Defence (Ministry) concluded a contract in 1992 with a foreign firm for supply of 3500 tubes for Kraz vehicles at a total cost of Rs 65.07 lakhs (US $ 206500). As per terms, payment was to be made in advance against presentation of invoice, specifications and certificate of quality.

The goods were received and inspected by Director General of Quality Assurance (DGQA) between December 1994 and January 1995, when it was found that the entire quantity of 3500 tubes was defective, although the payment was released without the certificate of quality in May 1994.

The matter was taken up with the suppliers for replacement pursuant to which the supplier's representative visited India in April 1995 but, after inspection did not agree with the findings of DGQA that all the tubes were defective and agreed to replace only 204 tubes. DGQA had, however, maintained that the entire lot of 3500 tubes was unserviceable on account of cracks, holes and cuts in them. Supplier rejected the views of DGQA on the ground that the tubes were to be evaluated on the basis of standards and technical specifications prevailing in the supplier's country and not by Indian standards.

It was seen that proper safeguards were not incorporated in the contract to ensure the quality of goods as per Indian standards prior to importation. Moreover, payment was also released in full without obtaining the quality certificate as was provided under the contract. Unless the tubes are replaced, Rs 65.07 lakhs incurred on its procurement would not only become infructuous but a large number of Kraz vehicles would continue to remain immobile in the base workshop.

The case was referred to the Ministry in August 1995 and their reply was awaited as of December 1995.

17. Recoveries at the instance of Audit

Mention was made in paragraph 14 of the Report No.12 of 1990 of the Comptroller and Auditor General of India, Union Government Defence Services (Army and Ordnance Factories) highlighting recoveries effected at the instance of Audit. In the Action Taken Note, Ministry of Defence (Ministry) stated, in February 1991 that necessary instructions had been issued in March 1989 by Controller General of Defence Accounts to Controllers to avoid overpayments/short recoveries in future and to undertake a critical review of the Internal Audit procedures to plug any loopholes brought out by such instances.

A test check of the accounts maintained by Pay and Accounts Offices (PAOs) revealed overpayments and short recoveries aggregating Rs 52.12 lakhs out of which Rs26.34 lakhs had been recovered by the PAOs at the instance of Audit upto November 1994.

18. Extra expenditure due to delay in placing orders

In July 1988 Army Headquarters (HQ) indented eight equipment from a Public Sector Undertaking (PSU) at an estimated unit rate of Rs 3.50 lakhs on the basis of the last purchase price. In August 1988 the PSU intimated their inability to supply the equipment at the estimated rate as the same had been revised to Rs 8.50 lakhs in September 1988. No supply orders were placed on the PSU till June 1990 when the said rate was further revised to Rs 10.10 lakhs, but the PSU offered to supply the equipment at Rs8.50 lakhs as a special case provided the supply orders were received within the then current stream of production. No decision could be taken by Army HQ within the validity of the special offer. Finally in November 1991, the unit rate was finalised by a Price Negotiation Committee at Rs 10.10 lakhs and orders placed accordingly. The equipment were received in February/March 1993. Thus, the failure of the Army HQs/ Ministry of Defence (Ministry) to take timely action within the validity of the lower offer of the PSU resulted in an extra expenditure of Rs 12.80 lakhs.

The case was referred to the Ministry in August 1995; their reply was awaited as of December 1995.

19. Injudicious import of tensile tester

Against an indent placed by Inspectorate of General Stores, Director General of Supplies and Disposals procured an automatic yarn tensile tester from a foreign firm through its Indian agent at a cost of Rs 10.89 lakhs. The equipment, which was received in October 1988 and commissioned in February 1989 was capable of testing 50 samples at a time and carried a warranty of 12 months from the date of commencement or 15 months from the date of despatch. However, it went out of order immediately after the expiry of its warranty period in March 1990. It was found that import of a motor control card was necessary for its repair. Efforts to obtain the said part from March 1990 till date have been made by concerned authorities without success.

It is thus seen that a high capacity tensile tester valued at Rs 10.89 lakhs has been lying idle for more than five years. It is further seen from the log book that, while the machine was in order from February 1989 to March 1990, it was utilised for only 37 days and the average number of samples tested per day worked out to 21 only.

Ministry of Defence intimated in December 1995 that the equipment was still lying in repairable condition.

20. Follow up on Audit Reports

Lok Sabha Secretariat issued instructions (April 1982) to all the Ministries requesting them to furnish notes indicating remedial/corrective action taken by them to the Ministry of Finance (Department of Expenditure) on the various paragraphs, contained in the Audit Reports, as soon as these were laid on the Table of the House, duly vetted by Audit.

A review of the position regarding receipt of Action Taken Notes (ATNs) on the paragraphs included in the Audit Reports upto the period ending 31 March 1994 revealed that Ministry of Defence (Ministry) has not submitted the remedial/corrective ATNs on the following 145 paragraphs (Details in Annexure I) as of December 1995.

Audit Report No. and year	No. of paragraphs on which ATNs were awaited	Remarks
Audit Report Union Government (Defence Services) for the year 1985-86	2	Final ATNs awaited
2 of 1988	3	Final ATNs awaited
2 of 1989	6	Final ATNs in respect of 4 paragraphs awaited
12 of 1990	10	Final ATNs in respect of 9 paragraphs awaited
8 of 1991	10	Final ATNs awaited
8 of 1992	14	Final ATNs in respect of 11 paragraphs awaited
13 of 1992	2(Parts I and II)	Final ATN in respect of Part-I awaited

14 of 1992	1	
8 of 1993	20	Final ATNs in respect of 14 paragraphs awaited
8 of 1994	36	Final ATNs in respect of 28 paragraphs awaited
8 of 1995	41	Final ATNs in respect of 28 paragraphs awaited

Of 145 paragraphs, ATNs in respect of 35 paragraphs had not been received even for the first time. In respect of the remaining 110 paragraphs, final ATNs after taking into account the comments of Audit in vetting, were awaited.

The case was referred to Ministry of Defence in October 1995 and their reply was awaited as of December 1995.

CHAPTER III

ARMY

21. Recruitment and training of Army Officers

21.1 Introduction

The officers cadre in the Army is made up of regular and support cadres and the annual intake of officers is determined by Army Headquarters (HQ) in accordance with Government instructions. Cadets are recruited into National Defence Academy (NDA), Indian Military Academy (IMA), Army Cadet College (ACC) and Officers Training Academy (OTA) through entrance tests conducted by Union Public Service Commission and/or Service Selection Board (SSB). All cadets are required to undergo pre-commission training before their induction into Army as officers. Pre-commission training to Army officers is given either at IMA or at OTA. NDA and ACC impart graduation course training to directly recruited candidates and service personnel selected for commission as officers for three years before they join IMA for the final course. The duration of total training period ranges from four weeks for Permanent Commission Special List (PC-SL) to four years for Higher Secondary passed cadets.

The Director General Military Training (DGMT) in Army HQ is responsible for formulating the policy for pre-commission training of Army officers.

21.2 Scope of Audit

Recruitment of officers in Army during 1990 to 1994 was reviewed in Audit during April-May 1995. The Review also covers training infrastructure utilisation, and general management of training academies.

21.3 Highlights

- **The overall deficiency in the officers cadre in Army increased from 22 per cent in 1990 to 28 per cent in 1994. The actual induction of 1167 to 1320 officers during this period against the target of 1880 could not even cover**

average annual wastage of around 1600 officers. Ministry of Defence (Ministry) has not formulated any effective time bound plans for making good the deficiencies.

(Paragraph 21.4)

Major portion of expenditure on 18 Sainik Schools, 5 Military Schools and Rastriya Indian Military College with combined annual capacity of 1650 Higher Secondary students is met by Government with a view to preparing them for entry into Defence Services. However, these schools contributed only 117 cadets per annum on an average as against the total average targetted annual induction of 660 cadets in NDA. Only 3.66 and 6.81 per cent of students from Sainik Schools and Military Schools respectively were successful in entrance examinations.

(Paragraph 21.4.1.1 and 21.4.1.2)

Only 255 service personnel were selected as commissioned officers out of the eligible service personnel in the age group of 22-27 for induction during 1990-94 against the target of 750.

(Paragraph 21.4.2)

The average annual intake of technical graduates was 93 which remained uniformly below the target of 140.

(Paragraph 21.4.3)

Inspite of a shortage of 22-28 per cent in the officers cadre, average induction in support cadre was only 51 per cent of the target.

(Paragraph 21.5)

The shortfall in utilisation of designed training slots was 32 per cent in OTA and 78 per cent in ACC. NDA had more un-utilised slots than the total number of trainees in ACC. Training of ACC cadets in NDA would have improved its capacity utilisation. Despite continuous shortfall in the intake of cadets in all the four training institutions, no reduction in certain categories of staff as per norms was made resulting in an expenditure of Rs 2.72 crores over and above the authorisation during the period 1990-95.

(Paragraph 21.6.1)

OTA has not been merged with IMA despite a high level decision and an

expenditure of Rs 1.75 crores on special repairs and renovations of buildings at IMA for this purpose. As a result, anticipated saving of Rs.3.12 crores per annum has not been achieved.

(Paragraph 21.6.1.1)

- **Repeat graduation study of officer cadets selected from Defence Services in ACC resulted in avoidable expenditure of Rs 1.49 crores, besides delay in their induction in Army.**

(Paragraph 21.6.2)

- **Allotment of more than one quarter to private individuals on normal rent instead of market rent in NDA resulted in short realisation of rent amounting to Rs 21.75 lakhs.**

(Paragraph 21.7.2)

Part I - Recruitment

21.4 Induction

There had been persistent shortfall in the strength of officers in Army during last five years. The average annual wastage of officers by way of retirement etc. is around 1600. The annual target of 1880 fixed by Army HQ for induction can, therefore, barely cover the annual wastage and there were no time bound plans for making good the present deficiency of 28 per cent.

Against the target of induction of 1880 officers, the actual induction varied between 1167 and 1320 during 1990 to 1994. Lower induction, coupled with high training wastage aggravated the deficiency from 22 per cent in 1990 to 28 per cent in 1994 in the officers cadre.

21.4.1 Induction in Regular cadre

The regular cadre in Army is commissioned after completion of their training in IMA. The cadets join IMA through different sources. The cadets ex-NDA join IMA after initial training in NDA for three years. ACC is a wing of IMA which runs academic course and service training to cadets selected from among service personnel for graduate's degree for three years before they join IMA in the fourth year. All other graduates join IMA directly for 12 to 18 months training.

The targets and actual induction of regular cadre of officers during the last five years were as under:-

Sl. No.	Type of entry	Annual target	Number actually inducted					Total induction for 90-94	Total targetted induction for 90-94
			1990	1991	1992	1993	1994		
1.	Ex-NDA	390	268	303	243	325	318	1457	1950
2.	Ex-ACC	150	66	61	44	52	32	255	750
3.	Direct entry at IMA	350	425	415	324	339	334	1837	1750
4.	Technical graduates	140	93	62	112	115	85	467	700
	Total	1030	852	841	723	831	769	4016	5150

The induction was uniformly lower than the targets during 1990-94 and through all routes of entry excepting the direct entry to IMA during 1990 and 1991. The shortfall in the average induction during 1990-94 was 22 per cent which deteriorated further on account of 13 to 22 per cent of training wastage.

Army HQ stated in July 1995 that increase in intake of regular cadre would result in an imbalance in overall officer's cadre leading to further stagnation and would be contrary to their proposals in the approach paper on "full and attractive carrier for officers through Army" submitted to the Ministry of Defence (Ministry) in September 1994. Apart from the fact that this approach paper had not been accepted by the Government as of September 1995, career advancement/ prospect alone cannot justify continued shortages, which has an adverse effect on supervision and is inconsistent with defined command structures.

21.4.1.1 Intake from Sainik Schools, Military Schools and Rashtriya Indian Military College

Government has established 18 Sainik Schools, five Military Schools and one Rashtriya Indian Military College (RIMC) with total annual capacity of 1650 Higher Secondary students with a view to preparing them for induction into the Armed Forces.

Major portion of the expenditure on their education is met by the Ministry and State Governments. The overall average annual contribution of these schools to NDA for recruitment in Army, Navy and Air Force was only 117 as against the annual target of 660 cadets.

Central Government incurred an expenditure of approximately Rs 1.40 lakhs per student in seven years of schooling in the Sainik Schools while the said figure was about Rs 1.32 lakhs per student in respect of Military Schools and Rs 1.60 lakhs in respect of RIMC cadets (in five years), basically to prepare them for induction in NDA. The total expenditure incurred by the Central Government in running these schools between 1989 to 1993 was Rs 36.30 crores. However, the performance of these students for the period 1989 to 1993 show that out of a total number of 10506 students who appeared in NDA entrance test during 1989-93, only 3.66 per cent of the Sainik School candidates were successful, while the said percentages in respect of the Military Schools and RIMC worked out to 6.81 and 64.7 respectively.

Ministry stated in December 1995 that a study group constituted in 1986 had recommended that the aim of Sainik Schools should be to impart education to children with a view to enabling them to take up a career in the Defence Services and also positions of responsibility in other spheres of public life. The reply, however, does not indicate as to whether report of the study group had been accepted by the Government. Further, Annual Report of the Ministry for 1994-95 shows that the aim of the Sainik Schools was to prepare boys for entry into NDA.

21.4.2 Entry through ACC

Service personnel with five years of service in the age group of 22-27 are eligible to appear before SSB for selection to the officers cadre for training in ACC. Only 255 officers were inducted through this route in five years (1990-94) against the total intake capacity of 750 at the rate of 150 per annum. On an average, 677 service personnel appeared for SSB selection every year, out of which only 51 were selected.

21.4.3 Entry through IMA

Graduate/technical graduate cadets are recruited directly for training in IMA. While the intake of direct entry graduates was close to the annual target of 350, the intake of technical graduates at an average of 93 per year was uniformly below the annual target of 140.

21.5 Induction in Support cadre

The Support cadre comprises Short Service Commission (SSC), Permanent Commission Special list (PC-SL) and Regimental Commission (RC) officers. The cadets are imparted training in OTA for short duration of 44,13 and 4 weeks respectively. The annual targets of induction in the Support cadre and actual induction during 1990-94 were as under:

Sl. No.	Type of entry	Annual target	Actual induction					Total induction during five years	Average induction percentage against target
			1990	1991	1992	1993	1994		
1.	SSC	500	361	167	349	317	300	1494	60
2.	PC-SL	200	53	52	46	60	64	275	27
3.	RC	150	56	107	70	79	102	414	55
Total		850	470	326	465	456	466	2183	51

While overall average induction in Support cadre was only 51 per cent of the target, the entry through permanent commission (PC-SL) was a mere 27 per cent of the target.

Army HQ stated in July and September 1995 that with a view to augmenting intake in PC-SL it was decided in March 1994 to allow persons having aptitude for Quarter Master's job and also Lance Naiks with requisite service to apply for commission. It further added that the retirement age of Regimental Commissioned Officers has been raised from 48 to 50 from January 1993.

Part II - Training

21.6 Training operations

21.6.1 Capacity utilisation

In a training institute, the capacity to train cadets can be viewed either by its annual capacity to turn out successful cadets or by total capacity of cadets in different phases/stages of training at a given point of time. The table below shows the total designed capacity and its utilisation in four training institutes viz. NDA, OTA, IMA and ACC during 1990-95.

Name of Institute	Designed capacity 1990-95	Utilisation 1990-95	Shortfall	Percentage of shortfall
NDA	9900	8469	1431	14
OTA	2500	1697	803	32
IMA	6000	4961	1039	17
ACC	2250	501	1749	78
Total	20650	15628	5022	24

While the overall shortfall in utilisation of designed training slots of all four training academies was about 24 per cent, it was 32 per cent in OTA and 78 per cent in ACC. Both NDA and ACC undertake graduation course, on completion of which the cadets join IMA. As the un-utilised slots in NDA was more than the total number of trainees in ACC, routing of ACC cadets through NDA would have improved NDA's capacity utilisation considerably during the five year period under review.

Ministry stated in December 1995 that since July 1993, NDA courses are being fully subscribed and therefore it did not have the capacity to take additional strength. This contention is, however, not borne out by facts because, as of March 1993 and March 1994, the total number of cadets undergoing training in NDA was 1578 and 1743 respectively as against the total capacity of 1980. There was, thus, a shortfall of 402 and 237 in utilisation of slots in these two years, while in respect of the same period the number of cadets under training in ACC were only 82 and 88.

Although as per norms given in peace establishments of training institutes reduction in holding of certain categories of administrative and technical staff was to be effected in case of shortfall in intake of cadets, no such reduction was made despite continuous shortfall in the intake in all the four institutions during the last five years. This had resulted in an expenditure of Rs 2.72 crores over and above the authorisation during the period 1990-91 to 1994-95.

21.6.1.1 Non-merger of OTA with IMA

In July 1993, DGMT intimated IMA and OTA that Chief of the Army Staff had decided that Dehradun should be a nodal centre for all pre-commission training for Army and that OTA should be shifted to Dehradun at the earliest. Centralisation of all pre-commission training was considered necessary for standardising and effecting economy. The existing infrastructure at IMA with special repairs and renovations was adequate for 1650 trainees and the strength of cadets was not likely to exceed 1650 until 2000 A.D. Saving of Rs 3.12 crores per annum was anticipated by implementing this decision.

However, the two academies had not been merged as of November 1995 even after spending Rs 1.75 crores on special repairs and renovations for this purpose.

Ministry stated in December 1995 that special repairs had increased the life of buildings which were being gainfully utilised and newly constructed buildings would be taken into account while progressing construction of new key location plan of IMA. The reply did not indicate any reason for non-implementation of the merger decision.

21.6.2 Wasteful expenditure on double graduation

All officer trainees selected out of eligible defence personnel in the age group of 22-27 years were given graduation course in ACC, before sending them to IMA, irrespective of their existing academic qualifications. Thus, graduates and postgraduates among them had to unnecessarily undergo graduation study a second time. About 48 cadets out of the total number of 255 selected through this route during 1990-94 were already graduates. Their second graduation in ACC instead of direct induction in IMA involved an avoidable estimated expenditure of about Rs 1.49 crores, besides delay in their induction into Army.

21.7 Other points of interest

21.7.1 Unauthorised transfer of public funds to regimental funds

IMA received Rs 394 lakhs towards Annual Training Grant, Incidental & Miscellaneous grant, Cadets Monetary Grant and washing allowance. The amounts were transferred irregularly to regimental fund and booked finally as expenditure. Since regimental funds are not subject to Government Audit, proper maintenance of accounts and expenditure out of it could not be examined.

21.7.2 Allotment of residential quarters to private individuals

NDA allotted more than one residential quarter each to 10 private individuals on normal rent instead of market rent. One of the individuals was occupying nine residential quarters.

NDA stated in April 1994, that a complete review of accommodation had been carried out and action taken to get accommodation over and above one quarter each vacated. However, till April 1995 no progress could be achieved. Had market rent been charged for the accommodation over and above one quarter, Rs 21.75 lakhs could have been realised during 1990-91 to 1994-95.

21.7.3 Holding of surplus vehicles

NDA held 14 vehicles in excess of their authorisation in 1994-95 resulting in an avoidable expenditure of Rs 7.31 lakhs on the pay and allowances of drivers.

22. Hiring of vehicles

Test check of hiring of load carrying and personnel carrying vehicles conducted in 12 formations/units during 1994-95 revealed following shortcomings which are only illustrative. The amount involved in avoidable, unauthorised and irregular hiring of vehicles was Rs 1.82 crores.

a) Avoidable hiring

The following cases noticed in Audit, would show that vehicles were hired either unreasonably or in violation of Government orders :

(i) Grinding of 7629.78 tonne of wheat at Chandigarh and thereafter its transportation to other stations in hired transport at a cost of Rs 27.07 lakhs during the period 1992-95 could have been minimised, if wheat was obtained from the nearest depots of Food Corporation of India and locally ground.

(ii) Ammunition was moved in hired transport by three formations in the Western Command on payment of Rs 8.89 lakhs towards hire charges although according to Government orders sensitive stores like ammunition were, in no case, to be transported in hired civil transport.

b) Unauthorised use of transport

(i) Prior to 1993 Defence consignments meant for specific units were directly transported from railway siding at Chandigarh to the consignees' premises. However, records show that from March 1993 for reasons not indicated, the consignments were first brought by hired transport to Supply Depot, Chandimandir and then transported to the consignees again by hired transport. This resulted in wasteful expenditure of Rs 3.69 lakhs during 1993-95.

(ii) Station Transport Officer (STO) of Headquarters (HQ) Delhi Area utilised vehicles on 196 occasions for unauthorised purposes during 1991-95. Consequential hiring of transport resulted in an avoidable expenditure of Rs 28.17 lakhs. While accepting the facts STO stated in August 1995 that appropriate measures were being taken to avoid recurrence.

(iii) During the period 1993-95, a transport unit at Chandigarh hired air-conditioned cars on 74 occasions at double the rate for non air conditioned ones. Since hiring of air-conditioned cars was not authorised, an extra expenditure of Rs 1.19 lakhs was incurred in a questionable manner.

(iv) Military School, Chail draws ration from Supply Depot, Jutogh located at a distance of 55 kilometre (Km) in their service transport and Supply Depot, Jutogh in turn gets the supply from Chandimandir Depot in hired transport which is 110 KM from Jutogh. Had Military School, Chail drawn ration directly from Chandimandir Depot which is located at a distance of 114 Km,in their service transport,an expenditure of Rs0.62 lakh on hired transport from Chandimandir to Jutogh for their supplies meant for Chail during 1992-95 could have been avoided.

(v) As of December 1994, Western Command HQ held 36 vehicles against authorisation of 21. In spite of this, 55 more vehicles had been appropriated to this Command by a transport unit and another 10 vehicles of other units were utilised by this Command HQ resulting in an overall excess holding of 80 vehicles which was four times the normal authorisation. In spite of this excess holding an expenditure of Rs 8.47 lakhs was incurred during 1990-95 on hiring of vehicles.

(vi) As of June 1995 Army Training Command, Shimla held 44 vehicles in excess of their authorisation of 29. In spite of this, on an average two personnel carrier vehicles were regularly hired during 1992-95 and an expenditure of Rs 7.88 lakhs incurred.

c) Loss of goods in transit

(i) Two hired vehicles containing ordnance stores worth Rs 4.33 lakhs despatched by an Ordnance Transit Group in Northern Command to a Field Ordnance Depot in May 1995, were completely burnt enroute. No recovery was, however, effected from the transporter. In three other cases, steam coal costing Rs 11.96 lakhs despatched from a rail head Supply Depot in Northern Command during 1993-95 to various stations by hired transport was not delivered and no recovery upto August 1995 had been effected. The cases illustrate the need for safeguarding Government interest while sending stores in hired vehicles.

d) Irregular practices

(i) In 385 entries in car diaries (log books) attached with the hired transport bills in respect of an Area HQ, specific nature of duty and places visited were not recorded and thus the purpose of maintaining car diaries was frustrated. In these cases, a total amount of Rs 75.65 lakhs had been spent on hiring.

(ii) One infantry division paid hire charges for transport at rates higher than those fixed by Sub Area HQ located at the same station which was applicable for all units at that station resulting in extra expenditure of Rs 2.58 lakhs during March 1993 to 1995.

(iii) Payment of hiring charges at the rate applicable to hiring for 24 hours instead of rate for 12 hours plus charges for additional hours for vehicles used for more than 12 but less than 24 hours resulted in overpayment of Rs 1.06 lakhs in HQ Bengal Area in Eastern Command.

The case was referred to the Ministry of Defence in October 1995 but their reply has not been received (December 1995).

23. Short recovery of airlifting charges

Based on the sanction accorded by Ministry of Defence (Ministry) in September 1969 for grant of certain facilities on payment to Indo-Tibetan Border Police (ITBP) in Ladakh sector, Army Service Corps (ASC) airlifted ration and other articles to ITBP battalions `A', `B' and `C' by AN-32 aircrafts from time to time.

Air Headquarters fixed in May 1993 the airlifting charges at the rate of three paise per kilogram (Kg) per kilometre for the year 1993-94. Taking into account the air distance from the supply point to battalions `A', `B' and `C' the recovery rate of airlifting charges worked out to Rs 15.30 and Rs 18.30 per Kg. However, ASC charged at the rate of Rs 2.60 per kg for airlifting of 1.39 lakh Kg for battalion `A' and 3.11 lakh kg. of stores for battalions `B' and `C' involving short recovery of Rs 66.47 lakhs from ITBP during 1993-94.

Thus, failure of ASC in levying the airlifting charges at correct rates resulted in avoidable expenditure of Rs 66.47 lakhs from Defence budget.

The matter was referred to the Ministry in June 1995; their reply was awaited as of December 1995.

24. Wasteful expenditure on injudicious procurement of tyres

As of February 1985, the Central Ordnance Depot (COD), Bombay held a stock of 800 tyres meant for a special type of vehicle (SV) used by the Army. Against indents raised by COD, the Department of Defence Production and Supplies placed orders for procurement of a further number of 1559 tyres at a total cost of Rs 54.56 lakhs, which were received by COD between September 1988 and October 1990.

It was noticed in audit that between February 1985 and February 1995, 498 tyres were issued for the SVs, showing an average annual consumption of 50 tyres and that, as of October 1995, COD held a stock of 1861 tyres. The prescribed shelf life of five years of the entire stock held by COD had expired by October 1995. Moreover, at the average annual rate of consumption, the above mentioned stock of 1861 tyres would have met the requirement for the next 37 years. It may be mentioned in this connection that the SV for which the tyres were procured were decided in February 1991 to be phased out by 1994-95. The stock of life expired tyres had since (August 1995) been declared surplus.

It would thus be seen that a wasteful expenditure of Rs 54.56 lakhs was incurred for unnecessary procurement of 1559 tyres between September 1988 and October 1990, both on the ground of expiry of shelf life of the tyres and also for phasing out of the SVs for which these were procured.

The matter was referred to Ministry of Defence in July 1995; their reply was awaited as of December 1995.

25. Avoidable procurement of mounting tripods

Against an indent of Small Arms Factory (SAF), Department of Defence Production and Supplies (DDPS) placed orders in January 1991 on three firms for supply of 600 numbers of mounting tripods at a total cost of Rs 56.43 lakhs at a unit rate of Rs 9405. The orders stipulated delivery of the tripods between June and December 1991. Although delivery time was not to be extended, such extensions were allowed to all the three firms and 550 numbers of tripods valuing Rs 51.70 lakhs were received in three lots between October 1991 and June 1992.

The extension of the delivery time assumes significance in view of the findings of the annual provision review for the year 1991 by Central Ordnance Depot (COD) which revealed a considerable surplus balance of such tripods. The indent of the SAF was processed without ascertaining the available balance of tripods with the COD.

The Ministry of Defence (Ministry) stated in September 1995 that extensions of time against stipulated dates of supply of tripods, were granted on the recommendations of a technical committee which indicated that part quantity of stores submitted by the firms were under inspection and the balance quantity was in the final stage of production. The Ministry also contended that there had been no loss to the State as the quantity received during the extended delivery period had been utilised.

The contention of the Ministry is not tenable as the average annual consumption during the years from 1992-93 to 1994-95 was 323 numbers. The stock of the tripods as of July 1995 was 1394 numbers and at the above mentioned average rate of consumption, this stock would last for more than four years. Had there been a proper coordination between the DDPS, Army Headquarters and COD, over-provisioning and unnecessary blocking of funds to the extent of Rs 51.70 lakhs could have been avoided.

26. Loss on account of procedural lapse

Central Ordnance Depot (COD), Cheoki received 601.01 cubic metres (cu.m.) of timber valued at Rs 36.11 lakhs in December 1986 from the Forest Department of a State Government. An inspection carried out at the time of receipt of the timber revealed a shortage of 16.53 cu m. Although rules provide that inquiry should be held immediately on detection of shortages/losses,a staff Court of Inquiry (CI) was held after seven years in February 1994 which found that the total shortage was not 16.53 cu.m. but 146.78 cu.m. valued at Rs 8.53 lakhs. The CI also observed that extent of shortage could not be detected at the time of receiving the timber on account of perfunctory inspection by COD.

In January 1995 General Officer Commanding-in-Chief, Central Command, concurring with the findings of the CI, directed COD to take on charge the available quantity of timber. As of April 1995 the COD did not take the same on charge on the ground that the consignment was received in an unacceptable condition. It was further noticed that 50 per cent of the 454.28 cu.m. valuing Rs 26.42 lakhs timber lying in COD had already become unserviceable.

Ministry of Defence stated, in December 1995 that COD had been directed to take the consignment on charge, take action for regularisation of deteriorated stock and to intimate the latest status of the administrative action against the two officials as per recommendation of the CI.

27. Non-utilisation of diesel hydraulic locomotive shunter

Paragraph 28 of the Report No.2 of 1989 of the Comptroller and Auditor General of India, Union Government, Defence Services (Army and Ordnance Factories) highlighted gross under-utilisation of a diesel hydraulic locomotive shunter (shunter) costing Rs 14.95 lakhs at Central Ammunition Depot (CAD) Pulgaon and also at Central Armoured Fighting Vehicle Depot (CAFVD) Kirkee to which it was transferred. The Ministry of Defence (Ministry) in their action taken note stated in March 1991 that efforts were being made to optimally utilise the shunter at CAFVD Kirkee.

It was, however, noticed that as none of the store houses at CAFVD were served by rail, the shunter had been lying unutilised at Kirkee upto September 1993 when it was transferred to Ordnance Depot, Talegaon. It was utilised there for 16 hours only for training of a driver and thereafter lying unutilised as of November 1995.

Thus, the gross under utilisation of a shunter reported in 1989 still continues.

The matter was referred to the Ministry in June 1995 but their reply was still (December 1995) awaited.

28. Loss from life expired oil

Central Ordnance Depot, Bombay (COD) was holding a stock of 9,788 litres of oil linseed boiled (oil) in September 1989 against their authorisation of 900 litres. Even then a further quantity of 50,000 litres of oil valued at Rs 10 lakhs was procured from trade in October 1989. 9027 litres of the stock was issued between October 1989 and June 1995, leaving a balance of 50,761 litres valued at Rs 10.15 lakhs.

Although the shelf life of the oil procured in October 1989 was to expire in October 1992, question of extending the shelf life was considered in May 1994 by the Controllerate of Quality Assurance, who permitted use of the same within November 1994. As the oil could not be used within the extended period, COD approached Army Headquarters in October 1994 for its disposal. As of November 1995, no decision regarding disposal of the life expired oil had been taken.

Thus an amount of Rs 10.00 lakhs was injudiciously spent in October 1989 on procurement of 50,000 litres of oil which could not be utilised even within the extended shelf life of the commodity.

Ministry of Defence accepted the facts in December 1995.

29. Non-utilisation of an imported equipment

Defence Food Research Laboratory (DFRL) in order to analyse food in a cost effective manner imported and installed a microbiological growth analyser (analyser) having a shelf life of six years, at a cost of Rs 10.45 lakhs in May 1987. DFRL observed in March 1988 that the "Uninterrupted Power Supply System" (UPS) of the analyser was frequently breaking down and completely stopped working after January 1990. As of November 1995, the defective machine was awaiting repairs.

The Ministry of Defence in November 1995 stated that the replacement of the UPS had not given the desired results and the analyser could not be repaired for want of expertise. Thus, the analyser, imported in May 1987 at a cost of Rs 10.45 lakhs and utilised for 28 months only, had been lying unutilised since January 1990 admittedly for lack of expertise to repair it.

CHAPTER IV

ORDNANCE FACTORY ORGANISATION

30. Performance of Ordnance Factory Organisation

30.1 Introduction

39 Ordnance Factories (OFs), with a manpower of 1.62 lakhs are engaged in production of about 1,600 items of arms, ammunition, equipment, clothing etc. primarily for the Armed Forces of the country. Most of the items produced by the factories are meant to be solely used by the Armed Forces and are not marketable. However, in order to utilise available spare capacities, Ordnance Factory Board (OFB) had started manufacturing items for civil trade as a measure of diversification. At the apex level, OFB is responsible for policy formulation, supervision and control. Director General of Ordnance Factories (DGOF) is the ex-officio Chairman of OFB, and is assisted by nine Members/ Addl. DGOFs who are incharge of various staff and line functions.

The broad distribution of the divisions with reference to their production is as under:

	Divisions	No.of factories
(i)	Materials and Components (M&C)	10
(ii)	Weapons, Vehicles and equipments (WV&E)	10
(iii)	Ammunition and Explosives (A&E)	10
(iv)	Armoured Vehicle (AV)	4
(v)	Ordnance Equipment Factories Group (OEF)	5

The factories are also classified as Metallurgical (6), Engineering (17), Filling (5), Chemical (4) and Ordnance Equipment (6). One factory sanctioned in October 1984 has not yet started production.

30.2 Revenue Expenditure

The actual expenditure under revenue head for the period 1990-91 to 1994-95 is given in the table overleaf.

(Rupees in crores)

Year	Initial expenditure incurred by Ordnance Factories	Value of products supplied to Armed Forces as adjusted by CDA in Central Compilation	Gross expenditure limited to Budget Grant	Receipts and Recoveries	Net expenditure of Ordnance Factories
1990-91	1805.24	1578.75	226.49	170.18	(+) 56.31
1991-92	1919.70	1565.95	353.75	306.80	(+) 46.95
1992-93	1983.99	1631.49	352.50	409.49	(-) 56.99
1993-94	2279.84	1813.11	466.73	560.15	(-) 93.42
1994-95	2347.94	1868.85	479.09	473.74	(+) 5.35

30.3 Analysis of performance of OFB

30.3.1 General

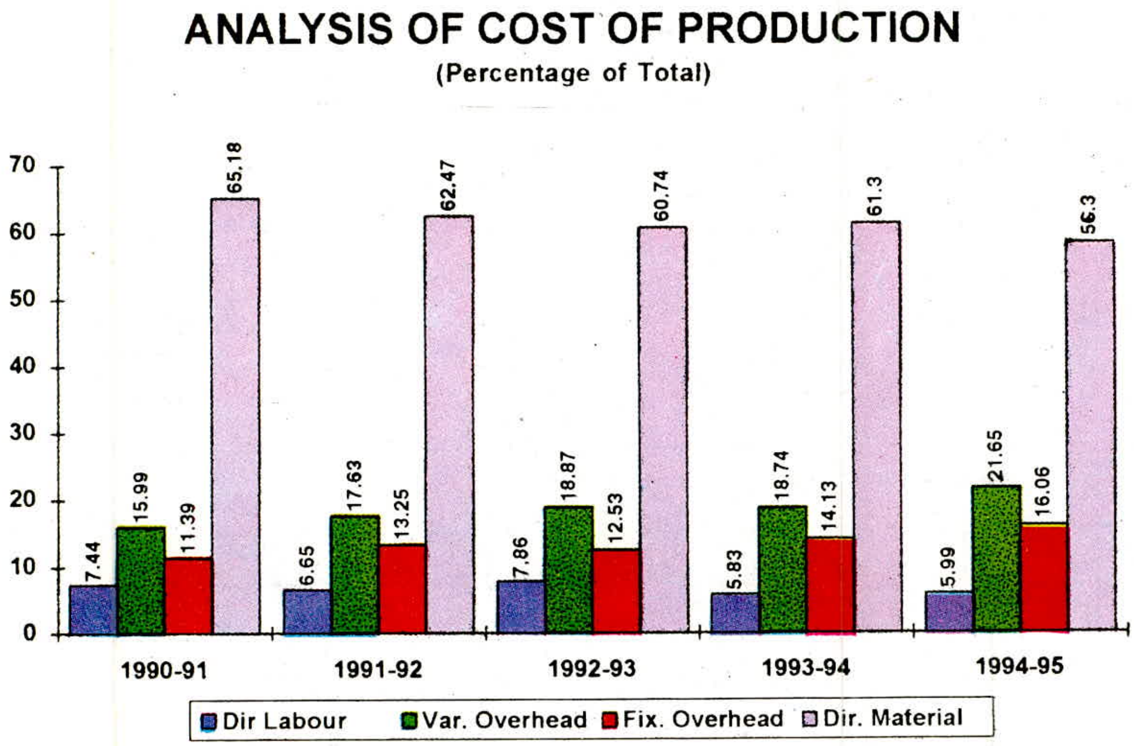
In 1994-95 Heavy Vehicle Factory Avadi's turnover was highest at Rs 277.37 crores with 62.56 per cent material components, while that of Ordnance Equipment Factory Hajaratpur was the lowest at Rs 10.52 crores with material components at 64.73 per cent.

30.3.1.1 The following table indicates element-wise value of production for the last 5 years ended 31 March 1995.

Element	Value of production				
	1990-91	1991-92	1992-93	1993-94	1994-95
					(Rupees in crores)
(a) Direct Material	1728.13	1438.12	1556.87	1725.75	1580.79
(b) Direct Labour	197.13	153.13	157.16	164.18	168.16
(c) Variable Overhead Charges Levied	424.03	405.73	471.40	527.83	607.85
(d) Fixed Overhead Charges Levied	302.05	305.12	313.03	397.76	450.99
Total	2651.34	2302.10	2498.46	2815.52	2807.79

Elements of overhead in the total cost of production varied widely from factory to factory, being 73.24 per cent in Opto Electronic Factory, Dehradun and 18.84 per cent in Ordnance Factory Chanda.

30.3.1.2 The bar chart below indicates the contribution of each unit of cost to the value of production (as percentages) for the five years upto 31 March 1995:



When production of new items is undertaken as a result of foreign collaboration, complete knocked down (CKD) assemblies are initially used. As this requires much less labour than regular production, the inclusion of the values of CKD assembled products distorts the overall production cost by increasing the direct material component while suppressing the direct labour component. The cost of CKD assemblies during the last four years i.e. 1990-91, 1991-92, 1992-93 and 1993-94 were Rs332.42 crores, Rs 124.04 crores, Rs 93.93 crores and Rs141.65 crores respectively.

30.3.2 Issue to users

The indentor-wise issues for the last 5 years are shown overleaf.

(Rs in crores)

	1990-91	1991-92	1992-93	1993-94	1994-95
Army	1349.22	1299.30	1339.09	1406.40	1492.58
Navy	15.19	18.43	16.88	28.80	28.02
Air Force	32.36	35.81	48.06	58.70	56.65
MES, Research & Development (Other Defence Department)	42.03	48.55	34.27	28.95	68.83
Civil Trade	102.34	174.25	271.25	392.83	371.88
Other Factories	728.09	587.08	608.86	694.48	717.70
Own Stock	22.14	15.84	23.36	31.22	29.74
Capital Work	2.82	1.33	2.54	2.38	1.92
Total	2294.19	2180.59	2344.31	2643.76	2767.32

30.3.3 Production planning and performance

30.3.3.1 Production programme vis-a-vis progress

It was noticed that progress of achievement in respect of several items remained well behind targets fixed by OFB for manufacture of items every year. Though orders for manufacture and supply of some more items existed, manufacture of these items had not been undertaken by the factories in absence of a production programme (targets) for these items by OFB. During the year 1994-95, though orders existed for 296 items, no targets were fixed for 46 items. Out of 250 items for which targets were fixed 83 items were being scheduled.

The slow progress in production of these items was attributed by OFB to non-availability of stores, technical problems and miscellaneous reasons.

30.3.4 Capacity utilisation

OFB assesses capacity utilisation of a factory in terms of standard man hours

(SMH) and machine hours. The following tables indicate the extent to which the capacity had been utilised, based on the above two parameters, during the last five years:

Table - I

Capacity utilisation in terms of SMH

Year	De rated capacity in SMH	Capacity utilisation in SMH	Percentage of capacity utilisation
1990-91	2257	2240	99.28
1991-92	2257	1722	76.30
1992-93	2139	1461	68.11
1993-94	2051	1387	67.64
1994-95	2040	1359	66.65

Table - II

Capacity utilisation in terms of machine hours

Year	Machine Hours available	Machine Hours utilised	Percentage utilisation
1990-91	1380.63	1062.40	81.16
1991-92	1187.36	941.87	79.32
1992-93	1114.68	871.70	78.20
1993-94	1141.29	846.58	74.18
1994-95	1198.87	894.03	74.57

It is evident that while machine hour utilisation remain more or less around 75 to 80 per cent during these five years, the manhours utilisation registered a steep fall of about 33 per cent from 1991 level.

OFB stated that service indentors had drastically reduced their requirements.

OFB further stated in December 1995, that manpower available with OFB was depleting continuously because of natural wastages and no replacement was received because of ban on recruitment. Machine hour utilisation was also dependent on the work load to be discharged during a year. To neutralise the effect of the drastic load reduction, marketing has been introduced to secure orders from Civil, Ministry of Home Affairs (MHA) and Exports.

30.3.4.1 Normally Ordnance Factories are geared to work two shifts of 10 hours each. As on 31 March 1994, 84 per cent of employees worked on day shifts while 16 per cent on night shifts.

30.3.5 Utilisation of manpower

30.3.5.1 Employees of the Ordnance Factory Organisation are classified as (i) "Officers", who man senior supervisory levels (ii)"Non-Gazetted" (NGO) or "Non-Industrial" employees (NIEs) who man junior supervisory levels and clerical establishment and (iii) "Industrial" employees (IEs), who are engaged in production and maintenance operations. The number of employees of various categories during the last 5 years as per table below reveal that strength of the supervisory level has registered a sharp increase in 1994-95, while number of NGOs, NIEs and IEs declined.

Category of employees	1990-91	1991-92	1992-93	1993-94	1994-95
Officers	1640	1681	1672	1672	2812
NGO/NIE's	43445	44285	44190	44548	43173
IE's	128255	126188	123583	118488	115702
Total	173340	172154	169445	164708	161687

30.3.5.2 In ordnance factories there are two types of industrial workers viz. "Piece Workers' who are directly engaged in production and paid for the work turned out by them and "Day Workers" who are engaged in maintenance jobs and paid for the actual number of days and hours they work without any regard to their output. Day workers are also called General Shop Labour (GSL).

30.3.5.3 The expenditure on GSL has been rising much faster than the rise of total direct labour during 1990-91 to 1994-95 period. Total expenditure on indirect labour and direct labour for the last five years are shown overleaf.

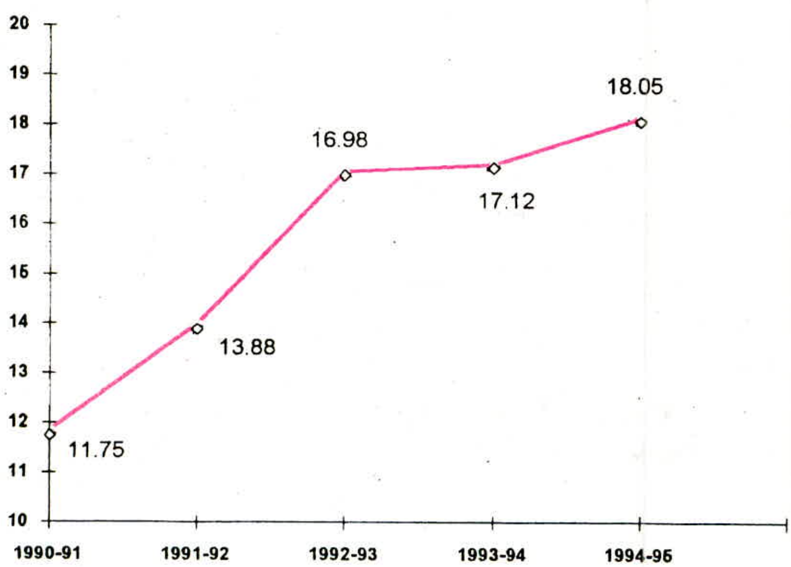
(Rs in crores)

	1990-91	1991-92	1992-93	1993-94	1994-95
(a) General Shop labour	25.75	31.77	43.70	49.03	57.17
(b) Total indirect Labour	219.20	228.86	257.38	286.40	316.73
(c) Total Direct labour	157.27	168.24	172.91	180.06	183.23
(d) Percentage of GSL to Total Indirect Labour	11.75	13.88	16.98	17.12	18.05

OFB stated, in December 1995, that the expenditure on GSL, indirect labour and direct labour increased over the years broadly due to normal inflation and grant of Dearness Allowance, etc. and was also because of deployment of more number of workers as GSL due to inadequate workload. Increase in percentage of GSL to total indirect labour over the last five years is represented in the graph below:

GENERAL SHOP LABOUR

AS A PERCENTAGE OF
TOTAL INDIRECT LABOUR



30.3.5.4 There has been a gradual decline of the number of employees on piece work indicating that the production activities in ordnance factories were decreasing as the following table would show:

Year	Average no. of piece workers	Payment to piece workers	Incentive bonus paid to maintenance workers	Total cost of produc-tion
		(Rs in crores)		
1990-91	73857	35.45	2.06	2318.89
1991-92	71101	91.00	4.09	2178.06
1992-93	69520	86.45	4.30	2404.53
1993-94	67500	85.86	4.41	2673.88
1994-95	64815	81.09	4.45	2807.79

30.3.6 Inventory Management

30.3.6.1 Stock holdings in excess of authorised requirement

As per provisioning procedure stipulated in March 1975, ordnance factories are authorised to hold stock of different types of stores as shown below:

Sl. No.	Type of stores	Months requirement to be held in stock
1.	Imported items	12 months
2.	Difficult indigenous items	9 months
3.	Other indigenous items	6 months

The total holding are accounted for in terms of months' requirement of different types of stores. However, on examination of closing stock of all the Ordnance and Ordnance Clothing Factories, as on 31 March 1995, it was noticed that average stock holdings in 6 factories as per table overleaf ranged between 13 months and 28 months requirements, contrary to the policy of the Board.

(Rupees in crores)

Sl.	Name of factory	Closing stock as on 31 March 1995	Average monthly consumption	Holding of stores in terms of months
1.	GSF Cossipore	37.82	2.25	16.81
2.	OF Kanpur	44.02	1.56	28.22
3.	OF Bhandara	15.48	1.13	13.70
4.	OF Khamaria	153.82	11.29	13.62
5.	EF Avadi	29.21	1.80	16.23
6.	OLFD Dehradun	8.13	0.44	18.47

30.3.6.2 Surplus in stock-taking

An amount of Rs 8.99 crores was shown as surplus during stock-taking in 1994-95 of which Rs 7.83 crores of stores were found surplus at the following two factories:

Sl.No.	Factory	Surplus in stock taking (Rupees in crores)
1.	V.F.J. Jabalpur	6.44
2.	O.F. Chanda	1.39

Stores found surplus in stock-taking is indicative of unsatisfactory maintenance of stores accounts.

30.3.6.3 In para 3.14 of the 54th Report of the Estimates Committee (Seventh Lok Sabha), it was stated that inventory holdings in ordnance factories were under constant review and were generally kept within the limits laid down in Government instructions. It was, however, noticed that while there was reduction in utilisation of capacity of the ordnance factories, there was increase in holdings. The average holdings in terms of number of days exceeded the prescribed norm of 180 days during each year. There was considerable increase in the holding of non-moving, slow moving and maintenance stores over the years as would be revealed by the table overleaf.

(Rupees in crores)

Sl.No	Particulars	1990-91	1991-92	1992-93	1993-94
1.	Working Stock				
a.	Active	952.71	905.25	773.01	702.65
b.	Non Moving	51.82	55.30	76.36	81.26
c.	Slow Moving	77.36	95.00	134.86	138.10
2.	Waste & Obsolete	4.93	17.79	23.59	16.44
3.	Surplus	44.26	41.58	41.95	38.40
4.	Maintenance Stores	90.98	93.78	96.27	99.13
	Total	1222.06	1208.70	1146.04	1075.98
	Average Holdings in terms of No. of mandays	276	314	286	254

As on 31 March 1995 the following factories accounted for major holding of slow-moving and non-moving items as below:

(In crores of rupees)

Sl.No.	Factory	Slow-Moving	Non-moving
1.	OF Katni	2.55	1.22
2.	OF Ambernath	2.01	3.64
3.	OF Ambhajhari	4.89	1.79
4.	OF Trichi	4.47	1.95
5.	GSF cossipore	11.12	6.42
6.	OF Kanpur	5.90	4.77
7.	GCF Jabalpur	3.94	4.18
8.	VF Jabalpur	5.43	8.37
9.	AF Kirkee	6.29	1.27
10.	OF Khamaria	18.21	29.93
11.	OF chanda	3.32	1.41
12.	OF Dehu Road	2.47	1.70
13.	HVF Avadi	28.55	20.97
14.	OLF Dehradun	2.09	1.19

30.3.6.4 Finished stock

There was a steady increase in the total holdings of finished stock and components until 1992-93 as indicated below:

	1990-91	1991-92	1992-93	1993-94	1994-95
Finished Stock					
Holding in Crores of Rupees	26.48	44.52	40.42	55.42	73.27
Holding in terms of Nos of Days' Consumption	4	7	6	8	10
Finished Components					
Holding in Crores of Rupees	174.78	201.23	208.87	195.13	197.85
Holding in terms of Nos of Days' Consumption	94	134	130	123	96

30.3.6.5 Work in progress

There was increase in the value of work-in-progress, as the following details would show:

As on 31 March	Value of work in progress (Rupees in crores)
1991	670.62
1992	715.55
1993	703.89
1994	717.84
1995	714.24

OFB stated in December 1995 that a substantial amount of raw material, work in progress and finished goods holdings were blocked in various factories due to:

i) Sudden short withdrawal of Indents by Service indentors;
ii) Suspension of Indents by the Indentors due to change in their priority of requirements to suit their budget;
iii) Change in design of the end product by the Authority Holding Seal Particulars at advance stages of production.

30.3.7 Manufacture

30.3.7.1 Rejections in manufacturing processes

Total value of production(including permissible rejections) vis-a-vis value of rejections beyond permissible limits (excluded from the total value of production) during the last five years was as under:

(Rupees in crores)

Year	Total value of production (including permissible rejection)	Value of rejection (beyond permissible limit)
1990-91	2318.89	7.74
1991-92	2178.06	8.09
1992-93	2404.53	6.47
1993-94	2673.88	9.41
1994-95	2807.79	11.41

An amount of Rs 11.41 crores had been kept out of production during 1994-95 (Rs 9.41 crores in 1993-94) being abnormal losses which occurred during manufacture. It would be seen that rejection in manufacture has considerably increased over the years. Out of the above, major losses occurred in five factories as shown below:

Sl. No.	Name of the factory	Amount (Rupees in crores)
1.	Ammunition Factory, Kirkee	3.08
2.	Vehicle Factory, Jabalpur	4.16
3.	HV Factory, Avadi	1.01
4.	Ordnance Factory, Muradnagar	0.77
5.	Metal and steel Factory Ishapore	1.38

30.3.7.2 Losses written off

The table below depicts losses written off by competent financial authorities.

(Rupees in lakhs)

Sl. No.	Particulars	1990-91	1991-92	1992-93	1993-94	1994-95
1.	Over issues of pay and allowances and claims abandoned	8.33	8.25	5.71	7.74	12.66
2.	Losses due to theft, fraud or neglect	1.29	0.11	7.69	0.92	0.20
3.	Losses due to deficiencies in actual balance not caused by theft, fraud or neglect	0.24	1.92	1.31	7.91	0.40
4.	Losses in transit	884.41	25.43	41.91	11.81	16.80
5.	Other causes (e.g. conditioning of stores not caused by defective storage, stores, scrapped due to Obsolescence etc.	6.11	1.12	1.55	14.26	19.55
6.	Manufacturing Losses	360.30	199.03	288.25	739.10	377.97
	Total	1260.68	235.86	346.42	781.74	427.58

It was observed that avoidable rejections continued over the years in the following factories:

(Rs in lakhs)

Name of the factory	1990-91	1991-92	1992-93	1993-94	1994-95
Ammunition Fy, Kirkee	388.28	423.90	148.04	341.63	307.80
Vehicle Fy. Jabalpur	134.90	127.77	184.63	166.14	416.30
Heavy Vehicle Fy. Avadi	55.79	47.82	174.84	160.93	101.20

31. Production of artillery training ammunition

31.1 Introduction

In 1983, Army projected a requirement of 1231 artillery training equipment and 4.80 lakh rounds of training ammunition per annum, indicating, inter-alia, that the annual requirement of training ammunition would increase to 7.75 lakh rounds on the basis of Seventh and Eighth Plan force level. It was envisaged that the introduction of specialised training equipment and ammunition would result in a saving of Rs 3 to 5 crores per annum by doing away with the use of service ammunition for imparting training. At the outset, however, requirement of training equipment and ammunition was to be met through the import.

In August 1988, Ministry of Defence (Ministry) approved a project for indigenous manufacture of training ammunition with foreign collaboration at an estimated cost of Rs920.22 lakhs including a foreign exchange component of Rs 371.02 lakhs at Ammunition Factory, Kirkee (AFK) with a capacity to manufacture 5 lakh rounds per annum. The approved estimates consisted of civil works (Rs 42.88 lakhs), plant and machinery (Rs 803.64 lakhs) and miscellaneous items (Rs 73.70 lakhs). Production of three versions of training ammunition i.e. with point detonation fuze (90 per cent), with 3 seconds - delay fuze (6 per cent) and with 6 seconds - delay fuze (4 per cent) was planned and the project was scheduled to be completed by April 1991.

The agreement with a foreign firm for indigenous manufacture of training equipment and ammunition was concluded in June 1983. But it took more than five years for the Ordnance Factory Board (OFB) and the Ministry to finalise the detailed project report.

31.2 Scope of Audit

A review of the project was conducted by Audit during 1995 to examine its implementation.

31.3 Organisational set up

The facilities for production of the training ammunition was to be set up at AFK under overall supervision of OFB.

31.4 Execution of the project

The work on the project for setting up of facilities for production of the ammunition consisted of the following principal activities, namely, civil works, procurement, installation and commissioning of plant and machinery and induction of human resource.

31.4.1 Civil works

The civil works which consisted of extension/ modification of existing buildings, humidification, air-conditioning and construction of building for electrical substation were actually completed at a cost of Rs 59.92 lakhs in February 1992 i.e. more than 10 months after the scheduled date of completion of the entire project.

31.4.2 Plant and machinery

Out of 84 items of machinery identified for the project, 15 were to be provided by internal diversion within AFK. Subsequently, in April 1992, the net requirement of machinery was assessed at only 50. AFK, thus, took nearly four years in firming up the total requirement. AFK placed orders for 50 machines during December 1988 to September 1992 costing Rs 365.61 lakhs. Against this, 48 machinery valued at Rs 303.79 lakhs were received during December 1988 to December 1993, and the remaining two were yet to be received as of October 1995. 44 of them valued at Rs 239.73 lakhs were commissioned during April 1991 to March 1995. The other four valued at Rs 64.06 lakhs received during 1988 to 1993 were yet to be installed. It would thus, be seen that even the supply orders for machinery were placed upto September 1992 i.e. one and a half years after the scheduled date of completion of the project.

OFB attributed the delay to the fact that these machines were not standard ones which could be purchased off the shelf. The reason advanced by OFB for delay does not explain as to why more than four years were taken in firming up the specifications of the machinery.

31.4.3 Human resource

Government sanction of 1988 envisaged placing of 345 technical, administrative and industrial staff by redeployment within the overall surplus in Ordnance Factories as far as possible. OFB approached the Ministry in March 1989 for creation of all 345 posts as, according to them, no surplus was available within the existing strength of ordnance factories. The Ministry did not agree in September 1989 to the proposal for creation of posts since the issue of surplus in the ordnance factories and workload of this project was not resolved.

31.5 Project for indigenous production of training equipment

Army had projected a total requirement of 1231 training equipment in 1983. Against this, requirement of 445 training equipment was to be met through import and the remaining 786 were proposed for indigenous production. An agreement was concluded in June 1983 with the foreign firm for import of technical document for indigenous production of training equipment and ammunition, for which Rs 80 lakhs was paid in June 1983. However, the work for the project for production of the training equipment was not taken up as of November 1995.

31.6 Production of ammunition

In productionisation of the training ammunition, two options were considered in regard to procurement of components through local trade. The first was to obtain ten components and the second was to obtain seven components while three components viz. cartridge case, body of projectiles and firing pins were to be manufactured in house. The second option was preferred, which entailed an additional estimated cost of Rs 363.88 lakhs for creation of the inhouse manufacturing facility and commence production. The actual expenditure on setting up of facilities for manufacture of these three components however, worked out to Rs 183.55 lakhs.

While on one hand, OFB chose to set up facility for manufacture of these three components, on the other, it procured 1.16 lakh cartridge cases, 3.34 lakh body projectiles and 4.15 lakh firing pins from trade during 1990-95.

AFK had also not established facility for production of two versions of ammunition i.e. with 3 seconds delay fuze and with 6 seconds delay fuze as of October 1995.

31.7 Reduction in requirement

After the project for establishing production capacity of 5 lakh rounds of training ammunition per annum was approved by Government in 1988, Army reduced the requirement of the ammunition to only 1.5 lakh rounds per annum as one of the guns for which the requirement of training ammunition was initially projected, was decided to be phased out. Thus, due to lack of proper assessment of requirement of ammunition by Army, the capacity created has been rendered surplus.

31.8 Summing-up

- Complete production facility was yet to be accomplished as of October 1995, even after an expenditure of Rs 471.54 lakhs on the project and more than four and a half years after the scheduled date of completion envisaged in Government sanction of August 1988.

- No manpower has been deployed on the project against the requirement of 345 projected at the time of sanction.

- Meanwhile, the annual requirement of artillery training ammunition projected by the Army in 1983 has been reduced by 80.65 per cent.

The matter was referred to the Ministry in July 1995; their reply was awaited as of November 1995.

32. Computerisation in Ordnance Factory Organisation

32.1 Introduction

Prior to 1989, Ordnance Factory Board (OFB) and Ordnance Factories were using one IBM mainframe computer in OFB and 34 micro-processors in Ordnance factories.

Ministry of Defence (Ministry) accorded sanction in March 1989 for procurement and installation of one mainframe computer at OFB and one mini computer in its 33 factories at a total cost of Rs 3.78 crores which was revised to Rs 3.98 crores in February 1991. The project was to be completed within 30 months from the date of sanction i.e. by August 1991. Against this, however, hardware and software costing Rs 7.55 crores were installed at OFB and the factories between April 1990 and March 1991. The system became operational in March 1992. On successful completion of the project, reduction of 15 per cent in inventory of raw material, 20 per cent of work-in-progress and 3 per cent in cost of production was expected over a period of six years.

32.2 Scope of Audit

Review of planning and acquisition of electronic data processing (EDP) system and its subsequent operation and utilisation was undertaken by Audit during April-July 1995.

32.3 Procurement

A contract for supply and installation of 33 Hindustan Computers Limited (HCL) Magnum II mini-computers at 33 factories and one ICIM make main computer at OFB with 17 software packages was concluded at a cost of Rs 6.50 crores with Messers Computer Maintenance Corporation (CMC) in April 1989. The contract was extended in March 1990 for supply of another 5 HCL magnum II mini-computers with same number of software packages in another 4 factories at a cost of Rs 1.05 crores. As per the agreement, the entire work was to be completed by January 1992.

In addition, 1,078 Personal Computers (PC) were purchased at a cost of Rs 5 crores upto 1994-95 for 37 factories and OFB.

32.4 Network system

In accordance with contract with CMC of April 1989 as extended in March 1990, 38 mini-computers capable of establishing connectivity with the main frame computer at OFB through Remote Area Business Message (RABM) system of Department of Telecommunication (DOT) were to be installed. In one factory two mini computers were sanctioned. OFB was registered with DOT for 24 micro-earth stations under RABM network set up by DOT. This was to ensure on-line data/information availability on Central Computer System so that the factories were able to communicate and access data among them for the sake of improving productivity.

The network system was yet to be established as of November 1995. The data/information continued to be transmitted through MODEM, FAX, telephone, telex, telegram and courier.

Since interconnection through RABM was not established and overall expenses (Rs 4.5 crores during 1993-94) in transmitting data/information through MODEM etc. was very high, OFB proposed in March 1995 to establish Wide Area Network at a cost of Rs 16.91 crores for which Ministry's approval was yet to be obtained as of November 1995. Thus, the much needed establishment of networking system among the OFB and ordnance factories had not been achieved.

32.5 Implementation of computerisation

As per the contract with CMC, 17 modules of Production Planning Control (PPC) software costing Rs 1.69 crores were developed by CMC and supplied to 37 factories by November 1990. Due to delay in decision about Relational Data Base Management (RDBM) packages on which PPC packages were developed, acceptance of PPC packages in the factories was delayed which were finally accepted by March 1991. The period of implementation support available for 12 months after acceptance, ended in March 1992.

The packages, however, could not be utilised and implemented fully as planned. The percentages of implementation of the packages as of March 1995 were as overleaf.

Modules	Implementation percentages	
	0-25	26-50
	Number of factories	
Inventory Maintenance	-	2
Inventory Analysis	3	3
Shop Order Release	1	2
Work-in-progress	6	7
Material Requirement Planning	2	5
Quality Control	6	8
Costing	9	8
Maintenance	12	12
Tool Control	7	6
Vendor Analysis	5	1
Payment Analysis	9	1
Forecasting	6	3
Detail Operation Scheduling	13	-
Database	implemented in all 37 factories	
Muster Scheduling	1	-
Capacity planning	1	-

In defence of the evidently flagging computerisation efforts, OFB stated, in December 1995, that implementation of PPC system was time consuming and required large volume of data collection and extensive testing. It added that subsequent modules could be operationalised only after completion of previous modules. The reason advanced by OFB lacks conviction since computer environment has been in operation in OFB for over 14 years and preparatory work for simultaneous collection of data base required for computerisation was an obvious pre-requisite for planning and successful implementation of computerisation.

In so far as installation of terminals was concerned, OFB did not have a system to monitor the progress. In response to enquiry by Audit about status of installation of terminals, OFB stated, in December 1995, that position was being ascertained from the factories.

The configuration of Magnum Computer System installed by March 1991 came into operation in March 1992. The operating system did not, however, support the latest version of informix RDBMS. OFB stated, in February 1995, that HCL discontinued the production of Magnum series and the machine had become obsclete. Thus, even before full implementation of PPC packages, the system became obsolete which necessitated dependance on an old system entailing loss of efficiency and more response time in operation.

32.6 Cost benefit and increase in productivity

With full computerisation, major benefit was expected to accrue from reduction of 15 per cent in inventory in six years by way of computerised A-B-C analysis, more frequent review of material, closer scrutiny of high value items, inter-factory material transfers etc. Further, a reduction of 20 per cent in work-in-progress inventory was estimated to be achieved over a period of six years.

On production side, efficiency in production was expected to increase on account of computerisation which, in turn, was to result in 3 per cent reduction in cost of production in six years. It was also estimated that savings stemming from computerisation in six years, would be nearly 5 times the cost of computers themselves.

The total investment in computers and allied data processing equipment for the entire Ordnance Factory Organisation was Rs 13.37 crores as of June 1992. The microprocessors for batch processing mode were in operation since 1988 and Magnum for online processing since 1992. However, OFB has not carried out any study to evaluate as to what extent the savings envisaged had been achieved. While appreciating the audit observation, OFB stated, in December 1995, that General Managers of the factories were being asked to study the implementation of computerisation with a view to obtaining feedback on implementation and benefits realised.

The matter was referred to the Ministry in September 1995; their reply was awaited as of November 1995.

Planning

33. Surplus inventory due to cancellation of orders

Ordnance Factories (OFs) under Ordnance Factory Board (OFB) were established to meet the requirement of the Armed Forces. The capacities created in OFs were planned having regard to war-wastage reserve and training requirements of the Armed Forces. Upto 1986-87 there was combined budget for both Army and OFB and supplies to the Armed Forces were without any payment. Consequent on the separation of OFB budget from the Army budget from April 1987, supplies to Armed Forces were on payment and Armed Forces were pressing OFB to have a predetermined price list for supplies to be made to them. The capacity and stores available with OFs were not being utilised to the full extent because of diminishing orders/no orders from the Armed Forces after 1986-87. Based on the orders placed by the Armed Forces, OFB has to take action for procurement of raw material, machinery etc. and create capacity for productionisation of items for which sufficient lead time is required. In case the requirement of Armed Forces drops suddenly from that already projected and acted upon by OFB, the materials procured and the production line created, involving considerable financial implication, become surplus/redundant. Since the Armed Forces are the primary customer of OFB it often becomes very difficult for them to utilise the surplus material for some other purpose. In such cases OFB has perforce to carry the inventory and/or keep the production infrastructure underutilised. If, however, the Armed Forces plan well in advance and give adequate notice to OFB, such situations could be averted.

A test check in Audit revealed that in the following illustrative cases, blockage of Rs 1700.41 lakhs had resulted from reduction in requirement and/or cancellation of indent without adequate notice by the Army.

Case I

In July/August 1990, Ordnance Factory, Khamaria (OFK) placed an inter factory demand on Ordnance Factory, Katni (OFKat) for manufacture and supply of 1.30 lakh stamping forgings (stampings) required for a fuze of an ammunition by May 1991. OFKat manufactured and supplied 1.20 lakh stampings valued at Rs 184.35 lakhs upto March 1991.

In March 1991, OFK intimated OFKat not to issue stampings as sufficient stock was available with them and short-closed the order at the supplied quantity of 1.20 lakh stampings in April 1991. Meanwhile, OFKat produced 9633 stampings valued at Rs14.75 lakhs during March/April 1991. These were not despatched to OFK and were lying at OFKat. 2.48 lakhs stampings valuing Rs 383.09 lakhs, which included 1.20 lakh stampings supplied against IFD of July/August 1990 had been lying unutilised at OFK as of September 1995.

Ministry of Defence (Ministry) stated, in September 1995, that sudden reduction in the requirement of ammunition by the Army in December 1990 had jeopardised the assessment of requirement of the stampings.

Thus, sudden curtailment of order of an ammunition by the Army led to blocking of finished stampings valued at Rs 397.84 lakhs.

Case II

Blocking of Government funds to the extent of Rs 2.13 crores in Ordnance Factory, Kanpur (OFC) on account of cancellation of indents for a bomb by the Army was commented upon in Paragraph 30 of Report No.8 of 1994 of the Comptroller and Auditor General of India - Union Government, Defence Services (Army and Ordnance Factories) for the year ended 31 March 1993. The Ministry did not submit Action Taken Note as of November 1995.

OFB stated, in August 1995, that due to cancellation of indents for the bomb by the Army there was a total blockage of Rs 12 crores in five factories including OFC. The items mainly being specific components, no alternate gainful utility of the components was in sight. The Ministry had taken up the matter with Army Headquarters in July 1994 to accept the items to avoid financial loss.

The matter was referred to the Ministry in May 1995; their reply was awaited as of November 1995.

Case III

Some major components costing Rs 102.57 lakhs required for manufacture/filling of a grenade had been lying in Ordnance Factory, Chanda since April 1993 without any use.

OFB stated in November 1995 that no production programme was received from the Army since 1993-94 and as such manufacture of grenade was not undertaken thereafter. It added that there was no alternative use of these components.

The matter was referred to the Ministry in August 1995; their reply was awaited as of November 1995.

34. Questionable expenditure

Design and development of an ammunition `X' was taken up in June 1984 by Ammunition Research and Development Establishment (ARDE) and Explosive Research and Development Laboratory (ERDL), but before it was proved in trials, it was decided in March 1989 that assembly including machining of components for the ammunition would be undertaken by Ordnance Factory, Kanpur (OFC). In order to meet annual targetted production of 6,500 round of ammunition `X' from 1990-91, OFC procured from trade finished and semi-finished components valued at Rs 6.44 crores between April 1990 and February 1992.

Meanwhile, in January 1991, ARDE and ERDL called for suspension of all production activities in respect of ammunition `X' till further clearance as the product was still under trial. This decision of January 1991 was communicated to OFC in February 1992 whereafter OFC stopped procurement of further components of ammunition `X' and held a stock of finished and semi-finished components valued at Rs 6.44 crores. Only a nominal quantity was machined by OFC at a cost of Rs 3.16 lakhs before receiving the stop production instruction in February 1992.

While accepting the facts, Ordnance Factory Board (OFB) stated, in August 1995, that trials were still going on and necessary clearance from competent authority was yet to be received. The reply of OFB implies that the components worth Rs 6.44 crores presently remaining unutilised would not lead to waste provided trials are successfully completed. There was, however, no clarification as to why a decision to produce machined components on a large scale and assembly thereof was at all taken when ammunition `X' was not cleared in trials. It is, therefore, evident that a hasty action to procure components for machining and assembling of ammunition `X' by OFC pending clearance by the designers resulted not only in blockage of an amount of Rs 6.44 crores but its utilisation thereof remained uncertain pending clearance by the designers.

The matter was referred to Ministry of Defence in May 1995; their reply was awaited as of November 1995.

35. Financial repercussion due to change in user's requirement

For meeting the outstanding proof demand of ammunition `X', Ordnance Factory, Kanpur (OFC) placed an inter factory demand in December 1984 on Ordnance Factory Khamaria (OFK) for supply of components of an ammunition `X'. As OFK could not keep up the supply of the said components at the required rate, OFC produced some of the said components in their own premises.

In January 1988, Ordnance Factory Board (OFB) cancelled all proof demands which were pending for more than one year due to changed pattern of the user's requirements. However, even after January 1988, OFC produced/received 10,005 components valuing Rs 40.17 lakhs. It was noticed that after cancellation of the proof demand, a total of 12,110 components valued at Rs 49.63 lakhs remained unutilised at OFC since February 1990, out of which 10,005 components valued at Rs 40.17 lakhs were produced/procured by OFC even after receiving cancellation of the proof demands.

Ministry of Defence stated in October 1995, that the user accorded priority to other stores without considering the problems of OFB resulting in accumulation of unutilised components. There was, however, no clarification as to why OFC did not stop production/procurement of the component from January 1988 after receiving cancellation of proof demands to avoid an unnecessary expenditure of Rs 40.17 lakhs.

Manufacturing

36. Loss due to use of indigenous steel sheet

For manufacture and supply of 80,750 cartridge cases (cartridges) to Ordnance Factory, Khamaria (OFK), Metal and Steel Factory, Ishapore (MSF) asked a Public Sector Undertaking (PSU) in January 1991 to supply 231 tonne of imported steel sheets. The ordered quantity was delivered to MSF in January 1993 at a total cost of Rs 79.51 lakhs. However, before the receipt of the imported sheets, MSF procured 38.66 tonne of indigenous sheets during 1992-93 from another PSU at a cost of Rs 24.35 lakhs and processed 2751 cartridges between September 1992 and March 1993, of which 45 per cent were rejected on inspection as against the permissible rejection limit of 28 per cent. The high percentage of rejection was attributable to deficient metallurgical characteristics of the indigenous sheets. In March 1993, MSF revised the normal rejection percentage from 28 to 66 without the concurrence of the competent authority.

Despite the high rejection rate, MSF continued the production of cartridges with the indigenous sheets and produced a total of 3666 more cartridges during the period 1993-95 of which 81 per cent was rejected on inspection. When MSF utilised the imported sheets in production of cartridges, rejection percentage ranged between 25 and 28. It was noticed that the total cost of cartridges produced from the indigenous sheets which were rejected on inspection was Rs 117.89 lakhs.

Ministry of Defence (Ministry) stated in November 1995, that the rejection rate of cartridges produced from indigenous sheets was on account of unforeseen problems encountered during actual processing. It was, however, not clarified by the Ministry as to why the processing could not be limited to a pilot sample to be tested for permissible rejection before undertaking bulk production. Had a pilot sample been processed and tested for inherent, metallurgical defects/deficiencies of the indigenous sheets, a loss of Rs 117.89 lakhs could have been avoided.

37. Loss due to defective forging

Between July 1989 and March 1994 Ordnance Factory Ambajhari supplied to

Gun and Shell Factory, Cossipore 2.90 lakh die-castings, out of which 4,920 numbers valuing Rs 34.26 lakhs were rejected in the intermediate stage of machining operation in January/February 1991.

A Court of Inquiry, constituted for the purposes, observed in December 1993 that the rejection was due to inherent defect in forging and presence of blow holes. Ordnance Factory Board stated, in July 1995, that the rejection loss had since been regularised as abnormal rejection by the General Manager in April 1995 and added that at present the rejections were within normal limit.

As regards regularisation, para 679 of Defence Accounts Department, Office Manual, Part-VI stipulates that the question of regularisation of abnormal rejection arises only in cases where the maximum percentage of rejection authorised in the standard estimate, is exceeded. It is, therefore, evident that the rejected die-castings valuing Rs 34.26 lakhs regularised as abnormal rejection was over and above the normal permissible limit, which had since been controlled.

The matter was referred to Ministry of Defence in April 1995; their reply was awaited as of November 1995.

38. Bulk production of detonators before issue of development extract

Mention was made in paragraph 35 of Report No.8 of 1992 of the Comptroller and Auditor General of India, Union Government - Defence Services (Army and Ordnance Factories) for the year ended 31 March 1991 regarding holding of 6.4 lakh unusable grenades by Army as the corresponding detonators, held by them were defective. Ministry of Defence (Ministry), in their Action Taken Note stated, in November 1992, that the grenades could be utilised with metallic detonators being produced by Ordnance Factories.

During the period February 1992 to March 1994, Ammunition Factory Kirkee (AFK) manufactured 1.76 lakh metallic detonators `A' with 7 - second delay and 1.18 lakh detonators `B' with 4 - second delay. Although the permissible rejection limit of such production was 15 per cent, it was found that the rejection percentage of the detonators `A' was 39.67 and that for detonators `B' was 27.97. The value of the rejected detonators `A' and `B' above the permissible limit worked out to Rs 42.07 lakhs.

On being pointed out by Audit, AFK stated, in October 1994, that metallic detonators were designed and developed after extensive and satisfactory trials but teething problems persisted during bulk production. The Ministry stated, in September 1995, that AFK undertook bulk production after the pilot lots were accepted by Authority Holding

Sealed Particulars. It added that considering the urgent need of Director General of Ordnance Services (DGOS) for these items, AFK, in its keenness, undertook bulk production straightway and when unforeseen difficulties were encountered during such production, there was no opportunity to issue development extract.

Thus, the pressure from DGOS and the keenness of AFK to undertake bulk production of the detonators without affording an opportunity to issue development extract led to heavy rejection of these items, resulting in an avoidable loss of Rs 42.07 lakhs.

39. Production of defective ammunition

From July 1990, Ordnance Factory Chanda (OFCh) undertook bulk production of a tank ammunition `X', based on an imported technology, using primer `Y'. The clearance for bulk production was accorded by Controllerate of Quality Assurance (CQA), Kirkee after the first lots of primer `Y' were produced to the satisfaction of the collaborator's experts at OF Ambajhari (OFAj). OFAj supplied major components of the empty primers in respect of the first 25 lots comprising 45,421 numbers to OFCh. The balance components in respect of these lots were obtained from trade by the OFCh. From lot No.26 onwards, OFAj supplied all the components of empty primer `Y' to OFCh.

OFCh filled the first 25 lots of primer `Y' at a cost of Rs 1.11 crores and used 39,485 primers for production of the tank ammunition `X' at a total cost of Rs 31.56 crores. The balance number of 5,936 primers were issued for proof testing to Central Proof Establishment, Itarsi, Ordnance Factory, Khamaria, Heavy Vehicle Factory, Avadi and Proof and Experimental Establishment, Balasore. However, before the proof results were available, OFCh issued all the 39,485 rounds of ammunition `X' to the Army.

During proof firing in December 1991 and May 1992, CQA, Avadi, observed that primer caps were blown off and propellent gases leaked through the cap holes. They traced these defects to primer lots No.9, 12 and 13 and all ammunition produced using primers from these lots were immediately sentenced unserviceable and instructions issued to replace the primers. In November 1992, Ammunition Research and Development Establishment (ARDE) conducted trials with the same ammunition when accidents occurred, leading to loss of life and property, on account of the same defect mentioned above. In this case, primer lot involved was No.24 which was immediately sentenced unserviceable. A serious view of these accidents was taken by all concerned authorities. CQA, Pune investigated the matter and reported in February 1993, that in filling primer `Y' OFCh failed to carry out an essential and inescapable operation known as "Bead" operation in respect of lot No.1 to 25, although the said operation was incorporated in the technical drawings supplied by the foreign collaborators.

A technical committee constituted by OFB in May 1993, found that the defects in primer `Y' was critical and suggested certain additional operations for added safety. OFB also clarified that the "Bead" operation was to be carried out in empty stage after assembly of conical shutter and bush and in this operation a circular groove was provided around the bush to ensure that it was held in position. OFB further clarified that OFAj was to perform the above operation which was introduced from lot No.26 onwards. In the absence of the "Bead" operation in respect of lot No.1 to 25, the purpose of holding the bush in position was served by application of N.C. Varnish as per the advice of foreign technicians under whose supervision the initial lots of primers were filled and manufactured at OFCh. OFB also reported, in December 1995, that no complaints about primer `Y' from lot No.26 onwards had been received.

It is, thus, evident that for omission of an essential operation, 39,485 rounds of tank ammunition had to be sentenced unserviceable and the users had to keep all the rounds segregated for replacement with serviceable primers. The replacement of the defective primers had not yet (December 1995) been carried out as OFCh expressed their inability to receive the entire quantity of defective ammunition `X' on account of lack of space in their factory. They were also not in a position to send their technical experts to various places where the sentenced ammunition were stocked.

Ministry of Defence contended, in December 1995, that the development and manufacture of the primer under direct supervision of and guidance from the foreign collaborators did not suffer from any deficiency but they have not clarified as to why the vital "Bead" operation was not carried out by OFAj as per the technical drawing and why OFCh filled the primers inspite of the above deficiencies.

The more important factor in the entire episode is the action of OFCh to issue the finished rounds to the users without waiting for the proof results. Had OFCh waited for these results without issuing the ammunition, the financial damage could have been contained and 39,485 rounds of tank ammunition could have been salvaged by replacement with serviceable primers. As per the present scenario, Rs 1.11 crores incurred in filling the defective primers had become wholly nugatory, while the usefulness and wisdom of the entire expenditure of Rs 31.56 crores incurred in producing the tank ammunition `X' has become highly questionable. Moreover, no responsibility for the rash and negligent act of omitting the "Bead" operation and issuing the finished rounds without waiting for the proof results has yet been fixed.

40. Loss due to rejection of barrel forgings

Metal and Steel Factory, Ishapore (MSF) supplied 301 barrel forgings (forging) valuing Rs 95.06 lakhs to Ordnance Factory, Kanpur between March 1989 and March 1991, but 51 forgings were found to be defective due to excessive/complex bend. The defective forgings valuing Rs 16.11 lakhs were back loaded to MSF in October 1992 for replacement/ rectification.

MSF stated, in April 1994, that action was in hand to get the back-loaded forgings machined from Gun and Shell Factory, Cossipore (GSF) where necessary facility and expertise was available. However, as of November 1994, only 9 out of the 51 defective forgings, were sent to GSF. Of these, only 5 could be rectified by GSF and issued to Gun Carriage Factory, Jabalpur in March 1995 and the remaining 4 were rejected. The balance 42 defective forgings were lying at MSF without rectification/replacement as of September 1995.

Ministry of Defence stated, in September 1995, that the rectification job was linked with availability of machine at GSF and nature of defects was not identical in all the barrels. It added that efforts were being made to rectify the forgings which would require 24 to 36 months.

Thus, out of 51 defective forgings supplied by MSF during March 1989 to March 1991, only 5 could so far be rectified and the balance 46 valued at Rs 14.53 lakhs were lying at MSF for the last 3 years.

41. Rejection of bombs

Ordnance Factory Board (OFB) placed four extracts between January 1985 and July 1989 on Ordnance Factory, Dehu Road (OFDR) for manufacture and supply of 37,891 numbers of a bomb to the Army.

OFDR manufactured and supplied 26,466 bombs to the Army upto 1992-93. Further 2,000 bombs manufactured during 1993-95 failed in proof due to its unsatisfactory performance and were rejected by Controller of Quality Assurance (Ammunition). The value of rejected bombs worked out to Rs 1.06 crores.

Ministry of Defence stated, in October 1995, that the rejected bombs were still under joint investigation.

Thus, there was loss of Rs 1.06 crores towards defective manufacture of 2,000 bombs by OFDR during 1993-95.

42. Production in anticipation of formal order

Ordnance Factory Board (OFB) sent a programme to Ordnance Factory, Katni (factory) in March 1990 for production of 50,000 cartridge cases for issue to Ordnance Factory, Khamaria (OFKh) during 1990-91. Without waiting for receipt of formal covering order from OFB or OFKh, the factory manufactured 33,500 brass blanks-a raw material for production of cartridge cases, till October 1990. The factory produced 10,000 cartridge cases by utilising 20,000 brass blanks against a demand of May 1989 and issued the same to Ordnance Factory, Chanda during 1990-92. The balance quantity of 11,500 brass blanks valuing Rs 39.05 lakhs had been lying unutilised besides 2,000 semis valuing Rs 8.20 lakhs in pipeline since October 1990 for want of further order as of September 1995.

Ministry of Defence stated, in October 1995, that further orders had been stopped and the impact could be considerably reduced by recycling the blanks and semis as input scrap for ammunition stores. A decision in this regard was yet to be taken.

Thus, blanks including semis valuing Rs 47.25 lakhs were lying unutilised for more than five years.

43. Defective production of grenade

Leakage in grenades filled by Ordnance Factory, Chanda was found at Army depots and units during 1981-82 and in 1985 due to deterioration of containers, improper soldering and cleaning of flux. Director General of Quality Assurance introduced certain remedial measures in November 1987. Despite this, leakage in 18,234 filled grenades valuing Rs 61.72 lakhs issued during July 1988 to November 1989 was again found and these were lying unserviceable in various Army depots/units.

Director General of Ordnance Services observed, in October 1993, the cause of defects attributable to manufacturing flaw. Controllerate of Quality Assurance (Ammunition), Kirkee suggested in December 1993 some remedial measures for manufacture of defect free grenade besides recommending that the defective grenades be sentenced as unserviceable.

Ordnance Factory Board stated, in November 1995, that the existing design was leakage prone and disposal of the affected grenades was to be decided by a committee.

Thus, grenades valuing Rs 61.72 lakhs were rendered unserviceable due to manufacturing defects.

The matter was referred to Ministry of Defence in August 1995; their reply was awaited as of November 1995.

44. Avoidable rejection

Lot number 32 comprising of 1,005 empties of an ammunition was manufactured by Ordnance Factory, Ambajhari in 1993-94 at a cost of Rs 40.65 lakhs. These empties were issued to Ordnance Factory, Chanda (OFCh) in November 1993 for filling. OFCh in anticipation of proof testing, filled the empties incurring an expenditure of Rs 17.76 lakhs. The entire quantity was rejected in empty proof testing in March 1994.

Ordnance Factory Board (OFB) stated, in December 1995, that this lot was taken for filling after getting clearance from Proof and Experimental Establishment, Balasore in February 1994. This contention runs counter to the fact that OFCh intimated Controllerate of Quality Assurance (Armaments), Kirkee in December 1993 that eleven lots from lot number 24 onwards were filled in anticipation of proof. OFB further stated that the rejected lot was under collection from depot for critical examination and reproof.

Thus, bulk manufacture of empties and its filling in anticipation of proof testing led to rejection of 1,005 filled ammunition valuing Rs 58.41 lakhs.

The matter was referred to Ministry of Defence in August 1995; their reply was awaited as of November 1995.

Provisioning of stores and machinery

Stores

45. Injudicious import of copper crusher cylinder

In April 1988, Ordnance Factory, Varangaon (OFV) placed an order on a foreign firm A' for supply of 30,000 copper crusher cylinders required for measuring chamber pressure during proof testing of ammunition. Against this order 30,070 cylinders at a cost of Rs14.20 lakhs were received by OFV between March and July 1989.

Quality Assurance Establishment (Armament), Varangaon (QAE) advised OFV in May 1988 not to import cylinders any further as the indigenous ones were showing good results. Despite this advice, order for supply of 38,000 more cylinders was placed on firm `A' by OFV in February 1989 at a total cost of Rs 17.69 lakhs. Against this order, 35,894 cylinders were received between July 1990 and June 1994, while the balance 2106 was lost in transit.

Out of 65,964 cylinders imported against the two above mentioned orders, various quantities were issued to other factories at Bhandara and Kirkee 45,405 cylinders valued at Rs 21.30 lakhs were lying unused at various factories as of November 1995.

Ordnance Factory Board stated, in September 1992, that indigenous cylinders advised by QAE were suitable for proof of ammunition using propellent `B' but not for ammunition using propellent `A'. It further stated that due to reduction in production/issue programme of propellent `A' for which import was resorted to production of propellent `B' had picked up resulting in a lower usage of the imported cylinders. It added, in August 1995, that the decision to import was in the interest of maintaining continuity of production.

The case, thus, revealed that there was a mismatch between the decision to import the cylinders and scaling down the provision of ammunition using propellent `A' for which 45,405 imported cylinders valued at Rs 21.30 lakhs were lying unutilised as of November 1995.

The matter was referred to Ministry of Defence in May 1995; their reply was awaited as of November 1995.

46. Excess provisioning of bomb components

Based on the demand of 37,891 numbers of a bomb placed by the Army between February 1984 and May 1989, Ordnance Factory Board (OFB) placed four extracts between January 1985 and July 1989 on Ordnance Factory, Dehu Road (OFDR) for manufacture and supply of the bombs to the Army.

Against the target of 35,000 bombs, OFDR could manufacture and supply only 26,466 bombs to the Army upto 1992-93. Due to reduction in the requirement projected by the Army since 1991-92 the production of the bomb was accordingly brought down. There was, however, no issue of the bomb to the Army during 1993-95. As a result, OFDR was holding a stock of major components of the bomb valued at Rs 90.24 lakhs as of April 1995. OFDR stated, in January 1994, that the targets were fixed depending on the requirement projected by the Army every year, and in view of extracts for the bomb being outstanding, the remaining components would be utilised on receipt of production programme from OFB. However, the existing stock of two components was so high that even after completion of the outstanding extracts, bomb components valuing Rs 13 lakhs would be left unutilised.

Ministry of Defence stated, in October 1995, that Director General of Ordnance Services in May 1990 had asked OFB to create maximum capacity for this bomb. Though sustained requirement was projected by the Army, actual offtake were far less, resulting in accumulation of components. This contention is not tenable because against the production programme of 35,000 bombs upto 1992-93, OFDR could manufacture and supply to the Army only 26,466 bombs.

47. Idling of ammunition assembly

Mention was made in paragraph 54 of Report No.8 of 1994 of the Comptroller and Auditor General of India, Union Government - Defence Services (Army and Ordnance Factories) for the year ended 31 March 1993 about inspection and acceptance of 6,064 sets of defective cone and funnel assemblies valuing Rs 71.98 lakhs from a firm in December 1992. Action Taken Note had not been received from Ministry of Defence (Ministry) so far (November 1995).

Further examination revealed that against two inter-factory demands (IFDs) of December 1989 of Ordnance Factory, Chanda (OFCh) for supply of 12,000 sets of an ammunition assembly, Ordnance Factory, Kanpur (OFC) manufactured 2,235 sets. Out of that OFC issued 1,173 sets to OFCh during 1991-93, which developed stain marks in one of its vital components viz. cone and funnel assemblies (assemblies). As a result, production of ammunition assemblies had to be discontinued.

As the firm did not rectify/replace the defective assemblies, OFC placed an IFD on Gun and Shell Factory, Cossipore (GSF) in December 1994 for repair of 1,050 assemblies at the unit rate of Rs 550. On receipt of the assemblies in January 1995, GSF had expressed its inability in July 1995 to repair the assemblies as per the decision of Controller of Quality Assurance (Metals), Ishapore. As a result, raw materials and semi-processed stores for ammunition assemblies valued at Rs 5.36 crores remained un-utilised.

The Ministry stated in October 1995, that legal action for recovery of the cost of assemblies was initiated against the firm and appointment of an arbitrator ordered in May 1995.

Thus, acceptance of defective assemblies valuing Rs 71.98 lakhs in inspection in December 1992 resulted in non-utilisation of other serviceable components/stores valuing Rs 5.36 crores required for production of an ammunition assembly.

48. Extra expenditure on rectification of defects

Ordnance Factory, Medak placed orders during 1986 to 1991 on a foreign collaborator for supply of completely knocked down (CKD) engines required for production of a vehicle. Out of 558 engines received between 1987 and 1991, 26 engines which were accepted at the time of receipt inspection in the factory, were later found to have certain defects. Claim for 9 defective engines was preferred in December 1987 on the foreign collaborator within the warranty period. Claim for remaining 17 engines could not be preferred as the defects were noticed at the testing stage and after the expiry of warranty period.

These 26 defective engines were rectified by Engine Factory, Avadi (EFA) at a cost of Rs 49.93 lakhs in 1991. Subsequently 7 more imported engines found defective at testing stage and sent to EFA during September 1991 to July 1993, were awaiting rectification as of September 1995.

Ordnance Factory Board stated, in September 1995, that no response had been received from the foreign collaborator in respect of the claim preferred for the 9 defective engines.

Thus, extra expenditure to the tune of Rs 49.93 lakhs had been incurred towards repair/rectification of defective engines due to failure of the factory in detecting the defects within the warranty period. The expenditure is likely to increase after rectification of 7 more engines.

The matter was referred to Ministry of Defence in July 1995; their reply was awaited as of October 1995.

Machinery

49. Sub-optimal utilisation of plant

In February 1983, Ordnance Factory, Kanpur (OFC) placed an operational indent on Director General of Supplies and Disposals (DGSD) for procurement of an induction hardening plant (plant) by September 1984, required for hardening of ammunition `X' and `Y'.

DGSD, however, placed an order in December 1985 on an Indian firm for import of the plant at a cost of Rs 97.75 lakhs (including customs duty) on the basis of the prevailing exchange rate. In September 1987, another Indian firm inspected the plant in the manufacturer's premises and found that the plant could successfully perform hardening of ammunition `X' but failed in respect of ammunition `Y'. Nevertheless, the plant was delivered in January 1988 by which time, on account of exchange rate variation, the total cost of the plant including customs duty worked out to Rs 135.82 lakhs. The plant was commissioned in January 1989, but in May 1989 faced a major breakdown which could be repaired only by April 1991.

It was noticed that as against the rated annual capacity of processing 1,20,000 shells of ammunition `X', on an average 24,493 shells were processed annually from April 1991 for three years. The hardening operation, however, could never be carried out in ammunition `Y', the production of which was discontinued from March 1992 on account of lack of order.

Ministry of Defence stated, in October 1995, that tapering of Army's requirement of ammunition `X' compelled the plant's restricted and sub-optimal utilisation. It added that work-load on the plant for 1995-96 was only 8,000 shells of ammunition `X'.

It is, thus, evident that delay in processing the indent and procurement of the plant resulted in escalation of its price by Rs 38.07 lakhs. Moreover, timely procurement could also have ensured better utilisation of the plant before the requirement of the ammunition `X' tapered off. Further the plant was intended for both ammunition `X' and `Y', but although it failed in the manufacturing stage to harden ammunition `Y', even then it was procured. As a result, the plant, costing Rs 135.82 lakhs, could be utilised to the extent of 20.41 per cent of its rated capacity only for three years from April 1991 in respect of ammunition `X', while the present capacity utilisation had been projected to be approximately 6.67 per cent.

50. Unproductive investment

Based on Ordnance Factory Board's (OFB) operational indent of June 1987, Director General of Supplies and Disposals (DGSD) placed an order on firm `A', in December 1989, for import of a machine at a total cost of Rs 1.84 crores to be delivered by June 1991. The machine was required to be utilised by Ordnance Factory, Khamaria (OFK), which received the machine in September 1991 but a payment of Rs 2.33 crores was made in June 1991 as the price increased on account of exchange rate variation. Attempts made during 1992 to complete trials were only partially successful, as the production level remained considerably below the rated capacity.

Ministry of Defence stated, in November 1995, that having completed trials of the machine in April 1995, commissioning had been completed.

Meanwhile, Army intimated in July 1992 that for next five years there was no requirement of the ammunition for which the machine was procured and the production was stopped from 1992 onwards.

Thus, the machine procured at a cost of Rs 2.33 crores and fully commissioned after 45 months from the date of receipt, had already become redundant before efforts to satisfactorily commission the machine could fructify.

51. Non-commissioning of imported testing device

Against a demand of Ordnance Factory, Khamaria (OFK), in April 1989, Ordnance Factory Board (OFB) imported at a total cost of Rs 16.23 lakhs, a fuze tightness testing device which was received by OFK in various consignments between August 1990 and October 1991. The device could not, however, be commissioned as of August 1995, as OFK did not possess the requisite technical know-how. The device was, therefore, lying unutilised at OFK since October 1991.

Meanwhile, the tightness testing of the fuzes was being conducted by OFK following the existing manual testing system. In justification of the import of the device, the OFK intimated, in January 1994, that it was procured for testing complete assembled fuzes which was not possible in the manual testing system. OFB stated, in September 1995, that efforts were being made to commission the device. No target date was, however, indicated by OFB.

Thus, import of the device without ensuring that it could be commissioned and utilised, resulted in unnecessary blockage of Rs 16.23 lakhs.

The matter was referred to Ministry of Defence in may 1995; their reply was awaited as of November 1995.

52. Non-utilisation of a special purpose machine

Mention was made in paragraph 35.6.5.1 of Report No.8 of 1993 of the Comptroller and Auditor General of India, Union Government - Defence Services (Army and Ordnance Factories) for the year ended 31 March 1992 about the delay in procurement of Flexible Manufacturing System (FMS) which led to import of finished materials costing over Rs 35 crores. Ministry of Defence (Ministry), in their Action Taken Note, stated in November 1993, that complete knocked downs and components were imported to maintain production and the same would be stopped on commissioning of FMS in mid 1994.

Further examination of the case revealed that a special purpose machine (SPM) procured at a cost of Rs 34.53 lakhs in September 1988 could be commissioned only in August 1992 after certain modifications but the utilisation of SPM was dependent on certain machined components to be obtained from the FMS. As the FMS received between January and September 1994 could not be commissioned as of August 1995, 1275 sets of machined components valued at Rs 7.70 crores were imported between December 1988 and October 1991 in the interest of continuity of production of engines to meet the requirement of the Army. It was stated by the user factory in November 1994 that the SPM could be gainfully utilised as soon as the FMS was commissioned.

Although, the Ministry stated, in November 1993, in their Action Taken Note that the FMS would be commissioned in April 1994, the same had not yet (November 1995) been made operational as a result of which the SPM was being utilised by resorting to import of machined components.

The matter was referred to the Ministry in May 1995; their reply was awaited as of November 1995.

53. Non-utilisation of an imported machine

Ordnance Factory Board (OFB) placed an order, in November 1989, on a foreign firm for import of two gear hobbing machines required for an Armoured Vehicle Project at Machine Tool Prototype Factory, Ambernath at a total cost of Rs 1.45 crores. The machines were received in August 1991.

One of the machines was commissioned and put into operation in June 1992. The second machine could not be commissioned as its control system was received in damaged condition. A Fact Finding Board constituted in February 1993, observed in May 1993 that the consignment was lying open at Embarkation Headquarters, Bombay, without outward protection. The machine was repaired and commissioned by the firm in March 1995 after incurring an expenditure of Rs 6 lakhs on to and fro air freight and other charges.

Before receipt of the machines in August 1991, the installed capacity of the project was reduced from 500 to 200 sets per annum in June 1990. As a result, the second machine became redundant.

OFB stated, in May 1995, that the machine which was a special purpose one, would be utilised for general purposes and also for getting other gears manufactured on it. This contention is not tenable as the machine was specially imported for a specific project.

Thus, a special purpose machine imported at a cost of Rs 72.74 lakhs in August 1991 could be installed only in March 1995 after incurring an extra expenditure of Rs 6 lakhs when there was no longer any specific requirement for the machine.

The matter was referred to Ministry of Defence in June 1995; their reply was awaited as of November 1995.

Inspection

54. Rejection of empty shots

Ordnance Factory, Kanpur (OFC) supplied 52,000 empty shots of an ammunition, duly passed in inspection, to Ordnance Factory, Khamaria (OFK) between 1984-85 and 1986-87. Out of the above mentioned number, 5,415 shots valuing Rs 1.79 crores were rejected by OFK during assembly due to various defects like low tracer cavity, high fibre band, loose sabot etc. and back-loaded to OFC between December 1985 and March 1987.

Instead of investigating the causes of defective manufacture of shots and their acceptance in inspection besides exploring the possibility of retrieval of high value components/material from them for re-utilisation, OFC sentenced all the rejected shots, in February 1994, as scrap valued at Rs 17.94 lakhs.

Ministry of Defence stated in September 1995, that a Technical Committee had been constituted in May 1995 to investigate the reasons for rejection of shots as well as sentencing the same as scrap and to explore the technical feasibility of dismantling the shots and retrieving the materials used.

Thus, defective manufacture by OFC led to rejection of 5,415 shots, entailing a loss of Rs 1.61 crores.

Other cases

55. Loss of stores in stock

A periodical review of stock conducted in September 1990 by Ordnance Factory

Kanpur (OFC) disclosed a shortage of 14,991 bases of a component required for manufacture of ammunition `X'. The value of the stock found short was Rs 29.88 lakhs.

As per existing rules all cases of losses are to be investigated promptly. Though the shortage was detected in September 1990, a Court of Inquiry (CI) was convened in August 1994 by the General Manager to enquire into the circumstances leading to the shortage but CI had not made any progress as of November 1995.

Ministry of Defence stated, in October 1995, that requisite disciplinary action was initiated in December 1994 to avoid further delay and the concerned employees had been chargesheeted. The final outcome was awaited.

Thus, delay in initiating and completing investigation as envisaged in the rules resulted in non-recovery and/or non-regularisation of loss of stores worth Rs 29.88 lakhs even after a lapse of five years of its detection.

56. Excess consumption of an ammunition in proof

During the period 1991 to 1993 Ammunition Factory, Kirkee (AFK) issued rounds of an ammunition `X' for proof, which exceeded the stipulated military specification by 59.6 per cent on an average. Total number of rounds issued in excess of requirement worked out to 9,32,480 valued at Rs 69.44 lakhs. On being pointed out by Audit, AFK stated, in June 1994, that in order to restrict testing expenditure they had since reduced issue of rounds for proof by 38.4 per cent below the stipulated quantity.

Ordnance Factory Board (OFB), however, stated, in August 1994 and reiterated in August 1995, that the increased quantity for proof was needed as the lots exhibited deficiencies. OFB's contention to justify excess issue of rounds for proof is inconsistent with the action of AFK which reduced the issue by 38.4 per cent, particularly in view of the fact that there had been no change in the technology.

Thus, excess issue of rounds for proof over the stipulated numbers as per military specification had resulted in an extra expenditure of Rs 69.44 lakhs.

The matter was referred to Ministry of Defence in May 1995; their reply was awaited as of November 1995.

57. Shortage of pig iron

The discrepancy in the balance of pig iron available in Ordnance Factory, Kanpur

(OFC) and that shown in the bin card was investigated by a Board of Enquiry (Board) in September 1988, which found a ground balance of 3,500 tonne valued at Rs 78.40 lakhs. This quantity was accounted for in the bin card in October 1988 and also verified by Stock Verifier of Director General, Ordnance Factories (DGOF) in July 1989. Thereafter, pig iron was issued to production section at OFC and other factories leaving a balance of 2,753.945 tonne which was verified by DGOF stock verifier in March 1992.

However, on the advice of Deputy General Manager (Stores), another Board was constituted in January 1992 to determine the actual ground balance of pig iron and to submit its report within seven days. The Board submitted its report in May 1994 stating that the assessment done by the earlier Board in September 1988, was not realistic and hardly 20/30 tonne were physically available and no one was held responsible as there was no loss.

In the meantime 108.625 tonne of pig iron was issued by OFC and balance quantity of 2,645.32 tonne valued at Rs 59.26 lakhs was charged off from the bin card in March 1994 without sanction of competent authority as envisaged in Factory Accounting Rules.

Ministry of Defence stated, in November 1995, that the previous Board did not indicate the methodology adopted and record the reasons for not physically weighing the heavy ingots. It further stated that the remedial measures suggested by the present Board would be followed in future. It added that the matter was being again taken up with Ordnance Factory Board to pinpoint the reasons for such vast discrepancies.

Thus, 2,645.32 tonne of pig iron valued at Rs 59.26 lakhs found short was charged off without the sanction of the competent authority and holding any one responsible for it.

58. Avoidable payment of energy tax

Article 287 of the Constitution stipulates that no law of a State shall impose or authorise the imposition of a tax on the consumption or sale of electricity which is consumed by Government of India or sold to Government of India for consumption by that Government. Accordingly, Tamil Nadu Electricity (Taxation on Consumption) Act 1962, as amended from time to time, also exempted levying of additional tax on energy consumed by Government of India. Despite this, the Superintending Engineer (SE), Trichy Electricity Distribution circle levied Rs 52.56 lakhs as energy tax on two ordnance factories for energy consumed by them during September 1991 to September 1994. The amount was paid by the two factories during September 1991 to October 1994.

The factory management had taken up the matter in October 1994, with Tamil Nadu Electricity Board (TNEB) for adjustment of entire amount paid as energy tax against future bills. Levying of energy tax by TNEB had been stopped from October 1994 onwards. Ordnance Factory Board (OFB) stated in May 1995 that the issue was also discussed in March 1995 with the SE/TNEB for refund/adjustment of the excess amount paid. Ministry of Defence stated, in October 1995, that the refund was yet to be obtained.

59. Avoidable construction of a swimming pool

Ministry of Defence (Ministry) sanctioned civil works in August 1986, which inter alia included construction of a swimming pool for 30 married and 20 single foreign technicians working in Ordnance Factory Project, Medak at a cost of Rs 25.89 lakhs for completion by August 1989.

The work awarded in January 1992 at a cost of Rs 32.33 lakhs was completed in December 1993 at a total cost of Rs 40.11 lakhs.

In the meantime, the strength of foreign technicians depleted and only three technicians were in the factory in January 1992 when the work was awarded. From May 1993, no foreign technician was in the factory.

Ordnance Factory Board stated, in October 1995, that after departure of foreign technicians the swimming pool was being utilised by employees of the factory and their families.

Thus, incurring of expenditure of Rs 40.11 lakhs towards construction of swimming pool failed to achieve its objectives and was avoidable.

The matter was referred to the Ministry in August 1995; their reply was awaited as of November 1995.

Research and Development Organisation

60. Loss due to reduced payment of insurance claim

Interim Test Range (ITR) concluded a contract with a foreign firm `A' in October 1987 for supply of a surveillance radar at a cost of Rs 2.36 crores including the cost of containers. At the time of despatch in April 1988, the consignment was insured with firm `B' for the entire amount of Rs 2.36 crores against all risks. The consignment was received by ITR in June 1988, when firm `B' was informed about its arrival and was asked to arrange a joint survey. The survey was conducted in August 1988 by firm `A' and the consignee but without any representative of firm `B' being present. Extensive damage to certain spares of the equipment was noticed in the process and the replacement cost of damaged items was assessed by firm `A' at Rs 18.25 lakhs. Moreover, ITR spent an additional amount of Rs 5 lakhs for repair of the container which was also damaged in transit.

ITR accordingly lodged a claim for Rs 23.25 lakhs in June 1989, but firm `B', after protracted correspondence, admitted only Rs 6.94 lakhs, of the aforesaid claim in December 1994. ITR accepted the amount under protest in January 1995. Ministry of Defence stated, in August 1995, that ITR lodged the insurance claim based on damaged components.

Thus, failure of ITR to arrange a joint survey along with the representative of firm `B' resulted in rejection of Rs 16.31 lakhs of their insurance claim.

61. Undue benefit given to a firm

Interim Test Range, Balasore (ITR) issued a limited tender enquiry for procurement of communication data cables of different sizes required urgently for the range. Technical Evaluation and Negotiating Committee (NC) examined the tenders during October - November 1987 and recommended inclusion of suitable provisions to levy of liquidated damages at the rate of 5 per cent per 10 days of the delay for undelivered items subject to a maximum of 20 per cent. The NC also recommended that the order be placed on firm `A' whose revised rates of November 1987 were the lowest. The rates quoted by the firm were fixed and it had not asked for price variation in the revised offer. The terms and conditions stipulated by NC were accepted by the firm in November 1987.

ITR concluded a contract in December 1987 with firm `A' for supply of cables at a cost of Rs 109.65 lakhs by mid March 1988. However, while concluding the contract, ITR diluted the terms specified by NC and provided for reduced liquidated damage at half per cent per week of the total value of supplies in arrears subject to a ceiling of 10 per cent of the value of the contract in place of 5 per cent per 10 days subject to maximum of 20 per cent. It also suo moto included a clause for price variation though it was not demanded by the firm in its revised offer. Extension of delivery period was granted from time to time and the last extension was given upto November 1988 without invoking the provision of liquidated damage. Supply was completed on 02 November 1988.

It was noticed that the delay ranged between 33 days to 213 days for which liquidated damages as per NCs recommendations would amount to Rs 21.33 lakhs. But a sum of Rs 10.96 lakhs being 10 per cent of the value of contract was recovered from firm `A' as per the contract. Besides Rs 7.52 lakhs was paid to the firm for price variation.

Ministry of Defence stated, in November 1995, that less recovery of liquidated damage had since been regularised and extra expenditure towards price variation was yet to be regularised. But no reasons had been assigned as to why the NCs recommendations were not acted upon.

Thus, deviation from the recommendation of NC and irregular provision of price variation clause resulted in an unnecessary avoidable burden of Rs 17.89 lakhs on the Defence budget.

62. Follow up on Audit Reports

Lok Sabha Secretariat issued instructions (April 1982) to all the Ministries requesting them to furnish notes indicating remedial/corrective action taken by them to the Ministry of Finance (Department of Expenditure) on the various paragraphs, contained in the Audit Reports, as soon as they were laid on the Table of the House, duly vetted by Audit.

A review of the position regarding receipt of Action Taken Notes on the paragraphs included in the Audit Reports upto the period ending 31 March 1994 revealed that the Ministry has not submitted the remedial/corrective Action Taken Notes on the following 79 paragraphs (Details in Annexure II) in spite of repeated instructions as of October 1995.

Audit Report No. and year	No. of paragraphs on which ATNs were awaited	Remarks
12 of 1990	10	Final ATNs in respect of 8 paragraphs awaited
8 of 1991	12	Final ATNs in respect of 11 paragraphs awaited
8 of 1992	5	Final ATNs awaited

8 of 1993	2	Final ATNs awaited
8 of 1994	22	Final ATN in respect of one paragraph awaited
8 of 1995	28	Final ATNs in respect of 3 paragraphs awaited

Out of 79 paragraphs, ATNs in respect of 49 paragraphs had not been received even for the first time. In respect of the remaining 30 paragraphs, final ATNs after taking into account the vetting comments of Audit, were awaited.

The matter was referred to the Ministry in October 1995; there reply was awaited as of November 1995.

CHAPTER V

WORKS AND MILITARY ENGINEER SERVICES

63. Nugatory expenditure due to lack of planning

The Army Zonal Planning Board in their deliberations in November 1981 had ear-marked a total area of 460 acres of land at Masimpur (Silchar) for accommodation of a Mountain Division. Of this 180 acres was identified as low-lying/flood prone, the level of which was required to be raised by two metres by earth filling.

In August 1986, the Ministry of Defence (Ministry) accorded four Administrative Approvals for a total amount of Rs 1176.72 lakhs for construction of married accommodation. The said sanctioned amounts included a provision of Rs 54.99 lakhs for site clearance.

An expenditure of Rs 119.17 lakhs on site clearance, construction of sheds and fencing was incurred between March 1989 to November 1990. However, on account of non-implementation of the recommendations of the Zonal Planning Board to raise the level of the flood prone area, the Chief Engineer (Shillong Zone) informed the Eastern Command Headquarters in June 1992 that the married accommodation project had to be foreclosed, although the same authority in December 1991 decided to take up foreclosure of this project on the ground that there was no possibility of further troops occupying accommodation at Masimpur. While the approval to the foreclosure of the project was awaited (November 1995), an infructuous expenditure of Rs 119.17 lakhs had already been incurred.

The Ministry accepted the facts in November 1995.

64. Avoidable payment of electricity charges

Ministry of Defence (Ministry) in their Action Taken Note on paragraph 78 of the Report No.8 of 1991 of Comptroller and Auditor General of India, Union Government - Defence Services (Army and Ordnance Factories) for the year ended 31 March 1990 regarding excess payment of electricity charges to the State Electricity Boards (SEBs) for exceeding the contracted demand, failure to achieve the power factor and consumption of less than 75 per cent of the contracted demand stated that suitable instructions had already been issued by Engineer-in-Chief in February 1991 to all concerned to avoid excess payment on this account.

A test check of 12 Military Engineer Services Divisions carried out subsequently, however, revealed that despite issue of above instructions, the irregularities still persisted and a total amount of Rs 1.00 crore was paid to SEBs as excess charges/penalty between February 1991 and June 1995.

The Ministry in December 1995 accepted the facts in respect of ten divisions involving penal charges of Rs 48.58 lakhs while their reply in respect of the two divisions relating to excess payment of Rs 51.49 lakhs was awaited as of December 1995.

65. Loss of stores due to fraud and neglect

In April 1989, a Garrison Engineer (Stores) reported a shortage of 344.5 MT of cement, being the difference between the ground and ledger balance. A physical verification carried out by a Board of Officers in May 1989 revealed a total shortage of 562.8MT of cement valuing Rs 9.10 lakhs. A Staff Court of Inquiry (CI) held in November 1989 to investigate the case found that the loss was due to fraud, neglect, partial implementation of accounting procedure, improper maintenance of stock accounts and physical verification of stock only once between April 1987 and April 1989, although such verification was to be conducted annually.

In January 1991, another departmental CI ordered by the Chief Engineer to assess the shortage of other stores from 1987 onwards revealed additional shortage of steel, pipes, bitumen etc. valued at Rs 72.96 lakhs due to fraud and neglect.

Ministry of Defence admitted in November 1993 that the loss was due to fraud and neglect besides inadequate security of storeyard. Engineer-in-Chief's Branch stated in August 1994 that disciplinary action against the persons held responsible had been initiated. However, regularisation of the loss of stores valuing Rs 82.06 lakhs due to fraud and neglect, detected between April 1989 and January 1991, is awaited.

66. Irregular sanctioning of work and its execution

Paragraph 3.10 of the Scales of Accommodation (SA) lays down that accommodation for children's school may be provided at stations where such facilities are not available. At a station A where four Kendriya Vidyalayas (KVs) and one Army Public School existed, the Air Headquarters (HQ) sanctioned, in December 1990, construction of an Air Force School (School) at an estimated cost of Rs 104.41 lakhs, contravening the aforesaid provisions.

A similar case was reported in paragraph 5.7.1 of Report No.9 of 1993 of the Comptroller and Auditor General of India, Union Government, Defence Services (Air Force and Navy) for the year ended 31 March 1992, pursuant to which Ministry of Defence (Ministry) in the Action Taken Note stated, in April 1994, that the lower formations had been directed to initiate regularisation of such schools. The Ministry had also issued instructions in April 1993 to the effect that new schools should not be opened at stations where educational facilities already existed and that Government sanction would be required for opening a school at a station where the nearest school was located at a considerable distance from the Cantonment area.

Although, the Air HQ sanctioned construction of the School in December 1990 at Station `A' having adequate educational facilities for children, the contract for construction of the school for an amount of Rs 78.02 lakhs was concluded only in November 1994 which violated the aforesaid directions of the Ministry issued in April 1993. The construction of the school is in progress and an expenditure of Rs 85.37 lakhs has been incurred till September 1995.

Ministry stated in December 1995 that provision of children school at a Military station should be at the discretion of the General Officer Commanding Area or the equivalent authority and hence the sanction of school was as per Government provision.

The contention of the Ministry was not consistent with its own directions issued in April 1993, which stipulated that it was generally the duty of the State Government to provide educational facilities to the children of the service officers and if the nearest school was at too far a distance from the Cantonment area necessitating opening of such schools, Government sanction would be necessary.

Hence the sanction accorded by Air HQ for the construction of a School was in contravention of the Ministry's letter of April 1993 and therefore required regularisation.

67. Savings at the instance of Audit

Four works indicated overleaf, sanctioned at an estimated cost of Rs 53.47 lakhs during 1990-94, were cancelled by respective sanctioning authorities on being pointed out by Audit that these were either unauthorised or in excess of authorisation.

Sl. No.	Name of work	Sanctioned by	Sanctioned in	Amount (Rs. in lakhs)	Pointed out by Audit in	Cancelled in
1.	Provision of fly proofing to temporary/ married accommodation for Junior Commissio-ned officers and other Ranks at Gurdaspur	Head-quarters (HQ) Corps`A'	February 1994	8.21	September 1994	October 1994
2.	Provision of four sta-tic water tanks at Garrison Engineer (Engineer Park) Bhatinda	HQ Bhatinda Sub Area	May 1990	8.75	June 1992	April 1994
3.	Provision of an addi-tional filteration plant and other works for a swimming pool at Patiala	HQ Corps`B'	October 1991	30.53	May 1992	May 1992
4.	Construction of one additional storage shed at station staff officer railway siding for Supply Depot, Ambala Cantonment	HQ Corps`B'	November 1993	5.98	July 1994	July 1994
				53.47		

68. Delay in construction of married accommodation for sailors

Between March 1984 and March 1985, 17 sanctions were accorded by Naval Headquarters (HQ) for construction of 510 married accommodation for sailors at Cochin at a total cost of Rs 12.74 crores, none of which included provision for external services. In April 1986, the Ministry of Defence (Ministry) sanctioned 240 more married accommodation for sailors at the same station at a cost of Rs 8.91 crores, revised to Rs 13.67 crores in December 1994, which included a provision of Rs 3.67 crores for external services for the entire complex of 750 quarters.

One contract for pile foundation work for 510 quarters was concluded in June 1986 but the foundation work for 270 quarters could be completed by December 1988 and that for 240 quarters by February 1989. Another contract for 240 quarters was concluded in July 1987 but the work was completed by March 1989. Due to delayed completion of the aforesaid pile foundation work, tenders for the construction of superstructures could not be invited before the above mentioned dates. Separate tenders for 510 and 240 quarters were received and evaluated between December 1988 and March 1989. As the lowest tendered amounts were found to be exceeding the sanctions, these were referred to Army HQ for obtaining financial concurrence after which the contracts for the construction of the superstructures were concluded in February/October 1990 and the construction of 510 quarters was completed by June 1993 and 240 quarters by May 1994.

As the contracts for external services were concluded separately and at a later date (during 1994-95), these services could not be provided to the completed 750 quarters. As a result, 120 quarters could be handed over to the users by October 1993, 150 by November 1994, 120 by January 1995 and 150 by June 1995, while the remaining 210 quarters are yet to be handed over (November 1995).

Although the project of construction of 750 married accommodation for the sailors at Cochin was covered by various sanctions between 1984 and 1986, the benefit to the service personnel (the sailors) accrued more than eight years later mainly on account of two reasons:

(i) Cost escalation due to delayed award of contract for the super-structure requiring fresh financial concurrence.

(ii) Non-synchronisation of external services works.

This delay has also resulted in avoidable payment of Rs 44.88 lakhs of compensation in lieu of quarters to sailors between June 1993 and July 1995.

The matter was referred to the Ministry in August 1995, their reply was awaited as of December 1995.

69. Irregular expenditure on a Public School

Irregular running of an Army Public School (APS) in Military buildings at Dagshai Cantonment since May 1985 was commented in paragraph 76 of Report No.8 of 1994 of the Comptroller and Auditor General of India, Union Government - Defence Services (Army and Ordnance Factories) - Action Taken Note on which is awaited (December 1995).

The above irregularity has not yet ceased and an expenditure of Rs 39.46 lakhs from 1992-93 to 1994-95 on account of maintenance and service charges of these buildings has been incurred from the Defence Budget and no action has so far been taken by the Military Engineer Services to recover the said amount from the school authorities. Moreover, thirty eight quarters meant for service personnel were also being occupied by the staff of the APS since April 1986. No licence fee has so far been recovered from the occupants, as the quantum of such fees are yet to be fixed.

The case was referred to the Ministry of Defence in August 1995, their reply was awaited as of December 1995.

70. Supply of sub-standard high strength cement

Against an order placed by Director General of Supplies and Disposals (DGSD) in January 1993 on a firm for supply of 1450 MT of high strength cement, 1199.15 MT valuing Rs 24.01 lakhs was received by a Garrison Engineer (GE) at Chandigarh in the same month. Tests conducted at four laboratories between April 1993 and June 1993, revealed that the cement was ordinary portland cement (OPC) instead of high strength cement.

After eighteen months from the date of receipt of the cement, GE Chandigarh requested DGSD in August 1994 to lift the sub-standard material and simultaneously asked Controller of Accounts, Department of Supply, to withhold Rs 24.01 lakhs from amounts payable to the firm. No action for removal/replacement of the substandard cement had been taken till October 1995. There was also no confirmation about the recovery of Rs24.01 lakhs from the firm.

Against the indent placed by Chief Engineer (AF), Jallandhar in November 1992, DGSD placed another order on the same firm in September 1993 for supply of 600 MT of high strength cement at a cost of Rs 13.06 lakhs to GE Ambala, inspite of being informed in May 1993 that its earlier supply of 1199.15 MT was substandard. The cement received in November/December 1993 against this order also did not conform to specifications.

Possibility for utilisation of the entire stock of 1799.15 MT of substandard high strength cement as OPC was explored in November 1994 by a Board of Officers, which recommended that only 600 MT of high strength cement received by GE, Ambala could still be used as OPC only. As no action was taken to take advantage of this finding till August 1995, it was found that the entire lot has since become unusable. Thus, an expenditure of Rs 37.07 lakhs incurred on the procurement of 1799.15 MT of high strength cement would become infructuous unless action to recover the amount from the firm is successfully taken.

The matter was referred to Ministry of Defence in July 1995; their reply was awaited as of December 1995.

71. Construction of substandard roads

A contract for Rs 119.04 lakhs concluded in July 1987 for construction of married accommodation including roads at Kota was completed in November 1990. In May 1991, Station Headquarters (HQ), Kota informed Garrison Engineer and Chief Engineer regarding badly deteriorating condition of the roads which was completed at a cost of Rs17.77 lakhs only a few months back.

A Board of Officers met in September 1993 and concluded that the road work under the said contract had not been carried out as per contracted specifications and recommended suitable action against the concerned executive staff for slack supervision besides deterrent punitive action against the defaulting contractor and suggested repairs/ rectification to the roads at an estimated cost of Rs 34.65 lakhs at the risk and cost of the contractor. A Staff Court of Inquiry ordered by Station HQ Kota in February 1994 for taking action against the supervising staff and the contractor was yet to be completed (November 1995).

As the repair of the roads at the risk and cost of the contractor has not yet (November 1995) been taken up and the investigation is pending, the possibility of effecting such recovery becomes highly doubtful. Meanwhile the users of the married accommodation at Kota continued to be inconvenienced by the unrepaired road remaining in a bad condition.

The Ministry of Defence accepted the facts in November 1995.

72. Irregular and fraudulent stores transactions resulting in loss

Test Audit of Store Accounts of a Garrison Engineer (GE) conducted in October 1992 revealed tampering of stores ledger figures, issue of stores without indent and other serious irregularities on the basis of which a shortage valuing Rs 8.36 lakhs was reported to the concerned authorities.

Pursuant to the Audit findings, Internal Audit carried out in December 1992 a special review of the stores transactions for the last five years and reported a total shortage of Rs 24.58 lakhs both in divisional and in project stores. Simultaneously, three Boards of Officers (Boards) carried out a physical check of the ground balances and reported a total shortage of Rs 15.91 lakhs of steel and cement.

A Court of Inquiry (CI) was instituted in January 1993 to investigate the case and fix responsibility for the shortages. After reconciling the discrepancies, the GE reported in January 1994 to the CI that the total shortage of stores was Rs 33.18 lakhs. The CI has, however, not finalised their report till November 1995.

Thus, perpetration of irregular accounting and tampering of records fraudulently had resulted in a loss of Rs 33.18 lakhs, the responsibility for which is yet to be fixed even after a lapse of three years of its detection.

Ministry of Defence accepted the facts in November 1995.

73. Over payments to a firm

In August 1988, a Zonal Chief Engineer (CE) concluded a lump sum contract for Rs 290.07 lakhs with a firm for construction of other than married accommodation at Patiala (Group II). As the work could not be completed even within the time extended upto December 1992, the Chief Engineer cancelled the contract in January 1993 when the progress of work was 62 per cent and the payment made to the firm was Rs 148.16 lakhs.

A Board of Officers (Board) took stock of inventory of finished/unfinished items of work and the left over material at the site. A high power technical board further identified substandard items of work and based on its findings, an amount of Rs 30.09 lakhs was assessed as recoverable from the firm.

A risk and cost contract was concluded at a cost of Rs 208.26 lakhs in April 1993 and the construction was completed including rectification of defects by March 1995. Final calculations show that an amount of Rs 99.68 lakhs was recoverable from the defaulting contractor for the risk and cost construction and thus the total amount recoverable worked out to Rs 129.77 lakhs. The said amount has not yet been recovered from the contractor (November 1995). No responsibility has also been fixed for supervision failure to check substandard work and overpayment of Rs 30.09 lakhs to the contractor prior to termination of his contract.

Ministry of Defence accepted the facts in November 1995.

74. Avoidable expenditure due to excess provision of single accommodation

Against the authorisation of accommodation for three single officers for two units located at a station, the station was already having accommodation for 12 single officers. Inspite of such surplus, Headquarters (HQ) Southern Air Command in July 1994 accorded sanction for construction of permanent accommodation for six more single officers at a cost of Rs 18.62 lakhs as a `special work', which was regularised by Air HQ in May 1995. This was contrary to the existing rules according to which special works leading to change of scales should not be approved. As the execution of work relating to above mentioned six single officers accommodation was yet to commence (May 1995), an expenditure of Rs 18.62 lakhs can be avoided if the `special work' is cancelled.

The matter was referred to Ministry of Defence in September 1995; their reply was awaited as of December 1995.

75. Unauthorised construction of squash courts

As per provisions of paragraph 8.7.7 read with table No.8 - VII of Scales of Accommodation, a maximum of two squash courts at a station can be provided, irrespective of the number of officers/troops at that station. In March 1987, a Board of Officers recommended demolition of two of the three existing squash courts at Ahmednagar and construction of a new one. Although, the recommended demolitions had not been carried out till October 1995, Headquarters Pune Sub-Area sanctioned construction of three new Squash Courts between July and October 1987 at a total cost of Rs 13.86 lakhs on unit basis, contravening the aforesaid provisions which restrict the permissible numbers of squash courts on a station basis. In addition, the Ministry of Defence (Ministry) in March 1992, sanctioned construction of other than married accommodation which included provision of another squash court at Ahmednagar. This court was constructed at a cost of Rs4.86 lakhs. An amount of Rs 17.87 lakhs had thus been spent for construction of these four new squash courts, as a result of which Ahmednagar station has a total number of seven squash courts, three old and four new, against the authorisation of only two such courts at that station.

The matter was referred to the Ministry in August 1995; their reply was awaited as of December 1995.

CHAPTER VI

RESEARCH AND DEVELOPMENT ORGANISATION

76. Infructuous expenditure on design and development of half track multirole vehicle

Based on the projected requirement of the Army in 1981, Ministry of Defence (Ministry) sanctioned a project in August 1983 for design and development of Half Track Multirole Vehicle (HTMV) by Vehicle Research and Development Establishment (VRDE), a unit of Defence Research and Development Organisation (DRDO) at a cost of Rs 51.41 lakhs.

VRDE developed two prototypes which were trial evaluated in 1986 during which serious deficiencies unacceptable to the user came to notice. In a presentation of the project in July 1987, the Chief of the Army Staff, while emphasising the firm requirement for HTMVs, desired improvement in the design with higher engine power, better ground clearance aluminium rubberized tracks and cost effective performance. As these were considered to be major changes in General Staff Qualitative Requirement, the Government sanctioned another project (in October 1988 for Rs 141.92 lakhs) for proving and finalising the design of HTMV leading to its bulk production. The initial project was therefore, terminated after incurring an expenditure of Rs 39.44 lakhs.

While the work of modifications and finalisation of the design of HTMV was in progress, the Army authorities indicated in March 1989 their preference for Kolos Tatra vehicles as being more cost effective and user friendly. Although DRDO persisted in their efforts to increase the engine power and overcome the shortcomings of HTMV the project was plagued by repeated engine failures and breakdown, which failed to satisfy the user. The Army finally lost interest in HTMV, as a comparative evaluation of Tata 4 tons and HTMV showed in July 1992 that the former was more cost effective.

The Ministry stated in November 1995 that production cost of HTMV was estimated to be Rs 10.9 lakhs and cost of a Tatra vehicle was Rs 40 lakhs, for which it could not be called a cost effective solution. This contention of Ministry was not tenable, as, in July 1992, while carrying out a comparative evaluation, the cost of HTMV was estimated to be between Rs 12 to Rs 15 lakhs while the estimated cost of Tatra vehicles was approximately Rs 5 lakhs.

An expenditure of Rs 71.94 lakhs, in addition to the initial expenditure of

Rs39.44 lakhs was incurred on the second project till April 1993. DRDO decided in January 1994 to terminate their efforts to develop the HTMV further. Had the project been abandoned in March 1989 when the user indicated not only their dis-satisfaction with the prototype HTMV but also showed a preference for a more cost effective alternative, the expenditure of Rs 71.94 lakhs incurred on the latter project could have been saved.

CHAPTER VII

BORDER ROADS ORGANISATION

77. Blockage of funds and delay in implementation of a project

Construction of Indo-Bangladesh Border Road in the Tripura Sector was entrusted to Border Road Organisation (BRO) who concluded two Memorandum of Terms (MOTs) with Tripura Small Industry Corporation (TSIC) in March 1993 for supply of brick and brick products valued at Rs 19.27 lakhs. Even before the conclusion of the MOTs, BRO paid an interest free advance of Rs 40 lakhs to TSIC in November 1992 to enable them to set up brick kilns for effecting the desired supply. The BRO stated in September 1995 that the MOTs with TSIC were concluded "to procure materials at cheaper rates from a reliable source".

The TSIC supplied bricks worth Rs 4.87 lakhs during July 1994 and till date has neither been able to supply the balance materials against the order, nor has refunded the outstanding advance of Rs 35.13 lakhs. Since the efforts of BRO to elicit any positive response from TSIC had repeatedly failed, the matter was taken up by the Ministry of Home Affairs with Chief Secretary, Government of Tripura in November 1994 and May 1995, emphasising that the failure of TSIC to supply the required materials had caused considerable delay in implementation of an Important Central Scheme.

Thus, inspite of advancing Rs 40 lakhs in November 1992, the BRO failed to derive benefit from the reliable source at cheaper rates resulting not only in blockage of funds but also in undesirable delay in implementation of Indo-Bangladesh Border Road project in the Tripura Sector.

Furthermore, an unintended benefit to the extent of Rs 26.34 lakhs accrued to TSIC from the use of balance amount of interest free advance for three years from November 1992 (interest rate assumed to be 20.5 per cent for unsecured loans).

The matter was referred to Ministry of Surface Transport in June 1995 and facts have been accepted by them.

B Bhattacharya

(B. BHATTACHARYA)
Additional Deputy Comptroller and
Auditor General

NEW DELHI
Dated the 20 FEB 1996

Countersigned

(C.G. SOMIAH)
Comptroller and Auditor General of India

NEW DELHI
Dated the 22 FEB 1996

Annexure I

(Referred to in Paragraph 20)

Sl. No.	Report No. and year	Para No.	Subject
1.	Audit Report Union Government (Defence Services) for the year 1985-86	34*	Loss due to delay in pointing out short/defective supply
2.		69*	Failure to recover charges for use of Defence siding
3.	No.2 of 1988	9*	Purchase of Combat dress from trade
4.		33*	Working of Military Farms
5.		41*	Loss in procurement of wax special
6.	No.2 of 1989	11	Purchase and licence production of 155 mm towed gun system and ammunition
7.		17*	Import of defective sight instruments
8.		18	Undue delay in rectification of defects in guns
9.		29*	Procurement of substandard oars
10.		77*	Delay in utilisation of buildings
11.		81*	Review on utilisation of equipment in Defence Research and Development Organisation
12.	No.12 of 1990	9	Contracts with Bofors for (a) purchase and licence production of 155 mm gun system and (b) counter trade

13.		10*	Induction and de-induction of a gun system
14.		15*	Repair facilities for a weapon system
15.		17*	Import of fire control system for tank
16.		19*	Import of ammunition of old vintage
17.		46*	Ration article - Dal
18.		98* Case I	Delay in according financial concurrence
19.		102* Case I	Installation of air-conditioning plants
20.		110*	Utilisation of huts
21.		113*	Payment of electricity duty/tax
22.	No.8 of 1991	1.7*	Non-verification of credits for stores
23.		2*	Procurement of crash fire tenders
24.		5*	Delay in modernisation of a tank
25.		10*	Procurement of stores in excess of requirement
26.		13*	Central Ordnance Depot, Agra
27.		15*	Extra expenditure due to wrong termination of a meat contract
28.		17*	Infructuous expenditure on procurement of dal chana
29.		45*	Duplication of research due to lack of co-ordination
30.		90*	Faulty construction of overhead tanks

31.		94*	Premature closure of a research project
32.	No.8 of 1992	2*	Loss of stores
33.		3	Outstanding claims/dues
34.		7*	Extra expenditure on the procurement of sheet ground light weight OG
35.		12	Procurement of computer
36.		18*	Supply of sub-standard timber soft wood
37.		20*	Procurement of sub-standard goods in an Ordnance Depot
38.		25*	Loss on acquisition of a private land
39.		28*	Avoidable payment of maintenance charges for Defence tracks not in use
40.		58	Procurement of stores in excess of requirement
41.		67*	Delay in construction of BPIs
42.		72*	Delay in construction of storage accommodation
43.		81*	Redundant payment of service charges to a Cantonment Board
44.		91*	Delay in investigation into untraceable/missing items of furniture
45.		93*	Non-recovery of rent for a Cinema Hall
46.	No.13 of 1992	Part I*	Recruitment of ORs
47.		Part II	Training of Other Ranks
48.	No.14 of 1992	Entire Report	Army Base Workshops

49.	No.8 of 1993	7	Extra expenditure due to delay in issue of allotment letters
50.		9*	Losses of stores
51.		10*	Losses awaiting regularisation
52.		11	Outstanding claims
53.		13*	Infructuous expenditure on development of radar
54.		15*	Non-utilisation of assets
55.		16	Procurement of rubber bushes
56.		19	Court of Inquiry proceedings
57.		20*	Loss due to manufacturing defects
58.		23*	Procurement of sub-standard goods
59.		25*	Holding of surplus target sleeves
60.		29*	Import of mountaineering equipment and sports items
61.		31*	Avoidable payment of detention charges
62.		33*	Additional expenditure due to rental of an exchange
63.		68*	Civil works for a Naval Air station
64.		69	Non-utilisation of assets created for a computer centre
65.		71* Case IV	Irregular provision of compound walls
66.		74 Case II	Provision of training sheds
67.		75*	Extra expenditure due to delay in according financial concurrence

68.		80*	Construction of an Officers' Institute/Non-gazetted Officers' Club
69.	No.8 of 1994	7	Outstanding claims
70.		8*	Losses awaiting regularisation
71.		10*	Establishment of a National War Museum
72.		11*	Non-utilisation of an imported equipment
73.		12*	Avoidable expenditure due to delay in issue of corrigendum
74.		13*	Import of defective image intensifier tubes
75.		14*	Remounts in the Army
76.		16*	Non-utilisation of degreasing plants
77.		17	Import of defective equipment
78.		18*	Non-commissioning of a plant
79.		19*	Nugatory expenditure due to non-utilisation of workshop equipment
80.		20*	Avoidable expenditure due to short closure of a supply order
81.		22*	Cost escalation due to abnormal delay in acquisition of land
82.		23	Avoidable payment of customs duty
83.		24	Procurement of a damaged machine
84.		63* Cases I to VI	Conclusion of contracts at extra cost due to delay in obtaining financial concurrence

85.	64*	Infructuous expenditure due to inadequacies in design and execution of works
86.	65*	Non-utilisation of assets due to improper plannning and their sub-standard execution
87.	66*	Unfruitful expenditure on swimming pool
88.	67*	Construction of married accommodation and its re-appropriation
89.	68*	Extra expenditure due to delay in finalisation of a water supply scheme
90.	70*	Non-utilisation of stores purchased without sanction
91.	71*	Avoidable payments made to CPWD
92.	72*	Procurement of an item at higher rate
93.	73	Extra expenditure due to failure in timely submission of revised estimates
94.	75*	Avoidable expenditure due to wrong selection of site
95.	76	Establishment of an Army Public School
96.	77*	Extra expenditure due to delay in execution of work
97.	78*	Short recovery of electricity charges
98.	79*	Acceptance of sub-standard furniture
99.	80*	Non-utilisation of assets due to defective construction

100.		82	Loss of revenue due to non-completion of works of external electrification and water supply
101.		84*	Blocking of funds due to poor planning
102.		85	Provision of defective gravent ventilation system
103.		87*	Installation of defective fire alarm system
104.		90*	Provision of shopping complex
105.	No.8 of 1995	7	Outstanding claims/dues
106.		8	Losses awaiting regularisation
107.		9*	Unadjusted amounts of security deposits lying with the courts
108.		11*	Loss of stores
109.		12	Working of the Department of Defence Supplies
110.		13*	Delay in repair of defective imported ammunition
111.		14*	Extra expenditure due to delay in repair of a damaged radar
112.		15*	Delay in adjustment of over payment
113.		16	Unauthorised payment of Daily Allowance to Service Officers
114.		17*	Import of radar
115.		18*	Loss on account of non-permissible wastage of wheat in grinding
116.		19*	Unfruitful expenditure on import of an equipment

117.	21	Non-retrieval of chassis from a firm
118.	22*	Recovery at the instance of Audit
119.	23*	Issue, repair and utilisation of `B' vehicles
120.	24*	Import of defective barrels
121.	25*	Non-utilisation of claymore mines
122.	26*	Abnormal delay in the repair of an imported equipment
123.	27*	Non-utilisation of an imported equipment
124.	28*	Under-utilisation of Central Maintenance Stations
125.	29	Manufacture of defective parachutes
126.	30	Non-utilisation of parachutes
127.	31*	Injudicious purchase of barrels
128.	33*	Avoidable procurement of skid boards
129.	34*	Avoidable extra expenditure on procurement of roof trough
130.	35*	Extra expenditure on acquisition of land
131.	36	Blocking of funds
132.	37*	Non-utilisation of a costly imported test equipment
133.	75*	Non-refund of energy charges paid in excess
134.	77	Extra expenditure due to delay in execution of contract

135.	78*	Avoidable payment of penal charges to an electricity board
136.	79*	Avoidable extra expenditure due to delay in construction
137.	80	Execution and payment for defective work
138.	81	Under-utilisation of assets
139.	82*	Non-utilisation of a bridge crane
140.	83*	Avoidable payment of load violation charges/penalty surcharges
141.	84*	Avoidable extra expenditure due to defective construction
142.	85*	Avoidable hiring of accommodation due to delay in completion of married accommodation
143.	86	Non-commissioning of automatic fire fighting system
144.	87	Collapse of an overhead water tank
145.	88*	Review on equipment, manpower and material management in six Research and Development Establishments

* Final ATN awaited.

ANNEXURE II

(referred to in paragraph 62)

Sl. No.	Report No. and Year	Para No.	Subject
1.	12 of 1990	51	Material Management in Ordnance and ordnance equipment factories
2.		58	Productionisation of aviation gun and its ammunition
3.		50*	General performance
4.		60*	Expansion of capacity without prospective need
5.		63*	Wasteful production of empty bodies
6.		66*	Production of field gun ammunition
7.		73*	Non-utilisation of clothing material
8.		75*	Purchase of aluminium rods
9.		89*	Supply of bogie type furnace
10.		92*	Abnormal rejection-Avadi factory
11.	8 of 1991	59	Violation of operative instructions
12.		25*	Working of grey iron foundry
13.		32*	Production action without formal indent
14.		36*	Rectification of cartridge cases
15.		49*	Unnecessary procurement of trucks
16.		51*	Purchase at inflated price

17.		53*	Purchase without buyer's option clause and consequent loss of rate advantage
18.		63*	Non-commissioning of a crane
19.		65*	Premature failure of acid storage tanks
20.		69*	Claim foregone due to lack of evidence
21.		70*	Over payment of customs duty
22.		72*	Loss of revenue
23.		35*	Production of defective Igniters
24.		48*	Rejection of forgings
25.		52*	Delay in inspection
26.		60*	Procurement of defective blasting machines
27.		94*	Development& production of Bridge layer tanks
28.	8 of 1993	52*	Procurement of containers for a phased out ammunition
29.		54*	Non-utilisation of stores due to non-procurement of a correct instrument
30.	8 of 1994	25	Performance of the Ordnance Factory Organisation
31.		26	Vehicle Factory Jabalpur
32.		27	Opto Electronic Project
33.		28	Interim Anti-Tank Ammunition Project
34.		29	Faulty production planning
35.		30	Short closure of an order for empty bodies of a bomb

36.		31	Short closure of an order
37.		32	Excess Manufacture of Steel Billets
38.		33	Unplanned reduction in production programme-blocking of funds
39.		36	Failure in inspection to locate design defects
40.		37	Rejection of a propellant
41.		38	Infructuous expenditure due to placement of orders without approval of an item
42.		39	Bulk production of an ammunition before its establishment
43.		40*	Rejection of ammunition assemblies
44.	8 of 1994	44	Supply of defective cotton fabric by a firm
45.		45	Non-recovery of risk purchase compensation from defaulting firm
46.		49	Procuremnt of a robotic welding station
47.		50	Infructuous expenditure on procurment of a defective testing machine
48.		53	Procuremnt of a defective hydraulic ingot stripper
49.		54	Acceptance of defective cone and funnel assemblies in inspection
50.		55	Procurement of defective fuze
51.		56	Inadequate testing parameters resulting in inappropriate procurement and blockage of fund

52.	8 of 1995	39	Performance of the Ordnance Factory Organisation
53.		41	Heavy Alloy Penetrator Factory, Trichy
54.		42	Ordnance Factory, Itarsi
55.		43	Loss due to transfer of production and rejection
56.		45*	Shortage of inter factory demands
57.		46*	Loss due to failure in productionisation of a rifle
58.		47	Blocking of capital due to short closure of orders
59.		48	Abnormal level of rejection of an ammunition
60.		50	Abnormal rejection during proof
61.		51	Excess consumption of materials
62.		52	Manufacture of defective blanks
63.		53	Abnormal rejections not investigated
64.		54	Loss in manufacture of a component
65.		56*	Imported stores lying rejected
66.		57	Delay in procurement leading to loss of productivity
67.		58	Uneconomical manufacture of a packing box
68.		59	Rejection of stores procured from sister factory due to long storage

69.		60	Uneconomical procurement of vehicle component from a sister factory
70.		61	Defective equipment lying without any use
71.		63	Abnormal delay in commissioning of furnaces
72.		64	Rejection due to inadequate inspection
73.		66	Loss of store due to fire
74.		68	Huge deficiency of empty grenades in stock
75.		70	Unintended benefit granted to a firm
76.		71	Payment towards fraudulent consignment
77.	.	72	Undue benefit granted to a firm
78.		73	Procurement of defective weather systems
79.		74	Loss due to non-realisation of insurance claim

*** Final ATN awaited**

ERRATA

Page No.	Reference	For	Read
2	Line 2 from bottom column fifth of table	6817.35	6817.34
5	Line 14 column 5	938.43	933.43
18	Line 13	(Paragraph 21.4.1.1 and 21.4.1.2	(Paragraph 21.4.1.1)
20	Line 11 from bottom	carrier	career
22	Line 1	44, 13 and 4 weeks	44, 4 and 13 weeks