Report of the Comptroller and Auditor General of India

for the year ended March 2001

Union Government (Defence Services)

Army and Ordnance Factories

No. 7 of 2002

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CHAPTER III – ARMY

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PREFATORY REMARKS

This Report for the year ended March 2001 has been prepared for submission to the President under Article 151 of the Constitution. It relates to matters arising from the Appropriation Accounts of the Defence Services for 2000-2001 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 and Border Roads Organisation.

The Report includes 62 Paragraphs and three Reviews on (i) Delegation of special financial powers to GOC-in-C to meet urgent and immediate requirements of counter insurgency operations and internal security duties (ii) Flexible Manufacturing System (iii) Working of Grey Iron Foundry Jabalpur

The cases mentioned in this Report are among those which came to notice in the course of audit during 2000-2001 and 2001-2002 as well as those which came to notice in earlier years but could not be included in the previous Reports.

OVERVIEW

Accounts of the Defence Services

The total budget provision for the Defence Services under all the five Grants for Army, Navy, Air Force, Ordnance Factories and Capital Outlay for the year 2000-01 was Rs 60,279.25 crore. As against this, the total expenditure aggregated to Rs 51481.63 crore leaving an unutilised balance of Rs 8797.62 crore. The unspent amounts exceeding Rs 100 crore occurred in the voted sections of Grant Nos. 18 (Army), 19 (Navy), 20 (Air Force) and 22 (Capital Outlay) and were Rs 2488.91 crore (8.42 *per cent*), Rs 355.24 crore (8.67 *per cent*), Rs 636.02 crore (7.83 *per cent*) and Rs 5534.13 crore (30.89 *per cent*) respectively. On the other hand, an excess expenditure of Rs 229.70 crore registered in the voted section of Grant No. 21(Ordnance Factories) over the approved provision requires regularization by the Parliament. The overall unspent amount of Rs 8797.62 crore in the aforesaid five Grants of the Defence Services, constituting 14.6 *per cent* of Budgetary allocation was the highest ever noticed.

(Chapter-I)

Delegation of special financial powers of Rs 10 crore to GOC-in-C to meet urgent and immediate requirements of counter insurgency operations and internal security duties

Review revealed that the delegated financial powers were not exercised within the parameters of delgation.

- Stores valuing Rs 18.13 crore not covered under the delegated special financial powers were purchased during 1996-97 to 2000-2001.

- Procurement of sub-standard stores valued Rs 3.12 crore had an adverse impact on the counter insurgency duties.

- There was non/improper utilization of stores worth Rs 60.99 lakh.

- Financial liabilities were carried forward from previous years in all the years. The excess over allocation during 1995-2000 ranged from Rs 0.21 crore to Rs 3.96 crore.

- There was constant surrender of funds ranging from Rs 3.70 lakh to Rs 76.02 lakh during the years 1995-96 to 2000-2001, which points towards lack of sound financial management.

- There was delay of 3 years in formulation of policy of accounting, stock-taking and conditioning of stores procured under the above delegated powers.

(Paragraph 18)

Premature downgradation of ammunition due to improper storage

Against available storage capacity of 12000 tonnes at Ammunition Depot Dappar, 35000 tonnes of ammunition was held in stock leading to improper and sub-standard storage. This resulted in declaring 5182 rounds of ammunition valued at Rs 1.16 crore issued to users, as unserviceable.

(Paragraph 26)

Avoidable expenditure on creating storage accommodation and helipad with allied facilities for helicopters

Lack of coordination between various wings of the Army led to avoidable construction of a Central Aviation Workshop at a cost of Rs 6.77 crore.

(Paragraph 15)

Non-utilisation of mines due to premature failure of cells

Mines imported at a cost of Rs 16.32 crore were rendered unusable due to improper storage of batteries.

(Paragraph 19)

Bouncing of Bank Guarantee furnished by Punjab Wireless Systems Ltd.

The Government accepted an invalid Bank Guarantee against advance payments which did not conform to the standard format. While the orders were cancelled due to failure of the supplier, the Bank Guarantees of Rs 8.27 crore could not be encashed.

(Paragraph 20)

Avoidable loss due to non-availing of concessional electricity tariff

BEST offered electric supply at concessional rates from July 1997 for high tension bulk consumers like MES for mixed residential and non-residential load provided they segregated their residential and non-residential load and met certain conditions. However, two Garrison Engineers failed to take timely action to avail the concession resulting in an avoidable expenditure of Rs 9.58 crore.

(Paragraph 29)

Inept handling of loss of store

A Divisional Ordnance Unit received 3700 steel buckets in place of 22035 Angola shirts dispatched from a Central Ordnance Depot in March 1996. No responsibility has been fixed for loss of Rs 82.85 lakh.

(Paragraph 27)

Overpayment of Rs 2.49 crore to Civil Hired Transport Contractors

Memorandum of Understanding (MOU) entered into between HQ NC and Civil transport contractors provided for the rates per tonne of load conveyed per kilometer between Pathankot and Leh of stores for Advance Winter Stocking. A Sub Area HQ, however, made payments towards full truck load of 9 tonnes even though stores conveyed varied between 5 to 6 tonnes. This resulted in overpayment of Rs 2.49 crore.

(Paragraph 25)

Loss of revenue due to non-functioning of electric meters

JCOs/ORs living in married accommodation are authorized free electricity at the Scales approved by the Station Boards/Commanders from time to time that was frozen by the Ministry of Defence in January 1983. Garrison Engineers at two stations, however, did not float bills for making recoveries for excess consumption, as the electric meters installed in the married accommodation at the above stations were not functioning. To overcome the problem, Station Boards, held in March 1995 and June 1996 fixed flat scales of consumption of electricity which were in excess of the frozen scales resulting in loss of Rs 4.40 crore.

(Paragraph 30)

Improper provisioning of tyres

Case I

COD Bombay took provisioning action and procured tyres ignoring the stocks held at Sub Depots, resulting in overprovisioning of tyres for Jeeps/4 Ton vehicle valued at Rs 1.49 crore.

Case II

Due to failure to implement policy decision on usage of sand-cum-Highway tyres by entire Field Force, huge stock of 15185 tyres and 6669 tubes are lying unutilised. Of these the shelf life of 5492 tyres and 6669 tubes valuing Rs 1.66 crore had already expired. Incorrect assessment of requirement also resulted in overprovisioning of cross Country tyres/tubes valued at Rs 2.22 crore.

Case III

Delay in provisioning, processing the case for sanction and communication of the sanction for procurement of cover outer for Shaktiman vehicles by COD/Army HQ resulted in avoidable expenditure of Rs 99.35 lakh.

(Paragraph 23)

Unauthorised construction

Sanction was accorded by the Ministry with the approval of CCPA for establishment of common inspection agency at Hyderabad, stipulating that no expenditure would be incurred on construction of residential accommodation. Despite CCPA's specific ban and over looking surplus accommodation, DRDO sanctioned construction of 28 married quarters at a cost of Rs 3.19 crore. 90 *per cent* of the work had been completed as of January 2001.

(Paragraph 36)

Overprovisioning of minor fire extinguisher and subsequent excess issue

Inter Service Working Group authorized 1216 numbers of minor fire extinguishers in February 1995 for entire Army and Air Force. COD, Dehu Road persistently held surplus stock during the financial years 1996-1999. Yet, Army HQ procured 5490 numbers of fire extinguishers at a cost of Rs 7.98 crore. This resulted in excess provisioning of 4274 nos. valued at Rs 6.30 crore.

(Paragraph 21)

Non-utilisation of land valuing Rs 3.70 crore

Army requisitioned 569 kanals of land in July 1975 for construction of married accommodation. The requisitioned land was rendered ineligible for acquisition as no structures/ improvements of any sorts were carried out thereon till December 1986. In the meantime Rs 17.15 lakh was paid towards rent. Eventually the land was acquired in April 1999 at a cost of Rs 3.70 crore. As the station has been declared as non-family station, the expenditure incurred on acquisition remained infructuous.

(Paragraph 24)

Time and cost over-run in construction of Road due to lapse on the part of Border Roads Organisation

Construction of an alternate logistic and communication support road sanctioned in 1993 as a priority work at a cost of Rs 5.75 crore was abandoned in November 1994 when 76 *per cent* of the work was done. The incomplete road remained unattended for over three years and got severely damaged. The expenditure of Rs 5.09 crore incurred on incomplete work failed to yield any value for money, besides likely time over-run of 11 years and estimated cost over run of Rs 2.21 crore.

(Paragraph 37)

Ordnance Factory Organisation

Performance of Ordnance Factory Organisation

The Ordnance Factory Organisation comprising of 39 ordnance factories with a manpower of 1.39 lakh are engaged in production of arms, ammunition, equipment, clothing etc. primarily for the Armed Forces of the country. The value of production aggregated to Rs 7224.11 crore in 2000-2001 which was 1.94 *per cent* higher than the value of production of Rs 7086.49 crore in 1999-2000.

The total expenditure of Ordnance Factory Organisation has increased steadily from Rs 3272.30 crore to Rs 6016.94 crore during 1996-97 to 2000-01.

During 2000-2001, production of 93 items (out of 364 items for which demands existed and targets were fixed) was behind schedule.

Audit noticed that in respect of 19 major items, the production spilled over beyond the financial year 2000-2001, ranging from 9 *per cent* to 100 *per cent* of the issues reported during 2000-2001. Although the full production and issues as per target was reported by March 2001, the production and actual issues were expected to be completed by August 2001 only and the total value of these spill over items amounted to Rs.514.60 crore approximately. This had affected the accuracy, reliability and completeness of Annual Accounts of Ordnance Factory Organisation for the year 2000-2001.

The supervision charges incurred exceeded the total wages of an industrial employee from Rs 1.61 to Rs 1.12 against each rupee in four Ordnance factories and between fifty paise and a rupee in 25 Ordnance factories. Similarly, such charges incurred on conversion of raw material into finished articles/components in all the Ordnance factories exceeded more than 100 *per cent* of the direct labour.

(Paragraph 40)

Flexible Manufacturing System

Additional Director General Ordnance Factories Avadi placed order in May 1991 for Flexible Manufacturing System (FMS) consisting of four identical machining centres having capacity to manufacture 1100 sets of components for engines of T-72 tank and infantry combat vehicle though Army's requirement of engines had been scaled down to 275 numbers per annum by April 1990. Though the system was required to be established by 1988; it was fully commissioned in January 1998 i.e. after a delay of 10 years and that too with lesser achievable capacity of 875 sets of components.

The factory management utilised the capacity of the FMS only to the extent of nine to 28 *per cent* during 1998-99 to 2000-2001. Shortfall in utilisation of capacity was attributed by Engine Factory Avadi to inadequate and poor quality of castings meant for FMS components, supplied by Ordnance Factory Medak. In order to meet the requirement of engine components, the factory management had to import components worth Rs 21.68 crore and Rs 14.43 crore during August 1994 to March 1998 and during April 1998 to March 2001 due to delayed commissioning and poor utilisation of the FMS respectively.

Thus, the management failed to derive the value for money from massive investment of Rs 53.78 crore on FMS so far.

(Paragraph 41)

Working of Grey Iron Foundry Jabalpur

The income realised by the management of Grey Iron Foundry Jabalpur was always less than the expenditure incurred during 1996-97 to 2000-01; it ranged from 36 to 73 *per cent* of actual expenditure during 1997-98 to 2000-01.

Grey Iron Foundry's capacity of 7000 tonnes per annum to manufacture castings for various components of Shaktiman and Nissan Vehicle produced by Vehicle Factory Jabalpur remained unutilised to the extent of 21 to 47 *per cent* during 1996-97 to 2000-01 due to insufficient order from sister factories. This resulted in under-utilisation of standard man-hours of direct industrial employees to the extent of 33 to 60 *per cent* during 1998-99 to 2000-01. The factory suffered not only from the continued incidence of high manufacturing rejections but there were heavy rejections at the buyer's ends also; the actual rejection in respect of nine major components ranged between 20.50 and 63.76 *per cent* during 1996-2000. Besides, the factory had to bear high proportion of overhead which ranged between 70.82 and 84.82 *per cent* of cost of production or as much as 2.43 to 5.59 times of the prime cost during 1996-2001. It was noticed that supervision charges were abnormally high and ranged between Rs 1.62 and Rs 3.98 against each rupee spent on direct labour. Similarly, average expenditure on each indirect IE was too high as compared to that on each direct IE and ranged between 2.19 and 6.28 times of direct IEs.

The management sustained huge loss in issue to civil trade in the range of Rs 2.02 crore to Rs 17.63 crore annually with reference to the cost of production during 1995-96 to 1999-2000.

In view of less workload, excessive underutilisation of man-hours, high rejection and abnormally high overhead charges, there is a need for seriously thinking on the long term perspective of the factory.

(Paragraph 42)

Blocked inventory pending Manufacture of cluster bombs

Pending manufacture and supply of 100 cluster bombs to the Air Force by March 2003 Ordnance Factory Khamaria and Gun Carriage Factory Jabalpur were saddled with blocked inventory of Rs 5.73 crore.

(Paragraph 43)

Blocked inventory due to delayed manufacture

Delayed manufacture of Board Arty by Ordnance Equipment Factory Kanpur resulted in shortclosure of indents by the Army and blocked inventory worth Rs 23.65 lakh.

(Paragraph 44))

Blocked inventory due to failure to manufacture a fuse

Gun and Shell Factory Cossipore failed to produce defectfree fuses of an ammunition and this led to suspension of manufacture of this ammunition at another factory resulting in cumulative blocked inventory of Rs 72.61 crore.

(Paragraph 56)

Futile attempt to establish production of an item

Failure of Gun Carriage Factory Jabalpur in establishing production of components of a pistol rendered infrastructure costing Rs 1.49 crore futile besides resulting in nugatory expenditure of Rs 33.39 lakh.

(Paragraph 46)

Injudicious manufacture of an ammunition before development

Bulk manufacture of 155 mm HEER ammunition at a cost of Rs 4.59 crore by an Ordnance Factory during 1998-99 even before the pilot lot of ammunition were cleared in proof was not only injudicious but was also in gross violation of extant provisions.

(Paragraph 47)

Financial repercussion due to short closure of an order

Failure of Metal and Steel Factory Ishapore in effecting even flow of supplies of boat tail forgings of 155 mm 77B ammunition, lack of production programme for the ammunition and creation of machining facilities at Ordnance Factory Ambajhari had resulted in short closure of orders placed on former by the latter and financial repercussion of Rs 2.06 crore at two sister factories besides Ishapore factory.

(Paragraph 48)

Loss due to non-rectification of rejected fuses

Gun and Shell Factory Cossipore failed to rectify rejected fuses worth Rs 46.65 lakh manufactured by them. Discontinuation of further manufacture of fuses resulted in blocked inventory worth Rs 11.91 lakh.

(Paragraph 45)

Loss due to failure of ammunition in proof

Failure of ammunition worth Rs 79.70 lakh manufactured by Ordnance Factories in proof led to short closure of indent by the Navy and also blocking of inventory worth Rs 98.32 lakh at Ammunition Factory Kirkee.

(Paragraph 53)

Rejection due to defective manufacture

Failure of Ordnance Factory Dehu Road to use correct composition in manufacture of an ammunition resulted in its rejection at proof and consequential loss of Rs 95.58 lakh.

(Paragraph 49)

Rejection due to defective manufacture of propellants

116.25 tonne propellants manufactured and supplied to Ordnance Factory Varangaon by Ordnance Factory Bhandara were rejected by the former resulting in a loss of Rs 6.09 crore.

(Paragraph 51)

Loss due to defects in charger clips of an ammunition

Defective manufacture of charger clips of an ammunition worth Rs 43.29 lakh had resulted in its rejection at Ordnance Factory Varangaon.

(Paragraph 52)

Loss due to defective manufacture

Ordnance Factory Kanpur sustained a loss of Rs 1.38 crore owing to defective manufacture of shells of 130 mm HE ammunition which ultimately were rejected at Ordnance Factory Chanda.

(Paragraph 54)

Unsuccessful indigenisation of 73 mm ammunition

Failure of Ordnance Factories to stabilise manufacture of components of 73 mm ammunition not only resulted in rejection worth Rs 8.93 crore but also forced them to import components worth Rs 3.31 crore during 1995 to 2000.

(Paragraph 55)

Avoidable trade procurement of cups

The action of Ammunition Factory Kirkee to resort to trade purchase of brass cups KF-31 in September 1999 involved an infructuous expenditure of Rs 7.16 crore since the factory not only ignored Ordnance Factory Ambernath's assurance to regulate supply of cups within the time frame of the former but also met its requirement of cartridge cases during 1999-2000 out of supplies from the latter.

(Paragraph 57)

Injudicious procurement of explosive

Ordnance Factory Chanda procured an explosive before finalisation of design of a Submunition bomblet and as a result they were holding explosive worth Rs 78.28 lakh in their stock since 1992.

(Paragraph 58)

Avoidable trade procurement of empty shells

Procurement of 19979 empty shells of an ammunition by Ordnance Factory Chanda from trade not only did not serve the intended purpose of meeting the requirement for 1999-2000 but also involved an avoidable cash outflow of Rs 5.10 crore.

(Paragraph 59)

Avoidable import of cartridge cases

Import of cartridge cases of an ammunition at a cost of Rs 10.69 crore by Ordnance Factory Khamaria was avoidable as the delivery schedules of these stores were such that they did not meet the intended purpose.

(Paragraph 60)

Injudicious procurement of Machine

Procurement of a whirling machine at Rs 7.82 crore by Vehicle Factory Jabalpur for carrying out machining operation of crankshafts was injudicious since existing machines were adequate to meet the requirement.

(Paragraph 61)

Costly machine lying idle

Ordnance Factory Varangaon could not utilise a machine costing Rs 85.66 lakh for sixteen years even after incurring another Rs 70.85 lakh on its conversion for use in alternate purpose thereby not realising value for money on a heavy capital investment.

(Paragraph 62)

Costly welding system lying idle

Procurement of a robotic welding system at Rs 2.61 crore in March 1993 by Ordnance Factory Medak was avoidable since the reduced requirement of hulls for which the system was purchased could be met with existing machines. Besides, robotic welding system being under breakdown was lying unutilised since December 1996.

(Paragraph 63)

Response of ministries/departments to Draft Audit Paragraphs

As per the Government instructions issued at the instance of Public Accounts Committee, the Ministries are required to send their response to the Draft Paragraphs forwarded demi–officially to the secretaries within six weeks. Defence Ministry did not send response to 21 paragraphs included in this Report. Similarly Department of Defence Production and Supplies did not send its response for 18 paragraphs.

(Paragraph 16 and 65)

CHAPTER I : ACCOUNTS OF THE DEFENCE SERVICES

1. Appropriation and Expenditure

The summarised position of Appropriation and expenditure during 2000-2001 was as under:

(Rs in crore)

	Original Grant/ Appropriation	Supple-mentary Grant	Total	Actual expenditure	Total unspent provision (-) Excess (+)
REVENUE **18-Army**					
Voted	29543.41	--	29543.41	27054.50	(-)2488.91
Charged	8.69	--	8.69	7.05	(-) 1.64
19- Navy					
Voted	4095.06	--	4095.06	3739.82	(-) 355.24
Charged	2.00	--	2.00	0.11	(-) 1.89
20-Air force					
Voted	8120.75	--	8120.75	7484.73	(-) 636.02
Charged	1.49	--	1.49	0.49	(-) 1.00
21-Ordnance Factories					
Voted	580.20	--	580.20	809.90	(+) 229.70
Charged	0.18	1.07	1.25	0.98	(-) 0.27
CAPITAL **22-Capital Outlay on Defence Services**					
Voted	17912.95	--	17912.95	12378.82	(-) 5534.13
Charged	13.45	--	13.45	5.23	(-) 8.22

The net unspent provision in the voted section of all the five grants aggregated to Rs 8784.60 crore as a result of unspent provision in the grants of Army (Rs 2488.91 crore), Navy (Rs 355.24 crore), Air Force (Rs 636.02 crore), Capital Outlay on Defence Services (Rs 5534.13 crore) and an excess expenditure occurred in the grant of Ordnance Factories (Rs 229.70 crore).

The overall net unspent provision (voted plus charged) under all the grants of Defence Services against the total provision increased sharply from Rs 1640.77 crore in 1999-2000 to Rs 8797.62 crore (436 *per cent*) during the year 2000-2001. Most of the increase in unspent provision was on account of Capital Outlay.

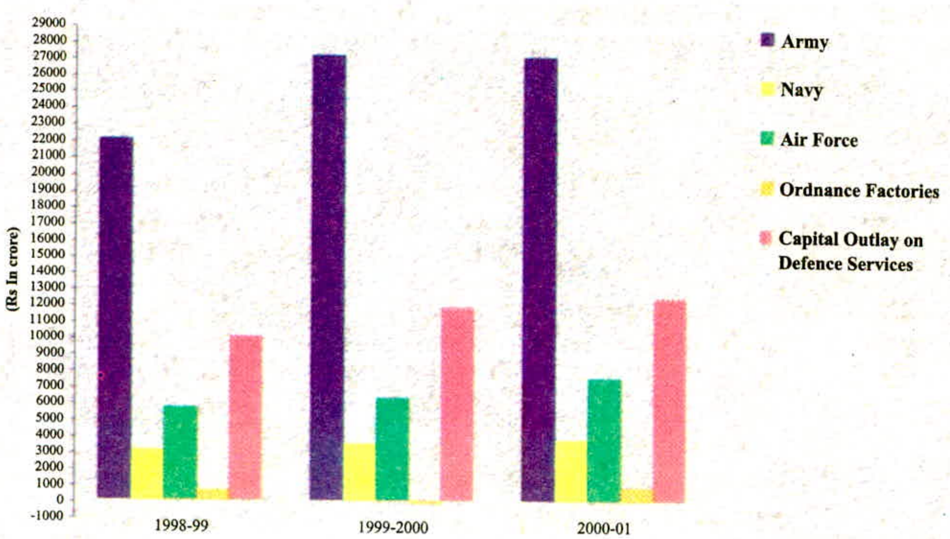
2. Defence Expenditure

The expenditure on major components of Defence Services during 1998-2001 was as under:

(Rs in crore)

	1998-99	1999-2000	2000-2001
Army	21994.26	27134.92	27061.55
Navy	3109.15	3542.92	3739.93
Air Force	5615.45	6250.42	7485.22
Ordnance Factories	608.71	-126.57	810.88
Capital Outlay on Defence Services			
Army	*2747.98*	*3485.31*	*4290.57*
Navy	*2972.90*	*3341.87*	*3741.43*
Air Force	*3658.14*	*4224.32*	*3346.36*
Ordnance Factories	*93.95*	*87.07*	*75.04*
R&D Organisation	*560.99*	*714.16*	*919.03*
Inspection Organisation	*1.98*	*2.11*	*11.62*
Total Capital expenditure	***10035.94***	***11854.84***	***12384.05***
Grand Total	**41363.51**	**48656.53**	**51481.63**

The expenditure is represented in the bar chart below:



3. Injudiciousre-appropriation

Unspent provision/excesses were noticed in the following cases where re-appropriation from/to various heads were made during the year, suggesting that re-appropriation made were not assessed properly:

(a) Re-appropriation to heads without requirement

In the following cases the original approved provision were sufficient to meet the requirement and thus, there was no necessity for re-appropriation of funds to these minor heads:

(Rs in crore)

Grant No. Minor head	Sanctioned provision (Voted)	Re-appropriation	Actual expenditure
19- Navy			
800- Other Expenditure	800.00	(+)35.58	718.86
22-Capital Outlay on Defence Services			
01/102- Heavy and Medium Vehicles	440.32	(+) 74.33	438.58

(b) Re-appropriation from heads where expenditure was more than the final provision

In the following case, the actual expenditure turned out to be more than the balance provision after re-appropriation from the head:

(Rs in crore)

Grant No. Minor Head	Sanctioned Provision (Voted)	Re-appropriation	Final provision	Actual Expenditure	Excess with reference to final provision
21-Defence Ordnance Factories					
106-Renewal and Replacement	250.00	(-)50.00	200.00	203.93	3.93

(c) Re-appropriation to heads where expenditure was less than the final amount

In the following cases, the amount of re-appropriation was not utilised fully:

(Rs in crore)

Grant No. Minor Head	Sanctioned Provision (Voted)	Re-appropriation	Final provision	Actual Expenditure	Unspent provision with reference to the final provision
18-Army					
800-Other Expenditure	520.49	(+)28.74	549.23	533.99	15.24
19-Navy					
101- Pay & Allowances	697.00	(+) 50.00	747.00	734.72	12.28
800- Other Expenditure	800.00	(+) 35.58	835.58	718.86	116.72

Grant No. Minor Head	Sanctioned Provision (Voted)	Re-appro-priation	Final provision	Actual Expendi-ture	Unspent provision with reference to the final provision
21- Defence Ordnance Factories					
110- Stores	3062.41	(+)358.67	3421.08	3369.81	51.27
800- Other Expenditure	411.95	(+) 49.70	461.65	451.23	10.42
22- Capital Outlay on Defence Services					
01/102-Heavy and Medium Vehicles	440.32	(+) 74.33	514.65	438.58	76.07
02/204- Naval fleet	2513.73	(+)112.82	2626.55	2580.22	46.33

4. Unspent provisions in grant(s) exceeding Rs 100 crore

Unspent budget provision exceeding Rs 100 crore occurred in the voted segments of four grants during the year 2000-2001, which indicates deficient budgeting or shortfall in performance.

Large unspent provision exceeding Rs 100 crore in the following four grants calls for submission of explanatory note to the Public Accounts Committee in terms of PAC branch OM No. 20/1/1/95/PAC dated 15 May 1995.

(Rs in crore)

Grant No.	Sanctioned Grant/ appropriation	Actual expenditure	Unspent provision (%)	Reasons attributed by the Ministry
18-Defence Services - Army	29543.41	27054.50	2488.91 (8.42)	Non payment of arrears on account of recommendation of Anomalies Committee, non-materialisation of certain contracts and DGOF Supplies
19-Defence Services – Navy	4095.06	3739.82	355.24 (8.67)	Delay in Supply of Stores/ Spares, less payment for repair of submarines, non-receipt of spares from abroad and non-submission of bills by various agencies
20-Defence Services - Air force	8120.75	7484.73	636.02 (7.83)	Less payment to Railways, less expenditure on printing & stationery, water/electricity tariff and maintenance
22-Capital Outlay on Defence Services	17912.95	12378.82	5534.13 (30.89)	Non-fructification of certain proposals, non-materialization of certain contractual payments, non receipt of equipments, non Supply of spares by foreign vendors, slow progress of works etc; late receipt of bills/documents from the vendor

5. Excess over Grant/appropriation

An excess expenditure to the tune of Rs 229.70 crore registered in the voted section of Grant No.21-Defence Ordnance Factories during 2000-2001 was as under:

(Rs in crore)

Defence Ordnance Factories	Original grant/ appropriation	Actual expenditure	Excess
Grant No. 21 Voted	580.20	809.90	229.70*

* Net figure after adjusting the savings under other segments as well as surrender or withdrawal within grant/ Appropriation

The reasons for excess expenditure attributed by the Ministry was the shortfall in issues to the Services in respect of ammunition and vehicles under the deduct head.

Budget Estimates for the grant relating to Ordnance Factories are prepared after taking into account anticipated recoveries against the supplies to be made to Army, Navy and Air Force etc. A scrutiny of the grant revealed that the actual recoveries fell short of the estimates to the tune of Rs 313.22 crore. The main reason attributed by the Ministry for the shortfall in recoveries was due to non-materialisation of supplies to Army in respect of Ammunition and Vehicles.

The excess expenditure over Grant/appropriation requires regularization under Article 115(1)(b) of the Constitution of India by the Parliament.

6. Persistent unspent provision

(a) Despite mention made in para 7 of Report No.7 of 2001 of the Comptroller and Auditor General of India, Union Govt., Defence Services (Army and Ordnance Factories) regarding persistent unspent provision; large amount of unspent provision exceeding Rs 5 crore continued to persist during the year 2000-2001 in the voted section of the following cases:

(Rs in crore)

Grant No. Minor Head	1998-99	1999-2000	2000-2001	Reasons given in the Appropriation Accounts for the unspent amount
19- Navy				
110- Stores	41.32	21.02	120.79	Delay in Supply of stores/ spares and rescheduling of major exercises
21- Ordnance Factories				
054- Manufacture	12.31	13.86	15.63	Lower production than anticipated
22-Capital Outlay on Defence Services				
02- Navy				
202- Construction Works	9.06	5.48	7.49	Slow progress of work
204- Naval Fleet	17.91	45.44	46.33	Delay in supply of spares by foreign vendors and slow progress of work
205- Naval Dockyard	10.91	5.39	20.27	Delay in completion of works in dockyards

(b) Audit further noticed that unspent provisions had become a regular feature under the grants/appropriation relating to the Defence Services. The overall unspent provision noticed during the last five years for the reasons shown against each, are as under:

(Rs in crore)

Year	Overall unspent provision	Reasons for large unspent provison
1996-97	449.59	An amount of Rs 437.36 crore remained unutilised in the grant/ appropriation of Capital Outlay on Defence Services
1997-98	1467.42	An amount of Rs 1160.98 crore and Rs 193.49 crore remained unutilised in the grants/appropriations of Defence Services- Army and Capital Outlay on Defence Services
1998-99	1021.54	An amount of Rs 1021.54 crore (overall) remained unutilised in the grants/ appropriations of Defence Services despite of excesses in the grants of Army(voted), Navy(voted) and Capital Outlay on Defence Services(charged)
1999-2000	1640.77	An amount of Rs 109.14 crore,Rs 106.46 crore,Rs 138.59 crore, Rs 901.02 crore and Rs 381.92 crore remained unutilised in the voted section of the grant/ appropriations of Defence Services- Army, Navy, Air Force, Ordnance Factories and Capital Outlay on Defence Services respectively
2000-2001	8797.62	An amount of Rs 8797.62 crore (overall) remained unutilized in the grants/appropriations of Defence Services

The net amount which remained unutilised in the grants of the Defence Services during the year 2000-01 constituted 14.6 *per cent* of Budgetary allocation, which shows increasing trend of savings and indicates poor financial management by the Ministry of Defence.

7. Surrender of Savings

Mention was made in paragraph 13 of the Report No.7 of 2001 of Comptroller and Auditor General of India regarding surrender of savings at the end of the financial year and the forfeiture of very purpose of surrender of funds. Despite this, a review of surrenders made in all the five grants of Defence Services during the year 2000-01 revealed that the amount was surrendered/accepted on 31 March 2001, as under:

(Rs in crore)

Grant No.	Final grant/ Appro-priation	Net Savings (-) Excess(+)	Surrender	Percentage of surrender w.r.t. final grant
18- Army	29552.10	2490.55	1544.92	5.23
19- Navy	4097.06	357.13	59.82	1.46
20- Air Force	8122.24	637.02	636.37	7.83
21-Defence Ordnance Factories	581.45	(+) 229.43	1.07	0.18
22-Capital Outlay on Defence Services	17926.40	5542.35	4951.53	27.62
Total	**60279.25**	**8797.62**	**7193.71**	**11.93**

It is evident that the total amount surrendered constituted 12 *per cent* of final grant/appropriation of all the grants of Defence Services. However, this fell short of savings by Rs 1603.91 crore. This could have been utilized elsewhere if surrendered timely. The surrender under the Grant No.22 was abnormally high to the tune of 28 *per cent*, which suggests that the funds could not be utilized as estimated and planned. Further the amount of surrenders increased sharply to the five folds as compared to the previous year (Rs 1148.68 crore).

There is, therefore, a need to strengthen budgetary control in this regard.

8. Irregular re-appropriation of funds

A scrutiny of audit order revealed that Ministry of Defence obtained prior approval of Secretary (Expenditure) in 23 cases of re-appropriation of funds, which had the effect of increasing the budget provision by rupees one crore or more under a sub-head after the presentation of last batch of supplementary demands for grants in the Parliament. But, as per rules in vogue, Ministry failed to obtain the prior approval of Secretary (Expenditure) in the following 07 cases of re-appropriation of funds where the amount re-appropriated exceeded 25 *per cent* of Budget Estimates:

(In thousand of Rupees)

Sl. No.	Major Head Sub-Maj. Head	Minor Head	Original Budget provision (Charged)	Re-approp-riation	Final Grant/ Appropriation 2000-2001	Percentage of Re-appropriation w.r.t. budget provision
1.	2076-Army	101-P&A of Army	30,00	35,00	65,00	116.66
2.	2076-Army	111-Works	15,00	30,00	45,00	200
3.	2078-Air Force	101-P&A of Air Force	Nil	7,00	7,00	700
4.	2078-Air Force	111-Works	2,00	8,00	10,00	400
5.	4076-Capital Outlay 02- Navy	050-Land	50,00	30,00	80,00	60
6.	4076-Capital Outlay 03-Air Force	202-Construction Works	35,00	20,00	55,00	57.14
7.	4076-Capital Outlay 04- Def. Ord. Factories	111-Works	20,00	20,00	40,00	100

The re-appropriation made by the Ministry in these cases was irregular and in contravention of provisions contained in sub para-3 of Ministry of Finance, Deptt. of Expenditure, OM No. 12(1)E-Coord/95 dated 23 August 1995 issued at the instance of Public Accounts Committee.

The matter was referred to Ministry in May, 2001; their reply was awaited as of October 2001.

9. Unspent provision exceeding Rs 20 crore

A scrutiny of the Appropriation Accounts, Defence Services for the year 2000-01 disclosed unspent provision of Rs 20 crore and above in the voted section of various Minor heads pertaining to different grants of Defence Services for the contributing reasons mentioned against each:

(Rs in crore)

Grant No. Minor Head	Final Grant or appropriation	Unspent provisions (%)	Contributory reasons as stated by the Ministry
18- Defence Services -Army			
101-Pay & Allowances of Army	10270.28	135.09 (1.32)	Non payment of arrears on account of recommendations of Anomalies Committee
109-Inspection Organisation	382.87	24.73 (6.46)	Less expenditure on proofing than anticipated
110-Stores	9322.77	763.75 (8.19)	Non-materialization of certain contracts and DGOF Supplies
19- Defence Services – Navy			
104-Pay & Allowances of Civilians	536.79	40.86 (7.61)	Delay in implementation of ACP scheme and regularization of casual labourers
110-Stores	1505.00	120.79 (8.03)	Delay in supply of stores/spares
800-Other Expenditure	835.58	116.72 (13.97)	Delay in payment for repair of submarines, non-receipt of spares from abroad etc.
21- Defence Ordnance Factories			
110-Stores	3421.08	51.27 (1.50)	Less expenditure against foreign purchase
22- Capital Outlay on Defence Services			
01-Army			
101-Air craft and Aero-engine	236.68	44.88 (18.96)	Non - materialization of certain contractual payments
102-Heavy and Medium vehicles	514.65	76.07 (14.78)	Non - fructification of certain proposals
103-Other Equipments	3316.79	327.18 (9.86)	Non - fructification of certain proposals
02-Navy			
204-Naval Fleet	2626.55	46.33 (1.76)	Delay in supply of spares by foreign vendors & slow progress of work
205-Naval Dockyards	277.25	20.27 (7.31)	Delay in completion of works and less progress in dockyards
03-Air Force			
101-Aircraft and Aero-engine	2691.28	28.19 (1.05)	Late receipt of bills/documents from the vendor
103-Other equipments	477.42	20.75 (4.35)	Delay in supply of equipments

The large unspent provision under the above minor heads of grants indicates over estimation of provisions/over optimistic budgeting against the programs by the Ministry.

10. Overprovision of funds under 'Stores' head of Grants

Appropriation Accounts Defence Services 2000-01 disclosed that despite re-appropriation of funds from/to Minor Head-110: Stores of following grants, a large amount remained unutilised in the voted segment as under:-

(Rs in crore)

Grant No. Minor Head	Original grant/ appropriation	Re-approp-riation	Final grant/approp-riation	Actual expenditure	Unutilised amount
18- Defence Services –Army					
110- Stores	11011.52	(-) 1688.75	9322.77	8559.02	763.75
19- Defence Services- Navy					
110- Stores	1610.00	(-) 105.00	1505.00	1384.21	120.79
21- Defence Ordnance Factories					
110- Stores	3062.41	(+) 358.67	3421.08	3369.81	51.27

The large unspent amount depicts over provisioning of funds under the head and reflects poor budgetary assumption on the part of Ministry of Defence.

11. Outstanding dues on account of special flights

The amount due for recovery on account of special flights/airlifts provided by the Air Force had increased from Rs 80.58 crore as on 30 June 2000 to Rs 116.86 crore as on 30 June 2001 showing an increase of 45 *per cent*.

The year wise break up of outstanding dues is given below:

OUTSTANDING DUES ON ACCOUNT OF SPECIAL FLIGHTS/AIRLIFTS

(Rs in crore)

Sl. No.	Year	No. of cases	Amount of outstanding dues
1.	1968-80	27	0.07
2.	1980-90	57	1.14
3.	1990-95	174	11.44
4.	1995-96	33	0.84
5.	1996-97	138	3.57
6.	1997-98	17	7.61
7.	1998-99	105	11.98
8.	1999-2000	80	5.64
9.	2000-2001	273	74.57
	Grand Total	**904**	**Rs 116.86 crore**

12. Dues on account of claims/services rendered

Mention is made every year in the CGDA's certificate regarding outstanding dues for supplies and services rendered on payment by the Defence Services to others including Central Civil Departments, State Govts., Private individuals etc; and outstanding claims against Railways/Shipping Corporations for losses of damages of stores in transit etc. A review of dues is indicated below:-

(i) The outstanding dues on account of licence fee and allied charges upto 31 March 2001 from Central Ministries and State Govts., Private Bodies, Messes and Clubs and Individual officers etc, as on 30 June 2001 were Rs 18.89 crore.

(ii) The claims outstanding against Railways/Shipping Corporations/ Airways raised up to 31 March 2001 for losses/damages of stores in transit awaiting finalisation as on 30 June 2001 were amounting to Rs 17.55 crore.

(iii) The outstanding dues on account of stores supplied and services rendered on payment by the Defence Services (other than Ordnance Factories) up to 31 March 2001 to others including Central Civil Departments and State Govts. as on 30 June 2001 were amounting to Rs 103.62 crore.

An early action for liquidation/finalisation of dues/claims needs to be taken.

13. Non-verification of credit for imported stores

Credit for imported stores/equipment amounting to Rs 2107.13 crore could not be verified in the ledgers of certain Stores Depot as Certified Receipt Vouchers and invoices in respect of 1061 Specification Certificates of Quality pertaining to the period 1966-2001 were not made available to Internal Audit. The outstanding amounts due to non verification of credits of the stores for the years from 1997-98 to 2000-01 aggregated to Rs 1914 crore, representing 91 *per cent* of the total outstandings of Rs 2107 crore. There is a need to focus on these items.

14. Suspense balances/advances outstanding against PSUs and Private parties

(a) Mention was made in paragraph 11 of Report No.7 of 2000 of Comptroller and Auditor General of India, Union Government (Army and Ordnance Factories) regarding suspense balances under various minor heads. In their Action Taken Note, Ministry of Defence (Finance) in August 2000 stated that during 1999-2000 an amount of Rs 2047.87 crore had been cleared and outstanding balance as on 31 March 2000 was Rs 302.56 crore (DR). As per Finance Accounts for the year 2000-01, net outstanding balances under various suspense heads had again increased to Rs 728.35 crore (CR) consisting of CR balance of Rs 1174.82 crore and DR balance of Rs 446.47 crore which were awaiting adjustments for want of further information in the appropriate heads of account.

(b) Demand registers maintained by CDA (HQrs.) New Delhi disclosed that advances to the extent of Rs 1865.91 crore against Public Sector Undertakings (PSUs) and Rs 84.65 crore against Private parties (totaling to Rs 1950.56 crore) remained outstanding for adjustments as on 31 March 2001. In certain cases, the advances paid to Private parties were outstanding for their recoveries/adjustments for more than 15 years.

The CGDA in January 2002 stated that the efforts of Pr. CDA (HQrs.) New Delhi were on to reconcile the outstanding advances.

Action for reconciliation/recovery of huge outstanding amount of advances needs to be taken expeditiously.

CHAPTER II : MINISTRY OF DEFENCE

15. Avoidable expenditure on creating storage accommodation and helipad with allied facilities for helicopters

Army HQ without considering flight safety norms, selected a site for locating Central Aviation Workshop which had to be shifted subsequently. A Chief Engineer incurred expenditure of Rs 6.77 crore even after decision to shift the CAW.

Consequent on formation of Army Aviation and its subsequent bifurcation from Indian Air Force, a need arose for storage of Army helicopters. The stored aircrafts being essential war reserves used to be serviced periodically and ground/air-tested as per existing flight and maintenance safety norms. A CAW[1] was co-located at CVD[2] to undertake this task. Despite, National Air Ports Authority (NAPA) not granting permission in November 1989 for establishment of a helipad at CVD due to operational reasons, Ministry of Defence accorded sanction in February 1993 for Rs 2.33 crore for storage accommodation for additional load factor at the CVD, which was revised to Rs 5.67 crore in August 1997 with probable date of completion of two years.

An examination of the case revealed the following:

i) Army Aviation in December 1997 suggested to MGO (Aviation) to locate MR&SOW[3] helicopters along with CAW at Place 'B' rather than at CVD due to various operational problems. Despite this, the Chief Engineer went ahead with conclusion of contract in April 1998 for construction of storage accommodation at place 'A' for helipad with allied facilities at a cost of Rs 6.13 crore.

ii) The Ministry approved shifting of CAW from CVD to place 'B' in March 1999 and consequently CAW was moved to place 'B' in June 1999 for flight safety reasons. However, there was no coordination/ interaction between the two wings of the Ministry; GS Wing who approved the shifting of CAW and the Works wing who was managing execution of works services. Consequently, the execution of work continued and completed in August 2000 at a cost of Rs 6.77 crore.

The Ministry admitted in September 2001 that there was lack of coordination between their wings at the time of taking decision to shift CAW. However, the Ministry's contention that position regarding non-granting of permission by NAPA was neither known to the Army HQ nor to two Boards of Officers who recommended construction of

[1] CAW : Central Aviation Workshop
[2] CVD : Central Vehicle Depot
[3] MR&SOW : Maintenance Reserve and Strike of Wastage

accommodation is not tenable in that Director of Air Routes and Aerodrome (OPS) had demi-officially brought this fact to the notice of Army HQ way back in November 1989.

Thus, decision of Army HQ in locating CAW and storage facilities at CVD without considering flight safety norms, which were well known to them as early as in November 1989 and non-coordination between two wings of the Ministry resulted in avoidable expenditure of Rs 6.77 crore.

16. Response of the ministries/departments to Draft Audit Paragraphs

On the recommendations of the Public Accounts Committee, Ministry of Finance (Department of Expenditure) issued directions to all ministries in June 1960 to send their response to the Draft Audit Paragraphs proposed for inclusion in the Report of the Comptroller and Auditor General of India within six weeks.

The Draft Paragraphs are always forwarded by the respective Audit Offices to the Secretaries of the concerned ministries/departments through Demi Official letters drawing their attention to the audit findings and requesting them to send their response within six weeks. It was brought to their personal notice that since the issues were likely to be included in the Audit Report of the Comptroller and Auditor General of India, which are placed before Parliament, it would be desirable to include their comments in the matter.

Draft paragraphs proposed for inclusion in the Report of the Comptroller and Auditor General of India for the year ended March 2001: Union Government (Defence Services), Army and Ordnance Factories : No. 7 of 2002 were forwarded to the Secretary, Ministry of Defence between April 2001 and September 2001 through Demi Official letters.

The Secretary of the Ministry of Defence did not send replies to 21 Draft Paragraphs out of 39 Paragraphs in compliance to above instructions of the Ministry of Finance issued at the instance of the Public Accounts Committee. Thus, the response of the Secretary of the Ministry could not be included in them.

17(a). Follow up on Audit Reports

Despite repeated instructions/recommendations of the Public Accounts Committee, the Ministry did not submit remedial Action Taken Notes on 158 Audit Paragraphs.

With a view to ensuring enforcement of accountability of the executive in respect of all issues dealt with in various Audit Reports, the Public Accounts Committee desired that ATNs[@] on all paragraphs pertaining to the Audit Reports for the year ended 31 March 1996 onwards be submitted to them duly vetted by Audit within 4 months from the laying

[@] Action Taken Notes

of the Reports in Parliament. Meetings were also held in August 1998, December 1998 and September 1999 under the Chairmanship of Secretary (Expenditure) to ensure timely submission of ATNs and to review the position of pending ATNs. Ministry of Finance (Department of Expenditure) in July 2000 had reiterated instructions issued by Public Accounts Committee to take urgent steps to finalise all the pending ATNs even of earlier Reports to ensure that all vetted ATNs are sent to Monitoring Cell well before the deadline prescribed by the Committee.

Review of outstanding Action Taken Notes relating to Army as of 18 January 2002 revealed that the Ministry failed to submit ATNs in respect of 158 Paragraphs included in Audit Reports up to and for the year ended March 2000 (No.7 of 2001) as per Annexure-I. Of these, even first round of ATNs for 57 paragraphs were not received for vetting and 22 paragraphs pertained to the Audit Reports up to and for the year ended March 1993 (No.8 of 1994).

The matter was referred to the Ministry in August 2001; their reply was awaited as of 18 January 2002.

17(b). Non-production of documents

As of December 2001, 78 files in respect of Army requisitioned for audit, during the period between October 1990 and March 2001 were not made available to Audit. This includes 35 cases (Annexure-II) where expenditure involved in each case is Rs 5 crore or more as detailed below:

Files called for but awaited (Annexure II)	
Year	**Army**
1995-1996	15
1996-1997	3
1997-1998	3
1998-1999	6
1999-2000	4
2000-2001	4
Total	35

CHAPTER III : ARMY

Review

18. Delegation of special financial powers to GOC-in-C to meet urgent and immediate requirements of counter insurgency operations and internal security duties

18.1 Introduction

In May 1995, Ministry of Defence delegated special financial powers to General Officer Commanding-in-Chief (GOC-in-C) of two commands for incurring expenditure to meet urgent requirements of counter insurgency operations, internal security duties and for Siachen Glacier. The limits of the delegated powers were Rs 1.00 crore per transaction subject to an annual limit of Rs 4.00 crore for each Command, which were subsequently enhanced in August 1998 upto Rs 2 to 5 crore per transaction and annual limit was also enhanced to Rs 10.00 crore. The limits in respect of miscellaneous and contingent expenditure remained at Rs 10.00 lakh per transaction subject to an annual limit of Rs 1.00 crore for each Command.

18.2 Organisational Set up

The above delegated powers were to be exercised by the GOC-in-C in consultation with the respective designated Controller of Defence Accounts (CDA) who was to act as Integrated Financial Advisor (IFA) for the purpose.

18.3 Scope of Audit

The Eastern Command was selected to seek an assurance that the delegated powers were being exercised as per the prescribed procedures.

18.4 Highlights

- **There was constant surrender of funds in all the years, which points towards lack of sound financial Management.**

(Para 18.5.1)

- **Financial liabilities were carried forward from previous year to the current year in all the years. The excess over allocation during 1995-2000 was Rs 6.30 crore.**

(Para 18.5.1)

- **Stores valuing Rs 18.13 crore not covered under these powers were purchased during 1996-97 to 2000-2001.**

(Para 18.6.1 to 18.6.6)

- **Stores worth Rs 3.12 crore procured under the above delegated powers proved to be substandard and there was an adverse impact of this on counter insurgency duties.**

(Para 18.8)

- **There was non/improper utilization of stores worth Rs 60.99 lakh.**

(Para 18.9)

- **There was considerable delay in formulation of policy on accounting, stock-taking and conditioning of stores procured under the above delgated powers.**

(Para 18.10)

18.5 Performance Appraisal

18.5.1 Budget vis-a-vis Expenditure

The special financial powers delegated by the Ministry to the GOC-in-C were to be exercised subject to availability of funds in the budget of the financial year. Audit scrutiny reveled that the actual expenditure plus commitment by way of financial liabilities carried over to the next financial year exceeded the allocations made in respect of procurement of Ordnance Stores during the period 01 April 1995 to 31 March 2000 in every year except 1996-97. In fact the financial commitment carried over to next financial year was much more than the funds surrendered. Financial commitments in excess of the budget allocation is a clear violation of the powers delegated to him. Details of allocation made vis-a-vis expenditure incurred/ committed/surrendered is given below:

Ordnance Stores

(Rs in lakh)

Year (1)	**Allocation** (2)	**Expenditure** (3)	**Financial liability/ Commitment** (4)	**Total** (5)	**Funds surrendered (2-3)** (6)
1995-96	400.00	365.31	56.40	421.71	34.69
1996-97	400.00	323.98	70.89	394.87	76.02
1997-98	400.00	385.16	126.99	512.15	14.84
1998-99	970.00	895.04	180.84	1075.88	74.96
1999-2000	1000.00	996.30	399.53	1395.83	3.70
2000-2001	1000.00	888.52	-	-	111.48
Total	4170	3854.31			315.69

Similarly there was persistent surrender of funds in respect of Minor Head 800- Misc. and contingent expenditure as under:

Major Head 2076 – Minor Head 800 : Misc and Contingent expenditure

(Rs in lakh)

Year	Allocation	Expenditure	Surrendered(-) Excess(+)	Percentage
1995-96	100.00	25.36	(-) 74.64	74.64
1996-97	100.00	27.84	(-) 72.16	72.16
1997-98	100.00	76.82	(-) 23.18	23.18
1998-99	100.00	93.11	(-) 6.89	6.89
1999-2000	100.00	72.99	(-) 27.01	27.01
2000-2001	100.00	59.41	(-) 40.59	40.59

18.6 Procurement of stores not covered under delegated financial powers

Audit scrutiny revealed that items worth Rs 14.51 crore not covered under delegated financial powers were purchased misusing the powers delegated for counter insurgency.

(Rs in lakh)

Year	Medical Stores/ Equipment	Vehicles/ Motor cycles	Bicycles	Generating sets	Intercommunication system*/Office automation
1995-96					
1996-97				17.59	
1997-98	113.82			22.05	
1998-99	130.38	214.57	3.84	49.85	71.64
1999-2000	167.56	181.65	16.68	--	11.04
2000-2001	37.89	25.00	25.00	40.00	322.64*
Total	449.65	421.22	45.52	129.49	405.32

The cases are narrated in the succeeding paragraphs.

18.6.1 Purchase of Medical Equipment

Medical equipment valuing Rs 4.50 crore procured during 1997-98 to 1999-2000 were booked under Minor Head 110 (C) (Ordnance Stores) instead of Minor Head 800. The wrong booking was done specially to avoid going to higher CFA as powers delegated under Minor Head 800 were restricted to Rs 10 lakh per transaction with a ceiling of Rs 1 crore per annum.

Command HQ stated that there was no specific ban on purchase of medical stores and also the purchases were made with the concurrence of the IFA. The contention of the command HQ is not tenable since IFA have no power to concur the proposal for medical stores procured under Minor Head 110C according to Ministry's sanctions of 1995 and 1999.

18.6.2 Vehicles and other items

During the years 1998-99 to 2000-2001 Command HQ purchased vehicles and other items like TV, VCR, Computer, Generating Sets etc. worth Rs 6.79 crore which were centrally procured items. Some of the vehicles were purchased directly from the dealers instead of through DGS&D Rate Contracts which resulted in additional expenditure of Rs 11.44 lakh in respect of 30 Maruti Vans and Rs 19.17 lakh in respect of 16 Gypsies. Out of above items pertaining to office automation valuing Rs 82.68 lakh were not covered under the schedule of items that can be procured under the delegated powers under Major Head 2076, Minor Head 110 which pertains to Ordnance and Sector Stores.

18.6.3 Procurement of Intercommunication System

The Army Commander approved procurement of 3 nos of Intercommunication system along with composite power supply in piecemeal at a total cost of Rs 322.64 lakh during 2000-2001. These items were not covered under Minor Head 110C and could have been procured through normal channel of procurement.

18.6.4 Legal Charges

A total amount of Rs 9.71 lakh was incurred during 1996-97 to 1999-2000 towards legal charges to Advocates and booked to Minor Head 800 instead of meeting the expenditure from regular budget allocated to Eastern Command. The Minor Head 800 only caters for ration, clothing and Medical facilities connected with CI/IS operations and sanctioning of expenditure by the Army Commander is in violation of powers delegated.

18.6.5 Purchases of standard generator sets in place of non-standard generating sets

According to the Schedule attached to the delegated powers only non-standard pattern generator such as small portable generator sets were permissible to be purchased. However, Army Commander purchased during 1996-2001 along with non-standard pattern generator sets, standard pattern generator sets of higher capacity valuing Rs 1.29 crore.

18.6.6 Other cases

Similarly other items worth Rs 4.41 crore detailed below not covered under delegated financial powers were purchased misusing the powers delegated to Commander.

(Rs in lakh)

Sl. No.	*Item*	Quantity	Value
(a)	VSAT	13 Nos.	297.24
(b)	EPABX	40 Nos.	53.99
	-do-	12 Nos.	3.66
(c)	INMARSAT	27 Nos.	86.64
			441.53

18.7 Procurement procedure not competitive

Audit scrutiny revealed that no register of approved suppliers was maintained at Eastern Command for purchases out of funds for counter insurgency. Procurement was mostly made through limited tender with minimal receipt of bids. Information in respect of supply orders exceeding Rs 30 lakh is given below:

Year	No. of SOs	No. of SOs placed against limited tender	No. of vendors to whom tender issued in r/o limited tender	No. of vendors who responded in r/o limited tender
1995-96	2(118.08)	2	41	4
1996-97	3(174.46)	2	39	7
1997-98	2(85.91)	1	02	2
1998-99	3(253.87)	2	22	6
1999-2000	4(597.40)	4	30	5
2000-01	6(435.71)	2	31	7

Poor response to tenders issued is indicative of the roster containing incapable or unwilling vendors therefore requiring updating.

18.8 Purchase of Substandard Stores and impact thereof

Stores worth Rs 312.20 lakh procured under the above delegated powers proved to be substandard/non-functional for various reasons. The details are as under:

(Rs in lakh)

Year	Item	Quantity purchased	Quantity found substandard	Value of substandard stores	Reason
1995-96 to 1997-98	Bullet Proof Patka	32800	32800	241.92	Lack of protection from top & lateral side, heavy weight, headache & giddiness
1997-98	Long Distance Satellite Terminal	4	2	35.91	Faulty non-functional
1997-98	Epicoated barrel	3700	3000	34.37	Cracks in pointing, not fit for second filling
				312.20	

The impact of the purchase of sub-standard stores was as under:

1.	Bullet Proof Patkha Anti-riot Jacket Bullet Proof wind screen glass.	Procurement of substandard items has failed to provide proper security cover to troops engaged on CIOP duties, which affect their efficient performance to that extent.
2.	Signal Channel Radio Relay Long distance satellites.	In the absence of these equipments the main objective of the procurement i.e. to establish effective communication system could not be achieved to that extent.
3.	Epicoated barrel	This led to loss to the state in terms of deterioration in condition of ATF stored therein and consequent cancellation of sorties to forward area.

18.9 Non/improper utilization of counter insurgency purchases

Stores valuing Rs 60.99 lakh could either not be utilised at all or were utilised for purposes other than counter insurgency operations and internal security duties. The details are as under:

(Rs in lakh)

Sl. No.	Item	Total Qty procured/ Value	No. of items diverted for other purpose	Value	Purpose
(a)	Tractors fitted with trailers and shrub masters	6 31.03	4	20.69	Utilised in Command HQrs for CI purposes
(b)	Speed boats	8 34.83	6	26.12	Utilised for other than CI purposes
(c)	Portable satellite phones	5 14.18	5	14.18	Idle
				60.99	

18.10 Delay in formulation of policy on accounting, stock taking and conditioning of stores

Though the procurement of stores under the above delegated powers commenced from the year 1995-96, Command Headquarters issued the comprehensive policy on accounting, stock-taking and conditioning of stores as late as in May 1999. As a result, not only the material management of the stores suffered, but the Command Headquarters was also deprived of the feed back on the performance of the stores. Consequently, further supply orders were placed for procurement of stores, which had already proved to be sub-standard such as bullet proof patka, signal channel radio relay, long distance satellite terminal and epicoated barrel.

18.11 Conclusion

It is evident from above that the financial powers delegated to Eastern Command for counter insurgency were not exercised within the parameters of the delegation. These were used to procure several items not covered under the delegation. Further more the purchase procedure was not competitive. There is therefore, a need for strengthening internal controls.

The matter was referred to the Ministry in September 2001; their reply was awaited as of November 2001.

19. Non-utilisation of mines due to premature failure of cells

12000 lithium cells were downgraded prematurely due to improper storage rendering 6000 imported mines costing Rs 16.32 crore unusable since August 1999.

Mines (HPD-2) are activated by a battery having two cells of 3.6 volt each fitted with them. While the mines carry a shelf life of greater than 10 years, the cells carry a shelf life of 10 years from the date of manufacture.

CAD Pulgaon received 6000 imported mines alongwith 12000 cells during June 1993-December 1993. A Field ammunition Depot, which received in June 1994 to March 1999 the 6000 mines alongwith the 12000 cells fitted with them, issued 500 mines alongwith the requisite cells to an Engineer Regiment in July 1999. The mines did not function during the operation as the cells failed to produce the required voltage. As a result, the entire 12000 cells valued at Rs 0.03 crore were declared unserviceable and the 6000 mines imported at Rs 16.32 crore were held as unusable as of November 2001.

Audit scrutiny revealed that:

- Although batteries were required to be stored in polythene pack in cool and dry place separately to achieve the desired shelf life they were fitted with mines during storage in the Depot.
- Field Ammunition Depot disowned any responsibility for deterioration of batteries on the plea that as per Technical Manual issued by supplier alongwith mines, no temperature restriction for storage was laid down specially for cells.
- No efforts were made by the depot to secure the batteries to be used in mines.

The matter was referred to the Ministry in June 2001; their reply was awaited as of October 2001.

20. Bouncing of Bank Guarantee furnished by Punjab Wireless System Ltd.

Acceptance of Invalid Bank Guarantees furnished by a firm amounting to Rs 8.27 crore resulted in their non-realisation.

Army HQ/DGOS placed three supply orders on Punjab Wireless System Limited on 31 March 1999 for supply of 500 VPS-MK-II Radio set at the cost of Rs 0.46 crore, 15 Radio Trunk System at the cost of Rs 28.35 crore and 14 Radio Local System at the cost of Rs 11.06 crore to be supplied by April/ June 2000 with a provision for payment of advance. The firm failed to supply the communication system as per delivery schedule and the supply orders for Radio Trunk System and Radio Local System were cancelled in September 2000 with financial repercussion. However, supply order for 500 Nos. VPS-MK-II Radio set is yet to be cancelled (August 2001).

The firm was paid advance of Rs 0.39 crore (85%) in respect of supply order for 500 Radio VPS MK II, Rs 5.67 crore (20%) for supply of Radio Trunk system and Rs 2.21 crore (20%) for Radio Local System in March/April 1999 based on Bank Guarantees given by Indian Overseas Bank for Rs 3.27 crore and State Bank of Patiala for Rs 5 crore. Out of which Bank Guarantee for Rs 0.39 crore was valid upto 31 March 2000 and for remaining Rs 2.88 crore and Rs 5 crore Bank Guarantees were valid up to 30 September 2000. As the firm failed to supply the stores, Army HQ approached the Banks in August 2000 for encashment. However, the Banks declined to honour the Bank Guarantees stating that the firm had not deposited the requisite amount at the time of taking Bank Guarantee.

Audit scrutiny revealed that only two bank guarantees for Rs 2.88 crore given by Indian Overseas Bank were to become operative on advance payment by the firm. Other Bank Guarantees for Rs 5.39 crore did not contain any such condition. Army HQ/CDA (HQ) failed to verify the correctness of two conditional Bank Guarantees furnished by the firm before releasing the advance. They further failed to bring to the notice of the banks that the guarantees furnished for Rs 5.39 crore were clear and no advance was stipulated in them. The firm has since been referred to BIFR.

The Army HQ stated in October 2001 that due to heavy rush of work on the last day of financial year and with known status of the firm being a state owned PSU and regular past supplier, the detailed conditions in the Bank Guarantees were apparently overlooked and the Bank Guarantees were accepted in good faith. The advance paid to the firm amounting to Rs 8.27 crore was still (October 2001) outstanding.

The matter was referred to the Ministry in July 2001; their reply was awaited as of October 2001.

21. Over provisioning of minor fire extinguisher and subsequent excess issue

As against an authorization for 1216 minor fire extinguishers in February 1995 order for 5490 extinguisher was placed in January 1999 which resulted in excess provisioning of 4274 nos valued at Rs 6.30 crore.

Ministry of Defence authorised in February 1995 1216 fire extinguishers[1] for Army as recommended by ISWG[2]. Army HQ, however, procured 5490 fire extinguishers in January 1999 based on deficiencies noticed in 1994 leading to over provisioning of 4274 valued at Rs 6.30 crore. 1314 fire extinguishers valued at Rs 1.94 crore issued to units were in excess of authorised scales.

An examination of the records revealed the following:-

(i) The COD had surplus stock of 8655 (1996-97), 4148 (1997-98) and 3511 (1998-99) fire extinguishers against authorisation of 1216 fixed by ISWG in February 1995. Despite that, the Army HQ went ahead with procurement of 5490 numbers in January 1999 at a cost of Rs 7.98 crore which led to excess provision of 4274 nos in this purchase itself.

(ii) Central Ordnance Depot received 2591 extinguishers up to November 2000 from trade and issued 2530 to various units when the authorized limit was only 1216 leading to excess issue of 1314 valued at Rs 1.94 crore.

(iii) The ISWG rationalized list of fire extinguishers and their recommendations of 1995 was circulated to Quality Assurance Offices located at Pune and Kanpur for implementation but not to provisioning agencies like Central Ordnance Depots who are responsible for procurement, receipt and supply of the stores to the units. This led to purchase in excess of authorization.

The matter was referred to the Ministry in June 2001; their reply was awaited as of October 2001.

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[1] Extinguisher Fire Twin 6 Kg Carbondioxide Trolly MK II

[2] Inter Services Working Group (Fire Extinguisher and Tentage equipments)

22. Recovery/saving at the instance of Audit

Deficient controls by three Controllers of Defence Accounts, seven Pay and Accounts Officers and two units/formations resulted in overpayment of Rs 3.34 crore. Cancellation of unauthorised works and supply orders at the instance of Audit resulted in savings of Rs 2.41 crore.

Recoveries

Overpayments and short recoveries aggregating Rs 3.34 crore relating to pay & allowances of officers and personnel and miscellaneous payments were noticed in the following cases in the pay accounts maintained by CDA(O)[3], Principal CDASC[4], PAOs[5], GE[6] etc. The recoveries/overpayments were accepted by the concerned offices.

Case I

Fifth Pay Commission recommendations and Special Army Instruction of January 1998 introduced revised scales based on trade rationalisation in the existing trade group structure of JCOs, NCOs and ORs including Defence Security Corps, Army Postal Service and Territorial Army. The first scale was effective from 01 January 1996 whereas the other enhanced scale was effective from 10 October 1997 on successful completion of training by new recruits.

Audit scrutiny of fixation of pay of recruits at PAO(ORs) (Artillery) Nasik revealed departure from the above laid down procedure and pay of recruits enrolled prior to 10 October 1997 and mustered after 10 October 1997 was fixed at enhanced rates with retrospective effect prior to 10 October 1997. The overpayment of Rs 1.32 crore on this account pointed out in audit was recovered by the PAO.

Case II

In December 1997, the pay structure of Army Officers was revised abolishing the rank of 2nd Lieutenant and pay was required to be fixed from 01 January 1996. Where the pay of Service officers drawing more than four consecutive stages in the existing scale got bunched and fixed in the revised scale at the same stage, the pay of officers drawing pay beyond the first four stages was to be stepped up by grant of one increment in the revised scale. The minimum pay of Lieutenant was fixed at Rs 2500 in the old scale. However, CDA(O) during pay fixation allowed additional increment after counting stages from 2nd Lieutenant. On being pointed out by Audit, a review was carried out by CDA(O) in February 2000 and overpayment of Rs 96.15 lakh recovered in June 2000.

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[3] Controller of Defence Accounts (Officers), Pune
[4] Controller of Defence Accounts, Southern Command, Pune
[5] Pay and Accounts Officer
[6] Garrison Engineer

Case III

(i) Audit scrutiny of pay accounts of Army officers and personnel maintained by CDA(O) and seven PAOs revealed overpayments and short recoveries aggregating Rs 25.19 lakh relating to pay & allowances, outfits allowance, transport allowance etc. The recovery of this amount has been effected.

(ii) On being pointed out in audit an amount of Rs 16.44 lakh on account of overpayment and short recoveries, non-levy of penalty, non-recovery of interest and overpayment of medical claim was recovered by CDA(CSD) and Pr CDA SC.

Case IV

Though the sewerage lines of Garrison Engineer Kanchanbagh were not connected with HMWS&SB[7], the GE erroneously admitted 35 *per cent* levy of sewerage cess claimed by HMWS&SB. On being pointed out in audit this irregularity was discontinued from September 2000 and refund of Rs 63.71 lakh was under realisation.

Case V

Audit scrutiny of the Revenue ledgers maintained by BSO(R&D)[8] West Bangalore revealed that only licence fee was being recovered without effecting recovery of hire charges for furniture items issued to Scientists of R&D. At the instance of Audit BSO R&D effected recovery of furniture charges worth Rs 0.57 lakh for the period from January 2000 to December 2000, besides, accrual of recurring revenue to the State.

Savings

In the following five cases savings of Rs 2.41 crore were effected at the instance of Audit:-

Case I

CAFVD[9] Kirkee placed a supply order in June 1994 for 250 driving sprocket valuing Rs 55 lakh. The item covered under the supply order was slow moving and declared as 'To Die when stock exhausted and No Further Provisioning'. On being pointed out in audit, the DGQA[10] in June 2000 decided to cancel the supply order resulting in saving of Rs 55 lakh.

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[7] Hyderabad Metropolitan Water Supply and Sewerage Board
[8] Barrack/Stores Officer (Research & Development)
[9] Central Armoured Fighting Vehicle Depot
[10] Director General Quality Assurance

Case II

COD[11] Mumbai in December 1999 proposed to adjust the surplus ST pattern tyres in lieu of CC pattern tyres and CQA(Vehicle)[12] Ahmednagar agreed to this proposal as a one time measure till surplus stock was exhausted. COD Mumbai in a provision review carried out in April 2000 ignored the surplus stock of 480 ST pattern tyres. On being pointed out in Audit, the Depot cancelled the supply order for 793 tyres. This resulted in saving of Rs 38.13 lakh.

Case III

Despite Ministry's orders issued in September 1998 for reduction in authorisation for single accommodation from 86 to 65 *per cent*, Air HQ in April 1999 sanctioned construction of excess 16 single accommodation for Airmen. On being pointed out in Audit in August 1999, Headquarters Training Command IAF Bangalore reviewed the requirement and reduced the scope of work which resulted in saving of Rs 11.81 lakh.

Case IV

In August 1993 Air HQ sanctioned provision of officers mess and single officers accommodation at a cost of Rs 104.96 lakh providing special architectural features and superior specifications costing Rs 5.44 lakh for officers mess which otherwise was not authorized as per Defence Works Procedure and Army HQ E-in-C's[13] instructions of February 1993. Agreeing with the audit views the special provision was deleted resulting in saving of Rs 5.44 lakh.

Case V

Audit scrutiny of works sanctions for an estimated amount of Rs 1.31 crore issued by HQ Northern Command, Station HQ and four Infantry Divisions between the period January 1999 and October 2000 revealed that these sanctions were issued for unauthorised/ irregular works services. On being pointed out in Audit, the concerned sanctioning authorities cancelled the sanctions which resulted in saving of Rs 1.31 crore.

The matter was referred to the Ministry in August/ September 2001; their reply was awaited as of October 2001.

23. Improper provisioning of tyres

Several cases of delay in provisioning action and non-utilisation of tyres due to delay in implementation of policy decisions were noticed. The cases are discussed below:

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[11] Central Ordnance Depot
[12] Controller of Quality Assurance (Vehicle)
[13] Engineer-in-Chief's

Case I

Ignoring stocks held by Sub Depots, Central Ordnance Depot Mumbai inflated demands in excess of requirement which resulted in accumulation of surplus stock of tyres valuing Rs 1.49 crore.

Stock dispersed to holding sub-depots are to be treated as assets of Central Ordnance Depot and these stock are set off against deficiency. Failure of Central Ordnance Depot Mumbai to take into account these stock as assets while carrying out review of two types of tyres resulted in over provisioning of 5305 tyres valued at Rs 1.49 crore.

The Audit scrutiny revealed the following:

(i) COD Bombay ignored the stocks of 2283 held at sub-depots for Jeep tyres and taken this stock as issues instead of taking it as asset while carrying out Annual Provision Review in October 1999. This resulted in inflating the 'deficiency and average consumption' (MMF[14]) which led to over provisioning of 4375 tyres valued at Rs 58.75 lakh. Provision review of October 2000 also revealed surplus holding of 6214 tyres.

(ii) Similarly incorrect procedure was adopted by the COD in April 2000 while carrying out review of tyres for Tata 4 Ton vehicle wherein dispersed stock of 2301 tyres to dependent sub-depots was ignored. This had resulted in excess procurement of 930 tyres valuing Rs 90.36 lakh in May 2000. Subsequent review in October 2000 revealed surplus holding of 974 tyres and therefore no fresh purchase was made.

iii) Considering the shelf life of 5 years and issue/consumption trend the tyres held with the COD coupled with introduction of "sand cum highway" tyres the prospects of their utilization within the expiry of shelf life is doubtful.

The matter was referred to the Ministry in July 2001; their reply was awaited as of October 2001.

Case II

Failure to use SCH tyres resulted in expiry of shelf life of 5492 tyres and 6669 tubes valuing Rs 1.66 crore. Further, incorrect assessment of requirement also resulted in over-provisioning of cross country tyres/tubes valued at Rs 2.22 crore.

COD Mumbai conducted a special provision review of SCH[15] tyres in February 1994 indicating a demand for 12925 tyres to cater for 2585 vehicles on the basis of vehicle holding. The existing stock of 1359 tyres was not taken into account as 'assets' on the

[14] Monthly Maintenance Figure

[15] Sand-cum-Highway

plea that the same have been procured to meet normal wastage. 12924 tyres valuing Rs 3.65 crore were procured between December 1994 and March 1998. In addition, cross country tyres for 2585 vehicles were also provisioned in April 2000.

Audit scrutiny revealed the following:

(i) Army HQ had prolonged deliberation with Ministry of Defence to chalk out the authorization of SCH tyres required for units/formation having operational role in the sand and highway terrain. But till October 1999 use of SCH tyres by entire Field Force could not be ensured though 3712 numbers of SCH tyres were procured in 1991.

(ii) Due to failure to implement policy decision of 1996 on usage of SCH tyres by entire Field Force huge stock of 15185 tyres and 6669 tubes were lying unutilised. Of these the shelf life of 5492 tyres and 6669 tubes valuing Rs 1.66 crore had already expired.

(iii) While carrying out provisioning review in April 2000 for cross country tyres required for a vehicle, procurement of SCH tyres already made for 2285 vehicles, was not taken into account, which led to excess procurement of cross country 9878 tyres and 9343 tubes valued at Rs 2.22 crore.

The matter was referred to the Ministry in August 2001; their reply was awaited as of October 2001.

Case III

Delay in provisioning and processing the case for sanction of Cover Outer for Shaktiman vehicles by COD/Army HQ resulted in avoidable expenditure of Rs 99.35 lakh.

Director General Ordnance Services Technical Instruction specifies three months period for carrying out provision review and placement of demand on supplying Agency for procurement of class 'B' stores.

Central Ordnance Depot Mumbai carried out a provision review of Cover Outer (Tyre) for Shaktiman Vehicles on 01 October 1994 which revealed a deficiency of 40985 tyres. The Depot forwarded a case for financial concurrence to Army HQ on 30 January 1995.

Army HQ in turn sent the proposal to Ministry in April 1995 and Ministry accorded sanction on 31 May 1995 for 35047 tyres at a cost of Rs 13.93 crore. Army HQ conveyed the sanction to the Depot on 28 June 1995 with the directions to place orders on 28 June 1995 itself as the old rates were valid up to this date. Depot placed two orders on two firms for 30000 and 5047 tyres on 30 June 1995 costing Rs 14.11 crore. One firm indicated production constraints and requested cancellation of order while the other informed delays in supplies that too with increased prices effective from 29 June 1995.

Therefore the Depot cancelled the supply orders on 9 August 1995 without financial repercussions on either side and placed three fresh supply orders on three firms for 35047 tyres at a cost of Rs 15.10 crore.

The case thus revealed:

(i) The Depot and Army HQ took 9 months in processing and conveying the sanction of the Ministry against 3 months prescribed period.

(ii) Army HQ could convey the sanction only on 28 June 1995 even though the Ministry had cleared the case on 31 May 1995 which resulted in order placement being delayed to 2 days resulting in extra expenditure of Rs 99.35 lakh.

The matter was referred to the Ministry in May 2001; their reply was awaited as of October 2001.

24. Non-utilisation of land valuing Rs 3.70 crore

Army failed to utilise the land for intended purpose for over 23 years.

Army requisitioned 569 Kanals of land (65 Kanals in Khandhipari and 504 Kanals in Hanjak) in July 1975 under RAIP[16] Act 1968 for construction of married accommodation in Kashmir Valley. Possession of the land was given to the Army in March 1978. As no value additions to the land in terms of buildings structures/improvements of any sorts were carried out, the requisitioned land was rendered ineligible for acquisition in December 1986, under RAIP Act 1968. In the meantime, rentals to the tune of Rs 17.15 lakh had to be paid to the owners, which was avoidable. In June 1989, acquisition proceedings were again initiated under J&K LA Act. Eventually, the land was acquired in April 1999 at a total cost of Rs 3.70 crore.

As of November 2001, construction of married accommodation on the land is remote as the station has been declared as 'non-family' station. Thus, Rs 3.70 crore paid to the owners towards cost of the land remained infructuous.

The matter was referred to the Ministry in May 2001; their reply was awaited as of November 2001.

[16] Requisitioning and Acquisition of Immovable Properties

25. Overpayment of Rs 2.49 crore to Civil Hired Transport contractors

A Sub Area HQ made over payment of Rs 2.49 crore to transport contractors in violation of the laid down terms of MOU.

Against Government sanction of May 1989, amended in August 1996 and June 1997, HQ Northern Command entered into Memorandum of understanding (MOU) with civil transporters for conveyance of stores for Advance Winter Stocking in Leh Sector. Audit scrutiny revealed that the MOU for the years 1998-99 and 1999-2000 provided for the rates for per tonne of load conveyed per kilometer between Pathankot and Leh. A Sub Area HQ being the contract operating authority allowed payments for full truck load capacity of 9 tonne against 5 to 6 tonne actually conveyed. Breach of MOU resulted in overpayment of Rs 2.49 crore to transport owners.

The overpayments pointed out in Audit have been accepted by HQ Northern Command subject to further findings by Staff Court of inquiry ordered in January 2001. Security deposit of Rs 26.37 lakh have been identified for liquidation of recoveries.

The matter was referred to the Ministry in August 2001; their reply was awaited as of October 2001.

26. Premature downgradation of ammunition due to improper storage

5182 rounds of ammunition valued at Rs 1.16 crore issued to user units were declared unserviceable due to improper storage of ammunition by an Ammunition Depot.

Ammunition Depot, Dappar has covered accommodation for 12000 tonnes of ammunition against which 35000 tonnes was held. The overflow of ammunition was stored in open clearings on dunnage[17] duly covered by water proof cover. 5182 rounds of 30 mm ammunition valued at Rs 1.16 crore issued by AD Dappar to six user units were declared unserviceable by them due to improper storage and inferior packing before the expiry of shelf life.

A scrutiny of the case revealed the following:

i) In 6 out of 10 Court of Inquiries (COI) held between August 1997 and August 2000 to investigate the causes of downgradation of ammunition, it was pointed out that the downgradation was due to inferior quality of factory packing and improper storage condition at AD Dappar i.e. ammunition stored in open covered with torn and worn out tarpaulines leading to seepage of air and moisture. However, the COI recommended to regularise the loss not due to theft, fraud and neglect and also

[17] Dunnage : A loose wood of any kind laid in the bottom of the hold to keep the cargo (stores) out of the bilge-water, or wedged between the part of the cargo (stores) to keep them steady.

suggested improvement in storage facilities to avoid recurrence of such losses. As such the downgradation of the ammunition was to be viewed as loss due to negligence.

ii) A joint inspection team consisting of representatives of Ordnance Factory Khamaria and 14 Guards examined 606 rounds at user unit on 09 June 2000. OF Khamaria did not accept the opinion of COI about use of inferior packing material and also stated that the seals of boxes were tampered with. The team concluded that the re-packing as well as storing at Depot level was not done properly. These facts substantiate that downgradation of ammunition was due to improper storage conditions at Depot level.

Headquarters Western Command stated in April 2001 that Ammunition Depot, Dappar has approached Army HQ to detail a representative of Ordnance Factory Khamaria to check the effectiveness of factory packages and ascertain the condition of ammunition in factory sealed boxes.

The matter was referred to the Ministry in June 2001; their reply was awaited as of October 2001.

27. Inept handling of loss of store

Non-adherence to the prescribed procedure for issue and receipt of store resulted in loss of Angola Shirts valuing Rs 1.07 crore. Delayed investigation enabled to guilty officials to escape punishment.

Regulations provide that consignor will prepare 06 copies of issue vouchers, two for consignee, two for his Local Audit Officer (LAO) and balance two for retaining at consignor's unit. LAO retains one copy and sends the other copy to consignee's LAO. In the event of non-receipt of issue voucher with the consignment and if efforts fail to get issue voucher in reasonable period, the receipt will be linked with the consignee LAO issue voucher. In the case of loss of store, Staff Court of Inquiry is required to be convened within 15 days of detection of loss and all matters relating to Court of Inquiry are required to be finalized within 180 days of detection of loss.

Audit scrutiny of two cases involving loss of Angola Shirts of Rs 1.07 crore revealed the following:

Case I

In January 1994, a Central Ordnance Depot (COD) despatched 12595 shirts valued at Rs 34.13 lakh to an Ordnance Transit Group (OTG) for onward transmission to a Divisional Ordnance Unit (DOU). The OTG despatched the shirts to DOU in July 1994. The consignment was received by the DOU in July/August 1994 through Civil Hired Transport (CHT).

Contrary to the laid down procedure of preparing the Daily Receipt Sheet (DRS) immediately after receipt of consignment, the Daily Receipt Sheet (DRS) was prepared in September 1994 after a delay of 50 days, which revealed short receipt of 9047 shirts valuing Rs 24.51 lakh. DOU did not obtain issue voucher from its LAO or consignors for linking the receipt. The deficiency remained unaccounted for till July 1998 when Discrepancy Report (DR) was formally raised against the consignor. The same was turned down by COD on the grounds that the shirts were issued in original Factory packing which were not opened at COD. A case has been processed by DOU for regularisation of loss of Rs 24.51 lakh, which was still awaited (April 2001).

A Staff Court of Inquiry ordered in June 1998 was in progress as of May 2001.

Case II

In February 1996, a Central Ordnance Depot (COD) despatched 22035 shirts valued at Rs 82.85 lakh to OTG for onward transmission to DOU through a Field Ordnance Depot (FOD). The consignments were received at OTG in February 1996 and these were redespatched to FOD in two Civil Hired Transport in March 1996. FOD in turn despatched the shirts to DOU who received it in March 1996.

In December 1996, the DOU intimated that they have not received the shirts, instead 3700 steel buckets were received. In March 1997, after 11 months of receipt of stores by DOU, a Court of Inquiry was convened and reconvened in April 1998 to find out the circumstances under which items issued by COD could not be correctly delivered at consignee end.

The Court of Inquiry opined that as a result of negligence at every stage, tampering of documents led to change in the contents of packages. Court also directed to hand over the case to an independent agency. Accordingly the case was handed over to CBI. HQ NC stated in February 1999 that Ordnance functionaries at HQ Command failed to specifically pin point the responsibility for the loss.

Court of Inquiry observed that though the delay in ordering/processing the departmental enquiry appears to be deliberate but it was not possible for the Court to comment on the ulterior motive, if any, or pecuniary benefit accrued to any functionary of Ordnance branch in HQ NC till the whereabouts of the missing consignment were known.

The matter was referred to Ministry in May 2001; their reply was awaited as of October 2001.

28. Avoidable loss of revenue

Failure to exercise delegated financial powers by Commandant of a Vehicle Depot led to loss of revenue of Rs 41.45 lakh.

According to the procedure laid down by Ministry in 1989 for sales of stores RGP[18] can be revised and re-fixed only when the offer received is less than 50 *per cent* of RGP fixed.

Further a Commandant is empowered to accept bids for sale of stores up to 20 *per cent* lower than the RGP without assigning any reasons.

Commandant of Northern Command Vehicle Depot rejected the bids received for Rs 197.41 lakh against RGP of Rs 220.91 lakh in respect of auction of 59 lots of class V/VI 'B' vehicles conducted by MSTC[19] on 28/29 February 2000 on the ground that they were below the RGP. Subsequently (in March 2000) the Command HQ revised/ downward the RGP to Rs 208.65 lakh and disposed these vehicles for Rs 155.96 lakh in the auction held on 23 & 24 March 2000.

In the auction held on 28/29 February 2000, the total bids received was for Rs 197.41 lakh against RGP of Rs 220.91 lakh i.e. 10.64 *per cent* below RGP which could have been accepted by the Commandant. The Command HQrs (March 2000) revised the RGP downwards to Rs 208.65 lakh stating that the RGP fixed was equal to or more than the highest bid received in the previous auction. Thus, non-exercising of financial powers, arbitrary reduction of RGP and acceptance of a lower bid towards the end of March 2000 resulted in loss of Rs 41.45 lakh.

The matter was referred to the Ministry in July 2001; their reply was awaited as of October 2001.

[18] Reserve Guiding Price
[19] Metal Scrap Trading Corporation

CHAPTER IV: WORKS AND MILITARY ENGINEER SERVICES

29. Avoidable loss due to non-availing of concessional electricity tariff

Failure of MES to avail the revised tariff issued by local electricity authority and consequential delay in securing concessional tariff led to an avoidable expenditure of Rs 9.58 crore.

BEST[1] offered electricity supply at concessional rates in their Schedule of Tariffs effective from 15 July 1997 for bulk consumers like Military Engineer Services who receive high Tension supply for mixed residential and non-residential purposes provided the latter segregated its residential and non-residential load and met certain conditions like minimum level consumption and better power factor. However two out of three Garrison Engineers in Mumbai failed to take timely action to avail the concessional rates of electricity tariff which led to avoidable additional expenditure of Rs 9.58 crore.

While Garrison Engineer (West) Mumbai has been availing the concessional tarrif from July 1999, the other two Garrison Engineers viz. GE (Naval Works) Kunjali and GE (Navy Nagar) took up the matter with BEST only in February/March 1999 and were yet to segregate the residential load (March 2001) attributing the delay to wide spread area of jurisdiction. Their failure to avail the concessional electricity tariff resulted in avoidable expenditure of Rs 9.58 crore for the period January 1998 to March 2001.

The matter was referred to the Ministry in May 2001; their reply was awaited as of October 2001.

30. Loss of revenue due to non-functioning of electric meters

Failure of Garrison Engineers in not floating bills for excess consumption of electricity over scales fixed and freezed resulted in loss of revenue to the extent of Rs 4.40 crore.

Mention was made in Paragraph 52 of the Report of the Comptroller and Auditor General of India No.7 of 1998 about increased scale of free consumption of electricity at 26 stations. Ministry's Action Taken Note on this Paragraph was awaited.

Audit scrutiny revealed that:

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[1] Brihan Mumbai Electric Supply and Transport Undertaking

JCOs[2]/ORs[3] living in married accommodation are authorised free electricity at the scales approved by the station Boards/ Commanders from time to time and it was frozen by the Ministry of Defence with effect from 01 January 1983. Since electric meters were not functioning/installed at Ambala in 821 JCOs and 3426 ORs quarters and at Bathinda in 672 JCOs and 3593 ORs quarters, the Garrison Engineers did not float bills for excess consumption to PAOs for making recoveries through IRLAs.[4] To overcome the problem, station Boards held in June 1996 and March 1995 for Ambala and Bathinda stations respectively fixed the flat scales of consumption of electricity, which were in excess of scales that were frozen resulting in loss of Rs 4.40 crore during January 1996 to March 2001.

In reply to audit observations while the Commander Works Engineer Ambala Cantt. in May 2001 admitted that timely action was not taken to float electric bills for excess consumption and these have to be issued, the Garrison Engineer Bathinda stated in February 2001 that action would be taken to repair the electric meters.

Ambala and Bathinda stations are located in similar climatic zone. However, the frozen scales and consumption scales fixed by the Board were much higher for Bathinda station.

The matter was referred to the Ministry in August 2001; their reply was awaited as of October 2001.

31. Avoidable expenditure on additions/alterations of OTM accommodation

Army HQ unauthorisedly reappropriated other than married accommodation of a Regiment for use by Indian Military Academy by addition/alteration at Rs 1.90 crore but the buildings are now with an Infantry Division.

The Ministry sanctioned (November 1996) deficient OTM[5] accommodation for a Field Regiment at a station for Rs 3.94 crore as amended. Chief Engineer Bareilly Zone in January 1998 concluded a contract for Rs 2.94 crore and the major part of work was completed in February 2000 at Rs 3.14 crore. Instead of handing over the accommodation to the Field Regiment, Army HQ ordered (November 2000) for shifting of ACC[6] wing of IMA[7] into the accommodation and to complete the balance work.

In a further reversal, the buildings were handed over (2001) to an Infantry Division for accommodating one of their units.

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[2] Junior Commissioned Officers
[3] Other Ranks
[4] Individual Running Ledger Accounts
[5] Other Than Married
[6] Army Cadet College
[7] Indian Military Academy

The following irregularities were observed in audit:

(a) The reappropriation ordered by the Army HQ in November 2000 was irregular as only the Ministry is competent to do so.

(b) HQ Central Command in February 2000 issued Go-ahead sanction for additions/alteration to the buildings under Para 11 of DWP[8] which could be invoked only on grounds of operational necessity or urgent medical grounds. The additions/alterations work was completed in February 2001 at Rs 1.90 crore.

(c) The Rs 1.90 crore spent on additions and alteration to meet the requirement of a training establishment were eventually rendered infructuous.

Thus, vacillating decision making, unauthorized reappropriation and misuse of delegated financial powers resulted in infructuous expenditure of Rs 1.90 crore.

The matter was referred to the Ministry in July 2001; their reply was awaited as of October 2001.

32. Avoidable expenditure due to delay in availing of concessional electricity tariff

Failure of GE R&D East Bangalore in taking timely action to avail concessional tariff for residential accommodation of Defence Research Establishments resulted in avoidable payment of Rs 1.40 crore.

Garrison Engineer R&D (I) East Bangalore has an agreement with Karnataka Electricity Board for a combined HT[9] connection for 5750 KVA electricity supply to Defence Research Establishments including residential accommodation load of 1500 KVA.

Karnataka Electricity Board, in October 1997, introduced new electricity tariff effective from 01 July 1997, which stipulated lower tariff for domestic consumption. Garrison Engineer took up the matter with the Board only after 18 months in December 1998 and it took another 24 months before a separate HT connection for domestic consumption was provided in January 2001. In the meanwhile, Rs 1.40 crore extra has been paid.

The matter was referred to the Ministry in May 2001; their reply was awaited as of October 2001.

[8] Defence Works Procedure
[9] High Tension

33. Non-commissioning of fire hydrant

A fire hydrant network remained incomplete and non-functional since 1997 rendering Rs 88.30 lakh spent on it nugatory.

In February 1994 the Army HQ sanctioned provision of water supply overhead tank, semi underground water tank, fire hydrants etc. at a cost of Rs 90.46 lakh for strengthening fire protection measures of an ammunition Depot to be completed in 144 weeks. Zonal Chief Engineer concluded a contract in May 1995 with Techno Trade for execution of work services related to provision of water supply, RCC tank and fire hydrants at a lump sum of Rs. 41.93 lakh. The contractor was paid Rs 28.31 lakh .The work regarding automatic functioning was executed by Oxy Cut. The balance amount related to cost of schedule B stores, contingencies and establishment charges. The system had not been commissioned even though an amount of Rs 88.30 lakh had been incurred as on March 2001.

Audit Scrutiny of the relevant records revealed:

i) The work was physically completed in September 1997 but the automatic running of the pumps could not be made effective till March 2001.

ii) The contractor absolved himself of his responsibility in the defects in the fire hydrant system attributing it to defective and erroneous design of the automatic system (August 1999).

iii) Chief Engineer cancelled the contract with effect from 20 June 2000 due to failure of the contractor to rectify the defects at his risk and cost.

iv) The risk purchase contract is yet to be placed for commissioning of the network (July 2001).

v) No serious effort had been made to rectify the defects and commission the system since September 1997. Scrutiny of the records revealed efforts at shifting blame among the various agencies involved.

The Ministry, while accepting the facts of the case, stated in August 2001 that all out efforts were being made to complete the work at the risk and cost of the original contractor. The Ministry, however, confirmed that no faulty design is noticed either in the Administrative Approval or in the contract.

34. Re-appropriation of single living accommodation constructed for Sailors

Two floors of single living accommodation for sailors constructed at a cost of Rs 79.33 lakh were not used for the intended purpose. HQ Western Naval Command, in gross violation of its powers, unauthorisedly handed over these floors of the building to Indian Naval Canteen Services.

Two floors of single accommodation for sailors completed at a cost of Rs 79.33 lakh in September 1999 had been unauthorisedly re-appropriated. Audit scrutiny of the records revealed the following:

a) Without obtaining approval from the Ministry of Defence, the ground floor of the building, which was designed to be a Cook House and Dining Hall and first floor of the building were re-appropriated as a self-service CSD canteen for Naval Officers by Flag Officer Commanding of Maharashtra Naval Area. This has covered area of 1289 square metre constructed at a cost of Rs 79.33 lakh. This is a violation of Para 15-B(C) of Defence Works Procedure.

b) While sailors had moved into the building in October 2000, the CSD canteen had been operational since April 1999, even before issue of the completion certificate.

c) Cook House and Dining Hall were integral to the proposal sanctioned by the Government. Re-appropriation of the ground floor intended for this purpose had adversely affected the convenience of the sailors because now they have their messing arrangement in respective units.

The matter was referred to the Ministry in May 2001; their reply was awaited as of October 2001.

35. Construction of married accommodation for which no utility exists

Sailors' married accommodation constructed at a cost of Rs 23.85 lakh at Calcutta and taken over in December 1999 was not put to use (October 2001).

HQ Eastern Naval Command sanctioned in March 1997 construction of seven sailors accommodation at Calcutta at an estimated cost of Rs 29.53 lakh. Chief Engineer Calcutta Zone concluded a contract in October 1997 for executing the work at a cost of Rs 26.68 lakh with date of completion as February 1999. While the work was in progress, the users informed the Chief Engineer in March 1998 that due to unavoidable operational reasons the necessity to build sailors accommodation was being reviewed and requested for temporary suspension of the work. However, the CE did not agree with the proposal as Rs 4.18 lakh was already spent on this and suspension would have involved financial implications. In the light of the above HQ Eastern Naval Command permitted in October 1998 to go ahead with the work. The accommodation, completed in August

1999 and taken over by the users in December 1999, has not been put to use till date (October 2001).

An examination of the case revealed the following:

(i) Allotment of fund of only Rs 0.01 lakh was made in March 1997 and no further funds were allotted till March 1999 by which time contract for the job was concluded. Expenditure of Rs 11.68 lakh was incurred in anticipation of allotment of funds in violation of Regulations.

(ii) Decision given by HQ Eastern Naval Command to complete the work without its necessity resulted in creation of idle assets valuing Rs 23.85 lakh (booked expenditure upto April 2000).

The matter was referred to the Ministry in July 2001; their reply was awaited as of October 2001.

CHAPTER V: RESEARCH AND DEVELOPMENT ORGANISATION

36. Unauthorised construction

Disregarding CCPA's ban on incurring any expenditure on residential accommodation and overlooking surplus accommodation, DRDO sanctioned construction of 28 married quarters at a cost of Rs 3.19 crore avoiding the approval of CCPA.

Ministry accorded sanction in August 1990 followed by another sanction in March 1993 for establishment of common inspection agency at Hyderabad clearly stipulating that no expenditure would be incurred on residential accommodation and the agency would utilize the existing infrastructure of the participating manufacturing/inspection units. The original sanction was approved by CCPA. However, violating the restriction imposed by CCPA, DRDO[1] approved construction of 28 married accommodation in June 1999 at a cost of Rs 3.19 crore in two phases. As of January 2001, 90 *per cent* of the work had been completed.

Audit scrutiny also revealed that the R&D lab[2], where the agency was functioning had surplus residential accommodation and had leased out 21 quarters to a Public Sector Undertaking[3] since 1991. The lease period was being extended from time to time, last extended in July 2000 for June 1998 to June 2001 on ex-post-facto basis. Had this accommodation been taken into account the requirement of accommodation for the agency could have been reduced by 21 quarters and curtailment of expenditure by Rs 1.76 crore.

The matter was referred to the Ministry in July 2001; their reply was awaited as of October 2001.

[1] Defence Research and Development Organization
[2] Research Centre Imarat
[3] GAETEC: Gallium Arsenide Enabling Technology Centre

CHAPTER VI : BORDER ROADS ORGANISATION

37. Time and cost over-run in construction of Road due to lapse on the part of Border Roads Organisation

An incomplete road was left unattended from February 1995 to March 1998. The expenditure of Rs 5.09 crore incurred on construction of road till February 1995 failed to yield any value for money, besides likely time over-run of 11 years and cost over-run of Rs 2.21 crore.

Ministry of Surface Transport sanctioned in April 1993 construction of 18.39 Kms of Morshing-Phudang road as General Staff Projection road at a cost of Rs 5.75 crore as priority I works- with date of completion by 1994-95 as an alternative route to Tawang to avoid disruption of logistic and communication support to the Army and civil population. The work was to be executed by Chief Engineer (P) Dantak and to be handed over to Chief Engineer (P) Vartak for its up-keep and maintenance. The road scheduled to be completed by 1994-95 was expected to be completed at a revised cost of Rs 7.96 crore by March 2006.

An examination of the case revealed the following:

(i) Chief Engineer(P) Dantak stated that road work was completed and sought approval of DGBR[1] in November 1994 for its transfer to Chief Engineer(P) Vartak when the work was completed to the extent of 76.38 *per cent* only. Chief Engineer(P) Dantak also informed the DGBR in March 1995 that the road was handed over to Chief Engineer(P) Vartak in February 1995. However, the Chief Engineer (P) Vartak informed the CE(P) Dantak in February 1995 that the road was incomplete and requested him to complete the balance work. The incomplete road was actually taken over by CE(P) Vartak in March 1998.

(ii) The alternate road remained unattended from February 1995 to March 1998 and was severely damaged by rain/land slides etc. Rs 5.09 crore incurred on the road till February 1995 failed to yield any value for money. More than three years of valuable time further lapsed and the work progressed upto 80.11 *per cent* only up to November 2000 for which Rs 5.19 crore was booked. Due to heavy blockage of state PWD road sector from Shergaon to Morshing, CE(P) Vartak could not progress the work. The completion cost of the road was estimated to be Rs 7.96 crore with PDC by March 2006 and the construction of balance work was commenced in January 2001.

[1] Director General Border Roads

(iii) No responsibility has been fixed for leaving the road unattended from February 1995 to March 1998. The alternate road route to Tawang will be delayed by 11 years involving additional cost to the tune of Rs 2.21 crore.

The matter was referred to the Ministry in April 2001; their reply was awaited as of October 2001.

38. Avoidable expenditure due to lapse in supervision

Non-correction/levelling of runway at the initial stage and use of defective screed of paver necessitated additional work resulting in an avoidable expenditure of Rs 92.72 lakh.

Ministry of Defence accorded 'Go-ahead' sanction in August 1998 for Rs 1.97 crore and accorded covering sanction in January 1999 for the work of resurfacing of runway at a Naval Air Station for Rs 9.27 crore. The work was to be executed by Border Roads Organisation. The work was commenced on 26 December 1998 based on 'Go-ahead' sanction of August 1998 and completed on 20 January 2000.

During the execution of work, the Secretary, BRDB[2] and DDG(TG)[3] of BRO[4] inspected the work in June 1999 and pointed out undulations in the resurfaced work. Commander, BRITF[5] in February 2000 sent a proposal to CE(P)[6] Chetak for additional overlay of 40 mm thick over 660 metres length of runway at a cost of Rs 94.05 lakh to remove undulations.

A Board of Officers, constituted in April 2000 to inspect the runway, found undulations beyond tolerance limits and 'peeling off' and recommended re-surfacing of 680 metres of flexible portion of runway but did not attribute any reason for defective screed paver or lack of supervision. The rectification work was completed in November 2000 by incurring an expenditure of Rs 112.33 lakh.

Scrutiny of the case revealed that the undulations in the re-surfaced work occurred due to defective screed of paver used for laying re-carpeting mix resulting in an avoidable expenditure of Rs 92.72 lakh. Furthermore, the work of relaying was necessitated second time, as correction/levelling work was not done at the initial stage due to lack of proper supervision. No responsibility has been fixed for laxity in supervision.

DGBR in reply (June 2001) stated that the re-carpeting of runway was necessitated for the second time not because of defective screed of the paver or due to lack of supervision but due to non-provision of a corrections/levelling course which was also not

[2] Border Road Development Board
[3] Dy. Director General (Technical Group)
[4] Border Road Organisation
[5] Border Road Integrated Task Force
[6] Chief Engineer (Project)

recommended by the Board. This only highlights that technical opinion of the Board was incomplete and there was failure at supervisory level.

39. Infructuous expenditure due to change in sequence of construction for development of a road to wider specification

Though development of a road to class 9 specification was already approved, DGBR instead directed to execute work on class 5 specification sanctioned earlier. Subsequent widening of the road resulted in damages to the tune of Rs 48.22 lakh due to operation of dozers on finished surface.

MOST[7] in April 1995 accorded sanction for surfacing of a road to class 5 specification at a cost of Rs 4.82 crore. Before the execution of above work could commence, Army Headquarters in September 1995 accorded approval to develop the subject road to class 9 specification. Development of road from class 5 to class 9 was sanctioned only during December 1999.

An examination of the case revealed the following:

(i) Instead of expediting sanction for development of formation of road to class 9 specification and taking up execution accordingly as per their direction of October 1995 DGBR in supersession of their earlier decision injudiciously directed the Chief Engineer (P) Udayak in November 1995 to first complete the surfacing on class 5 specification and then take up formation improvement to class 9 specification. Accordingly, class 5 surfacing was completed in March 1997.

(ii) During the course of execution of formation improvement work to class 9 specification, dozers were operated through class 5 surfaced road without taking any preventive measures, which resulted in damages to the surface. The cost for its correction was worked out to Rs 48.22 lakh.

(iii) In order to suppress the extent of damages, DGBR directed the Chief Engineer in February 2000 to reduce the scope of correction work to 40 *per cent*, and balance to be met through maintenance grant as of March 2001. This was not in order.

The matter was referred to the Ministry in July 2001; their reply was awaited as of October 2001.

[7] Ministry of Surface Transport

CHAPTER VII : ORDNANCE FACTORY ORGANISATION

40. Performance of Ordnance Factory Organisation

40.1 Introduction

Thirty-nine Ordnance Factories, with a manpower of 1.39 lakh are engaged in production of arms, ammunition, equipment clothing, etc. primarily for the Armed Forces of the country. In order to utilise available spare capacities, Ordnance Factories manufacture items also for civil trade. At the apex level, Ordnance Factories are managed by a "Board" which is responsible for policy formulation, supervision and control. Director General is the ex-officio chairman of the Ordnance Factory Board. He is assisted by nine Members/Addl Director General of Ordnance Factories, who are in charge of various staff and line functions.

The broad grouping of ordnance factories with reference to their production is as under:

	Divisions	No. of factories
(i)	Materials and Components	9
(ii)	Weapons, Vehicles and Equipment	10
(iii)	Ammunition and Explosives	10
(iv)	Armoured Vehicle	5
(v)	Ordnance Equipment Factories	5

On the basis of the product the factories are also classified as metallurgical (6), engineering (18), filling (5), chemical (4) and ordnance equipment (6).

40.2 Revenue expenditure

The expenditure under revenue head during 1996-97 to 2000-2001 is given in the table below:

Note: The figures incorporated in this paragraph are mainly based on Annual Accounts of Ordnance and Ordnance Equipment Factories in India finalized by Principal Controller of Accounts (Factories) Calcutta, documents maintained by Ordnance Factory Board Calcutta and information supplied by Ordnnace Factory Board, Calcutta.

(Rupees in crore)

Year	Total expenditure incurred by ordnance factories	Receipts against products supplied to Armed Forces	Other receipts and recoveries[+]	Total receipts	Net expenditure of ordnance factories
1996-97	3272.30	2416.22	433.06	2849.28	(+) 423.02
1997-98	4050.47	2852.93	517.06	3369.99	(+) 680.48
1998-99	4461.72	3854.92	598.59	4453.51	(+) 8.21
1999-2000	4994.88	5124.43	700.61	5825.04	(-) 830.16
2000-2001	6016.94[∇]	5209.17	839.54	6048.71	(-) 31.77

Though the total expenditure during 2000-2001 has increased by 20.46 *per cent* as compared to the previous year, the increase in total receipt was only marginal at 3.84 *per cent* as compared to the previous year.

40.3 Analysis of performance of OFB

40.3.1 General

In 2000-2001, outturn of Ordnance Factory Chanda was highest at Rs 1119.83 crore with 94.5 *per cent* material components while that of Ordnance Cable Factory Chandigarh was the lowest at Rs 29.66 crore with material components at 52.70 *per cent.*

Following five Ordnance Factories recorded highest outturn:

Sl. No.	Name of the Ordnance Factory	Amount (Rupees in crore)
1.	Ordnance Factory, Chanda	1119.83
2.	Vehicle Factory, Jabalpur	720.45
3.	Ordnance Factory, Khamaria	604.82
4.	Ordnance Factory, Bolangir	369.94
5.	Ordnance Factory, Ambajhari	325.27

The five Ordnance Factories which recorded lowest outturn were as under:

Sl. No.	Name of the Ordnance Factory	Amount (Rupees in crore)
1.	Ordnance Cable Factory, Chandigarh	29.66
2.	Ordnance Equipment Factory, Hazratpur	30.12
3.	Machine Tool Prototype Factory, Ambernath	38.06
4.	Grey Iron Foundry, Jabalpur	39.92
5.	Ordnance Factory, Bhusawal	40.07

[+] The figures under this column are not reflected in the Appropriation Accounts of Defence Services and hence the figures of net expenditure as shown above do not tally with the figures shown in Appropriation Accounts of Defence Services.

[∇] This does not include the expenditure incurred by D.A.V.P.
D.A.V.P. – Department of Audio Visual Publicity

40.3.1.1 The following table indicates element-wise cost of production during the last five years :

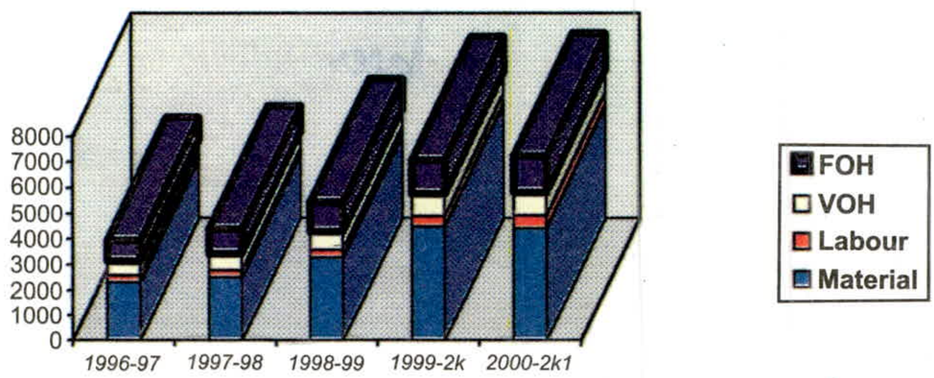
(Rupees in crore)

Element	1996-97	1997-98	1998-99	1999-2000	2000-2001
(a) Material	2299.79 (58.53)	2502.08 (57.07)	3268.98 (60.08)	4483.62 (63.27)	4413.34 (61.09)
(b) Labour	272.48 (6.94)	264.94 (6.04)	319.93 (5.88)	406.62 (5.74)	510.86 (7.07)
(c) VOH[1]	548.21 (13.95)	651.47 (14.86)	707.56 (13.00)	877.03 (12.37)	910.60 (12.61)
(d) FOH[2] charges	808.56 (20.58)	966.09 (22.03)	1144.66 (21.04)	1319.22 (18.62)	1389.31 (19.23)
Total	3929.04	4384.58	5441.13	7086.49	7224.11

Figures in bracket are percentages to the total cost of out turn.

Element-wise break up of cost of production

(Rupees in crore)



However, it may be noted that the cost of components procured by a factory from other sister factories gets included in the cost of production of both the factories thereby inflating to that extent, the cost of production of Ordnance Factory Organisation as a whole.

For instance, in 2000-2001, inter factory transfers amounted to Rs 2336.17 crore and the total cost of production of Ordnance Factories as a whole inflated to the extent these components were actually consumed by the procuring factories.

40.3.2 Issue to users

The indentor wise value of issues during the last five years was as under:

[1] VOH – Variable Overhead
[2] FOH – Fixed Overhead

(Rupees in crore)

	1996-97	1997-98	1998-99	1999-2000	2000-2001
Army	1964.99	2427.02	3339.46	4637.33	4544.74
Navy	46.56	60.39	62.49	85.24	86.93
Air Force	107.47	106.12	89.42	105.80	170.63
MES, Research and Development (Other Defence Department)	65.31	59.23	79.61	126.41	124.83
Total Defence	2184.33	2652.76	3570.98	4954.78	4927.13
Civil Trade	381.55	417.96	441.08	498.96	603.07
Total issues	2565.88	3070.72	4012.06	5453.74	5530.20

40.3.3 Production programme vis-a-vis progress

Production of several items for which targets had been fixed by Ordnance Factory Board was behind schedule. Details showing the number of items for which the demands existed, number of items for which target was fixed and number of items manufactured and the number of items for which target was fixed but production of items was behind schedule during the last five years are furnished in the table below:

Year	No. of items for which demands existed	No. of items for which target fixed	No. of items manufactured as per target	No. of items for which target fixed but production was behind schedule
1996-97	331	289	195	94
1997-98	284	234	161	73
1998-99	353	288	222	66
1999-2000	364	307	238	69
2000-2001	375	284	196	88

Ordnance Factory Board stated that production of 88 items was behind schedule mainly due to non-finalisation/non-availability of design/drawings/bulk production clearance, non-availability of indents in sufficient quantities.

40.3.3.1 Spill over production in Ordnance Factories

It was noticed that in respect of 19 major items the production spilled over beyond the financial year 2000-2001. Although the full production and issues as per target was reported by March 2001, the production and actual issue was yet to be completed till August 2001. The value of spill over items for the year 2000-2001 worked out to Rs 514.60 crore approximately out of total cost of production amounting to Rs 7224.11 crore. Due to the spill over of the production, the expenditure on production for material, labour and overhead cost may be incurred in the following year either wholly or in part even though the issues have been accounted for in the accounts of 2000-2001. Some of the accounting implications arising from this situation may be:-

(i) In the year of 'reported' issue, either partial or nil expenditure is booked under labour, material etc. against the relevant warrant whereas full credit is taken for issues thereby making finished stock account show abnormal profit.

(ii) In the subsequent year (year of actual manufacture and issue) as the expenditure incurred on manufacture is booked partly or wholly as the case may be without taking any credit on account of issues, the finished stock account would show abnormal loss. Thus, there is need to strengthen monitoring of production performance vis-a-vis target at various levels so that targets of issues are actually achieved in physical terms rather than reporting of issues without actual issues.

Ordnance Factory Board stated in January 2002 that major expenditure like labour and material were booked to avoid any budgetary constraints and also added that all out efforts were being made to minimize such happenings.

40.3.4 Capacity utilisation

The capacity utilisation of a factory is assessed in terms of standard [Ξ]man-hours (SMH) and machine hours. The tables below indicate the extent to which the capacity had been utilised in terms of SMH and machine hours during the last five years:

(Capacity utilisation in terms of SMH)
(Unit in lakh hours)

Year	Capacity in SMH	Utilisation in SMH
1996-97	1848	1558
1997-98	1650	1539
1998-99	1436	1639
1999-2000	1508	1839
2000-2001	1464	1892

(Capacity utilisation in terms of machine hours)
(Unit in lakh hours)

Year	Machine hours available	Machine hours utilised
1996-97	1271	936
1997-98	1341	972
1998-99	1266	959
1999-2000	1875	1368
2000-2001	2144	1715

40.3.5 Export and civil trade

The capacity created in ordnance factories was not being utilised to the full extent because of diminishing orders from Armed Forces. The Ministry decided in July 1986 to diversify and enter the civil market within the country and tap the export potential of ordnance factories to utilise their capacity.

[Ξ] Standard Manhour (SMH) means the average output expected of an average skilled worker as per the grades provided for in the estimates engaged in production activities in the ordnance factory for one hour. This does not include factors like setting time, fatigue allowance etc.

40.3.5.1 Export

The following table shows the achievement with reference to target in export from 1996-97 to 2000-2001.

Year	Number of factories involved	Target (Rs in crore)	Achievement (Rs in crore)	Percentage of achievement
1996-97	8	25.00	3.22	12.88
1997-98	13	25.00	23.83	95.32
1998-99	13	25.00	13.46	53.84
1999-2000	11	8.5	6.19	72.82
2000-2001	15	10.00	11.79	117.90

40.3.5.2 Civil trade

The turnover from civil trade other than supplies to Ministry of Home Affairs and State Government Police Departments during 1996-97 to 2000-2001 was as under:

Year	Number of factories involved	Target (Rs in crore)	Achievement (Rs in crore)	Percentage of achievement
1996-97	38	180.00	137.96	76.64
1997-98	38	180.00	168.34	93.52
1998-99	38	185.00	178.74	96.67
1999-2000	38	206.49	206.38	99.95
2000-2001	38	220.22	235.72	107.04

Thus the volume of civil trade has been steadily showing an upward trend since 1996-97.

40.3.5.3 Non-realisation of amount towards civil trade

According to the directive issued by Ordnance Factory Board in June 1985, all civil indentors are required to pay in cash or through demand draft in advance with the order in full or irrevocable letter of credit. However, Rs 15.34 crore was outstanding against civil indentors for supply of different items to them as on 31 March 2001. Ordnance Factory Board stated (January 2002) that the outstanding dues from civil indentors had come down to Rs 11.23 crore as of December 2001.

40.3.6 Utilisation of manpower

40.3.6.1 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 & clerical establishment and (iii) "Industrial employees" (IEs), who are engaged in the production and maintenance operations. The number of employees of various categories during the last five years is given in the table below:

(In number)

Category of employees	1996-97	1997-98	1998-99	1999-2000	2000-2001
Officers	3331	3579	4140	4043	3853
Percentage of officers to total manpower	2.14	2.33	2.76	2.77	2.77
NGO/NIEs	49462	42920	42483	42334	40792
Percentage of NGO/NIEs to total manpower	31.81	27.94	28.31	28.98	29.29
IEs	102675	107137	103444	99693	94611
Percentage of IEs to total manpower	66.03	69.73	68.93	68.25	67.94
Total	155468	153636	150067	146070	139256

40.3.6.2 The expenditure on labour is charged to production in two ways - 'direct labour' representing expenditure on labour relating directly to production and 'indirect labour' representing other expenditure on labour like maintenance and other activities incidental to production, etc. The expenditure on direct and indirect labour for the last five years is shown below:

(Rupees in crore)

	1996-97	1997-98	1998-99	1999-2000	2000-2001
(a) Total indirect labour	410.52	557.34	675.61	604.33	624.82
(b) Total direct labour	260.89	289.94	345.86	425.00	525.80
(c) Percentage of indirect labour to direct labour	157.35	192.22	195.34	142.20	118.83

Percentage of indirect labour to direct labour varied between 118.83 and 195.34 *per cent* during 1996-97 to 2000-2001 and was 118.83 *per cent* in 2000-2001 which was the lowest.

40.3.7 Supervision charges

(a) Supervision charges vis-a-vis total wages:

(i) The supervision charges incurred in the following four ordnance factories exceeded their total wages with High Explosives Factory Kirkee incurring maximum supervision charges of Rs 1.61 against each rupee spent on total wages.

Sl.No.	Name of the Ordnance Factory	Supervision charges for each rupee incurred on total wages
1.	High Explosives Factory Kirkee	Rs 1.61
2.	Ordnance Factory Itarsi	Rs 1.32
3.	Ordnance Factory Bolangir	Rs 1.15
4.	Ordnance Factory Bhandara	Rs 1.12

(ii) In respect of 25 Ordnance Factories, the supervision charges incurred were more than Re 0.50 but less than rupee one against each rupee of wages paid to industrial employees.

(b) Supervision charges paid vis-a-vis direct labour:

(i) For each rupee of direct labour incurred for conversion of raw material into finished articles/components, the supervision charges incurred by High Explosives Factory Kirkee was the highest at Rs 4.21. During 1999-2000, the supervision charges incurred by High Explosives Factory Kirkee was only Rs 1.58.

(ii) In all the Ordnance factories the superivision charges were more than 100 *per cent* of the direct wages.

(c) The ratio of supervision charges to total wages and supervision charges to direct labour wages was found to vary widely even from one ordnance factory to another ordnance factory grouped under the same divisions as shown below.

Sl.No.	**Division**	**Ratio of supervision charges to total wages**	
		Highest	**Lowest**
1.	M & C Division	Ordnance Cable Factory Chandigarh (0.79:1)	Ordnance Factory Ambajhari (0.36:1)
2.	WV & E Division	Field Gun Factory Kanpur (0.80:1)	Rifle Factory Ishapore (0.40:1)
3.	A & E Division	High Explosives Factory Kirkee (1.61:1)	Ordnance Factory Chanda (0.44:1)
4.	AV Division	BMP Medak (0.92:1)	Heavy Vehicles Factory Avadi (0.64:1)
5.	OEF Division	OEF Hazaratpur(0.42:1)	OPF Kanpur (0.28:1)

Sl.No.	**Division**	**Ratio of supervision charges to direct labour wages**	
		Highest	**Lowest**
1.	M & C Division	MTPF Ambernath (2.8:1)	OF Ambajhari (0.85:1)
2.	WV & E Division	Field Gun Factory Kanpur (3.43:1)	Rifle Factory Ishapore (0.74:1)
3.	A & E Division	High Explosives Factory Kirkee (4.21:1)	Ordnance Factory Chanda (0.9:1)
4.	AV Division	Opto Electronics Factory Dehra Dun (2.45:1)	Heavy Vehicles Factory Avadi (1.46:1)
5.	OEF Division	OEF Hazaratpur (0.70:1)	OPF Kanpur (0.46:1)

Ordnance Factory Board stated that the supervision charges depended on the Industry norm, available technology, production processes, etc. and with the planned modernisation programme, the supervision charges might go up marginally due to the fact that modern machines would require more supervision and less direct labour.

40.3.8 Inventory management

40.3.8.1 Stock holdings

As per the existing provisioning policy, the ordnance factories are authorised to hold stock of different types of stores as under:

Sl.No.	Types 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

40.3.8.2 The position of stock holdings during 1996-97 to 2000-2001 was as under:

(Rupees in crore)

Sl. No.	Particulars	1996-97	1997-98	1998-99	1999-2000	2000-2001
1.	**Working stock**					
a.	Active	1245.90	1462.38	1433.41	1590.70	1640.35
b.	Non-moving	77.93	109.69	146.25	139.26	157.50
c.	Slow moving	148.39	133.56	149.45	105.78	129.11
	Total Working Stock	1472.22	1705.63	1729.11	1835.74	1926.96
2.	Waste & Obsolete	8.09	10.56	10.94	31.57	9.36
3.	Surplus/ Scrap	41.21	39.87	36.14	38.59	59.29
4.	Maintenance stores	72.82	79.80	92.80	80.63	87.37
	Total	**1594.34**	**1835.86**	**1868.99**	**1986.53**	**2082.98**
5.	Average holdings in terms of number of days' consumption	209	232	200	158	162
6.	Percentage of total slow-moving and non-moving stock to total working stock	15.37	14.26	17	13.34	14.87

It may be seen that average holding in terms of number of days' consumption was within normal limits during 2000-2001.

40.3.8.3 The existing provisioning policy has been in effect since June 1973. In the meantime tremendous progress has been made in our country as well as world over in the field of transport and communication. With the modern facilities of communication like much more efficient telephone net work, internet, e-mail, fax etc. the purchase processing time can be greatly curtailed and therefore there is need to review stock holding limits. Ordnance Factory Board stated in January 2002 that IIM Study Report on Inventory Management had been approved by them and its recommendations would be implemented after approval of the Ministry.

40.3.8.4 During 2000-2001 average stock holdings in five factories, as given below ranged between 11 and 26 months' requirements which exceeded the existing norms.

(Rupees in crore)

Sl. No	Name of Factory	Opening Balance as on 01 April 2000	Closing Balance as on 31 March 2001	Average holding of stock	Average monthly consumption	Holding of stores in terms of numbers of months consumption
1.	Heavy Vehicles Factory Avadi	496.18	571.63	533.91	20.40	26.17
2.	MTPF Ambernath	8.38	9.92	9.15	0.62	14.75
3.	Opto Electronic Factory Dehra Dun	19.61	16.16	17.89	1.24	14.42
4.	Engine Factory Avadi	38.87	40.54	39.70	3.16	12.56
5.	Ordnance Factory Ambernath	58.85	71.24	65.05	5.82	11.17

40.3.8.5 Stores found surplus on stocktaking

Stores valued at Rs 150.54 lakh were shown as surplus during stock taking during 2000-2001 out of which stores valued at Rs 73.63 lakh were found surplus at Ordnance Factory Ambernath and Rs 70.62 lakh in Vehicle Factory Jabalpur. This is a reflection on the quality of maintenance of stores records as surpluses could occur due to under statement of receipts of stores or over statement of issues. Such large surpluses at stock taking can be due to excessive quantum of nominal transactions remaining unregularised for long periods, delay in taking stores on stock charge due to quality problems etc. leading to non-accounting and therefore warrant special attention to ensure that it does not lead to loss or deterioration of stores.

40.3.8.6 Finished Stock

The details of finished stock holding (completed articles and components) during the last five years is given in the table below:

(Rupees in crore)

	1996-97	1997-98	1998-99	1999-2000	2000-2001
Finished stock holding (completed articles)	182.58	112.72	72.78	89.33	90.75
Total value of outturn	3929.04	4384.58	5441.13	7086.49	7224.11
Holding of finished stock in terms of no. of days issue	17	9	5	4	4
Holding in terms of percentage of total value of outturn	4.65	2.57	1.34	1.26	1.17
Finished component holding	303.83	439.60	486.36	483.79	519.63
Holding of finished components in terms of no. of days consumption	99	123	150	124	143

The value of finished component holding has gone up from Rs 303.83 crore in 1996-97 to Rs 519.63 crore in 2000-2001 registering an increase of 71.03 *per cent*. A mention was made in paragraph 46.3.7.6 of the Report of Comptroller and Auditor General of India, Union Government (Defence Services) Army and Ordnance Factories No.7 of 2001 about the holding of finished components worth Rs 4.24 crore by Rifle Factory Ishapore out of which components valued at Rs 1.34 crore had already become obsolete and therefore it was recommended to review the position of finished components holding in various Ordnance Factories in order to take quick action for disposal of obsolete items especially because of the increasing trend of finished components holding year after year. However, there has been no significant progress.

40.3.8.7 Work-in-progress

The General Manager of an Ordnance factory authorises a production shop to manufacture an item in the given quantity by issue of warrant whose normal life is six months. Unfinished items pertaining to different warrants lying at the shop floors constitute work-in-progress.

The total value of work-in-progress as on 31 March has slightly increased in the last five years as shown in the table below:

As on 31 March	Value of work-in-progress (Rupees in crore)
1997	1038.00
1998	1194.00
1999	1214.00
2000	1049.00
2001	1052.00

As on 31 March 2001, 6809 warrants valuing Rs 254 crore were more than one to 14 years old against the normal life of six months. Old warrants need to be reviewed at regular intervals so that the items under production may not become obsolete by the time they are completed and the expenditure rendered infructuous.

Ordnance Factory Board stated that the number of outstanding warrants as on 30.6.2001 had come down to 6142 and further efforts were being made to liquidate the old outstanding warrants.

40.3.9 Losses written off

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

(Rupees in lakh)

Sl. No.	Particulars	1996-97	1997-98	1998-99	1999-2000	2000-2001
1	Over issues of pay and allowances and claims abandoned	2.44	2.38	3.20	3.20	6.83
2.	Losses due to theft,fraud or neglect	0.92	1.29	2.57	5.77	0.79
3.	Losses due to deficiencies in actual balance not caused by theft, fraud or neglect	18.73	4.16	0.17	0.27	6.51
4.	Losses in transit	15.82	13.99	8.41	44.97	39.07
5.	Other causes (e.g. conditioning of stores not caused by defective storage, stores, scrapped due to Obsolescence etc.)	22.70	10.43	9.12	54.86	119.70
6	Defective storage loss	-	2.36	0.74	0.68	0.58
7.	Manufacturing Losses	527.64	893.97	399.37	595.93	603.19
8.	Losses not pertaining to stock	5.48	-	-	-	-
9	**Total**	**593.73**	**928.58**	**423.58**	**705.68**	**776.67**

40.4 Analysis of Cost of Production

40.4.1 Analysis of Overhead Charges

(a) The details of overheads and the percentage it bears to the cost of production in respect of various Ordnance factories (division wise) and also for Ordnance factories as a whole during the last five years from 1996-97 to 2000-2001 are shown below:

Division	**(Rupees in crore)**					**Percentage of OH to Cost of Production**
	Year	**FOH⊕**	**VOH∅**	**Total OH ⌒Charges**	**Cost of Production**	
Materials and Components	1996-97	200.47	170.09	370.56	720.00	51.47
	1997-98	187.26	180.22	367.48	676.22	54.34
	1998-99	220.19	192.89	413.08	743.46	55.56
	1999-00	242.06	235.17	477.23	941.57	50.68
	2000-01	252.18	250.67	502.85	1008.91	49.84
Weapons, Vehicles and Equipment	1996-97	257.85	176.40	434.25	985.86	44.04
	1997-98	320.45	225.32	545.77	1084.42	50.33
	1998-99	365.41	230.34	595.75	1410.06	42.24
	1999-00	444.70	271.40	716.10	1765.37	40.56
	2000-01	471.77	292.39	764.16	1926.40	39.67
Ammunitions and Explosives	1996-97	185.69	105.70	291.39	1317.96	22.11
	1997-98	234.27	125.92	360.19	1531.30	23.52
	1998-99	280.71	141.55	422.26	1716.19	24.60
	1999-00	322.90	193.86	516.76	2686.98	19.23
	2000-01	374.22	211.81	586.03	2976.20	19.69
Armoured Vehicles	1996-97	104.20	52.02	156.22	506.27	30.85
	1997-98	153.59	69.26	222.85	646.12	34.49
	1998-99	192.32	87.38	279.70	1100.03	25.43
	1999-00	226.03	115.16	341.19	1185.59	28.78
	2000-01	196.20	97.07	293.27	768.00	38.18
Ordnance Equipment Factories	1996-97	60.36	44.00	104.36	398.95	26.16
	1997-98	70.52	50.76	121.28	446.51	27.16
	1998-99	86.03	55.39	141.42	471.38	30.00
	1999-00	83.53	61.44	144.97	506.99	28.59
	2000-01	94.93	58.66	153.59	544.58	28.20
Grand total - Ordnance Factories as a whole	1996-97	808.57	548.21	1356.78	3929.04	34.53
	1997-98	966.09	651.48	1617.57	4384.57	36.89
	1998-99	1144.66	707.55	1852.21	5441.12	34.04
	1999-00	1319.22	877.03	2196.25	7086.50	31.00
	2000-01	1389.31	910.60	2299.91	7224.11	31.84

It would be seen from the table above that the percentage of overheads to the cost of production was more pronounced in respect of Ordnance factories classified under M&C Division and WV&E Division where overheads consistently formed more than 40 *per cent* of the cost of production.

⊕ FOH means Fixed Overhead Charges.

∅ VOH means Variable Overhead Charges.

⌒ OH means Overhead Charges.

(b) The element of fixed and variable overheads in the total cost of production varied widely from factory to factory during 2000-2001 from as high as 84.82 *per cent* (Grey Iron Foundry Jabalpur) to as low as 4.03 *per cent* (Ordnance Factory Chanda).

Details of five ordnance factories where the element of fixed and variable overheads in the total cost of production was highest are as under:

(i)	Grey Iron Foundry Jabalpur	84.82 *per cent* of value of production
(ii)	MTPF Ambernath	77.43 *per cent* of value of production
(iii)	Ordnance Factory Trichy	73.27 *per cent* of value of production
(iv)	Opto Electronic Factory Dehradun	69.86 *per cent* of value of production
(v)	Metal & Steel Factory Ishapore	69.8 *per cent* of value of production

Ordnance Factory Board stated that the high overheads at GIF, MTPF and MSF were mainly due to low work load during 2000-2001 while at OF Trichy, the high overheads were due to phasing out of a weapon system and at OLF Dehradun, the high overheads were due to non-availability of imported vision equipment which affected the production.

Details of five ordnance factories where the element of fixed and variable overheads to the total cost of production was lowest are as under:

(i)	Ordnance Factory Chanda	4.03 *per cent* of value of production	
(ii)	Ordnance Factory Varangaon	10.91 *per cent* of value of production	
(iii)	Ordnance Factory Bolangir	15.16 *per cent* of value of production	
(iv)	Vehicle Factory Jabalpur	16.13 *per cent** of value of production	* in the case of Vehicle Factory Jabalpur, overheads were low due to its material component being high since VFJ was mainly assembling SKDs received from Telco/ Ashok Leyland.
(v)	High Explosives Factory Kirkee	21.63 *per cent* of value of production	

The overhead percentage of filling/assembly factories was generally low due to the fact that the material content to the cost of production was very high due to addition of several inputs from inter factory sources.

40.4.2 Analysis of Cost of man power

The details of direct labour, indirect labour, total wages, supervision charges, ratio of supervision charges to total wages and the ratio of supervision charges to direct labour in respect of various ordnance factories (division-wise) as well as for ordnance factories as a whole during the last five years from 1996-97 to 2000-2001 are shown below:

(Rupees in crore)

Division	Year	Direct Labour	Indirect Labour	Total wages	Super-vision charges	Ratio of Supervision charges to total wages	Ratio of Supervision charges to direct labour
Materials and Components	1996-97	44.06	93.27	137.33	81.35	0.59:1	1.84:1
	1997-98	43.42	119.97	163.39	92.26	0.56:1	1.12:1
	1998-99	56.96	139.31	196.27	107.40	0.54:1	1.88:1
	1999-00	74.89	130.36	205.25	105.59	0.51:1	1.41:1
	2000-01	92.98	133.57	226.55	116.64	0.51:1	1.25:1
Weapons, Vehicles and Equipment.	1996-97	91.60	146.98	238.58	128.52	0.53:1	1.40:1
	1997-98	101.12	195.93	297.05	184.20	0.62:1	1.82:1
	1998-99	110.89	242.52	353.41	179.78	0.50:1	1.62:1
	1999-00	124.67	215.95	340.62	197.63	0.58:1	1.58:1
	2000-01	157.18	223.22	380.40	210.64	0.55:1	1.34:1
Ammunitions and Explosives	1996-97	61.13	99.47	160.60	111.48	0.69:1	1.82:1
	1997-98	67.19	140.89	208.08	153.22	0.73:1	2.28:1
	1998-99	82.85	161.97	244.82	160.03	0.65:1	1.93:1
	1999-00	107.91	155.27	263.18	181.20	0.68:1	1.68:1
	2000-01	140.16	161.72	301.88	195.83	0.65:1	1.39:1
Armoured Vehicles	1996-97	15.11	21.58	36.69	30.53	0.83:1	2.02:1
	1997-98	24.59	38.05	62.64	53.25	0.85:1	2.16:1
	1998-99	31.48	50.29	81.77	64.73	0.79:1	2.05:1
	1999-00	41.33	45.75	87.08	69.14	0.79:1	1.67:1
	2000-01	43.81	50.71	94.52	72.11	0.76:1	1.64:1
Ordnance Equipment Factories	1996-97	48.98	49.21	98.19	29.39	0.29:1	0.60:1
	1997-98	53.62	62.48	116.10	37.74	0.32:1	0.70:1
	1998-99	63.68	81.52	145.20	44.23	0.30:1	0.69:1
	1999-00	76.20	57.00	133.20	43.91	0.32:1	0.57:1
	2000-01	91.67	55.60	147.27	52.16	0.35:1	0.57:1
Grand total - Ordnance Factories as a whole	1996-97	260.88	410.51	671.39	381.27	0.57:1	1.46:1
	1997-98	289.94	557.32	847.26	520.67	0.61:1	1.80:1
	1998-99	345.86	675.61	1021.47	556.17	0.54:1	1.60:1
	1999-00	425.00	604.33	1029.33	597.47	0.58:1	1.40:1
	2000-01	525.80	624.82	1150.62	647.38	0.56:1	1.23:1

In this regard following observations are made.

(a) Ordnance Factories on an average incurred from 54 paise to 61 paise on supervision charges against each rupee spent on total wages during 1996-97 to 2000-2001 which indicates high cost of supervision. According to Ordnance Factory Board, the supervision charges include some elements of social costs also like expenditure of Medical Officers and Staff of Training Institutes and also with the ban on recruitment and career progression of IEs to NGOs, this had the effect of higher supervision charges to some extent.

(b) For every rupee of wages paid to the industrial employees, the supervision charges incurred in Ordnance Equipment Factory Units was the lowest and ranged between 29 and 35 paise. In all other groups, supervision charges exceeded 50 paise against each rupee of wages paid to industrial employees and were highest in ordnance factories under Armoured Vehicles Division where these ranged between 76 and 85 paise.

(c) Further, for each rupee of direct labour incurred for conversion of raw materials into finished articles/components, the supervision charges incurred by ordnance factories were high and ranged between Rs 1.23 and 1.8.

40.5 Accounting lapses in ordnance factories

During scrutiny of Annual Accounts of ordnance factories for the year 1999-2000, Audit noticed some irregularities which led to misrepresentation of facts and figures that had a bearing on the accuracy and completeness of Annual Accounts of Ordnance Factory Organisation as brought out below:

40.5.1 Excess booking of Rs 42.34 crore against Army issue budget

During 1999-2000, Heavy Vehicles Factory Avadi prepared P issue vouchers for 120 T-72 tanks and 49 overhauled T-72 tanks and accordingly an amount of Rs 678.23 crore was booked against Army issue budget. However, they could issue only 44 T-72 tanks and 21 overhauled tanks even though full amount towards manufacture/overhaul of T-72 tanks has been booked against Army issue budget. Heavy Vehicles Factory Avadi stated in reply to an audit query that they had physically manufactured/overhauled the tanks during 1999-2000 itself and on getting acceptance from CQA (HV) who is the final inspector for clearance of tanks, the issue vouchers were prepared and sent to Ordnance Depot Avadi alongwith the inspection notes for collection of tanks. In the meantime, Ordnance Depot Avadi received instructions from Army Headquarters/MGOs Branch not to collect further tanks and as such Ordnance Depot Avadi did not collect the tanks.

In accordance with the Revised Accounting Procedure prescribed by the Ministry of Defence (Finance) in November 1995, the booking of Army issue budget for 'A' vehicles would be linked to the stage of manufacture and depending upon the stage of manufacture of vehicles, Army issue budget would be booked proportionately. According to this Revised Accounting Procedure, 90 *per cent* of the booking could be made depending upon the stage of manufacture and balance 10 *per cent* of price could be booked only on delivery of vehicle. Thus, even though 76 T-72 tanks newly manufactured and 28 overhauled tanks are yet to be issued to Army, Heavy Vehicles Factory Avadi had already booked an excess amount of Rs 42.34 crore against Army in their accounts for 1999-2000 which is not in accordance with the instructions issued by the Ministry in November 1995. Further more, no corresponding provision/adjustment for liabilities has been made in their Annual Accounts.

40.5.2 Accounting of fictitious profit by inflating value of issues to sister factories

Ordnance Factory Kanpur placed an inter factory demand on Field Gun Factory Kanpur in March 1998 for supply of 100 numbers each of Heat treated blank for tube (barrel) and casings required for manufacture of tube with casing for T-72 gun.

Against this demand, Field Gun Factory Kanpur issued 50 numbers each barrel and casings to Ordnance Factory Kanpur in May 1999 and January 2000. Field Gun Factory Kanpur had received these barrels and casings against an import order finalised by them earlier and these were issued to Ordnance Factory Kanpur after unpacking, cleaning and inspection. Though the issue vouchers indicated the issue price of barrel and casings at Rs 13,42,500 and Rs 3,58,200 respectively as against the imported price of Rs 8.51 lakh for each set of barrel and casings, the issue price of barrel was subsequently amended to Rs 1071996 in March 2000 by Accounts Officer, Field Gun Factory Kanpur. As a result Field Gun Factory made profit of Rs 5.79 lakh for each set of barrel and casings even though these barrels and casings had not undergone any significant operation at the factory.

Thus, due to levy of excess issue price for barrel and casings, Field Gun Factory Kanpur earned a profit of Rs 289.50 lakh during 1999-2000 without undertaking any manufacturing activity. In reply to an Audit query, the factory management stated (September 2000) that the value of issues for major items of supply was fixed by Ordnance Factory Board and for similar items of issue, an item cannot have different value of issues as per prevalent accounting procedure. The fact, however, remains that the issue price of barrel and casings was charged much in excess thereby inflating the profit of Field Gun Factory Kanpur for the year 1999-2000. Ordnance Factory Board stated in January 2002 that the point has been noted for taking remedial measures in consultation with accounting authorities to further streamline the procedure so that differences in estimated price and actual costs are minimized.

Reviews

41. Flexible Manufacturing System

Highlights

- **Delays in placement of order for Flexible Manufacturing System (FMS) by Additional Director General Ordnance Factories Avadi and commissioning of the machinery by the supplier, led to a delay of ten years in positioning of the system.**

(Paragraph 41.3)

- **The achievable capacity of FMS could only be partly utilised ranging from 28 to 9 *per cent* of achievable capacity during 1998-99 to 2000-01 for meagre quantities of 12 components planned for manufacture.**

(Paragraph 41.4)

- **Even after delayed commissioning FMS failed to meet the full requirement, necessitating import of components valuing Rs 36.11 crore during August 1994 to March 2001.**

(Paragraph 41.4)

41.1 Introduction

Flexible manufacturing system is a computerised numerically controlled system consisting of four identical heavy duty machining centres meant for manufacture of eight critical components of engine of T–72 tank (tank) and five components of engine of infantry combat vehicle (ICV) at Engine Factory Avadi.

Delayed procurement of FMS and consequent import of major engine components were commented in paragraph 35.6.5.1 of the Comptroller and Auditor General's Audit Report for the year ended March 1992. Ministry of Defence in their action taken note of November 1993 stated that there was unavoidable delay in finalisation of order and import of components would stop after commissioning of FMS in mid -1994.

41.2 Scope of Audit

Audit conducted a follow-up review of induction of FMS at Engine Factory Avadi in November 2000 to examine the impact of delayed procurement and commissioning of FMS, creation of capacity with reference to requirement and utilisation of capacity of the same.

41.3 Delayed procurement and commissioning of FMS

Additional Director General Ordnance Factories, Avadi placed order for FMS in May 1991 but Hindustan Machine Tools Limited accepted the order only in March 1992 due to delay in resolving the outstanding techno-commercial issues. Engine Factory Avadi received the complete system in October 1994 against scheduled delivery period of March 1994. Although the factory management stated in December 1995 that the FMS was commissioned, certain aspects like integration of machines, reliability run, achievement of cycle time, sorting out of technical problems, furnishing of tool details and drawing for fixtures could not be completed by Hindustan Machine Tools Limited till 1995. The trial runs conducted during 1995 –1997 indicated that FMS was capable of producing only 275 sets of eight components of tank engine and 600 sets of five components of ICV engine as against designed capacity of 350 sets and 750 sets of components per annum respectively, i.e. achieving only 78 *per cent* of the envisaged capacity. However, the factory management accepted the FMS as fully commissioned in January 1998, and paid Rs 53.78 crore to the supplier against total cost of Rs 57.74 crore. Hindustan Machine Tools Limited requested in March 1999 to condone the lack of improvement in cycle time. Although the contract stipulated that the supplier would make adequate technological and related improvements at his own cost to ensure achievement of the stipulated cycle time, the supplier requested the factory management to delete the relevant clause from the contract. But the factory management did not concede to their request and final decision in this regard was yet to be taken by Ordnance Factory Board as of December 2000.

Thus, the FMS received in October 1994 was finally taken over in January 1998 and that too, with lesser capacity.

41.4 Underutilisation of capacity

Although FMS had achievable capacity to manufacture 600 sets of five components of ICV engine and 275 sets of eight components of tank engine, the factory management produced very negligible quantity of those components even after commissioning of the FMS in January 1998. Details of the major critical components produced through FMS and percentage of utilisation of capacity of the same during 1996-97 to 2000-01 are shown below:

Name of the components produced by FMS	**Quantity in sets**					
	1996-1997	**1997-1998**	**1998-1999**	**1999-2000**	**2000-2001**	**Total**
ICV Crank case	49	65	12	5	101	232
ICV Cylinder head (RH)	33	63	49	20	107	272
ICV Cylinder head (LH)	22	71	33	26	110	262
ICV Cylinder head cover (RH)	Nil	64	37	154	135	390
ICV Cylinder head cover (LH)	Nil	64	47	152	128	391
Tank Crank case	4	32	17	86	128	267
Tank Cylinder jacket (RH)	2	203	57	150	124	536
Tank Cylinder jacket (LH)	2	194	43	156	114	509

Tank Cylinder head (RH)	Nil	46	60	79	84	269
Tank Cylinder head (LH)	Nil	41	60	78	81	260
Tank Cylinder head cover (RH)	40	246	10	114	131	541
Tank Cylinder head cover(LH)	40	214	10	72	138	474
Total	**192**	**1303**	**435**	**1092**	**1381**	
Percentage of capacity utilisation	**4**	**26**	**9**	**22**	**28**	

It is seen from the above that the percentage of utilisation of FMS has been very poor since commissioning in January 1998, maximum utilisation being 28 *per cent* during 2000-01.

The quantity of complete set of critical components manufactured through FMS were also far less than that of engines for ICV and tank produced by the factory during 1996-97 to 2000-01 as out of a total number of 570 tank engines and 453 ICV engines produced, only 260 and 232 engines respectively were assembled using the complete sets of critical components manufactured through FMS. Due to delayed commissioning of FMS the factory management had to import components valuing Rs 21.68 crore during August 1994 to March 1998. Further, due to shortfall in production even after commissioning of the FMS the factory management had to import components valuing Rs 14.43 crore during April 1998 to March 2001. The shortfall in production of complete set of components was stated to be due to inadequate supply of castings of proper quality from Ordnance Factory Medak. Though Engine Factory Avadi ordered for 7155 number of castings on Ordnance Factory Medak up to March 2001, the latter supplied only 5155 number of castings, out of which 806 number of castings valuing Rs 3.21 crore were rejected at Engine Factory Avadi due to various defects like blow holes, oil/water leakage, peeling of bakelite, insufficient material etc.

Thus, the underutilisation of FMS was in the range of 78 to 91 *per cent* of achievable capacity during 1998-99 to 2000-01. As a result, the factory management failed to derive the value for money from massive investment of Rs 53.78 crore on FMS and spent an amount of Rs 36.11 crore to import the same components which could have been manufactured by this machine during this period.

The matter was referred to the Ministry in August 2001; their reply was still awaited as of December 2001.

42. Working of Grey Iron Foundry Jabalpur

Highlights

- **The expenditure incurred by Grey Iron Foundry Jabalpur was always more than the revenue realised; the deficit being in the range of Rs 14.92 crore to Rs 25.98 crore which was 36 to 73 *per cent* of expenditure during 1997-98 to 2000-2001.**

  (Paragraph 42.2)

- **The manufacturing capacity augmented in 1988 to 7000 tonnes of casting per annum at a cost of Rs 2.78 crore remained underutilised to the extent of 21 to 47 *per cent* during 1996-97 to 2000-01 mainly due to lack of orders.**

  (Paragraph 42.3)

- **The available standard man-hours in respect of direct industrial employees remained unutilised in the range of 33 to 60 *per cent* during 1998-99 to 2000-01. Yet the management resorted to work on overtime basis for 13.42 lakh man- hours involving payment of Rs 3.04 crore.**

  (Paragraph 42.4)

- **The unavoidable rejection rates in respect of castings of nine major components were fixed in the very high range of 25 to 60 *per cent*. Against these, the actual rejection ranged between 20.50 and 63.76 *per cent* during 1996-97 to 1999-2000.**

  (Paragraph 42.6)

- **During 1998-2001 10 to 99.6 *per cent* of castings of two components supplied to civil customers were rejected at customer's end.**

  (Paragraph 42.8.2)

- **The factory also suffered losses in issue to civil trade in the range of Rs 30 lakh to Rs 3.48 crore during 1995-96 to 1999-2000 except in the year of 1996-97 with reference to the minimum price to be quoted for civil trade order.**

  (Paragraph 42.8.1)

- **The overhead charges to cost of production were going up year after year and the proportion of overhead to cost of production ranged between 70.82 and 84.82 *per cent* during 1996-97 to 2000-01.**

  (Paragraph 42.5.1)

- **The supervision charges incurred against each rupee spent on direct labour by the factory were very high and ranged between Rs 1.62 and Rs 3.98 during 1996-97 to 2000-01.**

(Paragraph 42.5.2)

- **Although strength of indirect industrial employees (IEs) was always less than direct IEs, the average expenditure on indirect IEs was too high and ranged between 2.19 and 6.28 times of that on direct IEs during 1996-97 to 2000-01.**

(Paragraph 42.5.3)

- **The investment of Rs 5.19 crore in modernisation of the factory is not a judicious proposition in view of continuous losses in civil trade, underutilisation of capacity and standard man-hours and high abnormal rejection.**

(Paragraph 42.9)

42.1 Introduction

Under the direction of Ordnance Factory Board, General Manager Grey Iron Foundry Jabalpur projected a demand of Rs 16.21 crore in December 2000 for procurement of plant and machinery during IXth and Xth plan for modernisation of the factory to meet the futuristic requirement of casting for existing as well as new vehicles like Stallion and LPTA etc. Since the inter factory demand has been dwindling audit undertook review of the working of Grey Iron Foundry Jabalpur with a view to assessing justification of modernisation.

The working of the Grey Iron Foundry was commented upon in paragraph 25 of the Comptroller and Auditor General's Audit Report for the year ended March 1990 highlighting underutilisation of capacity, high machining rejection of castings and high cost of production. The continued incidence of high rejection of castings by Grey Iron Foundry on machining at Vehicle Factory Jabalpur was again commented upon in paragraph 26.8.3 of the Comptroller and Auditor General's Audit Report for the year ended March 1993.

Ministry in their action taken note of February 1992 stated that Ordnance Factory Board and the factory were making efforts to obtain additional load from public and private sectors to increase the capacity utilisation. They also stated that the rejection and cost of production would be reduced by modernisation of the factory after introducing high pressure moulding/impulse moulding technology.

The result of the review are set out in succeeding paragraphs.

42.2 Poor financial performance of the factory

There was a wide gap between expenditure incurred and revenue realised during the period under review as indicated below:

Year	Actual Expenditure (Rs in lakh)	Income realised (Rs in lakh)	Deficit (Rs in lakh)	Percentage of Deficit
1996-97	3514.33	3323.37	190.96	5.43
1997-98	4094.69	2603.02	1491.67	36.43
1998-99	3737.04	1299.07	2437.97	65.24
1999-2K	3543.02	944.38	2598.64	73.35
2000-01	3970.56	2028.81	1941.75	48.90

The difference between the expenditure incurred and revenue realised was substantial during 1997-98 onwards touching 73.55 *per cent* of expenditure during 1999-2000. The Ordnance Factory Board stated in October 2001 that expenditure was being reduced by transfer of some manpower.

42.3 Underutilisation of capacity

Details of castings produced by the foundry in last five years during 1996-97 to 2000-01 and percentage of capacity utilisation with reference to achievable capacity of 7000 tonnes *per annum* are shown as under:

Year	Achievable capacity	Production (in tonnes)			Percentage of capacity utilisation
	(in tonnes)	Inter Factory Demand	Civil trade	Total	
1996-97	7000	3406	1929	5335	76
1997-98	7000	2134	3053	5187	74
1998-99	7000	663	3062	3725	53
1999-2000	7000	816	3410	4226	60
2000-2001	7000	3008	2503	5511	79

It is seen from the above that the capacity of the foundry remained unutilised from 21 to 47 *per cent* which was mainly due to declining order for castings from the sister factories as well as factory's failure to capture sufficient orders from civil sectors.

Ordnance Factory Board stated in October 2001 that the achievable capacity at Grey Iron Foundry remained at 4500 tonnes *per annum* due to non-induction of manpower in proportion to enhancement of plant capacity to 7000 tonnes and close down of a cupola in melting shop. Ordnance Factory Board's contention is not tenable since the factory management itself stated in March 1999 and June 2001 that the achievable capacity was re-rated as 7000 tonnes *per annum* after augmentation of plant and machinery at a cost of Rs 2.78 crore.

42.4 Underutilisation of standard man – hours (SMH)

Details of SMH of direct industrial employees (IEs) available, utilised and percentage of underutilisation of man-hours, overtime allowed and payment made during 1998-99 to 2000-01 are shown below:

Standard man-hours (in lakh) (direct IEs)						
Year	**Available**	**Utilised**	**Unutilised**	**Percentage of under-utilisation**	**Overtime allowed (in lakh hours)**	**Payment made for overtime (Rs in lakh)**
1998-99	16.89	11.27	5.62	33	4.57	96.37
1999-2K	17.01	6.84	10.17	60	4.49	112.63
2000-01	17.03	8.66	8.37	49	4.36	95.53
Total	**50.93**	**26.77**	**24.16**		**13.42**	**304.53**

The table indicates that the underutilisation of man-hours ranged from 33 *per cent* to 60 *per cent* during 1998-99 to 2000-01. Underutilisation of man-hours was mainly due to reduction of orders for castings from the sister factories as well as manufacture of simple castings for civil trade.

However, it was noticed that despite significant underutilisation of SMH available in Grey Iron Foundry Jabalpur, the factory management paid Rs 3.04 crore towards overtime work for 13.42 lakh hours during 1998-2001 even though 24.16 lakh man-hours remained unutilised during this period. This reflects inefficient utilisation of human resources by the factory management or lack of retraining the existing manpower to meet the needs of factory.

The factory management stated in November 2000 that work on overtime basis was necessary for meeting the target. They also added that the orders of 663 tonnes and 816 tonnes for 1998-99 and 1999-2000 were received from sister factories almost during last quarter of these years and payment for overtime up to 48 hours per week was made to the employees, which was customary and sanctioned by Ordnance Factory Board. The factory's contention is not tenable as the overtime was being paid routinely in each and every month during 1998-99 to 2000-01 despite availability of sufficient standard man-hours.

42.5 Analysis of cost of production

Cost of production mainly includes direct material, direct labour and overheads. Overheads incurred in the Ordnance Factory are broadly classified into variable and fixed according to the nature of expenses. Variable overheads are expenses which generally vary in tune with the load on the factory including costs such as repair/maintenance of machinery, indirect labours, indirect stores etc. Fixed overheads are items of expenditure which do not depend on the volume of manufacture, but generally remain constant irrespective of the load involved e.g. pay and allowances of officers, staff of the factory establishment and Accounts Office, superannuation charges, repair/maintenance of building and railway siding, depreciation of building/machinery. The analysis of overheads brought out the following:

42.5.1 Abnormally high overheads

The element-wise cost of production at Grey Iron Foundry during the year 1996-97 to 2000-01 indicating direct material, direct labour and overhead with reference to cost of production are shown below:

Year	Direct material	Direct labour	Overhead	Total cost of production	Overhead as percentage to total cost of production	Overhead as multiple of direct cost
			(Rs in Crore)			
1996-97	7.28	3.86	27.05	38.19	70.82	2.43 times
1997-98	5.27	3.45	30.98	39.70	78.04	3.55 times
1998-99	4.63	2.23	31.79	38.65	82.27	4.63 times
1999-2K	3.22	2.66	32.89	38.77	84.82	5.59 times
2000-01	3.24	2.87	32.51	38.62	84.18	5.32 times

It may be seen that expenditure on direct material and labour reduced gradually while expenditure on overheads was increasing.

The proportion of direct material and direct labour to the cost of production ranged between 8.31 *per cent* and 19.07 per cent and between 5.76 *per cent* and 10.11 *per cent* respectively while the proportion of overhead to cost of production ranged between 70.82 *per cent* and 84.82 *per cent* during 1996-97 to 2000-01.

According to the factory management, normally 55 *per cent* of the cost of production comprises of pay and allowances which drastically increased due to implementation of V Pay Commission in 1998-99 and 1999-2000. This resulted in abnormal increase in overhead charges.

Ordnance Factory Board stated in October 2001 that the factory management had already taken action to reduce manpower and increase the output.

42.5.2 Abnormally high supervision charges

Year-wise trend of direct labour charges, indirect labour charges, total wages, supervision charges, ratio of supervision charges to total wages and ratio of supervision charges to direct labour during the last five years from 1996-97 to 2000-2001 are shown below:

Year	Direct labour charges	Indirect labour charges	Total wages	Supervision charges	Ratio of supervision charges to total wages	Ratio of supervision charges to direct labour
			(Rupees in crore)			
1996- 97	3.86	6.79	10.65	6.25	0.58 : 1	1.62 :1
1997-98	3.45	9.38	12.83	8.80	0.68 : 1	2.55 :1
1998-99	2.23	11.26	13.49	8.88	0.66 : 1	3.98 :1
1999-2K	2.66	10.26	12.92	8.56	0.66 : 1	3.22 :1
2000-01	2.87	10.98	13.85	9.04	0.65 : 1	3.15 :1

It may be seen from the above table that supervision charges ranged from 58 paise to 68 paise against each rupee spent on total wages. Further, for each rupee of direct labour incurred for conversion of raw materials to finished articles / components, the supervision charges incurred by the factory was very high and ranged between Rs1.62 and Rs 3.98.

42.5.3 Disproportionate expenditure on indirect industrial employees

Year-wise details of strength of direct and indirect IEs, expenditure on direct and indirect labour, ratio of the same as well as ratio of average expenditure on indirect IEs to that on direct IEs during 1996-97 to 2000-01 are shown below:

Year	Number of IEs		Expenditure on labour		Average expenditure per IE		Ratio of expenditure on indirect labour to direct labour	Ratio of average expenditure on indirect labour to direct labour
	Direct	Indirect	Direct	Indirect	Direct	Indirect		
			Rs in crore		*Rs in lakh*			
1996-97	912	737	3.86	6.79	0.42	0.92	1.76 :1	2.19 :1
1997-98	911	728	3.45	9.38	0.38	1.28	2.71 :1	3.36 :1
1998-99	893	715	2.23	11.26	0.25	1.57	5.05 :1	6.28 :1
1999-2K	879	698	2.66	10.26	0.30	1.47	3.85 :1	4.90 :1
2000-01	903	625	2.87	10.98	0.32	1.75	3.82 :1	5.47 :1

It is seen from the above that though the strength of indirect IEs in each year was always less than that of direct IEs actually involved in production and also decreasing year after year, expenditure on indirect labour was always more than that on direct labour. The expenditure on indirect labour against each rupee expended on direct labour was abnormally high and ranged between Rs 1.76 and Rs 5.05. Similarly, average expenditure on indirect IE was too high as compared to direct IE and ranged between 2.19 and 6.28 times of average expenditure on direct IE.

Thus, the factory management failed to control the major portion of overhead charges involved in supervision charges and indirect labour year after year. This could have been avoided, had the manpower profile been realistically assessed and surplus manpower been identified and suitably redeployed/retrained for other works. Ordnance Factory Board stated in October 2001 that the factory management were reducing the cost of overhead by transferring manpower to other factories shortly.

42.6 Excessive rejection in production

Grey Iron Foundry Jabalpur mainly produces castings of front/rear axle housing, cylinder head, crank case, cylinder block, MT housing, manifold intake, gear box housing etc. for different type of vehicles. Details of percentages of actual rejections in manufacture of nine major castings during 1996-97 to1999- 2000 are shown below:

Name of the casting	Percentage of actual rejection in the year			
	1996-1997	1997-1998	1998-1999	1999-2000
IFD item				
Rear axle housing front	45.94	36.4	29.57	No Production
Cylinder head	45.49	38.75	No Production	No Production
Crank case	51.14	50.76	No Production	No Production
Cylinder block	29.68	31.05	30	55.83
Manifold intake	30.39	29.06	27	24.45
Manifold exhaust	28.98	27.10	26.00	24.06
Carrier Gear	49.99	51.10	28.07	No production
Gear box housing	27.64	29.96	29.00	32.10
Civil trade item				
MT Housing	48.67	63.76	20.50	No Production

It is seen from the table that the actual rejections ranged between 20.50 and 63.76 *per cent*.

Besides, two types of castings viz. cylinder head and cylinder block supplied to Vehicle Factory Jabalpur were also rejected during machining at Vehicle Factory Jabalpur. Actual rejections of those castings ranged between 24 and 60 *per cent* during 1994-95 to1997-98 against the laid down norms of 22.5 to 28 *per cent* due to bad material and bad workmanship.

Ordnance Factory Board stated that the castings of Grey Iron Foundry were very intricate in nature resulting in high level of rejection. They attributed the high UAR percentages provided in the estimate as justification for the high rate. This is not acceptable as casting is only one of the stages of production of nine components of vehicle etc. and 25 to 60 *per cent* rejection in just one stage of production is abnormal by any standard. If 60 *per cent* is accepted as UAR in castings then after rejection at further stages of machining etc. perhaps the net result would be dismal.

42.7 High cost of manufacture of castings

Vehicle Factory Jabalpur procured three types of castings worth Rs 14.86 crore during 1995-96 to 1998-99 from trade at a cheaper unit cost as shown below due to short supply of castings from Grey Iron Foundry Jabalpur and high rejection of the same at machining stage.

Year	Shaktiman crank case			Shaktiman Cylinder head			Nissan cylinder block		
	Factory Cost (*Rs*)	*Trade Cost* (*Rs*)	*Ratio of Factory Cost to Trade Cost*	*Factory Cost* (*Rs*)	*Trade Cost* (*Rs*)	*Ratio of Factory Cost to Trade Cost*	*Factory Cost* (*Rs*)	*Trade Cost* (*Rs*)	*Ratio of Factory Cost to Trade Cost*
1996-97	23979	13600	1.76 :1	2375	985	2.41 :1	20399	6200	3.29 :1
1997-98	30469	14550	2.09 :1	3074	1200	2.56 :1	24650	6527	3.77 :1
1998-99	30469	13204	2.30 :1	3974	988	3.11:1	47318	6100	7.76 :1

It may be seen that the cost of production at Grey Iron Foundry was two to eight times nearly the trade cost even though the trade cost must have included a good element of profit as against Grey Iron Foundry which was incurring losses in its issues.

Ordnance Factory Board stated in October 2001 that these items were not in production now as those vehicles were phased out. However, since the factory has now entered in civil trade and its cost of production has to be comparable to trade cost, it is essential to control the cost of production to continue in civil trade.

42.8 Loss in civil trade activities

42.8.1 Due to dwindling demands from sister factories Grey Iron Foundry entered the civil market in 1991 to obtain workload with a view to utilise surplus capacity of the factory. The principal civil customers of various castings of the factory are Indian Railways, Bharat Heavy Electricals Limited, Hindustan Machine Tools Limited etc.

Ordnance Factory Board stated in October 2001 that the factory obtained orders from competitive civil trade markets and met the challenge to supply the castings in quantity and quality. But the fact remains that the factory incurred losses in civil trade activities with reference to cost of production and value of issue during 1995-96 to 1999-2000 as shown below:

	Particulars	Rs in crore				
		1995-96	1996-97	1997-98	1998-99	1999-2000
1	Elementwise cost					
	Direct Labour Direct Material Overhead	0.45 2.42 3.16	0.37 1.66 2.54	0.83 2.67 6.36	1.00 2.76 12.32	1.26 2.35 17.69
2	Total cost of production	6.03	4.58	9.86	16.08	21.30
3	Value of issue	2.33	2.56	4.47	4.20	3.67
4	Loss with reference to cost of production (2-3)	3.70	2.02	5.39	11.88	17.63
5	Cost as per pricing formula for civil trade (Labour+Material+20 per cent of overhead)	3.50	2.55	4.77	6.22	7.15
6	Loss based on pricing formula for civil trade (5-3)	1.17	Nil	0.30	2.02	3.48

It is seen from the table that the factory could not control the cost of production and sustained huge loss in issue to civil trade in the range of Rs 2.02 crore to Rs 17.63 crore with reference to the cost of production.

Ordnance Factory Board authorised General Managers of all Ordnance Factories in November 1996 to quote minimum price of civil trade items computed on the basis of direct labour plus direct material plus 20 *per cent* of total overhead charges keeping in view of maximisation of turnover. Even with reference to that formula, the factory also suffered loss in issue to civil trade in the range of Rs 0.30 crore to Rs 3.48 crore annually during 1995-96 to 1999-2000 except in the year of 1996-97.

42.8.2 It was noticed that the castings supplied by the factory to its civil customers were rejected at the consignee's end thereby adversely affecting the credibility of Grey Iron Foundry. Details of a few such cases are given below:

Name of the casting	Name of the consignee	Value of order (Rs in lakh)	Quantity supplied (Number)	Quantity rejected (Number)	Percentage of rejection	Value of rejection (as per cost of production) (Rs in lakh)	Value of castings returned (Rs in lakh)	Net loss (Rs in lakh)
1998-99								
Fuel pump support	DCW Patiala	1.34	102	26	25	0.73	0.08	0.65
Water connection	DLW Baranasi	0.91	780	777	99.6	5.80	0.15	5.65
1999-2000								
Fuel pump support	DLW Baranasi	24.66	1922	399	21	21.34	1.18	20.16
Fuel pump support	DCW Patiala	3.22	240	23	10	1.12	0.07	1.05
2000-01								
Fuel pump support	DCW Patiala	7.98	594	128	22	6.25	0.38	5.87
	Total	**38.11**				**35.24**	**1.86**	**33.38**

As the defective castings were returned by customers to the Grey Iron Foundry the rejection of those castings at consignee's end during 1998-99 to 2000-01 led to a loss of Rs 33.38 lakh to the factory against orders of Rs 38.11 lakh. Although Ordnance Factory

Board worked out the loss as Rs 6.53 lakh based on value of issue, the same is not acceptable as the loss is due to abnormal rejection and the same is to be calculated based on cost of production.

42.9 Modernisation plan

General Manager Grey Iron Foundry Jabalpur under direction of Ordnance Factory Board projected a demand of Rs 16.21 crore in December 2000 for procurement of plant and machinery during ninth and tenth plan period for modernisation of the factory to meet the futuristic requirement of casting for existing as well as new products like Stallion, LPTA vehicles. The factory management had already incurred an expenditure of Rs 3.68 crore during 1996-97 to 2000-01 on procurement of plant and machinery from renewal and replacement as well as new capital grant. Ordnance Factory Board, however, stated in October 2001 that out of Rs 16.21 crore proposed for modernisation, equipment costing Rs 11.73 crore had been deleted and substituted by a machine costing Rs 71 lakh which was under processing. Ordnance Factory Board also stated that value for money out of investment of Rs 5.19 crore would be realised in view of the following:

i) Load for castings of Stallion and LPTA vehicles and other items would be to the tune of 4000 tonnes in 2001-02.

ii) Expected load from civil trade would be 2000 tonnes in 2001-02.

Investment of Rs 5.19 crore in modernisation of Grey Iron Foundry is not a judicious proposition in view of continuous losses in civil trade, underutilisation of capacity and standard man-hours and high abnormal rejection. A proper, considered and well supported plan for utilisation of capacity and increasing the income was essential. In case this cannot be implemented, continuance of this factory itself requires reconsideration.

The matter was referred to the Ministry in August 2001; their reply was awaited as of December 2001.

Production

Planning

43. Blocked inventory pending manufacture of cluster bombs

Ordnance Factory Khamaria and Gun Carriage Factory Jabalpur were holding blocked inventory worth Rs 5.73 crore since December 1999 pending manufacture of cluster bombs for the Air Force.

Mention was made in Paragraph 47 of Report No.9 of 1993 regarding delay in indigenisation of cluster bombs resulting interalia, in importation of cluster bombs valuing Rs 106.65 crore by the Indian Air Force to meet its requirement. In their Action Taken Note, Ministry of Defence maintained that cluster bomb was likely to go into full scale production from 1994. Further examination revealed that Ordnance Factories failed to supply cluster bombs as per Air Force requirement which led to shortclosure of Air Force indent leaving blocked inventory worth Rs 5.73 crore at Ordnance Factory

Khamaria and Gun Carriage Factory Jabalpur as discussed below:-

(a) Against the Air Force's development indent of August 1989 for supply of 50 cluster bombs by 1991-92, Ordnance Factory Khamaria supplied 35 bombs by 1995-96. These bombs were consumed in various trials by Air Force and were finally accepted after successful trials in November 1995. After successful trials in November 1995, the Air Force, while according bulk production clearance, had asked Ordnance Factory Board to supply (January 1996) 100 bombs with all fusing components during 1996-97.

(b) Even though bulk production clearance was given in January 1996, Air Force had placed an indent as early as July 1991 for supplying 2000 cluster bombs with fusing components.

(c) The bulk production of Cluster Bombs was to involve eight Ordnance Factories including Ordnance Factory Khamaria. As the factories other than Ordnance Factory Khamaria were not associated with developmental production, the Ordnance Factories had hardly any experience of manufacturing cluster bomb. Yet the Ordnance Factory Board acting upon the indent of Air Force, drew up a programme of producing 2000 cluster bombs by March 1996 which was too ambitious as well as unrealistic considering the ground realities. Ordnance Factory Khamaria had placed inter factory demand on sister factories for 24 sub-assemblies of cluster bomb for 1000 bombs, but could supply only 50 bombs between March 1997 and March 2000.

(d) Owing to failure of Ordnance Factory Khamaria in supplying bombs as per the delivery schedule, Air Force shortclosed the indent in November/December 1999. It was observed that the Gun Carriage Factory Jabalpur, which was identified for supplying tail unit assembly, on which an inter factory demand for 500 units was placed (December 1991) to be supplied by January 1992 i.e. in less than a month time, could not supply a single unit till January 2000 when the demand was shortclosed though stores/Work-in-Progress worth Rs 2.44 crore were piled up in the factory.

(e) On shortclosure of Air Force indent, Ordnance Factory Khamaria was saddled with the inventory worth Rs 3.29 crore pertaining to stores/sub assemblies meant for the cluster bombs.

The Ordnance Factory Board while accepting (September 2001) the facts stated that delay was mainly due to frequent changes in finalisation of drawings/specifications by Armament Research and Development Establishment. However, they argued that the shortclosure was due to technical/operational/tactical reasons. The contention of Ordnance Factory Board is not tenable as the shortclosure of indent was communicated by Air Force in November/ December 1999 itself citing delay in delivery as the reason. While accepting that due to shortclosure, Ordnance Factory Khamaria is holding blocked inventory of Rs 3.29 crore they further added that the blocked inventory will be gainfully utilised in production of 100 bombs for which indent has been received from Air Force, to be supplied by March 2003.

The matter was referred to the Ministry of Defence in June 2001; their response was awaited as of December 2001.

44. Blocked inventory due to delayed manufacture

Failure of Ordnance Equipment Factory Kanpur to manufacture and supply Board Arty resulted in cancellation of indent by Army and blocked inventory worth Rs 23.65 lakh.

Ordnance Equipment Factory Kanpur was holding raw material of Board Arty worth Rs 23.65 lakh as blocked inventory as on December 2001. Scrutiny of relevant records revealed the following:-

(a) Though the Army indented 325 and 144 Board Arty in June 1993 and June 1995 the Ordnance Equipment Factory Kanpur undertook manufacture between September 1995 and September 1996 after a time lag of two years three months and one year three months respectively

(b) Ordnance Equipment Factory Kanpur could not manufacture Board Arty up to September 1996 when the Army suggested for short closure of indents at 183 numbers in view of their changed equipment holding policy. Although Army had agreed to a target of 469 Boards for 1996-97 in February 1996 and 325 Board Arty were in final stages of production, the Army refused (December 1999) to reinstate their indents stating that Ordnance Equipment Factory Kanpur had failed to supply even a single Board Arty.

Short closure of indent resulted in blocked inventory which even after putting some material to alternative use stood at Rs 23.65 lakh inclusive of semis at Ordnance Equipment Factory Kanpur.

Ordnance Factory Board while accepting the facts stated in December 2001 that the indent of June 1993 was erroneously placed by Army on Ordnance Factory Dehradun which was redirected to Ordnance Equipment Factory Kanpur in December 1993 and hence there was delay in undertaking manufacture of items at latter factory. The contention of Ordnance Factory Board is not convincing since there had been time lag of about two years between actual date of receipt of Army's indent of June 1993 in December 1993 and actual date of manufacturing the items from September 1995.

The matter was referred to the Ministry of Defence in June 2001; their reply was awaited as of December 2001.

45. Loss due to non-rectification of rejected fuses

8115 rejected empty fuses of a bomb manufactured by Gun and Shell Factory Cossipore have not been rectified in view of discontinuation of production line resulting in loss of Rs 46.65 lakh.

Gun and Shell Factory Cossipore manufactured and issued 59307 fuses of Mortar bomb 51 mm HE2A to Ammunition Factory Kirkee between May 1996 and August 1998. Of these, 8115 fuses valuing Rs 46.65 lakh were rejected in empty filled* proof/empty filled dynamic@ proof by Armament Research and Development Establishment, Pune at Ammunition Factory Kirkee between October 1996 and February 1999 due to non-functioning of fuses and backloaded to Gun and Shell Factory Cossipore for rectification in November 1997 and September 1999. Gun and Shell Factory Cossipore was requested by Ammunition Factory Kirkee in April 1999 and June 1999 to supply atleast 4000 fuses in view of non-supplies from trade. But the Gun and Shell Factory Cossipore expressed inability to supply fuses on the ground that they were not in a position to manufacture fuses during 1999-2000 as the production line for empty fuses was discontinued since January 1998. Consequently Gun and Shell Factory Cossipore was holding blocked inventory worth Rs 11.91 lakh as of October 2001 besides rejected empty fuses worth Rs 46.65 lakh.

Gun and Shell Factory Cossipore stated in September 2000 that they could not undertake repair due to discontinuation of production of the fuse since January 1998. The contention of Gun and Shell Factory Cossipore is not tenable as rejection of 8115 fuses was intimated to them in August 1997.

Ministry of Defence stated in November 2001 that rejected fuses were backloaded in March 1998 but the production line for this fuses was dismantled in January 1998 itself and once the manufacturing line is dismantled and the machines/manpower are deployed for production of other priority items, it becomes difficult to undertake even repair of the non-current stores. Ministry of Defence also added that the repair work is planned to be commenced shortly and repaired fuses will be gainfully utilised. The contention of Ministry of Defence is misleading since Ammunition Factory Kirkee intimated Gun and Shell Factory Cossipore about the rejection of fuses in August 1997 and backloaded the same between November 1997 and September 1999.

46. Futile attempt to establish production of an item

Failure of Gun Carriage Factory Jabalpur in establishing production of components of a pistol rendered infrastructure costing Rs 1.49 crore futile besides resulting in nugatory expenditure of Rs 33.39 lakh.

In order to meet enhanced requirement of small arms projected by Ministry of Home Affairs Ordnance Factory Board authorised (August 1991) Gun Carriage Factory Jabalpur to establish manufacture of body and slide of 9 mm Auto Pistol. Scrutiny of relevant records revealed that:-

(a) Rifle Factory Ishapore short closed its two demands of January 1992 for 1000 slide and body in June 1995 because no supply was effected by Gun Carriage Factory Jabalpur for the last 3½ years. Gun Carriage Factory Jabalpur however, placed an order in August 1995 with M/s Praga Machine Tools Limited for two Computer Numerically Controlled Machining Centres at Rs 1.49 crore on the ground that extract of Ordnance

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* Empty filled proof is testing of representative samples of fuses filled with ammunition.

@ Dynamic proof is a process of testing the behaviour of shell fired through the weapon.

Factory Board placed on them in June 1992 for pistol was existing. Ordnance Factory Board cancelled the extract only in April 1996 in view of failure of the Carriage Factory to supply even a single pistol. Failure of Ordnance Factory Board in cancelling their extract timely resulted in avoidable procurement of machines worth Rs 1.49 crore.

(b) The machines received in November 1997 and July 1998 were under breakdown for 66 days in 1998, 206 days in 1999 and 452 days in 2000. One machine has been under breakdown condition since July 2000 while the other one has been partially working since September 2000.

(c) Gun Carriage Factory Jabalpur also spent Rs 33.39 lakh in manufacture of slide and body up to March 1999 without success.

Thus, Gun Carriage Factory Jabalpur failed to supply pistols and incurred infructuous expenditure of Rs 1.82 crore which could have been utilised in priority areas.

Ordnance Factory Board admitted frequent breakdown of machines and stated in September 2001 that the machines procured by Gun Carriage Factory Jabalpur are flexible and are capable of under taking different jobs. They added that loss statement to regularise nugatory expenditure of Rs 33.39 lakh has been processed by the factory and are under scrutiny by the Accounts. The contention of Ordnance Factory Board regarding use of machines by Gun Carriage Factory Jabalpur is fait accompli in as much as they are utilised for the purpose other than intended one.

The matter was referred to the Ministry of Defence in June 2001; their reply was awaited as of December 2001.

47. Injudicious manufacture of an ammunition before development

Bulk manufacture of 1604 nos of an ammunition costing Rs 4.59 crore before clearance of pilot lot in proof was injudicious.

An Ordnance Factory was holding 1917 rounds of 155 mm HEER ammunition (ammunition) manufactured at a cost of Rs 5.49 crore during 1998-99 as of September 2001. Scrutiny of relevant records revealed the following:-

(a) Ordnance Factory manufactured and filled 1987 shells of an ammunition during 1998-99 and out of which 383 shells were filled under pilot lot.

(b) Proof samples from pilot lot were rejected in functional proof at a proof establishment in December 1998 and February 1999. A joint investigation carried out at the proof establishment in April 1999 attributed the failure to either faulty shell filling or shell body. These rejected pilot lot rectified by Ordnance Factory as per suggestion of joint investigation team was again rejected in proof at a proof establishment in March 2000.

(c) Ordnance Factories procedure Manual stipulates that bulk production of new item should not commence unless pilot batches are cleared in inspection. But Ordnance Factory disregarded the Manual provision and manufactured 1604 numbers of ammunition costing Rs 4.59 crore in March 1999 which was avoidable. The Central Ammunition Depot, Pulgaon did not accept the ammunition as samples of this were under investigation. No specific reasons for failure of ammunition could be attributed so far (September 2001).

(d) Although Central Ammunition Depot Pulgaon refused to accept the ammunition the Ordnance Factory reflected these rounds of ammunition as having been issued to Central Ammunition Depot, Pulgaon in their accounts for the year 1998-99. However Central Ammunition Depot, Pulgaon raised a discrepancy report in this regard in August 2000 due to non-receipt of material.

Ordnance Factory Board stated in September 2001 that production of 155 mm HEER ammunition at Ordnance Factory was undertaken to meet the urgent requirement of Army in anticipation that the pilot lot will go through proof test at any point of time. The contention of Ordnance Factory Board regarding undertaking of manufacture of ammunition in anticipation of successful proof clearance of pilot lot of ammunition is not tenable since the Ordnance Factory ought to have undertaken bulk manufacture of ammunition only on receipt of clearance of pilot lot in proof as per the extant provisions.

The matter was referred to the Ministry of Defence in June 2001; their reply was awaited as of December 2001.

48. Financial repercussion due to short closure of an order

Delay in supply of boat tails by Metal and Steel Factory Ishapore to Ordnance Factory Ambajhari for an ammunition led to short closure of demand by the latter and blocked inventory of Rs 2.06 crore at the factory.

Metal and Steel Factory Ishapore, Gun Carriage Factory Jabalpur and Gun and Shell Factory Cossipore were holding blocked inventory worth Rs 2.06 crore owing to cancellation of demand for boat tail forgings of an ammunition by Ordnance Factory Ambajhari. Scrutiny of relevant records revealed the following:-

(a) Though Metal and Steel Factory Ishapore did not possess any capacity for machining of boat tail forgings, they accepted the Ordnance Factory Ambajhari's demand of May 1995 for supply of 15000 numbers on the ground of executing the same by obtaining assistance from Gun Carriage Factory Jabalpur and Gun and Shell Factory Cossipore.

(b) Although Metal and Steel Factory was to execute the Ambajhari's demand of May 1995 by July 1995 they supplied only 5500 up to March 1999. Inability of Metal and Steel Factory Ishapore to supply boat tail forging in even flow, lack of production programme for the ammunition and creation of machining facility at Ambajhari Factory forced the Ordnance Factory Ambajhari to cancel its demand of May 1995 at supplied quantity of 5500 boat tail forgings. Cancellation of Ordnance Factory Ambajhari's demand of May 1995 had resulted in financial repercussion of Rs 2.06 crore at Metal and Steel Factory Ishapore, Gun and Shell Factory Cossipore and Gun Carriage Factory Jabalpur.

Ordnance Factory Board while accepting the aforesaid facts stated in November 2001 that in view of urgency of the store Metal and Steel Factory Ishapore was entrusted with the development of the new item despite its machining constraints.

Thus, injudicious action of Ordnance Factory Board in directing Metal and Steel Factory Ishapore to accept orders from Ordnance Factory Ambajhari for the items for which they did not possess adequate capability resulted in (i) its failure to effect supplies timely and (ii) cancellation of demand by Ambajhari factory with consequent financial repercussion of Rs 2.06 crore.

The matter was referred to the Ministry of Defence in June 2001; their reply was awaited as of December 2001.

Manufacturing

49. Rejection due to defective manufacture

Use of incorrect composition by Ordnance Factory Dehu Road in manufacture of an ammunition resulted in rejection at proof and loss of Rs 95.58 lakh.

Ordnance Factory Dehu Road manufactured 15000 shells of an ammunition between 1992 and 1999 under 15 lots. One lot comprising 1000 ammunition manufactured in September 1998 at a cost of Rs 95.98 lakh was rejected during proof at a Central Proof Establishment in November 1998/January 1999 owing to emission of black/red smoke. The attempts made to rectify the ammunition as per recommendations of an investigation team were unsuccessful. A technical team convened at the behest of Controller of Quality Assurance (Ammunition) Kirkee in April 1999 attributed these defects to higher quantum of heat produced during burning owing to higher percentage of fuel and oxidant in the composition.

Ordnance Factory Board in October 2001 accepted the aforesaid facts.

The case was referred to the Ministry of Defence in May 2001; their reply was awaited as of December 2001.

50. Loss due to abnormal rejection

Gun Carriage Factory Jabalpur sustained a loss of Rs 37.81 lakh due to abnormal rejection of cast iron bolsters.

Ordnance Factory Bhusawal placed a demand for supply of 233 cast iron bolsters of various sizes required for manufacture of tools for tank on Gun Carriage Factory Jabalpur in December 1992 with scheduled date of supply as of June 1993. The Jabalpur Factory supplied 102 cast iron bolsters to the Bhusawal Factory up to November 1996. As the former was unable to further supply cast iron bolsters, the latter cancelled its demand in June 1998. Audit scrutiny of relevant records revealed that:-

(a) Subsequently Gun Carriage Factory Jabalpur had manufactured 178 cast iron bolsters of which 76 were rejected resulting in a loss of Rs 37.81 lakh. Ordnance Factory Bhusawal had to purchase 40 bolsters from trade at a cost of Rs 6.94 lakh.

(b) Prompt action was not taken to investigate the abnormal rejection while these were occurring and Board of Enquiry was constituted by Gun Carriage Factory Jabalpur in August 1998 i.e. after short closure of demand by Ordnance Factory Bhusawal.

(c) Board of Enquiry attributed the rejections of cast iron bolsters to inability of Foundry Section to produce castings free from blow holes. Board of Enquiry also suggested cementing by iron on the blow hole zone of castings for alternate use. The same was not agreed to by the General Manager Gun Carriage Factory Jabalpur for want of demand for these castings.

Ministry of Defence stated in November 2001 that due to process and plant limitations rejection of castings could not be prevented. This contention is not tenable as the factory had successfully manufactured and supplied 102 cast iron bolsters to the Ordnance Factory Bhusawal with the old Foundry.

51. Rejection due to defective manufacture of propellants

Defective manufacture of propellants by Ordnance Factory Bhandara resulted in rejection of 116.25 tonne valuing Rs 6.09 crore.

Ordnance Factory Bhandara supplied 202.50 tonne propellants of 7.62 mm ammunition duly inspected by Quality Assurance Establishment (Military Explosive) Bhandara to Ordnance Factory Varangaon against the latter's demand of June 1993. Scrutiny of relevant records revealed the following:-

(a) Ordnance Factory Varangaon carried out suitability trials for propellants received from Ordnance Factory Bhandara before going in for bulk production. During the trials the propellant exhibited erratic ballistic behaviour due to non-repeatable performance in repeat trials and also high pressure was recorded in comparison to specified limit, resulting in rejection of 116.25 tonne costing Rs 6.09 crore.

(b) A joint investigation committee convened by the Controllerate of Quality Assurance (Ammunition) Kirkee in March 2000 attributed non-detection of higher pressure than specified at Ordnance Factory Bhandara to the piston hole diameter of barrel at Ordnance Factory Bhandara being more than the specified limit.

(c) The rectification of rejected propellants based on the remedial measures suggested by joint investigation committee was yet to be undertaken by Ordnance Factory Bhandara as of August 2001.

(d) Ordnance Factory Varagaon had to import 400 tonne propellant for 7.62 mm ammunition costing Rs 18.25 crore against its three orders placed between December 1994 and February 1999 due to the failure of Ordnance Factory Bhandara to supply propellants as per required specification.

Thus, defective manufacture of propellants by Ordnance Factory Bhandara resulted in rejection of 116.25 tonne costing Rs 6.09 crore. Besides, inspection by the Quality Assurance Establishment (Military Explosive) Bhandara using barrel of higher diameter also needs investigation by appropriate authority.

Ordnance Factory Board while accepting the aforesaid facts stated in August 2001 that piston hole gauging was being introduced at Bhandara and rectification of propellants rejected at Ordnance Factory Varangaon will be taken up in phases when the spare capacity of plant are available.

The matter was referred to the Ministry of Defence in June 2001; their reply was awaited as of December 2001.

52. Loss due to defects in charger clips of an ammunition

Defects in charger clips of an ammunition manufactured by Ordnance Factory Trichy resulted in loss of Rs 43.29 lakh.

Ordnance Factory Varangaon was holding 37.99 lakh defective charger clips of an ammunition received from Ordnance Factory Trichy between July 1997 and January 1999 in its stock as of September 2001. Scrutiny of relevant records revealed the following:-

(a) Based on Ordnance Factory Varangaon's demand of October 1995 and January 1997 for 94 lakh charger clips of 7.62 mm ammunition Ordnance Factory Trichy supplied 72 lakh charger clips between December 1996 and January 1999. Out of these, 39.99 lakh clips valuing Rs 43.29 lakh were rejected at Varangaon Factory due to defects like improper and broken lugs, loose/tight springs, rust etc.

(b) Though Ordnance Factory Varangaon backloaded two lakh defective charger clips to Ordnance Factory Trichy for rectification in October 1998, the latter rectified only 20000 charger clips up to September 2001. The rectified charger clips failed in practical trial.

(c) Despite having committed in July 2000 to rectify and despatch two lakh charger clips by August 2000, Ordnance Factory Trichy attributed the defects to inadequate storage and preservation at Ordnance Factory Varangaon and suggested to the latter in February 2001 that the charger clips be rectified at Varangaon. The General Manager Ordnance Factory Varangaon disagreed that defects in charger clips were due to long storage and inadequate preservation at Ordnance Factory Varangaon and stated that charger clips supplied by Trichy factory were rejected at receipt stage itself.

Ministry of Defence stated in September 2001 that owing to over priority attached for establishment of a new weapon, the charger clips were not taken for rectification and the same will be taken up for rectification shortly. Ministry of Defence also added that the affected lot was under segregation/rectification at Ordnance Factory Trichy in association with Ordnance Factory Varangaon representative.

Steps to identify the real cause of the defects and to take remedial action were yet to be taken as of September 2001.

53. Loss due to failure of ammunition in proof

Rejection of ammunition manufactured by Ammunition Factory Kirkee and Ordnance Factory Dehu Road in proof resulted in loss of Rs 79.70 lakh and shortclosure of indent by Navy.

The indent placed on Ordnance Factory Board for 5300 numbers of shell star 4.5" MKN-2 (Ammunition) was shortclosed by the Navy in November 1997 at supplied quantity of 3120 numbers resulting in blocked inventory of Rs 98.32 lakh. Rejected ammunition worth Rs 79.70 lakh was also held in stock at Ammunition Factory Kirkee and Ordnance Factory Dehu Road. Audit scrutiny of relevant records revealed the following:-

(a) Ammunition Factory Kirkee manufactured 4506 ammunition and supplied 3120 numbers to the Navy between March 1987 and March 1993. The remaining 1386 ammunition costing Rs 44.82 lakh were rejected in proof by Senior Inspector of Naval Armaments, Kirkee between January 1992 and July 1992.

(b) Ordnance Factory Board offloaded the manufacture of remaining quantity of ammunition to Ordnance Factory Dehu Road in July 1993 as per modified drawings. However the Kirkee factory was directed by Ordnance Factory Board to constitute Board of Enquiry to suggest remedial measures to control rejection only in July 1996.

Board of Enquiry constituted by Ammunition Factory Kirkee in its findings of April 1997 did not give any specific reasons for rejection of ammunition in proof and recommended a thorough re-examination of designs, specifications, drawings of the ammunition.

(c) Ordnance Factory Dehu Road undertook manufacture of ammunition only in May 1996 as the modified drawings were received only in January 1995. Ordnance Factory Dehu Road manufactured 400 rounds of ammunition costing Rs 34.88 lakh in 1996-97 but these were also rejected in proof and reproof in October 1997 and August 1998 respectively owing to unsatisfactory performance.

(d) The prospect of utilisation of blocked inventory and rejected 1786 ammunition worth Rs 79.70 lakh at Ammunition Factory Kirkee and Ordnance Factory Dehu Road is remote in view of phasing out of ammunition by the Navy and blocked inventory not suitable for modified design.

Ordnance Factory Board stated in September 2001 that loss due to rejection of ammunition worth Rs 20.04 lakh has been regularised and failure of ammunition in inspection cannot be attributed to poor manufacture/workmanship/quality control during filling and assembling of this ammunition. The contention of Ordnance Factory Board is not tenable in view of the fact that 3120 rounds of ammunition out of 4506 nos manufactured by Ammunition Factory Kirkee between March 1987 and March 1993 were accepted by the Navy which goes to show that rejection of ammunition worth Rs 44.82 lakh in proof was attributable to lax process control during manufacturing at Kirkee Factory.

The matter was referred to the Ministry of Defence in June 2001; their reply was awaited as of October 2001.

54. Loss due to defective manufacture

Defective manufacture of an ammunition by Ordnance Factory Kanpur resulted in loss of Rs 1.38 crore.

Ordnance Factory Kanpur was holding rejected 2775 shells of 130 mm HE ammunition valuing Rs 1.38 crore in their stock as of February 2001. Scrutiny of relevant records revealed the following:-

(a) Ordnance Factory Kanpur manufactured and supplied 50000 shells of 130 mm HE ammunition to Ordnance Factory Chanda between 1994-95 and 1996-97 after clearance in inspection by Senior Quality Assurance Officer, Kanpur. Of these, Ordnance Factory Chanda rejected 2775 numbers costing Rs 1.38 crore due to lower weight than specified and backloaded the rejected shells to Ordnance Factory Kanpur during April 2000 to June 2000 for repair.

(b) Ordnance Factory Kanpur attributed rejection of shells to non-availability of expertise for manufacture of these shells and erratic behaviour of the weighing balance. The contention of Ordnance Factory Kanpur is not tenable since with the same expertise and weighing machine they could supply 47225 defect free shells. In this regard the role of inspection authorities is also questionable as variation in weight could have been easily detected at their level.

(c) Ordnance Factory Kanpur had not yet initiated (July 2001) action to offer the rejected shells for use as proof stock components despite decision taken to do so in February 1997.

Ministry of Defence stated in July 2001 that repair of the shells having lower than low mass is not possible for service use and the corrective measure have already been adopted by Ordnance Factory Kanpur to safeguard against recurrence of such defects which includes installation of electronic weighing machine. However, the remedial measure taken by the Ministry of Defence would only ensure better inspection and the Ministry/ Ordnance Factory Board was yet to take measures to control occurrence of defects.

55. Unsuccessful indigenisation of 73mm ammunition

Ordnance Factories failed to stabilise indigenous production of vital components like shell body, fuses and case cartridges of 73 mm ammunition even after 12 years resulting in rejection of components worth Rs 8.95 crore and import worth Rs 3.31 crore during 1995-2000.

Mention was made in the Comptroller and Auditor General of India's Audit Report – Defence Services (Army and Ordnance Factories) for the year ended 31 March 1996, inter-alia, about the delay in establishing indigenous production of 73 mm ammunition primarily due to delay in development of shell body and manufacture of defective fuses (HEAT Version). Ministry had stated (October 1997) that the problem had been overcome and both the items had been successfully indigenised since 1995-96/1996-97. Audit scrutiny of further developments revealed the following:-

(a) Production of shell body:

Between February 1995 and February 2000 Gun and Shell Factory supplied 70914 numbers of empty shell body to Ammunition Factory Kirkee in 38 lots. Of the 38 lots, four lots comprising 8060 shell bodies valuing Rs 7.62 crore were rejected in empty filled proof* as of August 2001. The year wise position of lots is given below:-

Year	Number of lots supplied by GSF Cossipore	Number of lots rejected
1994-95	4	Nil
1995-96	5	Nil
1996-97	7	2
1997-98	12	1
1998-99	4	Nil
1999-2000	6	1

Since all the above lots were supplied by Gun and Shell Factory Cossipore only after they had been passed by the Inspecting Authorities at Gun and Shell Factory Cossipore normally no rejection should have taken place at the users' end. Therefore, rejection of four lots indicated that the production of this item is yet to be fully stabilized. Besides, rejection of these lots was also a reflection on the quality of inspection.

Ordnance Factory Board stated in November 2001 that only one lot had been finally rejected and four are under reproof with new gun since gun was behaving erratically. It was not clarified whether cleared lots were proof tested with erratically behaving gun.

* Empty filled proof is testing of representative samples of shell body filled with ammunition

(b) Fuse (HEAT) version:

Gun and Shell Factory supplied 11 lots of base part and 16 lots of nose parts of the fuse to Ammunition Factory Kirkee during 1996-97 onwards. Out of these, four lots of base part valuing Rs 87.77 lakh and five lots of nose parts valuing Rs 22.89 lakh were rejected in empty filled proof. Since these parts of fuse were supplied by Gun and Shell Factory after clearance from quality assurance establishment heavy rejection of these fuse parts indicates that not only the production of this item is yet to be fully stabilised, but is also a reflection on the quality of inspection. As a consequence 20000 filled fuses were imported during 1996-97 and 1998-99 at a cost of Rs 1.61 crore. Thus, even after 12 years, the indigenisation of fuse could not be achieved successfully.

Ordnance Factory Board stated in November 2001 that the lots are mainly failing in functioning test, the reasons for which could not be ascertained and the reasons for the rejection of fuse was being further investigated by Controllerate of Quality Assurance (Ammunition), Kirkee.

(c) Case Cartridge:

Case cartridges were manufactured by Ordnance Factory Ambajhari and supplied to Ammunition Factory Kirkee, latter being responsible for filling the cartridge cases. However production of case cartridge and filled cartridges was also not free from problems and it was noticed that five lots of case cartridges supplied by Ordnance Factory Ambajhari and three lots of cartridge cases filled at Ammunition Factory Kirkee were rejected due to breakage of adapters. Of these, four lots of empty cartridge cases were rectified but one lot valuing Rs 21.76 lakh was lying rejected. Owing to problems/constraints in production of case cartridge and filled cartridges manufactured by Ordnance Factory Ambajhari and Ammunition Factory Kirkee respectively, Ammunition Factory Kirkee imported 12000 filled cartridge cases in December 1999 at a cost of Rs 1.70 crore.

Thus the indigenous production of 73 mm ammunition was yet to be fully stabilized and due to problems in manufacture of various components for 73 mm ammunition the Ammunition Factory Kirkee was badly lagging behind in meeting the requirement of Army as may be seen from table below despite resorting to imports of fuses as well as cartridge cases.

Year	Opening Qty. outstanding as on 1st April	Production target for the year	Issue during the year	Short fall
	(Nos)	(Nos)	(Nos)	(Nos)
1996-97	76,228	20000	5990	14010
1997-98	70,228	30000	15010	14990
1998-99	79,842	20000	11900	8100
1999-2000	82,842	15000	9140	5860
2000-2001	71,494	11000	5390	5610

Ammunition Factory Kirkee stated in August 2001 that targets could not be met due to non-availability of use worthy components. Ordnance Factory Board stated in November 2001 that shortfall in production/issue was mainly due to proof holdups at Central Proof Establishment due to equipment frequently going out of order.

The matter was referred to Ministry of Defence in July 2001; their reply was awaited as of December 2001.

56. Blocked inventory due to failure to manufacture a fuse

Failure of Gun and Shell Factory Cossipore to manufacture defect free fuses of an ammunition resulted in suspension of production of the ammunition and blocked inventory worth Rs 72.61 crore at Ordnance Factories.

Gun and Shell Factory Cossipore failed to manufacture defectfree fuses of 106 mm RCL ammunition. This coupled with Army's healthy stock position of ammunition and priority for other new generation items resulted in blocked inventory of various components of the ammunition of Rs 72.61 crore at various Ordnance Factories. Audit scrutiny revealed the following:-

(a) Ordnance Factory Khamaria had been producing this ammunition at the level of 10000 to 15000 sets per annum since sixties using the imported fuses as well as the indigenous fuses manufactured and supplied by Gun and Shell Factory Cossipore. An accident involving five casualities took place at Ordnance Factory Khamaria in January 1993 following which production of the ammunition was suspended despite having an outstanding order for 59000 rounds of ammunition. Although production of ammunition was resumed in February 1995 with imported fuse Ordnance Factory Khamaria failed to manufacture and supply the ammunition as per the target shown below:-

Year	Target (nos)	Actual supply (nos)
1996-97	15000	5246
1997-98	15000	13279
1998-99	15000	3700

Army gave no production target for the years 1999-2000 and 2000-2001 since they had sufficient stock for reserve, training and their priority for other new generation items to utilise their allotted budget for Ammunition issue.

(b) In the meantime, the newly developed fuse of Gun and Shell Factory Cossipore was cleared in April 1997 and Gun and Shell Factory Cossipore supplied eight lots of such fuses. However, as none of the lot could pass the proof test successfully the Controllerate of Quality Assurance (Ammunition) directed to stop the modification of fuse in March 1999.

(c) Due to discontinuation of production of the ammunition, a huge inventory of various components of ammunition worth Rs 72.61 crore lying at different factories were rendered surplus out of which blocked inventory worth Rs 1.71 crore could have been avoided as brought out below:-

Ordnance Factory Board in November 1998 asked Gun and Shell Factory Cossipore and Metal and Steel Factory Ishapore to discontinue further production and supply of shell and other hardware of 106 mm Recoilless High Explosive Antitank ammunition under manufacture at Ordnance Factory Khamaria as there was heavy accumulation of these hardwares amounting to Rs 47.42 crore at Ordnance Factory Khamaria due to non-availability of indigenous fuse under manufacture at Cossipore factory.

Despite above instructions of Ordnance Factory Board Gun and Shell Factory Cossipore placed a demand on Metal and Steel Factory Ishapore for 4000 forgings in December 1998 which was raised to 12773 forgings in February 1999 and received 4080 forgings valuing Rs 66.67 lakh from Metal and Steel Factory Ishapore between January 1999 and April 1999.

As Ordnance Factory Khamaria stopped accepting shells from Gun and Shell Factory Cossipore the latter shortclosed its demand of December 1998 at 4080 forgings in April 1999/September 1999 and as a result Metal and Steel Factory Ishapore was forced to hold blocked inventory worth Rs 1.04 crore which was provisioned by them to execute the demand of Cossipore Factory.

Ministry of Defence stated in September 2001 that though the Cossipore factory placed demand on Metal and Steel Factory Ishapore in December 1998 the requirement was intimated to the latter by the former in the beginning of 1998-99 and consequently the latter had gone ahead with the production in anticipation of demand from the former. The contention of Ministry of Defence is not tenable since if at all Cossipore factory had intimated their requirement in the beginning of 1998-99 the demand would have limited to 4000 forgings only and the same would not have been increased to 12773 forgings in February 1999. This goes to show that the Cossipore factory had failed to take note of Ordnance Factory Board's instructions of November 1998 which led to unnecessary placement of demand and blocked inventory of Rs 1.71 crore at Ishapore and Cossipore factories.

(d) Ordnance Factory Board stated in November 2001 that Army had given them a programme of 10000 ammunition during 2001-2002 and with this Ordnance Factories will be able to reduce the blocked inventory by Rs 18.50 crore by utilising 2500 numbers of imported fuses. Ordnance Factory Board further added that they would pursue the Army to allot targets in future years also to utilise the surplus inventory. The contention of Ordnance Factory Board only highlights pessimistic view of things as can be seen from the fact that they hope to produce only 2500 ammunition out of 10000 nos placed on them by the Army for 2001-02. Further indent of the ammunition from the Army is remote in view of Ordnance Factories failure to develop defectfree fuses till date and the manufacture and issue of ammunition to the Army without fuses is purposeless.

The matter was referred to Ministry of Defence in July 2001; their reply was awaited as of December 2001.

Provisioning of Stores and Machinery

Stores

57. Avoidable trade procurement of cups

Procurement of brass cups KF-31 by the General Manager Ammunition Factory Kirkee from trade resulted in infructuous expenditure of Rs 7.16 crore.

To meet the requirement of cartridge 5.56 mm ammunition for the year 1999-2000 Ammunition Factory Kirkee procured 300 tonne brass cups KF-31 between September 1999 and August 2000 from Rashtriya Metal Industries Mumbai at a cost of Rs 7.16 crore. Audit scrutiny of relevant records revealed the following:-

(a) The Factory resorted to trade purchase in September 1999 on the ground that it was not feasible for Ordnance Factory Ambernath to supply these cups despite the latter having assured in August 1999 to supply the entire ordered quantity of 430 tonne brass cups KF-31 within October 1999. However the price contracted with the private firm at Rs 2.39 lakh per tonne was more than double the cost of manufacture of Rs 1.11 lakh at Ordnance Factory Ambernath.

(b) In any case, trade procurement of 300 tonne brass cups was avoidable since the Factory actually manufactured only 91.96 million cartridge cases during 1999-2000 for which brass cups of three types supplied by Ordnance Factory Ambernath was more than sufficient. Further the firm commenced supply on 28 October 1999 and supplied only 150.22 tonne up to March 2000.

Infructuous expenditure of Rs 7.16 crore was, therefore, incurred in procuring brass cups from trade which were not at all required.

Ordnance Factory Board stated in July 2001 that trade procurement of cups was resorted to by Ammunition Factory Kirkee as they required cups from September 1999 and the supply schedule agreed to by Ordnance Factory Ambernath was from February 2000. The contention of Ordnance Factory Board is not tenable since Ordnance Factory Ambernath in August 1999 assured Ammunition Factory Kirkee to regulate supply of cups by October 1999. In any case the fact that Ammunition Factory Kirkee manufactured only 91.96 million cartridge cases during 1999-2000 for which the quantity of brass cups supplied by Ordnance Factory Ambernath was more than sufficient clearly establishes that trade procurement of cups was avoidable.

The matter was referred to the Ministry of Defence in May 2001; their reply was awaited as of December 2001.

58. Injudicious procurement of explosive

Import of an explosive worth Rs 83.35 lakh by Ordnance Factory Chanda in 1992 before finalisation of design was injudicious. Explosive worth Rs 78.28 lakh was still unutilised.

Ordnance Factory Chanda was holding 2.348 tonne HMX/WAX (explosive) costing Rs 78.28 lakh as of November 2001 since its procurement in June 1992. Scrutiny of relevant records revealed the following:-

(a) Though the design and drawing of a missile submunition bomblet was yet to be finalised, Bharat Dynamics Limited, Hyderabad and Armament Research and Development Establishment, Pune had placed three orders on Ordnance Factory Chanda in October 1987 and December 1989 for supply of 32 and 4250 missile warheads and bomblets respectively.

(b) Despite being aware that design for warheads and bomblets were yet to be developed and explosive was also to be developed indigenously, Ordnance Factory Chanda imported 2.5 tonne explosives at a cost of Rs 83.35 lakh in June 1992 and was still holding 2.348 tonne explosive valuing Rs 78.28 lakh in stock. The remaining 0.252 tonne was issued for check proof and user trial and production of limited series of bomblet warhead between March 1996 and July 2001.

(c) Shelf life of the explosive is 15 years out of which nine years are already over. Ministry of Defence stated in November 2001 that explosives were imported to avoid long lead time required in positioning the items and delay in production after finalisation of the design drawings by the Defence Research and Development Organisation. Ministry of Defence added that the design had already been finalised by Armament Research and Development Establishment and drawing was finalised in June 2001.

The contention of Ministry of Defence is not tenable in as much as procurement of explosive before finalisation of design/drawing was not judicious.

59. Avoidable trade procurement of empty shells

Avoidable procurement of 19979 empty shells of an ammunition from trade by Ordnance Factory Chanda resulted in an extra cash outflow of Rs 5.10 crore.

In order to meet Army's requirement of 130 mm ammunition for 1999-2000 Ordnance Factory Board authorised Ordnance Factory Chanda in June 1999 to procure 20000 empty shells from trade. Ordnance Factory Chanda procured 19979 empty shells from a trade firm at Rs 6000 each. Scrutiny of relevant records revealed the following:-

(a) The average unit cost of manufacturing relevant empty shells at the sister factories excluding overheads was only Rs 3448.50 against trade rate of Rs 6000 per unit. Thus procurement from trade resulted in cash outgo of Rs 5.10 crore.

(b) Although the contract stipulated supply of 10000 shells between October 1999 and January 2000 the firm supplied 9979 empty shells between April 2000 and September 2000 and another 10000 empty shells up to March 2001. Thus, the purpose of meeting emergent requirement of 1999-2000 was not served and Ordnance Factory Chanda met their target of 1.75 lakh rounds of ammunition for 1999-2000 by obtaining empty shells from sister factories.

(c) Ordnance Factory Chanda had procured 9979 shell out of 19979 shells by exercising option clause in October 2000 which was injudicious as the trade firm had failed to supply 10000 empty shells within the stipulated delivery schedule by January 2000 thereby defeating the purpose for which the trade action was proposed by Ordnance Factory Board in June 1999.

On being pointed out Ordnance Factory Chanda in July 2000 and December 2000 stated that they had undertaken trade purchase of empty shells only under the directives of Ordnance Factory Board.

Ordnance Factory Board attributed in October 2001 the inability of the firm to supply the stores within the stipulated delivery schedule to failure of inspector in providing gauge schedule and gauge drawing to the firm and the option clause had been exercised keeping in view the increased production target for 2000-01 for the ammunition. The contention of Ordnance Factory Board on operating option clause for 2000-01 is irrelevant and defeats the purpose for which the order was actually placed in August 1999. The failure of the inspectors to supply gauge schedule and gauge drawings despite urgent requirements would also require investigation.

The matter was referred to the Ministry of Defence in July 2001; their reply was awaited as of December 2001.

60. Avoidable import of cartridge cases

Import of three lakh cartridge cases of an ammunition valuing Rs 10.69 crore by Ordnance Factory Khamaria was avoidable since the delivery schedules of these stores by the firms were such that the import did not meet the intended purpose.

Ordnance Factory Khamaria procured three lakh cartridge cases of 30 mm BMP-II ammunition against its import order of July 1999 at a total cost of Rs 10.69 crore. The scrutiny of relevant records revealed the following :-

(a) Although the Ordnance Factory Board had dropped the proposal of Ordnance Factory Khamaria in May 1999 for import of cartridge cases on the ground that the sister factories would be able to meet the requirement of cartridge cases they sent the case to Ministry of Defence in June 1999 to meet the enhanced target of ammunition during post Kargil scenario.

(b) As per the import order of July 1999, three lakh cartridge cases were to be supplied by the foreign firm by November 1999. Having failed to complete the supply within the schedule the vendor suggested for cancellation of the order. However, Ordnance Factory Khamaria extended the delivery date to March 2000. The cartridge cases were actually received from August 2000 to November 2000. In the meantime the factory managed its requirement of 1999-2000 otherwise. Infact the production exceeded the targets indicating that the import of three lakh cartridge cases was unnecessary.

(c) Though the samples taken from four lots failed in salt spray test conducted by Controllerate of Quality Assurance (Metal) Ishapore which could reduce shelf life of ammunition, the Senior Quality Assurance Officer (Armaments) Khamaria cleared three lots for further processing with reduced shelf life. Strangely, Ordnance Factory Khamaria had utilised three lots in the assembly without waiting for the outcome of the test conducted by Controllerate of Quality Assurance (Metal) Ishapore. Replated sample of fresh lot found low in plating thickness were yet (August 2001) to be tested. The firm had agreed to bear the cost of replating.

(d) Besides four lots rejected by the Controllerate of Quality Assurance (Metals) Ishapore, another two lots comprising 20160 empty cartridge cases costing Rs 73.79 lakh were found unfit for further use by Senior Quality Assurance Establishment (Armament) Khamaria and Ordnance Factory Khamaria approached the foreign firm for free replacement of these lots in February 2001.

Ordnance Factory Board while accepting that the production during 1999-2000 was met by taking cartridge cases from sister factories stated that imported cartridge cases were utilised for meeting production target of 2000-01. The fact remains that the import of cartridge cases at a cost of Rs 10.69 crore was unnecessary.

The matter was referred to the Ministry of Defence in July 2001: their reply was awaited as of December 2001.

Machinery

61. Injudicious procurement of Machine

Procurement of whirling machine costing Rs 7.82 crore by Vehicle Factory Jabalpur in October 1999 was injudicious since the volume of demand for crank shaft did not justify provisioning.

In order to replace existing crank shaft turning machine at Vehicle Factory Jabalpur which had outlived its economic life, a whirling machine was procured from a foreign firm at a cost of Rs 7.82 crore in October 1999 against its order of April 1997. The procurement was made on the ground that the factory was required to supply crank shaft for overhaul of engines at the Army base workshops besides meeting the requirement of Shaktiman, Nissan and futuristic new generation vehicles. Audit scrutiny revealed that the decision was not judicious on the following grounds.

(i) The requirement of crank shaft for overhaul was only 750-1000 per annum which constituted only one month's machining capacity of the whirling machine. For rest of the 11 months it would have to be kept idle.

(ii) Shaktiman Vehicles manufactured at Vehicle Factory Jabalpur were being fitted with Hino Engines supplied by Ashok Leyland. The crank shafts for future generation vehicles were to be supplied by Ashok Leyland and Telco in terms of Transfer of Technology agreements concluded by Ordnance Factory Board in August/September 1998 with the indigenous firms.

(iii) Furthermore the peak production of 3246 shaktiman crankshafts was achieved by Vehicle Factory Jabalpur in 1995-96 with the old machines. The action of the factory to go in for fresh procurement of whirling machine was injudicious.

(iv) The new machine was used for machining of 55 crank shaft per month during 1999-2000 to 2000-2001 against its capacity of machining1000 crank shafts per month.

On being pointed out Vehicle Factory Jabalpur stated in December 2000 that the machine was capable of machining any type of crank shafts for futuristic vehicles. This is not tenable since procurement of a costly machine for producing crank shafts of vehicles which were yet to be decided was injudicious.

Ordnance Factory Board stated in October 2001 that the procurement of whirling machine was justified during 1996-97 based on the requirement of crankshafts not only for the overhaul of engine at Army Base Workshop but also to meet the requirement of spare engines and the engines for new generation vehicles besides to maintain the War Reserve capacity for manufacturing crankshafts. The contention of Ordnance Factory Board is not tenable since (i) the requirement of spare engines is miniscule and could have been managed with the existing machines, (ii) engines for new generation vehicles, which were undecided did not justify provisioning of new machines. Moreover Transfer of Technology agreement of August/September 1998 for futuristic vehicle does not include engines. Ordnance Factory Board also added that there was no indication or information from Army that requirement of crankshafts for Shaktiman and Nissan engines will come down drastically and it was after receipt of machine that Army decided to cannibalise the engines of vehicles which are de-inducted. This contention is not tenable since Ordnance Factory Board was exploring the possibility of utilising the machine for jobs of civil sector and leasing the machine to civil sector.

The matter was referred to the Ministry of Defence in June 2001; their reply was awaited as of December 2001.

Miscellaneous

62. Costly machine lying idle

A machine procured at a cost of Rs 85.66 lakh is lying uncommissioned and consequently unutilised despite incurring an additional expenditure of Rs 70.85 lakh on its conversion for alternative use resulting in blocking of Government funds of Rs 1.57 crore.

Ordnance Factory Varangaon procured a tracer loading machine to produce 0.50" RMG tracer in March 1985 at a cost of Rs 85.66 lakh. However, the machine could not be commissioned till 1997, as it was incapable of filling tracing composition in the required quantity. In the meantime, the requirement of 0.50" RMG tracer ceased to exist and Ordnance Factory Board decided (July 1998) to convert the existing machine to suit the requirement of 5.56 mm ammunition project. Accordingly a contract was concluded in March 1999 with a foreign firm for supply of conversion equipment for conversion of tracer filling machine of 0.50" RMG to 5.56 mm tracer at a cost of Rs 70.85 lakh. Although the delivery schedule stipulated supply within 10 months and erection and commissioning within another two months, the conversion equipment was received and trials commenced only in October 2000. However, the machine could not be commissioned successfully even for alternative purpose of tracer filling of 5.56mm ammunition.

Ministry of Defence while accepting the facts stated in November 2001 that machine was still under commissioning since extended trials are necessary to achieve flexibility in speed and charge mass vis-a-vis that specified in purchase contract. Thus, as of November 2001 no value for money could be derived from an expenditure of Rs 1.57 crore incurred on procurement/conversion of tracer filling machine.

63. Costly welding system lying idle

A robotic welding system procured in March 1993 from a firm of doubtful capability at a cost of Rs 2.61 crore has been under break down and lying unutilized since December 1996.

A robotic welding system procured in March 1993 at a cost of Rs 2.61 crore including erection charges from a private firm of Chennai for high quality automatic welding of hull assembly of Infantry Combat Vehicle (ICV) has been lying idle at Ordnance Factory Medak since December 1996. Audit scrutiny of relevant records revealed that:

(a) After commissioning of the system in March 1994, the firm stated in September 1995 that fully automatic welding could not be possible due to excessive part-to-part variations in profiles of the hulls. The system could therefore be utilized for welding of only 71 hulls of ICVs up to December 1996. Thereafter the system failed prematurely and was lying idle requiring modification. Ordnance Factory Medak has been managing welding of hulls with the available 51 welding machines.

(b) Order was placed on the firm in December 1991 even though a similar system procured from the firm in June 1990 for Heavy Vehicle Factory Avadi had not been commissioned. In fact that system has not yet been rectified.

Ordnance Factory Board stated in August 2001 that since indigenous armour plates in use since 1996 need pre-heating which facility is not provided in Robotic welding machine, it could not be utilised. Ordnance Factory Board did not clarify as to whether machine would be utilised for welding of hull assembly after modification. Thus, the decision to place order for a robotic welding system on a firm with unproven credentials led to infructuous expenditure of Rs 2.16 crore.

The matter was referred to the Ministry of Defence in June 2001; their reply was awaited as of December 2001.

64. Follow up on Audit Reports

The Ministry of Defence failed to submit remedial Action Taken Notes on 20 Audit Paragraphs as of December 2001.

With a view to ensuring enforcement of accountability of the executive in respect of all the issues dealt with in various Audit Reports, the Public Accounts Committee desired that Action Taken Notes on all paragraphs pertaining to the Audit Reports for the year ended 31 March 1996 onwards be submitted to them duly vetted by Audit within four months from the date of laying of the Reports in Parliament.

Review of outstanding Action Taken Notes relating to Ordnance Factory Board as of December 2001 revealed that the Ministry had not submitted Action Taken Notes in respect of 20 paragraphs included in the Audit Reports for the year ended March 2000 as per Annexure-III.

65. Response of the ministries/departments to Draft Audit Paragraphs

On the recommendations of the Public Accounts Committee, Ministry of Finance (Department of Expenditure) issued directions to all ministries in June 1960* to send their response to the Draft Audit Paragraphs proposed for inclusion in the Report of the Comptroller and Auditor General of India within six weeks.

The Draft Paragraphs are always forwarded by the respective Audit Offices to the Secretaries of the concerned ministries/departments through Demi Official letters drawing their attention to the audit findings and requesting them to send their response within six weeks. It was brought to their personal notice that since the issues were likely to be included in the Audit Report of the Comptroller and Auditor General of India, which are placed before Parliament, it would be desirable to include their comments in the matter.

Draft paragraphs proposed for inclusion in the Ordnance Factory Section of the Report of the Comptroller and Auditor General of India for the year ended March 2001: Union Government (Defence Services), Army and Ordnance Factories: No. 7 of 2002 were

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* *No. F-32(9) EG-1/60 dt.3 June 1960*

forwarded to the Secretary, Department of Defence Production and Supplies, Ministry of Defence between March 2001 and December 2001 through Demi Official letters.

The Secretary Department of Defence Production and Supplies did not send replies to 18 Draft Paragraphs out of 25 Paragraphs in compliance to above instructions of the Ministry of Finance issued at the instance of the Public Accounts Committee. Thus, the response of the Secretary of the Ministry could not be included in them.

Sudha Rajagopalan

(SUDHA RAJAGOPALAN)
Director General of Audit
Defence Services

New Delhi
Dated : 13th March 2002

Countersigned

V. K. Shunglu.

(V.K. SHUNGLU)
Comptroller and Auditor General of India

New Delhi
Dated : 13th March 2002

ANNEXURE-I
Position of outstanding ATNs

(i) Pending for more than five years

[Referred to in paragraph 17(a)]

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.	No.2 of 1988	9**	Purchase of Combat dress from trade.
3.		41**	Loss in procurement of wax special.
4.	No.2 of 1989	11*	Purchase and licence production of 155mm towed gun system and ammunition.
5.	No.12 of 1990	9*	Contracts with Bofors for (a) Purchase and licence production of 155mm gun system and (b) Counter trade.
6.		10*	Induction and de-induction of a gun system.
7.		19*	Import of ammunition of old vintage.
8.		46**	Ration article-Dal.
9.	No.8 of 1991	10*	Procurement of stores in excess of requirement.
10.		13*	Central Ordnance Depot, Agra.
11.		15**	Extra expenditure due to wrong termination of meat contract.
12.		17**	Infructuous expenditure on procurement of dal chana.
13.	No.8 of 1992	20**	Procurement of sub-standard goods in an Ordnance Depot.
14.		28**	Avoidable payment of maintenance charges for Defence tracks not in use.
15.	No. 13 of 1992	Part I*	Recruitment of Other Ranks
16.	No. 8 of 1993	13*	Infructuous expenditure on development of radar
17.		15**	Non-utilisation of assets
18.		22**	Over-provisioning of corrugated card board boxes
19.		29*	Import of mountaineering equipment and sports items
20.		31*	Avoidable payment of detention charges
21.		68*	Civil works for a Naval Air Station.

Sl.No.	Report No. and Year	Para No.	Subject
22.	No. 8 of 1994	10**	Establishment of a National War Museum
23.	No. 8 of 1995	12*	Working of the Department of Defence Supplies
24.		13*	Delay in repair of defective imported ammunition
25.		17*	Import of radar
26.		20**	Supply of defective ammunition by a foreign firm
27.		29	Manufacture of defective parachutes
28.		30	Non-utilisation of parachutes
(ii)	**Pending for more than 3 years**		
29.	No. 8 of 1996	24*	Wasteful expenditure on injudicious procurement of tyres
30.		25*	Avoidable procurement of mounting tripods
31.		70*	Supply of sub-standard high strength cement
32.	No. 7 of 1997	14*	Loss due to improper despatch of imported equipment
33.		15	Over provisioning of seats and cushions for vehicles
34.		18*	Management of Defence Land
35.		23**	Avoidable expenditure on Demurrage charges
36.		24*	Undue favour to a firm
37.		27**	Non-realisation of claims from the Railways
38.		69**	Defective construction of blast pens and taxi track
39.		79*	Non-utilisation of assets due to faulty planning
(iii)	**Pending upto three years**		
40.	No. 7 of 1998	14*	Extra expenditure on modification of radar
41.		15	Loss of ammunition due to improper storage
42.		16*	Questionable deal
43.		17*	Procurement of defective radars
44.		18	Extra expenditure on procurement of rifles and ammunition due to failure to adequately safeguard Government interest
45.		20*	Excess procurement of barrels
46.		21	Extra expenditure due to non-adherence of contract provision
47.		22*	Import of defective missiles
48.		25*	Follow up on Audit Reports

Sl.No.	Report No. and Year	Para No.	Subject
49.		26*	Design and development of Main Battle Tank-Arjun
50.		29*	Abnormal delay in repair/overhaul of tanks
51.		30	Avoidable payment of container detention charges
52.		32*	Infructuous expenditure on procurement of substandard cylinders
53.		34*	Unauthorised issue of free rations
54.		36*	Procurement of batteries at higher rates
55.		41**	Premature failure of tubewells
56.		43**	Non-utilisation of a building due to defective workmanship
57.		45**	Inordinate delay in construction of indoor gymnasium
58.		48*	Non-utilisation of residential accommodation
59.		49*	Avoidable payment due to delay in availing of concessional tariff
60.		52*	Loss of revenue
61.		53*	Payment of conservancy charges
62.		55*	Extra expenditure due to acceptance of higher rates
63.		57*	Unauthorised use of air-conditioners
64.		64*	Unfruitful expenditure on procurement of substandard hot mix plants
65.		68**	Injudicious procurement of stores
66.		69	Response of the Ministries/departments to draft audit paragraphs
67.	No.7 of 1999	12	Presumptive fraud in import of ammunition
68.		13*	Defective training ammunition supplied by Bofors
69.		14*	Delay in renewal of lease agreement
70.		15	Premature deterioration of imported ammunition
71.		16*	Mishandling of missiles
72.		17*	Procurement of defective sleeping bags
73.		18**	Loss of revenue
74.		21	Response of the ministries/departments to draft audit paragraphs
75.		22	Follow up on Audit Reports
76.		23*	Development of Multi Barrel Rocket Launcher System (PINAKA)

Sl.No.	Report No. and Year	Para No.	Subject
77.		24*	Negligence in framing terms of supply orders
78.		25*	Unauthorised transfer of Defence land
79.		26*	Excess manning by attachment of service personnel
80.		28	Non-recovery of advance
81.		29*	Injudicious acquisition of land under urgency clause
82.		30	Failure to meet operational requirement
83.		32	Non-utilisation of friction drop hammers
84.		33	Failure to observe proper issue procedure for batteries
85.		36*	Non-recovery/overpayment of electricity charges
86.		37*	Avoidable extra expenditure in the purchase of leather cloth
87.		38	Failure to administer a risk and expense contract
88.		39*	Delay in Missile storage accommodation
89.		40*	Delay in setting up of repair facilities for helicopters
90.		42*	Non-utilisation of a bulk petroleum installation
91.		44*	Extra expenditure due to substandard work
92.		47*	Additional expenditure due to non-adherence of instructions
93.	No. 7 of 2000	13*	Failure to Safeguard Government Interest
94.		15*	Additional expenditure due to non-compliance of Risk Purchase Procedures
95.		16*	Recovery/savings at the instance of Audit
96.		17	Response of the Ministries/Departments to Draft Audit Paragraphs
97.		18	Follow up on Audit Reports
98.		19*	Overhaul of infantry combat vehicles and engines (Project – White Lily)
99.		20*	Rejection of Barrels manufactured for T-72 tanks
100.		21	Downgradation of mines due to manufacturing defects
101.		22*	Loss due to non-repair of missiles within shelf life
102.		23	Procurement of defective bullet proof windscreen glasses
103.		24	Procurement of Batteries at higher rates

Sl.No.	Report No. and Year	Para No.	Subject
104.		25*	Acceptance of substandard mosquito nets by the Inspecting Authority
105.		27	Extra expenditure due to delay in taking risk purchase action
106.		28*	Non-recovery of due from a commercially run club occupying Prime Defence Land
107.		30*	Delay in setting up of an aviation base
108.		31*	Delay in taking over of land leading to pilferage of trees
109.		32*	Inadmissible payment under Land Acquisition Act
110.		33*	Idle investment owing to non-utilisation of assets
111.		34*	Wrongful reappropriation of married JCOs accommodation into married officers accommodation
112.		35*	Unauthorised use of accommodation of married JCOs
113.		36*	Unjustified payment towards sewerage cess
114.		37*	Avoidable extra expenditure in delayed conclusion of contract
115.		38*	Negligence in ensuring return of Government stores by contractors on their abandoning works
116.		39*	Construction of an overhead tank at a wrong site
117.		41*	Nugatory expenditure on indigenisation of a Rocket
118.		42*	Delay in construction of bridges by Director General of Border Roads
119.		43**	Deliberate delay in award of contract to favour a contractor
120.		52	Repowering of Vijayanta Tank
121.	No.7A of 2000	Entire Report	Review of Inventory Management in Ordnance Services
122.	No.7 of 2001	9*	Exception made a rule
123.		10	Losses awaiting regularisation/store losses
124.		11	Dues on account of Licence Fee and allied charges
125.		12	Non-settlement of Audit Objections
126.		13*	Surrender of savings
127.		14	Non-utilisation of imported radars
128.		15	Procurement of an incomplete equipment

Sl.No.	Report No. and Year	Para No.	Subject
129.		16*	Cancellation of unauthorised works at the instance of audit
130.		17	Unauthorised expenditure on operation of unsanctioned posts
131.		18	Injudicious construction of officers quarters at Naval Air Station Arkonam
132.		19	Infructuous expenditure on procurement of entertainment films
133.		20	Inadequate follow up on deficient supplies leading to avoidable loss
134.		21	Response of the Ministries/Departments to Draft Audit Paragraphs
135.		22	Follow up on Audit Reports
136.		23	Loss due to cavitation/cracks in High Explosive filling of shells
137.		24	Unauthorised use of defence land by a club at Mumbai
138.		25	Misuse of delegated powers in special repairs to buildings and diversion of staff for use by a private college
139.		26	Hiring of buildings by Defence Estates Officer from an unauthorised party
140.		27	Undue benefit to a private society
141.		28	Non-availing of an advantageous offer
142.		29	Extra expenditure in purchasing meat items
143.		30	Irregular payment of departmental charges under conservancy contracts
144.		31	Irregular construction of married officer accommodation in a field area
145.		32	Wrongful credit of sale proceeds of usufructs to regimental fund
146.		33	Avoidable payment of Sales Tax
147.		34	Non-levy of penalty by Canteen Stores Department for supplies in default
148.		35	Manpower in Military Engineer Services
149.		36	Non-utilisation of accommodation due to defective projection and planning of essential services
150.		37	Payment for water lost in transmission from MIDC tapping junction to R&D(E) Pune take-over point

Sl.No.	Report No. and Year	Para No.	Subject
151.		38	Cracks in garages and collapse of living accommodation due to defective design
152.		39	Provision of excess living accommodation due to faulty planning
153.		40*	Loss due to non-levy of departmental charges by Military Engineer Services
154.		41	Undue benefit to a contractor
155.		42*	Staff Projects completed by Vehicle Research and Development Establishment
156.		43	Infructuous expenditure on irregular execution of a work
157.		44	Non-utilisation of buildings constructed at a cost of Rs 4.80 crore
158.		45	Injudicious expenditure in constructing temporary bridges

*** Action Taken Note awaiting final settlement/vetting - 81**
Action Taken Notes not received even for the first time - 57
****Copy of the finalised ATN/Corrigendum to the finalised ATN awaited, from Ministry, after being duly vetted by Audit – 20**

ANNEXURE-II

Non-production of documents
Foreign Contracts

List of Files Called For During the Year '1990'

[Referred to in paragraph 17(b)]

Sl.No.	Contract No. & Date	Subject	Requisition No. & Date	Last reminder
1.	C.No. 706308411Dated 4-9-87 (Roubles 97768738) AA/602/70660842 dt.29-3-90 (Roubles 3780400) AA/605/706608412 dt.29-3-90 (Roubles 267283) SA.No.602/702908412 Dated 4-12-87 (Roubles 1138673) 6-2A/702908412 dt.30-3-90 (Roubles 1429312) 603/602908412 dt.14-3-90 (Roubles 360000)	Purchase of spares	180/D/S/27/86/ AtGp-I/Vol.II dated 11-10-90	18.1.2002

List of Files Called for During the Year '1991'

Sl.No.	Contract No. & Date	Subject	Requisition No. & Date	Last reminder
2.	C.No. 21-0-2079 Dated 7-3-91 (INR6,23,38.372) and Suppl.No.1 dt.7-3-91 (INR 11,2,5,33.000)	Procurement of Missiles	168/D/S/12/91/AtGp-I Dated 26-7-91	18.1.2002
3.	C.No.69/80-356-10127 Dated 27-3-91 (Rs.10,2,600,000.00)	Tropicalised Version of Radio Station with accessories	210/D/S/18/91/ AtGp-I Dated 26-7-91	-do-
4.	C.No.356-0030405/10021 Dated 25-7-91 (Rs.44,75,59,498)	Supply of Electronic Tubes	438/D/S/20/91/ AtGp-I dated 14-10-91	-do-

List of Files Called For During The Year '1992'

Sl. No.	Contract No. & Date	Subject	Requisition No. & Date	Last reminder
5.	No.48(1)/92/D(BDL)/MDN Dated 13-3-92(Rs.17.90 Crores)	Grant of Loan of Rs.17.90 crs.	208/D/S/18/92/AtGp-I dated 19-6-92	18.1.2002
6.	Supply Orders No. (1) 21(7)/92/D/(O-I) dated 30-4-92 (FF 48,19,455.50) (2) 21(20)/92/D(O-I) dated 11-5-92 (SFR 12,37,989.72) (3) 21(30)/92/D(O-I) dated 11-5-92 (FF 51,76,747.00) (4) 21(10)/92/D(O-I) dated 02-6-92 (Rs.1,75,78,600.00) (5) 21(2)/D(O-I)/92 dated 30-04-92 (FF16,32,500.00) (6) 21(28)/92/D(O-I) dated 11-5-92 (FF 1,18,600,28.00) (7) 21(31)/92/D(O-I) dated 11-5-92 (AS 1,24,85,044.00)	Supply order placed on Foreign Supplier	320/D/S/20/92/AtGp-I dated 22-7-92	-do-

List of files called for during the year '1993'

Sl. No.	Contract No. & Dated	Subject	Requisition No. & Date	Last reminder
7.	C.No.80/306505414 dated 16-4-93 (USD 2923600) C.No. 306608414 dated 16-4-93 (USD 2338880)	Procurement of Rifle cartiage with bullet	304/D/S/7/93/ AtGp-I dated 5-7-93	18.1.2002
8.	(i) C.No.80/306608431 dated 4-2-93 (USD 2183210.37) (ii) C.No.80/306308431 dated 4-2-93 (USD 2043376.96)	BMP Spares Ex-Russia (i) 218321037 USD (ii) 255357919 USD	313/D/S/12/93/ AtGp-I dated 9-7-93	-do-
9.	C.No. 702908412 dated 4-9-87 (Rs.2,91,56,925.28)	Purchase of equipment	288/D/S/27/86/ AtGp-I/Vol.II dated 14-3-93	-do-

List of Files Called For During the Year '1994'

Sl.No.	Contract No. & Date	Subject	Requisition No. & Date	Last reminder
10.	C.No.2240003 dated 14-1-94 (USD 438,232.27)	Purchase of spares	134/D/S/10/94/ AtGp-I dated 24-5-94	18.1.2002
11.	C.No. 80/302908411Dated 4-2-93 And AA.No. dated 9-2-94 (USD 40813830.00)	Procurement of Field simulator	630/D/S/16/94/ AtGp-I dated 28-12-94	-do-
12.	Sanction No. 14(2)/90/D(Proc) Vol.III dated 24-3-94 (Rs. 41.97 Crores)	Setting up of overhauls facilities for CVS BMP and Engines	164/D/OS/17/94/ AtGp-I dated 8-6-94	-do-
13.	56885/A-6/SD-7/183/45/D(O-I) dated 29-4-92 (Rs. 5.9 Crores)	Replacement of water trailers 1000 liters by Lorry 3 Ton water bowser 3000 liters	822/D/OS/4/94/ AtGp-IA dated 28-2-94	-do-

List of Files Called For During the Year '1995'

Sl.No.	Contract No. and Date	Subject	Requisition No. and Date	Last reminder
14.	PC to F No.7(3)/93/D(Proc) dated 22-9-95 (i) 5(1)/91/D(GS.IV) dt.19.7.91 (FF 2,112,232.20) (ii)5(1)/91/B/D/GS.IV/91 dt.19.7.91 (AS 90038,00) (iii)5(1)/91/B/D/GS.IV/91 dt.19.7.91 (AS 8625,68.00) (iv)5(1)/91/B/D/GS.IV/91 dt.19.7.91 (SFR 2,548,911) (v)5(1)/91/B/D/GS.IV dt.19.7.91 (SFR 1,4,32,710.50) (vi)5(1)/91/B/D/GS.IV/91 dt.19.7.91 (AS 14,46,088.90)	Opening of letter of Credit in F/o Foreign supplier against supply order placed on them	585/D/S/21/91/ AtGp-I dated 9-11-95	18.1.2002

List of Files Called For During the Year '1996'

Sl.No.	Contract No. and Date	Subject	Requisition No. and Date	Last reminder
15.	C.No. 0559453-29-01/356-4090 Dated 19-7-94 (Rs.24,67,50,000 Plus USD 1500000)	Contract concluded for spares	907/D/S/19/93/ AtGp-I dated 14-3-96	18.1.2002

List of Files Called For During the Year '1997'

Sl.No.	Contract No. and Date	Subject	Requisition No. and Date	Last reminder
16	Con.No.6(1)/90/D(GS-IV) dated 8-8-90 (USD 17248000)	Procurement of Ammunition	236/D/S/28/97/ AtGp-I dated 17-6-97	18.1.2002

List of Files Called For During the Year '1998'

Sl.No.	Contract No. and Date	Subject	Requisition No. and Date	Last reminder
17.	C.No. 10-C(1)/97/PO System dated 2-7-97 (Rs.5,27,39,979.20)	GPS Receivers	22/D/S/19/98/ AtGp-I dated 28-5-98	18.1.2002
18.	Con.No.PC1(95)A/15436/SCA/ PPO-3D Dated 20-7-98 (SEK 18,347,886.21) (Rs.10,09,13,374.00)	Spares for Vehicles	62/D/S/35/98/ AtGp-I dated 14-9-98	-do-
19.	Con. No.1(3)/92/D(GS-IV) dated 21-10-93 (USD 6,118,400.00)	Purchase of Ammunition	D.O. No. 1698/D/S/ 43/98/At Gp-I Dated 8-10-98	-do-

List of Files Called For During the Year '1999'

Sl.No.	Contract No. and Date	Subject	Requisition No. and Date	Last reminder
20.	Con.No. Com/EC/BD/2/60170/ GS(WE-6/US GS(IV) dated 16-9-98 (USD 1200200) (Rs.5,13,00,000.00)	Procurement of Bomb Disposal Suit ensembles/ accessories and telescopic Manipulators	111/D/S/69/98/ AtGp-I dated 28-12-98	18.1.2002
21.	C.No. COM/EC/BD/3/60170/ GS(WE-6)/USGDated 16-09-98 (665000)	Supply of super Broom Plus	129/D/S/2/99/AtGP-I dated 12-2-99	-do-
22.	Sanction No.43(11)/3/94/D(HAL) Vol.II Dated 4-12-98 (Rs.359.05 Crores)	Weapon System Integration on Advanced Light Helicopter.	131/D/S/7/99/AtGp-I dated 12-2-99	-do-
23.	C.No.Con/7/EC/BD/60170/GS (WE-6)/98 D(GS-IV) dated 17-9-98 (BEE 47,60,000)	X-Ray Generator with Spares Battery and Darts	127/D/S/4/99/AtGp-I dated 12-2-99	-do-
24.	PC to MF 007551/Allot(Policy)HPTR/AA-61D(GS-IV)(Rs.19.3236 Crores)	Advance payment for supply of Helicopter	66/D/OS/14/99/ AtGp-IA dated 5-7-99	-do-

List of Files Called For During the Year '2000'

Sl.No.	Contract No. and Date	Subject	Requisition No. and Date	Last reminder
25.	Addendum No.1 dated 24-6-99 to Con/EC/BD/2160170/GS(WE-6) USGS(IV) dated 16-9-98 USD 1,230,800.00	Bomb Disposal Suit	163/D/S/69/98/ AtGp-I dated 20-1-2000	18.1.2002
26.	Addendum lkNo.1 dated 28-6-99 to ContractNo. COH/EC/BD/3/60170/GS (WE-6)US GS-IV dated 16-9-98 PND 228000.00	Super Broom Plus	160/D/S/2/99/AtGp-I dated 20-1-2000	-do-

List of Files Called For During the Year '2001'

Sl.No.	Contract No. and Date	Subject	Requisition No. and Date	Last reminder
27.	4(2)99/D(Proc) dated 20.2.2001 Rs. 7090.05 Lakh	Launcher, Missiles and ESP	1243/D/S/13/2001/ AtGp-I dt.22.3.2001	-do-
28.	PB/835606131012 dt. 15.2.2001 (Rs.1,76,341.79 Lakh)	Proc. of Tanks	1250/D/S/12/2001/ AtGp-I dated 27.3.2001	-do-
29.	Addendum No.11 dt. 15.11.2000 to CA.No. COM/EC/BD/260170/GS (WE-6)US GS(IV) Dt. 16.9.98 (USD 1,875,000.00) (Rs.8,73,75,000.00)	Bomb disposal suit & Helmet with Accessories	38/S/69/98/AtGP-I dt.10.1.2001	-do-

Other than foreign contracts

List of files called for during the year 1999

Sl.No.	Contract No. and Date	Subject	Requisition No. and Date	Last reminder
1.	(i)B/561999/Q3(South)/3523/DE (W-II) dt. 21.6.76 (ii) 9(2)79/D(W-II) dt. 28.3.84 (iii) 9(4)/86/D(W-II) dt. 25.3.88 Total Amt. Rs.21.441 Crore	Non-repayment of loan by BWSSB Cauvery water supply scheme stage I, II & III.	1916/D/W/60/99/MES dt. 25.2.99	18.1.2002

Details of sanctions

Sl.No.	Letter No. and date	Subject	File No.
1.	901/At.Gp.III/CSD/94/CSD dt. 27.3.97	Allocation of net trade surplus of receipts over expenditure of CSD for the year 1994-95	No.95103/Q/BOCCS/94-95/569/(D)/D/Mov/96 (Rs.24.16 Crore)
2.	331/At.Gp.III/67/97/CSD dt. 16.7.97	Allocation of Net Trade surplus of CSD for the year 1995-96	No.95103/Q/BOCCS/795/D(Mov)/97 (Rs.35.50 Crore)
3.	204/At.Gp.III/5/2000/ALH dt. 25.5.2000	Advance payment for weapon system integration	No.14(1)/2000/D(GS-IV) (Rs.10.37 Crore)
4.	220/At.Gp.III/98/YS Br. dt. 31.5.2000	Order for production of vehicle mounted system	No.72874/1/GS/WE-6/ GS-IV (Rs.7.30 Crore)
5.	1171/AtGp-III/8/2000/Sera Leochi dt. 28.2.2001	Procurement of Equipment/store Extrade & Ex Services Stocks	27600/4/SD-3/UN/2474/20/D(GS-I) dt. 16.1.2001 (Rs.19.32 Crore)

ANNEXURE-III

Position of outstanding ATNs

(Referred to in paragraph 64)

Report No. & Year		**Para No.**	**Subject**	**Remarks**
Report No.7 of 2001	1)	47	Indigenous production of 5.56 mm Indian Small Arms System – A review.	ATN not at all received
	2)	48	Functioning of VFJ – A review	- do -
	3)	50	Production of stores without demand	- do -
	4)	51	Non-utilisation of material procured for production of packing box.	- do -
	5)	52	Suppression of abnormal rejection in production	- do -
	6)	53	Loss due to defective manufacture of an ammunition	- do -
	7)	55	Loss due to defective manufacture	- do -
	8)	56	Delay in manufacture of bridge	- do -
	9)	57	Loss due to rejection of primers in proof	- do -
	10)	58	Avoidable import of stores	- do -
	11)	59	Avoidable evaporation loss of volatile liquid due to excess procurement	- do -
	12)	62	Non-commissioning of costly imported machine	- do -
	13)	63	Avoidable import of engines	- do -
	14)	64	Loss due to lax process control	- do -
	15)	66	Non-recovery of Rs 1.08 crore from a defaulting firm	- do -
	16)	67	Short closure of indent due to delay in production	- do -
	17)	68	Extra expenditure in rectification of defective boxes	- do -
	18)	70	Questionable procurement of furnace oil	- do -
	19)	71	Follow up on Audit Reports	- do -
	20)	72	Response of the ministries/departments to Draft Audit Paragraph.	- do -