



**REPORT OF THE
COMPTROLLER AND AUDITOR GENERAL
OF INDIA**

**FOR THE YEAR ENDED 31 MARCH 1991
NO. 8 OF 1992**

**UNION GOVERNMENT-DEFENCE SERVICES
(ARMY AND ORDNANCE FACTORIES)**

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PREFATORY REMARKS

This Report for the year ended 31 March 1991 has been prepared for submission to the President under Article 151 of the Constitution. It relates mainly to matters arising from the Appropriation Accounts of the Defence Services for 1990-91 together with other points arising from the test audit of the financial transactions of the Ministry of Defence, Army, Ordnance Factories and the Defence Research and Development Organisation.

2. The Report includes, inter-alia , reviews on

Ordnance Factory Organisation

- ✓(a) Production of an armoured vehicle 'Z', its gun and ammunition
- (b) Development and production of an armament

3. The cases mentioned in this Report are among those which came to notice in the course of audit during the year 1990-91 as well as those which came to notice in earlier years but could not be dealt with in the previous Reports.

4. This report also includes a review on the Border Roads Organisation, the administrative control of which vests with the Ministry of Defence.

OVERVIEW

The Audit Report for the year ended 31 March 1991 contains 98 paragraphs including three reviews. The points highlighted in the Report are given below:

I Accounts of the Defence Services

The total grant for the Defence Services for the year 1990-91 was Rs.16493.17 crores. The actual expenditure was Rs.15996.16 crores as against Rs.14889.31 crores in 1989-90. The supplementary grant of Rs.60.98 crores obtained for the Air Force proved inadequate to the extent of Rs.1.44 crores. Out of the supplementary grant of Rs.76.22 crores obtained for the Army, Rs.49.74 crores remained unutilised as compared to Rs.20.08 crores during 1989-90. Similarly the entire supplementary grant of Rs.25.50 crores obtained for the Defence Ordnance Factories could not be utilised.

While there was excess under the Air Force grant, there was under utilisation of Rs.497.01 crores in the Defence Budget as a whole.

(Chapter I)

MINISTRY OF DEFENCE

II Undue benefit to a private firm

According to the contract concluded by the Ministry for procurement of certain types of vehicles, unit ceiling price or the price arrived at by cost accounts branch (CAB) whichever was lower was to be allowed. Though, the contract agreement and CAB provided prices for chassis, load body, tools and special items as separate units while admitting the payments the ceiling price for vehicle as a whole was only considered/compared with the prices arrived at by the CAB which resulted in an additional expenditure of Rs.82.79 lakhs out of which the firm was benefited by Rs.67.58 lakhs.

(Paragraph 5)

III Procurement of Mat Ground Surfacing Light

Non-placement of one third of the total quantity of order for Mat Ground Surfacing Light initially by the Ministry on a Public Sector Undertaking (PSU), despite

the advice of Finance not only resulted in delay in materialisation of the order placed on firm 'B' but also resulted in extra expenditure of Rs.98.88 lakhs on procurement of the item from PSU at an enhanced rate. The possibility of recovery of the extra expenditure from firm 'B' was remote as the risk and expense order was not placed within six months from the date of breach.

(Paragraph 6)

IV Extra expenditure on the procurement of Sheet Ground Light Weight O.G.

Placement of supply order for Sheet Ground Light Weight O.G. at higher rates in April 1986 by the Department of Defence Production and Supplies than the lower rate obtained by Director General of Supplies and Disposals in February 1986 for the same item resulted in extra expenditure of Rs.18.42 lakhs.

(Paragraph 7)

V Loss due to non-insurance of imported Defence stores

Non-insurance of imported defence stores due to the policy of insurance of such stores on a selective basis resulted in a loss of Rs.5.45 crores.

(Paragraph 8)

ARMY

VI Weaponry and allied equipment

A contract concluded in September 1987 for import of ammunition did not provide for supply of newly manufactured as well as ammunition not more than two years old, even though such omission in the earlier contracts had led to receipt of defective or life expired ammunition. This resulted in receipt of 79,209 rounds costing Rs.31.31 crores of shelf life expired ammunition including shipment of 36,559 rounds costing Rs.18.22 crores which was not stopped despite the recommendations of the Director General of Quality Assurance to that effect.

(Paragraph 9)

There was over provisioning and accumulation of aiming devices valued at Rs.29.18 lakhs due to lack of co-

ordination between Army Headquarters and users formations.

(Paragraph 10)

VII Logistics and transport

Procurement of 1657 defective sleepers by a Zonal Chief Engineer resulted in blocking an amount of Rs.12.06 lakhs as well as expenditure of Rs.0.56 lakh on transporting them to six consignee divisions.

(Paragraph 11)

Expenditure of Rs.8.90 lakhs incurred on procurement/maintenance of a computer system did not serve the objective of replacing the cardex system due to frequent breakdown and erratic behaviour of the computer system.

(Paragraph 12)

Out of Pontoon Spares worth Rs.24 lakhs procured by Army Engineers as early as 1976, approximately 25 per cent of the spares only could be consumed till February 1992 and the balance were still held in stock.

(Paragraph 13)

VIII Ordnance Stores

Despite fire accidents in the recent past and inadequate fire fighting arrangements, in 1987, a vulnerable ammunition depot, dispensed with grass cutting without making any effective alternative arrangement. As a result ammunition/assets worth Rs.26.32 crores other than obsolete ammunition which was also damaged were destroyed in a wild grass fire in May 1989. The proceedings of a Court of Inquiry ordered by the Command authorities to investigate the accident remained misplaced and unattended in the Command Headquarters for about an year.

(Paragraph 14)

A test check on the working of five laundry establishments created during 1983-1991 (cost: Rs.62.37 lakhs) revealed that there was delay of five to eight years in commissioning three of them. There was also gross under-utilisation of the available capacity in three establishments. Two of them in the same station where military hospitals were located who were not aware of the facility

and made their own arrangements at a cost of Rs.38.67 lakhs during this period.

(Paragraph 15)

Over provisioning of tyres for transporter trailers resulted in holding of 5186 surplus tyres worth Rs.153.47 lakhs for over five years.

(Paragraph 16)

IX Inspection

Improper rejection of timber at the consignee's end as well as delay in conducting joint inspection resulted in continued stocking of timber valued at Rs.1.10 crores for 14 months. Of this timber valued at Rs.28.06 lakhs rejected by the consignee was yet to be jointly inspected.

(Paragraph 18)

Due to delay in repair, a machine costing Rs.8.27 lakhs was lying idle since the last two years which adversely affected the quality clearance of the imported defence equipment.

(Paragraph 19)

Despite pre-inspection, sub-standard goods worth Rs.11.90 lakhs were procured/received by an Ordnance Depot and yet to be replaced by the suppliers. Out of this, rejection of stores worth Rs.2.74 lakhs was not communicated to the suppliers within the validity period of six months.

(Paragraph 20)

X Ration articles

Free rations costing Rs.6.16 lakhs issued to service officers seconded to the Survey of India till March 1990, in contravention of the rules were yet to be recovered/regularised.

(Paragraph 21)

Delay in implementation of the recommendations of the Expert Accounting Committee in regard to fixation of

sale issue rates of milk products on the basis of cost of production resulted in recurring loss of Rs.76.01 lakhs during 1986-91.

(Paragraph 22)

XI Defence Estates

Payment for acquired land included value of structures and trees. The land was taken over from the owner by Defence Estates Officer without accounting for the structures and trees. This resulted in missing structures and trees worth Rs.130.64 lakhs.

(Paragraph 23)

A sum of Rs.1.07 crores, being 80 per cent of probable cost of land under acquisition was paid in October 1989 by a Defence Estates Officer to the concerned State Government. Even after a lapse of over two years, the land was not made available due to a court stay order against the acquisition. Consequently, the amount of Rs.1.07 crores was held by the civil authorities, though the amount could have been got refunded by the Defence department in terms of Government orders. This led to blocking of Rs.1.07 crores for over two years.

(Paragraph 24)

Against Rs.111 lakhs paid by the Ministry towards cost of trees, trees valued at Rs.99.71 lakhs were found missing after physical occupation of the area by Army.

(Paragraph 25)

Failure on the part of the Defence Estates authorities for timely payment in satisfaction of the award by land acquisition authorities resulted in avoidable payment of Rs.18.78 lakhs towards interest accrued.

(Paragraph 26)

Frequent changes in location of units led to non-realisation of rentals of Rs.3.08 lakhs from a lessee for the period September 1984 to January 1992 in respect of lease of a site and avoidable payment of Rs.16.89 lakhs towards development work carried out by lessee on that site.

(Paragraph 27)

XIII Other cases

Non-receipt of paid vouchers in respect of pension paid to the British pensioners from the Pension Disbursing Officers as well as admitted shortfalls in maintenance, rendition and compilation of accounts led to non-realisation of pensionary charges of Rs.74.62 lakhs and agency commission of Rs.2.24 lakhs for the period October 1984 - March 1990 as on August 1991.

(Paragraph 29)

ORDNANCE FACTORY ORGANISATION

XIII Production of an armoured vehicle 'Z', its gun and ammunition

An Armoured Vehicle Project scheduled for completion by May 1989 had been delayed and expected to be completed only by March 1992. The approved project cost of Rs.389.27 crores has already overrun by Rs.74.13 crores. Although only the first 50 tanks were to be assembled from imported knocked down kits, all the 175 tanks which rolled out of the factory till March 1990 were assembled from imported knocked down kits except for a few components, machined at the factory. Had the project been completed by May 1989, the import of kits beyond 50 tanks, could have been avoided. The extra cost in foreign exchange amounted to Rs.270.75 crores.

(Paragraph 33)

XIV Development and production of an armament

This project took 81 months to be completed against the planned schedule of 48 months, resulting in cost overrun of Rs.2.22 crores. Due to shortfall in planned production, armament valuing Rs.24.49 crores had to be imported. The production was suspended due to controversy on the acceptance criteria resulting in accumulation of finished/semi finished armament and its components worth Rs.10.79 crores. This would also result in the facilities created at a cost of Rs.11.30 crores remaining unproductive.

(Paragraph 34)

XV Development and Production

As a result of defective design specifications and method of trial of safety fuzes with polythene covering, 6.40 lakh igniter sets valuing Rs.249.92 lakhs were lying at the depots in defective condition. Besides, grenades/rifles valuing Rs.772.20 lakhs could not be utilised due to non-availability of the fuzes.

(Paragraph 35)

Manufacture of boxes and spring hanger brackets at Gun Carriage Factory, Jabalpur, Ordnance Factory, Bhusawal and Vehicle Factory, Jabalpur despite substantially cheaper cost of procurement from trade resulted in extra expenditure of Rs.433.17 lakhs during 1987-90.

(Paragraphs 36, 37)

Capacity augmented at a factory for manufacture/repair of man dropping parachutes at a cost of Rs.109.36 lakhs was lying idle due to lack of orders from the indenter.

(Paragraph 38)

Un-realistic upward revision of estimate for an item resulted in drawal of excess input material to the extent of Rs.118.39 lakhs during 1987-91.

(Paragraph 39)

Of 1521.74 tonnes of billets manufactured and supplied by an ordnance factory to another ordnance factory duly inspected and cleared by the inspection wing of the former, 274.07 tonnes of billets valuing Rs.84.97 lakhs approximately were rejected by the latter, being defective.

(Paragraph 40)

An additional expenditure of Rs.76.67 lakhs had to be incurred due to under-utilisation of the created capacity and consequent procurement of fuzes from trade.

(Paragraph 41)

Cost of components (Rs.58.79 lakhs) expended in trials during the process of manufacture was capitalised in-

flating the value of plant and machinery instead of treating the same as manufacturing loss.

(Paragraph 42)

Lack of proper inspection before accepting material resulted in accumulation of 173.67 lakh unusable/rejected links valuing Rs.27.75 lakhs at a factory.

(Paragraph 43)

The production of 1992 shells by a factory for which there was no requirement resulted in avoidable expenditure of Rs.22.31 lakhs.

(Paragraph 46)

XVI Provisioning

Placement of order on a firm despite its poor past performance and in violation of the instructions on procurement of stores resulted in avoidable extra expenditure of Rs.63.07 lakhs.

(Paragraph 50)

Bulk provisioning of blanks without first establishing their suitability resulted in rendering approximately seven lakh blanks valuing Rs.112.70 lakhs, 3.29 lakhs unfinished semi valuing Rs.180.77 lakhs and 0.86 lakh finished semi valuing Rs.46.94 lakhs cartridge cases surplus to the requirement.

(Paragraph 51)

Delay in inspection resulted in extra expenditure of Rs.12.08 lakhs on procurement of planks at a higher rate from another firm.

(Paragraph 52)

XVII Plant and machinery

Of the three plants procured and installed at a cost of Rs.56.83 lakhs, one plant (value: Rs.16.47 lakhs plus duties and taxes) had not been commissioned for more than two years after its procurement; another plant (cost: Rs.25.50 lakhs exclusive of duties and taxes) though commissioned in July 1990 had not been put to use and the

extent of utilisation of the third plant (cost: Rs.14.10 lakhs exclusive of duties and taxes) was not known. Meanwhile, production of the ammunition for which these machines had been procured was phased out.

(Paragraph 59)

Investment of Rs.42.57 lakhs on blasting machines procured in July 1988 was idling due to their non-erection and commissioning owing to defects.

(Paragraph 60)

XVIII Other cases

Non-production of requisite documents to customs authorities for claiming exemption from payment of customs duty and non-preferment of claims within the prescribed period for refund of customs duty paid in excess resulted in loss of Rs.69.00 lakhs.

(Paragraph 62)

Due to non-provisioning of foreign exchange in its budget, avoidable service charges of Rs.7.63 lakhs had to be paid to a public sector undertaking for making payment of the stores through a letter of credit opened by them. Delay in supply of original shipping documents to Embarkation Headquarters for clearance of cargo resulted in avoidable payment of wharfage charges of Rs.13.76 lakhs..

(Paragraph 63)

XIX Works and Military Engineer Services

An Auditorium-cum-sand model room was sanctioned (July 1976) at Rs.65.86 lakhs. This was yet to be completed. An amount of Rs.170.08 lakhs (September 1991) has been incurred on this project. The anticipated completion cost has increased to Rs.3.03 crores due to inability of the users to assess the requirement at the initial planning stage and cancellation of the contract leading to arbitration. Rupees 19.64 lakhs is yet to be recovered from the defaulting contractor on account of arbitration award.

(Paragraph 66)

Storage tanks for Bulk Petroleum Installation sanctioned in December 1983 and brought to site in August 1988 were yet to be installed after incurring expenditure of Rs.153 lakhs. As a result expenditure of Rs.12.17 crores was incurred during the period 1988-90 on carriage and storage of 1,39,835 kilolitres of petroleum products.

(Paragraph 67)

Construction of another Bulk Petroleum Installation completed in September 1989 at a cost of Rs.28.07 lakhs was yet to be taken over in the absence of a pipeline from the railway siding which was still under consideration.

(Paragraph 68)

In respect of a computer system planned in the late sixties, execution of works for its installation was sanctioned in 1985 without ensuring the type and size of the system. This resulted in creation of assets worth Rs.87.80 lakhs whose utility is uncertain.

(Paragraph 69)

Improper supervision of works by the executive authorities caused an additional expenditure of Rs.20.37 lakhs on rectification of defects. Cost of rectification was yet to be recovered from the defaulting contractor.

(Paragraph 74)

Due to laxity in supervision 72 substandard married quarters completed in May 1987 at a cost of Rs.45.74 lakhs had to be vacated by the tenants ^{in August 1990.} The report of the Court of Inquiry convened to pinpoint the responsibility which was to complete their proceedings by 15 June 1990 were yet to finalise their report (June 1991).

(Paragraph 75)

Inadequate supervision of the work of a contractor led to collapse of a building and termination of the contract. Extra expenditure of Rs.6 lakhs on account of execution of the left over work at the risk and cost as well as cost of stores worth Rs.6.56 lakhs issued to the contractor was yet to be recovered (January 1992) from the defaulting contractor. Further, incorrect drafting of the contract resulted in an avoidable claim of Rs.11.88

lakhs by another contractor which is under reference to arbitration.

(Paragraph 76)

Due to poor workmanship, use of sub-standard materials and poor supervision, compound walls constructed at a cost of Rs.35.67 lakhs collapsed necessitating repair and reconstruction which were yet to be carried out (October 1991).

(Paragraph 78)

Claims for re-imburement of freight amounting to Rs.37.14 lakhs preferred during December 1984 to April 1987 were yet to be allowed by the cement factories, as the cases were not pursued vigorously by the Army.

(Paragraph 82)

A Hangar constructed in May 1988 could not be put to use due to delay in provision of ancillary work and services. As a result value for expenditure of Rs.40.87 lakhs incurred remained unrealised.

(Paragraph 83)

Tools and plants valuing Rs.18.85 lakhs were held for three to fifteen years after completion of the project for which these were requisitioned. Out of this, three plants moved to railway sidings without ensuring availability of crane for loading them in the wagon, deteriorated due to exposure to vagaries of weather. Further, Rs.2.97 lakhs had to be incurred on watch and ward duties at the sidings. In contravention of orders, hire charges amounting to Rs.23.95 lakhs for the period September 1986 to July 1989 were debited to the project though the plants were no longer utilised on the project/services.

(Paragraph 84)

As against the contract provision of making the payment on gross area of 3.3 lakh Square metres (SM) to be painted, payment was made for an area of 3.97 lakh SM. Further, the quantity of paint used was 24,120 litres as against 38,892.82 litres required to be used for the area as per the manufacturers standards. Total overpayment for

the excess area as well as for paint not incorporated in the work, worked out to Rs.14.33 lakhs.

(Paragraph 85)

Various items of work services for an integrated sports complex estimated at Rs.307.47 lakhs were split up and sanctioned by various lower authorities under their financial powers in violation of basic rules, which prohibits splitting up of work merely to bring it under one's financial powers. Superior specifications involving extra expenditure of Rs.26.09 lakhs were also incorporated in the works.

(Paragraph 86)

Lapses on the part of sanctioning authorities in the provision of messes/single officers' accommodation for Naval officers in three stations in contravention of basic provisions in the regulations, resulted in avoidable expenditure of Rs.102.52 lakhs.

(Paragraph 87)

Out of 1643.65 tonnes valuing Rs.115 lakhs of steel procured/received by a Garrison Engineer in 1986, 687 tonnes valuing Rs.50.71 lakhs remained unutilised for nearly six years.

(Paragraph 89)

Relief of the supervisor concerned by the Garrison Engineer without completing the handing/taking over formalities resulted in furniture of the value of Rs.29.48 lakhs ^{being} found deficient.

(Paragraph 91)

XX Research and Development Organisation

Expenditure of Rs.1739.53 lakhs incurred on development and production of Bridge Layer Tanks did not serve the purpose for which it was intended due to reluctance to accept them by the Army.

(Paragraph 94)

Though a provision for recovery of interest on advance payment made to a foreign supplier in the event of delay in delivery of equipment, existed in the contract, interest amounting to Rs.59.52 lakhs was not recovered.

(Paragraph 95)

A machine imported at a cost of Rs.53.35 lakhs remained unutilised for nearly four years due to delay in finalisation of the design of the engine for which it was to be used.

(Paragraph 96)

XXI Border Roads Organisation

Delay of over seven years in finalising the contract (February 1986) for extension of a bridge from the date of sanction (October 1978) resulted in cost escalation by about Rs.77.52 lakhs.

A sum of Rs.31.50 lakhs had to be paid to a firm entrusted to construct bridges for keeping idle resources due to delay in conclusion of contract with another firm for foundation treatment of two bridges.

Out of four bridges sanctioned (May 1967) for construction, only one bridge could be completed so far (January 1992) and consequently approach roads constructed departmentally for the remaining three bridges could not be put to use.

An expenditure of Rs.3.15 lakhs on civil works for a Bailey Raft carried out in February 1979 became infructuous as raft was found unsuitable for operation after test on its inauguration day.

Two bridge construction companies (BCCs) set up in the Border Roads Organisation for departmental construction of bridges were to have annual workload of 320 metres but the targets given to them were 74 metres, 70 metres and 73 metres for the year 1988-89, 1989-90 and 1990-91 respectively. The BCCs, however, achieved even lower targets of 71.80 metres, 19.80 metres and 67.80 metres respectively during these years.

Work of widening of a road and strengthening of pavement in the North Eastern Region was completed in March 1986 (cost:Rs.61.60 lakhs). As innumerable pot

holes, ditches, deep pot holes etc. had developed patch repairs were carried out under normal maintenance at a cost of Rs. 4 lakhs. The Board of Officers set up to assess the quantum of special work observed that damages occurred over a period due to heavy rainfall, increased traffic intensity and inadequate specification adopted in road construction needed special repairs which was completed (March 1991) at a cost of Rs.39.97 lakhs (May 1991).

There were abnormal cost difference in the handling and conveyance of stores concluded during the same period in the same area by two Chief Engineers resulting in additional expenditure of Rs.39.69 lakhs. The matter was under investigation.

Non-observance of the prescribed procedure while concluding the contract with a new firm and unsatisfactory monitoring of the progress of delivery enabled a contractor to make short delivery of 2078.60 tonnes of cement (Value:Rs.38.66 lakhs).

Work on jungle clearance had to be abandoned after incurring an expenditure of Rs.16 lakhs due to revision (July 1984) of master plan in an island earlier approved in 1983.

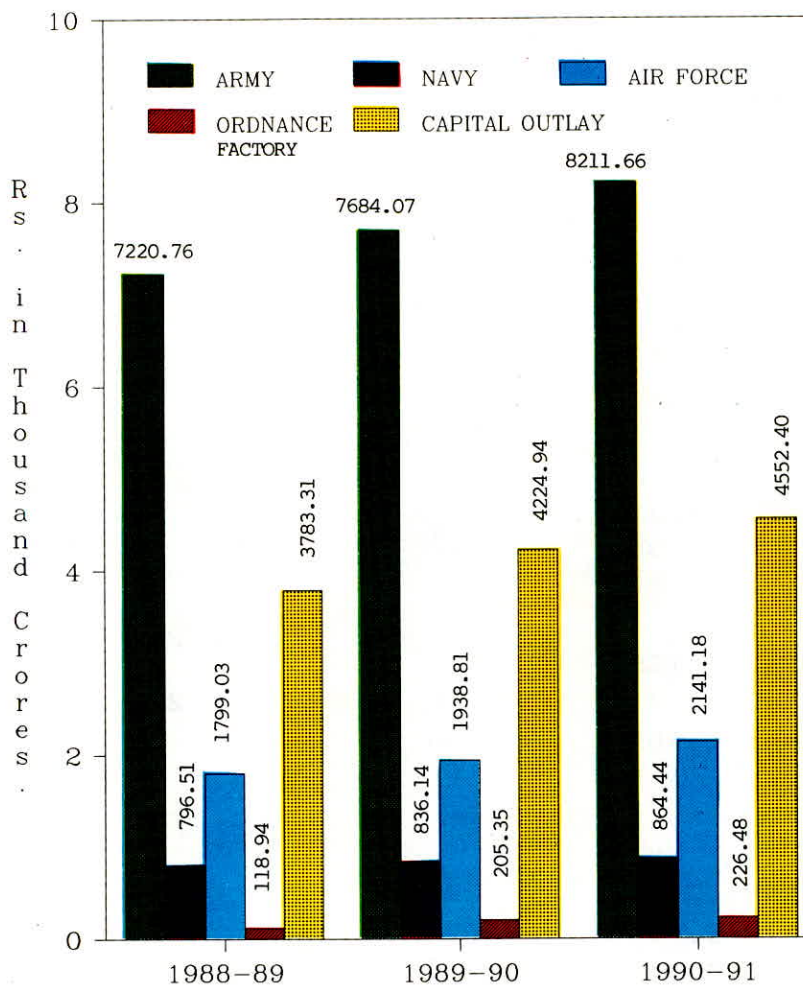
(Paragraph 98)

CHAPTER I

ACCOUNTS OF THE DEFENCE SERVICES

1.1 Defence expenditure

The expenditure on the Defence Services has increased from Rs.13718.55 crores in 1988-89 to Rs.15996.16 crores in 1990-91.



Note: The expenditure on ordnance factories does not include value of supplies made to Army, Navy, Air Force etc. which is reflected as expenditure under respective service grants. Booked expenditure for supplies made were as under:

(Rs. in crores)

1988-89	1352.67
1989-90	1400.37
1990-91	1578.75

1.2 Budget and actuals

The summarised position of expenditure during 1990-91 against grants/appropriations was as follows:-

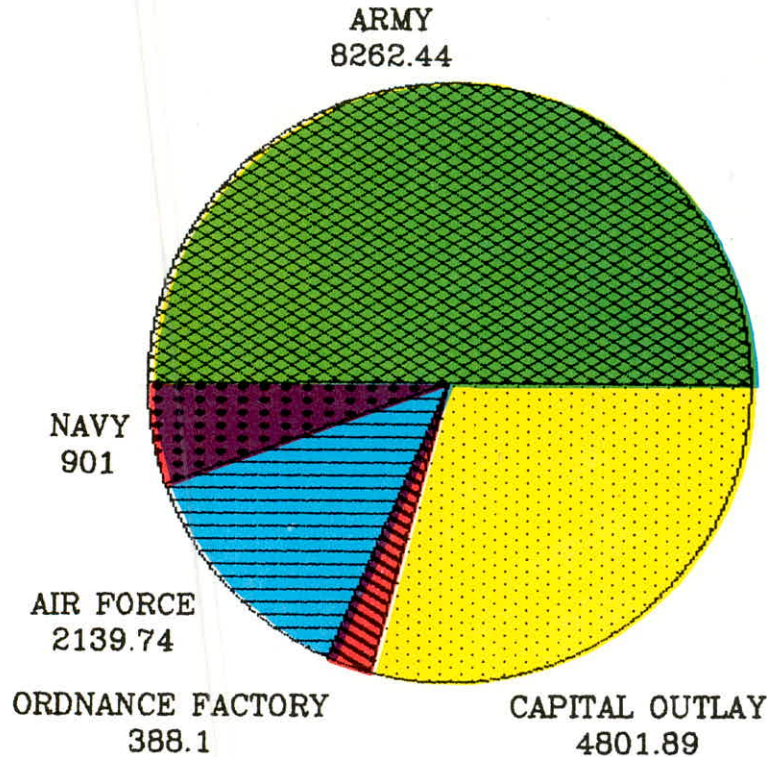
(Rs. in crores)

	Original grant/ appropria- tion	Supple- mentary	Total	Actual expen- diture	Variation Excess(+) Saving(-)
Revenue:					
ARMY:					
Voted	8183.95	76.22	8260.17	8210.43	(-)49.74
Charged	2.11	0.16	2.27	1.23	(-) 1.04
NAVY:					
Voted	900.80	-	900.80	864.34	(-)36.46
Charged	0.20	-	0.20	0.10	(-) 0.10
AIR FORCE:					
Voted	2078.63	60.98	2139.61	2141.05	(+) 1.44
Charged	0.13	-	0.13	0.13	-
DEFENCE					
ORDNANCE FACTORIES:					
Voted	361.30	25.50	386.80	226.47	(-)160.33
Charged	1.30	-	1.30	0.01	(-) 1.29
Capital:					
CAPITAL OUTLAY ON					
DEFENCE SERVICES					
Voted	4795.54	-	4795.54	4551.80	(-)243.74
Charged	6.35	-	6.35	0.60	(-) 5.75
TOTAL	16330.31	162.86	16493.17	15996.16	(-)497.01

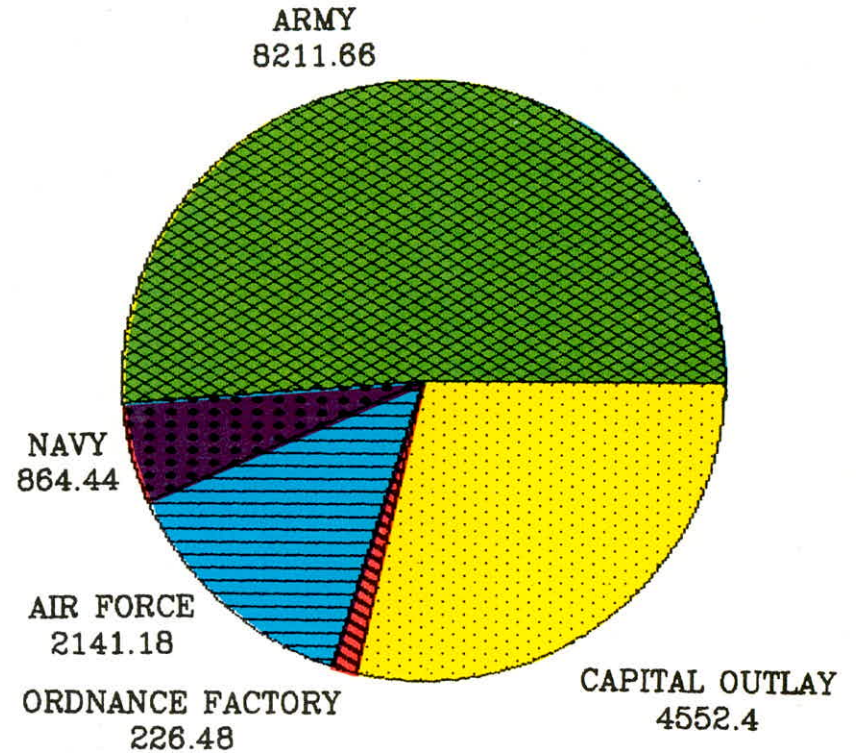
While the supplementary grants obtained for the Army and Defence Ordnance Factories proved to be surplus to the requirements, the supplementary grant obtained under Air Force head was inadequate; whereas the budget provision obtained for the Navy and Defence Capital Outlay itself proved to be excess to the requirements.

There were persistent savings under Ordnance Factories (both under Revenue and Capital) from 1987-88; savings

TOTAL GRANT & APPROPRIATION FOR 1990-91
TOTAL : 16493.17



ACTUAL EXPENDITURE DURING 1990-91
TOTAL : 15996.16



NOTE: FIGURES IN CRORES OF RUPEES

amounted to Rs.160.33 crores during 1990-91 also under Revenue. Despite reappropriating Rs.51 crores, there was saving of Rs.12.40 crores under sub-head A.4(1)-Machinery and Equipment of Capital Outlay on Defence Services.

1.3 Excess over grant

In the revenue section under Grant No.16-Defence Services-Air Force, against the total amount of Rs.2139.61 crores (original plus supplementary), the actual expenditure was Rs.2141.05 crores resulting in excess expenditure of Rs.1.44 crores (Rs.1,44,05,869) which requires regularisation under Article 115 of the Constitution.

Despite obtaining a supplementary grant of Rs.60.98 crores, there was excess expenditure mainly under Transportation, Works and Special Projects which indicates that the requirement of funds was not assessed properly though instructions to avoid such excess were issued every year.

1.4 Control over expenditure

Some instances of defective budgetary control are indicated below:-

(a) In the following cases the supplementary grant obtained was wholly or partially not utilised resulting in surplus to the requirements:-

(Rs. in crores)

Grant No. Sub-Head	Original grant	Supplementary grant	Amount Re-appropriated	Final grant	Actual expenditure	Excess(+) Saving(-)	Percen- tage Col.7 to 3	Percen- tage Col.7 to 5
1	2	3	4	5	6	7	8	9
<u>16-Defence Services</u>								
<u>Air Force</u>								
A.5 Stores	1255.68	35.37	(+)3.08	1294.13	1290.58	(-)3.55	10.04	0.27
A.8 Other expenditure	37.40	0.59	(-)0.10	37.89	35.97	(-)1.92	325.42	5.07
<u>17-Defence</u>								
<u>Ordnance Factories</u>								
A.8 Stores	924.30	20.50	(+)40.50	985.30	961.49	(-)23.81	116.15	2.42

(b) In the following cases, re-appropriations made during the course of the year were wholly or partially not required:

(Rs. in crores)

Grant No. Sub-Head	Sanctioned grant	Amount Re-appropriated	Final grant	Actual expenditure	Excess(+) Saving(-)	Percentage Col.6 to 3	Percentage Col.6 to 4
1	2	3	4	5	6	7	8
<u>14- Defence Services-Army</u>							
A.2 Pay and Allowances and Miscellaneous Expenditure of							
Auxiliary Forces	32.98	(+)18.30	51.28	38.99	(-)12.29	67.16	23.97
A.11 Other expenditure							
	171.12	(+)12.16	183.28	168.68	(-)14.60	119.98	7.96
<u>15- Defence Services-Navy</u>							
A.7 Other expenditure							
	59.85	(-)20.00	39.85	53.07	(+)13.22	66.10	33.17
<u>16- Defence Services-Air Force</u>							
A.7 Special Projects							
	8.75	(-) 2.75	6.00	6.37	(+) 0.37	13.45	6.17
<u>17- Defence Ordnance</u>							
<u>Factories</u>							
A.4 Maintenance-Machinery and Equipment							
	-	(+) 4.50	4.50	3.32	(-) 1.18	26.22	26.22
<u>18- Capital Outlay on Defence Services</u>							
A.1(8) Stock Suspense							
	-	(+) 1.20	1.20	(-)3.69	(-) 4.89	407.50	407.50
A.2(6) Naval Fleet							
	637.55	(+)63.62	701.17	680.34	(-)20.83	32.74	2.97
A.3(5) Const- ruction Works							
	100.45	(+) 3.00	103.45	93.33	(-)10.12	337.33	9.78
A.5 Research and Development Organisation							
	169.60	(+)19.96	189.56	174.60	(-)14.96	74.95	7.89

1.5 Persistent excess

Mention was made in paragraph 1.5 of the Report of Comptroller and Auditor General of India, Union Government - Defence Services (Army and Ordnance Factories) for the year ended 31 March 1990, No.8 of 1991 regarding persistent excess under the head 'Transportation' on all the three services viz. Army, Navy and Air Force under Revenue Section. Despite the above fact, excess persisted during the year 1990-91 also under Army and Air Force to the extent of Rs.5.13 crores and Rs.0.39 crore respectively.

Excess persisted under the Sub-Head A.6 Works of Defence Services - Air Force during the years 1989-90 and 1990-91 as per details given below:

(Rs. in crores)

Year	Final grant	Actual Expenditure	Excess
1989-90	144.98	149.76	(+)4.78
1990-91	175.00	183.50	(+)8.50

1.6 Savings in Grants/Appropriation

Out of total amount of grants/appropriations (Voted) of all the 5 grants - Rs.16482.92 crores savings under 4 grants accounted for Rs.490.28 crores as detailed below:

(Rs.in crores)

Sl. No.	Grant	Amount of saving	Main reasons
<u>REVENUE</u>			
1.	14 - Army	49.74	Excess provision/estimation mainly under Pay and Allowances, R&D Organisation, Inspection Organisation and Construction works.
2.	15 - Navy	36.46	Mainly under Pay and Allowances, transportation and surrender of funds at the time of revised estimates.

3. 17 - Defence
 Ordnance
 Factories 160.33

Mainly under Research, manufacture, maintenance of machinery and equipment, less booking under Renewal and Replacement, stores, other expenditure and more recoveries on account of supplies made to the three services than anticipated.

CAPITAL

4. 18 - Capital
 Outlay on
 Defence
 Services 243.75

Mainly under other equipment, construction works under Army, Land, Other Equipment, Naval Fleet and Naval Dockyards under Navy; Land, Aircraft and aero-engines, Other Equipment and Construction Works under Air Force Machinery; and equipment under Ordnance Factories, R&D organisation, Inspection organisation and surrender of funds at the RE stage.

1.7 Persistent savings

Savings persisted under the sub-head A.3 Pay and Allowances of civilians of Defence Services-Navy during the years 1988-89 onwards as indicated below:

(Rs. in crores)

Year	Final grant	Actual Expenditure	Saving
1988-89	119.00	114.79	(-)4.21
1989-90	126.95	125.61	(-)1.34
1990-91	136.95	133.07	(-)3.88

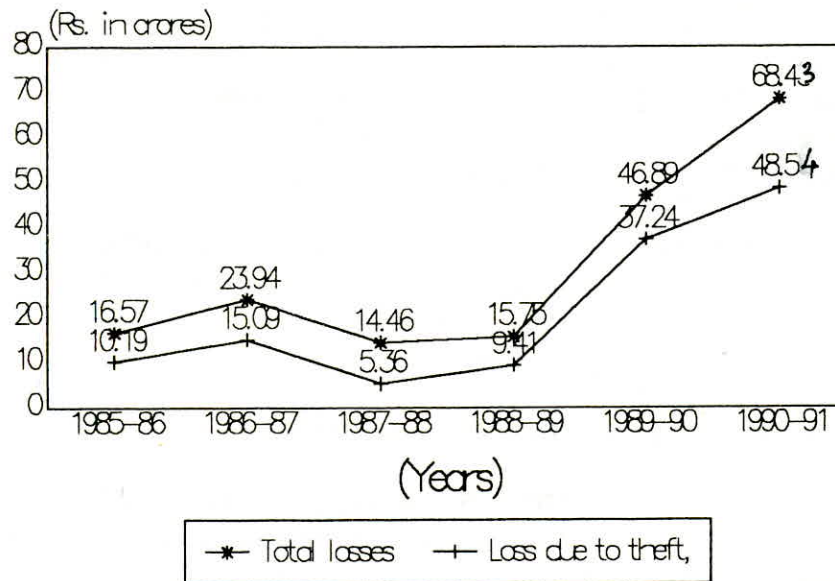
2. Loss of stores

Mention was made in paragraph 1.6 of the Report of Comptroller and Auditor General of India, Union Government - Defence Services (Army and Ordnance Factories) for the year ended 31 March 1990, No.8 of 1991, regarding in-

creasing trend of loss of stores especially losses due to theft, fraud or gross neglect. Despite this there was an increasing trend both in the total losses but also under losses due to theft, fraud or gross neglect. A comparative chart and statement of the losses of stores regularised from the year 1985-86 onwards indicated below shows an increasing trend.

(Rs. in crores)

Year	Total losses including losses due to theft, fraud or gross neglect	Losses due to theft, fraud or gross neg-	Percentage of Col.3 to 2
1985-86	16.57	10.19	61.50
1986-87	23.94	15.09	63.03
1987-88	14.46	5.36	37.07
1988-89	15.75	9.41	59.75
1989-90	46.89	37.24	79.42
1990-91	68.43	48.54	70.94



Losses of stores regularised due to theft, fraud or gross neglect amounted to Rs.48.54 crores during 1990-91 which was Rs.39.13 crores (415.83 per cent) more than the

loss in 1988-89 and Rs.11.30 crores (30.34 per cent) more than the loss in 1989-90. Further, it varied from 37.07 to 79.42 per cent of the total losses during the last 6 years.

3. Outstanding claims/dues

Mention was made in paragraph 8 of the Report of Comptroller and Auditor General of India, Union Government - Defence Services (Army and Ordnance Factories) for the year ended 31 March 1989, No.12 of 1990, regarding increasing trend in respect of pending claims with Railways/shipping corporations on account of loss of stores in transit as well as outstanding dues in respect of stores supplied and services rendered by the Defence Services to others.

Despite this there is still an increasing trend from year to year which is alarming and requires speedy action. The position of outstanding claims/dues as indicated below shows an increasing trend:-

(a) The claims outstanding against Railways/Shipping Corporations had gone up from Rs.30.71 crores as on 30th June 1988 to Rs.78.45 crores as on 30th June 1991.

(b)(i) The outstanding dues for the services rendered on payment by the Defence Services (other than Ordnance Factories) to various non-defence departments as on 30th June 1988 rose from Rs.39.13 crores to Rs.65.88 crores as on 30th June 1991 showing an increase of 168 per cent.

(ii) Outstanding dues for the services rendered by Ordnance Factories to other non-defence departments rose from Rs.3.98 crores as on 30th June 1988 to Rs.24.40 crores as on 30th June 1991 showing an increase of 613 per cent.

4. Erroneous compilation of expenditure

During the year 1988-89, a sum of Rs.15.06 lakhs in respect of certain Research and Development Project pertaining to Defence Services, Navy was erroneously compiled to Army Capital head under Capital Outlay on Defence Services instead of on the Revenue side of Defence Services-Navy. Though the above fact was brought to the notice of the Controller of Defence Accounts concerned the erroneous compilation was not corrected resulting in unrealistic compilation of Defence Services, Receipts and Charges.

During the year 1989-90, a sum of Rs.24.92 lakhs forming part of the excess under Defence Services, Air-Force was due to wrong adjustment under the expenditure head instead of the receipt head which resulted in regularisation of excess amount to that extent.

During the year 1990-91 also, a sum of Rs.0.74 lakh which should have been booked under different minor heads was adjusted to incorrect code heads in the charged portion resulting in misclassification.

A sum of Rs.12.32 lakhs pertaining to charged portion could not be included in the charged expenditure Report for want of details though the amount was stated to have been spent by the concerned Controllers of Defence Accounts. To this extent the charged expenditure reflected in the Appropriation Accounts, Defence Services was incorrect.

MINISTRY OF DEFENCE

5. Undue benefit to a private firm

In March 1982, the Ministry decided to cover the deficiency of one tonne and three tonne vehicles by procuring from trade sources. Accordingly, they concluded a contract with firm 'A' in May 1986 for 1,000 vehicles each of one tonne and four tonne capacities at provisional total prices of Rs.2.36 lakhs and Rs.2.83 lakhs per vehicle respectively exclusive of excise duty and sales tax. Four tonne vehicles were ordered in lieu of three tonne vehicles on the recommendation of Army Headquarters (HQ) due to their non-availability in the private sector. The number of four tonne vehicles were increased in May 1988 to 5278 by an amendment to the contract.

In the contract, the price of each of the two types of vehicle was broken up into four specific units (1) chassis with cab, (2) load body, (3) special fitments and (4) tools and the contract stipulated the ceiling price for each unit of each type of vehicle, the total of which was indicated as the total cost of the vehicle. The contract specifically provided that the unit prices were ceiling prices and prices were subject to verification by the Cost Accounts Branch (CAB) of the Ministry of Finance. In the event of the prices determined by the CAB being lower than those mentioned in the contract document, the lower prices were to prevail and necessary adjustment would be made from amounts subsequently payable to the contractor. There was no provision in the contract for increasing the unit ceiling prices in case CAB determined a higher amount.

It was observed in Audit (September 1988) that while the total price worked out by the CAB was lower than the total ceiling price indicated in the contract, the Ministry admitted the price of Rs.4567 for special fitments on the four tonne vehicle as indicated by the CAB against the ceiling price of Rs.3580 indicated in the contract. In respect of one tonne vehicles, the price worked out by the CAB for load body and tools were Rs.24930 and Rs.106 as against ceiling prices of Rs.26000 and Rs.110 respectively but the Ministry admitted the higher prices. It was also observed that, only the total price of each type of vehicle as a whole was highlighted for obtaining

final approval of the cost instead of comparison of unit prices which were specifically indicated in the contract. The variation in the cost of special fitments in the case of four tonne vehicle and load body, tools in the case of one tonne vehicle and the contract provisions were not brought out.

The observations of Audit on the above subject were referred to the Ministry as far back as in September 1988. Complete reply was not, however, received in spite of several reminders. The Ministry replied (February 1992) after over three years that "it is admitted that the price clause of the contract provided for ceiling prices, subject to verification of the CAB. At no stage was it envisaged that the price for each component of the final product would be adjusted against the CAB prices and the lower prices component-wise would prevail. The purpose of the verification of the CAB was to independently determine through an external expert agency that the price being paid by the Ministry was fair and reasonable. The method by which the CAB arrived at its final fair and reasonable price is really by way of an internal exercise and is not contractually relevant. The final price having been paid on the basis of the CAB unit price, the question of any undue benefit just does not arise." The reply of the Ministry even at this late stage does not appear to be borne out by facts as under:

- The unit ceiling prices have been specifically given in the contract. In the reply, the Ministry has avoided all references to this ceiling by referring to them as prices for each component of the final product.

- When the contract specifically provided for unit ceiling prices and the role of the CAB, the contention of the Ministry that these prices and the method by which the CAB arrived at its final and reasonable price is an internal exercise and not contractually relevant, was not borne out by the actual contents of the contract.

It was also observed that the total price of each type of vehicle as a whole was highlighted for obtaining final approval of the cost instead of unit prices and their ceiling indicated in the contract. The variation between the unit prices of contract and that arrived at by CAB were not brought out specifically.

The extra contractual action resulted in additional

expenditure of Rs.82.79 lakhs. Of this the firm benefitted by Rs.67.58 lakhs with the balance being payable towards excise duty and sales tax.

6. Procurement of Mat Ground Surfacing Light

Based on the urgent requirement projected by Army Headquarters for 50 Kms of Mat Ground Surfacing Light (used for laying on soils of low bearing capacity like very soft/sandy/marshy ground to enable sustained traffic), tender enquiries were floated in March 1986 by the Department of Defence Production and Supplies (DDPS). The lowest offer received viz. Rs.9.38 lakhs per Km from firm 'A' was considered reasonable after taking into account the cost of aluminium extrusion required for its fabrication. In June 1986, it was decided to counter-offer this rate to firm 'B' being a past supplier as well as to firm 'C', a public sector undertaking (PSU) (who was also the manufacturer of aluminium extrusion) with a price escalation on aluminium ingots. The counter-offer price was accepted by all the firms and the proposal to order 18 Kms on firm 'A', 27 Kms on firm 'B' and 5 Kms on the PSU at a total cost of Rs.4.69 crores was submitted in August 1986 for financial concurrence.

Finance, however, proposed (August 1986) that one third of the order may be placed on each firm viz. 17 Kms on the PSU, 16 Kms on firm 'A' and 17 Kms on firm 'B'. The proposal was not agreed to by the DDPS on the ground that the PSU had no experience in fabrication of this item and would not be in a position to commence supplies within six months. Finance reiterated (August 1986) their advice since the item involved was highly material intensive and suggested inclusion of a clause for off-loading the quantity on the successful suppliers in case of failure to effect supplies by the PSU. DDPS did not agree to the proposal due to the urgency of the requirement and placed supply orders on firms 'A', 'B' and the PSU for 18 Kms, 27 Kms and 5 Kms respectively in September 1986 at Rs.9.38 lakhs per Km. The supplies were to be completed by the firms by 15th April 1987, 15th May 1987 and 15th June 1987 respectively.

Firm 'A' and the PSU completed the supplies in May 1987 and November 1987 (extended delivery periods). Against the original delivery date of 15th May 1987, firm 'B' could supply only 10 Kms upto May 1987 and extensions were granted initially upto July 1987 and again upto Aug-

ust 1987,during which period the firm supplied additional 4 Kms only. The firm was granted further extension upto March 1988.

On the failure of firm 'B' to effect the supply, the PSU was approached in February 1988 to confirm whether they could supply the remaining 13 Kms at prices prevailing in March 1987. The PSU, however, offered the rate of Rs.11.22 lakhs per Km. This offer was not processed as the price quoted was higher than the updated price of Rs.10.61 lakhs per Km in January 1988. Firm 'B' was granted further extension upto November 1988 and then again upto July 1989 during which period a further quantity of only 2 Kms was supplied leaving a balance of 11 Kms.

In September 1989 the supply order was cancelled at the risk and expense of firm 'B' with the date of breach as 31st July 1989.DDPS placed a risk and expense order in March 1990 on the PSU for the procurement of the balance 11 Kms at the further increased rate of Rs.15.13 lakhs per Km subject to price variation in the cost of material. Though as per the conditions of the supply order,the risk purchases was to be made within six months of the date of breach, the offer of the PSU was accepted in January 1990 and a formal supply order indicating the terms and conditions could be placed only in March 1990, i.e. after more than seven months.

Ministry stated (October 1991) that the item was urgently required and the firms 'A' and 'B' were established suppliers in the past. Trial order on the PSU was placed for 5Kms as the firm had not done any fabrication work while placing the order. The Ministry further indicated that the price initially quoted by the PSU was Rs.13.49 lakhs. This was abnormally high compared to the price of Rs.9.38 lakhs quoted by firm 'A' and Rs.9.68 lakhs by firm 'B'. The main task of the DDPS was to develop and nurture sources for indigenisation.Risk purchase was, therefore, taken recourse to only as the last resort. Accordingly, firm 'B' was given a number of extensions of the delivery period as the other firms were not willing to supply the stores at the original contract prices. The Ministry further added that a demand notice for Rs.98.88 lakhs (under the risk and purchase clause) has been issued to firm 'B' in May 1991, simultaneously instructing Controller of Defence Accounts(CDA) to withhold payments.

The Ministry's contention that there was urgency in

the requirement of this item is not tenable due to the fact that against the order placed in September 1986 on firm 'B' for 27 Kms the firm could supply only 16 Kms till July 1989. The argument that the PSU was inexperienced in fabricating the item has to be viewed in the light of the fact that they were the manufacturers of the material required for its fabrication and could also complete their supplies after a slight delay of around five months. Further, Finance had also taken care to suggest inclusion of a clause for off-loading the quantity on the successful suppliers in case of failure to effect supplies by the PSU. The plea that the rate of the PSU quoted initially was higher has no relevance since the counter-offered rate of Rs.9.38 lakhs was subsequently accepted by all the firms including the PSU. The argument that firm 'A' and the PSU were not willing to supply the stores at original rates is also not convincing as the original supply orders catered for a price escalation on aluminium ingots. Had the contract with firm 'B' cancelled even in March 1988 and the offer of the PSU to supply the item at Rs.11.22 lakhs per Km accepted, the extra expenditure could have been reduced by Rs.43.01 lakhs. As per the records of the CDA, the balance payment due to the firm 'B' was only Rs.2.93 lakhs approximately against the demand of Rs.98.88 lakhs and therefore making good the loss by withholding payments to the firm does not arise.

The case revealed that:

- The advice tendered by Finance for placing orders for equal quantities on three suppliers was not accepted. This led to disproportionate reliance on one firm who could not deliver even after repeated extensions.
- Though the requirement was stated to be urgent, extensions were granted for a period of more than two years despite the poor performance of firm 'B'.
- No action was taken to cancel the order placed on firm 'B' in March 1988, when the PSU was prepared to supply this item at the rate of Rs.11.22 lakhs per km instead of Rs.15.13 lakhs which had to be paid later. Had this been done, the extra expenditure to the Government could have been minimised by Rs.43.01 lakhs.
- The extra expenditure caused to the Government work-

ed out to Rs.98.88 lakhs. The possibility of recovery, is remote in view of the fact that risk purchase order was not placed within the period of six months stipulated in the contract. As the firm 'B' has only Rs.2.93 lakhs credit with CDA, the extra expenditure can not also be adjusted against such dues.

7. Extra expenditure on the procurement of Sheet Ground light weight OG

Ground sheets (light weight OG) are authorised items for troops in operational areas. In August 1983, January 1984 and April 1984, Army Headquarters (HQ) placed three indents on the Department of Defence Production and Supplies (DDPS) for the procurement of 1,96,925 ground sheets at a total cost of Rs.1.54 crores to meet the requirements against the deficiencies for the years 1984-85 and 1985-86. DDPS placed five supply orders in January/October 1985 on four firms at a uniform rate of Rs.85 each, after holding price negotiations with various firms. The supplies under these orders were completed from June 1985 to March 1987.

Army HQ projected another indent on DDPS for procurement of 2,87,450 ground sheets. Keeping in view the last purchase price, a price of Rs.79.99 each was considered reasonable by DDPS in January 1986 based on the lowest quotation received from firm 'A'. This was counter-offered to four firms, out of which, two firms 'B' and 'C' accepted the offer. Firm 'B' agreed to supply at Rs.78.99 each for placement of an order for a quantity of two lakh pieces. Accordingly, DDPS placed (April 1986) three supply orders on firms 'A' and 'C' for 37,450 and 50,000 pieces at Rs.79.99 each and on Firm 'B' at Rs.78.99 each for two lakhs pieces. Firm 'B' completed the supplies in February 1987. Firm 'C' could complete supplies only to the extent of 29,003 pieces leaving a balance of 20,997 pieces. Supplies from firm 'A' did not materialise.

Against an indent of May 1986 of Army HQ the Director General of Supplies and Disposals (DGSD) placed order on firm 'D' in January 1987 for these stores at Rs.71 each. DDPS, therefore, asked firm 'B' in September 1987 whether they were willing to supply the stores which did not materialise from firm 'A' and 'C' at this rate, which was agreed to by them. Supply orders placed on firm 'A' and 'C' were cancelled and an amendment was issued in October 1987 to the existing supply order for the procurement of

the unsupplied quantity of 58,447 pieces at Rs.71 each on firm 'B'.

According to rules, once indigenous sources are developed and identified (more than two) the role of the DDPS in contracting for such items stands transferred to the DGSD. An item is considered developmental until at least two successive purchases are made and at least two sources are fully established. Two successive purchases would mean, purchases against two successive indents and a source may be considered as established after reasonable quantities of acceptable quality of stores are supplied.

Ministry stated (December 1991) that the supplies against the indents of August 1983, January and April 1984 had just started in May 1985 and only 45,000 pieces were supplied by the firms and, therefore, the indent of July 1985 was taken up by DDPS for procurement. Ministry further stated that there was no procedure in existence by which the rates obtained by DGSD are conveyed to other procurement agencies. The reasons for the DGSD in obtaining a lower price of Rs.71 was due to the fact that the production facility was created by placement of orders by DDPS on suppliers who amortised the cost of such facility/capability on the first order. Ministry further clarified that firm 'D' on whom DGSD placed the order supplied only part quantities and the balance had to be cancelled.

The Ministry's contention that July 1985 indent was taken up by the DDPS for procurement is not tenable owing to the fact that three firms had already supplied the full quantities ordered on them by February 1986, and the supply orders were placed by the DDPS only in April 1986. The non-existence of a procedure for conveying the rates to other procurement agencies cannot be taken as a shelter for procurement of the item by DDPS at higher rates. In case the firms had amortised the cost of production facilities on the first order, there was no justification for obtaining a higher rate in the April 1986 purchase. Further the acceptance of the lower rate of Rs.71 by the firms for the part quantities of the orders of April 1986 clearly proved that the rate accepted by the DDPS in April 1986 was higher. The fact that the DGSD firms failed to supply the stores is not relevant as subsequently firm 'B' has effected the supplies at the rate of Rs.71 per piece.

The case revealed the following:

- Even as far back as September 1985, more than two firms had been identified and it was known to DDPS that three firms had successfully supplied this item till February 1986. Despite this, DDPS placed the supply orders at Rs.78.99/79.99 each in April 1986.
- Taking into account the DGSD rate of Rs.71 and the fact that indigenous sources had been developed by February 1986, the excess payment made to the firms 'B' and 'C' due to the handling of order by DDPS in April 1986 worked out to Rs.18.42 lakhs.

8. Loss due to non-insurance of imported Defence stores

In terms of Government instructions issued in October 1983, March 1984 and further amplified in August 1986, Government property should not normally be insured; but in individual cases where insurance is considered absolutely necessary in order to secure full compensation for costly equipment/stores purchased from abroad, Government sanction is to be obtained for the more economical option of either insuring the goods worth more than £ 400 or if insurance charges are more than three per cent of ad-valorem value of goods, the nature and value of goods to be declared in the bill of lading. The stores were to be insured with Indian Insurance Companies. The organisation putting up the case for procurement of any equipment had to indicate with reasons, whether the equipment being imported was to be insured or not alongwith financial implications thereof.

Mention was made in paragraph 25 of Audit Report, Defence Services 1984-85 and para 30 of Audit Report, Defence Services 1985-86 about losses due to non insurance of imported defence stores. In their action taken note on these paras, the Ministry stated (September 1986/October 1987) that instructions of October 1983 were not implemented since these were known to be under review. After issue of the instructions in March 1984, the stores were now to be insured selectively after justification in a particular case.

An Indian ship carrying Defence cargo of 17 items valued at Rs.5.51 crores from abroad sank in the Red Sea in August 1987 and the total consignment was lost. Four items valued at Rs.5.78 lakhs were shipped on Cost, Insurance, Freight (CIF) basis and the balance 13 items valued

at Rs.5.45 crores were shipped on FOB (Free on Board) basis. In November 1987, Army Headquarters (HQ) directed Embarkation HQ Bombay and consignee Ordnance Depots to lodge the claim against insurance companies for items obtained on CIF basis and initiate action for regularisation of transit losses for stores obtained on FOB basis.

Audit requested the Ministry (July 1989 and June 1990) to elucidate the reasons for not having insured the Defence Stores lost in transit in accordance with the existing Government instructions to secure full compensation. In reply it was mentioned by the Ministry (June 1990) that Army HQ had stated that a deliberate decision to this effect was taken to save foreign exchange (FE). The Ministry, however, also indicated (December 1991) that Army HQ had no papers to corroborate the statement made by them.

It was also confirmed by the Ministry that all transactions with Indian Insurance companies were to be in rupees including payment of premia and settlement of claims. This contradictory situation, according to the Ministry, was due to lack of co-ordination between two branches of Army HQ. The Ministry further stated that it had not been possible to lay down any strict guidelines regarding which stores should be insured and beyond what amount but selective insurance would continue. They could not, however, clarify as to whether a specific decision was taken after due consideration not to insure stores worth Rs.5.45 crores in this case. Since no outflow of FE was involved, the contention of the Ministry was not tenable. In the absence of the papers showing the basis for the decision, it could not be ascertained whether the decision taken in not insuring the imported defence stores involving loss of Rs.5.45 crores was in the best interest of the State.

ARMY

Weaponary and allied equipment

9. Import of old vintage ammunition

Mention was made in paragraph 19 of the Report of the Comptroller and Auditor General of India for the year ended 31 March 1989, Union Government Defence Services - Army and Ordnance Factories -(Report No.12 of 1990)-about receipt of old vintage ammunition with short shelf life as the contracts for its import concluded during 1980-85 did not provide for inspection of ammunition by the purchaser nor did they stipulate that supply would be from current manufacture. It was also mentioned that 1,500 rounds of ammunition 'A' and 11,356 rounds of ammunition 'B' (total cost : Rs.184.12 lakhs) received in July 1985 were found defective (April 1987) and were awaiting replacement (November 1991).

Another contract was concluded in September 1987 with the same agency for import of 40,000 rounds each of the ammunitions 'A' and 'B' (cost : Rs.22.73 crores) to be supplied at 10,000 rounds each per year commencing from 1987. It provided for delivery of the ammunition from stock, fit for combat use and storage. Though the shelf life of the ammunition was 10 years from the date of manufacture, the contract did not stipulate any minimum residual shelf life for the ammunition to be supplied, "ex-stock".

The first consignment of 10,000 rounds each of ammunitions 'A' and 'B' manufactured in 1970-77 was received in India in January 1988. The second consignment of 10,000 rounds each of the ammunition manufactured in 1969-1977 was received in July 1988. As the shelf life of ammunition received had already expired, the Controller of Quality Assurance Ammunition (CQA) sought the advice of the Director General of Quality Assurance (DGQA) in September 1988 regarding further course of action. The DGQA, in turn, informed the Director of Ordnance Services (DOS) that they would not recommend acceptance of such ammunition even for training purposes as the possibility of defects/accidents occurring during its use could not be ruled out and this might affect the morale of troops. They recomme-

ned the matter to be taken up with the supplier for replacement and also to stop shipment of the remaining quantity if these were of the same vintage. The DOS referred the case to the Ministry of Defence, and requested the DGQA in November 1988 to carry out the check proof. In check proof carried out by CQA in March 1989 the samples performed satisfactorily and the explosive fillings therein were found serviceable on chemical analysis at that point of time, but were recommended to be retested after three years as the assigned shelf life was already over. The ammunition received under the first consignment was accepted with a restricted life of three years and according to DGQA, ammunition received under the second consignment needed to be replaced by the supplier or could be accepted on price reduction, guiding factor of which should be its remaining life of three years of the explosive fillings. The DOS instructed the Commands and Ammunition Depots in May 1990 that the ammunition totalling 52,856 rounds (value: Rs.13.20 crores) received under the above two consignments be issued on overriding priority and expended within three to five years.

Though the DGQA in September 1988 had recommended stopping of further shipment of the balance quantity under the contract, a third consignment of 10,000 rounds each of ammunitions 'A' and 'B', which were also of old vintage manufactured during 1970 to 1977 (except 1941 rounds of ammunition 'B' of 1986 manufacture), was received in India in March 1989. During check proof of this consignment samples of 1970 and 1973 manufactured ammunition recorded "misfires" and "tracer failures" and samples from 1975 and 1977 manufactured ammunitions 'A' and 'B' respectively functioned satisfactorily in dynamic proof. In view of this, the CQA held that the ammunition was indicating signs of strain in quality and although given a lease of three more years based on chemical analysis results might not last long. They recommended in January 1990 that the case for its replacement be pursued. On DGQA asking (February 1990) for their specific recommendation for acceptance or otherwise of the consignment, the CQA replied (February 1990) that "misfire" was a critical defect, even a single instance of which was not permitted and 'tracer failure' was a major defect. They added that in case the diluted performance of tracer and primer functioning was considered acceptable by the users the lots might be accepted for early consumption. Final decision on these consignments and supply position

of balance quantity were not known (August 1991).

During 1988-89, two other types of life expired ammunition 20,300 rounds of 'C' (Rs.14.34 crores) and 850 rounds of ammunition 'D' (Rs.0.42 crore) were also received from the same supplier against another contract concluded in September 1987. Though the primer and tracer fillings of the ammunition had outlived their normal shelf life, the life of the ammunition in these cases was extended by three more years based on chemical analysis results and satisfactory performance in dynamic proof. Notwithstanding this, the CQA had recommended replacement of the ammunition by the supplier but the DOS instructed (May 1990) early consumption, within three to five years, of 4,300 rounds (Rs.3.04 crores) of ammunition 'C' and 850 rounds (Rs.0.42 crore) of ammunition 'D' received in India in June 1988/April 1989. Final decision on the remaining quantity received in India in July 1989 and November 1989 was still awaited (August 1990). While 1,800 rounds of ammunition 'C' (Rs.1.27 crores) and 850 rounds of ammunition 'D' (Rs.0.42 crore) were received in June 1988, the balance 18,500 rounds of ammunition 'C' (Rs.13.07 crores) were received during April-November 1989, that is, after the DGQA had asked for stoppage of further shipments of the ammunition.

To an audit query, the CQA replied (September 1990) that they were not aware of placement of contracts in September 1987 for supply of ammunition from stock till the initial consignments were received and subsequently when it was referred to them they had categorically recommended purchase of only newly manufactured/less than two years old ammunition.

Thus, the contracts concluded in September 1987 for import of ammunition ex-stock did not provide for supply of newly manufactured ammunition/ammunition not more than two years old, even though such omission in the earlier contracts had led to receipt of defective/life expired ammunition. This resulted in receipt of 79,209 rounds (cost: Rs.31.31 crores) of shelf life expired ammunition. Instead of rejecting the old vintage ammunition, 45,150 rounds out of it (value: Rs.14.85 crores) had been ordered to be expended within three to five years of their receipt in 1988 and 1989. Further shipment of old vintage ammunition was not stopped despite the recommendation of DGQA resulting in further receipt of 36,559 rounds (Rs.18.22 crores) of the ammunition subsequently

in March-November 1989.

The case was reported to the Ministry in July 1991; their reply has not been received (November 1991).

10. Over provisioning of aiming device

Rest Aiming (MK-1A) for teaching techniques of taking correct aim with rifles 7.62 mm developed by the Defence Research and Development Organisation was accepted by the Army Headquarters (HQ) in 1971. The requirement was assessed (May 1971) for 22,597 pieces calculated at 25 per cent of the authorised scale of the earlier version (MK-1).

An indent for manufacture of 22,597 pieces was placed by the Central Ordnance Depot (COD) in December 1971 on the Director General of Ordnance Factories (DGOF) which in turn, placed orders in May 1973 on Rifle Factory, Ishapore (RFI). However, in December 1983, the order was reduced to 17,597 and the balance 5000 pieces were ordered on Small Arms Factory, Kanpur. During this period, the product standards were formulated by the Inspectors in August 1976 and regular production commenced from July 1979.

By July 1987, RFI supplied 9073 pieces to the COD concerned. In the same month, the COD requested Army HQ to stop further production of the item in view of the position that only two pieces were issued since 1984 and the expected wastage had not picked up. Simultaneously, the COD approached the DGOF to suspend further production of the item. The DGOF did not agree on the ground that it would involve huge financial repercussions. Army HQ also did not take any action to cancel further production by the Ordnance Factories. Consequently, RFI, completed the supply of the total quantity of 17,597 pieces by March 1991. The COD had a balance of 13,263 pieces in stock valued at Rs.29.18 lakhs (February 1992).

The Ministry stated (February 1992) that the provisioning was calculated on 25 per cent of the authorised scale of earlier version (MK-1); the wastage had been low on the introduction of revised version (MK- 1A) which was perhaps not known to the user units, leading to accumulation of stock. Instructions had since been issued (October 1991) to all Command HQ to advise the user units to project their demand on the COD for this item. It was

added that the actual wastage pattern would be known only after a year of issuance of the said instructions and further unexpended quantity, if any, would be offered to units under Ministry of Home Affairs.

In this connection it is pertinent to note that the MK-1A version was accepted by the Army as far back as in 1971, orders were placed in 1973 by Army HQ and production commenced only in 1979. Army HQ could not correct the perspective despite the eight year lag. Thus, lack of co-ordination between Army HQ and user formation led to provisioning of the aiming device with consequential accumulation of 13,263 pieces valued at Rs.29.18 lakhs as on February 1992.

Logistics and transport

11. Procurement of defective timber

Based on an indent placed in June 1988 by a Zonal Chief Engineer (CE), Director General of Supplies and Disposals (DGSD) placed in September 1988 an order on the conservator of forests of a State Government for supply of 198 cubic metres of sleepers of Deodar, Fir and Chir species at a total cost of Rs.13.26 lakhs. The goods were to be despatched to an Engineer Park.

In December 1988, 1822 sleepers of different species were supplied by the forest department to the Engineer Park. In February 1989, a joint inspection by the representative of the forest department and two officers from the user department was conducted and it was found that 458 sleepers, representing 26 per cent of the total sleepers supplied, were of sub-standard quality. These sleepers were rejected and were subsequently replaced in March 1989 by the forest department.

The Engineer Park despatched these sleepers to six Military Engineer Services (MES) divisions in April 1989. One of these divisions reported to the concerned CE that more than 80 per cent of the sleepers despatched by the Engineer Park were either rotten or defective.

In May/June 1989, the CE ordered a Board of Officers to check the timber received in the MES divisions. The Board found, that 1657 out of 1785 sleepers produced for check were defective. The defects included cracks, excess

knots, worm holes, split ends and decayed wood. The cost of transportation of the defective timber worked out to Rs.0.56 lakh. A court of inquiry to investigate the circumstances under which defective timber was accepted by the Engineer Park was convened in November 1989, on the recommendation of the CE. The findings of the court of inquiry which were to be finalised by December 27, 1989 were still awaited (January 1992). The cost of the defective timber worked out to Rs.12.06 lakhs.

The Ministry while accepting the facts stated (October 1991) that the cost of the defective timber could be ascertained only after finalisation of the departmental court of inquiry.

12. Procurement of computer

In January 1983, the Ministry sanctioned a mini computer to replace the existing cardex system in an Engineer Stores Depot (ESD) at an initial cost of Rs.8.63 lakhs. The saving on staff on the installation of the computer was worked out to Rs.4.30 lakhs per annum. After discussions with specialists, the ESD requested the Army Headquarters (HQ) in June 1983 to re-examine the adequacy of the system with particular reference to the capacities of the disc drive, matrix printers, basic language interpreter and software for the jobs to be performed. The Command HQ directed the ESD (July 1983) to discuss the matter with the firm and include a suitable clause in the supply order that full or part payment would be released only after successful completion of the performance trials.

Accordingly, in October 1983, ESD placed a supply order on firm 'A' for supply of the system at a cost of Rs.7.01 lakhs which was received in April 1984 and installed in May 1984.

In June 1984, ESD reported erratic behaviour of the computer to the firm. The defects temporarily rectified continued to recur. In August 1984 it was reported that the system installed was prone to frequent break-down due to defective drives. Defects reported upto October 1984 were rectified by November 1984 and in January 1985, ESD gave clearance for making further payments, since the computer had rendered trouble free service for two months. Consequently the firm was paid Rs.4.88 lakhs during March 1985 to May 1988 in addition to Rs.2.06

lakhs paid in April 1984.

The warranty period of the computer expired in May 1985, but the defects continued to recur. To keep the system functional, four maintenance contracts on annual basis were concluded with firm 'A' between November 1985 and September 1988 for a total sum of Rs. 1.96 lakhs. The system stopped functioning altogether in October 1988.

Due to non-functioning of the system approval for procurement of another computer was accorded in June 1990 for Rs. 0.48 lakh. The Ministry stated in January 1992 that a Personal Computer Advanced Technology had been procured and was being utilised.

In August 1990, a Board of Officers recommended disposal of the computer (without printer) through auction. It was admitted by the ESD that the service was never satisfactory and the existing system of maintaining the cardex system manually was continued.

The Ministry stated (January 1992) that the system had been working intermittently and its break down became more frequent after October 1988. It added that the model had become obsolete and it was not possible to run the system efficiently and economically.

Thus, an expenditure of Rs.8.90 lakhs incurred on the purchase and maintenance of a computer system did not serve the objective of replacing the existing cardex system. The computer system purchased worked only for around four years and that too intermittently.

13. Over provisioning of Pontoon spares

Test check in audit (1980-81) of the inventory of spares for pontoons procured for Army Engineers and a Base Workshop both at station 'X' revealed that spares worth Rs.13.44 lakhs specifically indented through the Director General Supplies and Disposals (DGSD) were received by Army Engineers in 1976. In addition spares worth Rs.10.56 lakhs were transferred(1975-76) from an Engineer Stores Depot (ESD) 'Z' to the Base Workshop for overhaul/repair of pontoons.

In May 1976, the Base Workshop demanded items valuing Rs.6.53 lakhs only from the Army Engineers and stated that the remaining items, mostly timber components, had

neither been demanded by them nor were suitable for their purpose. The balance spares worth Rs.17.47 lakhs (Rs.10.56 lakhs ex-ESD 'Z' and Rs.6.91 lakhs ex-trade) were backloaded to ESD 'Y' in 1986 and 1987 incurring Rs.0.23 lakh towards freight charges.

On this being pointed out, the Ministry stated (February 1992) that approximately 25 per cent of the spares had been consumed and the matter regarding expeditious repairs to the pontoons was being pursued. They added that unsuitability of timber could not be commented upon as no records were available. The cost of spares since consumed was not indicated on the ground that it could not be ascertained at this belated stage.

Ordnance stores

14. Loss due to incorrect decision to dispense with the removal of grass by contract

Grass cutting in a Central Ammunition Depot (Depot) which has 7100 acres of land was being contracted out from 1966 onwards till 1987 when the Commandant decided against the practice to obviate chances of entry of undesirable persons. However, no alternate arrangement for disposal of the grass was made, notwithstanding the fact that its unchecked growth was a recognised fire hazard and there were infact instances of fire accidents from 1984 onwards. A new Commandant posted in August 1988 initiated tender action in August/September 1988 for grass cutting which did not evoke any response.

On 9th May 1989 a major fire broke out and spread rapidly through the high grass which damaged ammunition beyond repair (value: Rs.27.27 crores) (Indian Rs.21.74 crores and imported Rs.5.53 crores), building (Rs.16 lakhs), Railway property (Rs.11.15 lakhs), damage to other items and vehicles (Rs.4 lakhs).

Consequently sanctions were accorded in March and November 1990 for Rs.1.32 crores for minimum immediate repairs required. These works were in progress (June 1991). The replacement/repair cost of the damaged buildings/railway tracks had been estimated at Rs.2.86 crores and Rs.12 lakhs respectively.

A Court of Inquiry convened (May/September 1989) to

investigate into the matter, interalia concluded:

- the probable cause of the fire was emission of sparks from the exhaust of a vehicle by negligence or throwing cigarette butts/burning match sticks;
- out of eight fire engines authorised for the depot, there were only two which were also off-road;
- persisting with the decision of non-contracting grass cutting even though no alternative arrangements could be put into effect;
- the maps of the depot were inaccurate.

While concurring with the Court of Inquiry, General Officer Commanding-in-Chief of the Southern Command suggested a proper investigation to pin point the responsibility of officers of Army HQ for serious lapses in not responding adequately to the repeated representation reports about the inadequacies at the depot brought to their notice from time to time by the Commandant, fire experts study groups etc. on the matter. The loss was yet to be regularised (February 1992).

Further examination made by Audit of the progress of the implementation of the recommendations indicated that while the depot authorities were not aware of the Court of Inquiry proceedings as well as the remedial measures suggested (January 1991), which were stated to have not been received by the depot, HQ Southern Command intimated that the findings were forwarded to the depot to initiate remedial measures in September 1989. The Command HQ also intimated (July 1991) that the fact of the finalisation of the Court of Inquiry was "learnt" by them only in July 1991 on receipt of the Army HQ letter of July 1990 which had been received in a different branch of the Command HQ who did not take any action thereon. This was despite the fact that the Court of Inquiry was itself initiated by the Southern Command HQ.

Ministry while agreeing with the factual position stated (February 1992) that no officer has been blamed from Army HQ. It was also added that a consolidated loss statement prepared for Rs.26.30 crores had been forwarded to the Controller of Defence Accounts Southern Command, Pune in November 1991 for rendition of audit report which was awaited. Grass cutting contract for the year 1989-90

and subsequent years had been concluded to avoid any fire risk.

The fact, however, remained that the grass cutting contract which was dispensed with (1987), even after occurrence of fire accidents since 1984, to obviate any chance of entry of undesirable persons, was subsequently restored (1989) after the major fire in May 1989. Had the contract not been dispensed with, without making any alternate arrangements loss of ammunition/property worth Rs.27.58 crores which included service ammunition and imported ammunition valued at Rs.20.46 crores and Rs.5.53 crores respectively, could have been avoided.

Thus the case revealed:

- Despite fire accident in the recent past, grass cutting contract was dispensed with in 1987 without making alternative arrangements when it was known that high grass is a serious fire risk.
- In a very vulnerable depot which stock ammunition there was inadequate fire fighting arrangements.
- Over Rs.26 crores worth of ammunition was destroyed in addition to Rs.32 lakhs worth of other assets.
- Even the Court of Inquiry proceedings were not seriously considered, as it remained unattended for about one year in the Command HQ.

15. Under-utilisation of laundry establishment and consequential extra expenditure

According to Orders of Government issued in 1981, warm clothing of all troops as also civilian personnel of the Army Service Corps Transport Companies are required to be washed in laundries or dry cleaning plants wherever installed. In the absence of such facilities units are to get these jobs done under their own arrangements or through contractors.

A review of the working of five such establishments during the period 1983-1991 by Audit revealed that the facilities created were not commissioned for five to eight years at Stations 'A', 'B' and 'C' (cost :Rs.21.93 lakhs) and grossly underutilised at Stations 'C', 'D' and 'E' (cost: Rs.48.17 lakhs). Moreover, although sizeable capacity was available at the establishments in Stations

'D' and 'E', the facility was not availed of by two Military Hospitals (MHs) located in the stations which led to avoidable extra expenditure of Rs.38.67 lakhs on the pay and allowances incurred on the staff engaged by the hospitals. The cases are dealt with below:

Station 'A': A laundry plant value-Rs.1.67 lakhs was procured in July 1982 from a private firm (90 per cent payment of Rs.1.50 lakhs was made). Civil works for installation of the plant were completed in July 1983 at Rs.2.25 lakhs; the plant was not commissioned till February 1992 pending inspection of the boiler by the Chief Inspector of Boiler, West Bengal and Director General Quality Assurance;

Station 'B': A laundry plant costing Rs.3.50 lakhs was received in an Advance Base Ordnance Depot in December 1982 from a private firm 'X'; certain parts of the plant were received later in 1983 and 1990; civil works (cost: Rs.7.29 lakhs) for installation of the plant was sanctioned in January 1983, requiring completion by January 1984 which was completed in July 1985 at Rs.6.95 lakhs due to delay in tender action. The plant though installed in January 1991, after a delay of about six years on account of tardy execution by the firm, was yet to be commissioned (February 1992), pending inspection of the boiler by the Chief Inspector of Boiler, West Bengal;

Station 'C': A laundry plant procured in September 1981 at Rs.3.51 lakhs could be installed and commissioned in February 1987 after a delay of five and half years due to belated issue of sanction for connected civil works (estimated cost: Rs.4.22 lakhs) by the Command HQ till March 1983 and thereafter owing to non-availability of accessories/fitments to make it functional. The plant was utilised only for 165 hours during February 1987 to April 1991 against 7140 hours available due to reduction in the quantity of washable clothes on account of introduction of life concept of personnel clothing introduced in June 1983 but stated to have been implemented only by 1987. Despite the fact that the life concept of clothing was introduced in June 1983 and was known to all concerned, the depot authorities went ahead with the construction of the building and installation of the plant. The under-utilisation of the plant during the period February 1987-April 1991 led to wasteful expenditure of Rs.7.94 lakhs by way of pay and allowances of 11 out of 21 staff of the establishment;

Station 'D': Annual utilisation of the drycleaning plant created in 1986 ranged from 1471 Kgs(3.13 per cent) to 3627 kgs(7.71 per cent) against the available capacity of 47040 Kgs during 1986-89. Similarly, against the available annual capacity of 1,40,000 Kgs of the laundry plant, the utilisation ranged between 1094 Kgs (0.78 per cent) and 3831 Kgs(2.73 per cent) during the same period. The expenditure incurred on the pay and allowances of the establishment for the period 1986-1990 was Rs.6.72 lakhs. The total cost of drycleaning/laundry plants was Rs.27.49 lakhs. While the mechanised facilities for washing clothes remained grossly underutilised, MH 'P' located at the same station made its own arrangements during the period to get clothes weighing 62725 Kgs washed manually incurring an additional expenditure of Rs.16.17 lakhs on pay and allowances;

Station 'E': Against the annual capacity of 20,160 Kgs and 2,52,000 Kgs in respect of a dry cleaning plant and a mobile laundry plant respectively, the utilisation ranged from 187 Kgs (0.93 per cent) to 2254 Kgs (11.18 per cent) against the former and 3668 Kgs (1.46 per cent) to 18229 Kgs (7.23 per cent) against the latter during 1986-1989. The pay and allowances of the personnel on the unutilised laundry plant worked out to Rs.17.27 lakhs during the period. The total cost of the plants was Rs.12.95 lakhs. Despite the availability of resources for centralised cleaning facilities, MH 'Q' located in the station, got their clothes weighing 38218 Kgs washed under their own arrangements during the same period, incurring an additional expenditure of Rs.12.50 lakhs on the pay and allowances of the staff engaged on the work. Considering the under-utilisation and uneconomical working of the establishment, the Command HQ decided (September 1990) to disband it. Accordingly, the Field Ordnance Depot 'P' forwarded the statement of case to the Command HQ in May 1991.

On the matter being pointed out the Ministry stated (February 1992) that:

- The annual capacity of dry cleaning and laundry plants calculated by Audit was on the assumption that each plant was operated for 6 hours for 280 days in a year. However, these plants were not required to be operational all through the year in that clothing was to be washed/dry cleaned only once in a year during the period May-August (4 months) when the clothing were withdrawn after

its use during winter. Accordingly, the annual capacity of a dry cleaning plant would work out to 16,128 Kgs and that of a laundry plant to 48,000 Kgs.

- MHs at Stations 'D' and 'E' as also Director General, Armed Forces Medical Services were not aware of the instructions issued in regard to use of centralised dry cleaning/laundry plants. Further instructions had since been issued in January 1992 to all concerned for proper utilisation of the plants.

- At Station 'C', the plant could not be made functional till July 1987 due to non-availability of accessories/fitments. Moreover while finalising the policy of life concept of personnel clothings in 1983, no amendment to the extant procedure of centralised washing/dry cleaning of clothing was made. Hence, the construction and installation of the plant was gone ahead with.

- At Stations 'A' and 'B', the delay in installation/commissioning of the plants was due to involvement of a number of agencies such as sanctioning authority for the civil works, the executing authority (MES), Inspecting authority (Boiler Inspection, DGQA) and the procuring authority (DGS&D).

The fact, however, remains that:

- At Stations 'D' and 'E' even after taking into account the requirement of the plants for dry cleaning/washing of the clothes of the troops only for four months i.e. between May-August, in a year, the utilisation pattern of the plants ranged between 1.15 and 22.48 per cent in respect of the dry cleaning plant and between 2.27 and 37.97 per cent in respect of the laundry plants. Thus although there was a sizeable capacity available in the two establishments, non-availing of the facilities by MHs 'P' and 'Q' resulted in additional expenditure of Rs.38.67 lakhs by way of pay and allowances incurred on the staff engaged by them;

- At Station 'C' under utilisation of the plant during the period February 1987-April 1991, led to wasteful expenditure of Rs.7.94 lakhs on payment of pay and allowances made to 11 out of 21 staff of the establishment. This happened despite the fact that there was a delay of four years in implementation of the

life concept of personnel clothing introduced in January 1983;

- At Stations 'A' and 'B' the delay in sanctioning of the required civil works, tardy execution of work/delayed inspection of the boiler led to non-commissioning of the plants valued at a total cost of Rs.14.20 lakhs for over six years (February 1992).

16. Avoidable expenditure due to over provisioning of tyres

According to provision directives, issued by Government through Army Headquarters (HQ) the quantum equivalent to 50 per cent of anticipated arisings of retreadable and repairable tyres during total liability period (TLP) plus 50 per cent holdings of repairable and retreadable stocks in hand provided these are within repair and retreading capacity by required dates are to be taken as assets. These norms were not followed by Central Ordnance Depot (COD) Bombay in respect of provision review carried out for tyre 'X' from April 1985 onwards which resulted in its excess provisioning. Details of the case are given below:

Provision review carried out (April 1985) in respect of tyre 'X' required for trailer vehicles as on 1st April 1985 by an Ordnance Depot (Depot) revealed a deficiency of 2,268 pieces. This review took into account a requirement of 1420 tyres projected by a Command HQ as early as in July 1983 which included estimated 1200 tyres required for an Armoured Brigade (Brigade), although there had never been a demand or issue to this unit. This review had included 1109 tyres of dispersal stock, as assets. However, 1929 serviceable tyres were received from the dispersal stock during July/August 1985. Without taking into account the increased number of tyres received back, a supply order was placed in September 1985 on Firm 'A' by the Depot for 840 tyres at a total cost of Rs.25.15 lakhs i.e. at Rs.2994 per unit with delivery schedule from October to December 1985.

The subsequent provision review carried out as on 1st October 1985, revealed a surplus of 1458 tyres. In spite of this, timely action was not initiated to cancel the quantity on order (840 pieces) which did not materialise by the scheduled delivery period. Firm 'A' applied in February 1986 for extension upto April 1986 which was

acceded to by the Depot without linking it with the available surplus. A quantity of 815 tyres was ultimately received by the Depot during August to October 1986 and the balance quantity of 25 tyres were consigned to another Depot in August 1986. During 1985 to 1987, the Depot got another 199 tyres retreaded at a cost of Rs.0.51 lakh.

All the subsequent provision reviews carried out bi-annually during the years 1986 to 1990 revealed mounting surpluses ranging from 3914 in April 1986 to 5126 tyres in November 1990. The issue of tyres during 1985 to 1990 were 617, 191, 507, 71, 98 and 21 respectively. In view of the surplus position, the Depot approached the Vehicle Inspectorate authorities in August 1988 to try tyre 'X' for re-utilisation in other current vehicles in service. The Inspectorate authorities intimated in October 1988 that these tyres could not be utilised and suggested their re-utilisation on trailers or any other allied equipment which was not found feasible.

In February 1989, the Depot approached the Command HQ and Army HQ intimating that they had taken procurement action as instructed by the Command HQ in July 1983 but issues were not as anticipated. In December 1989 and January 1990, the Depot intimated Army HQ that the tyres held as surplus to requirement might not be used in the near future and therefore Air Force, Navy and other paramilitary forces be approached to assess their requirements in the best interest of the State, as the item had a shelf life of five years only.

In May 1991 the Depot replied that since the figures of dispersal stocks never tally with that of regional depots, it was not felt necessary to cancel the supply order; there may also have been possible litigation problems and retreading of tyres which added to the surplus was done due to oversight.

Ministry while agreeing with the facts brought out by Audit stated (February 1992) that since the subject tyre was applicable to certain trailers which are extensively used only during operations/exercises, issue of those tyres was erratic as compared to other tyres. They added that no action was initiated to cancel the supply order owing to existence of only one source of supply for this item and it was felt that in case of immediate requirement, the firm would not be able to supply the items at short notice.

However, holding of 5186 surplus tyres for over five years valuing Rs.153.47 lakhs (priced at 1986 procurement prices) was not justified, on the contention of erratic issues and the probability of sudden immediate requirement; especially as the tyres have a shelf life of only five years and no alternative use for them could be located despite efforts made.

17. Loss of imported tubes

In April 1986, Embarkation Headquarters (HQ), Bombay notified receipt of three packages of Tube 'A' to be despatched to a Central Ordnance Depot (COD). In May 1986, Embarkation HQ requested the COD to depute a technical representative to identify the tubes lying at Bombay Port Trust. The COD deputed a stores Superintendent who checked the tubes and found (July 1986) that the dimension of pipes did not tally with that indicated in the invoice. In October 1986, the tubes were despatched by the Embarkation HQ to a vehicle factory which was not concerned with these stores, reasons for which were not indicated in the records COD collected the stores from the vehicle factory in May 1987 viz. after a year of its arrival in India.

A Board of officers assembled in the COD in July 1987 and an enquiry held in September 1987 found tubes worth Rs.12.51 lakhs deficient. As the stores received were entirely different from those recorded in the invoice, COD sent a claim for Rs.12.51 lakhs (on account of the total cost of the stores consigned but not received) to Army HQ in October 1987 for onward transmission to the foreign supplier. As the stipulated period of submission of such claim was 120 days, the claim was returned by the Indian Embassy. Army HQ had also directed (January 1989) the COD to explain the reasons for the delay in submission of the claim within a week.

While there were no indications as to whether the delay in the matter by Embarkation HQ was enquired into, it was observed that the COD authorities had considered (January 1989) regularisation of the deficiency after a staff court of enquiry. However, the proposal was actually referred to the staff authorities after a further lapse of 1 1/2 years (August 1990). The loss of Rs.12.51 lakhs was yet to be regularised (December 1991).

The case was referred to the Ministry in December 1991 and their reply has not yet been received (March 1992).

Inspection

18. Supply of sub-standard timber soft wood

In October 1988 and August 1989 the Director General Ordnance Services placed three indents on the Director General Supplies and Disposals (DGSD) for supply of 4000 cubic metres (Cu. M.) of Grade I and 2500 Cu.M. of grade II timber soft wood coniferous sleepers. In May 1990 DGSD placed an order on the forest department of Government of J & K at a total cost of Rs.2.68 crores later amended to Rs.2.64 crores. The timber soft wood was to be supplied to 17 Ordnance Depots, the main depot being COD Chheoki (2030 Cu.M.). According to this supply order inspection of the timber was to be carried out by an officer nominated by the Chief Conservator of Forest Department. In case of discrepancies, a joint inspection by the users and the suppliers' representatives was provided for. The supplies were completed in July 1990.

COD Chheoki received 2030 Cu.M. of timber (value: Rs.92.85 lakhs) and rejected the entire quantity due to the following reasons.

- a) sleepers had long split cracks, knots and broken ends beyond permissible limit.
- b) sleepers were in irregular shapes having bark of the trees alongwith.
- c) timber fibres had outlived their life and had no strength.

Subsequently after a joint inspection conducted after 14 months of receipt and storage, 1661.351 Cu.M. (value:Rs.75.99 lakhs), was accepted, 69.741 Cu.M. (value: Rs.3.19 lakhs) was rejected; and 298.90 Cu.M. (value: Rs.13.68 lakhs) were found short received. Joint inspection in respect of 73.581 Cu.M. timber short received by other Depots and 613.451 Cu.M. timber (costing Rs.28.06 lakhs) received by the other Depots and rejected by them was yet to be carried out (January 1992) despite Army HQ having intimated DGSD in February 1991 that the delay was affecting functional/operational efficiency of the Army.

The Ministry of Defence stated in January 1992 that DGSD had been requested to withhold payment of Rs.30

lakhs till the dispute was settled. The Ministry added that the responsibility to arrange joint inspection rests with the DGSD. It did not explain how bulk of the rejected timber came to be accepted in joint inspection 14 months later and why the debit for the entire despatched quantity was not raised against the forest department within six to eight weeks from the date of receipt of the consignees' registered letter as provided for in the Supply order. It was also not clear why 372.481 Cu.M. of timber short received (cost:Rs.17.04 lakhs) in COD Chheoki and four other depots was not taken into account for working out the amount to be withheld.

The case revealed that not only there was delay in conducting joint inspection which resulted in continued stocking of timber valued at Rs.1.10 crores for 14 months but the procedure followed for acceptance of goods need to be looked into as bulk of the timber rejected initially was accepted subsequently. Action is yet to be taken to get the timber valued at Rs.28.06 lakhs rejected by the consignees jointly inspected.

19. Delay in repair of a costly machine

A sophisticated vibration testing machine costing Rs.8.27 lakhs was purchased from firm 'X' by the Senior Quality Assurance Establishment (Armaments) (SQAE) Secunderabad in April 1986. After working satisfactorily till September 1989, the machine became faulty and firm 'X' was requested to rectify the defect. The representative of the firm agreed (February 1990) to repair it free of charge at the firm's premises provided road transportation charges were met by the SQAE. Although the SQAE approached (August 1990) the Director General of Quality Assurance for sanction for Rs.26,000 to move the machine, it was yet (April 1991) to be accorded.

Ministry while agreeing with the factual position stated (January 1992) that:

- The delay in repairing the machine was due to the powers to sanction expenditure on transportation cost of the machine not being vested on DGQA.
- DGQA had now ordered an enquiry to pin-point the responsibility for delay in repair.
- The firm had indicated that repair to the machine

was likely to be completed by mid January 1992.

The fact, however, remains that due to delay in repair the machine costing Rs.8.27 lakhs was lying idle for about two years with consequential adverse effect on quality clearance of important Defence equipment.

20. Procurement of sub-standard goods in an Ordnance Depot

Contracts concluded by the Director General, Supplies and Disposals (DGSD) for procurement of stores required for Defence envisage inspection of stores at the suppliers' premises and passing for acceptance by nominated inspecting officers before despatch to the consignees. Test check in audit revealed procurement of sub-standard goods in the following three cases costing Rs.11.90 lakhs in an Ordnance Depot (Depot).

(i) An Acceptance of Tender (A/T) was concluded by the DGSD in November 1986 with firm 'A' for supply of 90100 metres of rope at Rs.11.29 lakhs plus sales tax. The entire supply was received in the Depot between February and June 1987 with the inspection notes that the stores were duly inspected at the firm's premises before despatch. On receipt of the stores 'Standard check' conducted by the Defence inspecting authorities in July/December 1987 revealed that 51,000 metres did not conform to the specifications. The depot authorities rejected (April 1988) the substandard rope (51000 metres) and asked the firm for replacement. The concerned Pay and Accounts Officer (PAO) was also simultaneously instructed to effect recovery towards the cost of the stores, as Rs.9,95,951 being 95 per cent amount had already been paid to the firm. However, till July 1991, even after a lapse of about three years, an amount of Rs.3.20 lakhs only could be withheld from the amount due to the firm with Rs.6.76 lakhs still to be recovered; the rejected stores were yet to be replaced. The Ministry stated (January 1992) that the matter was being referred for arbitration.

(ii) An A/T was placed by the DGSD in May 1981 with firm 'B' for supply of 30,793 ground sheets at Rs.24.59 lakhs. According to the A/T, the stores were guaranteed for six months from the date of receipt at consignee's end. The stores reported as defective during this period were to be replaced by the firm free of cost.

The firm supplied the entire quantity of stores during April 1982 to January 1983, under ten inspection notes certifying that the stores were inspected and accepted before despatch. However, 'Standard check' conducted by the Defence inspecting authorities in April 1983 revealed that 3260 sheets costing Rs.2.74 lakhs received on January 21, 1983 under the inspection note of December 1982 were substandard as their polymer content and adhesion were below the required specifications. The firm was notified on 2nd June 1983 about the rejection and replacement of the substandard stores. The rejected stores were not replaced by the firm as the rejection letter could not be delivered within the validity period of six months. Consequently, the substandard stores were held in the Depot without any use for the last eight years (January 1992). Attributing non-delivery of the letter to incorrect postal code number, the Ministry stated (January 1992) that according to the Ministry of Law, as the rejection of stores had not been communicated to the firm, it did not have any effect.

(iii) An A/T was placed by the DGSD in August 1984 with firm 'C' for supply of 220192 pairs of canvas shoes at Rs.35.30 lakhs. The stores being supplied under the A/T were guaranteed for six months from the date of receipt at the consignee's end and stores reported as defective during these six months were to be replaced by the firm free of cost. 15000 pairs (cost: Rs.2.40 lakhs) received in December 1986 against pre-inspection note of December 1986 were found (February 1987) by the Defence inspection authorities to have major defects such as less polymer and carbon content, tensile/breaking strength, etc. The firm was informed about the rejection/replacement of the substandard stores in March 1987, duly endorsing a copy thereof to the concerned PAO to effect recovery and to the DGSD for further action. Though the DGSD, part cancelled the A/T in December 1987 for the balance quantity of 89,542 pairs, substandard 15000 pairs were neither replaced by the firm nor any recovery was effected by the PAO. Action was being initiated for disposal of rejected stores (January 1992).

The Ministry stated (January 1992) that the matter was under investigation by DGQA (vig cell) to ascertain and pin point inspection lapses, if any.

Ration articles

21. Irregular issue of ration to Army Officers during secondment

Ministry of Defence (Ministry) authorised issue of free rations to service officers upto the rank of Colonel with effect from January 25, 1983. This concession was subsequently extended to other senior officers also in April 1987.

Army Headquarters(HQ) clarified (November 1990) that this concession was not applicable to service officers seconded to other departments and when drawing civil rates of pay. However, free rations were issued by a field survey Engineer group during May 1983 to August 1990 to service officers seconded to the Survey of India, as authorised by station HQ Dehradun. The cost of rations issued during May 1983 to March 1990 to 42 Officers worked out to Rs.6.16 lakhs. On being pointed out in Audit (July 1990), the issue of free rations was stopped with effect from August 24, 1990. No recovery, however, had been effected so far (September 1991) for the earlier periods despite the suggestion of Audit for early action as some of the officers concerned were due for retirement shortly. Internal audit viz. the Defence Accounts Department had also directed (August 1990) that the cost of ration issued should be recovered. No action to effect the recovery was, however, taken. Ministry of Science and Technology which is the administrative Ministry for the Survey of India did not agree to bear the cost of the ration issued to such service officers. Loss statement for writing off the loss by Government had not been initiated by the Army Supply authorities who were responsible for issue of the rations. The matter was still under correspondence between Survey of India and Army HQ so as to pass on the debit to Ministry of Science and Technology (September 1991).

The Ministry while agreeing with the factual position brought out by Audit stated (February 1992) that the Army HQ were being advised to take further action to recover the cost of rations or regularise the amount, if it becomes irrecoverable.

Thus, free rations costing Rs.6.16 lakhs was issued to service officers seconded to the Survey of India in contravention of the rules which was yet to be recovered/

regularised.

22. Loss on account of issue of milk to paying consumers

Mention was made in paragraph 36 of the Report of the Comptroller and Auditor General of India for the year ended 31 March 1980 about the subsidy on issue of milk to paying consumers. The Public Accounts Committee (PAC) 1981-82 in their 78th Report (Seventh Lok Sabha) observed "It is unfortunate that as a quasi-commercial organisation, the Military Farms should have failed to recover the actual cost of production of milk from paying consumers thereby incurring losses. The Committee expect such losses will be avoided in future". In their action taken note submitted to the PAC in October 1982 the Ministry stated that recommendations of the PAC would be kept in view by the Expert Accounting Committee to eliminate chances of loss in future on account of sale of milk to paying customers. Mention was also made in paragraph 33 of the Report of the Comptroller and Auditor General of India for the year ended 31 March 1987 (No.2 of 1988) of losses on payment issues due to difference between cost of production/processing of milk and the price of milk charged to paying consumers amounting to Rs.18 lakhs during 1981-82 to 1985-86. The Expert Accounting Committee set up in November 1982 submitted its report in April 1987. The committee recommended fixation of sale rates of payment issues based on the cost of production of milk so as to eliminate losses.

However, supply of milk to paying consumers by the Military Farms continued to be made at prices lower than the production/processing cost resulting in consequential loss of Rs.76.01 lakhs during 1986-87 to 1990-91, the maximum loss being at the Military Farms at Binnaguri Rs.20.71 lakhs, Calcutta Rs.10.18 lakhs, Lucknow Rs.11.51 lakhs and Yol Rs.7.56 lakhs.

Ministry while accepting the contention of Audit stated (January 1992) that various recommendations of the committee had since been accepted in principle and detailed modalities for their implementation were under consideration.

The fact, however, remains that non-implementation of the recommendations of the Expert Accounting Committee even after five years has resulted in recurring losses to the State.

Defence estates

23. Loss on acquisition of land for a cantonment

According to the Acquisition, custody and Relinquishment of Military Land Rules 1944, placement of demand for acquisition on the civil authorities, ensuring steady progress of acquisition proceedings, assisting the civil authorities in assessment of compensation payable to the owners as also timely disbursement of compensation devolves on the Defence Lands and Cantonment department (now known as Defence Estates Department). Possession of land will not be assumed by the Defence Estates Officer (DEO) unless the final award of the Acquisition Officer has been made. Land, as defined in the Land Acquisition Act 1894, included benefits to arise out of land and things attached to the earth.

In a case for acquisition of land measuring 2817.256 acres at Mamun complex, sanctioned by the Ministry of Defence in September 1976 at an estimated cost of Rs.261.62 lakhs, the lapse on the part of DEO, Pathankot in not taking simultaneous possession of land alongwith structures and trees standing thereon despite payment for both the land and structures resulted in a loss of Rs.130.64 lakhs on account of missing structures and trees. The case is dealt with below.

Intention to acquire 2031.33 out of 2769.95 acres of land in 12 villages under section 6 of the concerned Land Acquisition Act was published in April 1978 and July 1978 by the State Government. In March 1979, the DEO, Pathankot made payment of Rs.153.47 lakhs towards compensation of land and structures based on tentative estimates of the Special Land Acquisition Collector (SLAC). Award for compensation of 2031.33 acres of land (value:Rs.107.21 lakhs) was published by the SLAC between June 1979 and January 1980 and for structures and trees (value:Rs.104.35 lakhs) standing thereon between April 1980 and June 1981 respectively. Possession of 2031.33 acres of land alone was taken over by the DEO between August and December 1979, endorsing on the handing/taking over certificate that structures/trees would be handed/taken over later on, eventhough there was no provision in the Act or Rules to do so. Payment of Rs.40.46 lakhs was made in March 1983 on account of structures and trees. However, the structures and assets were taken over only in March 1985 after a

lapse of about five years. The delay in taking over possession of the structures/trees was attributed by the DEO to the failure of local Army authorities to depute their representative for taking over possession. This was also brought to the notice of the Command Headquarters (HQ) by the Director, Military lands and cantonment, Jammu in October 1980.

At the time of taking over possession of structures and trees on 2031.33 acres in March 1985, it was found that structures (cost:Rs.59.48 lakhs) were missing at the sites and the DEO recorded the discrepancies in the handing/taking over certificate. Further, in January 1986, after a lapse of about one year, the DEO pointed out to the SLAC that trees worth Rs.44.86 lakhs (both fruit bearing and non-fruit bearing) were also found to have been removed by the ex-owners, requesting him to initiate proceedings against the ex-owners and recover the amount of compensation towards missing structures and trees. In reply, the SLAC pointed out (September 1986) that the compensation awards were published during 1979-81 and thereafter it was the DEO who delayed the taking over of the structures and trees and therefore, he had no obligation to recover compensation for the missing structures and trees. The SLAC suggested that the case be referred to the police authorities for investigation. The DEO did not take up the case with the police but caused it to be lodged by the SLAC in June/July 1989, after a lapse of three years. In the meantime, balance payment of Rs.17.63 lakhs towards trees was also made in March 1988.

In respect of another 738.62 acres of land in two villages, in the area intention to acquire the land was published in November 1982 and July 1987. Possession of land and structures/trees standing thereon was taken over, in parts, between March 1986 and June 1989 (590.15 acres) and in October 1989 (146.06 acres), after a delay of two to seven years owing to delay in payment as follows:

Payments in respect of these lands and structures/trees standing thereon were made in March 1985 for Rs.31.76 lakhs and in March 1988 for Rs.92.78 lakhs and Rs.29.60 lakhs in September 1991.

In respect of 590.15 acres of land taken over between March 1986 and June 1989, the DEO pointed out in May 1989 to the SLAC regarding certain missing structures and

trees worth Rs.26.29 lakhs. In February 1990, the SLAC took up the matter with the Deputy Commissioner, Gurdaspur to effect recoveries for the missing structures and trees from the ex-land owners. Certain documents and clarifications sought (November 1990) by the District Collector, Gurdaspur were communicated by the SLAC to the DEO in April 1991. The documents/clarifications were yet to be sent (January 1992).

Of the total amount of Rs.365.70 lakhs paid in all by the DEO towards compensation between March 1979 and September 1991, Rs.130.64 lakhs represented compensation in respect of missing structures and trees in respect of 2031.33 acres taken over in March 1985 and 590.15 acres taken over between March 1986 and June 1989.

On the matter being pointed out by Audit, the DEO stated (June 1991) that the structures and trees, whichever existing on the date of notification and declaration might have since been damaged/dried up for want of proper care and occupation of the area by the local Army authorities who started construction works after clearing the area. The Ministry, however, stated (December 1991) that the loss had resulted on account of delay in handing over of the acquired assets/structures by the SLAC, while according to the SLAC (State Government) there were delays in taking over the structures/assets by the DEO.

The fact, however, remains that loss of Rs.130.64 lakhs on account of missing structures and trees has not been written off and could have been avoided but for the DEO taking possession of the land without the structures and trees in the first instance.

24. Delay in acquisition of land for a priority project

For induction of three squadrons of aircraft in a proposed Air Force Station, sanction was accorded (September 1988) by the Ministry for acquisition of 363 acres of land at an estimated cost of Rs.326.67 lakhs. Of this area, 221.24 acres of private land was to be acquired under Land Acquisition (LA) Act 1894, 116.85 acres of land was to be taken over under the Urban Land Ceiling (ULC) Act, 8.50 acres of land owned by a Trust and 1.08 acres of State Government land under road were to be transferred.

In September 1989, the Special Land Acquisition Officer (SLAO) of the State Government intimated the Defence

Estates Officer that the declaration for taking over the private land, invoking urgency clause under section 6 of LA Act, had been published on 18th May 1989 and requested for payment of Rs.1.07 crores representing 80 per cent of the probable land compensation which was paid in October 1989 by DEO to the SLAO.

In February 1990, it was reported by the DEO that the draft award for private land to be acquired was returned by the State Government authorities observing that the lands were to be acquired under the Maharashtra Regional and Town Planning (MRTP) Act and not under the LA Act as the land under acquisition had been notified in the Maharashtra Government Gazette on 4th May 1989 itself, under the MRTP Act, which was earlier than the date of declaration under the LA Act viz. 18th May 1989. It was not clear from the records of the DEO as to how the SLAO of the State Government published the declaration for acquisition of the land under LA Act when it was to be notified in the State Gazette under the MRTP Act. Meanwhile the land owners had gone to the High Court on 30th November 1989 and obtained a stay against the proposed acquisition.

According to the Government orders of October 1982 as amended in September 1983, undisbursed amount with the civil authorities should be refunded to the DEO within the period of one year. In the instant case, the advance representing Rs.1.07 crores paid to the SLAO in October 1989 had not been refunded and continued to be with them for more than two years (February 1992).

A sum of Rs.0.50 lakh was paid by the DEO to the Trust in October 1989 towards cost of their 8.50 acres of land. This was not taken over by the users on the ground that the small portion of land could not be put to proper use unless the bulk of the land involved was acquired and taken over.

On this being pointed out in audit, the Ministry stated (December 1991) that the delay in acquisition of the private land was because of a stay order passed by the High Court and not due to any administrative lapse.

The fact, however, remained that neither could the land required urgently be made available nor refund of Rs.1.07 crores in terms of the Government orders obtained. The amount remains blocked for over two years (February 1992).

25. Loss on acquisition of a private land

Ministry of Defence (Ministry) accorded sanction in November 1982 to the acquisition of 532.776 Bighas of land in various villages in District Bikaner at Rs.19.98 crores for a Field firing range-cum-training area. In February 1983, the sanction was revised to acquisition of 551.339 Bighas and eight biswas at Rs.20.68 crores. Both the sanctions did not cover the cost of trees/structures standing thereon, eventhough a detailed schedule of inventories of trees/structures was prepared jointly by the representatives of the Collector, Defence Estates Officer (DEO) and the local Army authorities even before issue of the initial sanction in February 1982. After declaration of the awards in 1985, as approved by the Ministry, a sum of Rs.64.11 crores was paid/deposited with the Collector which included Rs.1.11 crores towards cost of the trees.

The DEO, Bikaner took possession of the land between January 1985 and May 1987. According to them, the land was simultaneously occupied by the local Army authorities, although it was admitted that the possession certificate was signed by the DEO and not the Army on the plea that only 10 per cent of the trees indicated in the inventories furnished by the DEO were found to be existing on the land; besides there were some encroachments. The DEO, contended (November 1990) that as the land was under the physical occupation of the Army, the trees could have only been removed by them. The Director General Defence Estates (DGDE) stated in September 1991 that the Army authorities have been occupying the land ever since its acquisition; the assets had been jointly verified by the owners and the representatives of the Collector and the DEO; these were guarded/disposed off by the Army; since the DEO in 1985 had the inventories of structures/trees etc. verified at site, it was incumbent on the part of the users to associate with the verification, which they did not. It was, however, observed that even as recent as June 1989 the DEO was still tracing out copies of the list of trees.

Further as per records it was, however, the DEO and not the Army authorities who took possession of the land/trees/ structures from the civil authorities. The issue relating to loss of the trees valued at Rs.99.71 lakhs was yet to be investigated by the concerned authorities (January 1992).

In reply to Audit, the Ministry stated (January 1992)

that a Board of Officers had since been ordered to look into the matter regarding the stated loss of trees in the acquired area and submit their findings at the earliest. The Ministry also added that action for eviction of the encroachers was on hand.

Thus, as against Rs.111 lakhs paid by the Ministry towards cost of trees, trees valued at Rs.99.71 lakhs were found to be missing from the site under the physical occupation of the Army.

26. Extra expenditure on the acquisition of land

Ministry of Defence (Ministry) accorded sanction in October 1984 to the acquisition of 209.51 acres of private land at a Station at an estimated cost of Rs.161.38 lakhs. According to the relevant Land Acquisition Act, interest at 4 per cent per annum on the cost of land from the date of taking possession to the date of payment was payable.

The possession was taken over in April 1985, paying Rs.161.38 lakhs to the concerned Collector. The Collector declared the final award in December 1986, increasing the compensation payable to the ex-owners to Rs.361.85 lakhs and interest on the amount payable after deducting the amount already paid from the date of taking over possession to the date of payment.

According to the land acquisition rules, the land under fruit trees was not required to be separately compensated for as the fruit trees are valued taking into account the land on which they stand to the extent of thirty square yards for the purpose of compensation. If an orchard owner desired compensation to be calculated separately for land and trees he would have to ask for the market value of the land as well as compensation for the fruit trees. In such cases, the cash compensation for the fruit trees would be only their timber value. The Collector fixed the rate for the orchard land (Bagh Khushki) at Rs.22,000 per kanal by apportioning the compensation of Rs.28.76 lakhs for fruit bearing trees as assessed by the Horticulture Department of the State instead of taking the consolidated amount of Rs.5.96 lakhs which was the timber value of the trees. The matter regarding the incorrect assessment was under correspondence among the Defence Estates Officer (DEO) Kashmir Circle Srinagar, Director, Defence Estates, Northern Command, the Director Ge-

neral, Defence Estates, New Delhi and the Ministry (Defence/Lands) between February 1987 and August 1988. In August 1988, the Ministry issued a corrigendum to the initial sanction, fixing the rate of orchard land at Rs.19,000 per kanal instead of Rs.22,000 per kanal as awarded, thereby reducing the cost of acquisition by Rs.28.76 lakhs. When the DEO, approached the District Collector, Budgaon for revising the award amount accordingly, the latter pointed out (December 1988) that "the final award stands already issued on 15 December 1986. No reference or appeal has been preferred against this award till date and as such it is conclusive for all practical purposes and even clerical or arithmetical mistakes can not be rectified at this stage under Land Acquisition Act".

On the advice of the Director, Defence Estates, Northern Command, the DEO released further payment of Rs.180.42 lakhs in March 1989. Thereafter, in May 1989, when the matter was eventually taken up with the legal Adviser (Defence), he pointed out that according to the Land Acquisition Act, application should have been filed against the award within six months from the date of the award.

Ultimately, the Ministry had to revise (December 1989) the sanction to the acquisition of land in accordance with the award for Rs.398.60 lakhs including interest of Rs.36.75 lakhs for the period from April 3, 1985 to November 2, 1989 and observed that in view of the delay and the limitation of time it would be difficult to challenge the award and the Director General, Defence Estates should have been vigilant and challenged the award in a Court of Law by May 1987. Finally, the balance amount of Rs.52.75 lakhs was paid on 1st March 1990, including interest upto 28th February 1990. The interest for the period from January 1987 to February 1990 worked out to Rs.18.78 lakhs, which was avoidable.

The Ministry contended in January 1992 that the Collector had not allowed the cost of fruit trees though the same was discussed/mentioned in the final award of 1986. It was, however, admitted that discrepancy in the matter of award was taken up with the State Government by the DEO and his action was correct.

The case revealed the following:

- the Defence Estates authorities had represented to

the Stage Government that the award was erroneous in the first instance.

- the Defence Estates authorities did not appeal against the award within the stipulated period of six months from the date of the award.
- if as contended by the Ministry of Defence in January 1992 the award was not erroneous, there was no necessity for delay in implementation of the award entailing avoidable payment of Rs.18.78 lakhs on account of interest accrued due to belated payment in satisfaction of the award.

27. Avoidable expenditure on lease of a land

Director General, Defence Estates (DGDE) accorded sanction in November 1982 to the grant of lease of 15 acres of land at site 'A' at Dehu Road to Steel Authority of India Limited (SAIL) at an annual rent of Rs.0.42 lakh and a premium deposit of Rs.4.25 lakhs. In December 1982, SAIL paid the premium amount and annual rent and the land was handed over to them in February 1983 for a period of 30 years.

In June 1983, Headquarters Southern Command (HQSC) intimated SAIL that the site 'A' handed over to them was required for an important Defence project and alternative land at site 'B' could only be provided. Simultaneously, the HQSC advised the Defence Estates Officer (DEO) Pune, to pursue the matter with SAIL for re-allotment of site. In September 1984 land at site 'B' was handed over by the DEO to SAIL with the written understanding that the latter would vacate site 'A' after completion of the development work in three months time at site 'B'. Despite the requirement indicated by the Army in 1983 and handing over of the alternate site of 15 acres to SAIL in September 1984, DEO executed the lease agreement in July 1985 for lease of 15 acres of land at site 'A' for 30 years. SAIL did not vacate site 'A' and continued to occupy both the sites (January 1992). The rental outstanding for the period September 1984-January 1992 in respect of site 'B' worked out to Rs.3.08 lakhs.

In the meantime, the local military authorities intimated (October 1988) the DEO that site 'B' was also required for a Defence project and allotment of alternate site against the site 'B' to SAIL be explored. The matter

was under correspondence with SAIL till February 1989, when the latter intimated that they had already carried out certain development work such as earth work and boundary wall, scale room etc. at site 'B', incurring Rs.44.07 lakhs (including liabilities of Rs.10.07 lakhs). In March 1989, the Station HQ, Dehu Road proposed to the HQSC allotment of site 'C' by exchanging assets valued at Rs.17.11 lakhs existing thereon between the Defence Department and SAIL. In January 1990, the DGDE worked out Rs.16.89 lakhs towards compensation payable to SAIL for vacating site 'B' after adjusting Rs.17.11 lakhs towards the Defence assets standing at site 'C' but excluding the liabilities amount of Rs.10.07 lakhs. Government sanction for exchange of assets as recommended by the DGDE was awaited (January 1992). Moreover, locating the Defence project at sites 'A' and 'B' was still under consideration of the Ministry.

Ministry stated (January 1992) among others, that (a) since site 'A' had not been vacated by SAIL, the lease agreement for the same was executed to regularise the deed and effect recovery of rent therefor, (b) a number of meetings were held between the Defence authorities and SAIL for sorting out the issue; and the settlement was yet to be arrived at; (c) on requesting SAIL to pay occupation charges/rent for site 'B' in addition to the payment for site 'A', SAIL objected to payment of rentals for site 'B', stating that as a result of frequent changes in the perception of Army authorities, they could neither fully utilise site 'A' nor site 'B'; (d) the avoidable expenditure, if any, could be mainly attributable to change in planning by the Army.

Thus, frequent changes in perception led not only to non-realisation of rentals of Rs.3.08 lakhs from September 1984 to January 1992 in respect of site 'B' but also avoidable payment of Rs.16.89 lakhs towards development work carried out by SAIL on that site.

Other Cases

28. Avoidable payment of maintenance charges for defence tracks not in use

In an Ordnance Depot (Depot), there were 13 railway tracks distributed in two locations; 6 laid at location 'A' and 7 at location 'B'. Out of these, 4 were lying un-

utilised for the last 14 years, 2 for 11 years and one for the last 4 years (one track was stated to be not even visible at location 'B') as on January 1992.

In August 1979 and August 1980, the Railways had indicated that the condition of the tracks was bad and may become unsafe without repairs. An estimate amounting to Rs.18.03 lakhs for their repairs at location 'A' and Rs.20 lakhs at location 'B' was prepared by them and forwarded to the Depot.

The Depot authorities forwarded the estimates pertaining to location 'A' to their higher authorities in September 1980 for approval indicating that there had also been derailment of wagons due to the deteriorated condition of sleepers. As regards location 'B' no immediate action was initiated. In a meeting convened (March 13, 1981) by the Depot with Railway and MES authorities, it was recommended that instead of repair/renovation of all tracks at the proposed cost of Rs.38 lakhs, only the required tracks should be repaired/renovated which will also reduce maintenance charges.

Accordingly the Railways were requested (April 1981) to forward revised estimates for repair/renovation of six tracks, removal of seven tracks, laying of a fresh track measuring 883 metres and extension of one track by 292 metres. The revised estimates of Rs.5.40 lakhs for location 'A' and Rs.14.53 lakhs for location 'B' were received in January/March 1983 and forwarded to Station Headquarters (HQ)/Bombay Sub-Area.

In April 1983/October 1983 two Boards of Officers were convened by Station HQ Bombay to assess the requirement of renovation and repairs of railway tracks at locations 'A' and 'B', who accepted (May 1983/April 1984) the scope of work included in the estimates submitted by Railways. Meanwhile the cost of the above works at location 'B' escalated to Rs.36.15 lakhs. By the time estimates could be accepted (August 1988) the Railways enhanced the estimates to Rs.51 lakhs which was further enhanced to Rs.57 lakhs subsequently (January 1992).

In the meantime, the Depot continued to pay Rs.1.11 lakhs per annum to the Railways on account of maintenance charges for all the tracks. The payment till 1989-90 was made even without obtaining requisite certificate from the users to ensure that particular tracks/platforms were

required for defence purposes as required under the rules. In fact one of the tracks was not even visible and had been covered by encroached hutments.

Sanction for removal of 5 tracks at location 'B' as recommended by the Board in 1984 as well as renovation of two of them and laying an additional track was ultimately issued by the Army authorities only in February 1988 i.e. seven years after the Railways had pointed out the defects. Besides the cost indicated by the Railways in 1985, additional works like improvement of ramps, steel gates and area drainage to be done by the Military Engineer Services (MES) at an estimated cost of Rs.11.20 lakhs were also included in the sanction. The sanction had to be amended to Rs.53.58 lakhs in August 1988 due to escalation.

An advance of Rs.51.33 lakhs was paid to the Railways in three instalments in March 1990 and March 1991 for execution of works. Part of the work pertaining to the ramps of eight sheds was completed (January 1991) at Rs.11.36 lakhs by the MES. The work pertaining to the steel gates and drainage was pending with the MES on account of non-completion of the railway work.

The work relating to removal of two tracks not in use at location 'A' has not yet been sanctioned. Although the matter had been pending since 1980, maintenance charges continued to be paid for all the tracks on both locations. The total amount of rent and maintenance charges paid to the Railways since 1979 for tracks not utilised could not be assessed.

Ministry in reply stated (February 1992) that due to various administrative and technical difficulties the final sanction of CFA could be accorded only in 1988 and the railway work was yet to commence.

To conclude:

- Although seven tracks were in disuse for 4 to 14 years and one of them was not even visible, full maintenance charges for all the 13 tracks amounting to Rs.1.11 lakhs per annum had been paid upto 1989-90 without the necessary certificate required to be issued by Area HQ upto 1989-90. Payment was made in 1990-91 on the certificate issued by them that all of them were required for defence purposes.

- Even though the Railways indicated in 1979 and 1980 that the condition of the tracks was bad and they might become unsafe without repairs, the work for location 'B' was sanctioned after 8 years in 1988. While this work was yet to be completed, the work for location 'A' was not even sanctioned so far (February 1992).

29. Non-realisation of pensionary charges from U.K. Government

The Chief Controller of Defence Accounts (Pensions), Allahabad in the capacity of overseas agent of and under direction from the U.K. Government arranges payment of pension to the British Pensioners residing in India. The amount of pension paid in India plus three per cent agency commission thereon are reimbursed by the U.K. Government in Pound sterling. The Chief Controller's office maintains Audit Registers in which personal data of each pensioner and his periodical entitlement are recorded. This register is used for watching the prompt receipt of paid vouchers and timely lodging of reimbursement claims.

A test check of the Audit Registers, however, revealed that paid vouchers in respect of 56 pensioners were not received from October 1984 to March 1990 from the pension disbursing officers. Consequently, reimbursement claim to the extent of Rs.74.62 lakhs and agency commission of Rs.2.24 lakhs could not be preferred against the U.K. Government. The Controller of Defence Accounts had reported (October 1989) to the Controller General of Defence Accounts that the quality of maintenance, rendition and compilation of accounts and system of internal audit had deteriorated considerably and audit had not been done systematically for the last several years. It was also indicated that the Pension Disbursement Officers were not following the prescribed instructions for this category of pensioners and, therefore, it was extremely difficult to identify such pensioners from paid vouchers. Consequently, the debits raised and accounts rendered were not true reflections of the amounts disbursed to the Pensioners.

The matter was referred to the Ministry in August 1991 and their reply had not been received so far (March 1992).

30. Recoveries at the instance of audit

Test audit of the accounts of some Controllers of Defence Accounts conducted during 1989-90 and 1990-91 revealed overpayments/short recoveries to the extent of Rs.4.98 crores, out of which Rs.4.03 crores had already been recovered/adjusted at the instance of Audit. These related to pay and allowances, gratuity, under-recovery of rent and excess water charges, short recovery of fund advance, service charges to Cantonment Boards, Customs duty, etc. The cases are dealt with below:

CASE I

In accordance with Government orders, service charges are payable with effect from April 1982, to all Cantonment Boards at prescribed percentages on the value of Defence buildings and lands under active occupation of the Ministry of Defence. A Cantonment Board at Station 'A' preferred (March 1985/April 1988) claims for Rs.248 lakhs on Military Engineer Services (MES) towards service charges for the years 1982-83 to 1988-89 based on valuation of lands and buildings furnished by the defence department. Accordingly, a sum of Rs.218.76 lakhs was paid during March 1985 to March 1989 by a Garrison Engineer (GE) 'X' to the Cantonment Board.

In June 1989, Audit observed that payment already made to the Cantonment Board was in excess over the service charges payable on account of overvaluation of land as well as undervaluation of buildings. Land was valued at higher rates applicable to Zone 4 instead of Zone 3 and buildings undervalued due to omission of the cost of addition and alterations. The difference between service charges payable and paid during this period due to erroneous calculation amounted to Rs.1.23 crores.

Agreeing with the contention of Audit, the Command Chief Engineer informed in May 1990 that a sum of Rs.123.54 lakhs overpaid by GE 'X' had been recovered from dues payable to the Cantonment Board against service charges billed on another GE 'Y' located in the same Cantonment.

CASE II

Army personnel below the rank of officer posted on duty in specified areas in Arunachal Pradesh, Jammu and

Kashmir and Tripura, who are not in receipt of Hill Compensatory Allowance or any other field service/modified field service concessions are entitled to Special Compensatory (Remote locality) Allowance (SCRLA) at rates ranging between Rs.75 and 650 per month depending on their basic pay and place of posting. A test check during January 1989 in one of the Pay Accounts Offices (PAO) (other ranks) other ranks revealed that the SCRLA was admitted for payment without ascertaining/ensuring that the personnel concerned were not in receipt of other field service concessions or Hill Compensatory Allowance. On this being pointed out in Audit, the Ministry stated in November 1991 that an overpayment of Rs.162.54 lakhs pertaining to the years 1987 to 1990 was recovered on account of the above.

CASE III

In June 1976, Ministry of Defence sanctioned a loan of Rs.2 crores to a State Government for releasing 20 lakh gallons of raw water per day (LGPD) to Defence units/establishments. The grant of loan was subject to the supply of raw water to the Defence at a concessional rate of 40 paise per 1000 litres for five years.

Though the State Government did not supply the required quantity of raw water till October 1981, it later agreed in February 1985 to make good the deficiency in supply by enhancing the rate to 60 paise per 1000 litres.

The payment of excess charges which was not in accordance with the terms for the grant of loan was pointed out (May 1986) in Audit. The views of Audit were accepted by the State Government and an amount of Rs.19.05 lakhs had been adjusted upto December 1989.

Case IV

In May 1988, an Ordnance factory (factory) situated at station 'A' ordered import of a machine at a cost of Rs.57.60 lakhs (DM 7.33 lakhs) on a foreign firm. Though import of the machine which was required to test the components being used for the manufacture of armament and special vehicles was exempted from payment of customs duty, the factory requested Embarkation Headquarters (HQ) concerned to arrange clearance of the consignment and payment of customs duty. Accordingly, the Embarkation HQ cleared the machine on its arrival in March 1989, after payment of customs duty amounting to Rs.91.39 lakhs. Sub-

sequently, a claim for refund of the duty paid was preferred on the customs authorities by the Embarkation HQ in June 1989. The claim was rejected by the customs authorities in August 1989 on the ground that the machine imported was not covered under the said customs notification. The Embarkation HQ called for necessary documents from the factory to prefer an appeal against the rejection of the refund claim.

The omission on the part of the factory to intimate the Embarkation HQ about customs duty not being leviable on the machine resulted in avoidable payment of Rs.91.39 lakhs. Lack of co-ordination between these two organisations located at the same station subsequently resulted in the claim for refund becoming time barred. The case for refund of customs duty was also not adequately monitored by the factory.

Ministry in their replies to these cases stated in August 1991/November 1991 that:

- the overpayment to the Cantonment Board on account of service charges had since been adjusted in the subsequent bills (case I).
- PAO had gone by the certification of the unit authorities as per the format prescribed by the Army Headquarters and adequate remedial action had been taken (Case II).
- The delay in recovery of the excess payments seem to be due to the fact that neither Unit Accountant nor the Controller's office was aware of the terms of the agreement regarding the contracted quantity of supply at concessional rates. The internal audit failure was being separately investigated (Case III).
- Army Headquarters had intimated that they had obtained the refund of Rs.91.39 lakhs from the customs authorities in August 1991 (Case IV).

31. Loss due to fire in a consignment of medicines

A wagon containing a consignment of medical stores despatched on 16th May 1986 by an Armed Forces Medical Stores Depot (AFMSD) to a field depot was involved in a fire on 25th May 1986. Open delivery was taken at the destination in the presence of Railway representatives. At

the time of delivery some medicines in packages including some loose medicines were examined alongwith Railway representatives. These were found unfit for medical use and destroyed on 10th July 1986.

The field depot preferred a claim in August 1986 for Rs.8.27 lakhs on the Railways on account of loss of medical stores. The claim was rejected in February 1990 based on the findings of (August 1988) an enquiry committee set up by Railways in January 1988 which included a Railway doctor, that fire took place due to presence of some medicines which caused chemical reaction generating heat, fume and finally fire. The field depot in their appeals in March 1990 and January 1991 contended that no medicine was despatched in the wagon which could cause fire. The Railways, however, reiterated their decision again in March 1991. The loss had not been investigated by the Army even after a year of rejection of the claim.

The Ministry while confirming some of the list of medicines as indicated by the Railways stated (December 1991) that the medical stores of chemical nature were of common use and inflammable in nature. They added that no incident of fire in consignment of that type had been reported since 1946 and that according to Central Drug Research Institute, Lucknow, there was no possibility of any risk of fire for the items booked. It was further stated that the Army had no justification to conduct any enquiry as the stores were in custody of the Railway and no claims were proposed to be filed with Railways.

The fact, however, remained that even after a lapse of about five years of the accident neither any compensation for the loss been received from the Railways nor the loss regularised (December 1991).

ORDNANCE FACTORY ORGANISATION

32. Performance of the Ordnance Factory Organisation

32.1 Introduction

The Ordnance Factory Organisation consists of 39 factories which produce more than 1500 items of arms, ammunitions, equipments and components. These factories are headed by General Managers and comprise of 7 metallurgical, 12 engineering, 5 filling, 4 chemical, 5 equipment, 4 armoured and 2 miscellaneous factories. An apex management body titled Ordnance Factory Board (OFB) headed by Director General of Ordnance Factories as Chairman with seven members conducts overall management of the organisation.

32.2 Budget grants and expenditure

Budget grants and actual expenditure for the period 1985-86 to 1990-91 were as under:

Year	Revenue		Capital	
	<u>Budget grant</u>	<u>Actual</u>	<u>Budget grant</u>	<u>Actual</u>
	(in crores of rupees)			
1985-86	960.41	1007.02	126.88	133.22
1986-87	1202.22	1192.15	198.75	181.04
1987-88	1355.80	1296.33	253.85	237.96
1988-89	1504.65	1471.45	307.88	310.38
1989-90	1586.37	1605.70	342.00	317.68
1990-91	1902.50	1805.23	306.85	240.77

32.3 Working of Ordnance Factories

32.3.1 Important performance indicators

The value of production as well as its net cost of production (excluding inter factory demands) in the factories had declined during 1989-90 although the value of fixed assets had increased by Rs.87.94 crores. As on March 31, 1990, work on 45,888 warrants were in progress. Of these, 16522 were more than a year old against the normal

life of six months of a warrant. The details in this regard are mentioned in the Appendix I.

32.3.2 Coverage of indents

The services normally raise indents on the OFB four years in advance which is the lead time required for production planning.

The position of supplies of uncovered indents during 1980-81 to 1988-89 was as under:

Period of placing of indents	Total number of indents placed	Indents outstanding due to incomplete supplies				Total
		Nil supply	1 per cent to 25 per cent supply below	25 per cent to 50 per cent supply above but below 50 per cent supply	50 per cent and above supply	
1980-81	NA	12	13	10	16	51
1981-82	NA	29	9	7	34	79
1982-83	NA	87	31	21	52	191
1983-84	NA	54	16	39	91	200
1984-85	NA	79	35	45	84	243
1985-86	NA	124	50	42	128	344
1986-87	NA	137	64	62	138	401
1987-88	NA	149	46	57	149	401
1988-89	NA	171	104	78	59	412
		-----	-----	-----	-----	-----
		6419	842	368	361	751
		-----	-----	-----	-----	-----
						2322

No records indicating year-wise position of total number of indents placed on Ordnance Factory Board (OFB) were being maintained by OFB.

32.3.3 Production performance

Ordnance Factory Board fixes targets for manufacture of items every year. It was noticed that progress of achievement in respect of several items remained well behind schedule. Though orders for manufacture and supply of some more items existed, manufacture of these items had not been undertaken by the factories in the absence of a production programme (targets) for these items by the OFB. Details are given in Appendix II.

32.3.4 Rejections in manufacturing process:

The total value of production (including permissible rejections vis-a-vis value of rejections beyond permissible limits (excluded from the total value of production) during 1985-90 were as under

(in crores of rupees)

Year	Total value of production including permissible rejections	Value of excess rejections
1985-86	1359.28	5.17
1986-87	1609.36	4.51
1987-88	1846.25	8.34
1988-89	2242.44	4.40
1989-90	2211.64	4.81

The following factories contributed the maximum volume of rejections:

(in lakhs of rupees)

Name of the Factories	1985-86	1986-87	1987-88	1988-89	1989-90
<u>Engineering Factories</u>					
Vehicle Factory					
Jabalpur	221.15	107.74	100.26	108.22	117.16
Gun and Shell Factory					
Cossipore	-	-	215.26	46.32	-
Ordnance Factory					
Trichi	-	-	-	-	49.38
Rifle Factory					
Ishapore	-	-	-	-	38.04
<u>Armoured Vehicle Factory</u>					
Heavy Vehicle Factory					
Avadi	70.64	139.07	97.74	90.46	75.84

Filling Factories

Ordnance Factory

Khamaria	59.25	71.02	147.51	-	-
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Ammunition

Factory Kirkee	-	54.83	-	43.48	-
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Metallurgical Factory

Ordnance

Factory

Muradnagar	40.45	-	157.96	74.83	123.63
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OFB stated (December 1991) that avoidable rejection in manufacture was worked out after closure of warrants and year-wise values of rejection shown above actually related to the cumulative rejections of all warrants closed during the years. The fact, however, remains that rejections above permissible limits occurred year after year and booked in the accounts as such.

32.3.5 Civil trade: The value of civil trade, profits generated and the amount of foreign exchange earned during 1985-90 were as under:

	1985-86	1986-87	1987-88	1988-89	1989-90
	(Rupees in lakhs)				
Value of civil trade	3803.55	3997.90	3392.57	3073.03	5888.20
Amount of profit	187.85	251.43	266.00	372.14	1096.42
Foreign exchange earned	121.10	646.25	441.10	0.25	0.19

The value of civil trade during 1989-90 compared with the two previous years had increased by 73.6 and 91.6 per cent respectively while profits over the same period, increased by 312.2 and 194.6 per cent due to revised pricing. Foreign exchange earnings were, however, negligible during 1988-90 due to lack of export orders.

As foreign exchange spent on production of items of civil trade was not accounted for separately by the Ordnance factories, the foreign exchange expenditure on this account could not be ascertained in audit.

32.3.6 Capacity utilisation: OFB assesses capacity utilisation of a factory in terms of standard man-hours (SMH). Capacity utilisation during the years 1986-87, 1987-88, 1988-89 and 1989-90 was as follows:

Year	Rated capacity in SMH	Capacity utilisation in SMH	Percentage of capacity utilisation
(in lakhs)			
1986-87	2123	2216	104.37
1987-88	2123	2235	105.25
1988-89	2123	2127	100.16
1989-90	2257	2259	100.09

It was noticed in audit that:

- despite increase in capacity utilisation in terms of SMH during 1989-90 and global inflationary trend, there was decline in the total value of production in 1989-90 as compared to 1988-89;
- the gross value of production per employee of ordnance factories (all categories including officers) declined to Rs.1,26,500 in 1989-90 from Rs.1,27,000 in 1988-89;
- the productivity linked bonus paid to the employees for the year 1989-90 declined to 34 days against 36 days paid for 1988-89; and
- the average number of piece/day workers declined in 1989-90 as against 1988-89 and there was also no increase in overtime hours during 1989-90. Despite this, the capacity utilisation in terms of SMH was shown to be more during 1989-90 as compared to 1988-89.

The table below also indicates the decreased production activities during 1989-90.

Year	Average Day workers	Number Piece workers	Piece work earnings	Incentive bonus paid to mainte- nance	Total cost of produc- tion workers
(In crores of rupees)					
1987-88	2119	78441	45.31	2.35	1846.25
1988-89	1949	78381	41.11	2.28	2242.44
1989-90	4298	74586	39.78	2.24	2211.64

32.3.7 Services rendered on payment: Outstanding dues on account of stores supplied and services rendered on payment by the Ordnance Factories upto March 1990 to outside organisations including other departments, State Government, Railways, private parties, etc. amounted to Rs.159.80 lakhs at the end of September 1991 as follows:

		Amount of outstanding dues (Rupees in lakhs)
Central Departments (excluding Railways)	:	36.61
Foreign Governments	:	7.19
State Governments	:	40.24
Public Sector Undertakings	:	62.64
Private Parties	:	13.12

Total	:	159.80

Of the total outstandings, Rs.54.00 lakhs were outstanding for more than three years with the oldest dues pertaining to 1970-71. The reasons for long outstanding dues were attributed in some cases, to liquidation of the company, disputes and arbitration.

As per OFB's instructions, no issue without payment was to be made to the indentors other than those under the Ministry of Defence with effect from April 1986. However, it was observed in audit that in contravention of these instructions stores worth Rs.6.12 crores had been issued to the indentors other than those under the Ministry of Defence without pre-payment during the years 1986-87 to 1989-90, part of which was realised subsequently.

32.4 Inventory Management

The table below indicates the position of stock holdings:

Sl. No.	Particulars	Year		
		1987-88	1988-89	1989-90
(Rupees in crores)				
1.	Working stock:			
	a. Active	732.57	816.38	922.21
	b. Non-moving	42.04	39.32	38.80
	c. Slow-moving	33.13	64.80	64.79
2.	Waste and obsolete	14.30	2.86	6.35
3.	Surplus	10.30	33.36	43.65
4.	Maintenance stores	77.02	76.09	80.91
	Total	909.36	1032.81	1156.71
5.	Average holdings in terms of number of days	243	212	256

The table above would indicate that the average holdings in terms of number of days exceeded, in each year the prescribed norm of 180 days. While the stock of obsolete, slow-moving and non-moving inventories during 1989-90 remained at around the same levels obtaining in the previous year, the stock holding level of surplus as well as waste and obsolete stores during 1989-90 increased significantly over the previous years levels.

32.5 Other points

Computerisation: Mention was made in paragraph 23.5 of the Report of the Comptroller and Auditor General of India, Union Government, Defence Services (Army and Ordnance Factories) for the year ended 31 March 1990, (No.8 of 1991) regarding Government sanction for procurement of 5 main frame computers for Ordnance Factory Organisation at Rs.4.00 crores (revised in March 1989 for 23 mini computers at Rs.3.78 crores). The OFB provided for one main frame computer and 10 mini computers out of its grant for

renewal and replacement. A contract for on line computerised production planning and control applications (one main frame and 33 mini computers) at OFB headquarters and in ordnance factories at a total cost of Rs.650.00 lakhs was concluded (April 1989) with a public sector undertaking (PSU). All the 33 mini and one main frame computer were received by April 1990 and installed by March 1991. The computers were to be put to use by January 1992 but according to OFB this was now expected to be done by August 1992 as some delay was likely to take place in customisation and acceptance of application softwares. Since the mini computers will now be taking over data-processing at the factory level, the utility of the micro-processors earlier purchased for Rs.1.41 crores would be marginal. A study of proposed utilisation of micro-processors revealed that those will now be used only for generation of static and dynamic data in the area of inventory accounting, pay rolls, personnel accounting etc.

The matter was reported to the Ministry in September 1991; their reply has not been received (January 1992).

Review

33. Production of an armoured vehicle 'Z', its gun and ammunition

33.1 Introduction

An armoured vehicle produced at factory 'A' and another imported vehicle 'Y' were due for gradual phasing out from 1980-81 onwards. Army Headquarters (HQ) carried out extensive trials in 1979 on certain imported armoured vehicle 'Z' and recommended their induction into the Indian fleet keeping in view the time-frame of availability of an indigenously developed armoured vehicle 'M'. The Cabinet Committee on Political Affairs (CCPA) while approving the proposal directed the Ministry in June 1981 to explore the possibility of manufacturing these tanks in India under licence from the foreign supplier. An agreement and a contract were concluded with the foreign supplier in July 1982 for licence and technical knowhow for indigenous manufacture of certain number of these vehicle 'Z' on payment of a licence fee of Rs.45.59 crores.

33.2 Organisational set up

The armoured vehicle 'Z' was to be produced in factory 'A' where expertise and manpower were already available for production of vehicle 'X' by augmenting its existing facilities and after transfer of technology by the collaborator. Further, with the phasing out of the latter from 1985-86, facilities created for its production in factory 'A' were to be utilised mainly for production of vehicle 'Z' and some other items viz. production of spares, repowering etc. of vehicle 'X'.

33.3 Scope of Audit

The implementation of vehicle 'Z' project was reviewed by Audit and the progress achieved in completion of civil works, procurement of plant and machinery and positioning of man-power, consequences of delay and the targets achieved etc. are discussed in the subsequent paragraphs.

33.4 Highlights

- The project scheduled for completion by May 1989 was expected to be completed by March 1992, thereby exceeding the total cost of project by Rs.74.13 crores.

(Para 33.5.1)

- During execution of civil works, a pipeline measuring 2722.5 metres diverted to another site was not put to use since diversion resulting in an expenditure of Rs.16.79 lakhs as wasteful.

(Para 33.5.2.1)

- An expenditure of Rs.15.22 lakhs was incurred on account of transportation and handling of certain steel items imported and not used on the project and their consequent transfer to other divisions. Besides imported steel valuing Rs.47.83 lakhs was also lying unutilised.

(Para 33.5.2.2)

- There were delays in ordering, receipt and commissioning of the plant and machinery.

(Para 33.5.3)

- The production programme for 1989-90 was reduced from 100 to 75 vehicles due to non-receipt of a few critical items from the foreign supplier. The production programme from 1990-91 onwards was also reduced from 150/200 to 125 due to reduction in the demands from the Army owing to budgetary constraints. The capacities, thus, created after incurring heavy expenditure under the project would remain largely unproductive due to reduction in Army's demands, substantial imports of vehicles before sanction of project and their possible phasing out owing to introduction of armoured vehicle 'M' by 1994-95.

(Para 33.6)

- Against Army's indent of September 1986 for 250 vehicles factory 'A' assembled and issued 175 vehicles till March 1990. The first 50 vehicles were to be assembled from imported CKDs but all the 175 vehicles were assembled mostly with imported CKDs excepting a few components machined/fabricated at Factory 'A'. Had the project been completed by May 1989 and indigenous production started, the import of CKDs beyond 50 vehicles from the collaborator and another foreign country valuing Rs.270.75 crores could have been avoided.

(Para 33.6)

33.5 Execution of the project

33.5.1 Cost and time overrun

It was decided to produce vehicle 'Z' at factory 'A' by augmenting its existing capacity and by taking assistance from certain Public Sector Undertakings (PSUs) for communication systems, armour plates etc. and from other Ordnance Factories for opto-electronic and armament items. Based on the CCPA's approval of May 1984, a 'go-ahead' sanction, pending a regular sanction, for the project was issued by the Ministry in July 1984 at an estimated cost of Rs.25 crores. The Detailed Project Report (DPR) expected to be made available by December 1984 was, however, prepared only in July 1985 based on the technical project report submitted by the foreign supplier in March 1985. The sanction for manufacture and assembly of certain number of vehicles per annum at factory 'A' at an estimated cost of Rs.503.75 crores (FE: Rs.149.15 crores) was

issued in April 1987. However, of the 2008 machines required for the project, it was decided not to procure 628 machines costing Rs.114.48 crores (approximately) thus bringing down the approved project cost to Rs.389.27 crores. The planned date of completion (PDC) of the project as per sanction was May 1989 and peak production was expected to be achieved during 1991-92. The project was strictly time-bound and trickle production was expected from 1987-88. However, due to delays in ordering, receipt and commissioning of the plant and machinery the project is expected to be completed by March 1992.

The expenditure booked/committed/anticipated upto September 1991 worked out to Rs.463.40 crores. Thus the time overrun has resulted in a cost over-run of Rs.74.13 crores.

33.5.2 Civil works

The main production buildings, were completed between February 1987 and August 1988 in phases, at a cost of Rs.91.74 crores (March 1991) against the sanctioned amount of Rs.91.50 crores.

The following cases of avoidable expenditure during execution of civil works were noticed:

33.5.2.1 In May 1985, a Garrison Engineer (GE) concluded a contract for Rs.2.16 lakhs for diverting an existing water supply mains to another route in a station. The work which involved relaying of 2722.5 metres of pipeline was completed in November 1985 at a cost of Rs.17.09 lakhs.

During technical examination of the work in October 1986 it was observed that lead consumption for joining the pipes as recorded could not be reconciled with the works diary of the period. The GE was advised to check the lead content of at least three to four joints and forward the actual weights obtained. Consequently, on checking this aspect a recovery of Rs.0.30 lakh was made from the contractor in November 1988.

In August 1988, the contractor informed the GE that some pipes were stolen from the area where he had carried out excavations for rechecking the lead contents. Pipes were again stated to have been stolen in October 1988 and two persons were apprehended and handed over to the police. The total cost of pipes stolen was Rs.5.00 lakhs.

The GE intimated (October 1988) that the Army Station Commander had expressed inability to post armed guards and police were not able to protect Government property. According to GE the safety of left over pipe lines was being ensured by constructing a compound wall around the pipe line and posting of Defence Security Corps (DSC) guards (July 1991). There had never been any occasion to use the pipe lines ever since its diversion in 1985.

Thus, re-routing of pipelines at a cost of Rs.16.79 lakhs lacked justification and resulted in a further expenditure in the proposed construction of compound wall besides loss of pipes worth Rs.5 lakhs due to theft.

33.5.2.2 A review of requirement of steel conducted in November 1987 indicated a total requirement of 44638 tonnes for the project against which 14553 tonnes of steel items costing Rs.11.30 crores were imported and received between March 1986 and July 1987. Examination of the project records in audit revealed that 4506 tonnes of imported steel had not been used on the project. This was mainly due to 4014 tonnes of imported MS rods and twisted bars costing Rs.60.05 lakhs which were not used on the project.

Of the above surplus, 2914 tonnes were transferred to outstation divisions involving expenditure of Rs.15.22 lakhs on account of transportation and handling charges. The quantity lying unutilised (March 1990) was 653 tonnes valuing Rs.47.83 lakhs.

Ministry stated (September 1990) that 463 tonnes would be utilised in the works at Avadi and the remaining quantity would be disposed of by internal transfers. Ministry also stated that MS rods were procured for 3000 married quarters pertaining to this project which were not sanctioned.

Thus, the procurement of imported steel without sanction and not assessing the requirements properly resulted in 653 tonnes of steel valued at Rs.47.83 lakhs lying unutilised and avoidable expenditure of Rs.15.22 lakhs in transferring the material to other divisions.

33.5.3 Plant and machinery

The sanctional project cost included Rs.412.25

crores (FE: Rs.149.15 crores) for purchase and installation of plant and machinery. The total number of plant and machinery required for the project (as per DPR) was estimated at 2008 costing Rs.356.47 crores (FE : Rs.148.56 crores). Of these, 1380 machines were considered essential for the commencement of production. Upto September 1991 orders for 1317 machines worth Rs.273.93 crores (FE: Rs.73.32 crores) had been placed of which 1302 (cost : Rs.250.33 crores) had been received and 1255 (cost: Rs.160.70 crores) commissioned.

Delays in ordering, receipt and commissioning of the plant and machinery were attributed to the following:

- delay in concluding contracts, slow start and slow progress in evaluation of order placement.
- delay in clearing cases beyond Ordnance Factory Board (OFB)/Additional Director General Ordnance Factories (ADGOF)'s powers.
- embargo on dealing with Indian agents for imported plant and machinery.
- difficulties created on account of embargo imposed by foreign Government on export of high technology equipment for Defence industries.
- delay in identification of a public sector undertaking as a source for certain machinery items which were earlier considered for import.
- re-tendering necessitated by failure of joint working arrangement between foreign collaborator and Indian suppliers.
- need for examining sophisticated technology like robotising in certain cases like material handling and welding equipment.
- delayed supplies, erection and commissioning of plant and machinery.

The committed expenditure on plant and machinery upto September 1991 was Rs.294.44 crores.

33.6 Production and capacity utilisation

As the sanction for the project was issued only in April 1987 based on DPR of July 1985, the production schedule had to be modified in March 1988, after taking into account the availability of various input materials for critical items and discussions with the collaborator. The schedule of production as per DPR and as changed in March 1988 and the actual achievement thereagainst was as follows:

Year	Production schedule as per DPR	Changed production schedule	Actual production
1986-87	16]] from CKDs	-	-
1987-88	34]	15] First] 50 from	-
1988-89	50	85] CKDs	175
1989-90	100	100	
1990-91	150	150	111
1991-92	200	200	-

The target for 1989-90 was further reduced (December 1989) from 100 to 75 vehicles due to uncertainty in supply of certain finished parts by the foreign supplier as well as the deficiencies against the supplies of CKDs by the collaborator.

The targets from 1990-91 onwards were also reduced from 150/200 vehicles to 125 as Army indicated (February 1990) a tentative requirement of 125 vehicles only per annum upto 1994-95 owing to budgetary constraints.

The Army initially placed an order in September 1986 for 250 vehicles and an additional order of 200 vehicles in July 1990. Factory 'A' assembled and supplied 175 vehicles during 1987-88 to 1989-90. Though the production of only the first 50 vehicles (value:Rs.63.86 crores) was to be out of CKDs, the assembly of all the 175 vehicles was done mainly with imported CKDs excepting a few components/assemblies which were machined/fabricated at factory

'A'. The production during 1990-91 was of 111 vehicles only against the reduced target of 125 vehicles. Thus at the end of 1990-91, orders for 164 vehicles remained outstanding.

Had the indigenous production of tanks started by May 1989 as scheduled, the import of CKDs etc. beyond 50 vehicles from the collaborator at a cost of Rs.268.82 crores and import of special bearings, raw materials, springs and other parts from another supplier at a cost of Rs.1.93 crores upto June 1990 could have been avoided.

Due to (i) reduction in the requirements of the Army from 200 to 125 vehicles (ii) import of a substantial number of vehicles from the collaborator before sanction of the project and (iii) availability of the indigenously developed vehicle 'M' by 1995, there would not be any need for production of vehicle 'Z' at factory 'A' beyond 1994-95. Thus, the capacities created under the project at a cost of about Rs.500 crores to meet the gap between the phasing out of vehicle 'X' and induction of vehicle 'M' would be rendered largely unproductive.

Ministry stated (February 1991) that these plans might undergo modification due to changing geo-political conditions. Obviously production of a vital and proven equipment like vehicle 'Z' could not be short closed without very deep and careful consideration. Further, production of spares for this tank had to be sustained during the life cycle of the equipment already in service. Even if vehicle 'M' was developed and accepted by the user, there were many items to be indigenously established and produced. Ministry also stated that the capacities created at factory 'A' were such as to absorb and meet the production demands for future vehicle as well. The plant and machinery procured were also of the latest version which would not become obsolete for a very long time and had inherent capabilities to produce a wide variety of engineering items, facilitating diversification efforts.

Ministry's contention is not tenable in view of the fact that the capacities created under the project had remained or would remain largely unproductive due to reduction in the demand for this vehicle and its possible phasing out from 1995-96 onwards. The extent to which the capacities already created could be gainfully utilised in the manufacture of vehicle 'M' was not known at this stage.

OFB stated (November 1991) that the factory had gone in for diversification of workload for optimum utilisation of plant and machinery installed by way of rendering assistance to HAL, BEML, Praga, VSSC, ISRO, ADA, Railways etc. However, the extent of utilisation as a result of diversification was not intimated.

33.7 Monitoring

While a Steering Committee was constituted to issue guidelines for implementation of the project, separate Working Groups on Armour, Vehicle, Engine, Armament, Ammunition, Opto-Electronics and Civil Works and Services etc. were constituted to monitor the project execution in specific areas and to oversee and ensure adequate interaction and co-ordination amongst various agencies involved. They were to look into the areas of bottleneck and issues that affected the progress of project and endeavour to resolve them or to project them to the Steering Committee or the Government. These Working Groups were to meet at least once in a quarter.

Although the Ministry stated (February 1991) that but for effective monitoring and co-ordination steps adopted for different stages, the delays would have been much more, the fact remained that between February 1983 and March 1991 the Steering Committee met only 13 times against 49 meetings envisaged. Similarly, during the above period the Working Groups for specific areas met between 7 and 18 times against 28 envisaged for each group.

33.8 Arms for the vehicle

The guns 'P' and 'Q' project for the vehicle was sanctioned for implementation at factory 'B' in November 1988 at a cost of Rs.1970.33 lakhs (plant and machinery : Rs.1413.33 lakhs and civil works Rs.557.00 lakhs). The planned date of completion (PDC) of the project as per sanction was November 1990. According to OFB (October 1990) the PDC as per DPR was 48 months from the date of issue of sanction i.e. November 1992 and the Ministry had been requested to issue necessary amendment to the time frame, which was awaited (December 1991).

The project is yet (November 1991) to be completed.

33.9 Ammunition

The ammunition project for gun 'P' had not yet (November 1991) been sanctioned as adequate stock of this ammunition ex-import was available for the present.

The ammunition project for gun 'Q' sanctioned in June 1988 at a cost of Rs.538.47 lakhs at factory 'C' has commenced (November 1991) production as stated by OFB in November 1991. To meet the requirements, pending start of production, CKDs for 6 lakh rounds of the ammunition (variety 'A':4.80 lakhs and variety 'B': 1.20 lakhs) were imported from the collaborator in 1987 and 1988 at a cost of Rs.135.46 lakhs. OFB intimated (November 1991) that 4.60 lakhs of ammunition 'A' were not likely to be utilised in the near future in the absence of any demand for this variety of ammunition.

The above review was referred to the Ministry in July 1991; their reply has not been received (December 1991).

34. Development and production of an armament

Ordnance Factory Board (OFB) proposed (November 1982) augmentation of the capacities of the ordnance factories at an estimated cost of Rs.12.57 crores to achieve the production level of 5,000 numbers of an armament per annum from five factories (A,B,C,D and E). The estimated cost was scaled down to Rs.11.20 crores (plant and machinery: Rs.7.64 crores, civil works:Rs.3.56 crores) by the Ministry while approving the project in June 1983. Taking into account the value of indigenous production of Rs.9 crores per annum, the investment output ratio was fixed at 1:0.80 which was considered favourable on self-reliance and strategic considerations.

The project was to be completed by June 1987 i.e. within 48 months from the date of approval and the production at the augmented level of 5000 sets per annum was to commence from 1987-88. Till then the Army proposed to meet their requirement through import.

The project was stated (April 1991) by the Ministry to have been completed by March 1990 against the planned date of completion of June 1987. There was thus a delay of 33 months. The expenditure incurred on the project was Rs.11.30 crores against the sanctioned cost of Rs.9.08 crores, allowing deduction of the cost of 3 machines valu-

ing Rs.2.12 crores contemplated in the project and not procured/dropped. The excess expenditure of Rs.2.22 crores over the sanctioned cost was primarily because of increase in prices due to time over-run.

The project was reviewed in audit and findings are discussed below:

(i) Civil Works: Progress of civil works which involved only factories B and D was as follows:

Factory	Date of sanction of project	Administrative Approval Date	Administrative Approval Amount	Sanctioned amount	Actual expenditure	Date of completion Planned	Actual completion
(Rs. in lakhs)							
B	June 1983	March 1985	302.69 revised to 390.39 in December 1989	356.00	378.57	December 1986	July 1988
D	-Do-	February 1985	32.52		33.74	-Do-	April 1988
Total				356.00	412.31		

The actual expenditure exceeded the sanctioned cost by Rs.56.31 lakhs which was due to delay in issue of administrative approval and consequent late completion of civil works by 16 to 18 months compared to the planned date of completion. Delay in completion of civil works was attributed by the Ministry (March 1990) to various technical reasons. The reply is vague and unconvincing.

(ii) Plant and machinery (P&M): Of the 94 P&M originally planned for the five factories, three (cost: Rs.2.12 crores) were subsequently dropped. The balance 91 P&M (sanctioned cost : Rs.5.52 crores) were received between January 1984 and June 1990 and 89 were commissioned upto March 1991. The Ministry stated (January 1992) that dropping of the three machines had reduced the rated capacity at factory A to 3000 fuzes for use in the armament and that trade assistance would be taken for the operations to be carried out on these three machines.

Delays of 5 to 41 months in ordering the machines in certain factories were noticed in audit. Only in factory E the machines were commissioned by the planned date of completion of the project. The delays resulted in the cost of the P&M going upto Rs.7.18 crores (excluding the cost of 3 machines not procured) against the approved cost of Rs.5.52 crores.

According to the Ministry (April 1991) the delay in ordering/commissioning of the machines was due to:

- poor response from the trade firms;
- delay in finalisation of contracts for machines due to inadequate technical information furnished by the supplier;
- delay in finalisation of contracts specially for imported machines;
- delay in completion of civil works; and
- delay in the delivery of P&M by the suppliers.

(iii) Production: During December 1976 to April 1982 the Army placed indents on OFB for supply of 25,100 numbers armament rockets. The factories were to produce 2,000 numbers per annum upto 1986-87 with their existing capacities and 5,000 numbers per annum from 1987-88 on completion of the augmentation project. Between 1981-87 the factories produced only 1,582 numbers. This represented only 13 per cent utilisation of their capacity of 2,000 per annum. The shortfall was attributed (April 1991) by the Ministry to frequent changes made by the Authority Holding Sealed Particulars (AHSP) in the design parameters and the specification of the material/components as warranted after the results of proof of trials from time to time. During 1987-88 to 1990-91 the total issues were 6474 numbers. Thus till 1990-91 only 8056 being 32.09 per cent of the indented quantity could be supplied.

It was stated by Ministry (January 1992) that the Army asked OFB in March 1991 to suspend production due to controversy on the acceptance criteria. A perusal of the records in the OFB showed that suspension of production was desired by the Army as indigenously designed and productionised were not meeting the standards as laid down in the foreign collaborator's a specification. No target

for production for 1991-92 was also fixed by the OFB.

Thus, even after a delay of three years when actually the project became ready for bulk production, the production was suspended.

An analysis of the factors leading to low production and its consequences revealed:

(i) Factory C was entrusted with the production of the weapon forging and machining thereof. Pending creation of facilities under the augmentation project, this factory manufactured and supplied 12,599 forgings to factory A during 1982-83 to 1987-88 for machining. The forgings manufactured by factory C were as per the drawings of the Research and Development (R&D) Laboratory. Out of this quantity factory A could machine only 7797 forgings till 1990-91.

In view of unsatisfactory test results obtained during proof trials in 1987, the R&D laboratory modified the drawings of the forging (1987), but the component from the forging required dynamic balancing, which was not stipulated before modification. As the original design/drawing for the forging did not cater for dynamic balancing no balancing machine was included in factory C in the project requirements. In July 1988, factory C requested OFB for sanction to procurement of a balancing machine and on their advice placed an order in January 1989 at Rs.3.24 lakhs. The machine was commissioned at factory C in February 1990.

Meanwhile in July 1988, factory A intimated factory C of their decision to dismantle their machining line and stoppage of further machining of forgings at their end. They also stated that out of 4,802 forgings held by them, 2,300 would be got machined with assistance from trade to meet production requirement for 1988-89 and the balance 2,502 forgings valuing Rs.8.34 lakhs would be surplus.

(ii) Between 1983-88 factory B received 5850 empty fuzes (value:Rs.50.39 lakhs) from factory A for filling. Of these 3787 (value:Rs.32.62 lakhs) were backloaded by factory B to factory A between July 1987 and October 1987 for rectification of defects. After rectification at a cost of Rs.12.35 lakhs factory A sent back the fuzes to factory B during November 1987 to May 1988. This involved an extra expenditure of Rs.12.35 lakhs on rectification.

(iii) Due to low production in the factories, Army had to import certain number of this armament at Rs.24.49 crores during October 1983 to March 1987.

(iv) Due to suspension of production from 1991-92 on the acceptance criteria, 858 numbers (value: Rs.276.12 lakhs) were awaiting issue and the value of semis and components held was Rs.802.88 lakhs (November 1991).

(v) No programme for production was fixed during 1991-92 and if there are no further orders the project capacity created at a cost of Rs.11.30 crores will not be utilised for this armament. Ministry intimated (January 1992) that the facility created being in the nature of general purpose machinery, it could be used as and when required for existing and future requirement of ammunitions. The reply is vague and the fact remains that the facility may not be utilised for which it was created. The extent of its utilisation for other purposes has not been intimated to Audit.

Summing Up:

- The project took 81 months to be completed against the planned schedule of 48 months. The completion cost was Rs.11.30 crores against the estimated cost of Rs.9.08 crores taking into account deletion of three machines which had reduced the rated capacity at factory A to 3000 fuzes for use in the armament.
- Out of 4,802 weapon forgings supplied to Factory A by factory C for machining 2,502 (cost : Rs.8.34 lakhs) were lying at factory A as surplus.
- There was an extra expenditure of Rs.12.35 lakhs in the repair of 3,787 numbers of defective safety fuzes supplied by factory A.
- Due to shortfall in production certain quantities had to be imported during October 1983 to March 1987 at Rs.24.49 crores.
- When the project became ready for bulk production, the production of the armament was suspended and as a consequence 858 numbers valuing Rs.276.12 lakhs were awaiting issue to Army. The value of semis and components held by factories was Rs.802.88 lakhs.
- Due to suspension of production facilities created

at a cost of Rs.11.30 crores would remain unproductive.

Development and Production

35. Production of defective igniters

An Ammunition Depot reported in July 1989 that 25662 igniter sets with four second delay pertaining to 1984-87 vintage had become defective due to development of cracks in their safety fuzes. The design of these safety fuzes with outer polythene covering was approved by the Controllerate of Quality Assurance (Ammunition) (CQA(A)) and these fuzes were in use ex-trade and supplied to factories 'A' and 'B' for manufacture of igniters with four/seven second delay since 1984-85.

A committee was formed in August 1989 by the CQA (A) to investigate the causes leading to defects and suggest remedial measures. The committee submitted its report in October 1989 containing the following main findings:

- deterioration of safety fuzes during storage could be due to introduction of polythene in 1984 in lieu of gutta percha which was used earlier as outer covering for water proofing;
- the present spirally wound polythene strip did not provide adequate water proofing or flexibility at the time of bending the safety fuze into the 'U' shape thereby resulting in its cracking which exposes the gun powder; and
- the specifications for testing of safety fuzes were earlier laid down when gutta percha was the specified water proofing material. With the change in water proofing material from gutta-percha to any other water proofing mixture, testing was done by subjecting the safety fuze to test in a coil form, whereas in actual use the safety fuze was given a 180° sharp 'U' bend turn which resulted in the unravelling/cracking of the water proofing layer.

The safety fuze with gutta percha water proofing was an all-time import item and since 1978 difficulty was being experienced in importing the item. It came to light in 1978 that the design had been modified by the foreign

manufacturer to house the safety fuzes in plastic cover but technical details in this regard could not be obtained. The design change was effected by Director General of Quality Assurance (DGQA) incorporating polythene covering after extensive laboratory trials, and the use of polythene covering safety fuzes was decided in a joint meeting with the Ordnance Factory Board (OFB) and CQA(A) in 1982. The final product of safety fuzes with polythene covering from trade firm was cleared by the inspector of CQA(A) and were taken into production of igniters by the factories.

Between 1984-91, 39.43 lakhs and 13.45 lakhs of igniter sets with four second and seven second delay respectively using safety fuzes with polythene covering were manufactured. The Director General of Ordnance Services (DGOS) asked in October 1990 for replacement of the 6.40 lakh defective igniters lying at Depots valuing Rs.249.92 lakhs (5.72 lakhs of igniter with four second delay valued at Rs.223.37 lakhs and 0.68 lakh of igniter with seven second delay valued at Rs.26.55 lakhs) at the cost of DGOF or DGQA. The OFB in October 1990 refused the responsibility of replacement of huge quantity of defective igniter sets on the plea that these were issued after clearance and sentenced serviceable by DGQA inspectors.

Thus, all the 6.40 lakh (approximately) igniters (value: Rs.249.92 lakhs) were held in Depots (October 1990) in segregated condition requiring sentencing as per procedure. Consequently 6.40 lakh Grenades 36 M Hand/Rifle valuing Rs.772.20 lakhs could not be issued to users and utilised due to defective igniter sets.

Further production of igniter sets with safety fuze with outer polythene covering had been suspended since 1991-92.

The audit findings were accepted (January 1992) by the Ministry. Thus, as a result of defective design, specifications and method of trial of safety fuzes with polythene covering:

- (i) a large number of igniter sets developed defects while in storage as depot stock;
- (ii) 6.40 lakhs igniter sets valuing Rs.249.92 lakhs were lying in defective condition at the Depots (October 1990).

(iii) 6.40 lakh Grenades 36 M Hand/Rifle valuing Rs.772.20 lakhs could also not be utilised for want of said igniters.

(iv) Further production of the safety fuzes with polythene outer covering stood suspended since April 1991.

36. Uneconomical production of ammunition boxes

Ordnance Factory, Khamaria (OFK) and Ordnance Factory, Chanda (OFCh) procure boxes for packing of ammunition from Gun Carriage Factory (GCF) and Ordnance Factory, Bhusawal (OFBh) as well as from trade sources.

During 1987-90, OFK and OFCh procured 1.21 lakh boxes from GCF and OFBh. The unit cost of production of boxes during this period at GCF ranged between Rs.662 and Rs.762 and that at OFBh between Rs.429 and Rs.513. It was noticed in audit that during the years 1987-88 and 1989-90, OFCh also placed 23 orders on trade firms for supply of 0.77 lakh and 0.39 lakh boxes respectively at rates ranging between Rs.225 plus taxes and Rs.252 (in 1987-88) and Rs.239 plus taxes and Rs.329 plus taxes (in 1989-90).

Procurement of these boxes from GCF and OFBh was thus uneconomical and resulted in extra expenditure to the extent of Rs.317.66 lakhs.

The matter was reported to the Ministry in July 1991; their reply has not been received (December 1991). Ordnance Factory Board, however stated (December 1991) that GCF was already bent with lack of load and without this item the problem would have aggravated and placing orders on them resulted in saving to the organisation/country.

37. Uneconomical manufacture of spring hanger brackets in ordnance factories

Vehicle Factory, Jabalpur (VFJ) manufacture Spring Hanger Brackets, front and rear (brackets) for use in vehicles to meet its requirements and they are also procured from Gun Carriage Factory, Jabalpur (GCF) as well as through trade.

An examination in audit of provisioning of these brackets at VFJ during 1987-90 revealed that in addition

to its own manufacture of 16,269 front (cost : Rs.68.31 lakhs) and 20,400 rear (cost:Rs.74.81 lakhs) brackets,VFJ procured 2,365 front (cost:Rs.28.95 lakhs) and 2,885 rear (cost:Rs.29.56 lakhs) brackets from GCF and placed orders on six trade firms 'A', 'B', 'C', 'D', 'E' and 'F' for 30,775 front (cost:Rs.70.18 lakhs excluding taxes) and 40,431 rear (cost:Rs.75.75 lakhs excluding taxes) brackets during the period. Average unit cost of production of these brackets at VFJ and GCF and average procurement cost from trade during 1987-90 was as under :

<u>Spring Hanger Brackets</u>	<u>(In rupees)</u>	
	<u>front</u>	<u>rear</u>
Average unit cost of production at VFJ	419.87	366.71
Average unit cost of procurement from GCF	1224.10	1024.61
Average unit procurement cost from trade	228.04	187.35

Thus, manufacture of these two items (41,919 brackets) at VFJ and GCF during 1987-90,even through the trade cost was substantially cheaper,resulted in extra expenditure of Rs.115.51 lakhs.

Ordnance Factory Board (OFB) stated (November 1991) that the cost of production of items within the ordnance factories should not be straightway compared with the trade cost, as in a situation of less load,items might be taken up for production even though costlier and in such cases, only the actual additional cost incurred should be taken into account and not sunk costs like depreciation or labour/staff who were permanent employees. OFB further stated that they were now working on a policy which would ensure that Inter Factory Demand was placed only if the additional cost was lower than trade cost.Had this policy been adopted earlier, the extra expenditure of Rs.115.51 lakhs incurred in manufacture of 41919 brackets could be saved to the State.

Ministry stated (January 1992) that the reasons for such high costs were,however,under investigation and further progress would be intimated to Audit.

38. Non-utilisation of augmented capacity due to lack of orders

Army uses mandropping parachutes for training and operational purposes. However, the responsibility for the procurement, maintenance and storing of such parachutes rests with the Air Force.

Based on the steady requirements of Air Headquarters (HQ) projected in October 1986, Government sanctioned a project in November 1987 for augmentation of capacity for manufacture/repair of Man Dropping Parachutes (parachutes) from 1000 to 3000 pieces per annum at Ordnance Parachute Factory, Kanpur (OPF) at an estimated cost of Rs.120.61 lakhs including a foreign exchange component of Rs.2.56 lakhs.

Civil works sanctioned (February 1988) at an estimated cost of Rs.110.86 lakhs were completed in October 1989 at a total cost of Rs.102.99 lakhs.

To meet the requirement of 34 machines and 22 equipments for the project, OPF placed two operational indents on Director General Supplies and Disposals (DGSD) in February 1988 for procurement of 34 machines by August 1988. DGSD in turn placed (February 1988 and January 1990) two orders for procurement of these machines. Nine machines were received in September 1988 against the order of February 1988 and twenty four machines were received in March 1991 against the order of January 1990. One machine valued at Rs.0.15 lakh was lost in transit for which a claim was lodged with the carrier. It was settled at Rs.0.12 lakh leaving a balance of Rs.0.03 lakh which was under the process of regularisation. Equipments required for the project had been manufactured departmentally.

The total expenditure incurred on the project upto March 1991 was Rs.109.36 lakhs (Rs.102.99 lakhs for civil works and Rs.6.37 lakhs for machinery).

The project was declared as completed in October 1989 even though all works in respect of the project had not been completed. On the declared date of completion twenty four machines against order of January 1990 were not in position.

Though the capacity was augmented to meet the requirement of Air HQ, no indent for repair or manufacture of

parachutes was placed by them. Air HQ placed their indent for repair of 500 parachutes in May 1991 and that too to cover only 1003 parachutes repaired by OPF during 1988-91 in anticipation of order. The remaining 503 parachutes already repaired in anticipation of order are still to be covered by an indent of Air HQ. Thus, the augmented capacity was lying un-utilised. Even the original capacity of repair/manufacture of 1000 parachutes per annum was not put to full use. The records of Air HQ did not contain any information regarding the non-availability of the requisite number of parachutes for repair at the OPF. Additional Directorate General Ordnance Factories-Group Headquarters, Kanpur, however, stated (October 1991) that remaining capacity was utilised for other parachutes. The contention is not tenable as the capacity for manufacture/repair of other parachutes already existed in OPF.

Thus augmentation of capacity at a total cost of Rs.109.36 lakhs proved unfruitful due to lack of orders from users.

The case was reported to the Ministry in July 1991; their reply has not been received (December 1991).

39. Upward revision of estimate

Ordnance Factory, Ambernath (OFA) manufactures brass cups for an ammunition for which 70/30 brass ingots are rolled into strips in sections 'A' and 'B' which are cupped in section 'C'.

According to the prevailing estimates, section 'A' used to draw 4.418 tonnes of 70/30 brass ingots and after recovery of 1.030 tonnes of scrap and a process loss of 0.010 tonne would supply 3.378 tonnes of strip of size 98.425 mm X 6.35 mm thick to section 'B'. This section would supply 2.702 tonnes of strip of size 98.425 mm X 3.05 mm thick to section 'C' (0.676 tonne would be scrap) for obtaining one tonne of brass cups (1.702 tonnes would be scrap).

In October 1987 the estimate was revised according to which section 'A' would draw 5.067 tonnes 70/30 brass ingot and after processing would supply 3.875 tonnes of strip to section 'B' who would process them and supply 3.099 tonnes of strip to section 'C' for obtaining one tonne of brass cups.

Due to this revision there was excess drawal of material worth Rs.118.39 lakhs during 1987-91 (upto January 1991) over those provided in original estimate. On this being pointed out in Audit, the Ministry attributed (November 1991) the cause to bad condition of milling machines in sections A and B. It was added that due to this there were variations in thickness and mis-milling of strips leading to higher rejections at sections A and B. However, in actual practice such rejections at sections A and B were not indicated and full quantity was supplied to section C necessitating increase in input material even in that section for cupping. It was stated (January 1991) by OFA that a fresh study would be carried out to consider downward revision of the estimate after successful commissioning of renovated or revamped milling machines. Report regarding renovation was awaited (October 1991).

The reply of the Ministry is itself indicative of the deficiencies in maintenance of records at the factory. No records were kept at different stages which would have facilitated drawal of a realistic estimate. Besides, prior to revision of the estimate, OFA had also not issued any recurring material which would have been unavoidable if actual requirement was more than the estimated requirement. Since the machines in section C were not in bad condition, there was no reason to increase the estimate of the input material in that section from 2.702 to 3.099 tonnes for obtaining one tonne of brass cups.

Thus framing of un-realistic estimates resulted in provisioning of higher input material for cupping operation with consequential extra expenditure of Rs.118.39 lakhs.

40. Rejection of billets

Ordnance Factory, Ambajhari (OF Aj) placed two Inter-Factory Demands (IFDs) in July 1987 and September 1988 on Metal and Steel Factory, Ishapore (MSF) for supply of 200 tonnes and 1200 tonnes of steel billets (billets) respectively required for production of empty body of an ammunition.

MSF manufactured and supplied 223.61 tonnes and 1298.13 tonnes of billets respectively against the above IFDs to OF Aj till January 1991 duly inspected and cleared by the Inspection Wing of MSF. Of these, 274.07 tonnes (value: Rs.84.97 lakhs approximately) of billets supplied

during October 1988 to January 1991 were found defective by OF Aj due to high Ultimate Tensile Strength value and higher physical properties than those specified leading to machining problem including cracking in cold shearing with likelihood of serious accident due to flying out of the cracked lumps.

OF Aj backloaded (May 1989-January 1991) 101.905 tonnes of rejected billets valuing Rs.31.59 lakhs approximately to MSF for re-annealing. Of these, 44.848 tonnes were re-annealed by MSF and despatched to OF Aj upto April 1991. 26.007 tonnes of re-annealed billets valuing Rs.7.62 lakhs received back (August 1990) from MSF were again rejected by OF Aj. The balance 172.165 tonnes of billets valuing Rs.53.38 lakhs had been lying in OF Aj as rejected billets.

In their reply MSF, however, contended (July 1990) that there had been no rejection of billets except for minor rectification work on the rejected billets. It was also stated by MSF that necessary remedial action had been taken to suit the specific requirements of OF Aj in respect of supply now being made and no problems had since been reported by them.

The fact remains that inadequate care taken during inspection at MSF resulted in material not suiting the requirement of OF Aj and consequential rejection of material. The rejected material valued at Rs.78.69 lakhs approximately is still (January 1992) lying in stock of OF Aj (198.172 tonnes valuing Rs.61.00 lakhs) and MSF (57.057 tonnes valuing Rs.17.69 lakhs) pending rectification etc. resulting in idling of funds. MSF also manufactured and supplied 121.74 tonnes billets valuing Rs.37.74 lakhs approximately in excess of the quantity demanded by OF Aj; reasons for the same were not available.

41. Unsatisfactory production of a fuze

In para 18 of the Report of the Comptroller and Auditor General of India, Union Government (Defence Services) for the year ended 31 March 1987, mention was made of non-productin of fuze 'X' despite creation of capacity for manufacture of 1.80 lakhs per annum thereof in two ten hour shifts at factory 'R' leading to imports, etc. It was noticed (March 1990) in audit that manufacture of the fuze continued to remain far below the created capacity. The targets given to factory 'R' for production of the

fuze during 1986-87 to 1989-90 and its achievements were as under:

Year	Target		Percentage of target to the created capacity	Achievement	
	Empty Nos.	Filled Nos.		Empty Nos.	Filled Nos.
1986-87	40,000	Nil	22.22	14,460	1,959
Total	40,000			16,419	
1987-88	40,000	20,000	33.33	35,824	11,714
Total	60,000			47,538	
1988-89	30,000	7,796	20.99	7,496	2,031
Total	37,796			9,527	
1989-90	50,000	-	27.77	35,313	Nil
Total	50,000			35,313	

Year	Shortfall		Percentage of achievement to the target	Percentage achievement to the created capacity
	Empty Nos.	Filled Nos.		
1986-87	25,540	(-)1,959	41.05	9.12
Total	23,581			
1987-88	4,176	8,286	79.23	26.41
Total	12,462			
1988-89	22,503	5,765	25.20	5.29
Total	28,268			
1989-90	14,687	Nil	70.62	19.62
Total	14,687			

Thus, the targets set for factory 'R' were between 33.33 and 20.99 per cent of the created capacity and achievements ranged from 25.20 to 79.23 per cent of the targets fixed and 5.29 to 26.41 per cent of the created capacity.

Factory 'R' had two different programmes one for empty fuze to be issued to factory 'P' for filling and

the other for filled fuzes to be issued to an ammunition factory. Due to less production and supply of empty fuzes by factory 'R' to factory 'P' during February 1987 to March 1990, factory 'P' had to resort to procurement from trade at higher rates to meet its requirements. During this period a total quantity of 2.05 lakhs of empty fuzes were purchased by factory 'P' from trade at prices ranging between Rs.300 and Rs.341 as against factory 'R's cost of production between Rs.234.29 and Rs.329.70 per unit, resulting in additional expenditure of Rs.76.67 lakhs.

Ministry stated (January 1992) that due to change in the requirement of the services, the production of the fuze was shelved till 1973. Production activities of the fuze commenced during 1979-80 only. The machinery had undergone frequent repairs since then resulting in substantial derating of created capacity. They further stated that production could not be achieved to the required extent as the technological documents supplied by the collaborator as well as the Authority Holding Sealed Particulars design were not comprehensive enough to overcome the inconsistent behaviour of the fuze for which exhaustive trials had to be carried out at factory 'R' to identify the grey areas and take action for rectification. The reply is, however, not tenable as the fuze was an established item of manufacture right from 1979-80. The extent to which the capacity had been derated was also not indicated in the reply of the Ministry. The fact remains that Government had to incur an additional expenditure of Rs.76.67 lakhs due to under-utilisation of the created capacity and consequent procurement of the fuzes from trade.

42. Manufacture of ring races

For the machining of 60 ring races (upper and lower rings) of a Tank, Heavy Vehicles Factory, Avadi (factory) issued four warrants between July 1987 and July 1988. Though machining of all the 60 rings was not completed and they were shown as unfinished semi as on March 31, 1990, 22 rings (value Rs.58.79 lakhs) were shown as expended in tests. When the reasons for high rejection were called for in audit, the factory stated that the machining process of the rings was complicated in nature involving many difficult operations, like rough and finish turning, induction hardening, grinding, drilling, gear cutting etc. The induction hardening was to be done on a special

purpose machine exclusively procured for the purpose and to achieve the desired pattern, the hardened rings had to be cut and analysed and in that process sometimes the rings were rendered unserviceable. The factory mentioned that the rejections were not due to negligence and was a part of proving/establishing the process and machines and hence the expenditure had been absorbed in erection and commissioning warrants.

Ministry intimated (November 1991) that the normal practice in establishing machining operation of a component involves machining trials, inspection of various important dimensions, correction of the CNC programme as required and repeat machining operations. The number of trials and the repeated corrections in the programme would depend upon the complexity and dimensional accuracy called for as per drawings and specifications. While carrying out selective induction hardening, destruction of several components is unavoidable. The factory had undertaken this kind of work for the first time with the assistance of foreign specialists. It was added that two sets of upper and lower rings were sent to country 'X' in soft condition (i.e. without achieving induction hardening) for carrying out gear cutting trials. According to the technological requirements the induction hardening operation is to be done before gear cutting operation. The components processed by deviating from the above sequence of operations are not suitable for production purposes. Ordnance Factory Board concluded that under the circumstances investigation by a committee of officers was not called for and the expenditure on the components consumed during the trial commissioning of the plant would have to be absorbed as capital expenditure and not to be treated as process manufacturing loss.

The reply is not acceptable as the erection of new machinery is classified under capital expenditure/services and the existing instructions do not provide for capitalisation of the cost of components expended in trials and added to the capital cost of plant and machinery. Further for any expenditure to be incurred under capital services, it has invariably to be accompanied by an estimate of cost. No such cost estimates could be produced to audit on demand.

Thus the absorption of the cost of components expended in trials as expenditure incurred on erection and commissioning was incorrect and would inflate the value of

plant and machinery. The value of expended rings viz. Rs.58.79 lakhs was, therefore, correctly to be treated as manufacturing loss and needs to be regularised after investigation by a Committee of officers. It may be added that the warrants for manufacture of rings had been correctly issued as part of manufacture and not as capital services.

43. Holding of unusable/rejected link cartridge metallic belts

Ordnance Factory, Varangaon (OFV) procures Link Cartridge Metallic belts (links), required for packing of a particular type of ammunition, from trade (new links) as well as from Ordnance Factory, Bhusawal (OFBh) and other sister factories (Reconditional ones).

It was noticed in audit (February 1990) that receipt and utilisation of these links at OFV was injudiciously monitored which resulted in holding of 173.67 lakh of unusable/rejected links (value: Rs.27.75 lakhs) in the following cases:

(i) During July 1981 to November 1984 OFV received 165.54 lakhs reconditioned links in loose condition from OFBh against four Inter Factory Demands (IFDs). Out of these, 140 lakh links (value:Rs.23.29 lakhs) representing about eight months requirements were lying unutilised (November 1991). According to OFV these links were in loose condition and hence could not be used in the factory's belting machines. It was further stated by them that in the past the links were utilised by hand belting which was no longer in vogue.

(ii) Again, against an IFD for 12 lakh links on OFBh, 10.50 lakh links (value: Rs.1.57 lakhs) were received at OFV between November 1986 and March 1987. These links being rusty were rejected on inspection at OFV (January 1988). OFBh did not accept the liability on the ground that the discrepancy was reported after a lapse of one to two years and the links were issued duly reconditioned and accepted by the Service Inspector.

(iii) A consignment of 23.17 lakh links (value : Rs.2.89 lakhs) issued (March 1986) by Ordnance Factory, Khamaria (OFK) against an IFD of OFV was rejected (October 1986) in full by OFV on a sample check of 10 per cent, being found to be rusty and defective. OFK did not accept any

liability. According to OFK the supplies were made ex-stock and serviceable belts only were issued; also the question of replacement of the links rejected at OFV did not arise as the latter failed to raise the discrepancy report within the stipulated time of thirty days. A Board of Enquiry convened (April 1989) by the General Manager, OFV to investigate and report upon the circumstances leading to these rejections opined that had the materials been inspected immediately on receipt, perhaps these could have been accepted and utilised in production.

Thus, lack of proper inspection by OFV before accepting material resulted in accumulation of 173.67 lakh unusable/rejected links of a value of Rs.27.75 lakhs at OFV. These have been held in stock for the last 4 to 6 years without any disposal (November 1991).

The case was reported to the Ministry in August 1991; their reply has not been received (November 1991).

44. Rejected forgings

During September 1984 to April 1987, Metal and Steel Factory (MSF) manufactured and supplied 49871 forgings to Gun and Shell Factory (GSF) against the latter's demand of November 1983. Out of these, 4634 forgings valued at Rs.26.85 lakhs, issued between September 1986 and November 1986, were found defective by GSF due to low thickness of wall, shortness in length and less hardness and were sent back to MSF between January and March 1988. MSF, however, did not accept the rejection of the forgings. The defective forgings were still lying (March 1991) with MSF. No investigation into the reasons due to which divergent parameters were being applied by the indenter and the supplier has been carried out. The possibility of utilisation of the rejected forgings has not also been explored. There has thus been a loss of revenue of Rs.26.85 lakhs to MSF.

The Ministry in their reply stated (December 1991) that a meeting between GSF and MSF was held in July 1991 with a view to investigate and solve the problem. It was added that efforts were being made to utilise the forgings in 1992-93.

45. Loss due to rejection of castings

Ordnance Factory, Muradnagar (OFM) was supplying

Axle Army Castings (castings) to Heavy Vehicle factory, Avadi (HVF) for a tank. During 1982 OFM supplied 600 castings valuing Rs.22.35 lakhs to HVF. Of these 245 castings were rejected at the stage of machining operations owing to serious casting defects, like shrinkage of bore and face, and the cost thereof was absorbed in the cost of production of HVF. Of the balance castings, 40 were used in production and 315 castings were sentenced as rejected by Controllerate of Quality Assurance, Avadi and the fact was also intimated (February 1983) to OFM. HVF asked (August and October 1984) OFM to replace the rejected castings, but OFM did not agree on the grounds that the castings were supplied duly radiographed and accepted by Inspector and also that interfactory demands had already been closed in the absence of any discrepancy report raised by HVF within one month from the date of receipt of stores as required under rules.

OFM did not agree (January 1987) to the request of HVF (December 1986) for reusing the rejected castings in their steel foundry and decided to utilise the material as scrap only. Accordingly, HVF back-loaded (March 1987) 315 castings (value: Rs.11.31 lakhs) to OFM by incurring an expenditure of Rs.0.05 lakh on freight which were taken on charge by the latter as scrap 'B' valuing Rs.1.66 lakhs. The remaining 245 unserviceable castings valuing Rs.9.55 lakhs were lying (July 1991) with HVF.

Thus, manufacture and supply of defective castings by OFM resulted in loss of Rs.19.25 lakhs, besides loss of man and machine hours at HVF during assembly process of vehicles using 245 castings which had to be rejected owing to serious casting defects. Accountability for this loss could not be established as reasons for defective manufacture of castings have not been investigated.

The case was referred to the Ministry in August 1991; their reply has not been received (November 1991).

46. Avoidable production of a shell for proof stock

Based on previous years consumption, the Controllerate of Quality Assurance (Ammunition), Kirkee (CQA (A)) projected (January 1990) the annual requirements of proof stock components in respect of Central Proof Establishment (CPE) Itarsi for the year 1990-91 for proving components of ammunition. The requirements were, however subject to change on receipt of Ordnance Factory Board's (OFB)

fresh production programme. CPE intimated (February 1990) the requirements of first two quarters of 1990-91 and requested the factories including Ammunition Factory, Kirkee (AFK) to supply the items at least one month in advance of the beginning of the quarter. Total proof stock requirement of the shell 'X' for 1990-91 to be manufactured by AFK was 2000 and its requirements for first two quarters were 800 and 400 respectively. On receipt (February 1990) of production programme from OFB indicating Nil requirement, CPE reduced (April 1990) their requirement of this shell to nil. OFB had intimated AFK even earlier in April 1989 that there was no requirement of this shell and hence the target for 1989-90 may be treated as Nil and no planning and procurement action need be initiated.

Despite this, AFK had manufactured the entire quantity of the 2000 shells for CPE by April 1990 itself and after a prolonged correspondence despatched (August 1990) 1992 shells costing Rs.22.31 lakhs to CPE.

As the production of shell 'X' for Army was discontinued from 1989-90, the manner of utilisation of the 1992 shells by CPE was enquired by Audit. The CQA (A) stated (February 1991) that the shells were required for proving fuze 'Y' which was being assembled with this as well as another shell and this would ensure utilisation of 1992 pieces of this shell for proof. It was, however, observed that as per the proof schedule of fuze 'Y' only five pieces of shell 'X' were required to prove a lot of 2000 fuzes 'Y'. There was thus no possibility of utilisation of 1992 shells 'X' in the near future and keeping this fact in view their requirement for the year 1990-91 was reduced to nil.

Thus production of 1992 shells costing Rs.22.31 lakhs, for which there was no requirement could have been avoided. At the most the production could have been restricted to 800 (relating to the first quarter only) initially thereby saving Rs.13.35 lakhs on production of 1192 shells required for the second and subsequent quarters.

47. Lack of system for the disposal of unexpended proof samples

Proof Schedule by the Inspection authorities (DGQA) in respect of fuze 'X' (fuze) provides for drawal of 81 fuzes (on fixed number basis) as proof samples for regu-

lar outturn lots from the concerned ordnance factory which includes 43 samples for first proof and 38 samples for reproof (RP) and double re-proof (DRP).

First proof (which includes both visual inspection and practical trial) is necessary to be carried out in respect of selected samples of products manufactured in the ordnance factories to ascertain their quality and effectiveness before utilisation in the end product or issue to the user. RP and DRP becomes necessary when even a single selected sample is found not conforming to specifications/standards in the first proof.

The proof schedule/specification of fuze 'A', however, does not specify the manner of disposal of the unexpended proof quantities in the event of the lot being accepted in first proof. Similarly action for disposal of balance quantities left after RP/DRP has also not been specified.

In September 1985 the Inspectorate of Armaments at Factory 'A' reported to the Controller of Inspection (Ammunition) Kirkee that due to non-utilisation of proof samples filled by factory 'A' for RP/DRP there was accumulation of fuzes and proposed to make the remaining fuzes into a workable lot and utilise it as serviceable stock for proof purposes or regular issue. Factory 'A' assessed the accumulated fuzes as 1991 in April 1986.

The Controller of Inspection, Kirkee directed (May 1986) the Inspectorate of Armaments to group the fuzes from various lots and subject them to proof tests before releasing to Central Proof Establishment (CPE) Itarsi as proof stock against existing demands. It was, however, proposed by factory 'A' in November 1988 to utilise the left over samples for issue to Director of Ordnance Stores (DOS) as CPE Itarsi did not project proof requirement of the filled fuze during 1987-89. As the proof stock was of very old period this was not agreed to by the Controller of Inspection, Kirkee but asked (November 1988) factory 'A' to furnish details of proof samples accumulated from 1986-87 onwards also which were furnished by the latter in January 1989.

In April 1989 the Controller of Inspection, Kirkee proposed utilisation of left over quantity of proof samples filled during 1982-86 with ammunition 'Y' with restricted life to be consumed within two years and those fil-

led in 1987-88 with ammunition 'Z' and issued to service. In partial modification of their proposals of April 1989 it was directed by the Controller of Inspection, Kirkee to utilise the lots of 82-86 manufacture either as proof stock components against relevant demand or alternatively be used for ammunition 'Y' as suggested earlier.

The lots filled during January 1987 to December 1988 were designated as lot C-1 comprising 2826 fuzes and those of 1982-86 manufacture as C-2 comprising 2957 fuzes.

Based on proof carried out by CPE Itarsi, lot C-1 was sentenced as "serviceable" but lot C-2 was 'rejected' in December 1990 as it registered four 'blinds'.

Thus due to failure of the Controller of Inspection, Kirkee to include the provision for disposal of unexpended proof samples in the proof schedule, 2957 serviceable fuzes accumulated during 1982-86, were rejected eventually by CPE Itarsi resulting in loss of Rs.11.26 lakhs.

The case was referred to the Ministry of Defence in July 1991. Their reply has not been received (September 1991).

48. Rejection of forgings

Gun and Shell Factory, Cossipore (GSF) placed two Inter Factory Demands (September 1980 and April 1981) on Metal and Steel Factory, Ishapore (MSF) for supply of 1,45,023 and 1,67,863 forgings respectively against which MSF manufactured and issued 3,14,075 forgings to GSF till April 1990. Of these 1,360 forgings valued at Rs.8.28 lakhs were rejected in inspection at GSF and backloaded to MSF between February and October 1988.

Ordnance Factory Board stated (November 1991) that the reasons for back-loading the store were due to supply of the stores in small batches when production of regular lots was going on. The defects arose subsequently due to shortage and would require only marginal rectification which would be done on receipt of further orders at GSF.

The fact, however, remains that 1,360 forgings worth Rs.8.28 lakhs are lying idle at MSF for more than three years. The possibility of utilisation of these forgings is remote as the product for which these were to be used

was phased out in July 1988.

The matter was reported to the Ministry in July 1991; their reply has not been received (December 1991).

49. Uneconomical production of packing cases

Cordite Factory, Aruvankadu (CFA) procures packing cases without partition and grooves from trade. To utilise the surplus capacity available at Ordnance Equipment Factory, Kanpur (OEF) and to establish a source of supply within the organisation, CFA placed (March 1981) an inter Factory Demand (IFD) on OEF for supply of 18,000 packing cases. Quantity on demand was, reduced (May 1981) to 6,000 cases. Supply was to commence at 500 cases per month from January 1982. However, supply of cases by OEF actually commenced from January 1986, after a lapse of four years and upto April 1, 1991, a total quantity of 4130 cases only were received by CFA. Delay in supply and poor performance were stated to be due to non-fixation of production programme for cases by the Ordnance Factory Board (OFB). In view of the abnormal delay in supplying the packing cases and also on account of availability of the cases at cheaper rates in the market, CFA short-closed (September 1990) the IFD at 4500 cases. It was also noticed that though the average cost of packing case procured from trade during February 1987 to February 1989 was Rs.118.06 each, the cost charged by the OEF was Rs.251.38 per case.

Thus the CFA had to incur extra expenditure of Rs.5.51 lakhs on procurement of 4130 packing cases from OEF till April 1, 1991.

In their reply, OFB attributed (November 1991) - the reasons for not including the manufacture of cases in their production programme for OEF to their giving over-all directions on component programme of ammunition packages which did not necessarily take care of the indent of one factory to meet its requirement on another sister factory. The spare capacities were stated to be utilised to the extent possible through IFDs. The reply is vague and indicates the lack of integrated planning. That the relative merits of procuring from trade sources and developing production capacities for such low technology items were not considered is clear from the reply of OFB that high cost of production was due to higher overheads and higher direct labour charges.

The matter was reported to the Ministry in August 1991; their reply has not been received (December 1991).

Provisioning

50. Extra expenditure on procurement of driver's cabin

Vehicle Factory, Jabalpur (VFJ) placed (June 1982) an order on a firm of New Delhi for supply of 1000 driver's cabins of Shaktiman vehicles at Rs.8,400 each. Two more orders were placed at the same time on a Public Sector Undertaking (PSU) and another firm for 4000 cabins at Rs.8933 each and 1500 cabins at Rs.8450 each respectively. The supply by Delhi firm which was to be completed by October 1984 was subsequently extended to December 1985 with liquidated damages for first 200 cabins. At the request of the firm, VFJ short closed the order in July 1987 at 172 cabins received and accepted by them. According to the Ordnance Factory Board (OFB) (October 1991), the risk clause could not be enforced as cabins with certain modified drawings were intended to be purchased. Orders for short supplied quantity of 828 were placed in September 1989 for 500 cabins at Rs.15,970 each and in April 1990 for 328 cabins at Rs.17,435 each.

Scrutiny in audit revealed that earlier in May 1977 an order for supply of 1500 cabins had been placed on the same Delhi firm and it could not supply defect-free cabins despite taking about six years to complete the order. All cabins had to be rectified by the firm's team before these could be used in production. Due to its poor performance, VFJ had recommended to Ordnance Factory Board (OFB) procurement of only 500 cabins in the order of June 1982. However, sanction was accorded for 1,000 cabins as the firm's price offer was conditional to a minimum order quantity of 1000 cabins. Accordingly order for that quantity was placed in June 1982.

Ministry of Defence while accepting the facts stated (December 1991) that the risk clause could not be enforced against the Delhi firm as cabins with certain modified drawings were intended to be purchased and that the orders were placed subsequently according to the prevalent conditions in which all sources remained loaded with orders proportionately to their capacities. The reply is not tenable as the orders and instructions issued from time to time by the OFB and Government as contained in the Compilation on Material Management clearly stipulate that

the firms whose performance is considered unsatisfactory against previous orders may be excluded while issuing further tenders. Proper weightage on capability and reliability of the firm as indicated by their past performance was also required to be given while finalising the selection of the supplier.

Thus, placement of order on a firm despite its poor past performance and in violation of the orders/instructions on procurement of stores resulted in avoidable extra expenditure of Rs.63.07 lakhs.

51. Procurement of unsuitable brass blanks without trials

Non-commencement of bulk production of an aviation ammunition due to failure of ammunition in proof was commented upon in paragraph 58 of the Report of the Comptroller and Auditor General of India, Union Government, Defence Services (Army and Ordnance Factories) for the year ended 31 March 1989 (No.12 of 1990). The failure also resulted in infructuous inventory holding as the Ministry of Defence was unable to obtain the technical specification of the brass to be used for manufacture of the cartridge cases. A Committee of officers of the Ordnance factories and the Inspection Organisation recommended (April 1975) use of brass blanks of 70/30 specification. The recommendation was accepted in June 1975 by the Directorate of Technical Development and Production without sufficient trials.

Based on this recommendation factory 'X' made bulk provisioning and received 12.77 lakh brass blanks of 70/30 specification from factories 'C' and 'D' during 1979 to 1984. Of these, 5.77 lakh blanks costing Rs.92.89 lakhs were used in manufacture of cartridge cases inclusive of 3.29 lakhs unfinished semi and 0.86 lakh finished semi.

The cases were found unsatisfactory during trials carried out by Air Armament Inspection Wing (AAIW) in February 1983 and January 1987. It was accordingly decided (January 1986) in a Task Force Meeting, after trials, to use brass blanks of 72/28 specification for manufacture of cartridge cases. The use of blanks of 70/30 specification was discontinued rendering seven lakh such blanks (value:Rs.112.70 lakhs) surplus. In addition 3.29 lakh unfinished semi (estimated cost:Rs.180.77 lakhs) and 0.86

lakh finished semi (estimated cost: Rs.46.94 lakhs) cartridge cases were lying unused.

A committee was formed (May 1989) to recommend ways of disposal of surplus brass blanks. It is yet (December 1991) to submit its report.

In sum, the Directorate of Technical Development and Production recommended the use of 70/30 brass blanks for manufacture of cartridge cases without sufficient trials. Bulk provisioning of the blanks without first establishing their suitability resulted in rendering 7 lakh brass blanks (Rs.112.70 lakhs), 3.29 lakh unfinished semi (Rs.180.77 lakhs) and 0.86 lakhs finished semi (Rs.46.94 lakhs) cartridge cases, surplus. Alternative ways to use the surplus material have not still been determined.

The Ministry of Defence confirmed the correctness of the above facts and intimated that efforts to dispose of the brass blanks were continuing and it was decided to carry out certain trials which were underway.

52. Delay in inspection

In response to a limited tender enquiry (November 1987) of Small Arms Factory, Kanpur (SAF) for supply of timber soft wood coniferous planks grade I (planks) of specified sizes required for manufacturing packing boxes, seven firms submitted their offers. The offer of firm 'A' being the lowest for all sizes was accepted and an order for supply of 485.20 cu. metres (Cu.M.) planks of various sizes F.O.R. Guwahati at a cost of Rs.17.02 lakhs was placed in January 1988. The supplies were to commence in February 1988 and completed by April 1988. In May 1988 the delivery period was extended upto July 30, 1988.

Inspection of planks had to be carried out by the General Manager SAF or his authorised representative at the firm's premises at Guwahati. Though the firm had given the first inspection call in March 1988 and followed it up with two reminders, the factory due to procedural delays did not depute their inspection team before May 25, 1988. Out of 300 Cu.M. (approximate) planks tendered for inspection, 82.289 Cu.M. only of different sizes were accepted and the balance quantity was rejected as it was damaged due to heavy rains and flood at that time in Guwahati. In December 1988 firm 'A' expressed their inability to supply timber of 9 and 10 feet length and request-

ted for permission to supply the balance quantity of planks in 6 to 8 feet length. The factory, however, short closed (January 1989) the order at the quantity of 82.289 Cu.M. supplied by the firm without any financial repercussions on either side. The firm was paid Rs.2.79 lakhs between June 1988 and September 1988.

Meanwhile, to meet the requirement of planks, a limited tender enquiry was issued in November 1988 and the lowest offer of firm 'B' at an uniform rate of Rs.6,880 per Cu.M. for all sizes was accepted. Accordingly, order for supply of 164.70 Cu.M. planks at a total cost of Rs.11.83 lakhs was placed in April 1989. The supply was to be completed by July 1989. In this order also inspection of supply was provided to be carried out by the General Manager or his authorised representative. On completion of supplies in August 1989, SAF placed (October 1989) a repeat order on firm 'B' at the same rate and for the same quantity as already supplied by them against the order of April 1989. The firm completed the supplies against the order.

In reply to audit query SAF stated (July 1990) that it was thought fit to cancel the order without any financial repercussion on either side at the earliest before the firm could charge the Government for the losses they suffered due to delayed inspection.

Had the inspection of planks which were made available by firm 'A', been conducted in time, it would not have been necessary to short close the order without financial implication on either side instead of cancelling it at the risk and cost of the firm. This resulted in extra expenditure of Rs.12.08 lakhs on procurement of 329.40 Cu.M. planks at higher rate from firm 'B'.

The Ministry stated (December 1991) that delay in deputing the inspection team was unintentional due to procedural and administrative reasons.

53. Loss due to local purchase

The Directorate General of Supplies and Disposals (DGSD) placed (November 1988) an order on firm 'A' for supply of 7.50 lakh metres of cloth at Rs.9.51 per metre by January 1989 to cover two indents of July 1988 placed by Ordnance Equipment Factory, Hazaratpur (OEFH) (2.50 lakh metres) and Ordnance Clothing Factory, Shahjahanpur

(OCFS) (5.00 lakh metres). The delivery period was last extended upto December 1989. Till January/February 1990 firm 'A' supplied 1.58 lakh metres to OCFS and 2.47 lakh metres to OEFH. Since stock position was stated to be critical, OCFS requested (January 1990) DGSD to cancel the order at the quantity supplied and stated that the store was being procured through local purchase to maintain continuity of production and that liquidated damages/general damages accruing, if any, would be intimated after finalisation of local purchase. In reply DGSD intimated (January and February 1990) OCFS that while the order was being cancelled for balance quantity at the risk and cost of the defaulting supplier, extra expenditure to be incurred by them on local purchase would not be recoverable as per legal advice of the Ministry. However, the extra expenditure incurred by DGSD on the purchase of balance quantity by them after cancelling the order at risk and cost of the firm 'A' was recoverable. The order was cancelled (February 1990) for the balance quantity at the risk and cost of the firm 'A'.

After opening risk purchase tenders in March 1990, DGSD informed (April 1990) OCFS to intimate whether they should procure the store against risk purchase with the delivery period of two and a half months after placement of order as against the delivery period of May 15, 1990 as desired by OCFS. However, OCFS did not agree (May 1990) to this on the ground of critical stock level and requested DGSD not to take further procurement action.

In the meanwhile OCFS had decided (January 1990) to float Limited Tender Enquiry which was issued in February 1990 and opened in March 1990. Tender Purchase Committee (TPC) decided on May 25, 1990 to procure 50 per cent of the required quantity (3.97 lakh metres) at Rs.11.25 per metre from firm 'B' and to make counter offer for the balance 50 per cent to other firms who had offered their quotations. Accordingly, an order for 1.95 lakh metres (as amended) at Rs.11.25 per metre to be supplied by August 31, 1990 or earlier, was placed on firm 'B' in June 1990 which was supplied between August 1990 and March 1991. On June 29, 1990, TPC further decided to place supply orders for the remaining 1.98 lakh metres, on three firms 'C', 'D' and 'E' at Rs.11.25 per metre. This was done in July 1990 stipulating delivery by September 30, 1990 which was later extended upto January 15, 1991 and February 15, 1991. Supplies made by April 1991 against the three orders were

1.97 lakh metres and that too only during the extended delivery period. Thus, OCFS could get 3.92 lakh metres against these four orders during August 1990 to April 1991 by resorting to local purchase.

Scrutiny in audit revealed that local purchase on the ground of critical stock level was not borne out by the fact that average monthly consumption of the store in 1989-90 and 1990-91 was 59,272 metres and 52,479 metres respectively and stock plus dues in of the store as on April 1, 1990 was 2,99,018 metres which was sufficient to meet more than five months requirement. Further, against the orders for local purchase placed by OCFS, only 0.29 lakh metre had been received in August 1990 and the balance quantity between September 1990 and April 1991.

Thus, by not allowing the DGSD to make risk purchase and make the supplies by the end of August 1990 on grounds of critical stock level, OCFS incurred extra expenditure of Rs.5.95 lakhs on procurement of the uncovered quantity of 3.42 lakh metres against the indent of five lakh metres.

The matter was reported to the Ministry in August 1991; reply has not been received (November 1991).

54. Purchase of unbottled forgings

Gun and Shell Factory, Cossipore (GSF) issued (May 1988) a limited tender enquiry (LTE) to six firms for procurement of 12000 unbottled forgings (tubes) required in production of shell body of an ammunition before bottling operation. Quotations from three firms 'A', 'B' and 'C' only were received. No order was, however, placed for which no reasons were also recorded in the comparative statement of tenders (CST).

Again in August 1988, but before expiry of validity of offers received against the earlier tender, GSF issued Tender Enquiry to the same six firms for procurement of 6000 tubes of same specification. The tender was opened in September 1988 and only three firms 'A', 'B' and 'D' quoted again. Firms 'A' and 'B' had quoted earlier also.

As firms 'A' and 'B' which had quoted Rs.408 each for each forging against the tender of May 1988 had increased their rates to Rs.472 and Rs.475 respectively against the tender of August 1988, it was decided (November

1988) by the Tender Purchase Committee (TPC) that both the firms would be asked to bring down their rates. While firm 'B' reduced their rate from Rs.475 to Rs.471, firm 'A' declined to reduce their rate. In January 1989, GSF placed an order on firm 'B' for supply of 6000 tubes at Rs.471 each plus excise duty and Central Sales Tax by June 1989. The supply was duly completed and the firm was paid (May 1989-January 1990) Rs.34.01 lakhs for the same.

The Ministry stated (December 1991) that in the meeting of the TPC held in November 1988, it had been mentioned by the General Manager, GSF that the tender action of May 1988 had been dropped as the bottling press at GSF had not been commissioned. The bottling press was expected to be received by October 1988 and commissioned by March 1989. The bottling press was actually received by GSF in September 1988 and was commissioned in January 1990.

The reply is not convincing as the process was revived almost immediately (August 1988) after giving it up and before expiry of validity period of the earlier offers which indicative of lack of adequate planning and monitoring of the work resulting in extra expenditure of Rs.4.89 lakhs.

55. Procurement of Transit Band at exorbitantly high cost

Ordnance Factory, Chanda (OF Ch) was issuing 68 MM Arrow Rockets (Rocket) manufactured by it to its indentors with plastic Non Ejectable Locking Piece (NELP). In May 1986 Navy introduced a new item viz. Metallic Fin retaining Cap (MFRC) in place of NELP for rockets to be supplied to them against their pending indents of 1981 to 1984.

Use of MFRC required another item named Transit Band made up of alkathene polymer. This item was to be procured from trade and OF Ch issued (February 1988) a limited tender enquiry (LTE) to five firms. No tender to firm 'Z', manufacturers of prototypes of MFRC, as intimated by the indentors in their letter of May 1986, was issued. In response to the LTE only one firm (Firm 'B') quoted a rate of Rs.72 each which was considered very high by the Tender Purchase Committee (TPC) and they decided (May 1988) to retender. Another LTE was issued (June 1988) to ten firms in response to which again only firm 'B' offered a rate of Rs.78 each, which was reduced to Rs.68 after negotiat-

ions.TPC decided to accept the rate of Rs.68 and an order was placed (November 1988) on firm 'B' for supply of 7000 transit bands at Rs.68 each plus taxes. The entire store (value: Rs.4.95 lakhs) was received and utilised in the factory in March 1989.

In October 1989 an advertised TE was issued for 1500 transit bands in response to which three tenders were received and the lowest offer was Rs.6 each as against the last purchase rate of Rs.68 each.However,this procurement action was subsequently given up as it was decided to manufacture the item at OF Ch. During 1990 a total quantity of 12,000 transit bands were manufactured at OF Ch at an estimated cost of Rs.10.33 each (actual cost of production not known).

Ministry stated (January 1992) that the item required was of intricate and critical nature of assembly of a rocket and being plastic (non-mettalic) item, tender enquiry was restricted to past known suppliers of similar items in the field. They also stated that lowest offer of Rs.6 each was considered as a freak one as the firm did not manufacature the item by itself.

Resorting to local purchase at exorbitant rate on LTE basis on the ground of intricacy of the item and urgent requirement was not tenable as MFRC was indented in May 1986 and the requirement was to be met from April 1989 i.e. three years after introduction.There was sufficient time to issue advertised TE (which was done subsequently) and verify the capability of the tenderers to supply the item. The unit cost of production of Rs.10.33 at OF Ch indicates that the rate of Rs.6 offered by trade against advertised TE was not as freak as made out by OFB. Even if the contention of OFB of unworkable rate is accepted, the time was sufficient to develop and manufacture the item by OF Ch.Had ever this been done,extra expenditure of Rs.4.04 lakhs incurred on procurement of 7000 transit bands from trade could have been saved, as the factory's cost of production was just Rs.10.33 against the trade rate of Rs.68.00 (Rs.68 - Rs.10.33).

56. Piecemeal purchase of timber planks

Factory 'A' was procuring logs and converting these to planks to meet their production needs upto 1987-88. They required 326.248 Cubic Metre (Cu.M.) Timber Chaplash Planks (planks) for their production needs during 1988-

89. A demand was raised in January 1988 for only 50 per cent of the required quantity although both 'Stock and Dues' of Timber were 'Nil'. Five out of ten firms offered (March 1988) their rates in response to a limited tender enquiry (LTE) issued in February 1988 and the lowest offer of firm 'M' was accepted. A supply order was placed (May 1988) on the firm for supply of planks of five different sizes totalling to 163.124 Cu.M. at Rs.6387 per Cu.M. excluding taxes, transportation charges and discount (total value: Rs.12.69 lakhs). After three months of raising the first demand and before placement of supply order, another demand was raised in April 1988 for another 163.124 Cu.M. planks and a limited tender enquiry was issued (May 1988) to eight firms excluding 'M'. This time, an order was placed (July 1988) on firm 'N' for 65.973 Cu.M. at Rs.9910 per Cu.M. and 97.151 Cu.M. at Rs.9510 per Cu.M. including 4 per cent CST (total value: Rs.16.41 lakhs).

Thus, ordering of the same quantity of planks after a gap of only two months at a substantially higher cost resulted in additional expenditure of Rs.4.07 lakhs.

Ministry stated (January 1992) that the fact that timber got distorted/warped/cracked/infested in storage if not used after being converted into plank, was the primary consideration for restricting procurement to six months requirement only.

The reply is not tenable as seasoned timber will remain unaffected if stored properly and to avoid such a situation the delivery period should have been staggered to be commensurate with the requirement. It may be added that the supply order was for seasoned timber only.

57. Procurement of store without proper assessment

Ordnance Factory, Dehradun (OFD) placed (December 1984) a demand on Metal and Steel Factory, Ishapore (MSF) for immediate supply of 100 shutter alloy castings (castings) required for manufacture of a type of periscopes indented (February 1980) by Director of Ordnance Services (DOS). On receipt of another indent for 715 periscopes in May 1985 from DOS, OFD increased (August 1985) the demand to 900 castings. Subsequently, due to offloading of manufacture of periscope by OFD, it decreased (May 1986) the quantity of demand to 280 castings which was not agreed to (July 1986) by MSF who by that time had already

manufactured 505 castings. Of these 495 were received upto April 1987 from MSF against the demands. Only 40 castings could be utilised in production of periscopes by OFD and the balance 455 castings valued at Rs.4.49 lakhs were lying unutilised since October 1987. Possibility of utilisation of these castings was remote as the periscopes were being procured from trade between October 1989 and September 1991 at much cheaper cost (Rs.8150 each) than OFD's cost of production (Rs.18,676.56 each during 1989-90) and no periscope was being manufactured from 1990-91 onwards.

OFB stated (November 1991) that since a decision had been taken to taper off production of a particular tank's instruments and replace them with other night vision instruments, the castings in question could not be utilised after 1987. The reply is not tenable as would be evident from the fact that even after this decision, orders for supply of 415 periscopes were placed (December 1987) on a trading firm against which the firm supplied 373 periscopes during October 1989 to September 1991.

The matter was reported to the Ministry in July 1991; their reply has not been received (December 1991).

58. Procurement of stores in excess of requirements

Based on an indent raised by Director General, Ordnance Factories (DGOF) in August 1988, the Supply Wing of High Commission of India, London (Supply Wing) concluded a contract with a French firm in February 1989 for procurement of 20,000 Tail Units at French Francs (FF) 26 lakhs (Rs.65 lakhs). In April 1989, the quantity of the required store was increased, under option clause of the contract to 50,000 units at FF 64.35 lakhs (Rs.151.22 lakhs) envisaging the entire supply by July 1989. The firm, however, intimated that the additional supply would be completed by March 1990. At the same time DGOF received intimation regarding reduction of the end store requirement by the Director General of Ordnance supplies and, therefore, requested the Supply Wing in April 1989 not to purchase the additional quantity of 30,000 units. Accordingly, the additional order was cancelled by the Supply Wing in May 1989 on the ground that firm's delivery terms were not acceptable.

In July 1989, the firm argued with DGOF against cancellation of the order stating that it had already geared

up its production line to meet the supply order and insisted upon DGOF that some part quantity, which the firm would deliver within the prescribed time i.e. 31 December 1989, must be purchased. DGOF, with a view to obviating legal and financial repercussions of cancellation of the supply order in the absence of a valid ground, agreed to purchase additional quantity upto 15,000 units on explicit condition of delivery by December 1989.

The firm failed to deliver the stores by 31 December 1989. Although failure of the firm to supply the stores by December 1989 presented a valid opportunity and ground for cancellation of the supply order, yet the order was not cancelled and 15,000 units valuing Rs.47.89 lakhs were procured in June 1990 in excess of requirement. In fact 98673 indigenous units of the same item had been supplied during 1989-90 by the Ordnance Factory, Kanpur which left the entire imported stock of 34943 units valued at Rs.112.89 lakhs as surplus. In August 1991, 14683 units were drawn from the imported lot even though the factory was holding 46,227 units of the indigenous stock. Besides, liquidated damages of Rs.0.76 lakh were short recovered. In their reply, DGOF while admitting that firm's failure to adhere to prescribed delivery schedule could be a valid ground for cancellation of the supply order, stated (August 1991) that the delivery schedule was extended by the Supply Wing upto June 1990 without consulting DGOF and thereby leaving no scope to short close the supply order. The residual supply unit has, however, stated (December 1991) that DGOF had described the requirements as urgent through a telex in January 1990 and had also requested for extension of delivery period upto February 1990. Recovery of liquidated damages was stated to have been taken up with the Bank.

The matter was referred to the Ministry of External Affairs and the Ministry of Defence (September 1991) and their replies were still awaited (November 1991).

Plant and machinery

59. Procurement of machines for a phased out ammunition

Metal and Steel Factory, Ishapore (MSF) placed a demand in March 1983 on Ordnance Factory Board, Calcutta (OFB) for procurement of one Automatic Degreasing-cum-Pickling Plant required for improving the quality of production

and decreasing the rejection of cartridge cases of ammunition 'X'. In September 1986 i.e. after a lapse of about 3 1/2 years, OFB requested MSF to again forward the demand for further processing as it had been left out inadvertently.

MSF while placing (November 1986) three demands on OFB for (i) continuous spray pickling plant (Plant I), (ii) dip type pickling plant (Plant II) and (iii) spray degreasing plant (Plant III) in lieu of the earlier demand of March 1983 simultaneously placed three indents on Director General of Supplies and Disposals (DGSD) New Delhi, for procurement of the three plants.

DGSD in turn placed (December 1987 and January 1988) orders on firm 'A' for supply of Plants I and II by August 1988 at a cost of Rs.25.50 lakhs and Rs.14.10 lakhs, exclusive of duties and taxes, respectively. For procurement of Plant III, an order was placed (April 1988) on firm 'B' at a cost of Rs.16.47 lakhs plus duties and taxes to be supplied by December 1988.

MSF received Plants I and II in November 1988 and July 1988 respectively. Plant III was received during February to June 1989 with shortages of some parts for which a claim for Rs.0.56 lakh was lodged with the Railways in July 1989.

During joint inspection with the representative of firm 'A' in January 1989 various defects were found and both Plants I and II were rejected. This was not agreed to by firm 'A' who requested MSF to arrange another joint inspection alongwith Director of Inspection, DGSD at site. Accordingly, in March 1989 another joint inspection of these two plants was carried out by MSF, Director of Inspection and representative of firm 'A' and the plants were accepted after obtaining a guarantee from firm 'A' that all the defects would be rectified by them and that the plants would give satisfactory performance after repairs. The guarantee was to commence after satisfactory commissioning of the plants by the firm and acceptance thereof by MSF.

Plant II commissioned in October 1989 was being used but Plant I though commissioned in July 1990 had not been put to use (October 1991) and Plant III has not been commissioned (October 1991). Expenditure incurred on installation/commissioning of Plants I and II was Rs.0.76 lakh.

As per OFB's report on production programme, the quantity of outstanding cases as on April 1, 1987 and April 1, 1988 was 1,66,972 and 66,972 respectively. Out of outstanding quantity of 66,972 cases, 61,123 were issued during 1988-89 and the balance outstanding quantity (5,849) was short closed and there had been no order for production since July 1988.

In the meantime the production of ammunition 'X' as well as the cases was discontinued from April 1, 1988.

Thus, the three plants procured and installed at a cost of Rs.56.83 lakhs could not be utilised for the intended purpose due to delay of over two years in their procurement and subsequent phasing out of production of ammunition 'X'.

Ministry in their reply stated (December 1991) that the delay in processing the indent of MSF was due to the latter initiating a review of their requirement in January 1986 and sending a proposal for completely different equipments. It was added that the plants procured were more of general purpose nature for chemical treatment of cartridge cases to take care of present production and also new products under development.

The fact, however, remains that out of the three plants, one plant (No.III) though procured by June 1989 had not been commissioned by October 1991 i.e. more than 2 years after its procurement and one plant (No.I) though commissioned in July 1990 had not been put to use (October 1991) for any purpose for more than one year after its procurement. The level of performance as also the extent of utilisation in respect of plant II was not intimated to Audit.

60. Procurement of defective blasting machines

Metal and Steel Factory, Ishapore (MSF) placed an operational indent on Director General, Supplies and Disposals, New Delhi (DGSD) in October 1984 for procurement of two shot Blasting Machines (Machines) by December 1985 as replacement for their two old machines. The machines were required for the Shell Forge Project of MSF for cleaning internal cavity of steel forgings. DGSD placed an order in September 1986 on firm 'A' for supply of two machines with two sets of spares for Rs.52.17 lakhs inclusive of duties and taxes. Supplies were to be completed by

March 1987 which was extended upto October 1991. Reasons for DGSD taking two years for placement of the order and extension of the date of supply were not available in the records of MSF.

In December 1987 the firm despatched the machines which were received by MSF in July 1988 in damaged/broken condition. Spares and compressors valued at Rs.0.48 lakh and Rs.3.54 lakh respectively were short supplied by firm 'A' who agreed in August 1988 to provide the missing and defective parts at the time of erection and commissioning of both the machines with accessories. Spares were, however, received in February 1991. Meanwhile, in May 1988 MSF placed an order on a local firm 'B' for site clearance and preparation of civil foundation for erection of machines at a total cost of Rs.0.95 lakh and these were completed in September 1988.

In January 1989 the firm 'A' started erection of the machines at site. They left the site in May 1989 after partial erection. They did not respond to the request of MSF to send its representative for discussion. Meanwhile, 90 per cent payment amounting to Rs.42.57 lakhs had been made to the firm (upto February 1990). Erection and commissioning of these two machines was still to be completed (September 1991).

In December 1989 DGSD intimated firm 'A' that there was a breach of contract as supplies had not been completed by due date of October 1989. In March 1990 DGSD advised Controller of Accounts, Bombay to recover the full amount paid to the firm against this order from its pending bills. Encashment of the Bank guarantee of Rs.1 lakh was also advised. DGSD further stated that in order to facilitate inspection, delivery period was being extended separately upto 15th April 1990 and that the Director of Inspection, Calcutta be requested for final inspection of the machines for acceptance/rejection.

Thus, investment of Rs.42.57 lakh on machines procured in July 1988 is idling. The department has not taken any action to recover the amount. In their reply on production loss due to non-installation of new machines, MSF stated (February 1990) that the old machines were being utilised for production and the quantum of production loss due to non-commissioning of the new machines had not been assessed.

Ordnance Factory Board, however, stated (November 1991) that no production loss due to non-erection of new machines had been incurred as the old machines were being used. Their reply is not tenable as the old machines were sort to be replaced.

The case was referred to the Ministry in June 1991. Their reply has not been received (December 1991).

61. Unfruitful expenditure on procurement of testing equipment

Based on the sanction of the Ordnance Factory Board (September 1987), Ordnance Factory, Muradnagar placed (January 1988) an indent on Directorate General of supplies and Disposals (DGSD), New Delhi for procurement of one temperature recorder and carbon equivalent determinator for controlling composition of cast iron metals at an estimated cost of Rs.4.28 lakhs (including FE Rs.2.25 lakhs) by March 1989. DGSD placed (April 1989) an order on firm 'A' for supply, erection and commissioning of the equipment and optional extras at a total cost of Rs.4.11 lakhs plus duties, taxes etc. F.O.R. Bombay by mid June 1989.

After grant of extensions upto 31st October 1989, the equipment alongwith extras duly inspected by the DGSD (September 1989) at firm's premises was received at OFM in September/October 1989 and commissioned in March 1990. However, the equipment did not give correct results. Meanwhile an amount of Rs.3.96 lakhs, being 95 per cent value of the equipment and extras, was paid to the firm in October 1989 on proof of despatch as per terms of the order. The firm maintained that they had fulfilled their contractual obligation after demonstrating the equipment for temperature measurement. In March 1990 and August 1990 OFM reported to DGSD that the firm could not satisfactorily commission the equipment and requested (August 1990) that the matter be taken up with them to take back the equipment and for recovery of the amount paid as well as re-tender for a suitable equipment. DGSD, however, asked (September 1990) Controller of Accounts, Department of Supply, Bombay to withhold firm's payment to the extent of Rs.3.96 lakhs when the payment had already been made about a year back.

The equipment alongwith essential extras received in September-October 1989 by paying Rs.3.96 lakhs was lying

(October 1991) unutilised in the factory resulting in non-achievement of the purpose for which it had been procured.

Ministry stated (February 1992) that since no further bills were forthcoming from the firm from which recoveries could be effected by Controller of Accounts, Department of Supplies, Bombay a letter had been issued by DGSD to other Controllers of Accounts in Calcutta, Madras and New Delhi to withhold the above mentioned amount.

Other cases

62. Avoidable payment of customs duty

The import and export of Defence consignments by sea and air rest with Embarkation Headquarters (EHQ) located at Bombay, Calcutta and Madras. Certain defence items imported from abroad are exempt from payment of customs duty as per notifications issued by the Government of India from time to time. In order to enable the EHQ to claim exemption from payment of customs duty at the time of clearance of the consignment, Customs Duty Exemption (CDE) and Not Manufactured in India (NMI) certificates issued by the competent authorities and received from the consignee have to be furnished to the customs authorities by the EHQ. EHQ are also entrusted with the responsibility for preferring claims for refund of customs duty paid in excess, if any, within the specified time limit and speedy recovery and finalisation of the claims. They are also responsible for despatch of the imported consignments to the ultimate consignee by road, rail or air.

Test check in audit of records pertaining to imports of equipment revealed the following cases of avoidable and excess payment of customs duty and non-preferment of claims for refund thereof within the specified time limit, resulting in loss of Rs.69.00 lakhs as under:

Sl.	Name of the indenter	Month of contract	Agency concluding the contract	Value of imported items	Amount of customs duty paid	Month	Name of EHQ
					(Rupees in lakhs)		
1	2	3	4	5	6	7	8
(i)	Proof and Experimental Establishment, Balasore	November 1978	India Supply Mission, London	3.84	3.53	April 1979	Calcutta
	-do-	-do-	India Supply Mission Washington	1.64	1.41	February 1980	Calcutta
(ii)	Ordnance Factory, Kanpur	February	Director General of Supplies and Disposal	192.03	57.42 6.64	November 1984 Between July 1984 and May 1986	Calcutta Calcutta
Total				69.00			

Reasons leading to avoidable/excess payment of customs duty and non-recovery thereof by way of refund claims, as noticed in audit in each case, are given below.

(i) Proof and Experimental Establishment, Balasore (PEE):

EHQ had to pay customs duty of Rs.3.53 lakhs in April 1979 and Rs.1.41 lakhs in February 1980 at the time of clearnace of the consignments (imported equipment) as the indenting unit (PEE) did not send CDE and NMI certi-

ificates to EHQ. The PEE, however, intimated (May 1979) EHQ that as the equipment was exempted from payment of customs duty as per Government notification, CDE and NMI certificates were not obtained from the concerned authorities and furnished to EHQ for getting exemption. In reply, EHQ informed (May 1979) PEE that the names of the equipment were not available in the relevant notification and requested them to intimate the specific item under which the refund claim could be preferred against the customs authorities within a time limit of six months failing which the claim would become time-barred. PEE, however, failed to communicate the required information and certificate to EHQ within the time limit and the claim ultimately became time-barred.

(ii) Ordnance Factory, Kanpur (OFK)

A consignment (of a plant and tools thereof) was despatched by a foreign firm in March 1984 and was received in June 1984 at EHQ Calcutta. Customs duty of Rs.180.84 lakhs on the consignment was charged and paid in June 1984 on the value of the goods of Rs.192.03 lakhs shown in the invoice which included the value of Rs.41.78 lakhs for toolings and spares which were not received. The consignment of toolings and spares was subsequently despatched by the firm in August 1984 and received and cleared in November 1984 on a further payment of customs duty of Rs.57.42 lakhs based on a separate invoice of the firm of August 1984 for Rs.41.78 lakhs as cost of toolings and spares. Thus customs duty of Rs.57.42 lakhs was paid twice. Further, the firm supplied certain items free of cost in eight consignments in replacement of damaged/deficient parts. Customs duty to the extent of Rs.6.64 lakhs was again charged and paid during July 1984 to May 1986 on these free supplies taking the excess payment of customs duty to Rs.64.06 lakhs.

EHQ forwarded (June and November 1984) related copy of the Bills of Entry and sought the observations of the OFK regarding the correctness of the assessment of customs duty. EHQ had also stated in their letters that if no reply was received within 45 days, the cases would be treated to have been accepted by OFK.

OFK intimated (December 1986 and March 1987) the Indian agent (agent) of the foreign firm that the customs duty paid in excess would be recovered from the supplier or from their Indian agent. The agent, however, declined

(December 1986 and August 1987) stating that neither they nor their Principal were responsible in this regard as the contract was on FOB basis and they had advised OFK well in advance to claim refund of customs duty.

OFK requested (February 1987) EHQ to arrange for the refund of customs duty paid in excess. EHQ expressed their inability (April 1987) to prefer refund claims as these had become time-barred. They, however, agreed (August 1987) to take up the case with customs authorities if orders for waiver of the limiting period for preferment of the refund claims were obtained by OFK from the Ministry of Finance.

The case for refund was taken up by OFK with Assistant Collector of Customs in February 1988 and was rejected in May 1988. An appeal filed in September 1988 was rejected in January 1989 on the ground that the claim for refund was time-barred. Later, a revision application praying for condonation of delay in preferring the claim was turned down by the Ministry of Finance, Department of Revenue in April 1990.

Thus, inaction in intimating the EHQ within the prescribed period of the requirement of filing a claim for refund of excess paid customs duty of Rs.64.06 lakhs resulted in the claim becoming time-barred.

In respect of PEE, Government accepted (August 1991) the audit observations and in respect of OFK Ministry stated (December 1991) that another appeal had been made. Results of the appeal are awaited (December 1991).

63. Procurement of Cold Rolled Steel Sheets

Cold Rolled Steel Sheets (CR Sheets) of a certain quality are a regular item of import by Ordnance Factory, Bhusawal (OF Bh) for their use. These sheets were being imported through Steel Authority of India Limited (SAIL) till 1985. In December 1986 Ordnance Factory Board (OFB) advised OFBh to approach a public sector undertaking (PSU) designated as canalising agent for import of CR Sheets. Payments to the foreign supplier could either be made through the PSU or directly by OFBh by opening Letter of Credit on the supplier. In case of payment through the PSU service charges of four per cent of cost, insurance and freight of the imported CR Sheets were payable to them and in case of direct payment to the foreign supplier by

OFBh only two per cent service charges were payable to the PSU.

Stores imported through PSU are transferred to consignee ordnance factory through High Sea Sales. Further, the Shippers have to transfer the cargo from Local to Government Manifests. In order to get the cargo cleared by the Embarkation Headquarters (EHQ), the PSU have to hand over all the documents to EHQ and shipping agents are required to issue amendment. Prompt co-ordination among the three agencies (PSU, OFBh and EHQ) is, therefore, required to clear the cargo in time to avoid payment of wharfage charges.

Scrutiny in audit revealed (September 1990) that in the following two cases there was avoidable expenditure of Rs.21.19 lakhs on import of CR Sheets by OFBh through PSU:

a) OFBh placed their first demand on the PSU in January 1987 for 1845 tonnes of CR Sheets and since then all procurement was through them. For imports during January 1987 to June 1989, Rs.30.52 lakhs were paid to the PSU as service charges.

b) OFBh did not opt for placing Letter of Credit directly on the foreign supplier after placement of order by the PSU. Had this mode been adopted service charges payable to the PSU would have been two per cent instead of four per cent paid for paying the foreign supplier through the PSU who established the foreign letter of credit.

OFB, however, stated (July 1991) that due to paucity of foreign exchange with them it would not have been possible for the factory to get direct letter of credit. The reply is not tenable as, according to OFBh (May 1990), it did not ask for any provisioning of foreign exchange in its budget for 1990-91 and so it could not open direct letter of credit on the foreign supplier and had to get the payment made through the PSU. OFB further stated that for opening direct letter of credit on the foreign supplier, the factory would have required to pay 1.0 to 1.5 per cent as bank's commission and other charges and actual savings could be of the order of 0.5 to 1.0 per cent only. Even at this rate, OFBh could have saved extra payment of Rs.7.63 lakhs (reckoned at one per cent) as service charges had it opened direct letter of credit on

the foreign supplier.

Ministry while accepting the facts of the case stated (January 1992) that the available options would now be evaluated to assess their economics and feasibility for future imports.

b) To cover an import application (October 1989) of OFBh, the PSU placed two orders (March 1990) on two foreign firms for supply of 1530 tonnes of CR Sheets. Against one of these import orders, both the Shipping Agency and the PSU informed (May 1990) OFBh that the vessel was expected shortly and it should make arrangements to collect the original shipping documents from the PSU to clear the cargo. These intimations were received in OFBh on the 10th and 16th May 1990. OFBh did not either send its representative or authorise EHQ immediately to collect the documents. OFBh sent its representative only on 13th June 1990 at the direction of OFB for collecting the documents. Meanwhile the ship berthed at Bombay Port on 15th May 1990 and the EHQ, after collecting the documents (6th June 1990) from the PSU cleared the cargo on 13th-14th June 1990 after expiry of prescribed Last Free Date (within ten days from the date of berthing) on payment of Rs.13.76 lakhs as wharfage charges. It was stated by EHQ (June 1990) that had OFBh intimated the EHQ in time about arrival of the vessel and authorised them to collect the documents, the cargo could have been cleared without incurring such heavy wharfage charges. OFB, however, stated (November 1991) that authorisation for collecting documents from the PSU by EHQ was not felt necessary because they were themselves collecting documents from the PSUs in the previous cases.

Thus, due to delay on the part of OFBh in arranging collection of the shipping documents either by its representative or by EHQ, Government had to incur an avoidable expenditure of Rs.13.76 lakhs in the shape of wharfage charges.

Ministry stated (January 1992) that the matter had been got investigated through an enquiry and suitable Administrative action was being taken against the staff for lapses leading to the payment of wharfage charges.

64. Inadequate care in drawing a contract

Fuze Percussion required for manufacture of an illuminating bomb, was being procured by Ordnance Factory Dehu Road (OFDR) from two established firms (A and B) in the private sector.

In July 1987, a Public Sector Undertaking (PSU) showed interest in supplying the fuze and quoted the rate of Rs.900 for each fuze as against Rs.786.60 and Rs.792.00 offered by firms 'A' and 'B' respectively. During negotiation at Ordnance Factory Board (OFB), the PSU agreed to the rate of Rs.690 each and wanted 30 per cent of the value of the order as advance payment. They also stated that they would submit advance sample within 4 to 5 months of the receipt of the formal order. Though firm 'A' and 'B' had reduced their rates to Rs.627.50 per fuze during negotiations, the Tender Purchase Committee (TPC) decided to place order for 10,000 fuzes at Rs.690 each primarily to develop a PSU as a further source of supplies.

Accordingly OFDR placed order on the PSU in March 1988. A sum of Rs.20.70 lakhs representing 30 per cent of the value of order was paid in August 1988. The PSU was to submit advance samples by July 31, 1988. Clearance of advance sample was expected by August 31, 1988. Bulk supplies at the rate of 1000 per month was to commence from September 1988.

The PSU submitted advance samples only in April 1990 which were not cleared as five instead of the stipulated three fuzes failed in the trails. Supply has not commenced (October 1991).

It was also noticed that Government had not reserved the right to charge interest on the advance paid in case of delays in the supply. Since the advance sample was to be cleared by August 31, 1988 as per the terms of the supply order, it was pointed out in audit that at bank rate (17 per cent) the interest due for the delay from September 1988 to January 1990 worked out to Rs.5.16 lakhs. OFDR informed (October 1990) that they had taken up the matter with the PSU who had requested for waiver of interest since their firm is a PSU. OFB advised (February 1991) OFDR that as the payment of interest on advance paid for late delivery had not been included in the contract, claiming it would not be contractually valid.

To sum up,

- Though the item was one of the important components of the bomb under production since 1983 at OFDR action to develop more sources was not taken till 1987-88.
- The PSU on which a development order was placed along with financial assistance from the Government could produce advance samples only after a delay of about 1-1/2 years. These samples too failed in the trials.
- The supply order placed on the PSU did not contain a condition stipulating recovery of interest on the advance paid by Government in case of delay in completion of the supplies. The interest for the period of delay upto January 1990 at the bank rate worked out to Rs.5.16 lakhs.
- The case was referred to the Ministry in August 1988; their reply has not been received (December 1991).

65. Splitting up of sanction

General Managers of ordnance factories are empowered to sanction execution of maintenance works and special repairs upto Rs.1 lakh in each case from July 1988. The General Manager of Ammunition Factory, Kirkee (AFK) accorded (April 1988 to May 1989) twenty five sanctions costing between Rs.0.43 lakh and Rs.0.96 lakh each to provide for fibre glass reinforced plastic (FRP) lining to the valley gutters and roofs of forty four buildings and two overhead tanks at a total estimated cost of Rs.16.82 lakhs. The works were got executed through twenty five contracts at a total cost of Rs.17.07 lakhs and by procurement of fibre glass lining against two orders placed in January and July 1989 at a total cost of Rs.7.31 lakhs. The FRP lining on three buildings which was provided during January-July 1989 at a cost of Rs.1.73 lakhs was ordered (December 1989) to be replaced by the agency of Military Engineer Service (MES) at a cost not exceeding Rs.14.00 lakhs (amended to Rs.18.00 lakhs in July 1990) on top priority due to heavy leakage during that year's monsoon interrupting production activities. Similar leakages from six other buildings which were newly repaired with FRP lining were also reported between June 1989 to October 1990 within three months of being provided with

FRP lining in each case.

Scrutiny in audit brought out the following:

- (i) The above sanctions were issued to keep the cost within the power of the General Manager, AFK. However, these were issued for the same purpose within a short span of thirteen months in contravention of the Defence Works Procedure (DWP) which provides that in cases where special repairs and additions and alterations to buildings become necessary at the same time, the work will be sanctioned as one project and treated as an original work for all purposes. Explaining the piecemeal sanctions, the factory management contended (December 1990) that the area inside the factory had been divided into four different zones for maintenance purposes and different buildings situated at different locations were hence included in different contracts. This is not tenable as it was seen in audit that different sanctions were issued on each occasion for buildings falling within the same maintenance zone and also that buildings falling under three different zones were included in the same sanction.
- (ii) The FRP lining on three buildings provided at a cost of Rs.1.73 lakhs had to be replaced as heavy leakage was experienced in the same year of provisioning of FRP lining, rendering the expenditure on FRP lining as wasteful.
- (iii) In respect of six other buildings provided with FRP lining, leakages were noticed soon after their provisioning.

The factory, however, replied (January 1991) that wherever minor leakages were reported after the FRP treatment, the same were attended by the concerned contractors and their security deposit was still held in case any further problems were experienced in the FRP lining carried out by them.

To an audit query whether the technique of FRP lining was a proven one and whether it was in use in other departments like MES, PWD etc., the factory replied (January 1991) that it was a well established technique but was yet to be introduced in MES.

The matter was reported to the Ministry in August 1991; their reply has not been received (December 1991).

WORKS AND MILITARY ENGINEER SERVICES

66. Unfruitful outlay on civil works

Construction of sand model room and auditorium for the Defence Services Staff College (DSSC) Wellington was sanctioned in July 1976 (amended in June 1977) at Rs.65.86 lakhs. The work was entrusted to a contractor for Rs.64.80 lakhs in February 1979 to be completed in March 1981.

During the execution of the work, major changes due to the users' requirement were found necessary and amendment was issued in January 1981 increasing the scope of the work (increase in cost of Rs.22.05 lakhs) and granting extension of time initially upto September 1981 and thereafter upto December 1982. There were 14 deviation orders (DO) issued on the contractor pertaining to additions and alterations.

In February 1983, the contract was cancelled at the risk and cost of the contractor as the progress of the work was considered to be very slow with only 50.5 per cent having been executed. By this time an expenditure of Rs.95.24 lakhs had been incurred which was 45 per cent above the sanctioned amount.

Action taken to proceed with the work through another contractor proved unsuccessful on account of a stay order by the High Court, based on a petition filed by the defaulting contractor and the courts' advice to refer the case to Arbitration in December 1983. The arbitrator a serving Army Engineer appointed in December 1983 awarded (March 1986) Rs.14.31 lakhs in favour of the contractor and Rs.33.95 lakhs in favour of the department. The delay in making the award (beyond the period of four months stipulated in the law of arbitration) was attributed by the Engineers to the involvement of extensive measurements of the work partly completed by the contractor and the submission of respective claims and pleadings in defence by the department and the contractor, consequent to which extension upto and including March 31, 1986 was obtained from the Court by the arbitrator for making and publishing the award.

The contractor filed two applications in 1986 before the District Judge for setting aside the award and for getting a decree in his favour. The case is subjudice (June 1991) and the net amount of Rs.19.61 lakhs was yet to be recovered.

Meanwhile the steel reinforcement in columns and the roof slabs which had remained exposed since 1983 and had faced atmospheric corrosion, had to be redesigned and rechecked. As a result, fresh tenders were issued only in June 1988. The lowest tender for the remaining 50 per cent work for Rs.1.39 crores was not accepted by the Ministry as the total cost of Rs.1.46 crores with a total liability of Rupees two crores was considered to be high.

As the work was abandoned from 1983, to ascertain the structural soundness of the exposed structures. Army Engineers in November 1989 approached the Indian Institute of Technology, New Delhi (IIT) to render necessary consultancy services for designing the scaffolding and shuttering for the work. IIT expressed their inability to undertake the work (December 1989) in view of their commitments. The design of shuttering and scaffolding for the main auditorium was undertaken by the Engineers themselves.

In addition to the 29 DOs due to the frequent changes in requirement, yet more additional works of acoustics, additional electrification and lighting were added by the users to the fresh tenders called for in February 1990 i.e. 11 years after the work on the buildings had started. The lowest tender of Rs.1.78 crores with the liability of Rs.1.91 crores was accepted by the Ministry and a contract concluded in October 1990 increasing the total completion cost of the project to Rs.3.03 crores. While according financial concurrence, the Ministry directed that the works on the auditorium complex should be completed within 18 months. Sixty eight per cent of the work amounting to Rs.133.45 lakhs had been completed till March 1991.

Inability of the users to properly assess their requirements at the initial planning stage resulted in subsequent changes in the scope of work from time to time and consequent increase in the quantum. The project which was originally estimated to cost to Rs.65.86 lakhs had progressed only to the extent of 77 percent per cent even after spending Rs.170.08 lakhs at the end of September 1991.

Due to the delay in the completion of the auditorium-cum-sand model room, additions/alterations to an existing building had to be carried out. The work was sanctioned in October 1985 and was completed in May 1986 at a cost of Rs.8.12 lakhs.

The Ministry in February 1990 stated that:

- increase in the course capacity and the consequential increase in the sitting capacity of the auditorium-cum-sand model room could not be visualised in 1970 when the proposal was initiated.
- The work is a one time requirement and had to be capable of handling future requirement in the fitness of increased strength.
- Being a prestigious institution the work had to be in keeping with the national prestige.
- Due to the non-completion of the auditorium-cum-sand model rooms, it was not possible to organise joint training for all the three wings of the DSSC as required.
- The method of instructions and programming had to be modified by having a separate schedule for the Wings based on the capacity available in the existing auditorium-cum-sand model room which was not a satisfactory arrangement.

The fact, however, remained that:

- non-realistic assessment of works services at the stage of finalising the contract keeping in view the future intake and course capacity as well as status of the institution for which the work services were recommended delayed execution of works services. The statement made that the capacity requirement indicated in 1970 could not foresee the increase in the course capacity was not tenable as the work was contracted in 1979 by which time the capacity increases were known.
- The project sanctioned in July 1976 with the due date of completion as March 1981 was yet (March 1992) to be completed, in spite of incurring an expenditure of Rs.170.08 lakhs (September 1991) as against the originally sanctioned cost of Rs.65.86

lakhs.

- The anticipated completion cost has been assessed at Rs.3.03 crores.
- As a result of the delay an expenditure of Rs.8.12 lakhs had to be incurred for making alternate arrangements.
- Rs.19.64 lakhs on account of the arbitrator's award remained to be recovered from the defaulting contractor.

67. Delay in construction of Bulk Petroleum Installation

In March 1977, a recce-cum-siting and costing Board of Officers reviewed the existing storage facilities at the Field Petroleum Depot (FPD) in a Station and found that it could stock only seven per cent of the authorised stock of 15,000 tonnes. The Board, therefore, recommended construction of a Petroleum installation consisting of 54 tanks of 15 Kilo litres (KL) capacity each and allied facilities. It was assessed that bulk storage would result in a saving of Re.0.87 per litre being incurred on transportation over a distance of 900 Km. from the nearest rail head.

The Ministry accepted the necessity and accorded administrative approval in December 1983 for construction of the installation at an estimated cost of Rs.112.84 lakhs. Part of the sanctioned work such as fabrication and positioning and installation of tanks, pumps, filling and decanting points, laying of pipelines and necessary electrification costing Rs.25.19 lakhs was to be executed by the Indian Oil Corporation (IOC) for which 100 per cent advance payment was to be released to them. The balance works such as site clearance, buildings and external services at an estimated cost of Rs.87.65 lakhs were to be carried out by Military Engineer Services (MES). The sanction did not indicate the time required for completion of the work. It was also observed that no contract agreement was concluded with the IOC binding them to complete the work by a specified time or at a stated cost.

The work was released for execution in November 1984. An advance payment of Rs.25 lakhs was made to IOC in March 1985. Though the sanction catered for installation of 54 tanks of 15 KL capacity each, IOC suggested (1985)

installation of 12 tanks of 70 KL capacity each. This was accepted by the Army authorities at Command level in 1985. Consequent upon the change in the number of tanks/capacity, the cost of work entrusted to IOC was reduced by Rs.2.30 lakhs. IOC was asked (June 1985) to refund the excess amount of Rs.2.30 lakhs. Instead, IOC revised (January 1986) the cost from Rs.22.70 lakhs to Rs.25.86 lakhs. The storage tanks were fabricated and brought to site in August 1988. IOC demanded (April 1989) an additional amount of Rs.61.61 lakhs for installation and commissioning the tanks. The storage tanks were lying uninstalled at the site for over two years (October 1991), pending decision regarding the additional payment.

MES had completed 89 per cent of the work to be executed by them by September 1990. The date of completion was extended to December 1991. The work that was initially estimated at Rs.87.65 lakhs (December 1983) was enhanced to Rs.113.40 lakhs in April 1986. The escalation in cost was attributed to increase in the price of steel and transportation charges (Rs.19.06 lakhs) and the balance Rs.6.68 lakhs towards change in the scope of work such as foundations, road work, etc. during the intervening period.

The total expenditure incurred against the project upto September 1990 was Rs.153.03 lakhs, including Rs.25 lakhs paid as advance to IOC.

According to the Ministry the total quantity of petroleum products handled by the FPD during the period 1988-90 was 1,39,835 Kilolitres. The expenditure incurred on carriage and storage of the aforesaid quantity at Re.0.87 per litre would work out to Rs.12.17 crores during the three years alone.

The Ministry stated (October 1991) that under the existing procedure, whenever a work was proposed to be entrusted to a Public Sector Undertaking for execution, an approximate estimate was obtained from it which was included in the administrative approval for the concerned works. After the administrative approval was accorded, the amount demanded by the PSU as per its estimates was deposited with them and the PSU was asked to commence the work. The Ministry felt that since the PSUs did not get bound with the conditions, it was necessary to take up a case with the Ministry of Petroleum for formulating procedure for execution of work by PSUs.

The case revealed:

- The installation that was recommended as far back as in March 1977 on economic consideration was sanctioned in December 1983 after a lapse of over six years and released for execution in November 1984.
- IOC was entrusted with fabrication (including material), installation and commissioning of the storage tanks without a contract agreement being concluded, in the absence of which, it could not be bound to complete the work by a specified period and at a stated cost. Consequently, the cost of these works that were initially estimated as Rs.25.19 lakhs was enhanced to Rs.86.80 lakhs.
- The storage tanks brought to site in August 1988 were lying uninstalled (October 1991).
- The cost of work to be executed by the MES was initially estimated to cost Rs.87.65 lakhs (December 1983). It was enhanced to Rs.113.39 lakhs in April 1986, due to escalation in the prices during the intervening period.
- The overall expected cost overrun for the project works out to Rs.87.35 lakhs.
- The bulk Petroleum installation was yet to be completed (October 1991) after incurring an expenditure of Rs.153 lakhs.
- Had the tanks brought to site in August 1988 been installed in time, a saving of Rs.12.17 crores would have accrued to the Government during 1988-1990 alone.

68. Non-utilisation of a Bulk Petroleum Installation

In March 1983, Eastern Command Headquarters (HQ) accorded sanction for construction of a bulk petroleum installation (BPI) at a cost of Rs.24.96 lakhs in a station. Five contracts were concluded between February 1984 and December 1985 with five different contractors at a total cost of Rs.26.93 lakhs with target dates of completion between November 1984 and December 1988.

Works under all the contracts were completed by the due dates. Calibration of dip stick essential for functio-

ning of the installation was completed in September 1989. The completion cost was Rs.28.07 lakhs.

Provision for a railway siding to facilitate direct decanting of railway tank wagons into the tanks of the BPI was considered in recce-cum-siting-cum-costing board convened by Eastern Command HQ in July 1983. The Indian Oil Corporation and the Railways indicated (July 1985) that loop lines were not technically feasible and recommended that a pipeline from the existing Railway siding would meet the requirement. However, the Army engineers confirmed that there had been no further progress in that direction.

According to the opinion of the Board of Officers held in September 1991 to consider the suitability and taking over of BPI, it was not in satisfactory condition in its present state for taking over and commissioning as the efficiency of the equipment installed as a system was not even 50 per cent. The Board, therefore, recommended certain modifications/improvements to the equipment installed. In a note of dissent, the Engineers indicated to the Board that the BPI lying without operation for the past three years would deteriorate if timely action for operation was not commenced and that no modification was possible without sanctioning of supplementary work.

The Ministry, in their reply stated (February 1992) that provision of a pipeline from the Railway siding to BPI was still under consideration of the administrative authorities. The BPI had still not been put to use due to absence of the local formations on other duties.

69. Creation of special items of assets for re-appropriation

Sanction was issued by the Ministry for technical accommodation for static computer installation at a Command Headquarters (HQ) in December 1985 at a cost of Rs.145.22 lakhs based on the guidelines of Army HQ which included computer complex, external water and electric supply, air-conditioning, fire fighting and lightning protection. The work was released for execution in February 1986. After attending to changes required due to site conditions and users requirements, the Zonal Chief Engineer (CE) concluded a contract in October 1988 after 33 months for construction of buildings including internal services at a cost of Rs.64.71 lakhs. The work commenced

in December 1988 with probable date of completion as March 1990.

When the physical progress of the work was only two per cent, in April 1989, Army HQ intimated Command HQ that in view of the proposal to reappropriate the work, a review may be carried out to avoid financial implications at a later stage. No such review was, however, done. However, subsequently in October 1989 the Zonal CE intimated the Command CE that the Host computer was not likely to be received and the building work in progress might require re-appropriation. The Zonal CE also sought the advice of the Command CE whether to progress the tenders for services like air-conditioning and external electrification. As a follow up tenders for air-conditioning already issued were withdrawn, the scope of external services was restricted and fire-fighting and lightning protection were omitted from the scope of works in August 1990. Jack floors in main hall were replaced by PCC floors (August 1990). The work relating to wall panelling was, however, carried out at a cost of Rs.1.95 lakhs as the contractor had procured the material therefor. Accordingly, the Zonal CE submitted (August 1990) revised Approximate Estimate for Rs.87.80 lakhs as against the sanctioned amount of Rs.145.22 lakhs which was yet to be approved (September 1991). The computer was yet to be procured (March 1992). The overall progress of work on the restricted scale upto June 1991 was 86 per cent.

The Ministry stated in March 1992 that after issue of sanction in December 1985 a study team had been appointed to evaluate the type and size of computer required to be installed at Command HQ; as the system was planned in the late sixtees. Meanwhile, construction had commenced and all possible measures were taken to reduce the expenditure.

The fact that the system was planned in the late sixtees was already known. Yet administrative approval was accorded in 1985 for execution of works for installation of computers whose type and size was not known. This resulted in creation of assets worth Rs.87.80 lakhs whose utility is uncertain.

70. Avoidable extra expenditure in the execution of a project

Based on the recommendations of a Board of Officers

assembled in October 1979 for provision of an administrative block and single living accommodation for a regiment at a station, Ministry of Defence (Ministry) accorded in October 1981 administrative approval for the execution of phase I of the project, at an estimated cost of Rs.70.68 lakhs which was amended to Rs.74.51 lakhs in December 1983. The work was released for execution in January 1982 and was required to be completed within 200 weeks, i.e. by December 1985. The probable date of completion (PDC) was revised to October 1987 with reference to the amendment of December 1983.

Tenders for the building work could not be issued till February 1984 as the layout plan approved by the concerned Corps Headquarters was faulty. The revision (October 1983) of the layout plan resulted in the delay of two years in issuing the tenders.

As no response was received against the tenders of February 1984, fresh tenders were issued again in May 1984. The lowest tender (Rs.119.15 lakhs) was not considered reasonable and retendering was resorted to in November 1984. The lowest tender of firm 'A' for Rs.105.17 lakhs received against this call was considered reasonable by the engineers and a contract was accordingly concluded (May 1985) after obtaining requisite financial concurrence from the Ministry. The increase in the cost of the building work was on account of price escalation during the intervening period from October 1981 to November 1984. The dates of commencement and scheduled completion of work were fixed as July 1985 and July 1987 respectively. However, firm 'A' could not complete the work as scheduled and extensions were granted from time to time up to June 1990 on account of late handing over of sites (670 days); sudden death of active partner (119 days); shortage of electricity (100 days); rain (115 days); and shortage of skilled/unskilled labour (60 days).

The work including other contracts for furniture and external electrification was completed in June 1990 and handed over to the users. Expenditure of Rs.143.37 lakhs had been booked till November 1991 which included Rs.12.64 lakhs on account of payment to the firm towards increase of price index of materials, fuel cost and labour wages during the extended period of the contract.

The Ministry stated (January 1992) that suitable administrative instructions had been issued to MES forma-

tions to avoid delays on account of changes in scope, layout and in handing over of building sites after issue of administrative approval.

Thus, due to inattention to finalisation of correct layout plan, and consequent delay in handing over of the sites, etc. there was a delay of four years and six months in completing the work with consequential increase in cost from Rs.74.51 lakhs estimated in December 1983 to Rs.143.37 lakhs booked till November 1991.

71. Avoidable extra expenditure on account of provision of unauthorised specifications in married accommodation for JCOs/ORs

In April 1988, construction of married quarters of four Army units at Gwalior were sanctioned by a Command Headquarters at a total cost of Rs.2.90 crores.

In October 1988, the Zonal Chief Engineer (CE) concluded two contracts for construction of the quarters with two firms at a total cost of Rs.2.14 crores with dates of commencement and completion as December 1988 and March/August 1990 respectively.

The contracts provided for dado/skirting in the quarters being of Terrazo cast-in-situ layer over 10 mm thick rendering. When the works were in progress (July 1989), the Zonal CE intimated the concerned Commander Works Engineer (CWE) that ceramic tiles in lieu of Terrazo cast-in-situ be provided in dado of WC, baths and kitchens. The CWE (Project), however, pointed out (July 1989) that such superior specifications in the JCOs/ORS quarters were not authorised under the rules. According to the rules, the engineer officer competent to accord technical sanctions may deviate from specifications shown in the sanction, provided, among others, there is no departure from authorised general specifications. However, in violation of the above rule the CE issued deviation orders in February/March 1990 to the contracts for provision of superior specification and in August 1990, the concerned Garrison Engineer issued formal letters to the contractors to incorporate ceramic tiles against the two contracts at an additional cost of Rs.2.40 lakhs and Rs.8.04 lakhs respectively.

On this being pointed out by Audit, the Ministry stated (November 1991) that during execution the provi-

sion of ceramic tiles in lieu of cast-in-situ terrazo has been restricted to 167 quarters at an additional expenditure of Rs.8.04 lakhs.

Thus, provision of skirting and dado with unauthorised specifications resulted in extra expenditure of Rs.8.04 lakhs to the State.

72. Delay in construction of storage accommodation

The Ministry accorded sanction in March 1981 for the provision of 33 ammunition sheds, Static Water Tanks (SWTs) for fire fighting, connected accommodation and required services for an Ammunition Sub-Depot at an estimated cost of Rs.128.02 lakhs. The sanction provided for construction of ammunition sheds with temporary specifications.

While the work was under planning, in July 1981, changes were projected by the users with special reference to the ammunition sheds and the Ministry revised the sanction to Rs.252.40 lakhs in December 1984 fixing the time for completion as three years. This sanction provided for 13 sheds of larger area and 2 sheds of the area as originally sanctioned with permanent specifications.

After the issue of the revised sanction, planning of the work was delayed as the Command Headquarters initiated feasibility studies for underground construction and thereafter dropped the proposal. Tenders for the construction of ammunition sheds alongwith connected services were issued by the Zonal Chief Engineer (CE) in July 1986. The contract was concluded in December 1986 for Rs.1.68 crores after obtaining financial concurrence (FC) from the Ministry. The could not to be completed in the stipulated time of three years mainly due to non removal of trees standing at the work-site by the users for more than two years.

In March 1987, the Commander Works Engineer (CWE) requested the HQ Sub-Area for augmentation of electric and water supply at a cost of Rs.40 lakhs which become necessary due to subsequent changes in the scope of work. Though the accommodation would not be fully functional without this work, it had, however, not been sanctioned so far (February 1992). The sanction issued in 1981 and revised in 1984 catered only for distribution lines.

The contract for construction of SWTs and part of

other than married accommodation (OTM) was concluded in February 1987 at a cost of Rs.26.18 lakhs with the date of completion as July 1988. They were actually completed in June 1989. In November 1987 the Garrison Engineer pointed out that the distribution lines of water supply to twelve SWTs were not provided although SWTs were increased from 9 to 21 in the revised sanction. The proposal for the sanction initiated in November 1987 had not had any response so far (February 1992). The Ammunition Depot stated that non-provision of water supply connections would affect the fire fighting capability and result in loss of ammunition and lives. According to the CE (January 1991) SWTs which were not taken over by the users would be functional after completion of certain works for which financial concurrence was awaited.

Tenders for the balance of the OTM accommodation including external water and electric supply were issued in May 1990. As the amount of the lowest tender (Rs.1.21 crores) plus anticipated liabilities totalling Rs.1.32 crores was more than the sanctioned amount, a case was taken up in November 1990 for obtaining FC for the acceptance of the tender. This case had also not been approved so far (February 1992).

As early as October 1983 the Field Ammunition Depot (FAD) had assessed that due to non-provision of ammunition sheds, the total loss on account of wear and tear of tentage was Rs.6.75 lakhs per year. Although it was admitted that the sheds were not handed over as on 4th January 1991 it was stated that no tarpaulines and traversing were used for storage/protection of ammunition lying in the open. While the Ministry admitted that there was not enough SWTs for fire protection and the requirement for water supply was likely to be sanctioned in the near future, it was also stated that the ammunition was now being stored in the sheds (April 1991). An expenditure of Rs.229 lakhs had been booked against the project upto February 1991.

To sum up:

- Failure to issue a comprehensive sanction for the project in 1981 and 1984, non-clearance of the site by the users and delay in according FC, resulted in non-completion of storage sheds for ammunition and balance of accommodation even after a period of over three years from the scheduled date of completion.

- Although the work was sanctioned for an ammunition depot where SWTs and fire preventive measures were mandatory, sanction was not obtained for the total requirement of water tanks.
- The abnormal delay in completion of works had resulted in non- utilisation of assets created at a cost of Rs.229 lakhs. The manner in which ammunition was stored in the absence of SWTs was not spelt out.

73. Avoidable extra expenditure and delay in the execution of work services

In August 1987, the Ministry accorded administrative approval for the provision of blast pens (small size - 7, large size - 1) with allied services at station 'X' for Rs.242.94 lakhs, (revised to Rs.246.75 lakhs in July 1988).The work was released for execution in August 1987.

Tenders for work services were issued by the Zonal Chief Engineer (CE) in March 1988. The lowest tender of Rs.277.02 lakhs was considered reasonable but could not be accepted as the value of the lowest tender worked out to Rs.333.24 lakhs after taking into account the difference in cost of stores and cost of items to be supplied departmentally free for fixing.

Accordingly, the Zonal CE approached the Engineer-in-Chief (E-in-C) in August 1988 for financial concurrence (FC). The case remained under correspondence between the Ministry of Defence (Finance)/E-in-C and Zonal CE between August 1988 and March 1989 regarding incorrect and unsatisfactory estimates, the cost of the bigger blast pen being unrealistic and on the higher side, necessitating rechecking of soil bearing capacity (SBC), changing of site to a location where SBC of 15 Ton/Sq.M was available, interchanging of site with the smaller blast pen and redesigning the foundation of piles if necessary, etc. This led to retesting of the SBC on ground, redesigning of the blast pen foundations and reassessment of financial requirements and retendering.

It was in January 1990 that tenders were reinvited. The delay in retendering was attributed to the E-in-C's Branch as it took them five months to declassify their standard drawing of blast pens, which were to form part of the tender, from 'secret' to 'ordinary'. The lowest rate obtained was for Rs.330.59 lakhs. As the value of the

lowest tender (after making the necessary adjustments) at Rs.378.20 lakhs, was substantially higher than the approved amount. The Zonal CE approached the E-in-C a second time in May 1990 for FC.

The E-in-C advised in July 1990 to reissue the tenders as the rates of the lowest tenderer had gone up from Rs.277.02 lakhs to Rs.330.59 lakhs i.e. from 9 per cent to 26 per cent.

Accordingly, tenders were reinvited for the third time in September 1990. The lowest rate obtained was for Rs.327.24 lakhs. As the value of the lowest tender after adjustments worked out to Rs.387.62 lakhs, the Zonal CE approached in October 1990 the E-in-C for FC which was accorded in December 1990 and the contract concluded in the same month.

Thus, projection of incorrect estimates by the engineers based on the rates of similar items sanctioned elsewhere rather than on standard drawings and specifications and attendant delays in retesting of SBC and redesigning of blast pen foundations and reassessment of financial requirements led to extra expenditure of Rs.54.38 lakhs due to escalation in price during the intervening period. Further, it delayed the commencement of the work by 33 months.

The Ministry stated (November 1991) that "no estimates could be very accurate for specialised work where ground conditions dictate the design aspect". The fact, however, remains that due to these factors not being attended to in proper time, retendering had to be resorted to thrice over a period of about three years involving extra expenditure of Rs.54.38 lakhs due to escalation in price during the intervening period; besides delayed commencement of the work.

74. Defective overlay of runway

In November 1984 Government accorded a go-ahead sanction for Rs.9.50 lakhs towards preparatory work for re-surfacing of a runway in a station. Subsequently sanction for the whole project was accorded in August 1985 at a cost of Rs.225.88 lakhs. The work to be executed was provision of concrete overlay (rigid pavement) and flexible overlay (bituminous).

A contract for the work was concluded by a Zonal Chief Engineer in November 1985 for Rs.218 lakhs. The design mix approved by the Central Road Research Institute (CRRI) was to be adopted in the overlay work. The work which was commenced in November 1985 was actually completed in July 1988 pending rectification of certain defects

The contractor had rectified the defects notified alongwith the completion certificate as well as during the maintenance period to some extent but not fully. The engineers had to carry out minimum essential repairs at a cost of Rs.0.95 lakh to keep the runway in operational fitness but an amount of Rs.0.84 lakh only was included for recovery in the final bill on this account.

A joint inspection of the runway was carried out (15th July 1989) by representatives of CRRI,engineers and the users (Air Force) before expiry of the maintenance period. The report submitted after inspection revealed that about 66 panels in rigid pavement had developed corner cracks mainly due to poor bonding between overlay and the original existing pavement. Full replacement of certain panels and partial replacement of other panels were recommended.

Based on the recommendations a notice was served on the contractor in July 1989 directing him to rectify all the defects pointed out within three months failing which the work was to be done at his risk and cost without further notice. The contractor, however, did not respond. A fresh contract was concluded in July 1990 at the risk and cost of the defaulting contractor for Rs.26.41 lakhs. The work was completed in March 1991 at a cost of Rs.20.37 lakhs.The cost of the rectification work has not been recovered so far from the defaulting contractor (June 1991) as the case was under arbitration.

The Ministry stated in October 1991 that the cracks had occurred due to bad workmanship by the contractor.The fact,however,remained that the work had not been supervised properly by the Army engineers during its execution to ensure the quality of the workmanship by the contractor. This resulted in additional expenditure of Rs.20.37 lakhs on rectification of defects noticed subsequently.

75. Construction of sub-standard married accommodation

In October 1983 and January 1984 Headquarters (HQ)

Southern Command, Pune accorded two administrative approvals for provision of married quarters for 12 Junior Commissioned Officers (JCOs) and 30 for Havildars and 112 for Other Ranks (ORs) at Jodhpur at a total estimated cost of Rs.97.50 lakhs. In October 1984, a combined contract for their construction was concluded by the Chief Engineer for Rs.83.26 lakhs. The work was completed in May 1987 at a cost of Rs.91.10 lakhs and taken over by the Military Engineer Services (MES) subject to rectification of the defects which included cracks in the roof plaster at certain places by the contractor by 31st May 1987. The MES failed to get the defects rectified at the risk and cost of the contractor. Seventy two quarters were allotted to the units/formations between July 1987 and October 1987, without getting the defects rectified, On the recommendations of the user Board that there was no apparent defect /damage in the accommodation.

In July 1989, the Garrison Engineer (GE) concluded a contract for repairs to the roofs of certain buildings for a sum of Rs.3.69 lakhs which included a few of the above defective quarters. When the water proofing treatment to the roofs was in progress, roof slabs in two blocks (24 quarters) showed sign of distress with roof plaster spilling off. The repair work was suspended pending detailed investigations and determination of the nature and scope of the rectification/repair work involved by a technical Board. However, repairs to the remaining blocks were undertaken and recovery of Rs.0.20 lakh was effected from the final bill of the defaulting contractor, issue of tender to whom has also been banned as stated by the Ministry.

In December 1989, the GE approached the Commander Works Engineer to detail a Technical Board of Officers (Board) to investigate the structural safety and suggest remedial measures. The Board which was convened in January 1990, on seeing the imminent danger of collapse of the roof slabs advised immediate vacation of the quarters in the first location and continuous monitoring of the structural safety of the roof slabs of the quarters situated in the second location with a view to initiate timely action for vacation to avoid any loss of life and damage to the property of the occupants. The Board observed that no permission of the GE was on record permitting the contractor to execute RCC work by volumetric batching; no periodical checks of the volume to weight ratio of coarse and

fine aggregation duly signed by the contractor and the GE as required under the contract were on record; the number of cube tests carried out was not as per the requirement of the contract; although there was a mention in the Works Passing Register about laying of RCC roof slab along with water proofing treatment, there was no mention in the Works Diary about bringing to site necessary water proofing compound by the contractor. It also recommended that the advice of specialist firms for strengthening/replacement of affected slabs could be sought and the rectification/replacement got done at the risk and cost of the contractor.

Seventy two quarters costing Rs.45.74 lakhs were ordered for vacation and were lying vacant since August 1990. A Court of Inquiry (C of I) convened to pinpoint responsibility with directions to complete their proceedings by 15th June 1990 was also yet to finalise its report (June 1991).

The Ministry stated (February 1992) that the Staff C of I to pinpoint the responsibility for the lapses in construction is in progress and the disciplinary and administrative action will be undertaken on finalisation of the same. In the meantime, the original contractor has come forward to reconstruct the defective work at his own cost. Twenty four quarters are likely to be completed and handed over back to the users by March 1992 and the remaining by December 1992. Alternative accommodation has been allotted to JCOs/ORs.

The fact, however, remains that due to laxity in supervision by the engineers, 72 substandard quarters costing Rs.45.74 lakhs had to be got vacated in August 1990 and were since lying vacant in unusable condition, pending rectification of defects (February 1992).

76. Collapse of a double storey building

In October 1981, Ministry accepted the necessity for provision of other than married accommodation for a Division Engineer Regiment at Station 'A' at an estimated cost of Rs.103.93 lakhs and accorded administrative approval to Phase I of the project for Rs.45.12 lakhs amended to Rs.46.30 lakhs in January 1984. In November 1983, the Zonal Chief Engineer (CE) concluded a contract with firm 'X' for building work including allied internal and external services for Rs.37.01 lakhs. The dates of

commencement and completion of the work were November 1983 and July 1985 respectively. The delay in the conclusion of the contract was mainly due to the time taken by the users in approving the site.

Before handing over the building to the Military Engineer Services (MES) by firm 'X', a double storeyed singleman barrack collapsed on July 17, 1985 as a result of which 22 labourers of firm 'X' died on the spot and 22 others were injured. A departmental Court of Inquiry was ordered by the Chief Engineer on July 20, 1985 to investigate the circumstances under which the building had collapsed. The Staff Court of Inquiry which was finalised in January 1986 held three Commissioned Officers, three Civilians and three Junior Commissioned Officers responsible for the collapse due to using materials below specifications, non-provision of protective work, allowing more plinth height than specified, and lack of supervision/control over the work as well as subordinate staff. Disciplinary action against eight out of the nine persons had been completed and action against one civilian was in progress.

Firm 'X' did not progress the work after the mishap and the contract was therefore terminated by the Zonal CE in February 1986 at the risk and cost of firm 'X'. A sum of Rs.6.56 lakhs on account of material issued to the contractor was yet (January 1992) to be recovered. For the balance work another contract was concluded in November 1986 with firm 'Y' for Rs.26.32 lakhs. The work was completed in June 1988 and handed over to the users. The contract catered for provision of two soakage pits. Instead of mentioning Rs.5400 per soakage pit in the unit rate column of the contract, Rs.5400 per 10 cm depth was mentioned by the department in the contract and also in the earlier contract. The firm, therefore, insisted for the payment of Rs.11.88 lakhs at the rate laid down in the contract agreement for two soakage pits. The department stated in December 1990 that this item was omitted through a deviation order. The dispute had been referred to an arbitrator whose award was still awaited (January 1992). The department incurred an extra expenditure of Rupees six lakhs on execution of the balance work at the risk and cost of firm 'X'.

The Ministry stated in January 1992 that no recovery could be made from firm 'X' as they obtained a court stay order and further the department's claims were still un-

der arbitration. The Ministry added that the circumstances under which the error occurred in mentioning the unit rate of soakage pits in the main contract and was repeated in the risk and cost contract were being ascertained from the officer concerned

Thus, inadequate supervision over the work of the contractor had led to collapse of a building and termination of the contract. The extra expenditure of Rs.6 lakhs on execution of the balance work was yet (January 1992) to be recovered from the contractor at whose risk and cost the balance works were executed. An amount of Rs.6.56 lakhs on account of stores issued to him were yet to be recovered (January 1992). Further incorrect drafting of the contract resulted in an avoidable claim of Rs.11.88 lakhs by another contractor against the department and the matter being referred to arbitration.

77. Collapse of overhead water tank

Construction of an overhead water tank of 2.27 lakh litres capacity was completed in January 1982 at Deolali at a cost of Rs.1.87 lakhs. The work was based on the contractor's design approved by the Army engineers and expected to last 25 to 50 years.

The reservoir collapsed in September 1988. A Court of Inquiry who investigated the collapse attributed (November 1988) it to the failure of the Garrison Engineer (GE) to observe the variation in the foundation soil and get the soil investigation done. The Maharashtra Engineering Research Institute who were requested in November 1988 to carry out detailed soil investigation concluded (January 1989) that the foundation design was done on the basis of adhoc assumptions and was unsafe. While the GE was awarded (July 1991) a censure, the enquiry recommended (October 1990) that the loss of Rs.1.63 lakhs being depreciated value of the tank may be borne by the State. Since immediate replacement of the tank was recommended to relieve hardship to the troops, a tank of equal capacity was sanctioned by the Sub-Area Commander in January 1991 at a cost of Rs.8.45 lakhs. The work was yet to commence (January 1992).

Ministry in January 1992 admitted that no detailed soil investigation was undertaken prior to commencement of this work and the design was approved and revised based on past experience and visual observation of the

soil strata. Ministry further added that they had issued instructions for carrying out detailed soil investigation in all such projects in future; and that difficulty was being experienced by the troops in the station in the absence of the tank.

78. Defective construction of boundary walls

Case I

Sanction was accorded in July 1984 by a Maintenance Command for provision of 5000 running metres (RM) of boundary wall of 1.30 metres height around married officers accommodation at Deolali at an estimated cost of Rs.14.92 lakhs amended to Rs.19.62 lakhs in June 1985. The contract for the work was concluded by the Commander Works Engineer (CWE) in May 1985 at a cost of Rs.14.34 lakhs. The work was completed on 31st March 1986 at a cost of Rs.16.33 lakhs and certified as satisfactory by the Garrison Engineer (GE).

During the execution, while the work had progressed upto 40 per cent, portions of the wall collapsed due to strong wind conditions. The users complained to the GE in September/October 1985 about the collapse and poor standard of work being executed. Two months after completion, 30-40 metres of the compound wall collapsed in June 1986 at six points. In July 1986, another portion collapsed. The users refused to take over the compound wall stating that the work was of inferior quality and insisted on thorough investigation and rectification of defects. A preliminary investigation was conducted by the CWE in August 1988 i.e. two years after completion of the work. The reasons for the delay were correspondence on the matter between MES and users coupled with delay in obtaining reports/explanation for collapse of the compound wall from the executive/supervisory staff. The report attributed the collapse due to natural reasons, lack of adequate curing to the wall and lack of supervision on the part of executive/supervisory staff. In September 1988, Zonal Chief Engineer (CE) directed CWE to take up the matter with the contractor to make good the damages including reimbursement of expenses incurred by the department. The contractor had refused to carry out the repairs as the maintenance period was over. The department had, by February 1989 incurred an expenditure of Rs.0.75 lakh on repairs.

In August 1989, the CE stated that the collapse of

the wall was due to lack of planning and defective construction and suggested that the wall stretch along the river bank would require to be replaced with chain-link/barbed wire fencing. The remaining collapsed portions would be reconstructed by taking the foundation below the depth of black cotton soil and providing proper cross drainage works. In April 1990, the GE suggested replacement of the boundary wall with high security fencing and regularisation of the loss involved after holding a Staff Court of Inquiry (C of I).

A Technical Board of Officers, convened by the CE in May 1990 concluded that the collapse was due to poor construction, use of sub-standard materials, inadequate cross drainage, bad workmanship, poor supervision, etc. There was no record of the CWE having visited the site. The CE concurred with the opinion of the Technical Board and directed disciplinary action to be taken against the concerned supervisory/executive staff. The wall remained in its collapsed form (October 1991).

Case II

Sanction was accorded in December 1985 for provision of low security wall and security fencing around the airfield at the station at an estimated cost of Rs.22.15 lakhs. The contract for the work was concluded by the CWE in November 1986 at a cost of Rs.17.26 lakhs and construction was completed in April 1988 at a cost of Rs.18.59 lakhs.

In July 1989, a portion of the wall on the south side collapsed. In January 1990, another portion of the wall collapsed on the west side. The users did not take over the compound wall since the construction was sub-standard. The matter was reported by the Station HQ to the Sub-Area in February 1990, requesting that a Staff C of I be ordered to pinpoint the responsibility for sub-standard construction. The C of I was convened in February 1991.

A Technical Board of Officers convened by Zonal CE assembled in May 1990, concluded that the collapse was due to poor workmanship, poor quality of materials used and lack of supervision. CE concurred with the opinion of the Technical Board and ordered that the contractor should be banned for two years and disciplinary action be taken against the concerned supervisory/executive staff.

The Ministry stated in October 1991 that disciplinary action has been initiated against the executive/supervisory staff held responsible in respect of Case I. They added that the contractor has been banned from execution of civil works i.e. buildings and roads. Staff C of I proceedings were pending with HQ Maintenance Command IAF for approval and finalisation. As regards the second case the Ministry stated that the C of I had not yet been finalised.

Thus, due to poor workmanship, use of sub-standard material and lack of supervision portions of compound walls constructed at a cost of Rs.35.67 lakhs in March 1986 and April 1988 collapsed necessitating repair and reconstruction which were yet to be carried out (October 1991).

79. Provision of security wall for a Naval Establishment

In order to replace the existing corroded and broken barbed wire of 7200 running metres (RM) around Establishment 'X' for security reasons, a Board of Officers recommended in 1978 provision of chain link fencing in three phases at a total cost of Rs.6.57 lakhs as under:

Phase I	- 3200 RM	- Rs.2.92 lakhs
Phase II	- 2500 RM	- Rs.2.28 lakhs
Phase III	- 1500 RM	- Rs.1.37 lakhs

The proceedings were approved by the Flag Officer Commanding-in-Chief, in April 1980 subject to the proviso that only Phase I may be executed with a honey comb wall instead of chain link fencing. The work was contracted for in November 1980 for Rs.6.41 lakhs. During the course of work, the specification for a portion was changed by the users to a solid wall. The work was completed (November 1982) at a cost of Rs.6.64 lakhs. No cross drainage system was provided. Holes were provided at ground level to drain out rain water. On account of paucity of funds due to increased scope of work, the wall was left unplastered.

In July 1985, the users reported large breaches and approximately 300 RM was required to be repaired/reconstructed. In addition, a portion collapsed with the onset of the monsoon creating yet another breach. Damages were attributed to water logging, non-plastering and non-

provision of proper cross drainage. The Engineers admitted (April 1986) that drainage was not catered for want of ground data.

While special repairs sanctioned in July 1986 were completed in July 1987 at a cost of Rs.3.17 lakhs, a fresh portion of the wall not subjected to the special repairs collapsed. This was reconstructed (September 1989) at a further cost of Rs.3.32 lakhs partly through normal maintenance and partly through another work sanctioned in July 1987.

In the meantime, another 240 RM of the wall was constructed in 1983, under a project unconnected with construction of security fencing/wall, at a cost of Rs.2.72 lakhs.

Further construction for 800 RM at an estimated cost of Rs.4.62 lakhs under Phase II contracted in February 1985 was completed in June 1986 at a cost of Rs.4.88 lakhs.

Against an administrative approval accorded in July 1987 by Command HQ 'Y' under Phase III-A for construction of another 1350 RM a contract was concluded in December 1987 at a cost of Rs.7.31 lakhs and completed at Rs.9.08 lakhs in September 1989 which left 1610 RM against the total requirement of 7200 RM yet to be taken up.

In July 1989, the users proposed to delete 480 RM of the wall from Phase III as that area had adequate security cover. Administrative approval was accorded in August 1990 for construction of masonry compound wall for another 945 RM at an estimated cost of Rs.9.20 lakhs in Phase III-B. The work was yet to be taken up (December 1991).

The Ministry stated (January 1992) that instructions had been issued to Naval Headquarters to investigate the reasons for the frequent breaches/collapses and fixation of responsibility. They also added that :

- The collapses were due to heavy water logging in the area on account of excessive rainfall and unforeseen vagaries of climatic conditions.
- Expenditure incurred towards ordinary repairs (Rs.2.66 lakhs) was of a routine maintenance nature

and was necessary since Goa is subjected to heavy rainfall for four months in a year which has detrimental effect on the surfaces of masonry work and more so in the case of compound walls.

The Ministry's reply, however, does not take into account the fact that collapses attributed to water logging had occurred due to non-provision of cross drainage system and non-plastering of wall and heavy rain during monsoon in a coastal area was well known and had been taken note of by the Board of Officers in 1978. Military Engineers had been building structures in the station since sixties.

To conclude :

- Non-provision of cross drainage and non-plastering resulted in an additional expenditure of Rs.6.49 lakhs on special repairs/normal maintenance.
- So far out of 7200 RM to be fenced only 5700 RM has been completed.
- The frequent breaches/collapses were yet to be got investigated by a Court of Inquiry (January 1992).

80. Faulty construction of storage accommodation

A contract for construction of magazine buildings at a station was concluded for Rs.9.30 lakhs in January 1985 by the Military Engineer Services (MES). The work was to be completed by October 1985. The work was, however, completed by the contractor only in February 1986 at a cost of Rs.10.30 lakhs. The buildings were handed over to the users in May 1986.

In July 1988, certain cracks in the walls of one magazine building was reported by the Infantry Brigade to their Divisional Headquarters (HQ). It was apprehended that the building might collapse during the approaching rainy season and immediate action was requested to avoid loss of life and ammunition.

Similar cracks were reported by the Sub-Area HQ in the remaining two magazine buildings in May 1989 and MES authorities were advised to conduct a technical enquiry to establish the cause of development of cracks in the newly constructed buildings. The findings of the technical Board of Officers (Board) constituted in July 1989 reve-

aled (August 1989) that the cracks were due to the use of very poor sand like masonry mortar. The Board, however, suggested obtaining of a second opinion of a specialist agency like Central Buildings Research Institute (CBRI). The Zonal Chief Engineer (CE) stated (August 1989) that disciplinary/administrative action was being initiated against the MES officers held responsible for the lapse.

In October 1989, the Zonal CE approached the CE (Design and consultancy) Pune for suggesting rehabilitation measures. In his report, the CE (Design and consultancy) mentioned the causes for the problem and suggested remedial measures for strengthening of the masonry work and avoidance of certain design short-comings noticed in the construction of the magazine buildings.

As the three magazine buildings had been rendered unsafe, a Board of Officers was ordered in April 1990 for the purpose of examining the types of deviations required to be sanctioned for the storage of ammunition of the users in alternative accommodation. A minor work costing Rs.24,000 was sanctioned and executed for provision of lightning conductors in three barracks where the ammunition has been shifted.

The Commander Works Engineer (CWE) also got the matter investigated (October 1989) through CBRI Roorkee, who concluded (August 1990) that the buildings were not safe as they could not resist horizontal loads and structural movements in them due to lack of adequate interfacial bond of mortar with the bricks and fluid condition of mortar. While suggesting certain strengthening measures for the structures, the CBRI also cautioned that the remedial measures require high level of supervision and quality construction and in case the desired level cannot be ensured, dismantling of the buildings and reconstruction would be ideal. An expenditure of Rs.30,000 was incurred in connection with the investigation/suggestion of remedial measures.

In July 1990, Sub-Area HQ ordered a Court of Inquiry (C of I) to investigate the development of cracks and structural failures in the magazine buildings and to submit its proceedings by August 30, 1990. The Court was also asked to ascertain and indicate if any other buildings constructed during the same period were also likely to be rendered unsafe in the near future as a result of similar deterioration. The proceedings of this C of I were stated

to be under examination (October 1991).

Thus, inadequate supervision of the contractor's work by the MES to ensure correct mix of cement and sand, bond of mortar with bricks, hardening of mortar etc. resulted in defective construction of magazine buildings costing Rs.10.30 lakhs and consequential non-utilisation thereof. In addition Rs.0.54 lakh was also spent on investigation/consultancy and other works relating to lightning protection and shifting the ammunition to other buildings.

Ministry admitting the facts of the case stated (October 1991) that the buildings were not in use as they were considered unsafe.

81. Redundant payment of service charges to a Cantonment Board

In May 1954, Government decided that Departments of Central Government will make payments to Cantonment Boards for services like water, electricity, scavenging or other services of general nature such as street lighting, town drainage, approach roads connected to Government properties etc. which are rendered by Cantonment Boards. However, this was not to be in the form of tax (as Central Government properties are exempt from taxes under Article 285(1) of the Constitution) but compensation for services rendered in quasi-contract.

The quantum of service charges payable by Central Government to local bodies was fixed in 1967 as under:

- in case of colonies which do not directly avail of civic services within the area and are self sufficient in all respects, payment of service charges will be restricted to 33 1/3 per cent of the normal rate of property tax applicable to private properties;
- in respect of colonies where only a partial use of the services is made, service charges will be paid as 50 per cent of the normal property tax rate;
- in respect of colonies where all the services normally provided by the municipal body to the residents of other area within its limits are being availed of, service charges will be paid as 75 per cent of the property tax rate realised from private individ-

uals.

Therefore a distinction was drawn on the amount of service charges to be levied by the local bodies when none, part or full services were being availed of.

Payment of service charges to the Cantonment Boards based on the above order was discontinued by the Ministry of Defence (Ministry) between January 1976 and October 1982. In November 1982 it was decided by the Government that in respect of Central Government properties belonging to the Ministry, service charges will be calculated at a uniform rate of 33 1/3 per cent of the property tax/house tax leviable (irrespective of whether full, part or no services were rendered by the Cantonment Boards). The Government letter of March 1967 was modified to this extent.

It was therefore clear from the Government orders of 1982 that payment of service charges was re-introduced subject to the provisions that even if establishments of the Ministry utilise full services available with Cantonment Boards payment made to them will have to be restricted to 33 1/3 per cent of the property tax leviable on private individuals. The question of separate service charges being made to the Cantonment Board for their services either of general or specific nature did not therefore arise under any contingency.

A test check of payments made by the Departments during April 1984 - December 1990 in Allahabad revealed that despite admitting, sum of Rs.254.69 lakhs towards service charges for the payment to the Cantonment Board computed at the uniform rate of 33 1/3 per cent laid down by Government for the period from 1984-85 upto December 1990, by the Army, the local Military authorities also made additional payments of Rs.63.93 lakhs during the same period under separate agreements towards conservancy, sanitation and hygiene for the period from 1984-89 upto December 1990.

The Ministry stated (January 1992) that the quantum of service charges fixed at a flat rate of 33 1/3 per cent in respect of Government properties was in lieu of property/house tax, which did not cover taxes in lieu of services like removal of rubbish and night soil etc. for which local military authorities entered into a contract with respective Cantonment Boards.

The Ministry's contention was not tenable in that the maximum quantum of service charges fixed by the Government was limited to 33 1/3 per cent which cover both specific services such as scavenging etc. and general services like street lighting, town drainage, approach road connecting the Central Government properties etc. being rendered by the Cantonment Boards. Besides, the rules were specific that this payment was not in lieu of house tax.

82. Delayed/non-preferring of reimbursement claims

As per cement control order of 1967, the price of cement is uniform throughout India on the basis of free on rail (FOR) destination railway station. The actual railway freight paid on such movements were being reimbursed to the cement producers from the pool maintained by the cement controller. In July 1975, the freight pooling system was extended according to which District Headquarters which did not have a railway station within the same district or were situated at a distance more than 50 KMS from the railway station in any neighbouring district would qualify for subsidy from the freight pool in respect of freight incurred on movement of cement by road.

An examination of the procurement of cement vis-a-vis expenditure incurred on their transportation by road and claiming of reimbursement of the expenditure incurred on transportation in four Military Engineer Services Divisions revealed the following:

(i) Between October 1984 and December 1985, 10302.90 tonnes of cement was procured by Division 'A' and transported to respective locations by road at a cost of Rs.27.40 lakhs based on which reimbursement claims were to be preferred. On this being pointed out in Audit (November 1985), ten claims for reimbursement of freight charges of Rs.14.62 lakhs in respect of 15234.35 tonnes of cement procured were preferred in March 1986. Out of these, claims amounting to Rs.11.17 lakhs preferred after expiry of six months were returned by the firm for obtaining waiver of time limit in excess of six months from the Development Commissioner for Cement Industry which was still awaited (January 1992). The claims were still pending with the Cement Factory (January 1992).

(ii) In March 1984, 785.75 tonnes of cement was procured by Division 'B' and transported by road. A claim of Rs.2.72 lakhs towards extra expenditure on transportation

by road preferred in December 1984 was still pending for reimbursement (January 1992)

(iii) In Division 'C', 3103.06 tonnes of cement was transported from the location of the cement factory to the Division by road between February 1984 and April 1987. Claims for Rs.6.65 lakhs were preferred between July 1985 and April 1987. The reimbursement was still awaited (January 1992).

(iv) Between March 1986 and May 1986, Division 'D' procured 7836.10 tonnes of cement on which freight charges amounting to Rs.6.72 lakhs was incurred. Five claims for reimbursement were preferred between April 1986 and December 1986 and of these, two claims for Rs.3.36 lakhs preferred in April 1986 were returned by the cement factory for re-submission in revised format in October 1986. This was done in December 1986. The balance claims were stated (January 1987) by the cement factory to be incomplete and the Garrison Engineer (GE) was asked to complete the requirement within the time limit. The completed claims furnished by the GE to the cement factory in April 1987 were still pending with them (January 1992).

Further a quantity of 4290.40 tonnes of cement was procured and transported by road from the location of the factory to the Division during September 1986 to December 1986. In February 1987, five claims for reimbursement of road freight amounting to Rs.6.43 lakhs preferred by the Division were returned by the cement factory in March 1987 as they were stated to be incomplete. The claims were re-submitted in April 1987 and were pending with the cement factory (January 1992).

The Ministry stated in January 1992 that position in respect of other Military Engineer Services divisions was being ascertained and would be intimated separately.

To sum up;

- Claims for reimbursement of freight amounting to Rs.37.14 lakhs preferred during December 1984 to April 1987 were yet (January 1992) to be realised from cement factories indicating lack of serious efforts by Army Headquarters for expediting the reimbursement.

83. Delay in planning and execution of ancillary works for utilisation of Hangar facilities

Sanction for erection of a hangar at Bombay for Rs.19.47 lakhs was accorded by Central Air Command in March 1985. The work was to be executed by the International Airport Authority of India (IAAI) as an Agency Work and accordingly Rs.19.47 lakhs was deposited with them by Military Engineer Services (MES) in November 1985. The hangar work contracted in October 1986 was completed in May 1988.

During execution of the project by IAAI, the user viz. Air Force (AF) authorities intimated (January 1987) MES about the requirement of essential ancillary works such as link taxi track, pavement, apron and drain in front of the hangar. These additional works were approved in March 1987 at a cost of Rs.28.95 lakhs and an amount of Rs.30.87 lakhs was deposited with IAAI by the MES between December 1987 and January 1989. The ancillary works were completed by IAAI in July 1989.

A Board of Officers (Board) assembled in October 1989 to take over the completed hangar and ancillary works concluded that the hangar facilities could not be taken over since IAAI had not made any provision for water, electricity and sewage connection although AF had funded them for these works. IAAI demanded a further sum of Rs.12.10 lakhs for these service connections. However, revised administrative approval was accorded (August 1990) for Rs.38.95 lakhs based on which a further instalment of Rs.10 lakhs was deposited with IAAI in November 1990 thus bringing the total deposit against the work to Rs.40.87 lakhs. Though, the work for service connections due for completion in May 1991 was stated to have been completed, testing and commissioning of fittings were held up for want of power supply on which there was dispute as to who had to initiate action for obtaining power supply from Bombay Suburban Electricity Supply (BSES) viz. the MES or Air Force. The AF authorities informed Audit (May 1991) that the hangar was not put to any use since the work relating to electricity and water connections were yet to be completed. It was further stated by them that in the absence of the above, makeshift arrangements were being made; water was being carried by water bousers and electricity was being supplied by movable generators to meet the operational requirements involving an expenditure of Rs.11500.

Ministry stated in October 1991 that periodic Air Defence exercises have since been conducted from the New Hangar. They added that in the absence of the Board proceedings pertaining to this work it could not be conclusively said that the ancillary work services were not covered in the initial estimates eventhough the estimates had to be revised to include the ancillary work services. The amount incurred on the makeshift arrangements could not have been avoided even with permanent arrangement of water and electricity in the hangar as in any case the payment would have had to be made to the State Government for actual consumption of electricity and water. According to the Ministry the probable date of completion of ancillary works (service connections) has been revised to January 1992.

The fact, however, remains that ancillary works/service connections required for putting the hangar constructed in May 1988 to use was yet (December 1991) to be completed even though Rs.40.87 lakhs had already been paid to IAAI. The effectiveness with which the operational requirement was being met in the absence of provision of water and electricity on a regular basis was not indicated.

Further, the work relating to service connections though completed could not be tested/commissioned for want of power supply for which action had not been initiated (October 1991). No co-ordinated efforts were also made by MES and users with IAAI for the timely completion/commission of the facilities.

84. Deterioration of plants due to delay in backloading

Tools and plants (T&P) utilised by the Military Engineer Services (MES) are required to be backloaded to Engineer Stores Depots (ESD) when they are to be overhauled or when they have been awaiting spares at site for over four months. Equipment to be discarded are also to be backloaded to depots. These instructions issued in March 1974 by Army Headquarters (HQ) had been reiterated from time to time to all units.

Despite the above, eight special T&P required for a specific work/project were held by a Garrison Engineer (GE) from 1975 to 1989, while work on the project for which they had been brought had been completed in September 1976. Cost of the eight T&P was Rs.18.85 lakhs. The

case for backloading them was initiated only in January 1978 by the Zonal Chief Engineer. Although it was the responsibility of the nominated ESD Kankinara to accept such plants, that ESD agreed to accept only three motorised scrapers in July 1979 out of the eight items of T&P. The GE placed a demand on the Railways only in January 1980 for five wagons and one 35 tonne crane for loading these scrapers and simultaneously moved the three plants to the Railway siding deploying three watchmen for watch and ward. After a lapse of one year and four months, the Railways informed (April 1981) the GE that while wagons had been placed in the military siding the required cranes may be arranged by him. While the demand for wagons was cancelled (December 1981), in the absence of the crane the plants continued to remain at the siding for ten years (November 1990) alongwith the watch and ward staff. No action was taken for backloading of the remaining five plants costing Rs.7.87 lakhs which were still held with the GE (January 1992).

During this period, in April 1987, Army HQ ordered transfer of two of the three motorised scrapers to another unit after ensuring hundred per cent serviceability. The GE indicated (May 1987) that the plants had been lying unused since 1977 and required repairs, facilities for which were not available with him. However, Army HQ contended (June 1987) that since these plants were given on operational basis it was obligatory on the part of GE to maintain them in serviceable condition. They directed that they should be repaired and transferred to the new unit or in the alternative a Court of Inquiry (C of I) should be convened to investigate circumstances under which the plants had been rendered unserviceable.

An examination of these plants by the workshop authorities in February 1988 indicated that due to non-maintenance and continuous exposure to weather at the railway siding the engines had jammed, rubber components had perished and instruments on central panel were found damaged/missing. This was despite the expenditure of around Rs.2.97 lakhs incurred on watch and ward from January 1980 to November 1990 from the existing establishment. No C of I has been held so far.

In April 1989 hire charges amounting to Rs.23.95 lakhs including Rs.9.10 lakhs for the two motorised scrapers was debited to the project covering the period upto July 1989, although in accordance with the orders on

the subject hire charges are not to be levied from the date the plants are no longer utilised on the project/service.

The audit findings were accepted (January 1992) by the Ministry.

To conclude:

- Eight T&P (cost:Rs.18.85 lakhs) requisitioned for specific project were not backloaded to the concerned ESD after completion of the project (September 1976), resulting in holding of five plants (cost:Rs.7.87 lakhs) with the GE between September 1976 and January 1992 and three plants (cost:Rs.10.98 lakhs) between September 1976 and January 1980, without any utilisation.
- Three plants were moved (January 1980) to railway sidings without ensuring availability of suitable crane to load them in the wagon and remained in the railway sidings till November 1990, exposed to vagaries of weather, resulting in deterioration; besides incurring around Rs.2.97 lakhs on deployment of watch and ward at the sidings between January 1980 and November 1990.
- Hire charges amounting to Rs.23.95 lakhs, covering the period between September 1976 and July 1989, were debited to the project in contravention of the existing orders that "hire charges are not to be levied from the date the plants were no longer utilised on the project/services".

85. Overpayment due to wrong operation of a contract

In October 1986, the Ministry sanctioned resurfacing of a runway at a station at an estimated cost of Rs.126.06 lakhs. One of the items of work included in the sanction was camouflaging of airfield pavements for 1.97 lakh square metres (Sq.M.). According to the contract the area required to be actually painted was approximately 60 per cent of the gross area i.e.1.97 lakh Sq.M. The Commander Works Engineer concluded (March 1989) a contract for covering a gross area of 3.3 lakh Sq.M. with camouflage painting. Further, measurement for the purpose of making payment was to be recorded as gross area and not the actual area of surfaces painted.

The tenderers were deemed to have taken into consideration the above point while quoting their rates. The contract also stated that the percentage of treated and untreated surfaces were approximate and no claim on account of any variation in their quantities was acceptable. The work commenced in April 1989 and was completed in January 1990 at a cost of Rs.23.23 lakhs. Notwithstanding the provision in the contract the contractor was paid for a gross area of 3.97 lakh Sq.M. as against 3.3 lakh Sq.M. provided in the contract. The amount paid for 0.67 lakh Sq.M. excess area worked out to Rs.3.92 lakhs.

According to the Technical Examiner of the command, the quantity of paint used in the work was only 24,120 litres against 38,892.82 litres required as per technical literature of the manufacturers. Use of less quantity of paint resulted in overpayment of Rs.10.41 lakhs to the contractor. Total overpayment including the payment of Rs.3.92 lakhs for the excess area amounted to Rs.14.33 lakhs.

The Ministry stated in November 1991 that the quantity of paint used on the work was not less than the quantity required based on the covering capacity of the paint. The manufacturers of the paint, however, expressed their inability to the technical examiner of the Command to indicate the covering capacity of paint with 100 per cent dilution provided in the contract as dilution of more than 50 per cent would not give the desired product performance and the question of indicating the covering capacity with 100 per cent dilution (as done in this case) did not therefore arise. In regard to the excess surface for which payment, was made, the Ministry added that the quantities of items executed were within the deviation limit as specified in the contract. This contention is also not tenable as according to the contract no variation in the quantity of treated and untreated surfaces was acceptable. Further, the Garrison Engineer had intimated Audit in October 1990 that gross area of the runway was 3.3 lakh Sq.M. only, whereas payment was made for a gross area of 3.97 lakh Sq.M.

86. Sanction of an integrated sports complex

Regulations provide that where a number of services in a station or area are necessitated by a change of plan or policy or location of units, provision thereof will be considered as for one project. All projects beyond the

powers of approval of the authorities lower than the Ministry will be submitted for its acceptance of necessity. Once the necessity for such projects has been accepted by Government, different phases thereof be sanctioned by the lower competent authority separately. However, no projects can be split up merely to bring it within the powers of sanctioning authority.

Notwithstanding these orders, Naval Headquarters (HQ) accepted the necessity and accorded three sanctions in November/December 1987 for construction of officers institute (cost:Rs.99.57 lakhs), athletic track, covered pavilion/stands, playing fields, tennis courts etc. (Rs.90.20 lakhs) and gymnasium (Rs.114.425 lakhs) at Colaba, Bombay. In February 1988 yet another sanction was accorded by HQ Western Naval Command (WNC) for provision of two squash courts also at Colaba, Bombay (Rs.27.35 lakhs). As these work services were to be located at the same location, the works should have been treated as one and case submitted to Government for acceptance of necessity in accordance with the rules. Instead, the works were split up to bring these within the powers of the Naval HQ and HQ WNC. All these works including swimming pool, sanction for which was accorded earlier by Naval HQ in February 1983 for Rs.64.35 lakhs, were clubbed under a contract, concluded in August 1989, by a Zonal Chief Engineer (CE) at a cost of Rs.307.47 lakhs as it was indicated by the Zonal CE in January 1989 that this was an integrated sports complex comprising all these facilities. Further, superior specifications like polished marble stones, wooden flooring, glass panelling, glass walls and acoustic treatment at a cost of Rs.26.09 lakhs, not authorised as per scales laid down by Government, were included in the contract.

During the processing of the above contract in February 1988, sanction was also accorded by HQ WNC for provision of two covered badminton courts at a cost of Rs.30.37 lakhs. This sanction was, however, cancelled in September 1988 as Naval HQ and CE pointed out that the above sanction was not within their financial powers. Accordingly, Naval HQ accorded sanction in February 1989 for provision of two covered badminton courts at Colaba, Bombay at a cost of Rs.14.80 lakhs, treating them as item of special works. This sanction was objected to in Audit in April 1989 since it was in deviation from the laid down Scales of Accommodation. In May/June 1989 Naval HQ

and Army HQ Engineer-in-Chief's Branch directed HQ WNC and Zonal CE to ascertain whether any covered badminton court had been provided anywhere by any of the three services in the past and if not, open badminton court as per authorised specification/scale might be provided. In July 1989, Zonal CE confirmed to Army HQ that no covered badminton court was sanctioned by either of the services and that a case was being taken up by the Navy for approval by Government. However, without obtaining Government approval the work on covered badminton court was progressed through the existing contract.

Ministry while agreeing with the factual position stated (January 1992) that:

- Works were sanctioned independently as it was intended to make good the existing deficiency on a case to case basis;
- Instructions have been issued to Naval HQ for obtaining ex-post-facto approval of the Government to the construction of the integrated sports complex and regularisation of the case of superior specifications;
- Naval HQ have been instructed to issue instructions to all concerned to avoid splitting of a work to bring the various items of works within the sanctioning powers of the lower competent financial authorities.

However, the fact remains that various items of work services for an integrated sports complex estimated at Rs.307.47 lakhs were sanctioned by various lower authorities by splitting the work in contravention of the basic rules which prohibits carrying out in parts any group of works the cost in the aggregate exceeds their powers of sanction and making the Government to regularise the same per-force on being pointed out by Audit. Further superior specifications involving additional burden to the extent of Rs.26.09 lakhs were incorporated in the works which was yet (January 1992) to be regularised.

87. Avoidable expenditure in the construction of excess accommodation for Officers' mess/single officers' quarters

In three stations, accommodation for Messes/single

officers' quarters were created in contravention of the rules on the subject which resulted in construction of excess accommodation costing Rs.102.52 lakhs, the details of which are as follows:

CASE I

A Naval Command Headquarters (HQ) sanctioned (September 1984) construction of a Naval mess with allied facilities at Bangalore, for 40 officers with a plinth area of 1768 square metres (SM) which included mess building for 40 officers and quarters for 14 servants at Rs.26.12 lakhs amended (January 1985) to Rs.28.23 lakhs. The requirement for 40 officers was worked out taking into account six officers undergoing academic degrees at the Institute of Science, Bangalore, 11 officers of the Services Selection Board (Board) who were members of the existing Sub-Area mess which was sanctioned and constructed at a cost of Rs.51.51 lakhs already taking into account the total strength of officers of the Board, one NCC officer and the ADC to the Governor of the State, who was incidentally at that time a Naval Officer. Officers with Public Sector Undertakings and Research and Development Establishments located there were also included.

It was observed that the mess was commissioned in September 1990, by which time there were only 24 members, the majority (12) being with the Selection Board and students with the Institute of Science. The sanction and construction of such a mess was neither covered under the rules nor was the establishment authorised by the Government.

The Ministry stated (January 1992) that the need to provide a mess at Bangalore was considered essential for the administrative expediency and morale of Naval officers at Bangalore. Ministry also added that instructions had been issued to Naval HQ to avoid recurrence of such lapses in future.

CASE II

Similarly, at Madras, construction of an officers' mess for the Navy for 67 officers and single accommodation for 31 officers was initiated in January 1986. The requirement was calculated by inclusion of nine officers posted to the Coast Guard, one officer of Embarkation HQ, one officer undergoing training and two officers posted

to a Research project. While the officers of the Coast Guard and Embarkation HQ already had separate officers' messes established (1988) the officers on training and the officers posted to the Research project did not form part of the Naval Establishment of the Station. Further, as against, the strength of 13 officers of the Naval Establishment, an increased strength of 18 officers was taken into account and Naval HQ accorded sanction in May 1988 for construction of a mess for 67 officers at Rs.85.86 lakhs.

Meanwhile in April 1987, a proposal for construction of single accommodation for 31 officers as against only nine officers who were entitled to it was initiated taking into account officers in transit and those on permanent duties at other stations and sanctioned in March 1988 for Rs.73.03 lakhs to be constructed in second to fifth floor of the six storey mess building. Since, the State Government had accorded (January 1989) permission to construct only five storey construction the provision was restricted (August 1989) to 24 single officers' quarters. A contract was concluded in October 1990 at a lump sum of Rs.95.20 lakhs for the construction of the mess and 24 single officers' quarters and the work was expected to be completed by January 1992.

Thus, against the requirement of a mess for 49 officers and nine single officers' quarters, the mess building and single officers' quarters were constructed for 67 officers and 24 officers respectively. This resulted in excess provision of accommodation at an avoidable cost of Rs.53.93 lakhs.

The Ministry stated (January 1992) that Madras being a transit point connecting Naval HQ and the three Naval Commands, has to cater for the necessary requirements of single officers' accommodation for the transiting officers as well as officers from visiting sub-marines during their stay at Madras. Ministry, however, indicated that instructions had been issued to Naval HQ to avoid recurrence of such lapses in future.

CASE III

In yet another station, Coimbatore, a mess for 39 officers and 12 single officers' quarters sanctioned by the Navy in September 1988 at a cost of Rs.68.40 lakhs were completed at Rs.72.11 lakhs (May 1991). The justifi-

cation for the mess was worked out taking into account 23 officers of a training establishment, 12 officers of the Board and four based on leave reserves. The construction of single officers' accommodation over-looked the fact that 10 single officers' quarters constructed for the purpose were available as assets. The extra plinth area cost worked out to Rs.20.36 lakhs.

The Ministry stated (January 1992) that in training establishments, the provision of accommodation should also cater for the assessed strength of trainees based on average peak load of trainees during a period of three years and the same during 1987 to 1989 was 28 and hence there was no excess provision. Ministry also added that the 10 quarters constructed in 1984 were of semi-permanent specification. The Ministry's contention did not take into account that the average trainees per month worked out to 12 only.

Thus, lapses on the part of the sanctioning authorities in the provision of messes/single officers' accommodation for Naval officers in three stations in contravention of basic provisions in the regulations resulted in incurring of avoidable expenditure of Rs.102.52 lakhs.

88. Delay in provision of electric meters

In April 1977, Army HQ (QMG) issued instructions for effecting economy in the use of electricity by all defence consumers. According to the instructions, scales of consumption of water and electricity for all consumers were required to be fixed in relation to minimum essential requirements and published in Station Orders and all consumers should be metered.

In April 1977, a Board of Officers (Board) was convened to fix ceiling limits with reference to electricity entitlements of consumers unit wise, and to recommend the capacity and number of electric meters to be installed at the station for enforcing economy in the use of electricity. The Board of Officers held in August 1978 recommended inter-alia provision of electric meters in various units at a station.

The Sub-Area accorded (October 1979) administrative approval for provision of 1391 electric meters at the station at an estimated cost of Rs.2.07 lakhs as amended to Rs.3.38 lakhs (February 1984). The work was required to

be completed within eight months after its release.

The work was released in April 1983. In July 1984 the Garrison Engineer (GE) concluded a contract with a firm for provision of electric meters for a lump sum of Rs.3.11 lakhs with date of commencement and completion being July 1984 and January 1985 respectively.

The contractor failed to proceed with work with due diligence, which led to cancellation of the contract in May 1989, after issue of several notices and reminders to him during 1985-89. Further, of the electric meters installed by the contractor, more than 80 per cent were found defective. A Board was convened in May 1989 to prepare an inventory of the actual work done by the contractor and to assess the left over work to be done at his risk and cost. According to the Ministry, the Board could finalise its proceedings only in September 1991 which was ascribed to delays by the contractor to attend to finalisation of inventories and users being away on exercises. This in turn delayed the conclusion of contract for completion of the balance work at the risk and cost of the contractor. An expenditure of Rs.2.69 lakhs had been incurred so far.

The case revealed that instructions to instal meters in the accommodation of consumers for enforcing economy in the use of electricity remained un-implemented for over 15 years. The Sub-Area concerned issued administrative approval to the provision of electric meters at the Station in October 1979 after a lapse of over two years, the work was released for execution in April 1983 after a further delay of 3 1/2 years; the contract for installation of the electric meters was concluded in July 1984 after a lapse of over one year, and the work was yet to be completed in February 1992. Despite slow progress of the work, it took five years to cancel the contract. A contract to complete the balance work at the risk and cost of the defaulting contractor is yet to be concluded though almost three years have since elapsed. The Ministry admitted the fact that in the absence of meters, building wise control over consumption of electricity by non-paying consumers was not workable and the difficulty still persisted (February 1992).

89. Injudicious procurement of steel

Army Headquarters (HQ) allocated 3100 tonnes of steel of various categories to be received from Steel Au-

thority of India Limited (SAIL), to Chief Engineer Pune (CE) in December 1985. In January 1986, the CE directed that the total quantity of steel should be collected by Garrison Engineer Chandrapur (GE 'A') on behalf of GE Projects Kirkee (GE 'B') who was to make payment for the entire quantity.

In February 1986, the CE in supersession of this order, directed that out of the above quantity 1700 tonnes of steel would be collected by GE 'A' and the balance 1400 tonnes by GE 'B'. During April 1986 to June 1986, 1643.65 tonnes of steel was collected by GE 'A' on behalf of GE 'B' and custodian certificates were issued by GE 'A' to GE 'B' for the stores received.

In June 1986, GE 'A' projected a requirement of 964 tonnes of steel for three projects being executed by him and requested for transfer of steel from the stock of GE 'B' held by him. Against this requirement CE, however, issued release orders in July 1986 for the entire quantity of 1643.65 tonnes to GE 'A' including 679 tonnes of Plates MS 12 mm not demanded by him. The entire quantity of the steel items valuing Rs.1.15 crores were taken on charge by GE 'A' in September 1986.

Subsequently, orders were issued by the CE/CWE from October 1986 to February 1991 for transfer of steel items from GE 'A' to other GEs. Accordingly, 262.98 tonnes of plates MS 12 mm and 47.80 tonnes of other steel items were transferred incurring freight/handling charges to the extent of Rs.1.72 lakhs. Of the remaining steel items 646 tonnes only were used by GE 'A' and the balance 687 tonnes valued at Rs.50.71 lakhs were lying unutilised for nearly six years (January 1992).

The Ministry stated (January 1992) that keeping in view the acute shortage of cold twisted deformed (CTD) bars during 1985, action to procure steel required for various anticipated works was taken but due to subsequent financial crunch, certain works could not take off, besides, the supply position of CTD bars having eased subsequently, there was a set back in the utilisation of HRD bars; however, instructions had been issued for immediate utilisation of the left over stock. Movement of the stock was necessitated due to the Railways insistence to move steel only in rake loads so that the entire quantity had to be consigned to one particular destination and demands of nearby formations had to be met with through transfer

orders.

The fact, however, remained that 687 tonnes valued at Rs.50.71 lakhs out of 1643.65 tonnes of steel procured at Rs.115 lakhs representing 40 per cent of the cost, remained unutilised for nearly six years.

90. Excess payment of electricity charges

Military Engineer Services (MES) entered into an agreement in December 1979 for supply of electric energy upto 800 KVA at a station. The payment was to be made for billing demand(load) and energy charges for the number of units consumed. The billing demand was the actual maximum demand for the month or 50 KVA whichever was higher. According to the agreement in the event of any meter ceasing to operate, the average consumption in the previous three months was to be adopted.

Although the meter for recording billing demand remained defective since March 1985 onwards, the billing demand adopted by the supplier during March 1985 to December 1989 was 75 per cent of 1300 KVA (and not 800 KVA) and thereafter 75 per cent of 800 KVA. Even if the payment for 75 per cent of contract demand is accepted there was an overpayment of Rs.11.81 lakhs due to adoption of incorrect contract demand. The defective meter was yet to be replaced.

The Ministry stated in December 1991 that the overpayment which was due to application of incorrect contract demand by the supplier, has been accepted by them (January 1990) and that the defective meter would be replaced at the earliest. There was no explanation as to why the bills were not scrutinised before payment. The refund was yet to be obtained (February 1992).

91. Delay in investigation into untraceable/missing items of furniture

In July 1988, a Barrack Stores Supervisor of a Garrison Engineer's (GE) office was transferred out to another GE in the same station. The supervisor was relieved in September 1988 without completion of the handing/taking over charge formalities required under the regulations on the plea that his reliever had already reported, it was not possible to hold two supervisors against one sanctioned post and the handing/taking over was likely to be

delayed due to certain discrepancies in the items of furniture in stock.

According to the Regulations, stock taking of furniture is to be carried out every year by two teams each consisting of three officers belonging to formations other than the stocking division and nominated by the Commander Works Engineer (CWE). The GE and the superiors are also expected to ensure that stock taking is carried out continuously and efficiently.

In February 1989, the new supervisor intimated the GE that there was deficiency of furniture (including 5950 charpoys and 370 steel kit boxes) valuing approximately Rs.29.48 lakhs. The GE approached the CWE concerned in March 1989 to constitute a Board of Officers to conduct a preliminary investigation into the causes for discrepancies and determine the extent of loss. A Board of Officers was ordered (March 1989) by the CWE to investigate the matter. The report was required to be submitted by April 12, 1989. The enquiry was, however, cancelled by the CWE in April 1989 stating that "any financial loss to the State was required to be reported to the staff authorities concerned for ordering a Staff Court of Inquiry (C of I); that according to the Zonal Chief Engineer the outgoing supervisor was relieved of his duties without completion of handing/taking over formalities; that too after a lapse of one month from the date of his transfer orders and moreover, the discrepancies were reported after a lapse of about seven months which was highly irregular".

Thereafter, on 12th May 1989 the local Sub-Area Headquarters (HQ) (Staff authorities) ordered a staff C of I comprising of three officers to be detailed by the local Station HQ, the proceedings of which were to be submitted by 10th June 1989. The officers for the staff C of I were nominated by the station HQ. in July 1989 but they were detailed only in August 1989. The C of I could not, however, be progressed due to non-availability of the presiding officer/members between August 1989 and March 1991, when a new set of officers were nominated by the station HQ with the stipulation that the proceedings should be finalised by 10th April 1991. The proceedings could not be completed till September 1991 as the witnesses concerned had not reported.

On this being pointed out, the Ministry stated (January 1992) that the C of I has been finalised; since

identification of deficiencies turned out to be a complex matter and could be resolved only through a staff C of I, it was not considered appropriate to detain the individual and deprive another unit of his services; it was quite likely that due to operational and training commitments the staff C of I could not assemble earlier; and the exact loss would be known only after the proceedings were finalised. It was also added that stock verifications were conducted till 1988-89 and subsequent verification and reports thereof were not submitted by the GE.

To sum up:

- Despite the fact that there were deficiencies of furniture in stock included 5950 charpoys and 370 steel kit boxes, the outgoing supervisor was relieved of his duties without completing the handing/taking over formalities prescribed in the Regulations. The C of I ordered by the staff authorities in May 1989 to investigate the matter commenced in March 1991, after a lapse of almost two years and was yet to be completed in all respects (January 1992). The aforesaid aspects indicated lack of seriousness on the part of all concerned in sorting out the deficiencies of furniture, worth Rs.29.48 lakhs.

92. Non-realisation of accrued revenue in respect of a Defence Auditorium

In October 1984, a Command Headquarters accorded sanction for the construction of an auditorium-cum-cinema hall at a station at an estimated cost of Rs.45.82 lakhs. The hall was completed in February 1989 at a cost of Rs.45.31 lakhs. In April 1989, the users leased it out to a private party for screening films (daily two shows) for a period of two years at rates to be decided by the party. The terms and conditions of the agreement provided for the payment of Re.0.10 lakh per month to the users so long as the auditorium was run with MES electric supply. No mention was, however, made of the quantum and mode of recovery of licence fee for the auditorium. The daily sale proceeds were to be retained by the private party. There was no restriction on admissions in the agreement and publicity was the contractors responsibility.

According to Rules only such cinemas where outsiders are not permitted could be termed as non-commercial. In the absence of such a clause licence fee should have been

assessed for the cinema on commercial basis which was not done. The users terminated the agreement with the private party in December 1990, with effect from January 1991. It was also stated that the hall will be left unutilised with effect from January 1991. Further according to the agreement a sum of Rs.2.05 lakhs which was due to be credited (Rs.10,000 per month for 20.5 months) had not being credited in time.

In June 1991, it was intimated that Re.0.83 lakh was deposited in the Government treasury in May 1991 as rent and electricity charges from April 1989 to December 1990 (after a lapse of over sixteen months). This amount was retrospectively worked out presuming that one show was screened daily although the agreement was for two shows per day. The electricity charges were deposited on assessed basis (Rs.25149), and not with reference to the agreement with the private party. Though there was no restriction of entry provided in the agreement, commercial rates were not derived.

The Ministry stated in February 1992 that:

- The hall was situated within the unit lines and therefore, was to be treated as non-commercial.
- It was decided to screen only one show with effect from 1st May 1989.
- The amount of Re.0.10 lakh included licence fee i.e. rent, electricity, water and other charges though it was not mentioned in the agreement.

The contention of the Ministry is not tenable as:

- The criteria for categorising a hall as commercial as indicated in the rules as well as direction of Army HQ was dependent on whether or not the rates were concessional. In this case the private party was allowed to fix the rates for the shows without restriction and retain the entire collections as indicated in the agreement, except Rs.10,000 per month payable by them.
- According to the agreement as long as the said auditorium was being run with MES electric supply, the contractor would pay in advance a sum of Rs.10,000 per month to the first party. However, the Ministry's

contention that the amount of Rs.10,000 included licence fee is not indicated in the legal agreement. The amount legally recoverable amounted to Rs.2.05 lakhs against which only Re.0.83 lakh was credited to Public Funds and that too sixteen months later.

- There was no amendment to the agreement regarding number of films to be screened per day.

93. Non-recovery of rent for a cinema hall

A cinema hall was constructed in 1964 at Pathankot on Government land at a cost of Rs.0.24 lakh out of regimental funds and leased out by the Sub-area to a private party in 1968 for five years on a monthly rent of Rs.50/. Although permission to renovate the cinema at his own cost was accorded by the Sub-Area, this was withdrawn in 1973, while the renovation work was in progress. The cinema was closed in February 1973.

The private party filed a suit against the Sub-Area in a Court of Law in September 1973. The Court passed a conditional decree in favour of the party and the Sub-area had to consequently hand over the hall again to the party in December 1974 for a period of six years at a ground rent of Rs.1759.33 per month. The party paid rent upto March 1979. Recovery of rent had not been made thereafter though the cinema hall remained in the possession of the party till August 1990 (for 11 years) when it was taken over by the Sub-Area.

Although the agreement for running the cinema was for 6 years ending in December 1980, a show cause notice under section 4 of public premises (unauthorised occupation of Government property Act 1971) was served on the lessee only in October 1987.

It was also noticed in Audit that besides Rs.2.40 lakhs not recovered towards rent for the period April 1979 to August 1990, Rs.12.14 lakhs was recoverable in accordance with the provisions contained in the Military Lands Manual for charging of a reserve price for the premium on the lease.

The Ministry stated (February 1992) that according to the revised draft agreement the ground rent from April 1980 to August 1990 was to be paid by the lessee, but the lessee lodged a First Information Report with the local

police, stating that he was made to sign the agreement under duress and obtained a stay order from the Court benches. As a result the amount could not be recovered. The Ministry further added that investigation into the matter or action to regularise the loss could not be made/taken pending receipt of judgement of the Court. No explanation was available for non-realisation of dues for the period April 1979 to March 1980.

CHAPTER VI

RESEARCH AND DEVELOPMENT ORGANISATION

94. Development and production of Bridge Layer Tanks

A Research and Development Establishment, to which the refurbishing of catapult chassis for Bridge Layer Tank (BLT) and the designing and development of basic vehicle for BLT, power drive and system integration was entrusted in December 1980 and February 1985 developed successfully two prototypes at a total cost of Rs.41.53 lakhs by January and June 1985. The first prototype was used as an initial study vehicle while the second one was subjected to extensive user trials between April 1986 and November 1987. The project was closed in June 1990 after successful completion.

Even before the user trials were completed, Army Headquarters (HQ), at the suggestion of the factory concerned placed an indent in July 1986 for production of 36 BLTs (without Bridge Superstructure) to be mounted on tank 'X' at an estimated cost of Rs.880 lakhs. This was done to enable the factory to utilise common items of the tank 'X', the production of which was coming to a close. In October 1986, the factory estimated that 18 months lead time was required for procurement of raw materials after the date of receipt of sealed drawings and another 12 months time for the first delivery of BLT. The order was expected to be completed at the rate of 12-14 BLT per year after first delivery. The initial estimated base cost of BLT (including bridge portion and hydraulics) was Rs.115.00 lakhs in August 1987 which was revised in February 1989 to Rs.129.40 lakhs. The cost of similar imported vehicle was Rs.49.23 lakhs only at that time. In view of the exorbitant cost and resource crunch, Army HQ kept (March 1989) further procurement action of BLT in abeyance for a final decision to be taken.

Meanwhile, the factory had placed orders on various sources for the procurement of materials costing Rs.974 lakhs required for 36 BLTs upto the end of May 1988. Subsequently it was decided in July 1989 that Army should place an order for 18 BLTs instead of 36.

In June 1990, the production of BLT was again discussed and the Army held that the BLT on the chassis of

tank 'X' was not suitable for the strike formations of the Army. However, in order to minimise the financial implications, Ministry of Defence suggested that (i) Army should accept 18 BLTs repowered with engine 'Y' and (ii) should also consider placing indent for spares procured for balance 18 chassis of tank 'X'. In September 1990, Army indicated that BLT would be acceptable only if the successful repowering of tank 'X' was completed. This was yet to be completed (March 1991). The production of BLT was again discussed in a meeting held in January 1991 in the Ministry and it was decided that Army would examine the acceptance of four out of the six BLTs mounted on chassis of tank 'X' with engine 'R' for being utilised for training/educational purposes. The Army informed in February 1991 that this was not acceptable to them.

The factory which had already commenced production of BLT incurred/committed expenditure of Rs.1698 lakhs so far (January 1991). The cost of systems/components held in the factory beyond 4 BLTs with engine 'R' worked out to Rs.1436 lakhs out of which systems costing about Rs.1070 lakhs could be put to alternate use (as DOS spares). Thus the cost of items which cannot be put to alternate use, besides expenditure of Rs.262 lakhs incurred on production of 4 BLTs not acceptable to the Army, would work out to Rs.628 lakhs.

Ministry stated (December 1991) that a clear estimate of the value of items which could not be put to alternate use would be made only after evaluation trials were completed and Army Headquarters representative visited HVF for gainfully diverting the items as spares.

Thus the expenditure of Rs.1739.53 lakhs incurred on development (Rs.41.53 lakhs) and production (Rs.1698 lakhs) of BLT did not serve the purpose for which it was intended due to incorrect assessment of their requirement by the Army authorities.

95. Non-recovery of interest on advance payment from a foreign firm

Interim Test Range, Balasore (ITR) concluded (January 1987) a contract with a foreign firm for supply of two items of an equipment with spares at a total cost of US \$78.75 lakhs (equivalent to Rs.11.35 crores) (exclusive of agency commission of US \$0.50 lakh deleted from the contract in April 1988). The equipment was to be supplied

by 21.5 months after contract effective date (CED) of 10th February 1987. This was subsequently (April 1988) modified to 33 months of the CED.

A total amount of US \$39.38 lakhs (equivalent to Rs.5.68 crores) being advance payment of 20 per cent and another 30 per cent of the contract value was paid to the firm in March 1988 and February 1989 as per terms of the contract.

The foreign Government suspended (November 1989) the firm's export licence resulting in its failure to supply the equipment so far (May 1991). However, the contract had not been cancelled (May 1991). The amount of advance payment of Rs.5.68 crores made to the firm was recovered in January 1990 through encashment of bank guarantee.

The contract stipulated that in the event of delay of more than three months in delivery of equipment due to circumstances other than force majeure, the buyer would have the right after the expiry of such three months, to terminate the contract fully or partly and the seller would forthwith refund the amount paid in advance for the items of equipment/services in respect of which the contract was terminated by the buyer, alongwith interest at 9 per cent per annum. As per provisions of the contract force majeure excluded withdrawal or cancellation of licences by the seller's Government.

In reply to audit query, ITR stated (December 1990) that no interest on the amount of advance paid to the firm had been recovered. A notice for recovery of interest was served on the firm in December 1989 and a formal claim was being processed. Ministry, however, stated (May 1991) that it was considered essential to have legal advice before formal claims were made. According to the Ministry, the Legal Advisor (LA) opined (June 1990) that the only clause under which the buyer had a right to cancel the contract was clause 7; generally, in every contract there was an article which provided the eventualities under which the contract could be cancelled, but in this case it was not like that. LA, therefore, advised the Department to incorporate such clause in future. Ministry further stated that under article 7 of the contract, the buyer had the right to cancel the contract in whole or in part in case the seller failed to obtain and maintain export licence or in case the seller failed to restore the licence which was withdrawn or cancelled and in such

a case, the buyer could legally claim only the refund of advance payment and nothing more unless there was any other provision in the contract.

However, it was noticed in audit that the provision for recovery of interest as contained in Article 13.3 of the contract was not brought to the notice of the LA despite his specific enquiry regarding existence of any such provision. This resulted in non-recovery of interest amounting to Rs.59.52 lakhs on the advance payment of Rs.5.68 crores.

The case was reported to the Ministry in August 1991; their reply has not been received (December 1991).

96. Non-utilisation of an imported machine

Combat Vehicle Research and Development Establishment (CVRDE) entrusted with the development of an engine for an armoured vehicle, projected the requirement of a specialised contour grinding machine for rough and fine grinding of the cam shaft for the engine which was being done through trade. The CVRDE placed an indent on the Director General of Supplies and Disposals (DGSD) in June 1985 for its procurement.

DGSD concluded a contract in March 1986 with firm 'A', Indian Agent of the foreign manufacturer, for supply of the machine at a cost of ₹306,224 (Rs.53.35 lakhs) (FOB) including Indian agent's commission of ₹14,542.60 (Rs. 2.53 lakhs) to be paid in Indian rupee. The machine was received by CVRDE in June 1987 and installed in August 1987. The performance of the machine during August to September 1987 was reviewed by the representatives of CVRDE, the foreign manufacturer and firm 'A' on September 30, 1987 and the action taken as well as to be taken to overcome the defects noticed was discussed. During their inspection, the representatives, did not inspect the multilobe cam shaft which was finish ground, by the machine. The reasons therefor were not recorded. The representatives, however, decided that this job would be inspected by co-ordinating with the local representative (firm 'A') of the foreign manufacturer at a later date.

The finish ground cam shaft was inspected by the representatives of the CVRDE and firm 'A' in June 1990. It was found that the machine did not give proper profile accuracies according to the test chart. The machine was,

therefore, not taken on charge even though it was received in full as per A/T and stated to be installed and commissioned in September 1987. Firm 'A' was asked (June 1990) to improve the profile accuracies. The results of their efforts are awaited (May 1991).

CVRDE stated (November 1990) that the machine did not have much work in the Establishment due to non-finalisation of design of the engine. They added that the machine was being used by the Combined Engine Plant, a production unit of Heavy Vehicle Factory, situated adjacent to CVRDE and that no expenditure was incurred on trade for grinding jobs so far.

Thus, delay in finalisation of the design of engine resulted in non-utilisation of a machine imported at a cost of Rs.53.35 lakhs for nearly four years.

The matter was reported to the Ministry in August 1991; their reply has not been received (December 1991).

97. Import of an Auxiliary Power Unit for a tank

The General Staff Qualitative Requirement issued in November 1985 for the Main Battle Tank (MBT) stipulated the provision of Auxillary Power Unit (APU) of suitable capacity to operate the electrical and electronic equipment and also to reduce the load of the main engine thereby increasing its life and reliability. The development agency was, however, not in favour of provision of APU in the tank due to:

- Capacity of modern tank diesel engines to run at considerably lower fuel consumption rates;
- better cold startability of tank diesel engine;
- provision of high battery capacity;
- provision of reliable brushless DC generator capable of supplying full output at idle speed; and
- non-existence of small diesel engine in sizes required for APU.

A task force, constituted in April 1987, recommended (June 1987) that running the main engine to meet the electrical loads was not considered as an ideal solution and since no other APU could be accommodated in the limi-

ted space, the Micro Turbo make APU could be accommodated in one prototype and the trials conducted on fuel consumption, infra red emission and accousitic emission of both main engine and APU in realistic conditions. Final decision on this APU would be taken after the trial.

Accordingly, based on the decision (August 1987) of a Tender Purchase Committee, the development agency placed (November 1987) an order on a foreign firm for procurement of one APU at a cost of Rs.13.60 lakhs in foreign exchange. The APU was received by the development agency in November 1988, its inspection and performance test was completed by the firm's engineers only in April 1989 and the same was accepted in May 1989, in the meantime, in the Steering Committee meeting held in December 1988 for reviewing the progress of development, the development agency themselves pointed out that the imported APU was not suitable because of noise and very high fuel consumption and the users indicated that a generator set of 4 to 5 Kw capacity for charging the batteries would serve the purpose. The Committee opined that the feasibility study for the fitment of suitable generator should be carried out by February 1989. The Steering Committee in its meeting of February 1990 again instructed that the development agency should expedite completion of the feasibility study for mounting 5 Kw charging set identified by MBT Cell for fitment in MBT.

In their reply to audit, the development agency stated (November 1990) that it was not possible to instal the APU in a fully configured prototype for its evaluation due to non-availability of the prototype. The Ministry, however, stated (October 1991) that installation of APU in a fully configured prototype was feasible and as and when one such prototype now undergoing trials was made available to the development agency, the APU would be installed in the vehicle and trials carried out as suggested in the report of Task Force.

The fact, however, remains that:

- the APU imported at a cost of Rs.13.60 lakhs was not found suitable for the MBT because of noise and high fuel consumption as these two parameters have important bearing on the tactical deployment of the vehicle in the field.
- the costly and imported APU had been proposed to be

used in the MBT for the purpose which the users indicated could be served by use of indigenous cheaper generating sets.

BORDER ROADS ORGANISATION

98. Review on Border Roads Organisation

98.1 Introduction

The Border Roads Development Board (BRDB) was set up in March 1960 by Government to ensure coordination of resources and efforts and expeditious execution of projects for the development of communications in the border areas. The Board which includes the Defence Secretary and the Secretary, Surface Transport exercises all powers of a Department of the Government with the Financial Adviser (Defence) tendering financial advice to it. The Administrative control of the Border Road Organisation (BRO) vests with the Ministry of Defence. The Board lays down the policy, targets and priorities for the development of communications included in its programme and decides upon the agency for execution of its projects. The various works included in the BRDB programme are executed essentially through the BRO.

BRO works are carried out by the General Reserve Engineering Force (GREF)-who are under the Army Act. Officers are drawn from the Army on deputation as well as from the permanent Border Road Engineering Services under the Director General Border Road (DGBR). The organisation which is self sufficient in manpower, machinery and equipment, is mobile and provides engineer support to the Army during emergency. It has built in provision for medical, stores, signals and transport elements based on the Army echelons of command and control.

98.2 Organisational Set Up

The DGBR which is headed by the Director General is responsible for:

- Planning and execution of projects entrusted to GREF;
- Technical soundness of designs and specifications adopted in the construction of projects;
- Scrutiny of all estimates (whether prepared by GREF

or by Public Works Departments (PWDs) before they are submitted to the Board for sanction;

- Preparation and submission of periodical budget estimates and obtaining funds from Government; and
- Administration, Planning and Control of manpower, resources etc. of GREF.

The Director General is assisted by thirteen project divisions and thirty task forces.

The organisational chart of DGBR organisation is shown in Appendix-III.

There are two Base work-shops located at Station 'A' and 'B' for carrying out major repairs/overhaul of vehicles, plants, equipment, etc. To provide requisite spares for the repair work there are two Store Divisions. There is a GREF centre which provides training to new recruits and in service training to GREF personnel.

Labour force required for execution of works by BRO is obtained through permanent pioneer companies who are under the Army Act and entitled to all concessions available to regular members of GREF as well as locally recruited casual labour. The ratio of Pioneer to casual labour varies from CE to CE depending on the availability of local labour.

The total strength of officers and staff in Border Road Organisation during the years 1988-89, 1989-90 and 1990-91 were as under:

	<u>1988-89</u>		<u>1989-90</u>		<u>1990-91</u>	
	<u>Authorised</u>	<u>held</u>	<u>Authorised</u>	<u>held</u>	<u>Authorised</u>	<u>held</u>
Officers	1454	1198	1461	1188	1445	1166
Staff	52284	46884	52219	45588	51492	44637

The BRO had a strength of 1 lakh casual personnel approximately in 1991-92.

98.3 Scope of Audit

The task force is the basic unit concerned with the basic work and is headed by the task force commander (Superintending Engineer/Lt.Col). Their performance on construction of roads, paths, culverts and bridges, store accounting and performance of plant and equipment was subjected to test check in 20 out of the total 30 task force units.

98.4 Highlights

- There was a delay of over 7 years in finalising the contract for a bridge increasing the project cost by about Rs.77.52 lakhs.

(Para 98.6.1.1)

- A sum of Rs.31.50 lakhs was paid to a contractor on account of idle resources due to delay in conclusion of another contract for foundation treatment work for a bridge.

(Para 98.6.1.2)

- Assets created at a cost of Rs.14.46 lakhs remained unutilised due to suspension of a bridge work and change of site causing cost escalation of Rs.11.06 lakhs.

(Para 98.6.1.3)

- Out of four permanent bridges sanctioned in 1967 construction of only one was completed and three were awaiting completion (July 1991) and consequently three approach roads could not be put to use.

(Para 98.6.1.4)

- After incurring an expenditure of Rs.10.34 lakhs, a bridge was left incomplete.

(Para 98.6.1.5)

- Expenditure of Rs.3.15 lakhs on civil works for a Bailey Raft despite doubts about its technical suitability became infructuous as the raft could not be operated.

(Para 98.6.1.6)

- Expenditure (Rs.4.94 lakhs) incurred on construction of towers for a common suspension bridge proved unfruitful since the bridge could not be constructed due to inadequate strength of the towers.

(Para 98.6.1.7)

- As against 160 metres of major bridges envisaged by the BRDB as workload for each of the two Bridge Construction Companies (BCC), the DGBR fixed targets of 74,70 and 73 metres for the years 1988-89, 1989-90 and 1990-91 for these BCCs. The two BCCs were able to achieve only 71.80, 19.80 and 67.80 metres respectively during these years.

(Para 98.6.1.8)

- Due to non-assessment of the quantum of likely rainfall and future increase in traffic intensity the specification adopted was found to be inadequate necessitating special repairs to a road at a cost of Rs.34.98 lakhs.

(98.6.2)

- Uneconomical procurement of construction material for resurfacing of an air field resulted in additional expenditure of Rs.112.99 lakhs.

(Para 98.7.1)

- Acceptance of handling and conveyance contracts for stores concluded during the same period in the same area by two CEs of BRO indicated abnormal cost difference and resulted in additional expenditure of Rs.39.69 lakhs in 20 work orders.

(Para 98.7.2)

- Due to non observance of the prescribed procedure while concluding contract with a new firm and unsatisfactory monitoring of the progress of delivery, the contractor was enabled to make short delivery of 2078.60 tonnes of cement (market value:38.66 lakhs). On account of this and various other lapses Rs.78.81 lakhs was yet (December 1991) to be recovered from the contractor against which only Rs.15.25 lakhs was available for recovery.

(Para 98.7.3)

- There was deficiency of Rs.4.27 lakhs of stores in a division due to non compliance of instructions for collection conveyance and handling of stores and non verification of physical stock annually at the time of handing/taking over.

(Para 98.7.4)

- Hire charges amounting to Rs.4.32 crores including departmental charges of Rs. 62.64 lakh were paid to a State Government for draglines during 1976-77 to 1990-91 despite advice to ascertain ownership of the same, several of which were financed from Defence funds.

(Para 98.8)

- Abandonment of work due to revision of master plan of the area resulted in infructuous expenditure of Rs.16 lakhs on jungle clearance.

(Para 98.8.3)

- Outstanding liability of Rs.50.50 crores in BRO carried forward from 1983 was yet to be debited (March 1991) against the projects concerned. A sum of Rs.72.62 crores on Sub Accounts Officer's (SAO's) accounts was awaiting reimbursement to the Ministry of Defence from the Ministry of Surface Transport (March 1990).

(Para 98.8.6)

98.5 Plans and Programmes

The works planned and approved by BRDB and actually achieved during the last five years was as under:

Items of work	1986-87		1987-88		1988-89		1989-90		1990-91	
	Planned	Achieved	Planned	Achieved	Planned	Achieved	Planned	Achieved	Planned	Achieved
Formation/imp- rovement (in Kilometres)	575	618	700	684	740	732	740	741	700	702
Surfacing works (in Kilometres)	812	838	850	858	860	847	930	963	1020	1039
Resurfa- cing (in Kilometres)	1812	1890	1980	2095	1980	1975	1700	1681	2000	1935
Permanent works (in lakhs of rupees)	5673	5700	6600	6708	7600	7670	8300	8709	8900	9050

98.6 Construction of Bridges and Roads

After the formation of BRO in 1960, construction of bridges and roads and their improvement in the border areas were entrusted to them. As on March 31, 1991 BRO had the responsibility for maintenance of 17462 kms of Roads (Average of three years upto March 1991). The number of existing bridges which were to be maintained was not centrally available. The performance of the BRO with respect to construction of bridges and roads in selected areas were examined in audit and were as under:

98.6.1 Bridges

98.6.1.1 Delay in finalising contract:

Sanctions were issued in August 1961(as amended in February 1962 and April 1972) and in September 1966 by the BRDB for construction of a road at an estimated cost of Rs.388.92 lakhs and a permanent bridge (cost: Rs.16.35 lakhs) respectively. These were physically completed in June 1970 and October 1967 at a cost of Rs.104 lakhs and Rs.389 lakhs respectively. In 1972 a new channel was cre-

ated due to heavy rains and a 130 feet suspension Bailey Bridge was launched (August 1975) at a cost of Rs.2.58 lakhs as an extension to the existing permanent bridge. It was observed in 1976 that the replacement of bailey bridge and extension of the bridge by addition of two prestressed Concrete span of 110 feet each, construction of the approaches as well as diversions and dredging work were required. Sanction for these works was issued (October 1978) at an estimated cost of Rs.26.96 lakhs. The rates included in the sanction were found to be unworkable when tender action was contemplated six years later (1984) and the revised estimates worked out to Rs.74.10 lakhs. There was only a single tender response which was rejected being too high. The lowest rate obtained by the CE on the reissued tender was Rs.83.70 lakhs. DGBR attributed the reasons for delay in execution of work sanctioned in 1978 to delay in getting hydraulic data from North Eastern Electric Power Corporation (NEEPC) and particular specifications for the tender could be finalised only in October 1984. Associate finance indicated (February 1986) that the delay of more than seven years had resulted in the abnormal increase in the project cost and if the NEEPC were not responding, the CE could have apprised DGBR and BRDB so that remedial measures could have been taken. The contract was concluded (February 1986) for Rs.83.70 lakhs and the work was completed in April 1989. The work on the approaches were also completed in 1989 at a cost of Rs.20.78 lakhs.

Thus, the delay of over 7 years in finalising the contract (February 1986) from the date of sanction (October 1978), resulted in cost escalation of the project by about Rs.77.52 lakhs.

98.6.1.2 Delay in conclusion of contract:

Government sanctioned (September 1969) construction of two bridges 'X' and 'Y' and approaches at an estimated cost of Rs.48.22 lakhs. In August 1970, the CE concluded a combined contract which in addition to these included bridge 'Z' (separately sanctioned in January 1968 for Rs.8.84 lakhs) on a National Highway with firm 'E' at a total cost of Rs.66.35 lakhs. Based on the actual tendered rates, Government issued (August 1970) a revised sanction enhancing the cost of the bridges to Rs.62.67 lakhs.

The work commenced in November 1970, and was sched-

uled to be completed by 15th April 1972. The firm could complete only two bridges 'Z' and 'Y' by October/December 1973 respectively at a cost of Rs.38.37 lakhs. During the execution of the work on bridge 'X' additional protective work was required which was sanctioned for bridges 'X' and 'Y' by the Government in December 1972 at a cost of Rs.8.71 lakhs.

To execute the foundation treatment work of bridge 'X' tenders were invited twice with no response. In the third tender received in January 1973 the lowest tenderer (firm 'F') stipulated conditions which were either not provided for or were at variance with standard conditions of contract. The date of validity of the offer was extended from time to time upto 21st May 1974. In February 1974, the tenderer announced enhancement of rates by 10 per cent resulting in an increase of Rs.1.40 lakhs which was sanctioned in April 1974. The contract was finally concluded in May 1974 with firm 'F' at a cost of Rs.15.44 lakhs. DGBR stated (December 1991) that the work was tendered 3 times and taking into account the negotiations with the lowest tenderer, reference to Government, the highly technical and specialised nature of the work the time taken for the conclusion of the contract could not be considered as unduly long. The work was completed in November 1975.

As per condition of this contract an extra amount of Rs.60 per bag of 50 Kgs cement used would be payable to firm 'F' in excess of one bag of cement per metre of length of anchor. As against the estimate of 1725 bags (@ Rs.26.78 per bag) included in the lump sum rate, firm 'F' claimed June 1976 Rs.8.86 lakhs for excess consumption of 14,763 bags (at Rs.60 per bag) against which the department had paid only Rs.3.96 lakhs and refused (February 1976) further payment as the rate fixed (November 1975) at Rs.26.78 per bag was binding on the contractor as per clause 56 of the contract agreement. The firm applied for arbitration and the arbitrator awarded (April 1977) a sum of Rs.4.74 lakhs in favour of the firm which was also upheld by court.

According to BRDB (January 1992) the lumpsum provision of 1725 bags of cement in the contract was based on assessment and such an assessment may vary to a great extent depending on the condition existing in the subsurface and an accurate assessment to subsurface work was not feasible.

Pending completion of work by firm 'F', the work on the original contract with firm 'E' was suspended from April 1974 to August 1975. The work was completed in September 1976. Firm 'E' sought arbitration in respect of their claims amounting to Rs.70.58 lakhs including Rs.65.47 lakhs on account of compensation for loss incurred on idle resources during the period of suspension. The arbitrator awarded in February 1985 a sum of Rs.36.09 lakhs including Rs.31.50 lakhs for idle resources to firm 'E' which was upheld (July 1989) by the High Court along-with 12 per cent interest on the awarded sum. A sum of Rs.36.09 lakhs was paid to the firm in October 1989 - January 1990; the payment of interest (Rs.25.98 lakhs) was under reconsideration (April 1990) of the court (December 1991).

Thus, the State was put to an extra expenditure/uncertain liability as under:

- An amount of Rs.31.50 lakhs had to be paid to firm 'E' for idle resources due to delay in conclusion of the contract with firm 'F'. Besides an uncertain liability of Rs.25.98 lakhs on account of interest was subjudice;
- An amount of Rs.4.74 lakhs had to be paid to firm 'F' due to incorrect estimation of requirement of cement in the contract, besides payment of Rs.1.4 lakh due to delay in acceptance of the firm's tender.

98.6.1.3 Suspension of work:

DGBR accorded (August 1986) sanction for the construction of Reinforced cement concrete (RCC) 'T' beam bridge over a location at a cost of Rs.9.99 lakhs. The probable date of completion (PDC) of the work was April 1991. The work had commenced (April 1987) and was suspended (September 1990) due to delay in acquisition of land by the civil authorities on one side of the approach road. To avoid delay the approach was to be shifted towards the right side necessitating construction of additional retaining wall (Rs.4.87 lakhs) on the revised alignment of the approaches. A revised estimate for Rs.21.04 lakhs was submitted (September 1990) providing for cost of the retaining wall, change in scope of the road lift and the effect of amendments/revision to the schedule of rates of DGBR, sanction for which was still awaited (July 1991). According to DGBR (December 1991) estimates are

under scrutiny by Chief Engineer. The work of construction of the bridge is in progress and expected to be completed by March 1992.

The progress of work and booked expenditure as on June 1991 was 62.50 per cent and Rs.14.46 lakhs respectively. The delay in acquisition of land resulted in cost escalation of Rs.11.06 lakhs.

DGBR stated (December 1991) that the assets created (cost:Rs.14.46 lakhs) are being utilised in balance work and cost escalations of Rs.11.06 lakhs are attributable to the additional work on the retaining wall and the revision of schedule of rate and escalation on other items.

98.6.1.4 Non-completion of bridges and non-use of approach roads:

In May 1967 Government accorded sanction for construction of four permanent bridges over a river and a nallah required for improvement and maintenance of single lane National Highway at an estimated cost of Rs.57.06 lakhs. The CE concluded (October 1967) a contract with a firm for construction of all the four bridges at a cost of Rs.35.50 lakhs to be completed within a period of 24 months from the date of handing over the first bridge site. The first site was handed over on May 25, 1968 and that of the second bridge on August 31, 1968. The contractor partially completed the work on the first bridge and did some items of boring on the second one. Thereafter the contractor stopped the work (November 1970) stating that the approach of the left bank would require to be brought down to the abutment level as it involved extra 50 to 60 feet of boring work. The total amount paid to the contractor was Rs.5.85 lakhs. The contract was cancelled with effect from March 30, 1971 at his risk and cost. The overall progress of construction after twenty four years was 28.7 per cent (July 1991) with booked expenditure of Rs.8.73 lakhs (May 1991). The contractor went in for arbitration claiming Rs.7.94 lakhs against the Departmental claim of Rs.37.52 lakhs. Two arbitrators (Army Officers) appointed resigned in succession and during the proceedings before the third arbitrator the firm went into liquidation (1976). The fourth arbitrator appointed in 1987 published the award in August 1988 which awarded a sum of Rs.0.07 lakh to Government. Meanwhile the bridge remained incomplete (July 1991).

In the tender for risk contract one firm quoted (1976) Rs.34 lakhs and Rs.22 lakhs as against Rs.20.73 lakhs and Rs.7.49 lakhs quoted for by the defaulting firm against the second and third bridge. No contract had been concluded for completion of these bridges so far (December 1991).

For construction of the approach roads to the four bridges a sanction was issued (January 1968) for Rs.3.98 lakhs which was subsequently revised (December 1971) by the Government at an estimated cost of Rs.13.22 lakhs. The work was executed departmentally and was completed on March 31, 1971 (completion cost:Rs.13.61 lakhs).

BRDB/DGBR stated (December 1991/January 1992) that one of the four bridges sanctioned during 1967 was completed, construction of another was omitted due to certain geological unsuitability of the site and as the contractor had abandoned the work on the other two bridges it was decided (May 1975) to defer their construction. The work on the bridge which was omitted due to unsuitability of site will be taken up with certain modifications in the site orientation and the bridge works already executed will be utilised when the construction of other bridges are revived.

Thus, the approach roads to three bridges constructed departmentally could not be put to use, the proportionate cost could not be assessed.

98.6.1.5 Foreclosure of a work

In June 1970, Government accorded sanction for the construction of a permanent Reinforced cement concrete (RCC) beam bridge with a span of 80 feet over a location at a cost of Rs.2.77 lakhs. After a lapse of six years (June 1976) when work amounting to Rs.2.18 lakhs had been executed, on review of site condition the sanctioned bridge was found to be technically unsuitable and abandoned. Consequently, Government had to issue (June 1977) a revised sanction for the construction of a Steel Girder (SG) bridge with a span of 95 feet at a cost of Rs.7.91 lakhs.

In December 1980, i.e., four years after the issue of the revised sanction, the CE concluded a contract agreement for the design, fabrication and supply of the SG bridge at a cost of Rs.4.76 lakhs. When the contract for

procurement of steel components for the bridge was completed at a cost of Rs.5.84 lakhs, it was found that no provision had been made in the revised sanction for launching the bridge. On resurvey it was found that certain additional works, though essential, were not catered for. In March 1983, the CE had to submit revised estimates for Rs.16.77 lakhs to facilitate expeditious conclusion of the contract for erection of the bridge.

Although the revised sanction for Rs.16.77 lakhs had not been received, it was indicated by the local task force (September 1990) that the project had been foreclosed. Till September 1990, the total booked expenditure on the project was Rs.10.34 lakhs and physical progress achieved on the work was 30.23 per cent which had not been regularised.

BRDB indicated (January 1992) that works constructed at various stages and the bridge parts procured were handed over to the State PWD in March 1986 along with the entire road portion and the steel girder Bridge has since been launched (June 1990) by the State PWD at the same location and a revised sanction was being obtained for regularising the expenditure of Rs.10.34 lakhs incurred before its foreclosure.

98.6.1.6 Non-utilisation of Bailey raft

To cope up with the increased traffic, a proposal was initiated in 1973 for the provision of a Bailey Raft for crossing a river as the existing Raft was considered inadequate.

In January 1974, Government accorded sanction for the provision of Class 18 Bailey Raft on the river at an estimated cost of Rs.6.68 lakhs. The work was stipulated to be completed within six months. The Bailey Raft components were received between April 1974 and June 1975 from different Army formations at a monthly rental of Rs.3355 and kept in stock due to non-availability of certain essential parts.

In December 1977, the Task Force Commander reported to the CE that the Bailey Raft was not technically sound and suggested that a 12 ton capacity Marboat on the existing Barrel Raft would adequately serve as a long term arrangement. This was not accepted by the CE as it was not supported by calculation/Technical data.

Work on the Bailey Raft commenced in January 1979 and was completed in February 1979 at a cost of Rs.3.15 lakh. On its inauguration day in March 1979 the working capacity was tested and found technically unsuitable. A decision was taken not to operate it.

DGBR stated (December 1991) that the Bailey raft was not made inoperative for any technical unsuitability. Use of raft was suspended for carrying heavy load during unfavourable periods and using it for minimal load was not considered economically viable.

The Bailey Raft components were retrieved between January 1986 and April 1987. The hire charges paid to the Army formation between December 1985 to May 1986 worked out to Rs.1.82 lakhs.

The technical unsuitability of the Bailey Raft had been indicated by the task force in 1977. Execution of civil works therefore in 1979 resulted in infructuous expenditure of Rs.3.15 lakhs.

98.6.1.7 Work not progressed due to inadequate strength of tower:

Government accorded (November 1976) sanction for the construction of a 400 feet span Bailey Suspension Bridge (BSB) on Road 'C' by the CE of a project at an estimated cost of Rs.8.33 lakhs. Some parts of the BSB were however, transferred (May 1978) for construction of a bridge on Road 'D' which was washed away (May 1978) due to heavy floods. Due to shortage of BSB parts and higher procurement rates by Rs.8540 per MT than that provided in the sanction, construction of bridge on road 'C' was not taken up. CE proposed (July 1978) construction of class 9/12 common suspension bridge (CSB) in lieu on road 'C' since normally only class 9/12 vehicles would ply on these roads. However, the Task Force issued (November 1980) Part Technical sanction for construction of towers, storage block, protective works for the towers and approaches for Rs.4.38 lakhs, without obtaining revised sanction from the competent financial authority for the proposed change in type of Bridge and approval of the drawing from DGBR. The work was commenced (November 1980) and the towers for the bridge completed (February 1981) at a cost of Rs.4.94 lakhs. Meanwhile, the revised sanction for construction of 400 ft. span CSB (class-12) was issued (September 1981) by Government at an estimated cost of Rs.15.79 lakhs. The

DGBR after examination of the drawings observed (August 1983) that the bridge deck including cables and suspenders would be unsafe for a chain of class 12 vehicles and the towers were unsafe even for a single class-12 vehicle

According to the CE due to the changed operational needs, requirement of a heavier bridge of class 18 instead of class 9/12 became necessary. The assets created (Value: Rs.4.94 lakhs) would be fully utilised since the existing towers could be used for launching a cableway when the existing bridge was damaged either during monsoon or by unexpected landslides. DGBR, however, indicated (December 1991) that RAE for the heavier bridge had not been initiated and regularisation action for expenditure already incurred on construction of the towers and allied works was being taken and that an aerial ropeway over the existing tower had been constructed for transshipment of stores. It was observed that the movement of traffic was continued through existing log bridge which was available during the construction of the bridge.

98.6.1.8 Performance of Bridge construction companies:

In August 1986, Government sanctioned the creation of two Bridge construction companies (BCCs) consisting of one BCC Headquarter, two Bridge construction sections, one Bridge equipment section and three Soil investigation sections in the BRO for departmental construction of bridges.

At the time (November 1983) of initiating the proposal for BCCs it was envisaged that each BCC would be able to achieve about 160 metres of major bridges upto 50 metres span and as such the annual workload of the two BCCs was expected to be 320 metres. As against this, DGBR could fix only targets to 74 metres, 70 metres and 73 metres for the years 1988-89, 1989-90 and 1990-91 respectively. The BCCs however, could not achieve even these targets and the performance of the BCCs during the years 1988-89, 1989-90 and 1990-91 were 71.80 metres, 19.80 metres and 67.80 metres respectively.

It was admitted by the DGBR (January 1990) that the progress on construction of major bridges during 1988-89 even against the reduced norms of 74 meters for both BCC's was low. The main reasons/drawbacks were lack of expertise and trained manpower in BCCs for taking up such specialised jobs and failure of supply contract for cen-

tering/shuttering materials.

In January 1992 BRDB admitted that the units were raised only about 4-5 years ago and they could not be expected to achieve the full targets in the initial stages and better performance could be expected from 1991-92 onwards. However, the poor achievement vis-a-vis the scaled down targets were not explained.

In the undermentioned cases there were abnormal delays in departmental construction of bridges due to delay in finalisation of design by the BRO, lack of expertise and trained manpower in the BCC for taking up such specialised jobs and failure of the supply contract for centering and shuttering materials of requisite standard/specification.

(a) One BCC located in station 'G' was entrusted (April 1987) to take up construction of three bridges on road 'Q'. Out of the three, one bridge with 33 metres span was sanctioned (May 1988) for Rs.49.50 lakhs which was later (September 1989) revised to Rs.67.50 lakhs with change of span to 45 meters to overcome dewatering problem. The remaining two bridges on road 'Q' were sanctioned in August 1976 (Estimated cost: Rs.5.57 lakhs) and May 1978 (Estimated cost: Rs.75 lakhs).

Subsequently (October 1989) sanction for the change of superstructure to cantilever type or alternatively to construct composite super structure with steel truss and RCC decking was sought by the Project authorities. Due to frequent changes in proposals and to avoid delay DGBR advised (October 1989) the CE to go in for consultancy agreement for the design.

The CE entered (April 1990) into a consultancy agreement with a firm at Rs.1.95 lakhs for design of the sub structure and super structure of one bridge on road 'Q'. As the design of the bridge was awaiting finalisation, the BCC had to be diverted (May 1987) for construction of a prestressed bridge in a new location.

The BCC was shifted (December 1990) to yet another location-road 'R' - leaving a skeleton staff to take care of the stores and equipment required to complete the bridge on road 'Q' which had progressed upto 24 per cent (September 1991) with booked expenditure of Rs.32.91 lakhs (upto September 1991).The other two bridges on road

'Q' were not taken up for construction at all.

b) Government accorded (October 1973) sanction for the construction of a 90 feet span permanent bridge at a location at an estimated cost of Rs.3.15 lakhs (revised to Rs.4.29 lakh in August 1976). No work on the superstructure of the bridge was carried out till February 1984 when the Army decided that the bridge should be upgraded. Accordingly DGBR accorded revised sanction (August 1986) for the construction of 90-feet span permanent bridge with higher carriage way at the location at an estimated cost of Rs.12.60 lakhs.

The specifications catered for a prestressed concrete bridge. In May 1987 a BCC was entrusted with the work. The BCC had neither any specialist training nor the requisite expertise for the construction nor any knowledge about the steel to be used for this type of bridge. Four tonnes High Tension Steel wire of 8 mm diameter at a cost of Rs.0.38 lakh were procured by them in September 1987.

In the meantime the shuttering work for the bridge was completed departmentally by May 1988. The work could not progress as the steel wire procured was found unsuitable for use. In July 1988, heavy rains damaged the preliminary structure of the bridge under construction and the shuttering stores were washed away.

A Board of officers constituted (August 1988) to investigate the case did not make any mention about the loss/damage to the bridge. Subsequently, another board was convened in December 1988 for assessing the loss/damage to the bridge. The board assessed the damage to the structure as Rs.0.98 lakhs and loss of shuttering stores as Rs.2.58 lakhs.

Since the steel wire procured was unsuitable it was decided to procure wires of the requisite standard afresh. Four tonnes steel wire at a cost of Rs.0.59 lakhs were procured in November 1988.

The work was completed and opened to traffic in November 1989. The steel wire procured in September 1987 was lying unutilised (November 1990) and the loss statement for Rs.2.58 lakhs for the shuttering stores was awaiting regularisation (December 1991). The cost of repair to the damaged structure was yet to be made available.

98.6.2 Construction of Roads

Work on widening of road of 21 Kms distance and strengthening of its pavements in an area in the North East was completed between December 1984 and March 1986 at a cost of Rs.61.60 lakhs. After completion of the surfacing, patch repairs had to be carried out under normal maintenance as innumerable pot holes, ditches and deep pot holes developed on the road. According to BRDB the maintenance fund spent on the road was Rupees four lakhs approximately. Since it was not possible to repair the damages within the maintenance grant, the CE ordered (August 1988) examination of the condition of the pavement, determine the causes of distress and assess the quantum of special work for rectification of damages. The Board observed that:

- only 20 mm thick premix Carpet was provided on the pavement which was not adequate considering the rainfall in the area. At least one layer of Bituminous Macadam (BM) should have been provided before laying the premix carpet;
- Bindings used were collected from the local quarries;
- damages occurred over a period due to heavy rainfall, increased traffic intensity, trucks carrying more than the authorised load, insufficiency of cross drainage and dumping coal on road berms and drainage;
- the bad condition of the road was not reported to the higher authorities.

The board suggested (August 1988) special repairs to avoid further deterioration in the road and the rough cost was assessed (August 1988) as Rs.78 lakhs. The DGBR accorded (January 1990) sanction for special repairs to the road at an estimated cost of Rs.34.98 lakhs. The work was commenced (February 1990) and completed in March 1991.

Thus due to non-assessment of the quantum of likely rainfall and traffic intensity, the specification adopted in road construction was inadequate needing special repairs at a cost of Rs.34.98 lakhs. The expenditure incurred upto May 1991 on special repair of this road was Rs.39.97 lakhs (including liabilities of Rs.1.8 lakhs), which was

64.89 per cent of the completion cost of the original road work i.e. Rs.61.60 lakhs.

98.7 Material management

98.7.1 Uneconomical procurement of material

A CE had concluded (March 1988) a contract for procurement of construction material (during April 1988 to December 1988) at a cost of Rs.187.60 lakhs in connection with resurfacing of an airfield. It was noticed by Audit that the rates accepted in this contract were exorbitantly high as may be seen from the following table in which these rates have been compared with the rates accepted by another Border Road Task Force (BRTF) for procurement of lesser quantities during December 1987 to October 1988.

Sl. No.	Item	Rate & Qty. as per CE's contract (March 1988) Duration April 1988 to December 1988 in Rs/Cum	Rate & Quantity as per BRTF procurement in Rs. per Cum				
			Dec. 1987	Jan. 1988	Feb. 1988	Apr. 1988	Oct. 1988
1.	River Sand	102 (8000)	90 (80)	49 (798)	86 (100)	75 (545)	65 (875)
2.	20mm Stone chips	253.50 (17000)	157 (50)	120 (647)	170 (58)	151 (50)	115 (990)
3.	12.5 mm stone chips	253.50 (20000)	-	123 (1024)	-	151 (2350)	115 (1000)
4.	Stone Dust	152 (7000)	-	69 (1360)	-	69 (1150)	55 (1400)
5.	40mm Stone chips	250 (3000)	-	-	165 (60)	-	-

The rates accepted by BRTF in April 1988 and October 1988 for items 1 to 4 as compared to rates accepted by CE in March 1988 resulted in additional expenditure of Rs.45.89 lakhs and Rs.60.99 lakhs respectively.

The DGBR stated (December 1991) that the conclusion of the contract at higher rates was necessitated:

- for urgent timely completion of the work of the Airfield.
- as no stone quarry was available in the area of the Airfield. The materials were required to be supplied from the National Highway quarry across a river but movement of heavy vehicles on the bridge over that river was prohibited as the bridge was weak; and the alternate route was 72 km longer. Lower rates in the case of procurement by the Task Force was due to the requirement being less and a petty contractor could manage the supply; the supply was to be effected along the National Highway; the time frame was not rigid; and the contractor did not require additional mobilisation of equipment/finance.

98.7.2 Acceptance of contract for handling and conveyance of stores at varying rates

CE 'M' concluded (April 1988) a contract with firm 'T' for handling and conveyance of about 8000 tonnes of stores from a Base Depot located at Station 'D' to Station 'P' at 396.50 per cent above the rates given in the schedule of tender. The contract rate accepted by CE 'M' during 1987-88 and 1989-90 were 165.97 per cent and 198.50 per cent respectively above the rates given in the Schedule of tender. During May 25, 1988 to July 13, 1988, 20 work orders for handling and conveyance of 4339 tonnes of stores at a cost of Rs.95.44 lakhs were placed by CE 'M' on the firm.

Another CE 'N' concluded (30th May 1988) a contract with the firm 'U' for handling and conveyance of about 2490 tonnes of stores from the same Base Depots located at the Station 'D' to the same Station 'P' at 190 per cent above the scheduled tender rate. The period of agreement valid for one year was extended upto June 1990.

The difference in rates for the two contracts concluded by CEs 'M' and 'N' resulted in an excess expenditure

of Rs.39.69 lakhs being incurred by CE 'M' on the handling and conveyance of stores pertaining to 20 work orders.

BRDB stated (January 1992) that the matter was under investigation.

98.7.3 Short delivery of cement due to faulty conclusion of the contracts

In two Border Roads Projects, five contracts were concluded with a firm during the year 1987-88 (one by project 'A' and four by project 'B' for handling and conveyance of cement by road from Railway Station to various locations. The antecedents of the contractor was not verified though such checks were prescribed. During the pendency of the contract, 2078.60 tonnes of cement valuing Rs.38.66 lakhs were found short delivered.

Departmental Courts of Inquiry which were ordered in April 1988, June 1988, and October 1989 held that

- the firm was not enlisted before issue of the tender and necessary verification about antecedents, financial position, working and equipment potential was not done before tendering ;
- the firm was not enlisted before acceptance of the tender;
- there was undue haste in concluding the contract and awarding more than one contract to the contractor at a time though he was new;
- there was failure to give importance to the correct preparation of convoy notes, handing over the cement without convoy notes and not pointing out the discrepancies;
- there were unsatisfactory monitoring of the progress of delivery;
- the contractor had preplanned to mis-appropriate the cement as the cement was kept in various godowns without informing the department;
- due caution restraint and discretion expected at the level of the accepting officer were not exercised at the time of conclusion of the contract.

The contract agreement provided recovery from the contractor at penal rate if stores were lost by him while in his custody and considered to be intentional. The total amount recoverable against the contractor as assessed by CEs 'A' and 'B' for short delivery at penal rates, receipt of cement in set condition, transportation charges, compensation for delay, cost of shifting of cement through risk and cost contract and by departmental vehicle and Godown charges amounted to Rs.78.81 lakhs, against which the total amount available for recovery for value of work done and security deposit and earnest money was Rs.15.25 lakhs leaving a balance of Rs.63.56 lakhs to be recovered from the contractor. The loss was yet (December 1991) to be regularised.

BRDB stated (October 1991) that the firm was registered by the Army (Eastern Command) as a class 'C' contractor and no preverification was undertaken by BRO while concluding the contract. The short delivery was not attributable to non-verification of the antecedents but to intentional misappropriation. While admitting that verification of the capacity would have minimised the loss, the final outcome of the claims and recoveries would be known on finalisation of the arbitration awards and the civil suits filed. Meanwhile the contractor had been debarred from issue of tenders by MES and BRDB. The concerned officers have been warned and the recovery of Rs.5000 ordered from one officer.

98.7.4 Deficiency in stock of stores

During handing/taking over of charge between two Officers of a Base Depot in January 1984, a deficiency of 17.23 tonnes of Mild Steel (value Rs.1.30 lakhs) was observed. The physical stock taking carried out by a Board of Officers in April 1985 revealed further deficiency in stock of 36.64 tonnes of Mild Steel round, tor steel C.G.I sheets, GP sheets, MS angle (value:Rs.2.49 lakhs) and also salvage stores (value:Rs.0.48 lakhs). A Court of Inquiry found that there was improper accounting of stores abnormal delay in taking the stores on charge, non-verification of physical stock annually and while handing over of stores by various officers in charge and stock holders and non compliance of instructions for collection conveyance and issues to units. DGBR observed (February 1988) that the deficiencies/discrepancies occurred due to general neglect in store keeping/store accounting and lack of supervision by those responsible for receipt, issue and

accounting of stores. He recommended disciplinary action to be taken against the officers and staff besides recovery of an amount of Rs.0.15 lakh (out of the total deficiency of Rs.4.27 lakhs) and the balance amount of Rs.4.12 lakhs to be regularised as a loss to the State. The amount proposed to be recovered was reduced (February 1989) by DGBR to Rs.0.09 lakh which was recovered from the Officers and Staff. The loss of the balance amount is yet to be regularised (January 1992) .

98.8 Other points of interest

98.8.1 Hiring of an equipment

The work on maintenance of Defence Ditch-cum-Bund (DCB) in Northern and Western Command was taken over by DGBR in May 1976. DGBR assessed (1976) the total requirement of Draglines as 13 for maintenance of drains. Initially 11 Draglines were taken on hire from the State Government out of which 2 were returned and 9 were retained till replacement by purchase was available. In March 1979 sanction was accorded by Government for Maintenance, improvement and execution of new works on DCBs by the DGBR and for procurement of 5 draglines at an estimated cost of Rs.1 crore. Two draglines were purchased at a cost of Rs.49.84 lakhs.

During this period it transpired that the Draglines held on hire from the State Government were purchased by them out of Defence Funds (dates not on record). Associated Finance indicated (May 1978) that in case these draglines were purchased out of Defence Funds and their ownership vested in the Defence Department the question of payment of hire charges by BRO would not arise and verification of credits if any, afforded to Defence by the State Government should be done. It was, however, observed that 10 Draglines (cost: Rs.89.95 lakhs) were procured by the State Government out of defence funds for which Book credits of only Rs.36.34 lakhs was afforded by them and the residual value as on July 1979 was indicated as Rs.48.25 lakhs. Further progress of affording credit and present residual value of the plants were not available. The hire charges paid to the State Government for eight draglines amounted to Rs.4.32 crores including Departmental charges of Rs.62.64 lakhs from 1976 to 1991.

Against a sanction for procurement of additional 3 draglines accorded (March 1983) by the Ministry of Defen-

ce at an estimated cost of Rs.92.4 lakhs without settling the ownership of the hired draglines, one Dragline was procured (1984) at a cost of Rs.24.92 lakhs.

Thus, despite the views of associated finance that payment of hire charges to the State Government would not arise in case these Draglines were purchased out of Defence Funds, the ownership of the Draglines was yet to be established. BRDB stated (January 1992) that they were not in a position to verify whether these draglines were procured by the State government out of funds provided by the Ministry of Defence as at that time they were not concerned with the activity. The issue had come up for consideration and the Ministry of Defence had agreed to take further necessary action in sorting out the ownership. Further progress in the matter was not known.

98.8.2 Utilisation of Resources

A test check of utilisation of hot mix plants indicated that out of 10 hot mix plants (value: Rs.18.46 lakhs) received in four Projects between September 1986 to July 1990, one Plant (value: Rs.1.83 lakhs) could not be commissioned so far (March 1991) and nine plants (value:Rs.16.63 lakhs) were under utilised due to manufacturing and other defects such as faulty design, bulky size and poor quality of material. Five of these had been run for period ranging from 12 to 49 hours only. BRDB stated (January 1992) that no comments could be given on faulty design, bulky size and the poor quality of the material of the plants since DGSD had concluded the contract in consultation with the Controller of Quality Assurance Establishment, Ministry of Defence.

98.8.3 Unfruitful expenditure on jungle clearance

In April 1983, Ministry of Defence accorded sanction for the development of a Military Station in three Islands at an estimated cost of Rs.32.97 crores based on the master plan approved by the Army. The sanction included clearance of site and development works in one Island at an estimated cost of Rs.17.74 lakhs.

The work was technically sanctioned in March 1984 for Rs.35.68 lakhs and commenced in March 1984. Upto July 1984, the works on road No.1 and 2 were completed and the works on Road No.3 was in progress with booked expenditure of Rs.19.61 lakhs and liabilities incurred to the

extent of Rs.10.37 lakhs. At this stage the Army revised the master plan and the project CE suspended (July 1984) the execution of the works. On receipt of the revised plan, the project CE observed that jungle clearance already done had to be abandoned and redone as the zonal layout had completely changed. The proportionate expenditure on the clearance of jungle on the abandoned area was worked out to Rs.16.00 lakhs.

BRDB stated (January 1992) that a site board for the master plan was approved in 1983 by Command Headquarters and work relating to jungle clearance commenced but the road layout was completely changed in the revised plan. BRO should therefore, not be held responsible for the infructuous expenditure.

98.8.4 Sanction of revised estimates

Estimates are prepared with reference to the standard schedule of rates (SSR) prescribed by the BRDB periodically. The last revision of SSR was done in June 1988. During check in audit it was observed that in a number of cases the original sanctioned estimates needed revision for which the revised approximate estimates (RAE) submitted one to seven years later were yet to be approved (March 1991).

The total number of RAEs awaiting sanction as on March 31, 1990 was 100 (value: Rs.86.32 crores) and that initiated during the year 1990-91 was 45 (value:Rs.108.47 crores). Of these 24 RAEs (value: Rs.57.51 crores) were sanctioned during the year 1990-91. As on March 31, 1991, 121 RAEs (value:Rs.137.28 crores) were awaiting sanction. In 31 cases, the RAEs initiated was more than 100 per cent of the original amounts, in 16 cases between 75 per cent and 100 per cent and in 29 cases between 50 per cent and 75 per cent.

A scrutiny of the reports by the Inspection cell of BRDB indicated that in most of the road sectors about 40 per cent to 48 per cent of the original jobs had exceeded the sanctioned amounts beyond the permissible limits of 20 per cent necessitating revision of estimates due to unrealistic & adhoc provision in the original estimates; excess variation of permissible limits in quantities; changes made in the specification and scope of work; and non-completion of work in time resulting in additional expenditure due to steep escalation in prices.

Agreeing with this, the BRDB added (January 1992) the following reasons for revision of estimates:

- change in classification of roads/bridges;
- change in accepted rate of contract/risk and cost execution of contract works;
- regularisation of provisional items such as land acquisition compensation;
- due to Bhutan compensatory allowance element.

While BRDB further stated that 42 RAEs have since been sanctioned the remaining 103 RAEs were at various stages of initiation/sanction. DGBR informed audit (December 1991) that the delay in finalisation and approval of RAEs was due to shortage of staff and the pressure of increased current works.

98.8.5 Completion Reports

In accordance with paras 671 to 673 of Border Road Regulation, a completion report part 'A' is initiated by the Task Force Commanders (TFC) as soon as the work is physically completed and transmitted to the BRDB and the Ministry of Defence (Finance) through the DGBR. Part 'B' of the completion Report is completed as soon as the accounts of the work are closed and forwarded in the same manner. The delay in initiating completion reports parts 'A' and 'B' resulted in dilution of the control of BRDB on the execution of various works by the TFC's.

As on March 1990 delays in forwarding of completion reports ranged between 2 to 3 years for part 'A' and 2 to 8 years for Part 'B'. Delays in initiation of Part 'B' by the project were adduced either to non liquidation of old liabilities or lack of sufficient funds. It was not however, possible to ascertain the exact number and value of Completion Reports Part 'A' and 'B' outstanding since the information was not available with DGBR in a consolidated fashion.

BRDB intimated (January 1992) that as on June 1991, 106 numbers Part 'A' (value: Rs.26.37 crores) and 319 number Part 'B' (value:Rs.112.81 crores) were outstanding and the delay in initiation of Part 'B' was attributed to non-receipt of debit on account of land acquisition/compensation from State Governments, delay in finalisation of

arbitration awards and non-finalisation of accounts by various authorities.

98.8.6 Outstanding Liabilities

The total amount of outstanding liabilities in Border Roads Organisation as on March 31, 1990 was Rs.54.79 crores and these were not debited to the projects. These liabilities included Rs.24.04 crores for category 'B' store, Rs.16.59 crores for Petrol oil and lubricant (POL) and Rs.6.04 crores for ration.

A sum of Rs.72.62 crores for which accounts were submitted by the Controllers of Defence Accounts during 1979-80 to 1988-89 have not been reimbursed by the Ministry of Surface Transport as on March 31, 1990.

A committee was appointed (June 1990) by the Controller General of Defence Accounts (CGDA) to examine the problem of outstanding liabilities. The main reasons leading to accumulation of liabilities were identified by the committee as under:

- inadequate provision in the budget;
- Delay in materialisation of supply orders; and receipt of adjusted vouchers;
- Booking of expenditure under wrong head;
- Emergent works undertaken without allotment of funds;
- increase in cost of stores;
- wrong compilation;
- lack of proper monitoring; and
- Agency/deposit works for which liabilities remained outstanding till these were allocated against the concerned projects.

The recommendations and remedial measures to liquidate these outstanding liabilities were yet (February 1992) to be finalised and submitted by the committee.

DGBR stated (February 1992) that the total amount of outstanding liabilities in BRO as on March 31, 1991 was Rs.50.50 crores and recommendations/remedial measures suggested by the committee appointed in June 1990 have not yet been finalised.



NEW DELHI

Dated the 13 APR 1992

(A.K. MENON)

Additional Deputy Comptroller and Auditor General

Countersigned



NEW DELHI

Dated the 13 APR 1992

(C.G. SOMIAH)

Comptroller and Auditor General of India

Appendix - I

(Refer to paragraph 32.3.1)

	1987-88	1988-89	1989-90
Average value of fixed capital assets (Rs.in crores)	623.69	661.40	749.34
Total value of production (Rs. in crores)	1846.25	2242.44	2211.64
Man-power (number in lakhs)	1.78	1.77	1.75
Net cost of production (excluding inter-factory demands) (Rs. in crores)	1441.82	1890.15	1566.48
Capital output ratio	1:2.31	1:2.86	1:2.09
Factory cost analysis in terms of percentage of gross value of production Material	63.67	67.30	65.94
Labour	7.06	6.24	6.29
Others	29.27	26.46	27.77
Gross contributed value(value of production less materials and outside supplies and services) (Rs.in crores)	670.70	733.23	753.16
Wages (Rs. in crores)	130.30	139.87	139.13
Net contributed value (Gross contributed value less wages) (Rs. in crores)	540.40	593.36	614.03
Net contributed value per Rs.1 crore of fixed capital assets (Rs. in crores)	0.87	0.90	0.82
Average earnings per employee (Rs.)	27301	29024	31174

Net contributed value per employee (Rs.)	30328	33601	35113
Value of avoidable rejection (Rs.in crores)	8.34	4.40	4.81
Percentage of avoidable rejection on gross value of production /customer composition (percentage of total issues excluding inter-factory demands)	0.45	0.20	0.22
(i) Army	91.08	92.83	89.70
(ii) Navy, Air Force & others	4.25	3.48	4.06
(iii) Civil trade	2.80	2.02	3.91
(iv) Own stock and capital works	1.87	1.67	2.33
Extent of requirement of stores (armament, ordnance clothing, mechanical transport) met by Ordnance Factories in terms of percentage			
(i) Army	53.22	68.88	66.38
(ii) Navy, Air Force & others	22.76	20.07	19.76
Value of inventories (Rs. in crores)	909.36	1032.81	1156.71
Surplus, obsolete, slow-moving and non-moving inventories (Rs. in crores)	99.77	140.34	153.59
Norms of general inventory holdings in terms of months requirement	6 months	6 months	6 months
Inventories in terms of month consumption	8.00 months	6.99 months	7.78 months

No. of warrants on which work
was in progress:

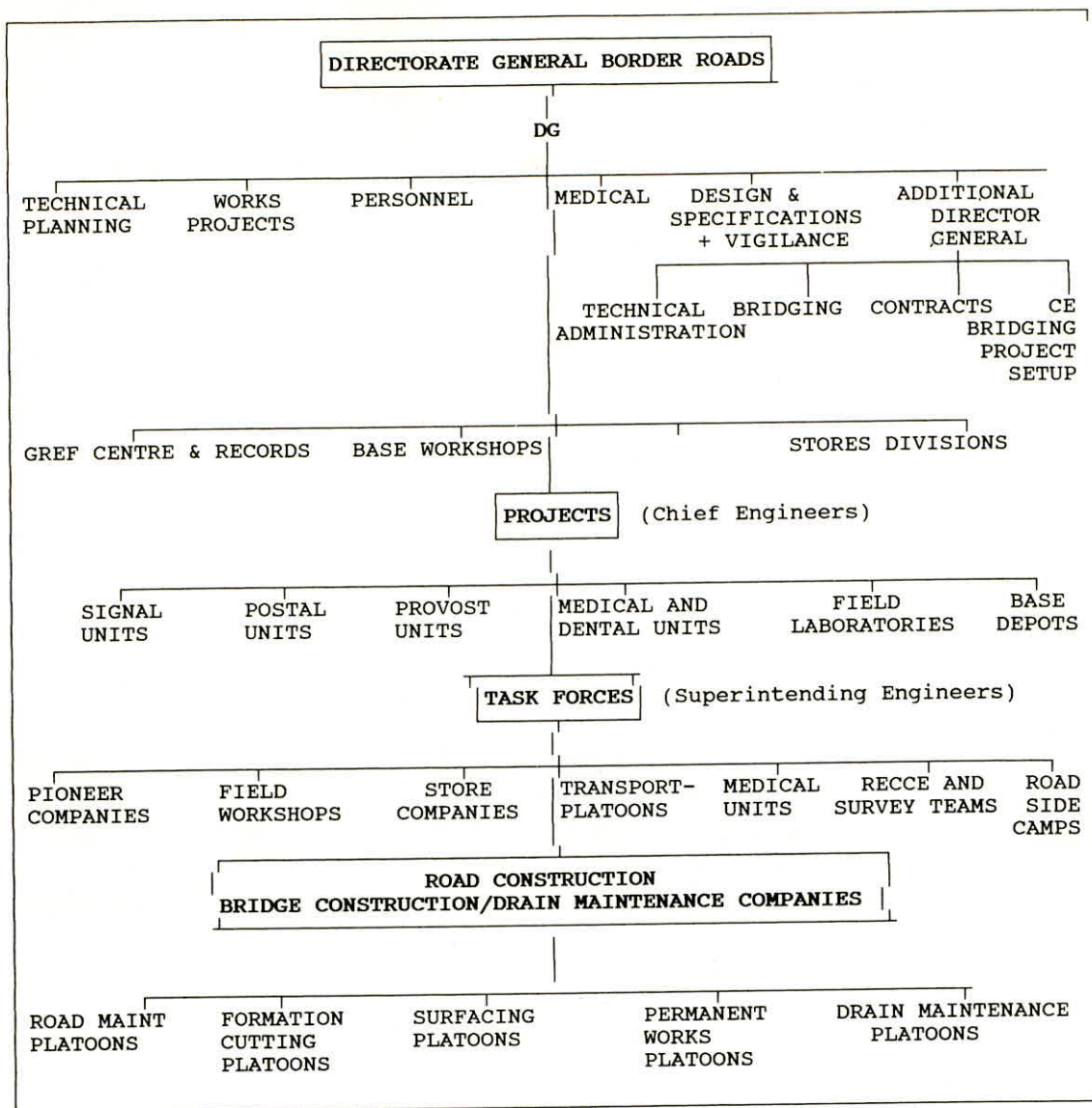
(i) Total No. of warrants which were in progress as on 31st March 1988/1989/1990	39058	33780	45888
(ii) No. of warrants more than one year old onwards on 31st March 1988/1989/1990 on which work was in progress	20327	14894	16522
Normal manufacturing cycle/ normal life of manufacturing warrants	6 months	6 months	6 months
Value of components and products in stock (Rs. in crores)	153.06	171.42	163.81
Components and products holding in terms of months production	0.99 month	0.92 month	0.89 month

Appendix II

(Refer to paragraph 32.3.3)

Year	No. of items for which targets fixed by OFB	No. of items for which progress was behind schedule	Slow progress due to								
			Non-availabilities of stores	Technical problems	Non-receipt of stores from abroad	Awaiting proof clearance	Non-receipt of required machines	Non-receipt of certain parts to be used	Short closed	Misc. and other reasons	No. of items of which orders for manufacture available but not included in the production programme
1986-87	218	36	15	1	1	2	-	-	-	17	14
1987-88	222	32	17	-	2	5	-	-	-	8	14
1988-89	260	44	21	2	5	2	-	-	2	12	26
1989-90	222	40	18	2	-	3	-	-	1	16	31
1990-91	248	29	7	8	3	1	1	1	1	7	39

(Refer to paragraph 98.2)



ERRATA

Page No.	Reference to paragraph/line	For	Read
15	13th line from bottom	lakhs	lakh
27	last line	contract	contract
98	9th line 18th line	estilabishing trails	establishing trials
109	7th line from bottom	idling	idle
111	5th line	froom	from
112	Table (ii)	February	February 1983
124	9th line from bottom	sanxtion	sanction
128	8th and 12th line from bottom	sixtees	sixties
160	12th line	May 1989	June 1989
172	21st line	Auxillary	Auxiliary

