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REPORT OF THE

COMPTROLLER AND AUDITOR GENERAL

OF INDIA

FOR THE YEAR ENDED 31 MARCH 1989

NO.12 OF 1990

UNION GOVERNMENT—DEFENCE SERVICES

(ARMY AND ORDNANCE FACTORIES)

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PREFATORY REMARKS

This Report for the year ended 31st March 1989 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 1988-89 together with other points arising from the test audit of the financial transactions of the Defence Services (Army and Ordnance Factories). Points relating to the Air Force and the Navy have been incorporated separately in Report No. 11 of 1990.

2. This Report includes, among others, reviews on

Army

Canteen Stores Department

Ordnance Factories

(a) Material management in ordnance and ordnance equipment factories.
(b) Ordnance Factory, Muradnagar

3. The Report also includes observations on counter trade which, though dealt with by the Ministry of Commerce, have arisen from the agreement with Bofors entered into by the Ministry of Defence on supply of 155 mm towed gun system and ammunition.

4. The cases mentioned in this Report are among those which came to notice in the course of audit during 1988-89 as well as those which came to notice in earlier years but could not be dealt with in the previous Reports; matters relating to the period subsequent to 1988-89 have also been included, wherever considered necessary.

The Audit Report for the year ended 31 March 1989 contains 128 paragraphs including three reviews. The points highlighted in the Report are given below:

I General

Instances of failure on the part of executive authorities, shortcomings in induction, purchase and maintenance of weaponary and allied equipment, deficiencies in procurement of ordnance stores, ration articles, transport and workshop equipment, lacunae in inspection procedures, etc. resulting in avoidable or wasteful expenditure have been pointed out. It also contains observations on development and production of arms, ammunitions and other equipment by ordnance factories. While commenting on several cases involving injudicious purchases, low capacity utilisation, defective contracts, non-fulfilment of targets and shortcomings in execution of works, the Report highlights the inadequacies in management systems and the delays in execution leading to escalation of costs and set-back to production programmes. The Report underscores the need for stricter financial control, in-depth planning, timely action and close monitoring at every stage of operation.

II Budgetary control

The total grant for the Defence Services as a whole for the year 1988-89 was Rs.13,812.24 crores. The actual expenditure was Rs.13,714.17 crores as against Rs. 12,378.75 crores in 1987-88. The supplementary grant of Rs.241.10 crores obtained for the Army proved inadequate to the extent of Rs. 103.65 crores. Though supplementary grant of Rs.57.87 crores was obtained for Air Force, Rs.51.26 crores remained unutilised. Similarly, against the supplementary grant of Rs.26.75 crores for ordnance factories, the amount remaining unutilised was Rs. 67.87 crores. Despite obtaining supplementary grants, re-appropriations were made and they were in a few cases wholly or partially unnecessary.

(Chapter I)

MINISTRY OF DEFENCE

III. Contracts with Bofors for (a) purchase and licence production of 155 mm gun system and(b) counter trade

The agreement with Bofors for supply of 155 mm towed gun system etc. contained a provision for counter trade to facilitate buy back of goods from India. Appropriate mechanisms for ensuring implementation of the provisions of the counter trade were not conceptualised. In the absence of such mechanisms it could not be ensured that counter trade resulted in additionality and product market diversification in India's or STC's exports and that there was no diversion of traditional exports.

Out of exports of over Rs.207 crores during April 1987 to June 1989 under counter trade, exports of traditional items constituted 59 *per cent*. Commodities like cashew kernels, meat, etc. which were not qualified were reckoned against counter trade.

Additional exports from India to Sweden, as envisaged, not only did not materialise but also exports to that country declined in 1988-89 from 1987-88.

Government have decided (February 1990) not to operationalise the licence agreement for indigenous manufacture of guns and ammunition till Bofors furnish full details about the persons/parties to whom payments of commission had been made. Meanwhile Rs.1.67 crores have been paid on account of commitment fee on unutilised credit in respect of licence production.

A test check of the records with reference to delivery schedule indicated that there were delays in issue of items of gun system to the regiments. One of the systems costing Rs.34.51 crores had not been issued as it did not conform to the prescribed specifications.

Fuze 'A' costing Rs.13.24 crores was awaiting check proof with shell 'N' as supplies of shell 'N' costing Rs.26.29 crores were rejected. Stock of another defective fuze valuing Rs.3.27 crores was being back loaded to suppliers for replacement/rectifications involving avoidable expenditure on its transportation in India.

An amount of Rs.21 crores on account of liquidated damages as of December 1989 was still to be recovered from Bofors (February 1990).

Acceptance of liability for repayment of a portion of credit in Deutsche Mark was likely to result in an uncertain liability due to fluctuations in foreign exchange rates.

No claims for damaged ammunition costing Rs.96.43 lakhs received during January-February 1989, were raised against carriers as marine survey report was not received.

Segregation of ammunition which was damaged by fire and which arrived in India during September 1987 was yet to be completed and out of a claim for Rs.6.60 crores raised therefor, an amount of Rs.1 crore only has been realised so far.

(Paragraph 9)

IV Induction and de-induction of a gun system

The reinduction of a gun, earlier in use, was justified in 1975 and after approval by Government in 1982, a contract for import and licence production was concluded in January 1983. The indigenous version of the gun was found to be superior in performance and part of the order was placed on ordnance factories. A contract for ammunition was concluded in February/March 1984 at a cost of Rs.33.62 crores and the ammunition was imported during 1984 to 1988. The order for guns on the foreign firm could not be performed by the latter due to export restrictions leading to cancellation of the order in June 1983. The indigenous guns, initially found superior in performance, were later on not acceptable to the users in August 1984. The order placed for guns on the ordnance factories was consequently closed in August 1985. It was decided in September 1986 not to induct the guns due to changes in operational requirements. The imported ammunition remained unutilised.

(Paragraph 10)

V Canteen Stores Department

The report underlines the need for a review of the pricing policy by the Canteen Stores Department, better inventory management and appropriate changes in the pattern of allocation of profits to secure better consumer-demand-satisfaction and capital growth for the enlargement of the activities to attain the prime objectives of this venture.

The customers were over-charged by CSD by way of incidental expenses to the extent of Rs.59.91 crores and by levying profit margin on excise duty to the extent of Rs.23.34 crores during 1984-89. While the allocation of profit as a percentage of the surplus for grants-in-aid was increasing, that for capital growth was decreasing. The payment of quantitative discount to unit run canteens and retail outlets rose from 2 per cent (Rs.1.52 crores) in 1977-78 to 3.5 per cent (Rs.20.30 crores) in 1988-89. The benefit on account of quantitative discount was not passed on to the consumers but was utilised for welfare of troops notwithstanding that CSD is paying grants-in-aid separately for this purpose.

Computerisation of data for better demand projections, improved turn-over, and better inventory management at an expenditure of Rs.36.68 lakhs did not prove effective. While procurement of certain goods was far in excess of requirements, twenty seven per cent of consumer demands for other goods could not be met. Of stocks worth Rs.40.26 crores held on 31st March 1989, Rs.19.40 crores were in excess of the norms. There was accumulation of newly introduced goods due to failure to return the unsold items as per understanding with the suppliers.

(Paragraph 11)

VI Provisioning of NCC uniforms

The Director General, Ordnance Factories, who was supplying uniforms to NCC, started according low priority to NCC supply from 1983-84 because of large Army requirements. Failure to make alternative arrangements led to local purchases at higher rates. On purchase of uniforms of Rs.122.57 lakhs, made in 1986-88, the excess expenditure, based on the rates at which the purchases were made by the Director General Supplies and Disposals was Rs.52.30 lakhs. Thus, there has been a failure to make suitable arrangement for centralised procurement of a relatively simple item like NCC uniforms.

(Paragraph 12)

VII Disposal of surplus stores

Security stores valued at Rs.82 crores had accumulated over a period of eleven years occupying not only valuable storage space but resulting in expenditure on their safeguarding. Successive Committees appointed since 1980 had failed to find a solution for their disposal.

(Paragraph 13)

ARMY

VIII Weaponary and allied equipments

A certain number of weapon system to provide air defence cover to Army formations and installations was imported during 1973-74 for Rs.27.25 crores. Eight years were taken in finalising the nceessary arrangement with the foreign supplier for setting up of repairs and overhauling facilities and in obtaining approval of Cabinet Committee on Political Affairs. The project was ultimately approved by Government in 1981, but its execution was further delayed as the sanction for civil works was accorded only in November 1984. The overhauls required for the weapon system in 1981 and 1989 could not be carried out, even once, due to delay in establishing the facilities and non-procurement of spares. The infrastructure for the purpose had been created at a cost of Rs.13.50 crores, but Army Headquarters stated that it remained under-utilised and, consequently, the weapon system remained in the poor fitness state. Further the firing range for the project was still under planning.

(Paragraph 15)

Fitment of a passive night vision device on a certain number of tanks, under a modernisation scheme, was approved during the Sixth Army Plan (1980-85). After procurement action was initiated, Army Headquarters envisaged fitment of the devices on more number of tanks and, accordingly, indents for the devices costing Rs.6.22 crores were placed over and above the quantity cleared in the Sixth Plan. As a consequence of a review carried out in July 1988, orders for a certain number were short-closed involving a loss of Rs.18.35 lakhs. It was also noticed that the devices costing Rs.9.28 crores had been procured in excess of requirements.

(Paragraph 16)

A contract was concluded in February 1981 with a foreign firm for 70 sets of tank fire control system without a fresh evaluation, notwithstanding that the system, earlier supplied by the firm, had failed in trials during 1977-78. Sixty nine sets costing Rs.8.58 crores received during April 1983 to March 1985 were found defective and had been lying unutilised for four to six years awaiting rectification/ modification.

(Paragraph 17)

There was a high incidence of premature failure of engines of a tank. During 1984 to 1988, 256 overhauled engines of a tank failed prematurely. 73 failed before achieving 500 kms including nine which failed even before completing 100 kms after overhaul. Premature failure worked out to 30 per cent of the engines overhauled. Action was stated to be in hand to find an alternative engine and to introduce improved technological measures for ensuring enhanced reliability of overhauled engines.

(Paragraph 18)

Two contracts concluded in May 1980 and August 1982 did not provide for inspection by the purchaser of the ammunition imported or the date of manufacture of the ammunition resulting in supply with a short shelf-life. Out of 12,856 rounds costing Rs.184.12 lakhs declared defective, 3307 rounds costing Rs.47.05 lakhs, had been issued to users units. Disposal of balance quantity of 9549 rounds, costing Rs.137.07 lakhs, was not intimated to Audit.

(Paragraph 19)

A tank simulator was imported in June 1984 at a cost of Rs.18.50 lakhs. However, it was installed in May 1986 after which defects in the hydraulic system were noticed. The defects had not been rectified so far. One of the two cabins in the simulator could be used sub-optimally thereby adversely affecting the training programme. Spares and special maintenance tools could not be procured in sufficient quantity as the simulator had gone out of production.

(Paragraph 20)

IX Logistics and transport

Even though the necessity for procurement of coaching stock was approved in August 1986 and funds were made available in December 1986 sanction for purchase was issued in August 1987, after the offer of the Bharat Earth Movers Limited had expired in May 1987. The firm revised its rate in June 1987 which resulted in extra expenditure of Rs.1.74 crores. Training and relief movements also suffered in the meantime due to inadequate coaching stock.

(Paragraph 21)

To expedite manufacture of wagons by about eight months, it was decided to import bearings for wagons at a higher cost by Rs.1 crore approximately though the required bearings were indigenously available. Although extra expenditure was incurred in foreign exchange, the objective of expediting the supply could not be achieved due to slippages in delivery.

(Paragraph 22)

Risk purchases within the stipulated period of six months from the date of breach of the terms of supply orders for camouflage equipment were not made resulting in extra expenditure of Rs.44.78 lakhs. Claim for general damages of Rs.8.29 lakhs had been initiated.

(Paragraph 23)

Department of Defence Production and Supplies had procured steel water tanks without water sprinklers at a cost of Rs.17.11 lakhs and these were lying idle since May 1987 for want of water sprinklers.

(Paragraph 24)

Motor boat workshops were authorised for the Army in 1972 to repair service vessels mid-stream. A contract was concluded in July 1981 with a firm for supply of workshops by September 1985. The firm failed to supply them, even though extensions for delivery were given up to December 1986. Even after a lapse of over four years the Department of Defence Production and Supplies had neither cancelled the contract nor encashed the bank guarantees obtained for payment of Rs.8.28 lakhs. Servicing continues on shore locations which was not considered desirable in an operational situation.

(Paragraph 26)

171 mules purchased during August 1987 to November 1988 for Rs. 20 lakhs were found to be sub-standard though these had been inspected before purchase by a Board of Officers. The mules could not be deployed for the purpose for which they had been purchased. An expenditure of Rs.4.13 lakhs was incurred on their ration during

December 1988 to September 1989.

(Paragraph 27)

X Workshop equipment

Out of two electronic gear testing machines imported for the purpose of securing optimum accuracy of the gears, one machine costing Rs.28.74 lakhs received in June 1986 by an Army Workshop, was lying in a defective condition. Due to non-finalisation of the proceedings of a Court of Inquiry, the repair to the machine had been delayed.

(Paragraph 28)

Despite the advice given in July 1984 by an Army Base Workshop not to procure a type of dynamometer because of its inherent design deficiency, three sets for Rs.18.37 lakhs were procured in 1986-88. These did not prove useful to the Workshop.

(Paragraph 29)

XI Ordnance stores

Failure of Army Headquarters in realistically assessing the requirement of packing paper and a recolouring compound resulted in excess procurement valued at Rs.285.36 lakhs. These had been lying in stock for over two to five years for want of demands from the users.

(Paragraph 33)

A fire broke out in the storage hangar of Central Ordnance Depot, Kanpur destroying boots worth Rs.1.53 crores on the night of 28th/29th May 1986. Investigations revealed that no stock taking was carried out after August 1984. Further 30 per cent of the 5764 boots salvaged from fire were without the inspection stamp suggesting that the inspection standards were not rigorous. The loss was awaiting regularisation.

(Paragraph 34)

XII Inspection

Instructions issued in October 1985 provide for inspection and check-proofing of imported stores immediately on their receipt in India. Nevertheless, inspection of ammunition, valuing Rs.13.72 crores, imported in April 1986, was delayed and carried out during February- June 1987. The entire consignment being affected with ingress of moisture was sentenced unserviceable. A claim for free replacement was rejected in August 1987 by the foreign supplier as it was preferred after expiry of the warranty period. On a further cent per cent inspection, ammunition costing Rs. 12.22 crores was found moisture affected and the balance valued at Rs.1.50 crores was again being check-proofed for assessing its residual shelf-life.

(Paragraph 39)

Defects arising out of old components in 655 missiles, supplied by Bharat Dynamics Limited, could not be noticed by the inspecting authorities thereby underscoring the need for revising inspection procedures for detecting substandard components. 542 defective missiles were repaired at a cost of Rs. 9.13 lakhs. Besides, 113 defective missiles costing Rs.107.35 lakhs were held in repairable condition and in the process of being phased out as obsolescent.

(Paragraph 40)

XIII Ration articles

Offers of firms for procurement of ration articles like skimmed milk powder, fresh meat, tinned butter and tinned meat could not be accepted within their validity period awaiting sanction of the Ministry. Consequently the contracts had to be concluded at higther rates and local purchases resorted to, to meet urgent requirements resulting in avoidable extra expenditure of Rs.1.87 crores. This calls for a review of systems and procedures and delegation of powers to formations.

(Paragraphs 42,43,44,45)

In pursuance of policy directive, tenders were flaoted on State co-operative federations without assessing their capability for supply of dal. The federations failed to supply. As a result, 6967.75 tonnes of dal had to be purchased from other sources incurring an additional expenditure of Rs.95.19 lakhs.

(Paragraph 46)

ORDNANCE AND CLOTHING FACTORIES

XIV General performance of ordnance factories

Working of the ordnance factories in terms of capacity utilisation, as assessed by the Ordnance Factory Board was above 60 per cent in 32 factories and below 40 per cent in one. Verification of the correctness of the computation by Audit on a sample basis in respect of one factory, however, showed that the statistical basis of computation was not correct. In terms of production performance, 10 out of 66 special items of weapons and ammunition registered significant short-fall owing to failure in accuracy proof, non-availability of components and diversion of capacity. A comprehensive review of the outstanding indents from 1950-51 to 1985-86 showed that 5659 indents were outstanding at the end of 1987-88. The value of abnormal rejections in 1987-88 increased by 85 per cent approximately over the preceding year. Most of the rejections were on account of defective materials and defective castings.

(Paragraph 50)

XV Material management in ordnance and ordnance equipment factories

Stores worth Rs. 182.42 crores in 14 factories were not accounted for in stock as at the end of March 1988. Further, stores valued at Rs. 426.48 crores, for which payments had already been made, could not be linked to the receipts. In one factory there was a discrepancy of Rs. 59.43 crores as on 31st March 1986 between the computerised accounting figures and the manually compiled figures in the store balance. Physical verification of all items of stock, once during each financial year, had not been carried out during 1986-87 and 1987-88 in 7 out of 14 factories. Stock holding had been in excess of authorised limits in some factories.

Discrepancy in stores amounting to Rs. 84.38 lakhs received in a factory from a sister factory had been treated as loss in transit without sanction by the competent authority. Discrepancy vouchers for deficiencies in stores valuing Rs. 78.35 lakhs raised by a factory in 1984-85 had not been adjusted. Loss on rejection of empty shell bodies valuing Rs. 1.30 crores during 1984-87 had not yet been regularised.

Materials valuing Rs. 53.62 lakhs had been drawn by one factory over and above the authorised quantity.

(Paragraph 51)

XVI Ordnance Factory, Muradnagar

In Ordnance Factory, Muradnagar,capacity of the foundries, was never fully utilised during the last five years. Utilisation of machining capacity was at a low level. Rejections during the last five years ranged from 69 to 74 per cent. Total value of abnormal rejections was Rs. 312.49 lakhs.

A plant costing Rs. 1 crore, procured in March 1982, to provide washed and graded sand to the foundries had been utilised only to the extent of 17 to 18 per cent of the capacity.

Items produced had been under- valued as pricing had not reflected the cost of production.

(Paragraph 52)

XVII Development and production

There were instances of lack of clarity in the choice of technical specifications and purposiveness in execution affecting the development and production of arms, ammunitions and equipment.

A mortar and its ammunition could not be developed though Rs. 41.50 lakhs had been incurred on developmental efforts in the last 16 years, for the reasons that quality parameters and user's trial had not been specified.

(Paragraph 53)

Notwithstanding that an appropriate fuze had not been developed even after seven years of work, bulk production had been ventured in leading to rejection of components and filled fuzes valued at Rs. 173.45 lakhs.

(Paragraph 54)

In the development of a naval ammunition, the estimates rose from Rs. 15 lakhs in 1978 to Rs. 55 lakhs in 1988. The capacities created in the ordnance factories at Rs. 258.57 lakhs had remained un-utilised since February 1988. Due to delay, the Navy had imported ammunition worth Rs. 158.82 lakhs during 1986 to 1988.

(Paragraph 55)

The Army gave the clearance for development of light tank without properly assessing the availability of BMP vehicles for productionisation. This resulted in an infructuous expenditure of Rs. 26.79 lakhs for modifying a BMP vehicle for mounting 90 mm turret. The expenditure being incurred on development of light tank with 105 mm turret would also prove infructuous as the Army do not have any requirement for this tank.

(Paragraph 56)

The selection of an improved version of a search light at a later stage, had rendered the expenditure of Rs. 12.28 lakhs incurred on the development of an earlier version, wasteful.

(Paragraph 57)

A project for productionisation of aviation gun sanctioned in December 1983 mainly on self-reliance and strategic considerations and which was to be completed by December 1987, had not been completed. The project productionisation of the ammunition sanctioned in January 1977 was completed in October 1985 but the bulk production of ammunition had not commenced till March 1989. Due to delay, complete ammunition rounds and components costing Rs. 5.20 crores were imported during May 1983 to October 1987.

(Paragraph 58)

Sanctioning of a project for self- reliance and on strategic consideration took 37 months. The project scheduled to be completed in December 1987 was expected to be completed by September 1989 mainly due to delay in completion of civil works. The anticipated completion cost was Rs. 5.24 crores against Rs. 4.58 crores sanctioned. Due to delay in completion of the project, practice ammunition had to be imported at a cost of Rs. 8.73 lakhs.

(Paragraph 59)

There was a mismatch between the design data and the actual design requirement rendering an investment of Rs.8.91 crores in the creation of production capacity for ammunition in a factory idle.

(Paragraph 60)

There was a mismatch in the production of different quantities of the components of an ammunition. This resulted in the production failing to meet the specified target. As a consequence an investment of Rs.370.57 lakhs for augmenting the production capacity of the factory failed to yield the desired return. Further, shortfall in production exceeded Rs.12.12 crores in four years. Ammunition worth Rs.55.74 lakhs were rejected and imports were to be resorted to.

(Paragraph 61)

Production of an adaptor required for fitment of a fuze to the shell body of an ammunition was undertaken before the suitability of the fuze to the shell body was assessed leading to wasteful production of adaptors costing Rs.86.56 lakhs.

(Paragraph 62)

A new pyrotechnic factory sanctioned at a cost of Rs.15.59 crores to produce 29 different items for ammunition could produce only 14 items. Short-fall in the production of two of the fourteen was so large that items costing Rs.11.80 crores had to be imported.

(Paragraph 64)

A project for strip-making was sanctioned even before the technological parameters were known. This resulted in cost and time overrun. Other adverse consequences were market dependence for Rs.233.14 lakhs worth of cold rolled strips, import of brass cups worth Rs.182.48 lakhs and additional cost of Rs.9.94 crores on conversion of scraps into strips.

(Paragraph 65)

Delay in the completion of a project for the production of shell bodies and cartridge cases for a type of ammunition led to procurement of forgings for shell bodies from trade at a higher cost of Rs.111.07 lakhs. Another project sanctioned to create facilities for the production of three other types of the same ammunition scheduled to be completed by July 1987 had not been completed.

(Paragraph 66)

Empty bodies for an ammunition supplied by a firm were cleared by the authorised Inspectorate but were found defective during production. Defective empty bodies and rejected filled bodies valuing Rs.12.24 lakhs had been lying in a factory without any prospective use.

(Paragraph 67)

XVIII Provisioning

There were instances of lack of co-ordination, delays in processing, deficiencies in contracts, etc. Due to lack of co-ordination, items indigenously developed and available were needlessly imported at a cost of Rs.52.09 lakhs.

(Paragraph 72)

Terywool cloth costing Rs.27.61 lakhs had been lying unutilised in a factory for the last three years due to the indentor not providing the specifications for the uniform.

(Paragraph 73)

An instance of procurement without assessing the requirement showed that forgings valued at Rs. 88 lakhs had become surplus with the discontinuance of the production of an ammunition.

(Paragraph 74)

Aluminium rods had been purchased at higher rates from a firm involving an extra expenditure of Rs.42.21 lakhs, ignoring the fact that the sale price of the rod of similar specification, manufactured by the same firm, had been much less.

(Paragraph 75)

Despite a track record of unsatisfactory performance, orders had been placed on a supplier who again failed to perform and the on-account payment of Rs.43.13 lakhs eventually became irrecoverable.

(Paragraph 76)

XIX Plant and Machinery

A purchase contract was concluded, based on incorrect specification, for high-capacity presses for Rs.1.31 crores. The presses failed to provide the envisaged advantage of an improved mechanical process.

(Paragraph 87)

XX Other cases

Instances of losses detected in audit were related to accidents, uneconomical disposals, abnormal rejections, purchase of defective materials, short-closures and abandoned claims. Successive explosions in the nitroglycerine plant in a factory occurred due to selection of the plant of obsolescent technology involving the risk of explosion. A loss of Rs.26.04 lakhs was incurred.

(Paragraph 91)

Losses due to abnormal rejections in one factory amounted to Rs. 322.48 lakhs during the period 1975 to 1985 and were written off long after their occurrence as special cases. A further loss of Rs. 140.05 lakhs was yet to be regularised. There was no system for regular investigation of cases of abnormal rejections.

(Paragraph 92)

In another case under-pricing resulted in the disposal of a material valuing Rs. 25 lakhs at Rs. 0.52 lakh.

(Paragraph 93)

XXI Works and Military Engineer Services

Military Engineer Services constructed additional accommodation for the Chief Engineer, Jabalpur un-authorisedly, by utilising funds of Rs.19.13 lakhs from contingencies of five projects though necessity for construction of a new building was neither accepted nor sanctioned by the competent authority.

(Paragraph 100)

The work of air-conditioning at certain installations at Gorakhpur sanctioned in December 1979 and due for completion in July 1982 was still incomplete after incurring an expenditure of Rs. 17.11 lakhs. Another work of air-conditioning at Jabalpur was pending for more than 15 years without any benefit though a sum of Rs. 4.46 lakhs had been spent. Yet another air-conditioning plant costing Rs. 3.84 lakhs installed in November 1983 had been lying without any use for more than five years as the requisite test and rectification of defects by the firm had not been carried out.

(Paragraphs 102,103)

A work relating to residential accommodation had been executed despite change in deployment of Army units. Another work relating to installation of sewage pumps had not been executed so as to synchronise it with the main work of sewage plant. This resulted in non-utilisation of assets costing Rs. 197 lakhs for over two years.

(Paragraph 107)

Military Engineer Services(MES) failed to apprise suppliers of electricity about the Constitutional provision with regard to non-imposition of electricity duty/tax on the consumption of electricity by the Central Government departments. MES also failed to get the approval for upward revision of maximum demand of electricity and also to disclose the excess connected load under voluntary disclosure scheme. This resulted in avoidable payment of Rs. 99.12 lakhs.

(Paragraphs 113,114,115)

Surplus spares worth Rs. 41 lakhs approved for disposal as early as in 1978 had been lying in an Engineer Stores Depot un-disposed. An expenditure of Rs. 1.73 lakhs had been incurred up to March 1986 on their maintenance and preservation.

(Paragraph 120)

XXII Non-collection of sales tax

There was failure to recover sales tax on goods disposed of in auction sales between April 1976 and October 1981 resulting in a loss of Rs. 81.45 lakhs.

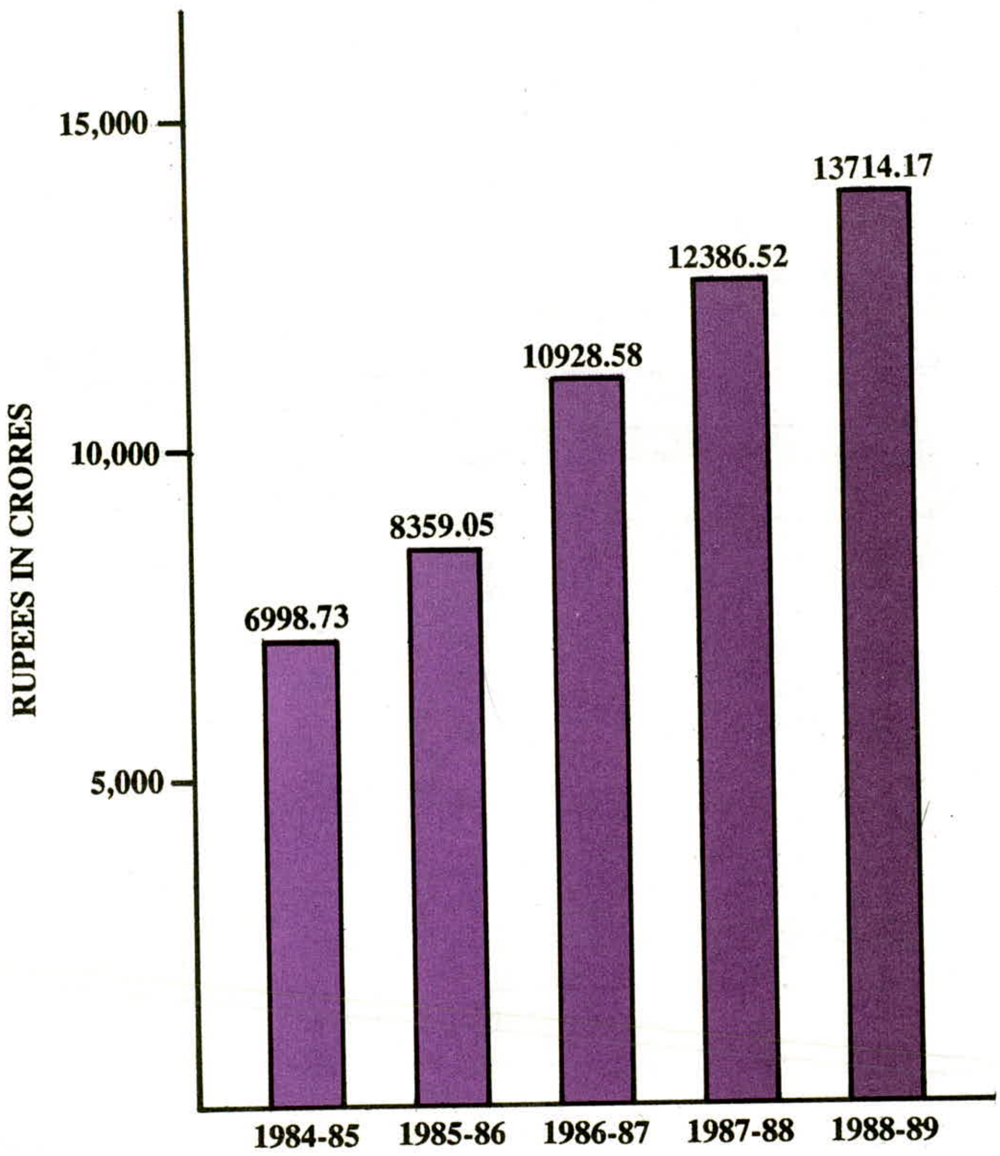
(Paragraph 127)

CHAPTER I

BUDGETARY CONTROL

1. Defence expenditure

Defence expenditure has been increasing from year to year. It stood at Rs. 13,714.17 crores (excluding pensions) for the year 1988-89. The expenditure for the years 1984-85 to 1988-89 was as given below:



2. Budget and actuals

The table below compares the expenditure incurred by the Defence Services in the year ended 31st March 1989 with the amounts of original and supplementary appropriations and grants for the year:

(i) Charged appropriations

	(Rs. in crores)
Original	14.30
Supplementary	0.28
Total	14.58
Actual expendiure	4.39
Saving	10.19
	(per cent)
Saving as a percentage of the total provision	69.89

There were overall savings in the preceding 13 years also. The percentage of savings as compared to the total provision during the years 1982-83 to 1987-88 ranged between 14.41 and 62.40 which increased to 69.89 during 1988-89.

(ii) Voted grants

	(Rs. in crores)
Original	13,467.35
Supplementary	344.89
Total	13,812.24
Actual expenditure	13,714.17
Saving	98.07
	(per cent)
Saving as a percentage of the total provision	0.71

In the preceding year, there was a saving of Rs. 914.87 crores under the voted grants.

3. Supplementary grants

There are, in all, five grants for Defence Services. Supplementary grants (voted) aggregating Rs. 344.89 crores, were obtained in four out of the five grants during March 1989 as indicated below:

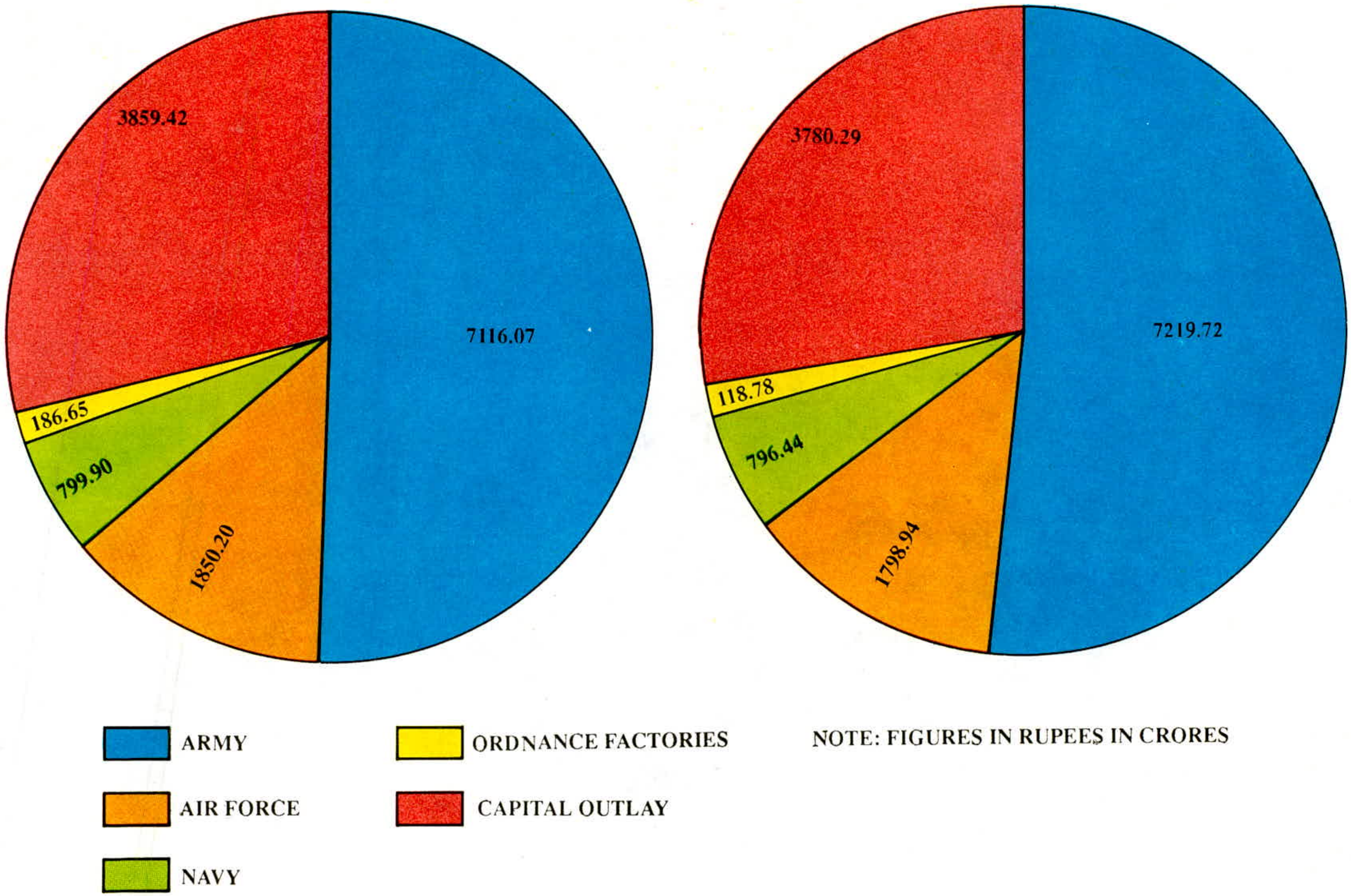
(Rs. in Crores)

Grant No.	Amount of grant			Actual	Excess (+)
	Original	Supplimentary	Total	Expenditure	Saving (-)
14-DS-Army	6874.97	241.10	7116.07	7219.72	(+)103.65
15-DS-Navy	780.73	19.17	799.90	796.44	(-)3.46
16-DS-Air Force	1792.33	57.87	1850.20	1798.94	(-)51.26
17-Defence Ordnance Factories	159.90	26.75	186.65	118.78	(-)67.87
18-Capital Outlay on Defence Services	3859.42	-	3859.42	3780.29	(-)79.13
Total	13,467.35	344.89	13,812.24	13,714.17	(-)98.07

The supplementary grant obtained for the Army proved to be inadequate to the actual requirement whereof for the Navy, Air Force and Defence Ordnance Factories, it turned out to be a surplus. The original grant on Capital Outlay on Defence Services also proved excessive.

VOTED GRANTS
FOR 1988-89
TOTAL - 13,812.24

ACTUAL EXPENDITURE
DURING 1988-89
TOTAL - 13,714.17



NOTE: FIGURES IN RUPEES IN CRORES

4. Excess over voted grant

In the revenue section under Grant No.14- DS-Army, against the total amount of grant of Rs.7116.07 crores, the actual expenditure was Rs.7219.72 crores resulting in excess expenditure of Rs.103.65 crores which requires regularisation under Article 115 of the Constitution.

Despite obtaining supplementary grant, the excess expenditure indicates that requirement of funds was assessed un-realistically not only at the time of budget estimates but also at the time of obtaining supplementary grant.

The excess expenditure on Army was mainly under:

(i) 'Pay and Allowances', due to heavy booking than anticipated and double booking against Assam Regiment;

(ii) 'Transportation', due to higher expenditure on travelling and out station allowance, rail charges and greater movement of personnel and stores;

(iii 'Military Farms', due to increase in the rate of daily labour and their regularisation, increased fodder prices, production charges, increase in cost of transportation of fodder and miscellaneous charges due to increased cost of steam coal, petrol, oil and lubricant, repair of plant and machinery, etc;

(iv) 'Inspection Organisation', due to increase in purchase of materials, grant of dearness allowance and bonus to work charged employees, increase in cost of stores and construction materials, increase in tariff rates, increased consumption of water and electricity, etc.;

(v) 'Stores', mainly due to supplies ex-Director General of Ordnance Factories;

(vi) 'Works', due to higher expenditure on minor works, maintenance and operation of installations on account of payment of bonus, increase in cost of stores, etc.; and

(vii) 'Other expenditure', due to abnormal increase in the prices of conservancy stores and equipment, abnormal increase in payment to Cantonment Boards for conservancy charges, increased expenditure on money order commission, increase in cost of liveries and uniforms, etc.

5. Control over expenditure

The following are some instances where budgetary control was defective.

(a) In the following cases, the supplementary grant was wholly or partially inadequate/ surplus:

(Rs. in Crores)

Grant No. / Sub-Head	Original grant	Supplementry grant	Amount re-appropriated	Final grant	Actual expenditure	Excess(+) Saving(-)
14-DS-Army						
A.1 Pay and Allowances of Army	2344.39	241.10	(+)47.71	2633.20	2690.39	(+)57.19
15-DS-Navy						
A.1 Pay and Allowances of Navy	140.00	10.00	*	150.00	154.30	(+)4.30
16-DS-Air Force						
A.6 Works	127.99	8.77	(+)1.23	137.99	124.47	(-)13.52
A.7 Special Projects	80.00	10.00	-	90.00	85.96	(-)4.04
17-Defence Ordnance Factories						
A.2 Manufacture	502.90	26.75	(+)15.92	545.57	503.62	(-)41.95

* Actual amount re-appropriated was (-) Rs. 20,000.

(b) In the following cases, re-appropriations made were wholly or partially unnecessary:

(Rs. in crores)

Grant No. Sub-Head	Sanctioned grant	Amount re-app-ropriated	Final grant	Actual expend-iture	Excess(+) Saving(-)
14-DS-Army					
A.3.Pay and Allowances of civilians	379.35	(-)8.35	371.00	372.30	(+)1.30
A.4.Transportation	219.63	(-)15.88	203.75	207.13	(+)3.38
A.9.Works	409.96	(-)6.01	403.95	428.66	(+)24.71
15-DS-Navy					
A.3.Pay and Allowances of civilians	114.17	(+)4.83	119.00	114.79	(-)4.21
A.4.Transportation	25.00	(+)19.50	44.50	42.32	(-)2.18
A.5.Stores	428.83	(-)60.33	368.50	369.97	(+)1.47
A.6.Works	50.00	(+)13.00	63.00	60.51	(-)2.49
A.7.Other expenditure	31.90	(+)23.00	54.90	54.55	(-)0.35
16-DS-Air Force					
A.1.Pay and Allowances of Air Force	412.20	(+)4.98	417.18	415.32	(-)1.86
A.3.Pay and Allowances of Civilians	63.35	(-)0.37	62.98	63.66	(+)0.68
A.4.Transportation	35.00	(+)8.60	43.60	42.42	(-)1.18
A.6.Works	136.76	(+)1.23	137.99	124.47	(-)13.52
A.8. Other Expenditure	30.89	(+)0.97	31.86	29.28	(-)2.58
17-Defence Ordnance Factories					
A.1.Direction and Administration	9.00	(+)0.25	9.25	8.86	(-)0.39
A.2.Manufacture	529.65	(+)15.92	545.57	503.62	(-)41.95
A.3.Stores	800.00	(-)12.07	787.93	820.83	(+)32.90
A.4.Machinery and Equipment	1.00	(+)1.50	2.50	1.96	(-)0.54

(Rs. in Crores)

Grant No. Sub-Head	Sanctioned grant	Amount re-app-ropriated	Final grant	Actual expend-iture	Excess(+) Saving(-)
18-Capital outlay on Defence Services					
A.1.Army					
A.1.(1) Land	49.00	(-)32.00	17.00	17.61	(+) 0.61
A.1.(3) Stock suspense	Nil	(+)2.18	2.18	0.07	(-)2.11
A.1.(5) Aircraft and Aeroengines	20.00	(-)14.68	5.32	7.86	(+)2.54
A.1.(7) Other Equipment	700.00	(-)138.27	561.73	605.16	(+)43.43
A.2.Navy					
A.2.(2) Constuction Works	102.90	(+)9.00	111.90	105.72	(-)6.18
A.2.(3) Naval Fleet	378.00	(+)66.12	444.12	436.35	(-)7.77
A.2.(4) Naval Dockyards	71.90	(-)8.98	62.92	66.84	(+)3.92
A.2.(5) Aircraft and Aero-Engines	441.17	(-)48.17	393.00	407.27	(+)14.27
A.2.(7) Other Equipment	8.00	(-)5.00	3.00	3.16	(+)0.16
A.3.Air Force					
A.3.(2) Construction Works	82.20	(+)22.70	104.90	104.00	(-)0.90
A.3.(3) Special Projects	20.00	(-)1.00	19.00	19.16	(+)0.16
A.4.Defence Ordnance Factories					
A.4.(2) Machinery and Equipment	218.00	(-)22.00	196.00	207.97	(+)11.97
A.4.(3) Susperse	Nil	(+)5.00	5.00	4.61	(-)0.39
A.5.Research and Deve-lopment Organisation	120.30	(-)7.65	112.65	115.95	(+)3.30
A.6.Inspection Organisation	7.00	(+)0.50	7.50	6.43	(-)1.07

6. Double booking of expenditure

During 1988-89, a sum of Rs. 11.73 crores was booked twice under Grant No. 14-DS - Army, Sub-Head A.1 'Pay and Allowances of Army' in respect of Junior Commissioned Officers/Other Ranks of Assam Regiment. Though the double booking was brought to the notice of the Controller of Defence Accounts (other ranks), Meerut and Controller General of Defence Accounts by Army Headquarters for taking corrective measures, no efforts were made to correct the same even at the time of March (Manual) corrections 1989, compilation. This resulted not only in exhibition of an incorrect picture of the actual expenditure but also in net excess requiring regularisation.

7. Erroneous booking of expenditure

Mention was made in the Appropriation Accounts, Defence Services 1987-88 under Grant No.13 - Defence Services - Army explaining the variations between final grant and actuals relating to Sub-Head A.5 - Military Farms. The reasons for the excess of Rs. 11.85 crores was stated mainly due to erroneous booking of Rs. 7 crores as "production charges".

However, it was stated by the Ministry of Defence (Finance/Budget) while submitting a Note to Public Accounts Committee (PAC) for regularisation of excess expenditure that the excess of Rs. 7 crores, earlier stated to be on account of production charges, was caused on account of re-adjustment of certain expenditure pertaining to the period December 1983 to March 1986.

Though the above excess was due to re- adjustment carried out to rectify the initial wrong booking made by the controlling authorities, it was not in order to book the same in the accounts of 1987-88 as the expenditure was not incurred during 1987-88. This has resulted in regularisation of the excess exenditure of Rs. 7 crores under Article 115 of the Constitution as if incurred during 1987-88.

8. Outstanding claims/dues

Mention was being made year after year in the CGDA's certificate in the Appropriation Accounts - Defence Services regarding outstanding claims against Railways/Shipping Corporations for losses of damages of stores in transit and outstanding dues for supplies and services rendered on payment by the Defence Services to others including Central Civil Departments, State Government's private individuals and institutions. A review of the position shows the increasing trend as indicated below:

(a) The claims outstanding against Railways/ Shipping Corporations rose from Rs. 25.12 crores as on 30th September 1984 to Rs. 30.71 crores as on 30th June 1988 showing an increase of 22 *per cent.*

(b) The outstanding dues for the services rendered on payment by the Defence Services to others as on 30th September 1984 rose from Rs. 22.57 crores to Rs. 39.13 crores as on 30th June 1988 showing an increase of over 73 per cent.

CHAPTER II

MINISTRY OF DEFENCE

9. Contracts with Bofors for (a) purchase and licence production of 155 mm gun system and (b) counter trade

9.1 Licence production

Mention was made in paragraph 11 of the Report of the Comptroller and Auditor General of India for the year ended 31 March 1988, No. 2 of 1989, Union Government-Defence Services (Army and Ordnance Factories) about conclusion of contract for 155 mm calibre (towed) gun system, its evaluation, financial aspects and certain aspects of contract performance including licence production. It was also brought out that a decision was taken to undertake the manufacture of the Bofors gun system and ammunition under licence, without a comprehensive assessment of the financial and economic costs involved.

Though the licence agreement with Bofors for indigenous production was entered into as early as in March 1986, the sanction for appointment of Bharat Earth Movers Limited as nodal agency for manufacture of gun, associated spares, etc. was issued in August 1989 only. No arrangements for indigenous manufacture of ammunition was finalised up to January 1990.

The Ministry stated, in February 1990, that "Government has since decided that no further steps shall be taken to operationalise the Licence Agreement for the 155 mm Gun till Bofors furnish full details about the persons/parties to whom payments of commission have been made by them and arrange to return the entire amount paid so far. In pursuance of the above directions, the Licence Agreement for indigenous manufacture of 155 mm Gun System is being reviewed by the Department of Defence Production and Supplies". It added that this review includes a re-assessment of the requirement of manufacture of guns and the technical feasibility to make the gun through reverse engineering without the need to import CKD/SKD kits and other materials from Bofors.

In March 1986, an agreement had been concluded with Svensk Export Kredit to avail credit for licence production. It provided for payment of commitment fee on unutilised portion of credit. No credit could be availed of due to lack of any progress on the project for licence production. However, up to June 1989, an amount of Rs.1.97 crores had been paid as commitment fee on the unavailed amount of credit.

9.2 Equipping of regiments

A test check of the records with reference to delivery schedule indicated that as on 31st August 1989, the shortfall in receipt of seven out of eight important items of the gun system ranged from 8 to 58 *per cent*. In respect of one item of ammunition, the shortfall in receipt was 38 *per cent*. There were also shortfalls in issue of these items to regiments *vis-a-vis* the availability in stock. One of the gun systems (37 numbers costing Swedish Kroners(SEK) 12.98 crores or Rs.34.51 crores) had not been issued (February 1990). The Ministry intimated in February 1990 that the system was not supplied to the regiments as it did not conform to the prescribed specifications. It added that almost all equipment for raising the regiments had been received from Bofors except one system. But it did not clarify the position regarding shortfall in issue of these items to regiments.

9.3 Freight on additional towing vehicles on loan

Due to anticipated delay in supply of towing vehicles, Bofors, in December 1986, offered to supply 26 additional towing vehicles, on loan, on the same terms and conditions as for 20 towing vehicles provided in contract on loan basis. On acceptance of this offer, 26 vehicles were sent by the supplier during March to July 1987. Excepting the cost of transportation to and from India, which was to be borne by the supplier, all other expenditure was to be borne by the buyer. The loan vehicles were subsequently returned to Bofors by incurring an expenditure on freight for 26 vehicles from Bombay to depot and back amounting to Rs.22 lakhs.

The Ministry stated in February 1990 that they had lodged a claim for liquidated damages for SEK 14.64 lakhs on account of delays in supply of new towing vehicles but Bofors did not agree on the ground that they had supplied additional 26 vehicles on loan. The Ministry added that the matter has again been taken up with Bofors.

9.4 Defective ammunition

After check proof of consignments of fuze 'A' in India in August 1988, Director General Quality Assurance (DGQA) pronounced the entire quantity of fuzes received up to

September 1988, valued at SEK 4.98 crores (Rs.13.34 crores) defective. The entire stock of this fuze was sealed/ banned for issue. Consequent on a request from the supplier, a fresh check proof in the presence of its representative was carried out with shell "M" in October 1989 and performance was found to be satisfactory. The check proof with shell "N" was still to be carried out (February 1990). Ministry stated in February 1990 that shell "N" had been sentenced rejected and Bofors had been asked in January 1990 to replace the entire defective quantity (cost: SEK 9.89 crores or Rs.26.29 crores).

Fuze 'B' to be supplied by Bofors could be used for firing with two types of ammunition. However, fuze'B' was found to encounter certain problems with one of these ammunitions.The supplier had agreed to modify the fuzes already supplied. Ministry stated in February 1990 that these fuzes costing Rs.3.27 crores were being back loaded for replacement/rectification. The cost of transportation of the fuzes within India, would be borne by the buyer. Due to defects, shell "N" and fuze 'B' costing Rs.29.56 crores could not be issued to the regiments.

9.5 Liquidated damages

Mention was made in paragraph 11.7.07 of the Report of the Comptroller and Auditor General of India, for the year ended 31 March 1988, Union Government-Defence Services, (Army and Ordnance Factories) about delay in delivery of certain items as a result of which liquidated damages worth SEK 51.82 lakhs, had become due up to June 1988.

The Ministry stated, in February 1990, that as a result of review of supplies of various items up to December 1989,claims for liquidated damages amounting to SEK 7.95 crores (Rs.21 crores) have been raised on Bofors. It added that there was no provision in the contract for levy of interest for delays in making payment of liquidated damages.

9.6 Methodology of evaluation of offers.

The Department of Economic Affairs had termed the Deutsche Mark (DM) as a strong and highly speculative currency. Repayment of credit under Tranche I B relating to amounts disbursed for deliveries of items of non-Swedish origin of the gun system and Tranche II relating to amounts disbursed for deliveries of the ammunition is to be made in DM. It was noticed in audit that invoices relating to the period August 1986 to June 1989 for Tranche I B and Tranche II, amounted to SEK 169.76 crores or DM 57.04 crores. The rupee equivalent of the ~~total value of invoices~~ up to June 1989,based on the exchange rate as on 24th November 1989, worked out to Rs.469.68 crores for SEK and Rs.476.27 crores for DM *i.e.* a difference of Rs.6.59 crores. This difference shows that the ultimate difference due to fluctuation in exchange rate, which will be borne by Government, when the repayment of credit relating to Tranche I B and Tranche II starts in October 1990 and April 1991 respectively, is likely to be quite substantial, if the present trend persists.

Ministry stated in February 1990 that part repayment of credit in DM had not worked out greatly to the disadvantage of Government and viewed with reference to the total credit facility utilised up to June 1989, the differential payment was insignificant. It further stated that the Department of Economic Affairs had issued, in December 1988, fresh guidelines for evaluation of tenders involving utilisation of credit.

9.7 Claims for defective/damaged ammunition

Regulations provide that application for survey would be made within three days of general landing date of the vessel or within the time limit prescribed by law or local usage. In two cases, ammunition costing Rs.96.43 lakhs, which arrived at an Indian port, during January - February 1989, was sent to an ammunition depot which received it in a damaged condition. As marine survey report was not received, no claims had been preferred so far (October 1989).

A fire broke out in an Indian vessel containing ammunition in July 1987. The ammunition was duly insured with an Indian insurance company. The vessel arrived at Indian port in September 1987. The consignment was inspected by a joint team comprising representatives of users, inspection authorities, supplier and marine survey team. The supplier finally recommended that ammunition should be considered a total loss having been subjected to high temperature during fire. Accordingly, Ministry rejected the entire ammunition. In October 1987, Ministry preferred a claim of Rs 13.62 crores on insurance company. The consultants of the insurance company desired that the entire lot should be inspected to determine the serviceability/ reliability of the ammunition. In December 1988, Ministry asked DGQA to inspect the ammunition in association with the consultants of the insurance company. After inspection, Ministry decided in July 1989 to accept four types of ammunition subject to the condition that the insurance company should furnish a bank guarantee equal to 5 *per cent* of value of these items as warranty. A revised claim was lodged for Rs.6.60 crores in July 1989. Simultaneously, Ministry requested the Director General Ordnance Services to complete segregation and examination of all items, on board the Indian vessel, which were not covered by the claim so that cost of defective items, if any, could be recovered from the insurance company.

A cheque for an on account payment of Rs.1 crore, without prejudice to the claim of Rs.6.60 crores, had been received from the insurance company in September 1989. In October 1989, Ministry requested the insurance authorities to pay the balance amount of Rs.5.60 crores immediately failing which interest at the rate of 18 *per cent* per annum would be levied for the period of delay beyond 31st October 1989. Ministry added that Army HQ had been directed to complete the segregation of ammunition immediately. Thus, even after a lapse of two years after fire, the segregation and examination of affected ammunition was not fully completed leading to non-settlement of the claims with the insurance authorities.

The comments of the Ministry had not been received(February 1990).

9.8 Bofors and counter trade

9.8.1 Agreement for counter trade

The agreement signed by the Ministry of Defence on 24th March 1986 for supply of 155 mm towed gun system etc. with Bofors of Sweden contained a clause for counter trade. It was to facilitate buy back of goods or items to be manufactured in India under the licence agreement and to pursuade other importers in Sweden to purchase commodities from India. The total exports from India shall not be less than 50 *per cent* of (a) the value of the contract (Rs.1438 crores) and (b) purchases made under the licence agreement.

Government nominated the State Trading Corporation of India Limited (STC) as the nodal agency to "effect and monitor exports from India" in fulfilment of the counter trade. As a sequel thereto, STC signed a Memorandum of Understanding (MOU), on 30th March 1987, with Bofors to implement the counter trade clause. As per the MOU, STC will get a service charge of 0.25 *per cent* of the FOB value of exports. As part of the MOU, Bofors furnished a list of 25 firms as their eligible nominees/ partners/ associates. This list had been revised, mutually, by the parties from time to time. As on 31st March 1989, the exports were being undertaken by ten nominees.

The MOU provided that "all commodities, products and services produced in India in part or full are eligible as mutually agreed" (to be exported). In the MOU signed in March 1987, eleven commodities/products like ores, minerals, chemicals and pharmaceuticals, manufactured goods, electrical and non-electrical machinery, transport equipment, finished goods, etc. were identified for exports from India. Subsequently, in the review meeting held in January 1988, restrictions on exports were imposed as under on certain items:

(i) some were not qualified for exports (*e.g.* sugar, molasses);
(ii) some were having market restrictions (*e.g.* cashew kernels to USA, coffee to quota countries); and
(iii) for some, STC was to have the first right of refusal (*e.g.* jute goods, spices).

Besides, exports to Rupee Payment Areas were not to be allowed under the MOU.

In placing restrictions, as mentioned above, general restrictions on certain items of exports under counter trade deals, which were enunciated in the guidelines issued by STC and effective from 15th September 1987 were not taken into account.

Consequent on further discussion between STC and Bofors, an addendum to the MOU was signed by STC on 9th March 1988 with Bofors. The addendum clarified that the purpose of counter purchase clause of the main contract was "to generate additional exports and not to divert existing exports from India". The addendum also fixed a schedule for exports valuing SEK 4200 million (Rs.800 crores aproximately) as given below:

Year	Value of counter trade (in million SEK)
1987	25
1988	400
1989	500
1990	600
1991	600
1992	600
1993	600
1994	600
1995	275
Total	4200

While fixing the above schedule no provision was made for purchases to be made by Bofors under the licence agreement. STC informed, in December 1989, that the counter trade against the licence agreement will be taken up as and when it is finalised.

The addendum also provided that special efforts would be made by Bofors to increase Indian exports to Sweden by arranging with the importers in Sweden and to divert to India the purchases made by Nobel Industries group wherever possible.

9.8.2 Export performance

The export performance under the counter trade with Bofors was as follows:

(in crores of rupees)

Year	Value of contracts concluded	Value of shipments made
1987-88	32.51	12.36
1988-89	247.42	153.57 ·
1989-90 (Upto June 1989)	181.56	41.44
Total	461.49	207.37

The export amounting to Rs.207.37 crores,through the nominees of Bofors, were to 46 countries. It was seen that substantial exports under the MOU were of traditional items. Out of exports of Rs.207.37 crores, made during April 1987 to June 1989, traditional items were of the value of Rs.122.05 crores as given below constituting 59 *per cent* of the exports:-

	Commodity	Value (Rupees in crore)
1.	Tobacco	11.58
2.	Jute goods	10.74
3.	Molasses	6.85
4.	Black pepper	5.41
5.	Guar gum	9.18
6.	Soyabean meal	11.63
7.	Rice	15.58
8.	Coffee	2.85
9.	Cashew kernels	25.29
10.	Ground-nut kernels	1.06
11.	Castor oil	15.70
12.	Psyllium husk	1.07
13.	Sorghum and millets	0.83
14.	Seeds	2.50
15.	Ground-nut extractions	1.37
16.	Spices	0.41
	Total	122.05

STC stated in December 1989 that traditional items also require counter trade support in the face of difficult market situation. While the contention of STC that even traditional items require marketing efforts may be so, counter trade support is essentially meant for export of other than traditional items and for product-market diversification. According to STC's guidelines of September 1987, while certain items were not qualified for export at all, some were given weightage of 50 *per cent* of the value exported for being reckoned against counter trade. It was seen that some of these items viz., cashew kernels (Rs.17.42 crores), meat (Rs.1.04 crores), black pepper (Rs.5.31 crores), soyabean meal (Rs.10.32 crores) were also exported under the MOU. It hardly served the purpose of export promotion by exporting under the MOU, items like cashew kernels, black pepper, etc., which have a ready international market.

9.8.3 Additionality of exports

As per the addendum of March 1988, attached to the MOU of March 1987, all exports, additional to the corresponding 1986 figures (base year), in respect of Bofors or its nominees were to be considered additionality. For the purpose of defining the base, Bofors was to provide STC, item-wise, country-wise levels of purchases in 1986 from India in respect of themselves and their nominees.

Additionality of exports should have been taken with reference to India's or STC's exports each year commodity-wise (and or country-wise) with reference to a base year. An increase in export performance of an individual Indian exporter with reference to a base year could also be reckoned as additional exports. The criteria followed by STC was flawed inasmuch as whatever exports were achieved by the nominees (except two for whom the base year's performance was taken) were treated as additional. If the existing exports achieved through Indian suppliers had been diverted and shown on the account of nominees of Bofors, there could not have been any additional exports in effect.

A test check of the commodities/items purchased by the nominees of Bofors from Indian suppliers under the MOU during 1988-89, revealed that in four major commodities namely castor oil, coffee, jute goods and rice there was no additionality in STC's exports in 1988-89 *vis-a-vis* 1987-88 but only diversion of trade. The table given below clarifies this position:

(in lakhs of rupees)

Commodity	1987-88 On STC account	1987-88 Under Bofors' counter trade	1987-88 Total	1988-89 On STC account	1988-89 Under Bofors' counter trade	1988-89 Total
Castor oil	5117.00	--	5117.00	4226.39	739.53	4965.92
Coffee	5610.40	--	5610.40	1232.94	285.78	1518.72
Jute goods	2920.80	6.00	2926.80	1103.56	723.75	1827.31
Rice	4636.80	--	4636.80	795.65	1464.43	2260.08
		6.00			3213.49	

Out of total exports of Rs.153.57 crores during 1988-89, under the MOU, the diversion of trade in respect of four commodities namely castor oil, coffee, jute goods and rice was of the order of Rs.32.07 crores amounting to about 21 *per cent* of the exports.

In terms of overall exports of the country there was a decline in the quantum of exports of coffee in 1988-89 as compared to 1987-88. In respect of jute goods, while there was an improvement in the quantity of exports in 1988-89 as compared to 1987-88, the value of exports had declined due to lower unit value realisation. There was only a marginal improvement in the quantum of exports of rice in 1988-89 as compared to 1987-88. The details are given below:

Commodity	1987-88 Quantity (Tonnes)	1987-88 Value (Rupees in crores)	1988-89 Quantity (Tonnes)	1988-89 Value (Rupees in crores)
Coffee	88,700	263.22	82,371	279.07
Jute goods	2,35,800	242.56	2,92,064	239.07
Rice	3,71,600	324.57	3,75,635	331.46

(source: Directorate General of Commercial Intelligence and Statistics-'Foreign Trade Statistics of India').

It will be seen thus that there was no additionality in exports from the country's point of view.

STC replied that castor oil was being exported earlier to only Rupee Payment Areas and that all exports under the MOU were to General Currency Areas. Excepting in 1985-86 and 1986-87, STC had exported castor oil to countries other than Rupee Payment Areas, the total value of which was Rs.2228 lakhs, Rs.1815 lakhs and Rs.3520 lakhs in 1982-83, 1983-84 and 1984-85 respectively.

In respect of coffee, STC stated that there was a sharp increase in its own direct export and as such it could not be construed as diversion. It was seen, however, that there was a sharp decline in STC's total exports of coffee (both direct and indirect export) in 1988-89 as compared to 1986-87 and 1987-88 when exports were of the order of Rs.6829.40 lakhs and Rs.5610.40 lakhs respectively. Therefore, exports shown under MOU for 1988-89 were diversion of existing exports.

In regard to jute goods, STC stated that this was one of the items identified by Government as one with depressed international market requiring counter trade support. STC's own export of jute goods was, however, substantial in earlier years (Rs.3066.30 lakhs in 1983-84, Rs.3512.10 lakhs in 1984-85, Rs.3087.80 lakhs in 1985-86 and Rs.2943.50 lakhs in 1986-87) and therefore, exports shown under counter trade were merely diversion of existing trade.

STC had further stated that rice was exported for the first time in 1987 to the General Currency Areas and no business could be done in 1988 but for the support of counter trade. The fact is that STC had been exporting to General Currency Areas earlier also, the total exports being Rs.315.80 lakhs in 1984-85 and Rs.101.50 lakhs in 1985-86 and Rs.847.80 lakhs in 1986-87.

There was a decline in the export by STC to some of the countries as indicated below, disclosing that there was diversion of STC's exports under counter trade:

(in lakhs of rupees)

Commodity	Country	Total export by STC 1987-88	Total export by STC 1988-89	Value of export under Bofors' counter trade in 1988-89 included in total export i.e. diversion	Actual decrease in 1988-89 by STC over 1987-88
Rice	Kuwait	1795.50	1200.84	1176.07	594.66
Cashew kernels	Australia	162.40	123.61	95.69	38.79
Jute goods	U.S.A.	1420.10	673.72	156.73	746.38
Coffee	U.K.	880.60	56.75	56.74	823.85
	U.S.A.	1730.30	344.86	122.08	1385.44
	West Germany	259.20	144.51	75.16	114.69

9.8.4 Trade with Sweden

Exports to Sweden during 1988-89 declined to Rs.74.74 crores from Rs.81.22 crores in 1987-88. Further, only additional exports of Rs.2.80 crores had been generated up to June 1989 under the MOU. This represented one *per cent* of the value of counter trade under the MOU with Bofors. Thus one of the objectives of MOU to generate additional exports to Sweden had not been fulfilled.

9.8.5 Ministry's reply

Ministry of Commerce, to whom the Audit observations on the counter trade had been sent, stated in January 1990 that " the comments given by the STC are quite justified and adequate in the context of the general policies and counter trade. Moreover, on the question of additionality, though the existing arrangement is termed as unscientific, no alternative workable formula has been suggested". It is clear that appropriate mechanisms for ensuring implementation of the provisions of the agreement on counter trade had not been conceptualised. The replies of STC to the Audit observations, which have been endorsed by the Ministry, run counter to the declared pronouncements on the objectives of counter trade, the most important being that there should be net additionality and no diversion of traditional exports and it should result in product-market diversification.

9.9 To conclude,

- Government have decided not to operationalise the licence agreement of March 1986 till Bofors furnish full details about the persons/parties to whom payments of commissions had been made and till Bofors arranges to return the entire amount paid so far. Meanwhile Rs.1.67 crores had been paid on account of commitment fee on unutilised credit in respect of licence production.

- There were delays in issue of the items of the gun system to the regiments. One of the systems, costing Rs.34.51 crores had not been issued to the regiments as it did not conform to the prescribed specifications.

- Delays by the supplier to supply towing vehicles in time resulted in an expenditure of Rs.22 lakhs in connection with transportation of 26 loan vehicles in India.

- Fuze 'A' costing Rs.13.24 crores was held in stock for check proof in the presence of supplier's representatives for over a year as the supplies of shell "N" costing Rs.26.29 crores with which its performance was to be checked had been rejected. Stock of another defective fuze valuing Rs.3.27 crores was being back-loaded to supplier for rectification/replacement involving avoidable expenditure on its transportation in India.

- An amount of Rs.21 crores due from the supplier on account of liquidated damages up to December 1989, was still to be recovered (February 1990).

- Acceptance of liability for repayment of a certain portion of credit in DM was likely to result in uncertain liability due to fluctuation in exchange rate.

- No claims for damaged ammunition costing Rs.96.43 lakhs received during January-February 1989 were raised (October 1989) as marine survey report was not received.

- Segregation and inspection of ammunition shipped in an Indian vessel which caught fire on high seas and arrived at Indian port in September 1987 was yet (October 1989) to be completed. Out of a claim for Rs.6.60 crores raised against insurance company, an on account payment of Rs.1 crore only has been realised so far (September 1989).

- The contract with Bofors contained a clause for counter trade to facilitate buy back of goods or items manufactured in India.

- Although the purpose of counter trade is to generate additional exports and not to divert existing exports from India, appropriate mechanisms for ensuring implementation of the agreement were not conceptualised.

- Out of exports of over Rs.207 crores during April 1987 to June 1989 under counter trade, exports of traditional items constituted 59 *per cent*. Commodities like cashew kernels, meat, etc., which were not qualified were reckoned against counter trade.

- The criteria followed by STC for determining additional exports was flawed inasmuch as whatever exports were achieved by nominees of Bofors were treated as additional instead of determining additionality to India's or STC's exports commodity-wise or country-wise. There was no additionality in STC's exports in 1988-89 over those of 1987-88 but a diversion of trade in respect of castor oil, coffee, jute goods and rice.

- The objective to generate additional exports to Sweden did not materialise as the total exports to Sweden had declined in 1988-89 from 1987-88.

10. Induction and de-induction of a gun system

An obsolete gun started ragaining its lost place in other countries due to increased threats from armoured personnel carriers and armed helicopters/aircrafts. An expert committee appointed in 1975 had recommended introduction of this weapon system for meeting Army's requirements. The gun and ammunition offered by various suppliers were evaluated by Army during 1979-80. The possibility of indigenous manufacture of the gun system through the ordnance factories was also explored. In 1982 the Cabinet Committee on Political Affairs (CCPA) accorded approval for:

- procurement of 1000 guns alongwith their accessories, spares and night vision weapon sights and ammunition for two years requirements from abroad at a cost not exceeding Rs. 66 crores.

- placement of orders for 596 guns, accessories, etc. on Director General of Ordnance Factories (DGOF).

- procurement of certain vehicles at an estimated cost of Rs. 24 crores.

An order for manufacture of 596 guns was placed by Army Headquarters (HQ) on DGOF in December 1982. A contract for import of 1000 guns, transfer of know-how and licensed production concluded in January 1983 with a foreign firm was cancelled in June 1983 due to failure of the firm to obtain export licence for transfer of know-how and licensed production. The proposal to import the guns from another foreign country was also given up and it was decided,in January 1984, to place orders for the requisite number of guns on the DGOF as the indigenous guns withstood the tests and found superior in performance. Army HQ placed a further order on DGOF for 454 guns in January 1984. Army HQ gave clearance for bulk manufacture of guns, in January 1984 after trials on the gun developed by an ordnance factory subject to certain conditions which included improvement in chromium plating technology of the barrel, acceptance of components of the gun by the users and the Director General of Inspection (DGI) and clearance by the General Staff. While acceptability of the components of the gun was yet to be confirmed, a contract was concluded in February 1984 with a foreign supplier for supply of 1.5 crore rounds of ammunition at a cost of Rs. 32.4 crores in foreign exchange. An option for further purchase of 8.50 lakh rounds of ammunition for Rs. 1.22 crores was exercised in March 1984.

During January to June 1984, the ordnance factory supplied 38 guns. Department of Defence Production pointed out in June 1984 that "the case has been going round in circles for too long, without the sense of urgency evident at the time of import proposals". Army HQ reported, in August 1984, serious defects in the guns within barely two months from the date of issue of the guns despite being used sparingly. The defects were attributed to weak material and manufacturing defects.

In January 1985 Army HQ placed one more order for 546 guns on DGOF. In August 1985, Army HQ asked DGOF to stop the production of guns as they had developed serious defects affecting the barrel life and metallurgy of components. In December 1985, Army HQ indicated that details to ascertain the exact number of guns likely to be in service were under finalisation. In September 1986 Army HQ decided to remove the gun from the war establishment due to the drawbacks noticed in the indigenously developed guns and substantial changes in operational requirements since the inception of the concept.

The supplies of ammunition against the contract of February 1984 were received from abroad during November 1984 to October 1986. Liquidated damages claim on account of delay in supply of ammunition amounting to Rs. 0.8 crore was waived by the Ministry considering that the delay in delivery was not due to any fault of the supplier. Advance payment of 25 per cent of the optional quantity of 8.5 lakh rounds had been made by Army HQ in November 1985 as per terms of the contract. In September 1986, the supplier intimated that they were ready to ship this ammunition and necessary Letter of Credit should be opened. Army HQ stated that there was no possibility of their using this ammunition. The supplier was requested (November 1986) to explore the possibility of selling the ammunition to some other party but it expressed inability to locate any buyer for this ammunition. Foreign exchange of Rs. 1.76 crores for opening of necessary letter of credit was released in January 1988. The optional quantity was accepted as it was a contractual commitment.

While de-inducting the gun in September 1986, Army HQ had decided to utilise the available guns as sector stores and to meet requirement of training establishments. The status of sector stores was to be reviewed after two years. In June 1987, the Ministry informed CCPA that the manpower authorised for the gun platoons would be redeployed for another weapon and the question of utilisation of imported ammunition and financial repercussions of the short-closure of the order on DGOF were being examined separately. Paragraph 48 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 1988 had reported that the short-closure of production order of the gun system had resulted in raw materials and semi-finished components becoming surplus, the value of which was stated to be under compilation by the Ordnance Factory Board (OFB) in November 1988.

In December 1987, Army HQ indicated that training issues and utilisation by the Ministry of Home Affairs of the imported ammunition, if feasible, might mitigate the loss. Possibility of export of this ammunition to countries where the gun was in use was also proposed to be explored.

The Ministry stated in December 1989 that the import of ammunition was made because supply of guns was initially contracted ex-import and subsequently covered by indigenous production. The fact remained that contract for import of ammunition was concluded in February 1984 prior to the acceptability of indigenous gun by the users. The order for manufacture of 596 guns was placed on DGOF in December 1982 and the import was contracted in January 1983 which was subsequently cancelled in June 1983.

To conclude,

- Operational requirement of a gun was felt in 1975 and the approval for its import was accorded by CCPA in 1982. Contract for import of guns and licensed production concluded in 1983 was cancelled in June 1983 and indigenous guns issued to users were found to have serious defects in August 1984. However, the Ministry concluded contract in February-March 1984 for import of a substantial quantity of ammunition costing Rs. 33.62 crores.

- Eventhough the indigenous guns were stated to be superior in performance in January 1984 serious defects were noticed in it barely two months of the date of issue and the Army HQ ended up (September 1986) with the removal of the gun from war establishment due to drawbacks noticed in the guns and substantial change in operational requirements since the initiation of the concept.

- Eventhough Army had assessed around 1975 that the obsolete gun had started gaining its lost place in other countries, no buyer for its ammunition could be located by its suppliers in 1986.

- The value of surplus raw materials and semi-finished components due to short-closure of indigenous production had not been assessed by the OFB.

- De-induction of guns from service after two years of issue of guns to the Army would indicate that introduction of guns was not well thought of. Thus, there would appear to be a need for instituting better induction planning to avoid recurrence of such cases.

11. Canteen Stores Department

11.1 Introduction

In July 1942, Government took over the business of supplying household requirements of troops, earlier managed by the Canteen Contractors Syndicate. "Canteen Services (India)" was then formed and run on commercial lines and was expected to be self supporting. After independence, Canteen Services (India) went into voluntary liquidation and in January 1948, the Canteen Stores Depatment (CSD) came into being as a Department under the Ministry.

The prime objectives of CSD are

(a) to provide consumer goods of high quality to the troops at a price cheaper than the prevailing market rates;

(b) to ensure that the level of 'consumer demand satisfaction' is maintained at the maximum;

(c) to generate reasonable profits to sustain the organisation, permit growth and provide additional facilities for the troops and their families; and

(d) to formulate and execute development programmes to improve and maintain organisational effectiveness.

11.2 Scope of Audit

A review on the working of CSD was conducted by Audit during 1987-88 covering the period of four years up to 1986-87. A draft review was sent to the Ministry in May 1988, to which the Ministry had furnished a reply in October 1988. The draft review, updated up to 1987-88, was again issued to the Ministry in July 1989. Ministry's reply had not been received (December 1989). The data has been further updated by Audit to bring these up to 1988-89. The review had been finalised covering the period of five years up to 1988-89 and keeping in view the Ministry's reply of October 1988 and further discussions held with the officers of the CSD, Bombay in July 1989. While finalising this review, the observations and recommendations contained in the 39th Report of the Estimates Committee (1986-87) (Eighth Lok Sabha) had also been kept in view.

11.3 Organisational set up

At the apex level, there is a Board of Control Canteen Services (BOCCS) to control general expenditure and the financial policy of the CSD, exercise financial powers up to the limit of powers of the Ministry and advise Government on the disposal of profits and the general policy with regard to CSD. The Board is assisted by an Executive Committee which reviews the functioning of the CSD once in a quarter.

The day-to-day functions of the CSD are carried out by the General Manager,CSD who is also Chairman of the Board of Administration. CSD has its head office at Bombay.

CSD makes bulk purchases of consumer goods from manufacturers/wholesalers. The sale of these goods is through the retail net-work of Unit Run Canteens (URCs) which are independent of CSD. To manage the wholesale business, CSD has a base depot at Bombay (mother depot) and a chain of 31 area depots located all over the country catering to the retail net- work of 3686 URCs.

11.4 Highlights

On the prime objectives of CSD, namely, to sell goods at cheaper prices, to secure maximum consumer satisfaction, to generate adequate funds to secure growth, execute development programmes and improve organisational effectiveness, the review brings out inter-alia:

- **CSD was overcharging the consumers on incidental expenses and by levying profit margin on excise duty; the amount so collected being Rs. 59.91 crores and Rs.23.34 crores respectively during 1984-89.**

- **Though the prime objective of the CSD is to secure maximum consumer satisfaction, the denial of demands for consumer goods was about 27 per cent.**

- **Licence fees recovered by CSD representing recoveries on account of departmental accommodation hired out were not credited to Government but taken to profits, such amount recovered being Rs. 2.69 crores during 1977-89.**

- **Profits generated, including those attributable to overcharging of consumers and licence fees recovered, were allocated partly to capital growth and partly to disbursement of grants-in-aid. While the allocations for the latter had been increasing proportionately, the allocation for the former had been decreasing.**

- **The payment of quantitative discount to URCs the retail outlets, reducing the overall profitability of CSD had been increasing. The rates of discount, two per cent in 1977-78 (Rs.1.52 crores) stood enhanced to 3.5 per cent in 1988-89 (Rs. 20.30 crores), the increased quantum of 1.5 per cent amounting to Rs. 8.7 crores. The benefit, Rs. 72.88 crores during 1984-89, was not passed on to the consumers but were utilised for the welfare of troops for which CSD is paying grants-in-aid separately.**

- **Steps had been taken to set up more depots but attempts made to improve the organisational effectiveness through computerisation of data for better demand projections to improve turnover and inventory management, attempted at a cost of Rs. 36.68 lakhs during the last five years, had not proved effective.**

- **As on 31st March 1989, CSD had reflected in their accounts a sum of Rs. 91.87 lakhs as due from Controller of Defence Accounts (CDA), which had been paid to suppliers by CSD but which had been disallowed by the CDA(CSD).**

- **Inventory management had been deficient as procurement of certain goods were far in excess of requirements. On a review of goods worth Rs. 40.26 crores held on 31st March 1989, stocks worth Rs. 19.40 crores were in excess of the norms and some of these goods would last for over five years. Inventory accumulation had also taken place in newly introduced goods due to failure to implement the condition of returning the unsold stock and realising the value thereof and in imported liquor and sports goods.**

- **The findings of this report point to the need for a review of the pricing policy so as not to overcharge the consumer, better inventory management and appropriate changes in the pattern of allocation of profits to secure better consumer- demand-satisfaction and capital growth for the enlargement of the activities to attain the prime objectives of this venture.**

11.5 Pricing of goods

11.5.1 Generation of profit by overcharging incidental expenses:- One of the objectives of CSD is to provide consumer goods at a price cheaper than the prevailing market rate as far as possible. According to the pricing policy, issued by the Ministry in October 1977, a 'gross profit' margin of 10 to 12 per cent on liquor and 5 per cent on other goods is to be added to the cost price. Incidental expenses on freight, insurance, packing and octroi, at predetermined percentages, are also added to the cost price to determine the selling price. While the profit margin had been correctly charged, the amounts charged as incidental expenses at fixed percentage were generally higher than the actuals. The consequential overcharging of price and excess receipts so realised amounted to Rs.5990.97 lakhs during 1984-89. The relevant details are as below:

(Rupees in lakhs)

	1984-85	1985-86	1986-87	1987-88	1988-89
Excess collection on inland pilferage and Marine insurance fund	59.58	67.15	94.16	91.72	118.28
Octroi	21.83	25.16	29.51	49.63	48.23
Transit insurance charges	112.17	128.89	143.09	287.65	381.01
Packing and forwarding charges	171.34	231.56	156.15	236.58	258.80
Freight	514.23	539.64	669.68	648.11	906.82
Total	879.15	992.40	1092.59	1313.69	1713.14

If the object of cheaper price to the consumer is to be secured, the percentage added on as incidental expenses would require a downward revision.

Ministry stated in October 1988 that the incidental expenses are added at a pre-determined percentage as per the existing pricing formula and certain other incidental expenses such as telephone, advertisement, rent, etc. were not included in the selling price. That certain other charges were not specifically added could not be a justification for overcharging on others.

11.5.2 Charging of profit on items not part of basic price structure:- As per orders on the pricing policy issued in October 1977, the basic price of all items including liquor, is to be the same all over India and local taxes comprising State excise duty, sales tax, octroi, etc. is charged in addition to the listed price. Thus, profit margin is to be levied only for arriving at the basic price. CSD was, however, charging, on liquor, the profit margin on landed cost inclusive of State excise duty. During the five years 1984-89, CSD had realised, as profit margin, a sum of Rs.2334.48 lakhs on payment of excise duty. The details were as below:

(Rupees in lakhs)

Year	Excise duty paid	Profit at the rate of 10 per cent charged on excise duty
1984-85	3569.15	356.92
1985-86	3990.14	399.01
1986-87	4456.71	445.67
1987-88	5087.67	508.77
1988-89	6241.10	624.11
Total		2334.48

Profit generation to that extent was at the expense of the consumer.

11.6 Consumer demand satisfaction

One of the objectives of CSD is to ensure that the level of consumer demand satisfaction is maintained at the maximum. The Estimates Committee, in its 39th report ibid, noted that many items demanded by end users were denied to them. The Committee recommended that the Ministry should evolve a more effective and adequate machinery for co-ordination between the department and its depots and URCs with a view to eliminate denial of items to end users. An examination of the records in connection with goods demanded but could not be supplied indicated that the users were denied about 27 per cent of their total demands. The details were as under:-

(in lakhs)

Year	Number of demands	Number of demands denied	Percentage
1984-85	31.14	8.23	27
1985-86	35.33	10.86	29
1986-87	42.77	11.97	28
1987-88	39.08	10.09	26
1988-89	37.48	8.82	24

A check in five depots revealed that while on the one hand stocks were held in excess of the norm of 90 days requirements, there was substantial denial of demands for other items as under:

Value of stock in excess of 90 days requirement as on	Narangi	Srinagar	Visakhapatnam	Ramgarh	Leh
31st March 1986	17.00	9.00	7.00	37.00	176.00
31st March 1987	77.00	243.00	78.00	86.00	105.00
Percentage of denial of demands in					
1985-86	39	44	32	17	7
1986-87	37	34	29	13	18

The above table is indicative of unsatisfactory management of inventory and consumer demands. A rational utilisation of funds is,therefore, called for so that the items on demand are not denied due to excess holding of others.

In October 1988, the Ministry stated that the denials were mainly due to force majeure conditions. In certain depots, denials during 1986-87 were due to troops movement on account of exercises. It added that every effort would be made to increase consumer satisfaction. It was, however, not clarified if any action was taken to enquire into the persistence of a very large number of denials due to force majeure conditions during successive years. Troops movements on account of exercises, being a regular feature of the Defence forces, should have factored in inventory management.

11.7 Working results

11.7.1 Concessions and subsidies :- CSD enjoys certain concessions and subsidies. Interest due on capital employed is treated as grants-in-aid. As a result, interest free capital is a concession enjoyed by CSD in computing its working results. Transport of defence material by rail on military credit(MC) note is also at a lower tariff. The value of these concessions/subsidies for the last five years was Rs.40.81 crores vide details below:

(Rupees in crores)

Year	Grants-in-aid from Government	Concession availed on MC Notes	Total
1984-85	3.34	1.62	4.96
1985-86	7.96	2.41	10.37
1986-87	5.26	2.04	7.30
1987-88	6.50	1.64	8.14
1988-89	8.08	1.96	10.04
Total	31.14	9.67	40.81

Rest of the concessions have not been quantified. Other benefits enjoyed by CSD are exemption of sales tax, accorded by some State Governments, and concessional rent or rent-free occupation of Government buildings. The amount of these concessions were not taken into account while determining the selling price.

The Ministry stated, in October 1988, that interest calculated on capital and treated as notional grants-in-aid from Government without actual flow of Government funds might not be treated as a concession enjoyed by CSD as the capital employed had been completely generated by CSD ploughing back part of the trade surpluses over the years.

The contention of the Ministry was not tenable as retention of funds by way of capital accretion by CSD should be liable for payment of interest thereon to Government.

11.7.2 Income from properties :- Orders were issued in March 1977 on the merger of CSD funds with the Consolidated Fund of India (CFI). Though recoveries on account of licence fee effected by CSD on account of departmental buildings hired out to private parties and staff were booked to final head of account as per orders issued in March 1977, neither the amount was credited to Government nor shown as "due to Government" in the books of CSD but were credited in the Profit and Loss Account. The amount so credited to the Profit and Loss Account from 1977-78 to 1988-89 was Rs.2.69 crores and the amounts were reckoned for purposes of appropriation of profits. The CSD held that income generated from the assets belonging to the CSD should be treated as trade surplus. This is, however, not tenable as licence fee recovered is the revenue of the Government and should be deposited to the credit of the Government.

11.7.3 Profit generation :- CSD is to generate reasonable profits to sustain the organisation, permit growth and provide additional facilities for the troops and their families. The accounts of CSD are maintained on proforma basis. The net profits shown in the accounts for the last five years and the rates of return on the capital employed were as under:

(Rupees in crores)

Year	Capital employed	Net profit as per profit and loss account	Percentage of net profit to capital employed
1984-85	54.43	12.66	23.26
1985-86	57.43	15.59	27.10
1986-87	66.12	22.38	33.85
1987-88	81.15	27.79	34.07
1988-89	97.90	34.84	35.59

Note: Capital employed consists of capital, specific reserves, distributable surpluses for the year and Board of Control General Purpose Fund.

11.7.4 Net profit computation :- Consumers were overcharged on incidentals such as freight as mentioned earlier.

An element of profit was also charged on State excise duty and licence fee received was taken to reckon towards profits had also been brought out earlier. If the income from these sources is excluded from profits the return would be significantly lower, as indicated below:

(Rupee in crores)

Year	Net profit as per Profit and Loss account	Excess collection of incidental charges	Profits realisation on reckoned Excise Duty	Licence fee recovered/ as profits	Total (3+4+5)	Profit from commercial activities (2)-(6)	Revised return on capital employed *Percent*
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
1984-85	12.66	8.79	3.57	0.26	12.62	0.04	0.07
1985-86	15.59	9.92	3.99	0.33	14.24	1.35	2.34
1986-87	22.38	10.92	4.46	0.38	15.76	6.62	10.01
1987-88	27.79	13.14	5.09	0.35	18.58	9.21	11.29
1988-89	34.84	17.13	6.24	0.37	23.74	11.10	11.33
Total:	113.26	59.90	23.35	1.69	84.94	28.32	

From the above table, it will be seen that the reduced return on capital employed has varied from 2.34 per cent in 1985-86 to 11.33 per cent in 1988-89. This indicates that though the authorised percentage of profit margin has not varied over the years the actual profit charged from the customers had been much more.

11.7.5 Growth of capital including funds and reserves:- Every year, CSD's profits are allocated partly to the General Reserve and partly for the welfare of troops as grants-in-aid. The resultant growth of capital including funds and general reserves was Rs. 55.29 crores i.e. from Rs.26.28 crores as at the end of 1983-84 to Rs. 81.57 crores at the end of 1988-89. Details of distribution of profits were as under:

(Rupees in crores)

Year	Net profit as per Profit and Loss Appropriation account	To grants-in-aid	Increase over the preceding year	To general reserve (capital)	Increase/ decrease (-) over the preceding year	Capital including General Reserve at the end of the year
1983-84	12.09	4.60	-	7.48	-	26.28
1984-85	12.93	6.20	1.60	6.84	(-)0.64	42.27
1985-86	14.69	7.50	1.30	7.18	0.34	49.11
1986-87	22.93	11.50	4.00	11.43	4.25	56.29
1987-88	27.85	14.00	2.50	13.85	2.42	67.72
1988-89	-	-	-	-	-	81.57
Total	90.49	43.80	(+)9.40	46.78	(+)6.37	-

The allocation of net profit for 1988-89 was yet to be received, as profits of a particular year are appropriated in the next year's account.

It will be seen that over these years, allocations for grants-in-aid had been increasing proportionately, while allocations to capital growth was declining. Admittedly, induction of funds to capital from profits has not only to meet the inflationary pressures to maintain the current level of operations and to secure greater consumer satisfaction but also to secure growth and development. This calls for a re-examination of the norms.

The Ministry stated, in October 1988, that allocation of trade surpluses to grants-in-aid was being done according to the assurance given and that the department had been able to generate adequate funds to meet the growth rate and did not have to borrow funds since its inception.

11.7.6 Quantitative discount to unit run canteens :- The increase in the quantum of quantitative discount to URCs had also resulted in reducing profit and consequently capital growth. CSD pays the discount as a percentage of the value of purchases made by the URCs. The discount of two per cent i.e. Rs. 1.52 crores in 1977-78 stood enhanced to 3.5 per cent in 1988-89 i.e. Rs. 20.30 crores (provision made), the increased quantum of 1.5 per cent amounting to Rs.8.70 crores. The amount paid on this account for five years up to 1988-89 was Rs. 72.88 crores. The benefit arising out of this discount was not passed on to the consumers by way of any reduction in prices.

The Ministry stated, in October 1988, that discount was released in the form of stores to URCs and the profits thus earned were made available through welfare funds of units to meet the welfare needs of the troops.

The Ministry's reply was not convincing as the benefits did not reach the actual consumers. Further the welfare of the troops is looked after by the grants-in-aid scheme. The Estimates Committee in its 39th Report had also observed that these did not percolate down to the jawans and their families. In view of this, the increase in the quantum of discount which alone worked out to a sum of Rs. 29.33 crores out of Rs. 72.88 crores paid during 1984-85 to 1988-89 was not justified. Further, the current rate of discount was more than the profit earned on certain items like edible oil and tea (2 per cent) and bicycle (3 per cent). Against a sum of Rs. 135.80 lakhs profit earned on these items, CSD had paid discount to the tune of Rs. 231.89 lakhs during 1986-87 to 1987-88. The increase in the quantum of discount sanctioned from time to time would, therefore, require to be reviewed.

11.8 Development programmes and organisational effectiveness

It is also an objective of CSD to formulate and execute developmental programmes to maintain and improve organisational effectiveness. On developmental programmes, CSD had opened one more depot and proposed to set up five more depots.

On organisational effectiveness, CSD introduced Electronic Data Processing (EDP) activity on an experimental basis, in 1978 by hiring computer time. The object was to use data related to past sales and denials to work out the future order quantities, so that greater customer satisfaction could be achieved, besides increasing sales with minimum possible inventories. Savings in inventory-carrying-costs and increased turnover of CSD funds were also sought to be achieved. Expenditure incurred on hiring of computer time during 1984-85 to 1988-89 was Rs. 36.68 lakhs.

On a request from Audit for making available the EDP print-out of the "provisioning review to guide order", CSD, in September 1986, stated that the revised format of the same was in its infancy and yet to be fully developed and refined to a level of reliability for production for audit scrutiny. In August 1987, the department again stated that the computer print- outs were still to be perfected and were not reliable for purpose of audit scrutiny.

The Ministry stated in October 1988 that prior to 1985 computer time sanctioned and utilised was very limited. Since 1985, additional computer time was sanctioned and as a result computerised direct procurement system and purchase management system were developed and implemented. As a result, in March 1988, inventory level came down and turnover for 1987-88 went up with prospects of better use in future.

Thus, improved organisational effectiveness attempted through modern techniques of management since 1978 remained unfulfilled despite an expenditure of Rs. 36.68 lakhs during the last five years. The claim that inventory level in March 1988 came down and turnover for 1987-88 went up due to computerisation was not understood since the inhouse computer became operational only in February 1988.

11.9 Procurement of ration items for Army Headquarters

Sanction was accorded by Ministry in June 1982 for the procurement of items of tinned food stuffs and provisioning of hydrogenated oil, tea and cigarettes by Army Service Corps(ASC) either from the CSD or from Army Purchase Organisation at the discretion of the Army Headquarters (HQ), for their requirement for 1982-83 and 1983-84. With effect from April 1984, the ASC were to procure all items of processed and tinned food stuff and other items viz. hydrogenated oil, tea and cigarettes through CSD.

As per the administrative instructions issued by the Army HQ in October 1982, all issues and transactions would be permitted on credit as a special case. CSD Head office was required to submit the bills to the CDA (CSD) for clearance and executing payments drawn on Reserve Bank of India in favour of CSD.

In the annual accounts of the CSD for 1988-89, an amount of Rs.91.87 lakhs was shown as dues from CDA (CSD) on account of ASC sales. However, scrutiny of the various contingent bills pertaining to 1983-84 submitted by

CSD to CDA(CSD) for reimbursement of sums paid by CSD revealed that an amount of Rs.6.45 lakhs was disallowed by the CDA(CSD) during 1983-84 on account of octroi charges claimed by CSD,as not payable as per rules. An amount of Rs. 6.64 lakhs was disallowed by CDA(CSD) during 1983-84 on account of Central Sales Tax, as not payable as per the contract. Further, an amount of Rs.5.93 lakhs was not reimbursed by CDA(CSD) on account of payments made to the supplier by CSD in excess of the rates specified in the contract. The above payments having been made by CSD had resulted in a loss to the CSD.

Further an amount of Rs.66.21 lakhs claimed by CSD pertaining to 1983-84 was not reimbursed by the CDA(CSD) on account of incomplete documentation. Though four years had lapsed, the CDA (CSD) was yet to receive (March 1989) from CSD the concerned documents in order to enable the reimbursement of Rs.66.21 lakhs. Inaction on the part of the CSD in not submitting the documents resulted in depletion of CSD funds to the tune of Rs 66.21 lakhs.

11.10 Inventory holdings

11.10.1 CSD is authorised to hold inventory up to 90 days requirements. An analysis of closing stock as on 31st March 1989 revealed that in respect of 869 articles worth Rs.40.26 crores held in stock, stores valued at Rs.19.40 crores were held in excess of 90 days requirements. On the basis of preceding three months consumption excess stock would last for a further period as indicated below:

Up to	Number of articles	Value (Rupees in lakhs)
180 days	273	594.94
360 days	268	696.04
720 days	139	325.52
1800 days	95	197.80
More than 1800 days	94	125.36
Total	869	1939.66

11.10.2 Unusual accumulation of inventory from private parties

Case I

On 31st January 1987, CSD held Rs.76.94 lakhs worth of four brands of perfume and one brand of toilet soap procured from a single private supplier. The authorised requirement of 90 days was only Rs.15.66 lakhs. Excess stock held amounted to Rs.61.28 lakhs.

In May 1987, in reply to an audit query, CSD stated that surplus stock of toilet soap was returned to the supplier and in respect of two out of four brands of perfume, no order would be placed on the supplier till stocks were liquidated.

CSD had not clarified as to why as in the case of toilet soap, the other surplus stock too could not also be returned and cost realised.

In October 1988, Ministry stated that stock holding as on 30th June 1988 had since been brought down to Rs. 15.77 lakhs and that efforts were on to bring it down to within the limit of Rs.15.66 lakhs.

Case II

On 31st March 1987, CSD held Rs.79.12 lakhs worth of transistors, radios and tape-recorders of a single private manufacturer. Of this, stocks held in excess of authorised requirement for 90 days amounted to Rs 66.42 lakhs.

The Ministry stated, in October 1988, that stock holding as on 30th June 1988 was brought down to Rs 44.34 lakhs and orders were under issue to bring down the stock level to 90 days of requirement. As on 31st March 1989, CSD was still holding a stock of transistors and tape-recorders worth Rs.37.70 lakhs which would last for a further period of 22 months based on the average monthly sales for the past two years.

11.11 Newly introduced items

11.11.1 A test check of goods newly introduced during April 1985 to September 1986, revealed that the stock of 70 items worth Rs.2.25 crores as on 30th November 1987, would last for a period ranging between 12 and 100 months. Quantities of newly introduced items procured were not based on a proper appreciation of the average off-take of the items concerned.

In October 1988, Ministry stated that the stock level had since been brought down to Rs.93.73 lakhs as on 30th June 1988 and orders were under issue to freeze placement of further orders of these 70 items, and return stores in excess of 90 days requirement wherever feasible. Deletion of these items would also be gone into and where orders had been placed these would be cancelled. However, CSD still held stocks worth Rs.64.88 lakhs of these items on 31st March 1989 of which stocks worth Rs 30.95 lakhs were expected to last beyond 90 days requirements. The need of obtaining goods in respect of newly introduced items only on consignment basis by the CSD would obviate investment of any capital by CSD.

11.11.2 A particular brand of a cigarette lighter manufactured by a private firm was introduced in the CSD's range in August 1982. The purchase carried a condition that in the event of any stock remaining unsold, the same would be taken back by the supplier at his cost. Between September 1982 and April 1984, 42,300 lighters valued at Rs 6.77 lakhs were purchased through eight supply orders. In October 1984, CSD asked the supplier to take back 16,200 unsold lighters, valued at Rs.2.77 lakhs, as the off-take was poor. In March 1985 the firm pleaded inability to take back the surplus on the ground that excise duty of the product had been paid and stated that they would start a promotional campaign which would accelerate the off-take of stock. In March 1985, the Base Depot at Bombay segregated 21,600 lighters as surplus to requirement and raised a debit note on the supplier for Rs.3.69 lakhs. The supplier did not take back the stock but, instead, suggested on 14th October 1985, that CSD might distribute the stock in some selected outlets where the supplier would do some special sales promotion. In the meantime, on 11th October 1985, Base Depot, Bombay cancelled the debit note. As on 31st March 1987, CSD held a stock of 23,834 lighters valued at Rs.4.08 lakhs. Besides injudicious procurement of the stock, CSD failed to enforce the condition of backloading of unsold stock and recovery of the cost.

The Ministry stated, in October 1988, that as on 30th June 1988, stock of cigarette lighters was 15,120 valued at Rs.2.57 lakhs. The item had already been de-listed and it was hoped that the entire stock would be liquidated during 1988-89. As on 31st March 1989, 7015 cigarette lighters valued at Rs.1.20 lakhs were still held in stock.

11.11.3 Certain items of stainless steel utensils manufactured by a private firm were introduced in the CSD's range in July 1980. The understanding with the firm was that in the event of any stock remaining unsold/surplus to CSD's requirement or found defective/ substandard, the same would be taken back by the supplier at his cost within 12 months of supply. Surplus stock worth Rs.11.40 lakhs was returned to the supplier in March 1985. A debit note for Rs.11.40 lakhs was raised on the supplier, but later in October 1986, CSD allowed the supplier to refund the outstanding amount by adjustment by 50 per cent against the future bills for supplies to be effected by him. As on 31st March 1987, an amount of Rs 4.45 lakhs was still to be recovered from the supplier. This was an extra contractual benefit to the supplier.

In October 1988, the Ministry stated that by placing orders for certain fast selling items on the firm, the entire amount of Rs. 11.40 lakhs for stainless steel utensils had since been recovered.

11.11.4 A certain brand of camera with leather cases marketed by a private firm was introduced by CSD in November 1979. In January 1984, 3104 cameras and 3171 leather cases were held by the CSD. The depots holding surplus stocks were asked to segregate the same and raise debit notes on the supplier. Three area depots also while raising debit notes for Rs.1.16 lakhs returned 1902 cameras and 1411 leather cases to the supplier. The supplier had neither made good the defective goods nor paid the cost thereof(October 1988). The CSD had stated in June 1987, that there was no formal agreement under which the supplier could be forced to take back the surplus stock. Thus, besides holding surplus stocks of the camera/leather case, the CSD had incurred a loss of Rs 1.16 lakhs.

The Ministry stated in October 1988 that the case had been handed over to the Law Ministry at Bombay to file a case. A case for recovery of Rs.1.36 lakhs has since been filed in the Delhi High Court on 3rd October 1988.

11.12 Import against foreign exchange allotment

11.12.1 Liquors:- As on 31st March 1987, imported liquor worth Rs. 46.29 lakhs was in stock. An analysis of 40 out of the 68 brands in CSD's range revealed that the stock held was in excess of requirement. The period for which the stock would last was as under:

	Number of items	Value (Rupees in lakhs)
Over 1 year but		
up to 2 years	12	12.62
up to 3 years	14	17.64
up to 4 years	5	3.75
over 4 years	9	5.97
Total	40	39.98

During the preceding three years, 1984-87, liquor worth Rs. 18 lakhs was imported against foreign exchange allotted. The import and allotment of foreign exchange therefor, were not justified in the light of the surplus stock indicated above.

The Ministry stated that a decision had been taken not to allocate free foreign exchange for import of liquor from 1988-89 onwards. The scales of issue of imported liquor which had undergone changes, were being constantly reviewed. As on 31st March 1989, liquor worth Rs. 44.44 lakhs was still held in stock.

11.12.2 Sports items:- Imported sports goods of 52 varieties, worth Rs. 22.67 lakhs in stock as on 31st March 1987 were in excess of requirements as under:

Sufficient for	Number of items	Value (Rupees in lakhs)
two years	16	16.80
three years	8	4.63
four years	10	0.51
over four years	18	0.73
Total	52	22.67

The Ministry stated that the value of sports items had been brought down to Rs.11.58 lakhs as on 30th June 1988 and that from 1988, sports items were being imported against firm demands only.

As on 31st March 1989, 36 items worth Rs. 4.10 lakhs were still held in stock.

12. Provisioning of NCC uniforms

Cadets of the National Cadet Corps (NCC) are provided with cotton/terricot uniforms from the Defence budget. The requirements of uniforms and other allied small items of clothing were met by the Directorate General, Ordnance Factories (DGOF), but in the face of larger requirements of the Army, lower priority was accorded for supply to NCC from 1983-84. In the absence of alternative arrangements a huge back log of demands arose. In two review meetings held in June-July 1985, DGOF had agreed to supply certain priority items by sparing capacity of 12 lakh manhours per year against the outstanding demand of the order of 65 lakh manhours. Simultaneously the Director General (DG) NCC was also advised (June 1985) to go to trade. The Director General of Supplies and Disposals (DGSD) also expressed its inability to arrange supply of uniforms as it had no experience in this task, although it was prepared to accept demands for supply of cloth only. DGSD later agreed in September 1986 to arrange procurement of stitched uniforms for NCC. The DGSD could conclude certain contracts for cotton uniforms from 1987-88 onward and for terricot uniforms from 1988-89 onward.

In the meantime, for meeting urgent requirements, sixteen Directorates of the NCC working in different States resorted to local purchase of uniforms.A comparison of the rates at which local purchases worth Rs. 122.57 lakhs were made by the NCC Directorates during 1985-86 to 1987-88 with those at which DGSD concluded contracts for 1987-88 revealed that the local purchase rates were higher than the DGSD rates by 74 per cent. The extra expenditure caused to Defence budget on this account worked out to Rs. 52.30 lakhs.

In September 1989, the Ministry stated that all efforts were made to make arrangements for the supply of NCC uniforms on a centralised basis from June 1985 onwards but these could materialise practically only in 1987-88 that too with very scanty supplies and those arrangements had not worked at all satisfactorily. A new source for the supply of NCC uniforms was being looked into.

The case reveals that from 1983-84 onwards, the Ministry had failed to establish arrangements for centralised procurement of a simple item, like NCC uniforms from reliable resources for meeting recurring demands. Centralised arrangements for purchases would have resulted in substantial savings as illustrated by the fact that the difference between the rates of local purchase made by NCC Directorates and those at which centralised purchases were made by the DGSD was substantial. On local purchase of value of Rs. 122.57 lakhs made between 1985-86 and 1987-88 the difference, as compared to DGSD rates was Rs. 52.30 lakhs.

13. Disposal of surplus stores

Disposal of surplus stores of security nature poses a problem as these could not be released to the general public for sale. In order to cut down maintenance expenses and to make available more storage space a dire necessity was felt to get rid of such stores as quickly as possible. All efforts having failed to dispose of such stores, a Special Surplus Disposal Committee (SSDC) was constituted in January 1977 and it functioned during March 1977 to May 1978. The committee disposed of nearly 50,000 tonnes of surplus material realising about Rs. 7 crores.

In September 1980, the Ministry constituted an expert group for disposal of surplus security stores and a standing committee for examining inordinate delay in the disposal of surplus stores by the Director General of Supplies and Disposal (DGSD). Nothing tangible could be done either by the expert group or by the standing committee. In a meeting held in July 1982 it was decided that the Department of Supply be moved to constitute another SSDC as was done in 1977.

In November 1983, the Department of Supply recommended constitution of a High Powered Committee on Disposals (HPCD). At the time of seeking approval for the constitution of HPCD it was mentioned that 36,000 tonnes of security stores with a book value of Rs. 60 crores approximately had accumulated in the Army depots, Air Force stations, etc. In January 1984, HPCD was set up for accelerating the disposal of surplus security stores and at a later stage to review the procedure of disposal of non-security stores followed by DGSD. HPCD was vested with full powers and authority to evolve and devise the ways and means for effective and expeditious disposal of surplus security stores subject to clearance of export sales by the 'Defence Export Promotion Board'. In July 1984, export promotion cell intimated the Department of Supply that entire stores pertaining to the Army were pending with them for exploring the possibility of export. Major quantum of the stores pertaining to the Air Force were also pending for exploring the possibility of their export. Department of Supply requested (July 1984) for reversion of stores from the export promotion cell so that HPCD could effectively take up the disposal of stores for which it was constituted.

Metal Scrap Trade Corporation Limited (MSTC), a Government of India company, was engaged in disposal of scrap available during 1977-78 and their services were availed of by the SSDC. HPCD had also discussed and finalised an agreement which was concluded in December 1984 to enable MSTC to take up disposal of all scraps, secondary arisings surplus stores, miscellaneous articles, etc. on payment at two per cent service charges.

In its report finalised in March 1985 HPCD brought out that the stores were mostly still at the first stage of reporting to the export promotion cell and were undergoing export effort. A large number of vehicles spares were dealt with by export promotion cell and were understood to have been disposed of. As a result of further consideration, a number of stores were totally withdrawn or were withheld for further examination. The stock taking done by HPCD showed that the quantum of work available to it was a fraction of what was originally envisaged.

In April 1985, HPCD was wound up and it was decided that residual work of disposal of security stores shall be transferred to the Ministry. In April 1986 the Ministry informed Audit that on winding up of the HPCD, stores offered to it stood reverted to the stock holdings and as per the policy (of 1982) the security stores were first offered to export promotion cell for exploring the possibility of sale of these items in foreign countries and in case of no demand in the foreign market the same would be disposed of as a scrap after mutilation, through MSTC.

In response to Audit queries inter-alia on action taken for disposal of surplus stores of security nature accumulated since 1978 alongwith details of stores disposed of with sale realisations on this account, the Ministry informed Audit in May 1989 that stores projected to export promotion cell could not be disposed of by them and a proposal for constitution of another HPCD was under consideration in the Ministry. The value of surplus stores (52,480 tonnes) awaiting disposal was Rs. 82 crores (September 1989).

In September 1989, the Ministry stated that a draft note seeking approval to the formation of a Special Surplus Disposal Committee had been prepared for referal to Department of Supply.

To conclude, according to Government policy of 1982 surplus stores were to be initially offered to export promotion cell for exploring the possibility of selling these items in foreign countries. Despite the formation of an expert group in 1980 and High Powered Committee on Disposals in 1984, stores of security nature with a book value of Rs. 82 crores accumulated from 1978 till September 1989 were yet (September 1989) to be disposed of. In the meantime stores have been occupying valuable storage accommodation and expenditure was being incurred on their maintenance.

14. Recoveries at the instance of Audit

Defence Accounts Department (DAD) scrutinises, before authorising payment, all claims debitable to Defence Services Estimates except pay and allowances of Defence personnel, which are checked after payment. As a result, all Defence expenditure is internally checked by the DAD.

A test audit by statutory Audit of the accounts maintained/kept by some Controllers of Defence Accounts conducted during 1986-87 to 1988-89 revealed overpayments/short recoveries to the extent of Rs. 73.47 lakhs, relating to pay and allowances, pension, provident funds and overpayment to contractors, etc.

At the instance of Audit, a sum of Rs. 68.88 lakhs had been recovered during 1986-87 to 1988-89.

In October 1988 and September 1989, Ministry of Defence (Finance) stated that controllers were being advised to undertake a critical review of various cases of overpayments to ascertain whether there were any serious and positive failures in internal audit and consider action whenever required.

CHAPTER III

ARMY

Weaponary and allied equipment

15. Repair facilities for a weapon system

A certain number of weapon system was imported during 1973-74 at a cost of Rs.27.25 crores to provide air defence cover to some formation, and installations. The weapon system required two overhauls every eight years to keep it in an operationally reliable condition during its expected life cycle of 20 years.

In April 1973, an agreement was signed with the supplier for rendering technical assistance for overhaul of the weapon system. During 1974 and 1975 repair documents were asked for but these were not provided. In May 1976, the supplier informed an Indian delegation that they could establish a complete repair project and assistance may not be restricted to transfer of documents alone. Since it was essential to establish repair facilities, the delegation requested for assistance in setting up repair facilities. A team of specialists visited India in January 1977 and prepared a project report. In November 1977, Army Headquarters (HQ) recommended finalisation of this contract for preparation of a technical report.

Electrical and Mechanical Engineering (EME) Directorate stated in March 1978 that there was abnormal delay in finalisation of this case which would have serious repercussions. In May 1978, an agreement was signed with the supplier for transferring within 12 months from the date of the agreement, the detailed project report (DPR) at a cost of Rs.8 lakhs. The DPR was required to be approved within two months from the date of its receipt. The DPR was submitted by specialists during 1979-80.

A working protocol was signed in January 1980 and the time schedule of the project was given as under:

Supply of equipment, test measuring apparatus, jigs,fixtures and materials	4th quarter of 1980 to 3rd quarter of 1982
Executing of installation and commissioning work	1982

Two draft contracts were received in India in April 1980.

In December 1980, the EME Directorate highlighted that any further delay in the overhaul would increase consumption of spares resulting in increased cost and would also result in keeping unreliable equipment in the hands of the troops.

A draft paper was put up to the Ministry in March 1981 in which it was inter-alia mentioned that it took two years round time for getting the equipment overhauled from the supplier. In July 1981, the Cabinet Committee on Political Affairs(CCPA) accorded approval for the setting up of base repair facilities for the weapon system at a cost of Rs. 7.13 crores. The contracts concluded with the supplier in October 1981 provided for delivery of equipment (Rs. 3.65 crores) and delivery of documentation (Rs. 0.47 crore).

A working protocal was also signed in October 1981 providing interalia for delivery of recommended spares required for the first year under a separate contract in 1984.

The Ministry apprised the CCPA, in April 1984 that 80 per cent of the equipment required for overhaul/repair had been received from the supplier, the revised estimate of the project was Rs. 12.83 crores. The increase in cost was attributed to increase in cost of civil works, cost of equipment to be procured/manufactured in India, expenditure on specialists and escalation of prices.

Contracts for various civil works were concluded between February 1984 and July 1988. The overall progress of the project as in December 1988 was 99 per cent and an expenditure of Rs.6.78 crores was booked against the project till January 1989.

A firing range, the design of which was not included in the DPR was still (February 11989) under planning. A contract relating to provision of electrification (cost: Rs. 83 lakhs) had been awaiting completion after 98 per cent progress since February 1988. The project cell of the workshop requested the engineers in December 1988 to continue the work (laying of cables) and terminate the cables at the locations of machines as per contract and not to wait for installation of machines. The work was still (March 1989) incomplete.

In April 1985, Ministry had accorded sanction for fabrication by the Base Workshop of jigs/fixtures, special maintenance tools/special test equipment at an estimated cost of Rs. 93.91 lakhs (amended to Rs.97.44 lakhs in February 1987) which were urgently required for establishing the facilities.

The Base Workshop reported to the EME Directorate in October 1988 that spares procurement for overhaul of the weapon system was not getting due priority as 2643 items of spares offered by the supplier eight months earlier were yet to be contracted and 4058 items including 3535 vital items, had not been offered so far by the supplier. EME Directorate stated in November 1988 that overhaul was not progressing due to non-availability of spares which was resulting in poor fitness state of weapon systemprocured in 1973 and infrastructure created at a cost of Rs. 13.5 crores would also remain underutilised. They also proposed import of '200 critical items from the supplier. Machines costing Rs. 3.65 crores were imported and received during 1983-84 to 1984-85.

A certain numbers of weapon system were received in the Base Workshop during February 1986 to August 1987 but none of this had been overhauled and handed over (February 1989) to the units.

To conclude,

- It took three years for the Ministry to decide the nature of assistance to be obtained for setting up the repair facilities for the weapon system. Approval of the project by CCPA at a cost of Rs. 7.13 crores took another five years.

- A revised approval of the CCPA to the enhanced cost of the project (Rs. 12.83 crores) was obtained in 1984 i.e. three years after the weapon system became due for first overhaul in 1981-82.

- Second overhaul of the weapon system imported at a cost of Rs. 27.25 crores fell due in 1989 but none of the weapon system could be overhauled even once and handed over to the units so far (February 1989) resulting in poor fitness state of weapon system.

- Spares procurement for overhaul was not getting due priority as 4058 items had not been offered by the supplier till October 1988 and 2643 items offered by the supplier were not contracted. The infrastructure created at a cost of Rs.13.50 crores is remaining under utilised as no weapon system has been overhauled.

- Firing range for the project was still (February 1989) under planning.

The case was referred to the Ministry in June 1989; a reply has not been received (November 1989).

16. Procurement of passive night vision device for tank

Fitment of a passive night vision device (PNVD) on a certain number of tanks under modernisation scheme was approved during the Sixth Army Plan (1980-85). Supply orders for a certain number of PNVD were placed in 1983.

In 1985, Army Headquarters (HQ) envisaged fitment of PNVD on more number of tanks than planned in Sixth Plan. In October 1985, Army HQ submitted a draft paper to the Ministry for obtaining the approval of the Cabinet Committee on Political Affairs (CCPA). This paper was not progressed further till October 1988.

Indent for accessories was placed in 1987 partly on Electrical and Mechanical Engineers and partly on National Instruments Limited (NIL), Calcutta. There were fitment trial problems with the Director General Ordnance Services on the PNVD procured.

While the CCPA paper was under consideration, the procurement was not stalled and an indent for additional quantities of PNVD alongwith accessories was placed on the Ordnance Factory Board (OFB) in January 1988 at an estimated cost of Rs. 5.49 crores. Yet another indent for further quotations of PNVD with accessories was placed in January 1988 on NIL Calcutta at a total price of Rs. 6.03 crores. The supply order placed on NIL Calcutta provided for issue of image intensifier tube free of cost by Government for fitment in PNVD. Thus, indents for PNVD estimated to cost Rs. 6.22 crores were placed while the CCPA paper for fitment of PNVD on more number of tanks was still under consideration.

In February 1988, Ministry requested Army HQ to re-examine the various schemes with a view to preparing concrete proposals for those which were absolutely essential. In March 1988, Ministry felt that a decision should be taken to discontinue the non-essential schemes with immediate effect after assessing the financial implications of the activity already under- taken.

Army HQ conducted a review and forwarded to the Ministry a revised programme in July 1988. According to this review PNVD was required to be fitted only on a limited number of tanks. On 5th August 1988, Army HQ requested the Ministry for cancellation of orders placed on OFB and NIL in January/ February 1988. The financial repercussions involved in cancellation of the entire quantity indented on OFB was Rs. 80 to 100 lakhs and in cancellation of part quantity ordered on NIL, Rs. 261.56 lakhs. The Department of Defence Production and Supplies pointed out in November 1988 that short-closure of order would not only lead to huge financial loss but might also adversely affect the industrial relations at the production units. Army HQ agreed in December 1988 for completion of the order on NIL Calcutta and restrict the indent on OFB so as to limit the loss. The cost of additional PNVD with accessories with reference to the revised programme of July 1988 worked out to Rs.9.28 crores.

On the matter regarding foreclosure of indent being taken up by Army HQ, OFB informed in January 1989 that the financial repercussions would be Rs. 18.35 lakhs and requested the latter to intimate acceptance of the loss for further necessary action by OFB.

Fulfilment of the scheme was fully dependent on import of image intensifier tubes. The orders for image intensifier tubes required for PNVD ordered in January 1988 had not been placed (September 1989).

The Ministry stated in September 1989 that the revised modernisation scheme estimated a much higher cost vis-a-vis the modernisation scheme sanctioned in the Sixth plan. Due to financial constraints it was necessary to curtail the expenditure and this was effected in two ways (i) a cut back in the number of schemes and (ii) a curtailment in the number of tanks to be modernised. In view of financial repercussions it was decided to short- close the orders. The balance would be used on tank derivatives as planned earlier. Case for regularisation of loss due to short-closure of order was being taken up by Army HQ. Fitment trials were satisfactory and some tanks had been fitted with PNVDs.

To sum up, while CCPA paper was still under consideration, the Army HQ placed indents for PNVDs estimated to cost Rs. 6.22 crores over and above the quantity cleared in the sixth plan. The shortclosure would involve a loss of Rs.18.35 lakhs. The order for image intensifier tubes had not been placed (September 1989). According to a review conducted by Army HQ, in July 1988, PNVDs costing Rs.9.28 crores were procured in excess of requirement.

17. Import of fire control system for tank

Fitment of tank fire control system was approved in the modernisation scheme for a particular type of tank for sixth Army Plan. In August/September 1977, a fire control system (system) of a foreign firm was tried out. The system failed and had to be re-offered for trials. A number of defects/limitations were observed during the re-trials in March-April 1978. It was recommended that before induction of the system into service, all modifications/improvements pointed out in trial reports were to be incorporated and the system be evaluated. Fresh evaluation of the system was, however, not carried out.

In February 1981, a contract was concluded with the same foreign firm for supply of 70 sets of the system at a cost of 59.38 lakhs (Rs. 8.7 crores) with an option for another 80 sets. This was subject to troop environmental trials on an advance supply of four sets. The system on receipt in India was to be fitted on the tanks in workshops. The troop trials on four sets were completed in January 1983 and the remaining 66 sets were to be supplied by November 1983. Trials on these sets revealed certain defects/deficiencies.

In all, 69 sets were received during April 1983 to March 1985 and issued to workshops during April 1983 to March 1987 for fitment into tanks.

According to the user directorate, the system was found (October 1985) to be inadequate and no more procurement of this type was envisaged. All the 69 sets were held in a workshop under extreme weather conditions and were likely to deteriorate awaiting fitment into tanks. Fitment was held up (September 1987) as the foreign firm was not agreeable to carry out the rectifications/fitment. In September 1988, the system was handed over to Bharat Electronics Limited for study and their report was awaited (October 1989).

In November 1989, the Ministry stated that all out efforts were being made to get the system rectified/modified by the foreign firm and the proposal was in the process of finalisation.

To sum up, tank fire control system of a foreign firm failed in trials during 1977 and 1978. A contract was, however, concluded in February 1981 with the same firm for supply of 70 sets without fresh-evaluation. Tank fire control system costing Rs. 8.58 crores were defective and had been lying un-utilised for four to six years awaiting rectification/ modification.

18. Pre-mature failure of engines of tank

Mention was made in paragraph 8 of the Report of the Comptroller and Auditor General of India Union Government (Defence Services)for the year 1981-82 about frequent breakdowns of an equipment (tank) supplied to the Army due to high incidence of premature failure of engines.

The life of overhauled engines was fixed in September 1985 as 2000 Kms. after first overhaul or 1600 Kms. after second overhaul.

The number of engines overhauled in a workshop during 1984 to 1988, number prematurely failed and kilometers achieved by the prematurely failed engines were as indicated below

Year	Number overhauled	Prematurely failed		Kilometres achieved				
		Numbers	Percentage	Upto 500	501 to 1000	1001 to 1500	1501 to 2500	Above 2500
1984	145	38	26	9	7	11	8	3
1985	124	32	26	16	7	5	4	--
1986	147	24	16	4	11	5	3	1
1987	210	90	43	25	30	24	10	1
1988	232	72	31	19	32	10	6	5
Total	858	256	30	73	87	55	31	10

Nine overhauled engines failed prematurely even before performing 100 Kms.

The Workshop informed Army HQ in August 1988 that a large number of failures of engines of tank were attributed to design inadequacy. The other causes were improper measurements of critical components, improper application of adhesives,incorrect matching of vital components, inadequate supervision in inspection, etc. and proposed to bring in stringent inspection at different stages of overhaul to eliminate major defects.

The workshop intimated the Army HQ in October 1988 that with the adoption of stringent stage inspection measures the problem of premature failure would be eliminated to a large extent. They, however, added that occurrence of such defects at low Kilometerage due to design inadequacy was an accepted fact.

On an enquiry by Audit regarding the cost of overhaul of engines of the tank, Army HQ expressed (April 1989) their inability to provide the cost of overhaul on the plea that Army Base Workshops were not cost accounting units. Premature failure during 1988 was 31 per cent of the engines overhauled. This has resulted in its unreliability and unspecified infructuous expenditure on overhaul.

The Ministry stated, in December 1989, that action was in hand to find out a suitable alternative engine and also to introduce improved technological measures for ensuring enhanced reliability of the overhauled engines.

19. Import of ammunition of old vintage

18,000 rounds of ammunition 'A' (cost: Rs. 278.91 lakhs) and 22,000 rounds of ammunition 'B' (cost :Rs.311.66 lakhs) under two contracts concluded in May 1980 and August 1982 were shipped by a foreign supplier in July 1985 and was received at the Central Ammunition Depot (CAD), Pulgaon in August 1985. According to the contracts, the quality of ammunition was to be certified through a "Specification- Certificate of quality" by the supplier. There was no stipulation in the contracts that the supplier will supply ammunition from current manufacture. Further there were no provisions in the contracts for inspection of the ammunition by the Government.

On a scrutiny of batch/lot details of the consignment, the CAD reported, in October 1985, to Army Headquarters (HQ) that the ammunition lots were manufactured in 1970 and 1974 to 1977 and had a short shelf-life besides corrosion and deterioration. Therefore, cent per cent inspection of the entire consignment was taken up. The CAD also requested the Army HQ to take up the case with the supplier. In October 1985, Controller of Inspection, Pune observed that the defects were noticed within 12 months from the date of delivery i.e. within the guarantee period.

In April 1987, the CAD reported to the ArmyHQ that 179 rounds of ammunition'A'(value: Rs. 2.77 lakhs) and 1165 rounds of ammunition 'B' (value :Rs. 16.50 lakhs) declared unserviceable in November 1986 for replacement by supplier, had been kept segregated. Further, during cent *per cent* inspection similar defects had been observed in lots received against the other two contracts concluded in October 1981 and August 1985 with the same foreign supplier. The total quantity of defective ammunition was 4070 rounds of ammunition 'A' and 4143 rounds of ammunition'B'. The Army HQ was, therefore, asked in April

1987 to intimate their disposal.

In September 1987, based on the result of metallurgical examination of the affected lots by the Director General of Quality Assurance (DGQA), the Army HQ informed the CAD that the rounds showed signs of intergranular corrosion on aluminium body being not rectifiable and affected lots including the unserviceable rounds be consumed early preferably within a period of five years. However, till the receipt of final decision from the Ministry, the ammunition was to be kept segregated. During November 1985 to May 1988 the CAD had, issued 1322 rounds of ammunition 'A' and 8738 rounds of ammunition'B' of the affected lots to forward ammunition depots for issue to units. In May 1988, the Army HQ intimated that on retest, the DGQA had revised their opinion and had suggested the replacement of the entire affected lots consisting of 1500 rounds of ammunition `A' and 11,356 rounds of ammunition `B' (total cost:Rs. 184.12 lakhs) under the two contracts.

As the matter regarding replacement of defective ammunition had been taken up with the supplier, the Army HQ advised, in July 1988, to segregate the affected lots for inspection at short notice. From the stock details, reported by forward ammunition depots, 149 rounds of ammunition 'A' and 3158 rounds of ammunition 'B' valuing Rs. 47.05 lakhs were already issued to user units.

To sum up,the contracts concluded for import of ammunition did not provide for inspection of ammunition by the purchaser nor did they stipulate that supply would be from current manufacture resulting in supply of ammunition with short shelf life. Out of 1500 rounds of ammunition 'A' and 11,356 rounds of ammunition 'B' declared defective (total cost: Rs. 184.12 lakhs) and required replacement, 149 rounds of ammunition 'A' and 3158 rounds of ammunition 'B' at a total cost of Rs. 47.05 lakhs had been issued to the user units. Replacement of the balance quantity costing Rs.137.07 lakhs was not known (January 1989).

The case was referred to the Ministry in June 1989 and their reply has not been received (November 1989).

20. Procurement of a simulator

A protocol was signed with a foreign Government in November 1982 for delivery of a simulator for tank at a cost of Rs. 19.16 lakhs.

In March 1983, the representative of the foreign Government intimated that simulator was not being produced for a long time and because of this spares could not be secured for ten years as well as special maintenance tools. Necessary basic set of spare parts were, however, included in the set. In June 1983, the Ministry requested the foreign Government to provide as much quantity of spares as possible and to make available the drawings and data for building including airconditioning required to house the simulator before conclusion of the contract.

After negotiations a contract for the supply of simulator with accessories for Rs. 18.50 lakhs was signed in October 1983. The contract contained list of spare parts for two years. The simulator was guaranteed for a period of 12 months after the assembly but not later than 18 months of the date of delivery of the last substantial part.

The simulator was received in India in June 1984. Works services required to house the simulator in an Army school, commenced in July 1984, were completed in July 1985 at a cost of Rs. 9.90 lakhs. The guarantee period of the simulator expired in December 1985. The simulator was installed by the experts of the foreign country in May 1986 after two years of receipt. The expenditure on experts was about Rs. 1.90 lakhs.

In June 1986, after the simulator had worked for 175 hours, the hydraulic system in one of the cabins became defective and was not fit for further exploitation. A claim report was sent to the foreign Government in September 1986. In April 1987 foreign Government sent the hydraulic accumulator which was again found defective. The Army school had received some spares from foreign Government in February 1987 of which two rotors were found broken and one hydraulic lock valve was damaged. This was reported to Army Headquarters in May 1987.

Army school informed Audit in March 1989 that the training programme was being adversely affected as cabin No. II could only be used for shadow projection. Film projection with and without hydraulics was not being carried out in cabin No. II due to defects in the hydraulic system and the damaged rectifiers which had not been replaced (March 1989).

The Ministry stated in December 1989, that since hydraulic system of cabin No. II was defective, only training on driving without motion was imparted from this cabin. The rectifiers have now been replaced by locally procured rectifiers and foreign Government had supplied rotors as replacement for the damaged/broken parts.

Thus, the simulator imported at a cost of Rs. 18.50 lakhs remained unutilised for two years. The defect in hydraulic system noticed in June 1986 within a month of installation of the simulator could not be rectified so far (September 1989); as a result one of the cabins was used only for shadow projection thereby adversely affecting the training programme.

Logistics and transport

21. Procurement of broad gauge coaches

Army Headquarters (HQ) had been facing perpetual difficulties in arranging movement of troops and defence stores by special trains due to deficiency of railway coaches. In a meeting held in December 1985 the representative of the Railway Board suggested that spare manufacturing capacity was available with Bharat Earth Movers Limited (BEML), a public sector undertaking, and the Ministry might utilise this capacity for meeting the deficiency of coaching stock. After discussions, BEML, quoted different sets of unit prices ex-works in June 1986 for delivery of second class General (GS) and second class with brake van and luggage (SLR) coaches. In August 1986 BEML indicated that wages of their employees could get revised from December 1986 which would result in further increase.

In August-September 1986, Army HQ sought the approval of the Ministry to the procurement of 80 second class broad guage coaches (60 vestibuled GS coaches and 20 SLR coaches).

The necessity for procurement of coaching stock was approved by Raksha Rajya Mantri (RRM) on 26th August 1986. Availability of Rs. 16.26 crores for manufacture of coaches through BEML was confirmed by the Army HQ in December 1986.

However, in November 1986 BEML requested to finalise the order at the earliest or to atleast place a letter of intent pending completion of formalities to enable them to incorporate the requirement of coaches in their production plan. The Ministry did not place the order. BEML had extended the validity of their offer to May 1987. In June 1987 BEML quoted Rs.18 crores for the coaches.

The Ministry accorded sanction for manufacture of coaching stock in August 1987. Supply order for manufacture and supply of coaches was placed on BEML on 7th October 1987 at a cost of Rs.18 crores. All the 80 coaches were delivered between March and August 1988. The extra cost with reference to rates for deliveries during 1987-88 worked out to Rs.1.738 crores.

The Ministry stated in March-August 1989 that though to some extent Railways provided the coaches on loan, for the rest training and relief movements suffered due to inadequate coaching stock. There was no delay on sanction of the project. This contention is not tenable as the funds were made available in December 1986. Although the offer of BEML was valid up to May 1987, the case was delayed by the Ministry in issuing sanction (August 1987) and placing supply order (October 1987).

Thus, delay in the issue of sanction by the Ministry to manufacture the coaching stock by the BEML resulted in extra expenditure of Rs.1.738 crores. Training and relief movements suffered due to inadequate coaching stock.

22. Import of bearings

Military Bogie Well Type (MBWT) wagons are used for carriage of tanks, medium guns and heavy equipment of mechanised forces. In March 1982, Ministry issued a sanction for manufacture of 100 MBWT wagons, at an estimated cost of Rs.7.87 crores.

In a meeting held in May 1982, to consider measures for accelerating the work, the railway representative said that if production of 100 MBWT wagons was entrusted to the present manufacturer, (Bharat Wagon and Engineering Company Limited) the production would start from September 1983 at 10 wagons per month and would be completed by June 1984. If, however, the bearings were imported, Central India Machinery Manufacturing Company Limited (CIMMCO) would be able to produce 15 wagons per month from April 1983 and complete the supply by October 1983 thus, quicker by eight months. The cost of imported bearings was indicated by the railway representative as Rs. 18,000 against Rs.9,000-9,500 of indigenous bearings. Additional expenditure on 800 bearings (eight bearings per wagon) including customs duty was estimated to about Rs. 1 crore. Ministry agreed to use imported bearings for speedy manufacture of the wagons.

In June 1982, Army Headquarters requested the Railway Board to commence contractual process immediately for manufacture of 100 MBWT wagons with imported bearings in order to complete production by October 1983. An import order for manufacture and supply of 400 numbers of roller bearings was placed by the Railway Board in January 1983. As per the delivery schedule, the supply of imported bearings should have been completed by September 1983 but the entire consignment was shipped in December 1983. The delay in supply was attributed by the foreign firm to late receipt of technical approval and letter of credit. In March 1983, the Railway Board placed supply order on CIMMCO for fabrication and supply of 100 MBWT wagons at a cost of Rs.2.74 crores excluding cost of steel, wheel-sets, roller bearing axle boxes, centre buffer couplers, laminated bearing spring, etc. which were to be supplied to the firm free of cost. The wagons were to be delivered at the rate of 20/25 per month from 30th November 1983 when the prototype was approved by the railways.

The firm represented to the Railway Board in August 1984, non- availability of wheel sets. Wheel sets in worthwhile numbers were available from May 1984.

Wagons were actually delivered in batches starting from 1985 to 1986 i.e. after three years of expected delivery schedule. A sum of Rs.11.02 crores had been paid towards manufacture of the wagons to railways and a final bill for Rs.2.31 crores had been received recently (August 1989).

Ministry stated in August 1989 that railways imported the bearings from some Austrian firm. There was no reason to doubt the statement of the railways that receipt of bearings by import would be quicker. Due to non-availability of wagons improvement in concentration timings could not be effected.

Despite the availability of indigenous bearings, Ministry opted for import of bearings at a higher cost with a view to obtain supply of wagons eight months in advance. This objective was, however, not achieved resulting in an extra expenditure in foreign exchange.

23. Purchase of camouflage equipment

Army Headquarters (HQ) is placing a number of supply orders for various items through Tender Purchase Committee. The conditions of supply orders stipulate that in the event of failure to supply the stores, the supply orders would be cancelled at the risk and expense of the defaulting firms. Forty six supply orders placed by Army HQ during April 1982 to February 1985 for equipment camouflage were cancelled during August'1983 to October 1986 at the risk and expense of the defaulting firms, but neither risk purchases were made nor general damages recovered from the defaulting firms. Subsequent purchases of this item were made during 1985 and 1986 at higher rates and the extra expenditure caused to the State, worked out to Rs. 34.52 lakhs. The Army HQ indicated in January 1987/June 1989 that no valid risk purchases were possible in these cases due to expiry of prescribed period of six months from the dates of breach and other practical difficulties. In respect of another fifteen supply orders for the same equipment placed during May 1982 to April 1984, though risk purchases were made during January 1985 to July 1987, the extra expenditure incurred to the tune of Rs. 10.26 lakhs was still to be recovered (November 1989). The Ministry stated in December 1989 that subsequent purchases were made based on subsequent annual provision review and not against the 46 cancelled supply orders. This contention is not tenable as the same item was purchased subsequently establishing that the demand of the item existed. The Ministry further stated that extra expenditure could not be recovered/claimed from the defaulting firms as the risk purchases in respect of 15 supply orders were not made within six months because of legal constraints. However, general damages amounting to Rs. 8.29 lakhs had been lodged in 13 cases and in the remaining two it was under process.

Thus, failure of the department for not resorting to risk purchases within the stipulated period of six months from the date of breach resulted in an extra expenditure of Rs. 44.78 lakhs. Action had been initiated to claim only general damages of Rs. 8.29 lakhs.

24. Procurement of water sprinklers

An indent for 180 water sprinkler attachments and 360 water steel tanks was placed by the Army Headquarters in December 1982 on the Department of Defence Production and Supplies (DDPS) for arranging supply by December 1983 at an estimated unit cost of Rs. 3,350 and Rs. 2,075 respectively.

The DDPS concluded a contract with firm 'A' in May 1984 for Rs. 16.75 lakhs for supply of water sprinkler and steel water tank at the unit rate of Rs. 4100 and Rs. 2575 respectively. Pilot sample was required to be submitted within 5-6 weeks and bulk supply to be made within 4-5 months after approval of pilot sample. The firm, failed to submit an acceptable pilot sample. The order for both the items was cancelled in January 1986 without any financial repercussion on either side by treating the non- supply as a developmental failure.

As the item was still required by the units, the DDPS concluded two separate contracts in August 1986 for supply of water sprinklers and steel water tanks with firms 'B' and 'C' respectively at Rs. 6950 and Rs. 3,975 each respectively. The total value of these two contracts was Rs. 26.82 lakhs. While firm 'C' could supply the steel water tanks in May 1987 at a cost of Rs. 17.11 lakhs, the firm which was to submit an acceptable pilot sample for water sprinkler was granted extension of time up to April 1989. The pilot sample was yet to be submitted by firm 'B' (July 1989).

In the absence of water sprinklers 360 steel water tanks purchased in May 1987 at a cost of Rs. 17.11 lakhs were lying un-used.

In July 1989, Ministry stated that two separate contracts for supply of water sprinklers and steel tanks were concurrently placed on two different firms with stipulation for supply of items concurrently. Firm B' could not develop pilot sample for water sprinkler fully acceptable whereas firm 'C' could complete supply of steel water tanks in

May 1987.

To conclude, eventhough bulk production clearance could only be given when complete set was tested as pilot sample, the DDPS had procured steel water tanks separately at a cost of Rs. 17.11 lakhs and these were lying without use since May 1987 for want of water sprinklers.

25. Non-recovery/retrieval of Government assets from a firm

In August 1980, the Department of Defence Production and Supplies (DDPS) placed a supply order on a firm for construction and supply of 14 aircraft refuellers for Rs. 16.80 lakhs. Supply was to commence at the rate of 1-2 units per month immediately after clearance for bulk production. The supply order provided for on-account payment subject to a ceiling of 50 per cent of the value of the order against bank guarantee. No bank guarantee was, however, stipulated for securing the chassis and meters while in possession with the firm for fabrication.

The chassis were handed over to the firm in November 1980 and meters in July 1981. The firm submitted the prototype for final inspection in November 1981 which was cleared for users trial in March 1982. In the interest of materialisation of supplies, five chassis were issued to the firm in April 1982 for carrying out preliminary fabrication work in anticipation of clearance for production which was granted on 2nd May 1983. The delivery period fixed was 31st January 1984. On-account payment of Rs. 4.14 lakhs was made to the firm against three bank guarantees with dates of validity during February to October 1985. Eventhough the firm failed to adhere to the delivery schedule, four meters were issued to it in November 1984. The firm was granted extension of time up to March 1985 for supplies. Inspection authorities suggested in March 1985 shortclosure of the supply order and retrieval of chassis and meters. It was decided to extend the delivery period up to April 1985 with performance notice to comply with legal requirements before cancellation of supply order. In February 1986 the inspection authorities intimated DDPS that since the firm was under liquidation, action for cancellation of the supply order and retrieval of chassis might be taken. In May 1986, after 15 months of suggestion for shortclosure of order the DDPS cancelled the supply order asking them to return the chassis and meters valued at Rs. 8.78 lakhs.

During February, July and September 1985 DDPS approached the firm as well as its bankers either to extend the validity of bank guarantees or to remit the bank guarantee amounts to the paying authority. However, the bankers did not make any payment.

The Ministry stated in August 1989 that the vehicles and bulk meters were bound at firm's premises by a court order. The DDPS had instructed Government Law Officer at Calcutta to obtain release of the chassis through Calcutta High Court. No fresh supply order could be placed as it was not possible for any firm to supply the item without chassis and the required chassis and bulk meters were in the custody of the defaulting firm.

To conclude, no bank guarantee was obtained from the firm before handing over Government assets worth Rs. 8.78 lakhs. Supply order was cancelled after 15 months of receipt of suggestion of inspection authorities for shortclosure of order and retrieval of chassis. Government assets worth Rs. 8.78 lakhs had been lying with the firm for five to seven years and on-account payment of Rs. 4.14 lakhs had not yet been recovered (August 1989).

26. Procurement of motor boat workshops

Repairs to vessels held on charge of inland water transport operating companies are carried out by workshops positioned at their permanent locations. This arrangement involves loss of time and employment of troops for carrying the defective components to the workshops and bringing them back to the vessels. It was not considered desirable in an operational situation. Hence two motor boat workshops(Boat Workshops) were authorised in 1972 for deployment in water with detachments of vessels to provide repair cover to vessels developing faults while in midstream.

Indent for two boat workshops was placed by Army Headquarters (HQ) on the Department of Defence Production and Supplies (DDPS) in December 1977 . In October 1979, Army HQ proposed certain changes to the specifications of the boat workshops. The contract for the two boat workshops conforming to the revised specifications was, therefore, concluded in July 1981 with a firm on competitive tender basis at a cost of Rs. 31 lakhs. The firm was required to submit the drawings for approval and to complete the supplies within 12 months of the approval of drawings. The last drawing submitted by the firm was approved in September 1984 and the period for completion of supplies was accordingly fixed by DDPS as September 1985.

The firm was allowed 'on -account' payments of Rs. 12.43 lakhs in March,November 1983 and January 1985 for the first three stages of manufacture against bank guarantees of equal amount. There was no progress of work after third stage of the manufacture which was inspected in October 1984.

The firm did not adhere to the stipulated delivery period and was granted extension of time up to December 1986 by DDPS. Thereafter, neither the supplies were made by the firm nor the contract was cancelled by the DDPS for making risk and expense purchase. The bank guarantee against the first stage payment of Rs. 4.14 lakhs was encashed in October 1987 though applied for in April 1985. The bank guarantees against subsequent payments of Rs. 4.14 lakhs each were valid up to August 1984 and October 1985. DDPS had advised bank authorities in July 1984 and September 1985 to encash these bank guarantees if the firm failed to extend their validity. The bank guarantees were however, not encashed within the validity period. The bank held (February 1988) that it was not asked in time for encashment. The bank asked DDPS in March 1988 for postal documentary proof of despatch and receipt of advice letter which could not be produced by DDPS.

The Ministry in August 1989 stated that finalisation of specifications of motor boat workshop involved interaction between various agencies which required considerable time. Further, steps were being taken to get back the advance by legal channel.

The case reveals that although two boat workshops were authorised in 1972, the same had not been provided to the units. As a result units continue with the old arrangements which was not considered desirable in an operational situation. There was no progress of the work after third stage of manufacture. DDPS neither cancelled the contract thereafter nor encashed the bank guarantees against payment of Rs. 8.28 lakhs even after a lapse of over four years.

27. Purchase of sub-standard mules

In July 1987, Government accorded sanction for the purchase of 1174 mules at Rs. 11,700 each (total cost : Rs. 1.37 crores) from a private firm to be delivered to Remount Depots Hempur and Saharanpur against the existing deficiency of mules. In August 1987, Army Headquarters (HQ) authorised a Board of Officers (Board) to purchase these mules as per height and girth laid down in the contract of July 1987 besides following the departmental instructions. Remount Depot, Hempur received 724 mules between August 1987 and November 1988 duly inspected and passed by the Board.

In November 1988 during the course of inspection a sizeable number of mules were found sub-standard by the Additional Director General Remount Veterinary Services. A Board ordered on 8th November 1988 and assembled on 28th and 29th November 1988 to identify the number of mules purchased not conforming to the specifications, observed that out of 337 mules still held with Depot Hampur, 301 were below specification either in height, girth or both. Of these 301 mules, 171 were found below specification exclusively in height ranging between more than one and seven centimetre. On 19th December 1988, the Army HQ informed the HQ Central Command to order a Staff Court of Inquiry to investigate the purchase of 171 sub- standard mules costing Rs. 20 lakhs and to fix responsibility. On 29th December 1988, the HQ Central Command ordered the Staff Court of Inquiry to investigate the matter with instructions to submit its findings by 28th February 1989. The findings of the Court of Inquiry were still awaited (August 1989).

A sum of Rs. 4.13 lakhs was incurred on the ration of the 171 sub-standard mules from December 1988 to September 1989. The sub- standard mules were continued to be held without being utilised for the purpose.

In September 1989, Ministry stated that the actual number of sub-standard mules purchased would be known only after finalisation of the Staff Court of Inquiry proceedings and Army HQ was pursuing the matter with the HQ Central Command and had instructed them for finalisation of the Court of Inquiry by 15th September 1989.

Thus, despite inspection, 171 sub- standard mules short in height between more than one and seven centimetres were purchased at a cost of Rs. 20 lakhs. The sub-standard mules continued to be held without utilising them for the intended purpose, resulting in an expenditure of Rs. 4.13 lakhs on their ration from December 1988 to September 1989. The Court of Inquiry ordered in December 1988, was yet to submit its report (September 1989).

Workshop equipment

28. Improper handling of a machine

Based on an indent placed by Army Headquarters (HQ) in February 1984, Supply Wing of an Indian Mission abroad (SW) concluded a contract in March 1985 with a foreign firm forthe supply of two electronic gear testing machines alongwith connected accessories and spare parts at a total cost of DM 14.16 lakhs (Rs. 57.49 lakhs). Of the two machines, one was to be supplied to Army Base Workshop, Meerut and the other to Bangalore through Embarkation Headquarters (EHQ) Bombay and Madras respectively. Since it was a precision and sensitive machine, the firm recommended (April 1984) to the SW that it should be transported from the port of entry to the site of installation by lorry transport.

The consignment of one machine costing Rs. 28.74 lakhs arrived at the Bombay port on 25th April 1986 and was got cleared on 5th May 1986 from the port authorities after customs check by EHQ Bombay who despatched the same to Meerut on 6th June 1986 in an open railway wagon. The consignment was received on 14th June 1986 and kept in a building which was not an air-conditioned one.

On 4th November 1986, the packages containing the machine were opened in the presence of the representatives of the Workshop, firm and its Indian agent and found that the machine was unfit for assembly and installation due to rusting of its vital parts on account of exposure to rain water. It was suggested that the machine should be sent back to their principals to the country of origin for repairs at the earliest. One machine received in Bangalore workshop in August 1986 and installed in November 1986 was functioning satisfactorily since then. The position of another machine meant for Meerut Workshop is shown in succeeding paragraphs.

In November 1986, the Meerut Workshop referred the matter to HQ Technical Group EME which advised, in December 1986, to get the matter investigated through a Staff Court of Inquiry (CI) to pin-point the responsibility for the damage caused to the machine. Accordingly, a CI convened in March 1987 opined that damage to the machine occurred due to failure of the EHQ in not repacking the packages properly and putting in a closed wagon or lorry and the firm's Indian agent was responsible for not sending their representative to the EHQ to ensure compliance of manufacturer's instructions regarding opening of packages, repacking and its transportation.

However, in June 1988 Sub-Area Commander and in December 1988 the General Officer Commanding-in-Chief (GOC-in-C) of the Command did not agree with the findings of the CI and were of the opinion that the Meerut Workshop had failed to ensure the transportation of the consignment by lorry transport from port of entry to the site of installation as instructed by the firm. It was further held by them that damage to the machine occurred due to non-receipt of specific instructions regarding requisite repacking and transportation by the EHQ. Besides recommending disciplinary action against the staff handling the subject, the GOC-in-C recommended that the supplementary CI be ordered by Army HQ to pin-point the responsibility on specific functionaries.

In June 1989, the GOC-in-C opined that staff of the SW was blameworthy for their failure to ensure compliance of instructions contained in the firm's letter of 25th April 1984 and recommended that the loss be borne by the State. The CI proceedings were sent for obtaining approval of the Chief of the Army Staff in June 1989 which was awaited (November 1989).

In the meantime a proposal was sent, in December 1988, to the Army HQ for obtaining sanction for undertaking repairs to the damaged machine either in India or at the premises of the firm. The cost of repair was assessed at Rs. 26 lakhs at the firm's premises and Rs.19.50 lakhs in India. In either of these two contingencies the firm had stated that guaranteed accuracy of the machine should not be proved or insisted upon and whatever best accuracy achieved would have to be accepted. The decision to undertake the repairs was awaited due to non-finalisation of CI proceedings (November 1989).

In November 1989, the Ministry stated that instructions of the firm were communicated to the SW only. The packages were opened by the EHQ on arrival at Bombay port for customs clearance and in the absence of any special advice being available with them the EHQ did not repack the packages properly and consigned them to Meerut Workshop in an open railway wagon instead of lorry transport resulting in ingress of rain water thereby rusting the vital component of the machinery. The decision to undertake the repair was awaited for want of finalisation of CI proceedings. In the meantime, the accuracy of the gears was being checked by adopting conventional engineering methods which are less accurate and time consuming.

Thus, failure in repacking the packages properly and putting in a closed wagon or lorry from the port of entry to the site of installation resulted in rusting of vital components of the machine due to ingress of rain water thereby rendering the same unfit for use. The machine (cost: Rs. 28.74 lakhs) received in June 1986 was lying in defective condition requiring repairs at an estimated cost of Rs. 26 lakhs at firm's premises or Rs. 19.50 lakhs in India and the decision in this regard was awaited due to non-finalisation of the CI proceedings and the intended benefits of securing optimum accuracy had not been achieved (November 1989).

29. Procurement of dynamometers

Based on the forecast requirement of the Army Base Workshop, Delhi Cantonment,Army Headquarters (HQ) placed an indent on the Department of Defence Production and Supplies (DDPS), in March 1984, for procurement of four sets of dynamometers at a cost of Rs. 8.20 lakhs. Tender enquiries were floated by the DDPS in May 1984. The workshop indicated in July 1984 that the dynamometers being procured had inherent design deficiency and, therefore, not suitable for testing of engines adding that the workshop was already having one such dynamometer installed in October 1980, which was posing continuous problem since its installation. It recommended the procurement of a different model.

Despite the workshop's suggestion not to procure this type of dynamometer, Army HQ accepted the dynamometer offered by the firm on the basis that the model suggested by the workshop was not in the production line and any other dynamometer would take time up to two years.

A supply order on a firm for four sets of dynamometer for Rs. 21.12 lakhs was placed in March 1985. In November 1985, the workshop again requested Army HQ to cancel the supply order placed on the firm and to import reliable and suitable dynamometers in view of the improper materials used in manufacture by the firm. No action was, however, taken and two sets of dynamometer received in the workshop in July and December 1986 were commissioned in November 1986 and February 1987 respectively.

Due to serious defects in the functioning of the dynamometer reported by the workshop it was decided in November 1986 to short-close the quantities from four to three and to import one set. The reduction of one set was effected in the supply order in December 1986. The third set was received by the workshop in August 1988 and installed in December 1988. During the half year ending June 1989, the utilisation of the three dynamometers was 55 to 62 *per cent.*

In January 1988, an indent for import of one set of dynamometer at an estimated cost of Rs. 9.36 lakhs was placed by the Army HQ on Director General of Supplies and Disposals (DGSD) and the same was under progress by the DGSD. In May 1988, the workshop again stated that the dynamometer was not suitable for overhauling of engines undertaken by them. The cost of the three sets procured worked out to Rs. 18.37 lakhs.

In November 1989, Ministry stated that the workshop did not accept the dynamometers as suitable and its non-acceptance was conveyed to the Army HQ, the subsequent decision to their procurement was based on the recommendations of the Controllerate of Engineering Equipment which was the authority holding sealed particulars. There were certain design inadequacies which made it defect prone despite various modifications carried out by the firm and that the dynamometers operated much closer to their limiting parameters. A decision to import a dynamometer was taken keeping in view the technical evaluation and limiting parameters observed during the actual usage.

Despite the workshop's recommendation not to procure the dynamometers in view of their inherent design deficiency, the Army HQ procured three sets for Rs. 18.37 lakhs. These had not proved useful to the workshop.

30. Non-utilisation of honing machines

In July 1982, Army Headquarters (HQ) placed an indent on the Supply Wing of an Indian Mission abroad (SW) for procurement of four honing machines. Two each were to be despatched to the workshops at Meerut and Kirkee. Before finalisation of the contract, Army HQ noticed from the terms of the contract that honing machines with immovable tables, which had very limited use in the workshops, were being procured, instead of movable tables and informed the SW in March 1983, to procure machines with movable tables. In April 1983, the SW concluded a contract with a foreign supplier for supply of four honing machines with fixed table at a cost of DM 271,219 (Rs. 9.82 lakhs). In July 1983, Army HQ reiterated through telex that only movable tables should be procured. On 7th May 1984, the Army HQ sought for confirmation about procurement of machines with movable tables only. The Supply Wing did not take up the matter with the supplier till 23rd May 1984 who expressed inability to replace the fixed tables with movable tables. Machines with fixed tables were despatched by the supplier in September 1984. The Embarkation HQ, Bombay despatched all the four machines to the workshop at Meerut where these were taken on charge in May 1985.

One machine was modified in March 1989 at a cost of Rs.0.50 lakh and is in use since then, but the remaining three could not be used. Army HQ decided to transfer a machine each to two workshops located in forward areas and workshop at Kankinara and get them modified in consultation with workshop at Meerut. The modification cost was estimated at Rs.0.50 lakh per machine. All the three machines costing Rs.7.37 lakhs were lying un-utilised awaiting modification.

The Ministry stated in December 1989 that the reply from the concerned authorities for not carrying out the amendment to the contract as well as revision of despatch order were awaited. The three machines were likely to be made operative within the current financial year.

There was indifference on the part of the Supply Wing to the specific request of the Army HQ. The workshop also failed to carry out the modifications resulting three machines costing Rs. 7.37 lakhs imported in 1984 lying unutilised.

31. Procurement of welding machines

On the basis of an indent placed by Army Headquarters(HQ) in October 1983, the Director General of Supplies and Disposals (DGSD) concluded a contract with a Calcutta firm in January 1985 for the supply of four welding machines for the purpose of heavy duty welding of components, etc. in four Army base workshops at a total cost of Rs. 5.18 lakhs. The machines carried a warranty of 12 months from the date of installation by the consignee or 15 months from the date of delivery of the goods.

Three machines intended for use by workshops at Allahabad, Meerut and Kirkee were despatched in December 1985. The fourth machine to be used by the workshop at Agra, was received in February 1986 and the same was installed/demonstrated by the firm in August 1988 i.e. after a lapse of 29 months due to non- procurement of certain items costing Rs.3500 as demanded by the supplier to instal the machine. Subsequently, the workshop wrote to Army HQ in September 1988, that the capabilities of the plant installed in their workshop revealed that it was suitable for continuous and heavy duty welding works like building heavy structure and that their workshop did not have any such type of work where the machine could be properly utilised and hence the machine be transferred elsewhere where it could be gainfully utilised. Similarly, the workshop at Kirkee had also declared the machine surplus to their requirement and made a similar request to Army HQ for its transfer to some other workshop. The third machine installed at Meerut in September 1987 i.e.after a lapse of 18 months of its receipt in December 1985, was being put to limited use only. In December 1988, it was decided to transfer the two machines available with the workshops at Agra and Kirkee to Electrical and Mechanical Engineering centre, Secunderabad for possible use. One machine had been transferred in February 1989.

Thus, failure to adequately assess the functional and operational utility of the welding machines before conclusion of the contract led to the procurement of three machines (cost: Rs. 3.88 lakhs), between December 1985 and February 1986, which largely remained unutilised/underutilised.

The case was referred to the Ministry in June 1989 and their reply has not been received (November 1989).

32. Purchase of wheel arbator

Under a modernisation plan for a workshop at Bangalore Army Headquarters (HQ) placed an indent in May 1984 for a wheel arbator on Director General of Supplies and Disposals (DGSD) who placed an order in April 1985 on a firm. The machine costing Rs. 5.41 lakhs was received by the workshop in January 1986 with a guarantee up to January 1988.

Consequent on change in workload, the machine received in January 1986 was declared surplus to requirement in September 1986. The machine was shifted to a workshop at Kirkee in September 1987 by incurring Rs. 0.22 lakh towards freight as it was lying without any utilisation for 21 months. There also it was not put to any use. It was declared surplus to requirement in August 1988.

The Ministry stated in December 1989 that as the firm failed to carry out the commissioning of the machine at Bangalore workshop, it was decided to instal it at Kirkee workshop due to subsequent launching of another project in this workshop.

Thus, a machine costing Rs. 5.41 lakhs, procured in January 1986 had been lying idle (November 1989).

33. Injudicious purchase of stores

Army Headquarters (HQ) are responsible for provisioning of various kinds of packing paper and recolouring compound based on the stock available with the Central Ordnance Depot, Chheoki (COD) and requirements projected by the user units/depots . Their procurement and issue revealed the following features:

Case I

Twenty one purchase orders for procurement of various kinds of packing paper placed by the Director General of Supplies and Disposals were scrutinised in Audit, which inter-alia covered 16 indents placed between March 1983 and April 1987. Against this, 11 kinds of packing paper costing Rs. 245.53 lakhs were received in the COD between August 1983 and August 1988. Of this, packing paper costing Rs.17.67 lakhs only could be issued and in some cases even the usage of packing paper was not known to the COD. At the end of March 1989, paper costing Rs.227.86 lakhs was held in stock for which the COD had no pending demands from the units/regional depots.

Apprehending deterioration of the packing paper due to poor turnover and shortage of accommodation the COD had, in June 1988, sought for disposal instructions from Army HQ. Notwithstanding the fact that a huge quantity of packing paper was held by the COD, Army HQ placed, in May 1988, another indent for procurement of 1.53 lakh kgs. of packing paper on the Director General of Supplies and Disposals (DGSD) who placed, in October 1988, purchase order on a firm for supply of 1.53 lakh kgs. of packing paper by April 1989 to the COD at a cost of Rs. 12.13 lakhs. In March 1989 the COD requested the Army HQ either to get the order cancelled or transfer the paper to other regional depots. The firm supplied 0.53 lakh kgs. of packing paper duly inspected against payment of Rs. 4 lakhs in April 1989 but the COD rejected the same due to faulty packing. The balance one lakh kgs. of packing paper was cancelled at the request of COD in July 1989.

In December 1989, the Ministry stated that COD's intimation of June 1988 was not received in Army HQ. Subsequently based on their letter of October 1988 which was received in November 1988, prompt action was taken ragarding the surplus store of papers and the level of surplus stocks held had since almost been depleted. A review of the Inter and Budgetary Control Cell in consultation with the Ordnance Directorate was being initiated to ensure better inventory control and a study was also entrusted to Indian Institute of Management, Ahmedabad to go into management, lead time, etc., and once the results of this study were available, more efficiency was likely to ensue. The Ministry, did not indicate the stock of packing papers disposed of and also presently held.

Case II

Based on two indents placed by the Army HQ in March 1984 and April 1985, the DGSD placed (between August 1984 and December 1985) seven purchase orders for procurement of 4.97 lakh kgs. of recolouring compound for camouflage of tentage of different shades on four different firms at prices ranging from Rs. 11.85 to Rs. 16.73 per kg. The firms supplied stores costing Rs. 73.14 lakhs between November 1984 and April 1987 to the COD. Due to lack of demand from user units, a quantity of 1.09 lakh kgs only could be issued by the COD up to December 1988 leaving a balance of 3.88 lakh kgs. costing Rs. 57.50 lakhs in stock for which there was no demand from the users. The shelf-life of the compound being three years, the possibility of deterioration of the compound during the storage period could not be ruled out as the compound was lying in stock for over two to five years.

In December 1989, the Ministry stated that the stock held was declared by inspection authorities as serviceable in June 1989.

To conclude, failure of Army HQ in assessing the requirement of packing paper and recolouring compound realistically resulted in excess procurement of these items to the extent of Rs. 285.36 lakhs which were lying in the COD for over two to five years for want of demands from the users (March 1989). Due to poor turnover and shortage of accommodation the possibility of their deterioration in stock could not be ruled out. Further such injudicious expenditure starves real developmental activities of scarce funds.

34. Loss of stores by fire

In early 1986 the Army Headquarters (HQ) asked the Central Ordnance Depot (COD), Kanpur to prepare a consignment of 30,000 pairs of directly moulded shoes (boots) to be issued to a foreign Government within a period of three to four months. During inspection, started on 6th May 1986, the Inspectorate of General Stores found about 3500 pairs of boots affected by termite and fungus. It was decided to heat seal the boots in polythene bags and then pack them in poly-propylene corrugated plastic. For carrying out heat sealing, crude gadgets were procured by the COD and temporary electric connection in the hangar where boots were stored, was provided by Military Engineer Services (MES) as instructed by the COD.

On the night of 28th/29th May 1986 a fire broke out in the storage hangar. A Court of Inquiry held in May 1986, opined, interalia as under:

- no stock-taking was carried out after August 1984;
- 3500 pairs of boots were found affected by termite and fungus during inspection and 30 per cent of 5764 boots salvaged from the hangar did not bear inspection stamp;
- heat sealing should not have been permitted in a hangar where combustible items worth lakhs of rupees were stored; and
- the items which had been destroyed by the fire be charged off and a loss of Rs.1.73 crores (value of boots: Rs.1.53 crores) be borne by the State.

Based on the findings of the Court of Inquiry, the Chief of the Army Staff ordered , in August 1987, administrative action against the commandant COD and disciplinary action against the five officers besides imposing penal recoveries totalling to Rs.0.54 lakh and the loss amounting to Rs. 1.73 crores after deducting the penal recoveries be written off and borne by the State. In March 1988, the COD intimated the Controller of Defence Accounts (Officers), Pune to effect recovery of Rs. 0.10 lakh each from the three service officers. Action taken to recover the balance amount of Rs. 0.24 lakh from the remaining officials was not known (September 1989). The loss had not yet been regularised (September 1989).

In September 1989, Ministry stated that the Army HQ was yet to project a proposal for writing off the loss and necessary administrative/disciplinary action against the six defaulting officers had been taken.

Thus, the boots stored in the hangar were affected by termite and fungus and this could not be detected as no stock taking was carried out after August 1984. The COD authorities failed to ensure that the boots recovered were duly inspected by the inspecting authorities at the source of supply as 30 *per cent* of 5764 boots salvaged were without the inspection stamp proving that the boots were of sub-standard quality. The loss of Rs. 1.73 crores (value of boots: Rs.1.53 crores) was awaiting regularisation (Septmeber 1989).

35. Non-observance of booking instructions

Terylene, terycot, terywool and nylon and their fabrics are declared by the Railways as "excepted articles". The Railway rules for acceptance, carriage and delivery of goods provide that when these articles are contained in any package and the value of such articles in the package exceeds Rs. 500 the Railway administration shall not be responsible for the loss etc., unless the value and contents are declared at the time of booking and unless the percentage charge on value over and above the freight charges at Railway risk is paid to and accepted by the Railways.

Between January 1984 and November 1985 Central Ordnance Depot (COD), Kanpur consigned polyster shirts and trousers to a field ordnance depot (FOD) without declaring the contents and the value of the consignment. At the consignees' end it was found that shirts/trousers worth Rs. 12.84 lakhs were short for which shortage certificates were obtained and claims preferred during December 1985 and December 1986 for Rs. 13.59 lakhs from Railways besides raising discrepancy reports against the consignor. The COD, repudiating the discrepancies stated that the goods/stores were correctly loaded at the time of despatch. Railway authorities also repudiated the claims stating that at the time of booking "excepted articles" neither its value was declared nor percentage charges were paid. In October 1986, the FOD requested the COD to follow the prescribed procedure while booking "excepted articles" in future. The COD, in turn, sought the advice of Army Headquarters (HQ) in the matter eventhough instructions existed in this regard. However, the Army HQ forwarded in September 1987, the relevant extracts of rules and regulations in this regard for guidance. Despite this, the COD continued to send the stores as per earlier practice and polyster shirts and trousers worth Rs. 1.11 lakhs were also found short on its receipt by the FOD during November 1986 and November 1988.

The Army HQ regularised in July 1987 only loss of Rs. 0.46 lakh and returned the remaining loss statements for Rs. 13.13 lakhs which were to be regularised by Government, with advice to take up the matter with Railway Board/ Ministry of Railways for consideration of the claims. An appeal was submitted to the Railway Board in July 1987. The case was also under investigation by Army HQ. Progress of appeal and results of investigation by the Army HQ were awaited (August 1989). No loss statement for subsequent loss of Rs. 1.11 lakhs had been prepared (October 1989).

Thus, non-observance of the existing instructions/ procedure for booking of polyster shirts and trousers, as excepted articles by the COD resulted in rejection of claims by Railway authorities involving an avoidable loss of Rs. 14.70 lakhs.

The case was referred to Ministry in June 1989 and their reply has not been received (November 1989).

36. Deterioration of stores during storage

Central Ordnance Depot, Chheoki holds, among other items, perishable stores such as paint, tallow, chemicals, etc. In the event of prolonged storage due to lack of demand, samples of such stores are sent to respective inspectors for serviceability test and sentencing.

A test check of 13 items of perishable stores received from trade during April 1979 to February 1986 revealed that the entire quantity of four items and a major portion of the remaining items were not issued as there was no demand from the users even though these remained under storage for periods ranging from 13 months to 111 months. Unutilised stock valued at Rs.11.96 lakhs was declared unserviceable during September 1984 to June 1988.

The case was referred to the Ministry in June 1989, no reply has been received (November 1989).

37. Local purchase of toilet soap

The requirement of 22 lakh pieces of toilet soap of Ordnance Depot Talegaon, Pune was included in a contract concluded by Director General of Supplies and Disposals (DGSD) with a Bombay firm in October 1986. As per the contract, the soap was to be consigned to Central Ordnance Depot (COD) Chheoki by June 1987. The COD, in turn, was to despatch them to the ordnance depot. In May 1987, Army Headquarters desired to have the soap meant for the ordnance depot be consigned to it direct instead of to the COD and proposed to the DGSD for an amendment to this effect. The DGSD in June 1987 intimated that the change in the consignee by way of amendment was not possible as the material had already been despatched to the COD.

The soap meant for the ordnance depot was received from COD only in October-November 1988. Meanwhile, on grounds of operational necessity and urgency the ordnance depot and dependent units resorted to local purchase of three lakh pieces of soap costing Rs. 12.26 lakhs. This rate was higher than the DGSD contract rate. Therefore, local purchases effected during February to October 1988, resulted in an extra expenditure of Rs. 4.71 lakhs.

The Ministry stated in December 1989 that direct consignment of stores to various ordnance depots was being tried out on an experimental basis in respect of a limited number of items where there was bulk demand and Army Headquarters had been requested to explain the delay in supplying the stores by the COD Chheoki to OD Talegaon, Pune.

38. Non-recovery of Government claims from a firm

Against a rate contract concluded by the Director General of Supplies and Disposals (DGSD) in October 1982 (valid up to September 1983), three supply orders were placed in November 1982 by a Field Ordnance Depot (FOD 'A') on firm 'X' for retreading of 754 tyres. In December 1983, FOD 'A' asked the firm 'X' to expedite the delivery of tyres duly retreaded in respect of one supply order placed by them under intimation to the DGSD. In June 1984, FOD 'A' asked the firm 'X' to despatch the balance tyres outstanding against three supply orders at the earliest as more than 18 months had passed. The DGSD was also requested in June 1984 to approach the firm 'X' for return of balance tyres. The firm 'X' had not returned the tyres. Total amount due for recovery including the recovery for prematurely failed tyres, etc. was Rs. 3.44 lakhs which was yet to be recovered from the firm 'X' (May 1989).

Against another rate contract concluded by the DGSD in May 1984 (valid up to September 1984) with the same firm 'X', FOD 'B' placed in September 1984 a supply order for retreading of 364 tyres. All the 364 tyres were returned by the firm 'X' in a buffed condition. The supply order placed on firm 'X' was cancelled in October 1987 by the FOD 'B' at their risk and cost. Another firm 'Y' selected only 252 tyres out of 364 for retreading leaving a balance of 112 tyres of which 82 returned in buffed condition by firm 'X', were found unfit for retreading and 30 not selected by firm 'Y' being not covered by their rate contract. As a result a sum of Rs. 1.47 lakhs became recoverable from firm 'X' and the same was yet to be recovered (May 1989).

The DGSD intimated in September 1987 that the chances of full recovery from firm 'X' were bleak as the firm appeared to have gone out of business. In May 1989, the DGSD intimated that an amount of Rs. 4.95 lakhs was to be recovered from firm 'X' against supply orders placed by three FODs and the matter was being proposed to be referred to arbitration. Chances for recovery of Rs. 4.95 lakhs from the defaulting firm 'X' were bleak.

The case was referred to the Ministry in June 1989 and their reply has not been received (December 1989).

Inspection

39. Inspection of imported ammunition

According to the instructions issued by the Ministry in October 1985, stores received from a foreign supplier should be inspected/examined physically within 15 days of its receipt and thereafter inspected and check-proofed within one month for intimating the defects to the supplier within the time limits specified in the contract.

In December 1985, the Ministry concluded a contract with a foreign supplier for supply of 10,000 pieces of a particular ammunition for Rs. 13.72 crores. The ammunition was to be inspected and check-proofed by the Indian side on arrival and the supplier was responsible for providing replacement, free of cost, of ammunition found defective or deficient. The ammunition was warranted for 12 months against defective material, workmanship and non-performance.

The consignment was despatched in April 1986 at Embarkation Headquarters (EHQ), Bombay which in turn, despatched, in June 1986, to a unit by rail. Finally, the consignment was received by a Field Ammunition Depot (FAD) between June and September 1986 on behalf of the Central Ammunition Depot (CAD) Pulgaon.

In July 1986, Controllerate of Quality Assurance (CQA) Armaments, Kirkee asked the CAD to forward lot details/ data cards inspection certificates for selection of proof samples. On getting the lot details, the FAD despatched in November 1986 one piece of ammunition which was received in February 1987 by the CQA. As dynamic proof of sample carried out in February 1987 revealed presence of water moisture inside the ammunition and rusting of components, two more pieces were called for from the FAD besides enquiring the exact cause of ingress of water i.e. due to bad storage or transit hazards. While sending the samples in March 1987 the FAD confirmed that entire consignment was affected with ingress of moisture.

Since the chemical analysis done in April 1987 revealed appreciably less remaining shelf-life of shell filling and propellants and break down of two additional samples confirmed ingress of moisture and rusting of components, the CQA representative, who visited FAD in May 1987, observed rusting/ white deposits on 47 pieces out of 67 pieces visually examined. On receipt of check-proof results, Directorate of Quality Assurance (Armaments) (DQA) sentenced, in June 1987, the consignment as unserviceable and informed so the Army Headquarters (HQ). In July1987,the Ministry intimated rejection to the supplier asking to provide replacement of entire quantity of ammunition at their risk and cost as per contract condition. In August 1987, the foreign supplier rejected the claim for free replacement on the ground that the information about the defects was received after the expiry of warranty period.

On 4th February 1988, a Court of Inquiry (CI) was ordered to investigate into the circumstances leading to premature downgradation of the ammunition with instructions to submit its findings by 15th February 1988 positively. The CI had not been finalised (November 1989).

In November 1989, the Ministry stated that on cent per cent inspection of the consignment by the FAD, 8904 pieces were found moisture affected. The DQA had been ordered to carry out a fresh check-proof to assess the residual shelf-life of 1082 pieces not affected by moisture and to investigate precisely the reasons for ingress of moisture in the ammunition. On receipt of the complete report from the DQA and the report of CI from the Army HQ, it was proposed to invite a team of experts from the foreign supplier, which has already been agreed to by the foreign supplier and discuss the matter further with them.

Thus, despite the Ministry's instructions of 1985, ammunition received in April 1986 was not inspected and check-proofed immediately on its arrival in India. Subsequently, 8904 pieces valuing Rs. 12.22 crores were found moisture affected. The claim for free replacement of the unserviceable ammunition though rejected by the foreign supplier as the same was preferred after the expiry of the warranty period was yet to be settled. The CI ordered in February 1988, was yet to be finalised (November 1989). This also calls for systems improvement in the quality check of imported ammunition with resonable expedition so as to obviate troops engaged in conflicts being supplied with defective ammunition.

40. Procurement of missiles

In March 1971 Army Headquarters (HQ) placed an indent on Bharat Dynamics Limited (BDL), Hyderabad for supply of 6,060 missiles. The quantity on order was increased to 7,922 in August 1978. Against this 6,468 missiles were received. The actual receipt of missiles in three ammunition depots (depot) 'A', 'B' and 'C' up to 1980-81 was 539, 436 and 5,493 respectively.

In November 1978, Army HQ issued instructions regarding evaluation of the serviceability of the missiles and *interalia* directed segregation of a few missiles out of each lot for evaluation for their balance service /shelf-life and generation of data. On receipt of a new lot pertaining to 1979, further instructions were issued for segregation of whole lot as certain defects were noticed during firing and pre-issue inspection out of the missiles received during 1976 to 1978 at depot 'C'. In October 1981, Army HQ issued instructions for cent *per cent* special inspection of all the missiles received during 1976 to 1978. In the meantime, the matter was taken up with the BDL in July 1981 by the Army HQ for repairing the defective missiles free of cost as the defects were due to use of old vintage components by BDL. The firm stated in September 1981 that they were not able to accept any liability for free replacement of defective items beyond the guarantee period of 12 months after despatch. The firm, however, agreed to keep the cost of repairs to the minimum. In March 1982, it was observed that the missiles became defective due to fitting of tracer flares and gyro squibb which were of old vintage and had already completed their life.

By 1985, 100 missiles by depot 'A' and 138 missiles by depot 'C' were despatched to the firm for repairs. 304 missiles were repaired at depot level. Government had to incur Rs. 9.13 lakhs by way of repairs both at depot and at BDL (including transportation to and fro and insurance charges). 113 missiles costing Rs.1.07 crores were lying in repairable condition and no repair was likely to be carried out due to its phasing out (October 1989).

The Ministry stated in October 1989 that according to the existing procedure no special inspection was required to be carried out during the first five years of storage of the missiles. The defects were noticed during pre-issue inspection after the expiry of warranty period. The missiles were, therefore, sent to BDL for repairs. Out of the total missiles supplied by them, 733 serviceable and 113 repairable missiles were held in the stock and their shelf-life had expired. The missile system had been phased out due to obsolescence of the technology and the stock held could be utilised for training and/or operations.

Thus, according to the existing inspection procedure, defects arising out of old vintage components in 655 missiles could not be noticed before acceptance of missiles supplied by BDL. This calls for a suitable review of inspection parameters and procedures before missiles are taken on stock in future. 542 defective missiles had been repaired involving an extra expenditure of Rs. 9.13 lakhs. Besides 113 defective missiles, costing Rs. 107.35 lakhs, were held in repairable condition and in the process of being phased out as obsolescent.

41. Purchase of water dispersible powder

Benezene hexa chloride water dispersible powder 50 *per cent* (BHC powder) is one of the hygiene chemical items authorised for issue to Army units. Against two demands projected by the Army Headquarters (HQ) in December 1983 and October 1984 for 132.39 tonnes and 127.5 tonnes, to be supplied by September 1984 and September 1985 respectively, the Director General of Supplies and Disposals (DGSD) concluded six contracts for supply of 262.627 tonnes of BHC powder. Supplies against three, contracts concluded in March 1984 (one) and January 1985 (two) for 79.485 tonnes of BHC powder were made by the firms. A review of the supply position of the remaining contracts concluded by DGSD with firm'A' revealed the following:

Against a contract for 55.19 tonnes of BHC powder concluded with a firm in January 1985 at Rs. 6994 per tonne an additional quantity of 13.797 tonnes was also covered in February 1985 due to rejection of supplies against another contract with the firm. Supplies were due by March 1985. The entire stock which was inspected by the Defence Inspection staff before despatch in November 1985 was found below acceptable standards . As per terms of the contract 95 *per cent* of the payment i.e. Rs. 4.77 lakhs was made to the firm in November 1985 itself. In May 1987, DGSD asked the firm to refund the payment received by it. The firm had neither replaced the defective stock nor refunded its cost (September 1989).

Another contract for supply of 100.418 tonnes of BHC powder was concluded in July 1985 at Rs. 6574 per tonne with the same firm 'A'. The supplies were due by August 1985. The firm was granted three extensions due to strike by its workers taking the scheduled delivery period from August 1985 to January 1987 without recommendation of Army HQ. Keeping in view, the past performance of the firm, further extension was not agreed to (February 1987) by the Army HQ. Before resorting to risk and expense purchase, the DGSD asked the Army HQ in May 1987 about the continued existence of the demand. The Army HQ informed the DGSD in June 1987 that the requirement for the item no longer existed and no further provisioning of the said item be made.

While the stock of 68.987 tonnes supplied by the firm in November 1985 against January 1985 contract was found defective and risk and expense purchase was not insisted upon by the Army HQ against the contract of July 1985 for 100.418 tonnes, the demands of the user units were met by resorting to piecemeal local purchases at exorbitant rates ranging from Rs. 8.25 to Rs. 22 per kg. against the DGSD contract rate of approximately Rs. 7 per kg. During September 1985 to May 1988, 136.871 tonnes of BHC powder were purchased. The extra expenditure on local purchases, as compared to DGSD contract rates, worked out to Rs. 3.33 lakhs.

The Ministry stated in September 1989 that against the quantity of 169.405 tonnes (contracted in January and July 1985) the actual local purchase had been made for 106.871 tonnes and in actual fact there was no loss to the State. This contention was not tenable as the quantity locally purchased was 106.871 tonnes up to April 1987 and 30 tonnes in May 1988. The extra expenditure would require to be calculated based on the difference in rates of local and central purchase rates alone and local purchase of a lesser quantity cannot be deemed to off set the extra cost.

Thus, failure in inspection led to supply of sub-standard stock of 68.987 tonnes blocking funds to the extent of Rs. 4.77 lakhs for four years. Non-replacement of the sub-standard stock and granting extensions to the firm for supply of 100.418 tonnes without recommendation of Army HQ led to local purchase involving an avoidable expenditure of Rs. 3.33 lakhs.

Ration articles

42. Skimmed milk powder

As per prevailing policy skimmed milk powder needed for preparation of standard milk for issue to troops is procured through the National Cooperative Dairy Federation of India (NCDFI). The rates for the supplies are negotiated by the Ministry and communicated to the contract concluding agency for adoption in the contracts to be concluded with the various State cooperative federations nominated by the NCDFI.

In October 1986, 900 tonnes of milk powder were demanded by the Military Farms Directorate, Army Headquarters for consumption during 1987-88. Taking into consideration, the flush season for availability of milk products as November-March, 600 tonnes were required by March 1987 and the balance 300 tonnes during November 1987 to March 1988. The demand for 600 tonnes was accordingly approved for immediate procurement and projected to the Ministry on 5th January 1987 for negotiating the rates with the NCDFI. The Ministry called for quotations from the NCDFI on 22nd May 1987 i.e after more than 4 1/2 months of the receipt of the demand. On 8th June 1987, the NCDFI quoted the rate of Rs.25 per kg. for supply of 600 tonnes by 31st July 1987. The Ministry accepted the offer on 29th July 1987. Necessary order for 890 tonnes was placed by the Canteen Stores Department (CSD) on State Cooperative Federation 'A' on 31st July 1987. The NCDFI informed the Military Farms Directorate that the Government order dated 29th July 1987 made it virtually impossible for the federations to supply and the military farms to lift the material before 31st July 1987. As the federations were facing acute shortage of milk as a result of which, production of milk powder had been significantly affected and therefore, it was not possible to supply at the rate of Rs. 25 per Kg.

On 10th August 1987, the NCDFI quoted to the Military Farms Directorate a rate of Rs.28 per kg. for supplies to be made during November 1987 to March 1988. The Ministry, however, did not take this rate into account while negotiating the rate on 22nd September 1987 with the NCDFI and agreed to take supplies during November 1987 to March 1988 at Rs.32 per kg. Accordingly CSD placed six supply orders on 2nd November 1987 for 890 tonnes of milk powder against the requirements of 1987-88. This resulted in an additional expenditure of Rs.53.30 lakhs. The supplies materialised between January 1988 and April 1989.

For 1988-89, the Military Farms Directorate assessed in August 1987 a demand of 1167 tonnes of milk powder. Of this, 817 tonnes were required to be supplied during November 1987 to March 1988. The demand was projected to the Ministry in August 1987. The Ministry processed the case for sanction at Rs.32 per kg. as finalised in the negotiations held on 22nd September 1987. Although the supply was desired to be completed by March 1988, the sanction accepting the rate of Rs.32 per kg. was issued on 22nd March1988 only and the Army Purchase Organisation (APO) of the Ministry was asked in May 1988 to conclude contracts. (The procurement agency was changed from CSD to APO in Novemmber 1987). As the period up to which supplies were agreed to be made at Rs.32 per kg. had already elapsed in March 1988, no supply could be obtained at the sanctioned rate. The demand was then clubbed with the next year's requirement for which a rate of Rs.35 per kg. was agreed to by the Ministry at the negotiations held on 6th September 1988. 12 supply orders for 1276 tonnes were placed on 16th December 1988 at Rs.35 per kg. Additional expenditure on procurement of 817 tonnes of milk powder required for 1988-89 worked out to Rs.57.19 lakhs.

Due to delay in arranging milk powder, its requirement in three Army Commands was met by local purchase. During 1987-88 and 1988-89, 211.816 tonnes of milk powder were purchased locally at rates ranging between Rs. 31 and Rs. 48.50 per kg. involving an avoidable extra expenditure of Rs. 18.03 lakhs as compared to the contracted rate of Rs. 32 per kg.

In September 1989, the Ministry stated that the policy of procurement of tinned items including dairy products exclusively through NCDFI was under examination. With a view to achieving better economy in expenditure, finally it was decided to continue the existing policy, but in the process some time had elapsed. Further the NCDFI had quoted Rs. 36 per kg. in the meeting held on 22nd September 1987 but they did not quote the rates as mentioned in their letter dated 10th August 1987 addressed to the Military Farms Directorate. The Ministry added that the NCDFI expressed their inability to carry out the supplies due to unprecedented drought conditions in the country and its impact on the market.

Thus, the Ministry who were to negotiate rates with the NCDFI for supply of milk powder neither gave due consideration to the delivery schedule indicated by the indentor nor kept in view the rate offered by the supplier while processing the case for sanction. The delays in accepting the offers resulted in procurement of milk powder at higher rates involving additional expenditure of Rs.1.10 crores. Further avoidable extra expenditure of Rs. 18.03 lakhs was also incurred on local purchase of milk powder due to delay in arranging supplies through the NCDFI.

43. Fresh meat

Tenders for supply of fresh meat (dressed and meat-on-hoof) from April 1987 to March 1988 at three adjoining stations viz. Bangalore, Jalahalli and Yellahanka, were issued and the rates received in January 1987 from a solitary tenderer were found to be 6.62 *per cent* higher than the reasonable rates determined by the Panel of Officers (PO). The rates even after negotiation were higher by 5.37 *per cent* which were also considered to be unreasonable and retendering was resorted to.

In February 1987, two State Government Corporations responded to the re-tendering. As the tender of Tamil Nadu Meat and Poultry Development Corporation Limited (Corporation) was *0.17 per cent* lower than the reasonable rates, the Command Headquarters (HQ) recommended in March 1987 for its acceptance to Army HQ. The offer was valid up to 30th April 1987.

The Army HQ, however, instructed the Command HQ, in March 1987, to negotiate with the Corporation to reduce the rate of Rs.1450 per 100 Kg. offered for meat-on-hoof to

Rs. 1400 and to re-submit the contract documents through courier. The estimated requirement of meat-on-hoof was only 4500 Kgs. during the contract period.

The Corporation agreed on 10th April 1987 for reduction in rates of meat-on-hoof to Rs.1400. In April 1987 itself both the tenderers were telegraphically requested to extend the validity period up to the end of May 1987. The representative of the Corporation expressed that the extension of validity was to be decided by the management. On 29th April 1987, contract documents were forwarded to Army HQ. Since the Corporation did not extend the validity period the contract could not be concluded. As a result, during August 1987 to March 1988 the requirement of meat was met by local purchase and through contracts with private parties at rates higher than those quoted by the Corporation which resulted in an extra expenditure of Rs.5.65 lakhs.

The Ministry stated in July 1989 that sometime was required in processing/examining the contract documents at different administrative levels in the Army HQ/Ministry and its Finance division before approval. The Ministry's contention was not tenable as Army HQ had failed to direct the Command HQ in March 1987 to conclude the contract on acceptance of reduced rate for meat-on-hoof by the Corporation.

Failure of the Army HQ to direct the Command HQ to conclude a contract on acceptance of reduced rate by the Corporation led to non- conclusion of contract and local purchases at exorbitant rates during August 1987 to March 1988 involving an extra expenditure of Rs. 5.65 lakhs.

44. Tinned butter

In November 1986, the Ministry accorded sanction for the procurement of 400 tonnes of tinned butter at Rs.43 per kg. through the Canteen Stores Department (CSD). Out of 400 tonnes, 200 were to be procured from state cooperative federation through the National Cooperative Dairy Federation of India (NCDFI) and the balance from Central Dairy Farm (CDF), Aligarh subject to CDF accepting the above rate, otherwise, the entire quantity was to be supplied by the NCDFI. Orders for supply of 200 tonnes were placed through NCDFI in December 1986 and supply was completed. Since CDF did not confirm the acceptability of the rate indicated in the sanction, NCDFI was asked by CSD only in February 1987 to supply the balance quantity of 200 tonnes also. However, NCDFI in March 1987 intimated that it was not possible to supply at the same rate and indicated the rate as Rs.50 per kg. On 7th September 1987,after a lapse of four months, CSD was authorised to procure 200 tonnes of tinned butter at the rates offered by NCDFI and also approach NCDFI to supply the additional quantity of 140 tonnes (backlog of 1985-86) at the same rate. On 25th September 1987, NCDFI had further revised their rates to Rs. 56 per kg. Accordingly the orders at enhanced rates were placed in December 1987. The supplies were made between January 1988 and January 1989. The extra avoidable expenditure in arranging the supply of 340 tonnes of the item was to the tune of Rs.44.20 lakhs.

The Ministry stated in September 1989 that 200 tonnes of tinned butter was allocated to the CDF to take advantage of the low price of Rs. 43 per Kg. The decision lacked justification as even the representative of CDF was not available during the negotiations conducted in June 1986.

Thus, delay in placement of order by CSD on NCDFI for tinned butter resulted in avoidable extra expenditure of Rs. 44.20 lakhs.

45. Tinned meat

In February 1987, Government sanctioned procurement of tinned ration articles which, *inter -alia*, included 150 tonnes of tinned meat through open tendering. Subsequently in April 1987, tinned meat was deleted from the articles to be procured. The supply of tinned meat was reviewed in a meeting held in the Ministry in April 1987 and as a consequence, Canteen Stores Department (CSD) was asked to explore the market. In May 1987, CSD was directed by Army Headquarters (HQ) to take immediate action to clear the backlog of tinned meat. The quantity was estimated at 583 tonnes and CSD asked the Ministry to confirm the quantity to be procured.

Tenders were issued in June 1987 to 19 firms and opened in July 1987. Out of four firms which quoted one State public sector undertaking (PSU) i.e Rajasthan State Cooperative Sheep and Wool Marketing Federation Limited quoted Rs. 55.40 per Kg. for the entire quantity of 583 tonnes.

Since the Ministry did not confirm the quantity to be procured, CSD intimated in July 1987 Army HQ the details of delivery schedule, rates, etc. and requested expeditious decision as no action had been taken on the tenders which were opened in July 1987.

Since the requirement was most urgent for winter stocking of Northern and Eastern Command troops it was decided in a meeting held in September 1987 that the Army HQ should negotiate with the firm for arranging supplies. As the negotiated rates were higher, it was recommended on the ground of urgent necessity to consider rates of those firms who quoted less than Rs. 75 per kg. In October 1987, Army HQ placed two supply orders on two State PSUs for a total quantity of 90 tonnes (70 tonnes at Rs. 65 per kg. and 20 tonnes at Rs. 72 per kg.) at the rates higher than those (Rs. 55.40 per kg.) obtained by CSD through open tendering in July 1987. The Ministry issued only in November 1987 a sanction for local purchase of 200 tonnes of tinned meat i.e. 160 tonnes at rates ranging from Rs. 65 to Rs. 72 per kg. from three firms (two of which had originally responded to the CSD tenders) and balance 40 tonnes to be procured locally at a rate not exceeding Rs. 75 per kg.

Against 90 tonnes of tinned meat ordered, only 84 tonnes were supplied by both the PSUs, up to October 1987 at a total cost of Rs.58.01 lakhs. This involved an additional expenditure of Rs. 9.59 lakhs in comparison to the rates obtained in open tendering by CSD in July 1987.

In September 1989, the Ministry stated that there was no delay on its part to confirm the quantity to be procured and CSD was only required to explore the market and not to place orders on the basis of quotations received in July 1987. The Ministry's contention was not tenable as instead of confirming the quantity to be procured by CSD, the Army HQ was asked to purchase locally at higher rates as the requirement was most urgent for winter stocking.

46. Dal

The Army Purchase Organisation (APO) is responsible for procurement of food articles required for the armed forces. As a matter of policy, various kinds of dal are being purchased from State level co-operative federations (Co- operatives). A test check of the orders placed for dal in 1987 revealed the following:

Against Army Headquarters (HQ) indent of 10th July 1986 for supply of 6900 tonnes of dal chana during April to July 1987 the APO concluded three contracts in April 1987 with three State Co-operatives (Mizoram, Punjab and Assam) for 4400 tonnes, 1500 tonnes and 1000 tonnes respectively at rates varying from Rs.441 to Rs.449 per quintal. Tenders were issued to Co-operatives Mizoram and Punjab without ascertaining their supply capability. Assam Co- operative completed the supply by June 1987. Co-operatives of Mizoram and Punjab neither deposited the security deposit of Rs.19.52 lakhs and Rs.6.67 lakhs i.e. equal to 10 per cent of the value of contract nor made any supply. Therefore, their contracts were cancelled on 10th September 1987 and Ist July 1987 respectively for making 'risk and expense' purchases. Against the cancelled contract of Mizoram Co-operative for 4400 tonnes, two 'risk and expense' contracts were concluded on 12th November 1987 for 3400 tonnes and 1000 tonnes with Co-operatives of Assam and Uttar Pradesh respectively at Rs.573 to Rs. 588 per quintal. Uttar Pradesh Co-operative completed supply of 1000 tonnes of dal chana in February 1988 and Assam Co-operative supplied 3185.93 tonnes by April 1988. The contract was treated as completed in June 1989. The extra expenditure involved on 'risk and expense' purchase of 4185.93 tonnes of dal chana from both the Co- operatives of Assam and Uttar Pradesh worked out to Rs.58.62 lakhs. The claim made by the APO in July 1988-89 for effecting the recovery from Mizoram Co-operative was yet to materialise (September 1989).

Against the cancelled contract with Punjab Co-operative for 1500 tonnes, the APO concluded 'risk and expense' contract with New Delhi Co-operative on 31st August 1987 at Rs.560 per quintal. The supply was completed on 31st October 1987. The claim lodged by the APO in July 1989 for recovering the extra amount of Rs.17.26 lakhs from the Punjab Co-operative was yet to materialise (September 1989).

Against Army HQ indent of 10th July 1986 for supply of 1300 tonnes of masur whole during April 1987, the APO concluded a contract with Punjab Co-operative on 30th March 1987 at Rs.424.90 to Rs.448.50 per quintal. The supply was required to be completed by 31st July 1987. The Co-operative neither deposited the security deposit amount of Rs.5.69 lakhs nor made any supply. The contract was cancelled on 1st July 1987 at the 'risk and expense' of defaulting Co- operative. The APO concluded three 'risk and expense' contracts on 26th August 1987 with Co-operatives of Assam, Uttar Pradesh and Kerala for 500 tonnes, 500 tonnes and 300 tonnes respectively at Rs.585.00 to Rs.589.51 per quintal. The supply of 1281.82 tonnes was made by the three Co-operatives on 31st March 1988, 30th October 1987 and 30th December 1987 respectively. The extra amount due for recovery from Punjab Co-operative worked out to Rs.19.31 lakhs. The claim of the APO made in July 1989 for recovery from Punjab Co-operative was yet to materialise (September 1989).

The Ministry stated in August 1989 that risk purchase contract for 4400 tonnes of dal chana was completed in June 1989. In other risk purchases there was delay in raising claims. The contention of the Ministry was not tenable as the last consignment of dal chana was tendered in April 1988 and accepted in July 1988. Action to recover extra expenditure on risk purchase should have been taken soon after acceptance of last consignment. The Ministry stated further that in case of industrial products the capability of a supplier can be ascertained by looking into their licensed and installed capacity, financial position, possession of technical knowhow, etc. Whereas in the case of purchase of dals no such standard yardstick could be applied. The Ministry added that so long an offer is from a Co-operative federation/Public Sector Undertakings/State Co-operative authorised to deal with procurement of dals, it is sufficient compliance with our requirements. As regards pruchase of dals from State Co-operative some yardstick must be evolved to judge their capability to supply the contracted quantity.

To sum up, placing of tender enquiry on State Co-operatives pursuant to policy directive of the Ministry, without assessing the capability of the supplier for supply, led to conclusion of risk purchase contracts for supply of dal to the extent of 6967.75 tonnes involving an additional expenditure of Rs.95.19 lakhs. Claims made by the APO belatedly in July 1989 on the two defaulting Co-operatives were yet to be recovered (September 1989).

47. Failure of contracts for supply of meat

Based on the lowest rates quoted by a Federation and sanctions accorded by Army Headquarters (HQ), a Command HQ concluded contracts with the Federation for supply of meat at military stations Bhatinda and Ferozepur from April 1986 to March 1987.

The Federation neither made any security deposit nor commenced supplies. Army HQ terminated the contracts at these stations with effect from 10th June 1986. The department incurred an extra expenditure of Rs. 6.32 lakhs at these stations on local purchase of meat. Internal Audit and Legal Adviser, Ministry opined that this was a case of rescission and advised that the extra expenditure be recovered by filing a case in an appropriate court. This was conveyed by Army HQ to the Command HQ in June 1988. No case was, however, filed (September 1989).

The Ministry stated in September 1989 that the department was not in a position to substantiate its claim in a Court of Law for the extra expenditure of Rs. 6.32 lakhs since these contracts were only terminated and not rescinded.

Thus, failure of the department to rescind the contracts resulted in non-recovery of an extra expenditure of Rs. 6.32 lakhs incurred on local purchase of meat.

48. Issue of condiments

Army Officers and Junior Commissioned Officers when posted in field areas are entitled to draw cash allowance instead of condiments in kind. However, nine supply depots continued to issue condiments in kind instead of cash allowance in the field areas declared so during certain operations from 1st June 1984 to 20th August 1985 resulting in an extra expenditure of Rs. 4.32 lakhs being the difference between the value of condiments issued in kind and cash allowance admissible.

In September 1989, the Ministry stated that the delay in implementation of Government orders was due to time taken in transmission of the orders to the depots and their actual implementation. Further some of the supply depots had already taken action for regularisation and the remaining depots had been instructed to initiate cases for regularisation.

Thus, delay in transmission of orders to depots and subsequently its implementation resulted in an extra expenditure of Rs. 4.32 lakhs.

49. Over-drawal of citrus fruits

The scales of ration for Junior Commissioned Officers (JCOs) and Other Ranks (ORs) were revised from 28th July 1984. The existing scales of fresh fruit for service officers and the revised scales for JCOs and ORs are 230 grams of non-citrus fruits or 110 grams of citrus fruits per man per day for three days in a week. The accounting of fresh fruit is based on non-citrus scale.

In sixteen supply depots of Western Command while issuing citrus fruits alongwith non-citrus fruits, the depots continued to double the quantity of citrus fruits to convert it into non-citrus fruits though the scales were changed from 1:2 to 11:23 resulting in overdrawal of fresh fruits valuing Rs. 3.15 lakhs. Similar overdrawal of fresh fruits valuing Rs. 0.36 lakh were noticed in four other supply depots in Eastern and Southern Command. The irregularity was also not objected to by internal audit though ration accounts are audited by them every quarterly.

Ministry stated in September 1989 that depots had been instructed to educate all ration drawing units to calculate it correctly. It added that suitable instructions were being issued to underdraw the overdrawals or to submit statement of case for regularisation of excess issues.

Thus, adoption of wrong formula for conversion of citrus fruits into non-citrus fruits by twenty depots led to over-drawal of fresh fruits valuing Rs. 3.51 lakhs.

CHAPTER IV

ORDNANCE AND CLOTHING FACTORIES

50 General Performance

50.1 Introduction

The 'Ordnance Factories Organisation' is a multifaceted industrial establishment covering a wide range of disciplines, technologies and product mix. Its primary task being to equip the armed forces, the ordnance factories produce a variety of ordnances, weapons and ammunitions. Spare capacity in the ordnance factories is utilised by undertaking on payment, work for civil departments, railways and private bodies. The total number of factories are 38, grouped according to the type of products/operations as follows:

Metallurgical	6
Engineering	12
Filling	5
Chemical	4
Ordnance equipment	5
Armoured vehicle	4
Miscellaneous	2
Total	38

One armoured vehicle factory and one miscellaneous factory have still not started production.

50.2 Organisation

In pursuance of the recommendations of the Apex II Planning Group on the Defence plan, the government in August 1975, appointed a committee for examining the reasons for slippages and constraints in the production of stores in ordnance factories. Pursuant to the recommendations of the committee, the organisation was restructured in 1979 when an apex body, called Ordnance Factory Board (OFB) was constituted. The OFB is headed by a chairman who is ex-officio Director General Ordnance Factories (DGOF). The chairman is assisted by seven full time members who are in charge of staff and line functions. The Ordnance Equipment Group of factories and Armoured Vehicle Group of factories are under the charge of two Additional Directors General of Ordnance Factories.

50.3 Objectives

The main objective of the ordnance factories organisation is to effectively equip the Armed Forces through optimum utilisation of capacity, timely achievement of the production targets and production of items of requisite quality, reduction of overheads and rejection in manufacturing process, product development etc.

50.4 Capacity utilisation

As per the Management Information System (MIS) followed by the OFB, capacity utilisation of a factory is assessed in terms of Standard Man Hours (SMH) instead of in terms of quantity produced followed earlier. Capacity utilisation so assessed by the OFB in respect of 33 out of 36 factories was found to be 100 per cent and above in 19, 90 to 100 per cent in six, 80 to 90 per cent in six, 60 to 80 per cent in one and below 40 per cent in one. Report of capacity utilisation in respect of the remaining three factories called for from OFB (November 1989) was awaited.

50.5 Production performance

An analysis of the rate of performance by ordnance factories in the production of 66 special items of weapons and ammunition for the services during 1987-88 revealed that the achievements with reference to production programme were 100 per cent and above in case of 52 items, 75 to 100 per cent in case of four, 50 to 75 per cent in case of two, 25 to 50 per cent in case of two items and below 25 per cent in case of six of which shortfall in respect of two items was 100 per cent.

Shortfall in production of 10 items where achievement was below 75 per cent was mainly due to failure in accuracy proof (three items); non-availability of empties and components (six items); and diversion of capacity for production of another item.

50.6 Coverage of indents

Analysis of coverage of indents placed by the services on the DGOF/OFB showed that 5659 old indents were lying outstanding at the end of 1987-88. Supplies made against indents were as under:

(number of indents)

Period of placing of the indent	Number of indents outstanding	Supplies made less than 25 per-cent	25 per-cent to 50 per-cent	50 per-cent and above
1950-51	1	1	-	-
1956-61	7	6	1	-
1961-66	7	2	2	3
1966-71	14	5	1	8
1971-76	53	28	7	18
Up to 1976	82	42	11	29
1976-81	480	268	44	168
1981-86	5097	3410	559	1128
Total	5659	3720	614	1325

50.7 Overall production activities

On an analysis of production activities of the ordnance factories it was noticed in Audit that the direct material consumed in production during 1986-87 and 1987-88 was 65 and 64 *per cent* respectively. Further, despite the increase in the average number of direct labour in 1987-88 (78, 441 nos.) compared to that of 1986-87 (77, 164 nos.) piece work earnings decreased from Rs. 46.09 crores in 1986-87 to Rs. 45.31 crores in 1987-88. The decrease by 3.3 *per cent* of the average piece work earning per labour during 1987-88 compared to that of 1986-87 would indicate decreased production activities during the year though the total cost of production during 1987-88 (Rs. 1846.25 crores) was more than that of 1986-87 (Rs. 1609.36 crores) which was ostensibly due to escalation in the cost of material and labour.

50.8 Rejections in manufacturing process

In the manufacture of items in ordnance factories, provision exists in the estimate for unavoidable rejections which are inherent in the process of manufacture and the value thereof is included in the cost of production. All rejections beyond the percentage of unavoidable rejections provided for in the estimates, are treated as abnormal and the cost thereof is kept out of the value of production. Value of abnormal rejections kept out of the total cost of production during 1987-88 compared to that of 1986-87 was as under:

(In crores of rupees)

Year	Total cost of production	Value of abnormal rejections
1986-87	1609.36	4.51
1987-88	1846.25	8.34

Thus, while total cost of production in 1987-88 increased by 15 per cent approximately over that of 1986-87, the amount of abnormal rejections in 1987-88 increased by 85 per cent approximately over the preceding year.

A test check of the cases of abnormal rejections amounting to Rs. 3.73 crores in two factories comprising 45 per cent of the total value of abnormal rejection (Rs. 8.34 crores) brought out the following:

In Cossipore factory, the increase in the abnormal rejection during 1987-88 (Rs. 2.15 crores) compared to that of 1986-87 (Rs. 0.08 crore) was more than twenty five times. Preliminary investigations carried out at shop level indicated that the rejections were mainly due to various defects in the materials used for production. No Board of Inquiry to investigate the causes of such huge abnormal rejections and to suggest remedial measures, as required under the extent rules/orders, was constituted.

In Muradnagar factory, increase in the abnormal rejection during 1987-88 (Rs. 1.58 crores) compared to that of 1986-87 (Rs. 0.06 crore) was also more than twenty five times. Excessive rejections in the factory were found mainly due to casting defects. A consultant firm was appointed by the OFB for suggesting measures to improve the castings manufactured in the factory. The report submitted by the firm in May 1987 was under consideration (October 1989) of the OFB.

50.9 Civil trade

One of the objectives of the OFB's work programme was to maximise utilisation of installed capacity where necessary by diversification of production for civil and export markets. The volume of civil trade, profit generated and amount of foreign exchange earned during three years ended March 1988 were as under:

(Rupees in lakhs)

	1985-86	1986-87	1987-88
Value of civil trade	3803.55	3997.90	3392.57
Amount of profit	187.85	251.43	266.00
Foreign exchange earned	121.10	646.25	441.10

The volume of civil trade during 1987-88 compared to that in 1985-86 and 1986-87 had decreased by 11 per cent and 15 per cent respectively.

50.10 Services rendered on payment

Outstanding dues on account of stores supplied and services rendered on payment by the ordnance factories up to March 1988 to outside parties including other departments, State Governments, railways, private parties etc. amounted to Rs. 3.98 crores at the end of June 1988 as follows:

	Value of outstanding dues (Rupees in crores)
Central departments (excluding railways)	1.30
Foreign Government	0.10
State Governments	1.36
Railways	0.02
Public Sector Undertakings	0.89
Private parties	0.31
Total	3.98

Some of the dues remained outstanding for nearly two decades. Of the total outstanding of Rs. 3.98 crores, the amount due for recovery for more than one year was Rs. 2.42 crores of which Rs. 84.73 lakhs were outstanding for more than three years, the oldest pertaining to the year 1970-71.

50.11 Budgeting

Budget grant and actual expenditure from 1985-86 were as under:

Year	Revenue		Capital	
	Budget grant	Actual	Budget grant	Actual
			(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	1477.68	307.88	310.39

* Includes recoveries on account of supplies made to Army, Navy and Air Force.

Savings of Rs. 67.87 crores during 1988-89 in the final grant under revenue head was mainly due to non-materialisation of certain payments, non-receipt of certain items, reduced payment of TA/DA on account of movement of personnel and stores and economy instructions issued by the Government.

The excess of Rs. 7.49 crores under the capital head was mainly on account of heavy payments made for certain plant and machinery.

50.12 Overall statistical data

The overall statistical data in respect of the ordnance factories for the period 1985-86 to 1987-88 is shown below:

	1985-86	1986-87	1987-88
Avarage Value of fixed capital assets. (Rs. in crores)	546.07	584.62	623.29
Man-Power (number in lakhs)	1.85	1.81	1.78
Net cost of production (excluding inter factory demands) (Rs. in crores)	1006.65	1224.89	1441.82
Capital output ratio	1:1.84	1:2.10	1:2.31
Factory cost analysis in terms of percentage of gross value of production:			
Material	66.16	64.76	63.67
Labour	6.83	6.94	7.06
Others	27.01	28.30	29.27
Gross contributed value (Value of production less materials and outside supplies and services) (Rs. in crores)	459.95	567.06	670.70
Wages (Rs. in crores)	92.83	11.60	130.30
Net contributed value			

	1985-86	1986-87	1987-88
(Gross contributed value less wages) (Rs. in crores)	367.12	455.46	540.40
Net contributed value per Rs.1 crore of fixed capital assets (Rs. in crores)	0.67	0.78	0.87
Average earnings per employees (Rs.)	17,082	23,225	27,301
Net contributed value per employee (Rs)	19,861	25,133	30,328
Value of abnormal rejection (Rs. in crores)	5.17	4.51	8.34
Percentage of abnormal rejection on gross value of production	0.38	0.28	0.45
Customer Composition (Percentage of total issues met of inter-factory demands):			
(i) Army	91.10	90.08	91.08
(ii) Navy, Air Force & others	2.96	4.15	4.25
(iii) Civil trades	4.06	3.67	2.80
(iv) Own stock and capital works	1.88	2.10	1.87
Extent of requirment of stores (armament, ordnance clothing, machanical transprot) met by ordrance factories in terms of percentage:			
(i) Army	54.54	42.44	53.22
(ii) Navy, Air Forces & others	22.19	30.25	22.76
Value of inventories (Rs. in crores)	730.62	772.36	909.36
Surplus, obsolete, slow-moving and non-moving inventories (Rs. in crores)	114.46	92.49	99.77
Norms of general inventory holdings in terms of months requirment	6 months	6 months	6 months
Inventories in terms of months consumption	8.56 months	8.05 months	8.00 months
No. of warrants pendency:			
(i) Total No. of warrants pendency as on 31st March 1986/1987/1988	47,625	45,201	39,058
(ii) No. of warrants more than one year old onwards on 31st March 1986/1987/1988	23,465	21,915	20,327
Normal manufacturing cycle/normal life of manufacturing warrnats	6 months	6 months	6 months
Value of components and products in stock (Rs. in crores)	178.82	144.90	153.06
Components and products holding in terms of months production	1.58 months	1.08 months	0.99 months

The observations were reported to the Ministry in September 1989 and their reply has not been received (November 1989).

51. Material management in ordnance and ordnance equipment factories

51.1 Introduction

The material component of the value of production in ordnance factories during 1985-88 was 61 to 63 per cent. This underlines the importance of proper material management, especially provisioning and procurement of right quantity of stores at right time and at right price. Stockout of a single item would clog a production line which would not only deny and delay essential supplies to the services but would also have adverse financial repercussions. At the same time, an inflated inventory would not only lock up scarce capital but would also add to the cost of care and custody and in the long run, would lead to wastage.

51.2 Scope of Audit

A test check of records was carried out by Audit in January 1989 to test the efficacy of the system and to highlight trends of shortcomings and deficiencies. Out of 38 factories, 14 factories were selected on the twin bases of the volume of inventory holding and the volume of consumption, taking care to see that the selected factories represented a cross-section of the range of activities in the ordnance factory organisation. The selected factories were:

Ammunition Factory, Kirkee (AFK),
Gun Carriage Factory, Jabalpur (GCF),
Gun and Shell Factory, Cossipore (GSF),
Heavy Vehicle Factory, Avadi (HVF),
Ordnance Factory, Ambajhari (OF AMb),
Ordnance Factory, Ambarnath (OFA),
Ordnance Clothing Factory, Avadi (OCFA),
Ordnance Factory, Chanda (OFCH),
Ordnance Factory, Kanpur (OFC),
Ordnance Factory, Dum Dum (OFDC),
Ordnance Factory, Khamaria (OFKH),
Ordnance Clothing Factory, Shahjahanpur (OCFS),
Rifle Factory, Ishapur (RFI) and
Vehicle Factory, Jabalpur (VFJ).

51.3 Organisational set up

Ordnance factories function as departmental undertakings under the Department of Defence Production and Supplies. The Ordnance Factory Board (OFB) is the apex policy making and regulating body and has overall responsibility for planning, monitoring and implementation of the production programme.

51.4 Highlights

- **The stock holding in some ordnance factories varied from 11 months to 19 months against the normal authorisation for 9 months requirements.**

- **Stores worth Rs. 182.42 crores in the 14 factories under review were not accounted for in stock as at the end of March 1988 and the period of delay in some cases exceeded ten years. Discrepancy in stores valuing Rs. 84.38 lakhs received in Ammunition Factory Kirkee from sister factories were treated as loss-in-transit without preparation of loss statements and sanction thereof by the competent authority.**

- **Stores for which payments had been made but the receipt of the stores could not be traced were valued at Rs. 426.48 crores at the end of March 1988; in some cases the period of non-linking of receipts with payments exceeded ten years.**

- **There was abnormal delay in the regular accounting of stores after receipt in the factory, the period of delay in some cases exceeded three years.**

- **In a number of cases delay/non-posting of demand notes in the material abstract resulted in incorrect pricing of the end product.**

- **Discrepancy of Rs. 39.43 crores in store balance in a factory between the computerised accounting and the manually compiled accounts as on 31st March 1986 was not reconciled (October 1989).**

- **As the rate of recovery was under-assessed, the actual arisings of scraps in the shop floors, were more than estimated and they were not accounted for.**

- **Losses/shortages of items due to improper storage and lack of control over receipts and issue, valuing Rs. 10.96 lakhs in tool godown of Vehicle Factory Jabalpur detected in 1984-85 and 1985-86 continued to remain unregularised.**

- **Discrepancy vouchers for deficiencies valu-**

ing Rs. 78.35 lakhs raised by Vehicle Factory Jabalpur in 1984-85 for free replacement of defective stores supplied by the firms were yet to be adjusted.

- Although the rules provide that physical verification of all the items of stock is to be carried out once during each financial year, the same was not followed for a number of items during the years 1986-87 and 1987-88 in seven out of fourteen factories reviewed. No mechanism existed for watching regularisation of discrepancies reported in stock verification. There was considerable delay in adjustment/regularisation of the surpluses/ deficiencies found in stock-verification.

- Proper accounts of the sub-assemblies of vehicles received from sister factories/trade and damaged and rejected in the course of production of the finished item at Vehicle Factory Jabalpur, were being maintained.

- Due to detention of wagons beyond free time by the railways during the period October 1981 to December 1985, Ordnance Factory Chanda had to pay a sum of Rs. 50.81 lakhs as demurrage charges.

- Estimates for the manufacture of an equipment in Heavy Vehicle Factory Avadi continued to remain non-standardised.

- The practice of issuing ammunitions to depots in anticipation of proof results persisted.

- Materials valuing Rs. 53.62 lakhs were drawn by Ammunition Factory Kirkee over and above the quantities authorised as per estimates for production of small arms ammunition.

- Loss on rejection of empty shell bodies valuing Rs. 1.30 crores received by Ammunition Factory Kirkee from Ordnance Factory Khamaria and Gun and Shell Factory Cossipore during April 1984 to March 1987 was not regularised.

51.5 Provisioning of stores

Ordnance factories are authorised to hold stock for 9 to 12 months requirements of imported items, 9 months requirements of difficult indigenous items and 6 months requirements of other indigenous items. The total holdings in ordnance factories are not accounted for either in volume or money value of the different types of stores. The overall average of all the varieties may therefore, be roughly taken as nine months requirements. Mention was made in paragraph 12 of the Report of the Comptroller and Auditor General of India for the year 1981-82, Union Government (Defence Services) about the heavy stock-holdings in ordnance factories locking up large capital. The Public Accounts Committee (PAC) in their 214th Report (Seventh Lok Sabha-1983-84) had recommended that the level of inventory holdings in ordnance factories was required to be brought down drastically to a reasonable level.

On a test check of the 14 factories, it was noticed that the holding of stock in the following factories was in excess of nine months limit:

Name of the factory	Inventory holding at the year end (in lakhs of rupees)			Average monthly consuption during the year (in lakhs of rupees)			Stock holding in terms of months' consuption		
	1985-86	1986-87	1987-88	1985-86	1986-87	1987-88	1985-86	1986-87	1987-88
GCF	3497	3634	3689	189.18	227.27	261.86	21	16	14
HVF	4254	4581	11,073	406.53	252.27	418.21	12	18	19
OFC	2337	2788	3467	349.69	368.65	287.18	5	7	11
RFI	919	1196	1386	60.28	65.04	78.96	15	16	16
VFJ	15,299	17,554	17,053	1076.00	1447.00	1474.00	16	11	12

The total holding of inventories of the 14 ordnance factories valued at Rs. 695.20 crores as on 31 March 1988 included stores of substantial value not drawn for a period of three years or more (Rs. 36.79 crores), for a period of one year to three years (Rs. 29.51 crores) and obsolete surplus stores (Rs. 20.90 crores). The value of stores not drawn for one year to three years included a sum of Rs. 10.86 lakhs in respect of stores which were not available physically.

51.6 Stores - in - transit

Rules provide that the stores, on receipt in a factory from other sister fatories be -

i) inspected within 14 days of receipt and taken on charge without delay;

ii) in the case of stores not found acceptable on inspection, the discrepancy reports raised on the consignor factories within one month of the receipts for their remarks, and

iii) if no reply is received from the consignor factories within one month or if they disown their responsibility for the discrepancy, the stores are to be brought to account as found on receipt and necessary loss statement prepared for regularisation.

It was noticed in Audit that the provisions of the Rules were not being complied with and stores worth Rs. 204.11 crores remained unadjusted in accounts at the end of March 1988 in the different ordnance factories due to non-preparation of receipt vouchers, of which the stores of 14 factories under review comprised Rs. 182.42 crores. The period of delay ranged up to and over ten years. The possibility of these stores becoming unusable with the passage of time due to change in design and specification, unrectifiable defects etc. cannot be ruled out.

Three instances are illustrated below:

(a) 38,000 empty cartridge cases including the wooden crates valued at Rs. 57.28 lakhs were received by Ammunition Factory Kirkee (AFK) from Ordnance Factory Khamaria (OFKH) in August 1984. Initial inspection of the stores at AFK revealed certain minor surface defects and the discrepancy reports raised on OFKH.

These defects were subsequently rectified and the cases were utilised in production between 1986-87 and 1987-88 before being accounted for as receipts in the factory's stock. Stores valued at Rs. 57.28 lakhs continue to be accounted for as stores in transit from 1984-85 to-date (October 1989). This indicates that the factory's assets inflated to the tune of Rs. 57.28 lakhs and stores received in the factory were not accounted for in the stock.

(b) Prior to 1987-88 Ordnance Factory Ambernath (OFA) was not weighing the consignments of scraps received from sister factories and was taking on charge the full quantities as vouched by the consignor factories. On weighment of a consignment of 103.90 tonnes brass scrap despatched by Ordnance Factory, Varangaon (OFV) in March 1987 and received in OFA in April 1987, a deficiency of 24.09 tonnes valued at Rs. 8.16 lakhs was found and discrepancy report raised on OFV in April 1987. The discrepancy report was, however, returned unaccepted by the consignor factory (March 1988). Similarly, out of 48.39 tonnes of brass scrap despatched by Ordnance Factory Katni (OF Kat) in March 1987, a quantity of 11.74 tonnes valued at Rs. 4.27 lakhs was found deficient on receipt of the consignment in April 1987. The discrepancy report raised on the consignor factory in April 1987 was returned unaccepted (March 1988). Instead of regularising the losses, OFA requested their Accounts Officer in April 1988 to amend the quantity of the issue vouchers as per actual receipt of the stores in the factory. Meanwhile, the discrepancy of the stores valued at Rs. 12.45 lakhs continued to be reflected as stores-in-transit in the factory's accounts.

51.7 Failure to take stores on account

Stores for which payments had been made but the receipt of the stores could not be linked in the factory's end were treated as assets of the factory. An analysis of the assets of the ordnance factories from 1985 to 1988 revealed as under:

Year	Assets
(as on 31st March)	(Rupees in crores)
1986	545.36
1987	425.49
1988	426.48

The figure for 1988 was test-checked by Audit in seven factories covering Rs. 262.36 crores out of Rs. 426.48

crores. This revealed that delay in linking the receipt of stores paid for, ranged from less than one year to more than ten years as detailed below:

	Amount (in crores of rupees)
10 years and above	0.64
5 years and above but less than 10 years	8.74
3 years and above but less than 5 years	20.24
1 year and above but less than 3 years	66.53
less than one year	166.21
Total	262.36

51.8 Accounting of stores

51.8.1 Preparation of receipt vouchers and posting thereof

Rules provide that all stores on receipt in the Receipt branch will be entered upon a material inward slip which will be numbered and dated on the same day of arrival of the material and inspection of the stores be carried out within fourteen days of receipt of the stores. After inspection, the material inward slip will be converted into receipt voucher and accepted quantity will be taken on charge by the stores holder in bin card and by the Accounts Office in the Price Stores-cum-Provision Ledger (PSL) after pricing. The cases of stores found rejected/discrepant in inspection will be taken up with consignor for replacement etc. In test check of the case of stores received by ordnance factory Chanda and ordnance factory Ambajhari during the last three years ended 31 March, 1988 it was found in Audit, that there were abnormal delays in preparation of the receipt vouchers after receipt of the stores in the factory. The delay ranged from one month to over 36 months as detailed below:

(in numbers)

	1985-86	1986-87	1987-88
between one month to three month	18,330	19,140	17,903
over 3 months to 6 months	2,761	2,308	1,644
over 6 months to 12 months	1,247	671	453
over 12 months to 24 months	191	176	181
over 24 months to 36 months	684	48	74
overn 36 months	255	277	113

In Ordnance Factory Khamaria the receipt voucher column of the material inward slip register was left blank and the date(s) of accounting of the stores by the factory in the bin card/price store-cum-provision ledger could not, therefore, be verified in Audit.

51.8.2 Posting of demand/return notes in the material abstract

Rules provide that stores should be drawn on demand notes against material warrants for manufacture of an item. The demand notes are priced by the Accounts Office and accounted for in the relevant cost card through material abstract to reflect the cost of material utilised in production of the item.

It was noticed that there was abnormal delay in posting the demand notes in material abstract which culminated in incorrect pricing of the end product. A few instances are given below:

(a) The unit cost of material for production of component for a gun in Ordnance Factory Kanpur during 1983-84 to 1985-86 was as below:

(in rupees)

Year	Unit cost of material	Unit cost of production
1983-84	72,695.00	93,807.00
1984-85	72,287.00	93,585.00
1985-86	61,603.00	81,877.00

The reasons for decrease in the unit cost of material and total cost of production of the component during 1985-86 was stated by the Accounts Officer to be due to delay in preparation of demand notes. As the demand notes were not posted in material abstract, material actually drawn and utilised in production could not be accounted for correctly resulting in under-pricing of the cost of material to the tune of Rs. 8.55 lakhs compared to the cost of material for 1984-85 in production of 80 numbers of the component in 1985-86.

(b) In Vehicle Factory Jabalpur (VFJ) demand notes worth Rs. 10.56 crores were not accounted for in the material abstract for 1985-86 and consequently the value of these demand notes were not taken into account while finalising the cost of production of the vehicles in 1985-86. Thus, the cost of production valuing Rs. 150.66 crores in VFJ remained under-assessed to the extent of Rs. 10.56 crores in 1985-86.

(c) In Ammunition Factory Kirkee, against a warrant issued in January 1987, for manufacture of 42,000 cartridges, 22,738 empty cartridge cases were drawn on demand notes in March 1988. Out of 22,738 drawn, 21,650 numbers were transferred in the same month (March 1988) to another warrant issued in December 1986, the manufacture/supply against which had already been completed in September 1987. Thus, the number of empty cartridge cases available against the warrant of January 1987 was only 1088 numbers although the factory completed manufacture of 26,696 numbers of the ammunitions during 1987-88. This indicated that 25,608 of empty cartridge cases valued at Rs. 49.11 lakhs were drawn without any demand note and utilised to produce 26,696 numbers of the ammunition resulting in incorrect costing of end product while violating the established process of drawl of materials.

51.8.3 Discrepancy between computerised accounting and manual accounting of store balances

Opening balance of inventory holding as on 1st April, 1983 of Vehicle Factory Jabalpur worked out to Rs. 107.76 crores as per computerised accounts and that shown in the Stores Account manually compiled was Rs. 167.19 crores. The difference was adjusted by reducing Rs. 59.43 crores in the opening balance of Stores Account for 1985-86 to bring it at par with the computerised figures. The updating of priced store ledger on computer was done for three years together from 1st April 1983 to 31st March 1986 and the balance as on 31st March 1986 worked out to Rs. 113.54 crores. The closing balance as on that date as shown in the Stores Account of the factory for the year 1985-86 was however Rs. 152.99 crores. The difference of Rs. 39.43 crores in store balance between the computerised accounts and the priced store ledger maintained manually by the Accounts office was still (October 1989) to be reconciled and adjusted.

51.8.4 Accounting of scrap arisings in production shop

Materials required for production of an item in ordnance factories are drawn based on standard estimates approved by the factory management. The quantities of waste products and scrap returnable by the shops on completion of a batch of production of a particular item are also mentioned in the standard estimates.

The estimates for manufacture of aluminium alloy billets of two different specifications catered for recovery of 76 kgs. and 50 kgs. of aluminium dross per tonne of the billets produced in Ordnance Factory, Ambernath. Accordingly, the production shop was returning the aluminium dross at 76 kg. or 50 kg. per tonne of billet manufactured, though the actual arisings were 96 kgs. and 70 kgs. respectively. The excess arisings were not returned by the shops and were allowed to be accumulated without being brought to accounts thus escaping detection in stock verification also. The recovery rate of aluminium dross per tonne of billets was revised by the factory in November 1987 from 76 kg. to 96 kg. and from 50 kg. to 70 kg. Meanwhile, the factory put up 500 tonnes of aluminium dross for disposal in February 1987 though the holding of the item in the accounts on that date was 91.51 tonnes only. The quantity put up for disposal obviously included the quantities accumulated in the shop floor remained unaccounted for. A contract for disposal of the 500 tonnes aluminium dross at Rs. 500 per tonne was concluded by the factory in March 1987 and 250 tonnes of the item were lifted by the contractor by 10th June 1987. As the contractor failed to lift the balance quantity of 250 tonnes within the contractual period i.e., on or before 10th June 1987, the contract was terminated by the factory in October 1987. No further action has, however, been initiated by the factory to dispose of the balance quantity of 250 tonnes or to bring the same on charge in bin card. The rate of Rs. 500 per tonne obtained in March 1987 was also much less than the rate of Rs. 2150 per tonne fetched for disposal of the same item by the factory in October 1986. Non-accounting of the actual arisings of the aluminium dross due to under-assessment of the rate of recovery in the estimates and the delay in its disposal thus resulted in a loss of Rs. 4.12 lakhs.

51.8.5 Custody and accounting of stores

At the time of handing/taking over of a tool godown at Vehicle Factory, Jabalpur in March 1986 between the store keepers, 207 items of stores were found discrepant. These 207 items were also verified as short/discrepant in stock verification during the period 1985-86. A further list of 56 items found deficient during stock verification in 1984-85 was also reported in April 1986. In January 1987, a Board of Enquiry was convened by the OFB to determine the causes/circumstances leading to loss/shortages of 263 items valuing Rs. 10.96 lakhs in tool godown. Inspection of the godown in August 1987 showed that the stores were lying in unsecured condition in the tool godown and 264 items were lying surplus without accountal. The Board, therefore, suggested that thorough checking of the items reported discrepant and items found surplus/unlinked might be carried out by a team of representatives of the Material Control Office, Stores Section, Works Inspection section and the user Section to correctly identify the items and locate the bin cards and reconcile the discrepancies to the extent possible. This has not been done so far.

51.8.6 Accounting and watching of free replacement of defective stores

Mention was made in Paragraph 13(iv) of the Report of the Comptroller and Auditor General of India Union Government (Defence Services) for the year 1985-86 regarding non-adherance to the prescribed procedure, improper documentation/accounting and watching of free-replacement of defective stores supplied by the firms resulting in non-recovery of the amount due from the firms. It was observed in Audit that discrepancy/deficiency vouchers valuing Rs. 78.35 lakhs raised by VFJ in 1984-85 for free replacement of defective stores supplied by the firms were yet (October 1988) to be adjusted.

51.9 Stock verification in ordnance factories

Physical verification of stock in ordnance factories, as per rules, is to be carried out by independent stock verification organisation under the Director General, Ordnance Factories. Stock verifiers are responsible for physical verification of stock, deposit stock items, inventory articles, machineries and buildings, electric installations and medical stores borne on the books of the factories at least once during each financial year. Result of stock verification is to be recorded on the stock taking sheet and forwarded to the Accounts Officer of the factory for noting down the ledger balance. Discrepancies, if any, are to be reconciled and adjusted by the factory management.

However, verification of finished articles on charge on Production ledger Cards and of materials in the process of manufacture was not carried out by the independent stock verification organisation. These stocks are verified by the factory staff at the end of each financial year.

Although the rules provide that the stock verification of every item will be carried out atleast once in a year, it was noticed in Audit that in a number of cases the annual stock verification was not carried out. During the years 1986-87 and 1987-88 stock verification was not carried out in the following cases:

Serial number	Name of the factory	Number of the items for which stock verification was not done	
		1986-87	1987-88
1.	GCF	1687	2956
2.	HVF	Nil	123
3.	OFA	17	Nil
4.	OF Amb	66164	Nil
5.	OF KH	56799	Nil
6.	RFI	Nil	49007
7.	VFJ	Nil	174

Percentage of items for which stock verification was not carried out in the above factories ranged between 1 and 100 per cent.

The value of surpluses and deficiencies revealed in stock verification during the last three years ended March 1988 for all 38 factories was as under:

Year	Surpluses	Deficiencies
	(in crores of rupees)	
1985-86	1.13	0.46
1986-87	1.82	0.28
1987-88	0.85	0.04

Progress in the regularisation of the discrepancies revealed in stock verification called for in Audit in February 1988 was still awaited from the OFB/Chief Controller of Accounts (Factories) (October 1989). However, in a test check of a few factories under review, it was noticed in Audit that, of the surpluses valuing Rs. 5.17 crores reported by the stock verifier during the period 1983-84 to 1987-88, surpluses of Rs. 4.69 crores were yet to be adjusted (October 1988), similarly of the deficiences valuing Rs. 0.44 crore were yet to be regularised (October 1988).

51.10 Disposal of stores

Although substantial quantities of sub-assemblies of the vehicles received from sister factories/ex-trade got damaged and rejected in the course of production activities of Vehicle Factory Jabalpur during the last 15 years, no proper accounting of the rejected items was maintained nor their disposal was arranged. The factory approached the OFB for the first time in November 1985 for disposal of the rejected items primarily to retrieve the space occupied by the rejected stores. The quantities of the material offered in the tender enquiry and that held in bin cards varied abnormally thereby corroborating the fact that no proper accounting of the rejected material was kept. During September 1986 to February 1988, nine contracts were concluded for disposal of 3150 tonnes of steel scrap at the rates varying between Rs. 2109 per tonne and Rs. 3227 per tonne. Further the rate realised in disposal of 250 tonnes of steel scrap (consisting of rejected fabricated components made of sheets and plates-fresh arisings) in May 1988 was Rs. 4015 per tonne. This indicated that the delayed action in disposal of the earlier scraps of the rejected material had resulted in realisation of lesser amount, compared to the fresh arisings.

51.11 Other points

(a) A free time of five hour is allowed by the Railways after a wagon is positioned at the railway siding of the factory for the purpose of loading/unloading and in the event of detention of wagons beyond the free time the Railways charge demurrage in accordance with the rates fixed from time to time. A sum of Rs. 50.81 lakhs was paid as demurrage charges by the Ordnance Factory Chanda for detention of wagons beyond the free time during the period October 1981 to December 1985.

(b) Rules provide that for manufacture of an item in ordnance factories, a standard estimate is to be prepared by the management detailing various operations necessary to produce the article, the labour charges to be paid for the operations and the quantity and description of materials required. No standard estimates exist for the manufacture of Vijayanta tank and its components in Heavy Vehicle Factory Avadi. This was commented in paragraph 8 of the Report of the Comptroller and Auditor General of India Union Government (Defence Services) for the year 1981-82. The position in this regard remains the same till date (October 1989). In the absence of estimates, the production shops are drawing the material based on the quantity indicated in a report called 'where used report'.

(c) For want of adequate storage accommodation, Ordnance Factory Chanda is issuing ammunition to depots in anticipation of proof results. The value of such issues awaiting proof clearance as on 31 March 1988 was Rs. 13.02 crores of which issues during 1986-87 valued Rs. 0.24 crore. The possibility of the issues so made ultimately failing in proof and the entire expenditure becoming infructuous cannot be over ruled. Mention was made in paragraph 16 (i) of the Report of the Comptroller and Auditor General of India Union Government (Defence Services) for the year ended 31 March 1987 (No.2 of 1988) about heavy rejection of the ammunition supplied to an ordnance depot pending proof clearance.

(d) Drawal of material for production of an item in ordnance factories is regulated by the quantities indicated in the estimates. However, materials not provided for in the estimates can be drawn through Non-Recurring Rate Forms for Materials (NRMs) in exceptional circumstances for the purpose of covering some sundry jobs of a non-recurring nature required to bring the material to the correct size or shape or to rectify defective forgings or castings or for similar job of a non-recurring nature.

It was, however, observed in Audit that AFK had drawn materials worth Rs. 53.62 lakhs over the estimated quantity through NRMs for production of two types of small arms ammunition during 1985-86 to 1987-88.

The amount of the material drawn through NRMs had been included in the cost of production as normal drawal of material by the factory.

The drawal of materials valuing Rs. 53.62 lakhs of recurring nature through NRMs over and above the estimated quantity is to be treated as abnormal and kept out of cost of production and would also require regularisation.

(e) 26000 nos. of empty shell bodies valuing Rs. 1.30 crores were received from Ordnance Factory, Khamaria (20,000 numbers) and Gun and Shell Factory, Cossipore (6,000 numbers) by Ammunition Factory, Kirkee during April 1984 to March 1987 for manufacture of ammunition. These were, however, rejected in inspection at factory's end as their 'set up' was more than the concessional tolerance of 0.1 mm. The rejected empty bodies valuing Rs. 1.30 crores, however, stand included in the inventory holding of the factory and no action has been taken for regularising the loss.

The case was referred to the Ministry in July 1989; a reply has not been received (November 1989).

52. Ordnance Factory, Muradnagar

52.1 Introduction

Ordnance Factory, Muradnagar (factory), manufactures bodies of certain items of ammunition. The Report of the Comptroller and Auditor General of India Union Government (Defence Services) for the year 1978-79 had commented that the utilisation of production capacity of the factory was less than the existing capacity. The Ministry, while attributing the reason of low production to lack of orders, had stated (December 1979) that by evolving a better product-mix, a higher production could be ensured.

52.2 Scope of Audit

A review of the working of the factory was conducted by Audit in October-November 1988, with a view to ascertaining if production had in fact improved.

52.3 Highlights

- **The capacity of the foundries of the factory was under-utilised to a large extent during the last five years.**

- **Rejections during the last five years ranged from 69 to 74 *per cent* of the value of production. The total value of such abnormal rejection was Rs. 312.49 lakhs.**

- **The plant to provide washed and graded sand to the foundries procured, in March 1982, at a cost of about Rs. 1 crore, remained continuously under-utilised and during the last three years ended March 1988 the plant was utilised to the extent of 17 to 18 per cent of its capacity.**

- **The orders for pricing of the items issued were not being followed by the factory. The difference between the value of the items issued to other sister factories and the cost of production of those items during 1985-86 and 1986-87 worked out to Rs. 1.24 crores and Rs. 6.98 crores respectively. This had the effect of under-valuing the items produced by the sister factories to whom the stores were issued.**

52.4 Utilisation of production capacity

Utilisation of capacity in the three foundries during the last five years ended 31st March 1988 vis-a-vis capacity available was as indicated below:

(in tons)

Year	Heavy steel foundry	light steel foundry	Iron foundry	Total
Capacity available	2,968	7,178	1,874	12,020
Production				
1983-84	1,168	2,984	1,379	5,531
1984-85	1,216	3,533	1,324	6,073
1985-86	1,521	3,763	1,215	6,499
1986-87	1,823	3,118	1,173	6,114
1987-88	1,224	3,174	1,079	5,477

The outturn in the heavy steel foundry and the iron foundry was less than the capacity. The outturn in the light steel foundry was also to the extent of 42 to 52 per cent of capacity.

In terms of products, production vis-a-vis the capacity during the last five years ended March 1988 was as under:

(In numbers)

Year	Item-I	Item-II	Item-III
Capacity	6,00,000	18,00,000	60,000
Actual Production			
1983-84	1,78,220	8,62,600	30,300
1984-85	1,98,300	10,40,781	33,397
1985-86	1,80,734	9,58,008	10,938
1986-87	1,54,650	5,27,500	411
1987-88	1,60,119	6,35,000	

Production of all the three main items was much less than the capacity during all these years.

52.5 Rejection of items produced

52.5.1 It was observed in Audit that unaviodable rejection during the process of manufacture of a major item of production in the factory, during 1983-84 to 1987-88 varied from 69 to 74 per cent, the amount of obnormal rejections kept out of the cost of production worked out to Rs. 312.49 lakhs.

A Board of Inquiry set up by the factory in October 1979 attributed (January 1981) the excessive rejection of the bodies mainly to defects in the process and in the castings. An advisory team engaged by the OFB also carried out a preliminary study in the factory in December 1981. The team concluded that by taking care of the suggestions given by them there was a possibility of achieving an yield of 60 to 65 per cent against 30 per cent achieved. Another Task Force appointed in March 1982 submitted its final report in October 1984. The recommendations of the task force were not found acceptable/practicable by the factory (November 1984). MECON, were appointed as consultants for undertaking a feasibility study. The report submitted by the consultant team (May 1987) was still under consideration by the OFB (October 1989).

Thus, despite several investigations made since 1981, into the causes of rejections, no remedial measures had been formulated till now.

52.5.2 In the case of manufacture of another item (item IV) the permissible percentage of rejection, as per estimate, was 52. Against two warrants issued in August 1985 (300 numbers) and October 1985 (350 numbers) and completed in September 1987, actual rejections were 67.34 and 67.45 per cent, valued at Rs. 14.03 lakhs. A technical investigation team, as appointed in August 1988, in its report of February 1989, concluded that the rejections were mainly due to casting defects at the stage of machining which was attributable to limitations of the technology adopted.

52.6. Under-utilisation of a plant

Under-utilisation of a sand washing and grading plant procured by the factory, in March 1982, at a cost of about Rs. 1 crore was commented in paragraph 12(ii) of the Report of the Comptroller and Auditor General of India Union Government (Defence Services) for the year 1983-84. In the remedial/corrective action taken note the Ministry informed (July 1985) that, in order to utilise the full capacity of the plant, efforts were on to get suitable orders for the supply of washed and graded sand. It was observed in Audit that the utilisation of the plant continued to be low and in the last three years ended 31st March 1988 was 17 to 18 per cent.

52.7. Incorrect pricing of the finished items issued

The value of the items manufactured during a year is debited to the finished stock account of that year and the value of all issues or services rendered including inter-factory issues is credited to that Account. The difference between the debit and credit sides of this account represents profit or loss on the working of the factory and is exhibited as such in this account. Issues to other ordnance factories are priced at actual cost of production as shown in the cost cards. When actual costs are not available, issue vouchers are priced at estimated rates. It was, observed in Audit that the adjustment between the issue price and the actual cost price in respect of the stores issued by the factory to other sister factories as required under the extent rules, was not carried out and the difference between the two during the two years ended 31st March 1987 were as follows:

(Rupees in crores)

Year	Cost of production of the item issued to other factories	Value of the item issued at estaimated rates to other factories	Difference
1985-86	15.99	14.75	1.24
1986-87	19.06	12.08	6.98

This had the effect of under-valuing the cost of the items produced by the sister factories to whom the stores were issued.

The matter was referred to the Ministry in June 1989; but, a reply has not been received (October 1989).

Development and production

53. Development and production of light mortar and ammunition

The General Staff Qualitative Requirments (GSQR) for a new mortar and its high explosive (HE) ammunition were established in July 1972 and a project was sanctioned in January 1973 at a cost of Rs. 2.90 lakhs for the design and development of these at the Armament Research and Development Establishment (ARDE). Another project was sanctioned in June 1982 for the design and development of an illuminating version of the ammunition for the new mortar at the ARDE at a cost of Rs. 9.63 lakhs. The mortar and ammunition were sought to be developed for increasing their range and lethality over the existing mortar and ammunition.

The project for the design and development of the new mortar and its HE ammunition was to be completed by April 1975 and was completed in 1978. The mortar was introduced into service in January 1981 after extensive troop trials. The HE ammunition was introduced in service in May 1985. The estimated cost of the project, the account of which has still not been closed, rose from Rs. 2.90 lakhs to Rs. 35 lakhs. Expenditure incurred upto December 1988 was Rs. 29.4 lakhs. The Ministry of Defence, Department of Defence Research and Development (DRD) intimated Audit in August 1989 that the increase in the cost of the project was mainly due to changed requirements of the user for troop trials and change in the location of the sight on the mortar.

DRD stated (August 1989) that the first prototype sight developed in 1980 was not accepted by the user. The user asked for change of location of the sight once in May 1980 and again in March 1987. Change of location necessitated re-designing of the sight and after extensive trials in September 1988 the sight was accepted for introduction into service in March 1989. Thus frequent changes in location delayed the development of the 'sight'. The Ministry had clarified in July 1981 that the new mortars could be used without sight for firing the old mortar ammunition. This, however, had no functional advantage.

The production of the new mortar commenced at factories 'A' and 'B' in 1985-86 and 1986-87 respectively. A small part of the pending demand was met till March 1988.

The development work for the illuminating ammunition was completed in December 1986 but during trials, the user suggested certain modifications to be carried out before commencement of bulk production. It was introduced into service in December 1987. The completion date of the project was however revised to June 1989. The estimated cost of the project rose from Rs. 9.63 lakhs to Rs. 15.83 lakhs and expenditure incurred upto December 1988 was Rs. 12.13 lakhs. The increase in the cost of the project was due to subsequent inclusion of two sub-projects and for catering to the increased requirements of the ammunition for troop trials which was not projected in the GSQR. Development production commenced in 1988-89.

Thus,

(a) although it was decided in 1972 to develop and introduce a superior type of mortar and its ammunition to achieve increased range and lethality, the object had not been achieved (October 1989) even after incurring an expenditure of Rs. 41.50 lakhs and after a lapse of 16 years.

(b) bulk production of the new mortar started in 1985-86 without 'sight' and only a small part of the pending demand of the Army was met till March 1988.

(c) since the 'sight' was introduced only in March 1989 the new mortar was being used with the old mortar ammunition without the functional advantage of sight.

(d) the time and cost over-runs of the development projects were mainly due to not specifying the requiremnts properly in the GSQR and piecemeal requirements of prototypes for user trials.

The case was referred to the Ministry of Defence, Department of Defence Production and supplies in April 1989; reply has not been received (October 1989).

54. Development and productionisation of fuze

An ammunition, for being used in a proximity role, requires the employment of a special type of fuze in its shell structure. One such fuze was designed and developed by the National Solid State Physics Laboratory and the Armament Research and Development Establishment (ARDE) in 1973. Productionisation of the electronic components of the fuze was entrusted to Hindustan Aeronautics Limited (HAL) and the productionisation of the explosive portion and final assembly were entrusted to an Ordnance Factory (factory).

Orders for the supply of 37,084 units of electronic components were placed by Director of Ordnance Services (DOS) on HAL in September 1973 and February 1981. HAL produced 21,314 units of the components and supplied 16,822 units to the factory; the balance 4,492 units valued at Rs. 116.43 lakhs were rejected in batch acceptance test. Investigation into the reasons for high rejection by technical experts (December 1983) revealed that the design of the fuze was not suitable to meet the requirement of the user and hence further production of the component at HAL was suspended. In reply to audit observations the Department of Defence Research and Development stated in August 1989 that the finding of the technical experts is erroneous as fifteen successive lots had passed the acceptance criteria before the failure was noticed and there were other factors like manufacturing process, components and material quality which could influence the outcome of a productive process.

However, production of fuze type I by HAL was suspended solely on the ground of its unsuitable design and the design was not used again. HAL estimated the loss on account of suspension of production to be Rs. 504.57 lakhs and claimed Rs. 265 lakhs as reimbursement for the infructuous expenditure incurred by it. The claim had not been settled.

Out of 16,822 units of electronic components accepted and filled by the factory during 1978-79 to 1982-83, 12,477 units were issued to the central ammunition depot during February 1979 to August 1982; 2,427 units valuing Rs. 48.54 lakhs were expended in proof tests and 1,948 units valued at Rs. 38.96 lakhs were rejected at filled proof and lying at the factory unissued since 1982-83. DOS did not agree (August 1988) to the proposal (May 1988) of the Ordnance Factory Board to accept the rejected units for training purpose. Besides, the factory was also holding unfinished components etc. valued at Rs. 10.82 lakhs approximately. Out of 12,477 number of filled fuzes received by the depot, 903 numbers valued at Rs. 18.06 lakhs were lying with them without any issue of which 496 numbers valuing Rs. 9.92 lakhs had shown vertical hairline cracks on the moulded portion.

In January 1986 possibility of modifying another existing fuze for use in the proximity role for the ammunition was contemplated. The modification was to be undertaken by Electronics Corporation of India Limited (ECIL) and ammunition for fuze as well as trials were to be provided by ARDE. Against an order placed by the Department of Defence Production and supplies in April 1986, ECIL supplied 423 numbers of modified fuzes valued at Rs. 13.69 lakhs to ARDE during May 1984 to November 1986 for integration with explosive component and development trials. User trials conducted in 1987 and 1988 showed that the fuze was not capable of meeting the required specifications without extensive redesign. Consequently, the order placed on ECIL was cancelled and the project was closed. An expenditure of about Rs. 11.96 lakhs was incurred on the project till October 1989.

Thus,

- An appropriate fuze for use in the proximity role for an ammunition could not be developed after seven years and after incurring an expenditure of Rs. 18 lakhs on the development.

- Bulk productionisation of electronic components of fuze type I based on unsuitable design resulted in the rejection of components valued at Rs. 116.43 lakhs and suspension of further production by HAL. HAL claimed a compensation of Rs. 265 lakhs for the infructuous expenditure incurred by them.

- 2,851 filled fuzes valued at Rs. 57.02 lakhs were lying at the ordnance factory/depot without any prospect of issue.

- An expenditure of Rs. 11.96 lakhs incurred on the modification of another fuze and Rs. 13.69 lakhs being the cost of modified fuzes proved infructuous as the modification was found unworkable.

The case was referred to the Department of Defence Production and Supplies in June 1989 and reply has not been received (December 1989).

55. Delay in development and productionisation of ammunition

Navy was importing three varieties of ammunition (high explosive (HE), tracer and practice) to meet their requirements. On strategic consideration Government, in December 1978, sanctioned Rs. 15.03 lakhs (increased to Rs. 55.05 lakhs in May 1988), for a project to design and develop the three varieties of the ammunition by Armament Research and Development Establishment (ARDE) and Explosive Research and Development Laboratory (ERDL) for indigenous productionisation in ordnance factories. The ARDE was the Authority Holding Sealed Particulars (AHSP) for the ammunition.

The original date of completion of the project (i.e. December 1982) was extended from time to time and finally up to June 1989. The project has yet to be completed (October 1989). Development work relating to 'practice' and 'tracer' varieties had been completed and the drawings, specification and proof schedules were forwarded to the Naval Inspectorate in July 1988, who provisionally sealed the drawings in August 1988 for bulk production in ordnance factories. The development work of the 'fuze' for HE variety was in progress (October 1989) as the ERDL could not develop two vital sub-components of the fuze. The Department of Defence Research and Development (DRD) contended (October 1989) that the delay in completion of the project was mainly due to delayed supplies of various components by ordnance factories associated with the development work; large scale rejection of cartridge cases supplied by an ordnance factory and delay in development of two vital sub-components of the fuze by ERDL. Regarding delayed supplies of components by factories, the DRD stated (October 1989) that for certain special items, like cartridge cases, primers, propellant etc., the ARDE had to solely depend on factories and for certain intricate items for the fuze, one concerned factory expressed its difficulty for early supply. The ARDE nevertheless explored alternative sources of supply and supplied these to ERDL.

Regarding rejection of cartridge cases, there was a difference of opinion between the Department of Defence Production and Supplies (DDPS) and the DRD. According to DDPS (March 1989) the rejection of the cartridge cases was due to non-achievement of specified weight and tolerance though cartridge cases were manufactured with specified material as per drawing and ARDE subsequently amended the weight tolerance of the cartridge cases. The DRD however contended (October 1989) that the rejection was due to non-maintenance of the required hardness range as per drawing. The fact, however, is that there was rejection leading to delay in development but the actual reasons for rejection were not known.

Total expenditure incurred on the development project till March 1989 was Rs. 38.70 lakhs.

Productionisation:- Productionisation of the ammunition was planned in four factories, of which capacities were to be created at two factories only, while the other two factories would utilise their existing facilities. Government sanctioned a separate project in October 1981, at an estimated cost of Rs. 258.57 lakhs to augment the existing facilities to achieve an annual production of Rs. 1.20 lakh rounds of the ammunition (three varieties) by May 1985.

Civil Works involved only in one factory were completed in February 1988, and taken over by the factory in september 1988. The expenditure incurred on civil works till March 1989 was Rs. 75.41 lakhs.

All the machines required for the project were received during August 1983 to February 1988 and all except four in one factory, were commissioned by July 1988. According to the DDPS the project was physically completed by February 1988 as against February 1985 originally stipulated. Total expenditure booked against the project was yet to be compiled (October 1989).

Production:- In November 1983, the Navy placed three development orders on Ordnance Factory Board for supply of 20,000 rounds of each of the three varieties of the ammunition. Bulk production of ammunition was envisaged to commence for 1985-86 but till 1988-89 there was no production. The DDPS intimated Audit in March 1989, that production of the ammunition was held in abeyance as the sealed particulars were not made available to the ordnance factories by the AHSP. The DRD however contended in October 1989 that drawings for 'practice' and 'tracer' ammunitions were sealed by the Naval Inspectorate in August 1988.

Import:- Meanwhile the Navy, concluded a contract in November 1985 for import of 1.50 lakh rounds of the ammunition (three varieties) at a cost of Rs. 158.82 lakhs to meet their requirements. The ammunition was received during 1986 to 1988.

Thus, the main objective of developing three varieties of ammunition for indigenous production from 1985-86, could not be achieved till March 1989 due to delay in developing the ammunition and its clearance for bulk production. The expenditure incurred on the development project was Rs. 38.70 lakhs against an estimate of Rs. 15.03 lakhs in December 1978. The capacities created in ordnance factories at an estimated cost of Rs. 258.57 lakhs remained unutilised since February 1988. Due to delay in developing the ammunition and its productionisation, Navy imported ammunition worth Rs. 158.82 lakhs.

The case was referred to the Department of Defence Production and supplies in June 1989 and their reply has not been received (December 1989).

56. Design and development of light tank

Government sanctioned a project in October 1983, at an estimated cost of Rs. 2.54 crores for the development of a light tank by mounting 90mm turret on a BMP vehicle. The development project was to be done by the Combat Vehicle Research and Development Establishment (CVRDE) and was to be completed within 30 months from the date of sanction.

An agreement was entered into by CVRDE in November 1983, with a foreign firm for the import of two 90mm turrets and connected ammunition required for the project (cost: Rs.1.15 crores). The turrets and the ammunition were required to be kept ready for shipment by the firm within 13 months and 11 months from the date of agreement respectively. Acceptance of the agreement by Government was communicated to the firm in February 1984, with a simultaneous order to supply turrets and ammunition as per the agreement. An advance of Rs. 24 lakhs representing 20 *per cent* of the contract amount was authorised (February 1984) by the Ministry for payment to the supplier, against which a payment of Rs. 22.27 lakhs was actually made. The turrets were due for shipment in January 1985.

Meanwhile, the Army in February 1984 pressed their preference for 105mm turret instead of the 90mm turret and communicated to the Directorate of Research and Development Organisation in September 1984 that the project of mounting 90mm turret on the BMP vehicle might be closed. Again in July 1985, Army expressed 'firm and considered view' that they did not want any light tank to be developed on BMP vehicle whether it be with 90mm or 105mm turret.

Meanwhile, CVRDE had procured one BMP vehicle at a cost of Rs 25 lakhs and had modified it at a cost of Rs. 1.02 lakhs to fit a dummy 90mm turret brought on loan from the firm. The shipment charges for the dummy turret were Rs. 0.77 lakh.

In view of the magnitude of expenditure already incurred and pending contractual obligations towards the firm, Army agreed in October 1986 to the proposal for development of two prototypes with 105mm turret. A revised agreement was entered into with the firm in October 1988 for supply of 105mm turret. The period of supply was 14 months from the date of 30 *per cent* advance payment to be made under the contract. The contract provided for adjusting the advance of Rs. 22.27 lakhs already paid under the first contract towards the advance due under the second contract. In reply to an observation, Army intimated Audit in June 1989, that when the development of light tank with 90mm turret was entrusted to CVRDE, technology for mounting 105mm turret on light vehicle was not known. This was known only in 1984, and therefore, the development work with 90mm turret was closed. They also stated in August 1989, that development of light tank with 105mm turret was not preferred as a review of requirement and availability revealed at that time, that BMP vehicles could not be spared for productionisation of light tanks. This showed that Army projected their requirements for the light tanks without properly assessing the availability of BMP vehicle for productionisation. This resulted in an infructuous expenditure of Rs. 26.79 lakhs in modifying one BMP vehicle to fit 90mm turret. Besides, till September 1989, a total amount of Rs. 26.33 lakhs was spent on pay and allowances and training of the personnel for the project. Ministry stated in May 1989, that the technical know how gained by modifying a BMP vehicle would be of immense use when a tank with 105mm turret was developed. The fact, however, remained that light tank with 105mm turret also would not be productionised as the Army did not have any requirement. Development work with 105mm turret was undertaken merely to meet the contractual obligations and also in view of the fact that heavy expenditure had been incurred in modifying one BMP vehicle for 90mm turret.

Thus, clearance for development of light tank, without properly assessing the availability of BMP vehicles for productionisation resulted in an infructuous expenditure of Rs. 26.79 lakhs in modifying a BMP vehicle for 90mm turret. Besides, the expenditure being incurred on development of light tank with 105mm turret would also prove infructuous as the Army do not have any requirement for this tank.

57. Development of search light for tank

Government sanctioned a project in August 1975 to develop a search light for the tank, stipulating the planned date of completion as December 1986 for twelve prototypes. The original cost of the project was Rs. 9.25 lakhs and was revised to Rs. 14.38 lakhs.

The project was required to provide the tank on its own power supply, a certain range of vision on a clear night. The first protoype of the search light was made ready in June 1982 and positioned at Combat Vehicle Research and Development Establishment (CVRDE) for fitment trials in April 1983. The fitment trials were completed satisfactorily. The fourth prototype was assembled and sent to CVRDE for fitment in June 1985. The General Staff Branch, however, decided in January 1987, to remove the search light from the tank from fourth prototype onwards. As a result the project was abandoned and till December 1986 an expenditure of Rs. 12.28 lakhs was incurred on the project.

The Department of Defence Research and Development stated in October 1989, that the project was dropped, as under a separate project the development of thermal imager, a much improved equipment for the purpose was in an advanced stage. They also stated that the search light project served the requirement of the user at the initial stages of development of the tank. The fact, however, is that development of search light with an expenditure of Rs. 12.28 lakhs did not serve any purpose as this was replaced by an improved equipment, which was also under development simultaneously.

58. Productionisation of aviation gun and its ammunition

Government entered into a licence agreement, in January 1972, with a foreign country, for indigenous productionisation of a gun and its ammunition required by the Air Force (IAF). The technology transfer for the gun and ammunition was completed in November 1974 on payment of Rs. 57.16 lakhs. Meanwhile, in May 1974 Government considered that indigenous productionisation of the gun would not be economically viable in view of the limited requirements of the gun. No final decision in this regard could, however, be taken for ten years as the requirements of the IAF for the gun was varying from time to time. The guns continued to be imported.

Based on the total requirement of 750 guns during a period of 15 years from 1985 as projected by the IAF, the Ordnance Factory Board (OFB) submitted a proposal to the Ministry in February 1982, for creating capacities in an ordnance factory (factory 'A') at an estimated cost of Rs. 9.84 crores for production of 100 guns per annum. In August 1983, the requirement of the guns up to 1994-95 was revised upwards. The Ministry sanctioned the project in December 1983 on self reliance and strategic consideration as

(i) the gun was expected to be in service till 2000 A.D.;

(ii) the existing holding (November 1983) of guns (including those already indented) would last for four years; and

(iii) the foreign country declined to supply any gun, against the indent placed on them in March 1981.

The Ministry had earlier sanctioned the project for indigenous production of ammunition of two varieties in January 1977, in ordnance factories at a cost of Rs. 4.48 crores.

An examination of the execution of both the projects till March 1989 brought out the following:

(i) Productionisation of gun

The OFB issued administrative approval for the civil works at factory 'A' in November 1985, at an estimated cost of Rs. 65.75 lakhs (raised to Rs. 67.42 lakhs in December 1986) with completion date as June 1987. The civil works were completed by October 1987 but the air-conditioning plant was under rectification (September 1988).

Against the requirement of plant and machinery machines indented, ordered, received and commissioned till April 1989 was as under:

indented	covered by orders	received	commissioned
16 (August 1984 to March 1987)	15 (December 1985 to June 1988)	11 (May 1987 to February 1989)	6

From the date of sanction there was a delay of 8 to 38 months in finalising and indenting the machines by the OFB. The entire project was scheduled to be completed by December 1987, but by March 1989 only 37 per cent of plant and machinery required, had been commissioned. The project was expected to be completed in December 1989.

Thus, the object of sanctioning the project on self-reliance and strategic considerations had not yet been fulfilled due to non-completion of the project even after more than one year of its scheduled date of completion.

(ii) Productionisation of ammunition

The project for indigenous production of two lakh rounds each of high explosive (HE) and armour piercing (AP) ammunition and 6000 numbers of a component (component 'R') per annum, was sanctioned by Government in January 1977 at a cost of Rs. 4.48 crores. The production of ammunition and its components was planned in three factories ('B', 'C' and 'D'). The projcet was to be completed by January 1981. In paragraph 12 of the Report of the Comptroller and Auditor general of India, Union Government (Defence Services) for the year 1980-81, mention was inter-alia made, regarding delay in completion of the project and consequent import of the ammunition. The completion date of the project was revised to January 1984.

Civil Works involved in Factory 'B' were completed in July 1984 and 118 machines (out of 120 required) were commissioned during February 1979 to December 1986. According to OFB (October 1985) all activities relating to the project were completed except one machine which was yet to be received.

The expenditure booked against the project till January 1989 was Rs. 4.86 crores against Rs. 4.48 crores sanctioned. The excess expenditure was on import of complete rounds of the ammunition and its components necessitated due to unsatisfactory performance of the ammunition indigenously produced.

During July 1973 to April 1985, the IAF placed indents on OFB for supply of 2.30 lakh rounds of HE and 10.70 lakh rounds of AP ammunition. Though the major activities of the project were completed by October 1985, the first supply of 1400 rounds of HE ammunition was made only in March 1989 for trials. Bulk production was expected from 1989-90. There was no production of AP ammunition till March 1989.

Factory 'B', however, supplied a total of 1.58 lakh rounds of HE (inert) ammunition till March 1989.

According to OFB (September 1987), bulk production could not be commenced due to failure of the ammunition in proof. Though the malfunctioning of the ammunition was investigated jointly with Inspectorate at different stages even under technical guidance of foreign experts, the exact causes for the failure could not be located. Finally in June 1986 the OFB constituted a task force to overcome various difficulties.

The production of component 'R' at 6,000 numbers per annum as envisaged in the project sanction, could not be commenced till March 1989.

Due to delay in productionisation of the ammunition three contracts were concluded with a foreign supplier during November 1983 to August 1985, for import of 10.20 lakh rounds of the ammunition of both HE and AP varieties at a total cost of Rs. 4.19 crores. Besides, five lakh number of cartridge cases blank (value: Rs. 47.45 lakhs), 20,000 numbers of component 'R' (value: Rs. 23.37 lakhs). Other materials and components (value: Rs. 30.38 lakhs) were also imported against contracts concluded during May 1983 to October 1987.

The case reveals the following:

(i) The project for productionisation of the gun sanctioned in December 1983 mainly on self-reliance and strategic considerations and which was to be completed by December 1987, was yet to be completed.

(ii) The project for productionisation of the ammunition sanctioned in January 1977 could not be completed within the stipulated period of January 1981. Major portion of the project was completed by October 1985. Bulk production of the ammunition could not be commenced till March 1989 due to difficulties encountered in the production of certain components and unsatisfactory performance of the ammunition in proof trial.

(iii) due to dealy in productioninsation, complete ammunition rounds, components/materials valuing Rs. 5.20 crores (total) were imported during May 1983 to October 1987.

The case was referred to the Ministry in June 1989; a reply has not been received (October 1989).

59. Development and productionisation of Naval ammunition

In July 1973, Government sanctioned a project to design and develop, the 'high explosive' (HE) and 'practice' versions of the ammunition for the Navy by the Armament Research and Development Establishment (ARDE) at a cost of Rs. 7.90 lakhs for productionisation in ordnance factories. The 'practice' ammunition was developed in March 1977 but problems arose with the package designed by the ARDE. The ARDE redesigned the package which necessitated modification in the design of shells already developed. Modification in the design of the shell was finally completed in 1983. A sum of Rs. 5.67 lakhs was incurred on the project. The HE ammunition was under development till then. Though 'practice' ammunition was developed in 1983, the project was kept open till free flow production of the ammunition was established in ordnance factories. Meanwhile, in February 1981, Government sanctioned another project to design and develop 'prefragmented' HE (PFHE) ammunition with 'proximity fuze' by ARDE at a cost of Rs. 18.90 lakhs (including Rs. 0.97 lakh meant for Terminal Ballastic Research Laboratory) with completion date as February 1984.

As PFHE shell 'proximity fuze' was better than conventional HE shell the Navy advised in November 1981, to close the project for conventional HE ammunition after its development and freeze the design.

Mark (MK)-I design of the PFHE shell developed by ARDE was accepted for introduction into service in June 1984. In May 1985, the ARDE proposed to develop MK-II design of the PFHE shell having improved performance. The Navy accepted MK-II version in January 1989 for introduction into the service. Finalisation of drawings, etc. for bulk production were in progress (June 1989). Till June 1989, a sum of Rs. 13.90 lakhs was incurred on the project.

The Navy took 13 months from December 1980 to assess its annual requirements for ammunition. Based on the total requirements projected by the Navy in January 1982, the Ordnance Factory Board (OFB) submitted a proposal to the Ministry in January 1983 for setting up of capacity in ordnance factories and for production of the ammunition at an estimated cost of Rs. 5.97 crores. Production of different components of the ammunition was planned in five factories.

The entire amount of Rs. 5.97 crores was for creating capacities at two factories ('A' and 'E') only.

In November 1983, the Ministry pruned down the proposed cost from Rs. 5.97 crores to Rs. 4.58 crores and though the investment output ratio was not economically viable, the project was sanctioned in December 1983 at a cost of Rs. 4.58 crores for achieving self reliance and on strategic consideration. The project was to be completed by December 1987.

Thus, the period from finalisation of requirements by the Navy up to the stage of sanctioning the project on self reliance and strategic considerations stretched over 37 months.

In factory 'E' civil works comprised addition, alteration/modification of certain existing magazine buildings and construction of several air-conditioned process buildings for different components. The Siting Board for the civil works was held in November 1982 but their proceedings were approved in January 1984. The Engineer-in-Chief's Branch of the Army Headquarters submitted an approximate estimate of Rs. 3 crores for the works to the Ministry in April 1985. The Ministry scaled down the cost to Rs. 2.70 crores and issued administrative approval in June 1985. The works were to be completed in two phases during March 1987 to September 1987. In December 1987, the completion date was, however, revised to March/June 1988 for phase-I and June/September 1988 for phase-II. Against the revised completion date, the progress of completion till July 1989 was 96.5 *per cent* and the expenditure upto May 1989 was Rs. 3.68 crores.

According to the Military Engineer Services (MES), the delay in completion was due to delays in handing over of certain buildings by the factory; frequent changes in the scope of the works as required by the factory; restriction of working hours on security ground and abnormal rainfall.

However, according to OFB (October 1988) the dealy was mainly due to belated issue of the administrative approval by the Ministry and the expected date of completion of the civil works was September 1989.

There was also delay of two to five years in finalising the requirement and ordering the machines for the factories. Thus, even after one year from the original date of completion (December 1987), four machines remained uncommissioned and one machine was yet to be received (July 1989).

The total expenditure booked against the project till December 1988 was Rs. 3.43 crores. The anticipated expenditure would be about Rs. 5.24 crores as assessed by OFB (April 1989) against Rs. 4.58 crores sanctioned. The anticipated increase in the project cost was mainly due to:

(i) preparation of the estimates by the MES based on Standard Schedule of Rates (SSR) of 1975 as the composite rates of SSR of 1980 were not then available and

(ii) increase in the cost of petrol, oil and lubricants.

Though indent for 'practice' version was placed in 1977, clearance for its bulk production was accorded in 1983. During 1984-85 to 1988-89, factory 'E' supplied a total quantity of 11,430 rounds. Due to short supply of the ammunition by factory 'E', the Navy placed import orders in April/December 1987 for 1125 rounds of 'practice' ammunition at a cost of Rs. 8.73 lakhs.

MK-I version of PFHE ammunition was developed and accepted in June 1984 for introduction into service but sealed drawings were received by OFB/factory in November 1985. In the drawing, cartridge case for 'practice' version was indicated, which was subsequently withdrawn and Navy finally sent the amended drawings in October 1988 only. Thus, production of cartridge was held up in factory 'A' due to incorrect drawings and there was no production of the ammunition by factory 'E' till March 1989.

Thus, sanctioning of a project on self reliance and strategic consideration took 37 months; the project scheduled to be completed in December 1987, was expected to be completed by September 1989 due to delay in completion of the project: 'practice' ammunition had to be imported at a cost of Rs. 8.73 lakhs to fill up the gap.

The case was referred to the Ministry in May 1989 and their reply has not been received (November 1989).

60. Expansion of capacity without prospective need

The Ministry sanctioned a project in February 1981 at an estimated cost of Rs. 7.95 crores towards capital investment in ordnance factory 'B' for production of ammunition. Subsequently, in March 1983, the capacity indicated in the sanction was amended to 20.6 lakh rounds per annum (5.6 lakh rounds of ammunition at factory 'A' and 15 lakh rounds of ammunition 'X' in factory 'B'). Thus, new facilities were only at factory 'B' for production of 15 lakh rounds per annum of ammunition 'X'. The estimated cost of Rs. 7.95 crores sanctioned earlier in February 1981 was revised to Rs. 13.51 crores in May 1984.

Civil works related to the project at factory 'B', were completed during April-September 1984 at a cost of Rs. 0.13 crore (till August 1988) and taken over by the factory between October 1985 and February 1986.

Of the 19 machines ordered and received, only 17 could be commissioned during February 1985 to December 1986. Non-commissioning of the two imported machines (value: Rs. 109.10 lakhs) proved to be a bottleneck in the production programme. The circumstances in which these two machines could not be commissioned are detailed below:

(a) Against the indent of Ordnance Factory Board (OFB) of November 1981, the Director General of Supplies and Disposals (DGSD) placed an order on a firm in May 1983, for supply of one head turning and treaming machine from a foreign source at a cost of Rs. 17.41 lakhs. After placement of the order, the firm offered in October 1983 to supply machine of a different model at the same cost which was accepted by the OFB in May 1984 without any assessment of its operational feasibility and considering it as an improved version of the earlier one. The machine received by the factory in April 1985, could not be commissioned as it failed to give the required surface finish of the groove. In December 1986, the firm offered another machine of different model in replacement and the original order was amended on 24 November 1987 for procurement of the replacement machine at a cost of Rs. 13.93 lakhs. The replacement machine received in December 1987, could not also be commissioned as it failed to obtain the desired output and quality during trial runs. According to factory 'B' (August 1988) sufficient components, required for trial and continuous running of the machine, were not available. As a result, the desired production could not be achieved and the machine was lying uncommissioned (September 1989). OFB intimated Audit in October 1989 that the capacity parameter of the machine had been considered before acceptance. The fact, however, is that the machine could not be commissioned with consequences on the production.

(b) Against OFB's indent of November 1981, DGSD placed an order on a firm in May 1982, for supply of one continuous motion tracer loading machine from a foreign source at a total cost of Rs. 91.69 lakhs. The machine, received in January 1985 was erected in March 1985 but could not be commissioned (November 1989) as it failed to load both types of compositions as required. The factory intimated the firm in May 1988 that the machine was not satisfying the acceptance of tender. The firm, however, contended in June 1988, that the machine was designed and manufactured as per drawing and other particulars furnished by the factory. They also stated that after the receipt of the machines, the factory changed the charge mass of the compositions which would not be achievable by them at that stage. The factory however maintained (June 1988) that they had not informed any change in charge mass for composition as given in the acceptance of tender. The matter had been referred to the Ministry of Law for advice in October 1988. The final outcome was not yet known (October 1989). Hence the machine valuing Rs. 91.69 lakhs was lying uncommissioned since receipt.

Production was expected to commence four years from the date of issue of sanction *i.e.* by February 1985. However, production had not commenced even in September 1989.

A scrutiny by Audit of the demand-supply interaction, however, showed that Army's requirements were being fully met by the production of factory 'A' even though that was lower than the installed capacity and further, the Army had not resorted to any imports after 1980-81. More significantly the weapon which ammunition 'X' was designed to serve was being phased out after 1985, leading to reduction in the requirements of the ammunition by the Army. Thus, the expenditure of Rs. 8.91 crores incurred till August 1988 in creating facilities in factory 'B' for production of ammunition 'X' has proved to be unproductive. OFB stated in October 1989 that production at factory 'B' could have been started if the machines were commissioned in time.

Thus, the project in factory 'B' was sanctioned without adequate study of its operational viability. Due to mismatches between the design data and design requirements of the machines, the capacity created in factory 'B' at an estimated cost of R. 8.91 crores, proved to be unproductive.

The case was referred to the Ministry in April 1989; no reply has been received (December 1989).

61. Shortfall in production of ammunition

Mention was made about the shortfall in production of a certain type of ammunition during 1980-81 to 1983-84 and consequent import of ammunition valued at Rs. 1252 lakhs and its components valued at Rs. 310 lakhs in paragraph 13(ii) of the Report of the Comptroller and Auditor general of India, Union Government (Defence Services) for the year 1983-84.

A test check by audit of the production of the ammunition during 1985-86 to 1988-89 revealed persistent shortfall in production of the ammunition.

Against the production programme of 30,000 to 35,000 rounds of the ammunition per annum, which was below the created capacity of 40,000 rounds per annum, filling factory 'A' supplied on an average 21,620 rounds per annum during 1985-86 to 1988-89. The achievement with reference to the production programme was thus about 67 *per cent*. Consequently the value of shortfall in production during 1985-86 to 1988-89 worked out to Rs 12.12 crores. The main reason for the shortfall in production was inadequate supplies of components by factories 'C' (for fuze) and 'D' (for cartridge case). Components were being manufactured in unmatched quantities and that production of cartridge case and fuze was below the requirement.

Due to inadequate supply of fuzes, import orders were placed in November 1986 and June 1987 by OFB and the Supply Wing of an Indian Mission abroad (SW) for supply of 20,000 numbers of filled fuzes at a total cost of Rs. 44.47 lakhs.

Factory 'A' was supplying filled ammunition, in anticipation of filled proof clearance. During filled proof trials, conducted from 1982 to 1985, 16,000 rounds of ammunition of 1982 to 1985 products, valued at Rs. 446 lakhs failed. Out of this quantity, Army accepted (July 1986), 14,000 rounds valued at Rs. 390.18 lakhs for training and practice purpose and the balance 2000 rounds valued at Rs. 55.74 lakhs were rejected.

Internal investigation by a task force in July 1986, identified the cause of failure of the ammunition to be due to the fuzes manufactured by factory 'C' which were not tested for arming test and for continuity after filling. The task force suggested certain modifications in the design of the fuze in July 1986, to avoid such failure. Though a modification was introduced in 1986-87; 5000 rounds of the ammunition valued at Rs. 139.35 lakhs with fuzes of modified design were again rejected in 1987 and 1988. Factory 'A' contended (March 1989) that the failure of the ammunition was due to an inherent design flaw in the fuze. OFB intimated in October 1989, that based on the improved design of the imported fuze, the Controllerate of Quality Assurance (CQA) recently modified the design and action was in hand for indigenous production of fuze as per modified design.

The fact, however, is that though the fuze had inherent design flaws, its bulk production was continued. OFB stated (October 1989) that during 1985-86 and 1986-87, 13,000 empty fuzes valued at about Rs. 50 lakhs were rejected and that a total of 15,597 rejected fuzes valued at about Rs. 60 lakhs were lying with factories 'A' and 'C' for rectification. OFB also stated that an order had since been placed for import of 10,000 filled fuzes by SW for about Rs. 29.24 lakhs.

The case reveals the following:

- due to production of different components in un matched quantities the planned production of 40,000 rounds of the ammunition per annum, from 1980-81 could not be achieved till 1988-89 even after investment of Rs. 370.57 lakhs for augmenting the capacities in the factories. The achievement with reference to the production programme was about 66 *per cent* during 1985-86 to 1988-89 with a resultant shortfall of Rs.12.12 crores.

- due to inherent design flaw, of fuze, 16,000 rounds of ammunition worth Rs.446 lakhs failed in proof. Subsequently 14,000 rounds valued at Rs.390.18 lakhs were accepted by army for training and practice purposes and the balance 2000 rounds costing Rs.55.74 lakhs were finally rejected. During 1985-86 to 1986-87, a total quantity of 13,000 empty fuzes valued at Rs.50 lakhs were rejected and a total of 15,597 fuzes valued at Rs.60 lakhs were lying for rectification. Fuzes worth Rs. 44.77 lakhs were imported to maintain continuity in production. Import order for a further quantity of 10,000 filled fuzes worth about Rs.49.74 lakhs had been placed.

The case was referred to the Ministry (May 1989) and their reply has not been received (October 1989).

62. Wasteful production of fuze-adapter

Fuze 'X', of imported origin, was indigenously developed by a Gun Development Team (GDT) and used with the ammunitions of certain field guns. This fuze was to be eventually used with the ammunitions of 105mm field gun being indigenously developed by GDT. Use of fuze 'X' in the 105mm ammunition was, however, not automatic as the fuze was to be connected to the shell of the ammunition by using an adapter, also developed by the GDT. From April 1979, the GDT undertook the evaluation of the suitability of fuze 'X' to 105 mm ammunition, and the evaluation was completed in May 1987. The final decision to use the fuze with the 'adapter' had not been communicated by the general staff branch of Army Headquarters till August 1989.

Meanwhile, drawings for 105 mm ammunition with fuze 'X' and the 'adapter' were sealed by the Controllerate of Inspection, in July 1970 and passed on to Ordnance Factory, Chanda for obtaining the required quantity of 'adapters' for fitment with the fuze. Ordnance Factory Chanda placed eight inter-factory demands (IFDS) between November 1975 and February 1980 on three sister factories for the supply of 1,54,230 'adapters' even though the suitability of fuze 'X' was still not determined. Supply of the adapters commenced in 1977-78. In December 1982, the Controllerate deleted reference to the use of fuze 'X' with 105mm ammunition. Thus fuze 'X' was not required to be used with 105mm ammunition any further and consequently the possibility of the use of the 'adapters' did not arise. The sister factories, however, continued manufacturing and supplying the 'adapters' till November 1988. By then, Ordnance Factory Chanda had received 95,340 'adapters' of which 6380 were issued to the GDT for trial and another 15,834 were assembled to 105mm ammunition shell in lieu of 'plugs' and issued to Army during 1984-85. Further use of 'adapter' in lieu of 'plugs' was, however, discontinued for being uneconomical as the unit cost of an 'adapter' was Rs. 118.37 against the unit cost of Rs.3.51 for a 'plug' procured from trade. The use of 'adapter' in lieu of plug inflated the cost of 15,834 shells to the extent of Rs. 18.19 lakhs. The balance quantity held by the factory of 73,126 'adapters' valued at Rs. 86.56 lakhs, had no prospective use.

The Ordnance Factory Board intimated Audit in July 1989, that the matter for liquidation of the 'adapters' held by the factory had been taken up with the GDT/Controllerate. The Board further intimated that the financial repercussion on the sister factories due to short-closure/cancellation of the IFDs placed by Ordnance Factory Chanda was under assessment (October 1989).

Thus, production of an 'adapter' for fuze 'X' before the establishment of suitability of the fuze itself for the ammunition,resulted in wasteful production of 73,126 'adapters' costing Rs. 86.56 lakhs and alternative use of another 15,834 'adapters' involved an extra expenditure of Rs. 18.19 lakhs.

The case was referred to the Ministry in March 1989; reply has not been received (December 1989).

63. Wasteful production of empty bodies

Empty bodies (Empties) of an ammunition were being manufactured by two ordnance factories and issued to a third ordnance factory for filling. Due to non-availability of the specified material of a certain thickness from the usual trade sources, the factories manufacturing empties approached the Controllerate of Inspection (Ammunition) in August 1983 for permitting the use of a thicker material which was readily available. The Controllerate permitted the relaxation in August 1983. During October 1983 to March 1985 the factories manufactured 80,756 empties by using the thicker material without consulting the user (Army) and issued these to the third factory for filling and issue. While issuing the ammunition it was found that bodies made from the thicker material were higher in diameter and were not suitable to meet the specified requirement of the user. The Ordnance Factory Board (OFB) therefore requested the Army to review its requirements and grant permission for the issue of 60,000 numbers of the ammunition so that these could atlest be used in a mode different from the specified mode. Army accepted the proposal in August 1985 as a special case and warned the OFB that the future production should be strictly in accordance with the specification. OFB should have made the request for 80,000 numbers instead of 60,000. With issue of 60,000 numbers of ammunition, 20,756 still remained with the filling factory. The OFB requested the user in June 1986 for accepting a further quantity of around 21,000 numbers of the ammunition with the thicker bodies. The user declined in September 1986. Empties valuing at Rs. 11.39 lakhs rendered surplus were treated as rejected and returned to the manufacturing factory.

Thus, production of unsuitable empties by using unspecified material without conforming to the user's need resulted in the wasteful expenditure of Rs. 11.39 lakhs.

The case was referred to the Ministry in March 1989; a reply has not been received (October 1989).

64. Production performance of a new pyrotechnic factory

Government sanctioned setting up of a new pyrotechnic factory (factory) in three phases at a cost of Rs. 15.59 crores to meet the increasing requirements of the Services for various types of illuminating ammunition, to indigenise the items which were being imported and to shift production of some from two ordnance factories. The details of works under the project alongwith the dates of their completion and expenditure incurred thereon were as under:

Phase	month of sanction	planned date of completion	actual date of completion	expenditure incurred (in crores of rupees)
I	January 1977	June 1979	June 1979	4.03
I(extension)	April 1979	March 1981	March 1982	0.83
II	July 1980	July 1983	June 1984	11.33

The factory was to undertake assembly and filling of the various items of pyrotechnic ammunition while hardware for production were to be obtained from other sister factories/trade.

Under phase-I, facilities for production of ten items on transfer from another ordnance factory were established in June 1979. Against this, only seven were productionised as no orders existed for two and one had become obsolete.

Under phase-I(extension), of the four items to be established, only one was productionised and one had become obsolete by the time the facilities were created. The remaining were transferred to phase-II of the project due to delay in development of the design of the items.

Under phase-II, out of 17 items including two from phase-I(extension) to be productionised under the phase only six were productionised. Of the remaining eleven there were no orders for productionisation of two and production of three were yet to be established. Meanwhile, the factory was utilising this capacity for increasing production of some other ammunition; five items were declared obsolete by the services and for one trade sources were developed.

Scrutiny of the production performance in respect of a major item (item 'P') constituting 50 *per cent* of the total value of production Rs.9.66 crores of the factory revealed the following:

The facilities for production of item 'P' at 65,688 numbers per annum were established in the factory in 1983-84. Army Headquarters placed indents in February 1983 and May 1984 for supply of 1,55,000 numbers of the item during 1983-84 to 1986-87. Actual total production during 1983-84 to 1986-87 was however only 82,856.

According to the Ordnance Factory Board (OFB) (September 1989), the shortfall in production was mainly due to embargo by the indentor to bulk production of the item till January 1985 pending final acceptance by the user. Shortfall in production resulted in import of 30,000 numbers of 'P' under a contract concluded by the Army in March 1986 at a cost of Rs. 9.75 crores, against the cost of production of Rs. 5.67 crores in the factory during 1986-87.

Production during 1983-84 to 1985-86 ranged between 3900 and 7400 against the installed capacity of 12,000 numbers per annum established in November 1981. The OFB intimated (September 1989) that capacity was set up for one item (shells) only and the other components were to be supplied by feeder factories. Due to some problem in feeder factories, supplies to Army were limited. To meet the requirments, Army concluded a contract for the import of 10,000 numbers of the item in November 1985 at a cost of Rs. 2.05 crores. Priced at the factory's cost of production during the year 1985-86 the value of item 'Q' imported, however, worked out to Rs. 1.10 crores approximately.

Thus, out of 29 different items to be productionised under the project sanctioned at a total cost of Rs. 15.59 crores, 14 only were productionised. Even after establishment of facilities the production of two major items fell short of the requirements of the Army necessitating the import of the items valuing Rs. 11.80 crores.

The case was referred to the Ministry in June 1989; and their reply has not been received (October 1989).

65. Delay in the completion of a modernisation project

The Director General, Ordnance Factories (DGOF) submitted a project proposal, in June 1986, to the Ministry for rehabilitation of the eroded capacity of the plants and their further augmentation in two ordnance factories (A and B) at an estimated cost of Rs. 19 crores. While the proposal was under consideration of the high level committee, DGOF submitted a limited proposal in December 1976 to instal four imported furnaces (hitherto lying unutilised) with supporting infrastructure and equipment at an estimated cost of Rs. 3.5crores for the immediate augmentation of brass melting and strip-making capacity in factory 'A'. The proposal, was sanctioned by Government, in August 1978, at an estimated cost of Rs. 3.95 crores (revised to Rs. 7.40 crores in September 1981) as phase 1A of the project to be completed by May 1983. In paragraph 16 of the Report of the Comptroller and Auditor General of India, Union Government (Defence Services) for the year 1985-86 delay in implementation of phase 1A of the project and under-utilisation of capacity created for production of cast strips for small arms ammunition were commented upon.

Audit noticed that under-utilisation of capacity under phase-1A continued. During 1986-87 and 1987-88, the capacity utilisation was 35.12 *per cent* and 44.92 *per cent* respectively.

Before completion of phase-1A of the project, Ordnance Factory Board (OFB) submitted a proposal, in December 1981, to the Ministry for modernisation and augmentation of brass melting and strip making capacities in factories 'A' and 'B'. Ministry sanctioned the proposal in February 1983 at an estimated cost of Rs. 33.83 crores, styled as phase-1B of the project. This was scheduled to be completed by February 1987, but is expected to be completed in June 1991.

Phase-1B cateres for creating hot and cold rolling, annealing, blanking and cupping facilities which were not provided under phase-1A with the expectation of an additional outturn of 900 tonnes of strips per annum with the same input of raw material and labour. The project included a programme for the deputation of a study team abroad for the evaluation and selection of the most suitable technology available. The project cost was revised from Rs. 33.83 crores to Rs. 53.66 crores on account of increased cost of plant and machinery proposed to be acquired on the basis of the recommendations of the study team and sanctioned, in September 1987, by Government.

Out of 18 machines required by factory 'A', orders for 16 costing Rs. 5.39 crores were placed during July 1985 to February 1988. Order for the two vital machines, rolling mills, for the project was concluded only in March 1989. All the 16 machines ordered were received during August 1986 to June 1989 of which only five had been commissioned till September 1989.

The civil works at Factory 'A' involved construction of a rolling mill shop (cost: Rs.1.68 crores) and external/internal services including flooring, machine foundation, etc.(cost: Rs. 1.36 crores). The approval of the siting board for the rolling mill shop was accorded, in May 1983 but the administrative approval for the work was issued in June 1984. The work was completed in July 1987 against the planned date of May 1985. The building was yet to be taken over (November 1989) after repair/rectification by Military Engineer Services (MES).

The sanction for the external/internal services was issued, in October 1987, with the planned date of completion in November 1988. The work was still in progress (November 1989). OFB stated, in September 1989, that external/internal services included foundation of major plants like rolling mills which could only be taken when order for the mills was placed which was issued only in March 1989. The completion of the rolling mill shop has been delayed by more than 24 months.

In factory 'B' out of 38 required, 36 machines costing Rs. 9.80 crores were ordered during February 1987 to October 1988. One of the remaining two was ordered on a firm in May 1987, but the order was subsequently cancelled, as the firm went into liquidation. A fresh order for this machine was being initiated by Director General of Supplies and Disposal (DGSD). The other remaining machine was tendered twice by DGSD when only one offer for Rs. 2.90 crores against the budgetory cost of Rs. 15.40 lakhs, was received. As the cost offer was too high, the machine was being retendered. Further development regarding procurement of these two remaining machines were not known. Out of 36 machines ordered, eight machines costing Rs. 6.5 crores were received during June 1987 to December 1988 but none had been commissioned so far (November 1989).

The civil works at factory 'B' involved (i) extension of rolling mill shop (cost: Rs. 62.16 lakhs) (ii) construction of new melting shop (cost: Rs. 183.17 lakhs) (iii) construction of residential quarters (cost: Rs. 88.13 lakhs) and (iv) conversion of 11 KV line to 33 KV line (cost: Rs. 56.87 Lakhs). The approvals of the siting board for the rolling mill shop, melting shop and the residential quarters were issued in May 1983, August 1983 and April 1984 respectively. The approximate estimate for the rolling mill shop was issued in March 1985 and those for the melting shop and residential quarters in May 1984 and September 1985 respectively. The planned date of the completion of rolling mill shop was March 1988, the work was still in progress (November 1989).

(a) The melting shop was completed in December 1987 against the planned date of July 1987 but the building had not yet been taken over (November 1989) pending rectification of defects.

(b) The construction of residential quarters and the conversion of 11 KV to 33 KV line were yet to be completed (November 1989). The completion of civil works has been delayed for periods exceeding six to 44 months and a major part of the delay was due to delay in finalisation of the estimates after the approval of the Siting Board.

Against the sanctioned expenditure of Rs. 53.66 crores, the anticipated expenditure on the project taking into account the committed liabilities was assessed as Rs. 60.99 crores in April 1989. Revised sanction had not yet been issued (November 1989).

Non-provision of rolling, annealing and cupping facilities in phase-1A of the project and providing these facilities in phase-1B yet to be completed and under-utilisation of capacity under phase-1A resulted in the following:

(i) During August 1983 to September 1983, factory 'A' and Department of Defence Supplies (DDS) placed six orders on trade for cold rolling of 3900 tonnes of factory produced cast strips from 13 mm to 6 mm thickness at a cost of Rs. 176.11 lakhs. Till February 1989, factory 'A' issued 3168.45 tonnes of cast strips to trade firms and received back 2941.96 tonnes rolled to 6mm thickness, 45.65 tonnes were rejected and returned as scrap to the factory and another 175.078 tonnes valued at Rs. 69.52 lakhs of rejected strips were held by the firms. For the rejected strips valued at Rs. 69.52 lakhs, factory'A' claimed Rs. 8.49 lakhs being the differences in cost between the strips issued by the factory and scrap. The firms, however, did not agree to pay the amount claimed. OFB stated in September 1989, that the matter was pending with DDS. Final outcome was not known.

During September 1983 to November 1984, three orders were placed on trade firms for cold rolling of 1300 tonnes of strips from 6 mm to 4.2 mm thickness at a cost of Rs. 57.03 lakhs. Till February 1989, the factory issued 781.18 tonnes of strips to the trade firms and got back 740.84 tonnes rolled to required thickness and the balance quantity valuing Rs. 19.28 lakhs was rejected.

(ii) To cover the deficiencies in the requirements of the brass strips, orders were placed during the period August 1987 to July 1988 on trade for conversion of 2866 tonnes of factory supplied scraps into strips involving an additional expenditure of Rs. 250.40 lakhs over the cost of conversion of factory'A'.

(iii) Due to shortage of strips 520 tonnes of brass cups costing Rs. 182.48 lakhs were imported for producing small arms ammunitions.

Thus, part of the delay and increase in the cost of the project were due to unrealistic estimation and sanction of the project of modernisation before the technology parameters were known. Delay in the completion of items of civil works ranged from 6 to 44 months. Due to providing of the downline facilities in phase-IB, the utilisation of capacity created under phase 1A was only 21 to 45 *per cent* during 1983-84 to 1987-88. Due to non-availability of rolling facilities orders for cold rolling of strips were placed on trade firms at a cost of Rs. 233.14 lakhs. 175.078 tonnes of strips valuing about Rs. 69.52 lakhs were lying with the firm in rejected condition after rolling and they did not agree to pay the difference in cost of Rs. 8.49 lakhs claimed by factory'A'. Due to shortage of brass strips 520 tonnes of brass cups were imported at a cost of Rs. 182.48 lakhs. While the capacity under phase-1A was lying considerably under-utilised, trade assistance was being taken for conversion of scraps into strips at a higher cost, involving Rs. 9.94 crores during 1983-84 to 1988-89.

The case was referred to the Ministry in May 1989 and their reply has not been received (November 1989).

66. Production of field gun ammunition

Government sanctioned two projects in August 1981 and October 1983 (Projects I and II) for the augmentation and establishment of capacities for the production of a field gun ammunition of four types (I, II, III and IV) in the ordnance factories.

Project I was sanctioned in August 1981 for Rs. 945.37 lakhs (including foreign exchange (FE) Rs. 187.60 lakhs) for augmenting the capacity at factories 'F' and 'K' for the production of shell bodies (shells) and cartridge cases (cases) of field gun ammunition type-I. The project cost was revised in November 1983 to Rs. 1065.37 lakhs involving a FE component of Rs. 357.60 lakhs.

Project-II was sanctioned in October 1983 at a cost of Rs. 1347 lakhs involving a FE component of Rs. 538 lakhs for setting up of facilities in factories 'G' and 'F' for the manufacture of shells and cases for three different types (II, III and IV) of field gun ammunition. The project was to be completed by February 1987.

Project-I was physically closed in December 1988 as against August 1985, the actual expenditure of the project up to the date of closure had not been compiled (July 1989). Project-II had not been completed (July 1989).

An audit scrutiny of the implementation of the projects and an assessment of the consequences of delay in completion brought out the following:

A. Delay in the completion of projects

Project-I

All the 30 machines required under the project were procured and with the exception of a shell forge press of imported origin, commissioned by September 1987.

For import of the shell forge press for factory 'K' at a cost of Rs. 141.43 lakhs, the Director General of Supplies and Disposals (DGSD) concluded a contract in November 1983 with a Public Sector Undertaking (PSU) and their associate abroad. The firms were to supply the press along with its layout and ancillary equipments, foundation drawing for building, between October 1983 and September 1984. The press was to be inspected by the Inspection Wing of an Indian Mission abroad (SW) before despatch. During inspection by the SW the press was found to deviate from the contracted specification. But the SW released (December 1984) it subject to satisfactory performance in factory 'K'. The press with its modified toolings was received by factory 'K' piece meal in September 1985/October 1986. After installation in factory 'K', the press failed in performance tests conducted during December 1986 to July 1987. The press was, however, accepted by the factory in February 1988 at a low rated capacity subject to settlement of reduction in price by the DGSD. The price settlement was yet to be completed (November 1989). The Ordnance Factory Board (OFB) intimated Audit in April 1989 that the SW did not directly intimate them regarding inspection of the press and that they came to know (December 1984), about the failure of the press in inspection when they offered their comments in January 1985 by which time the press was shipped (December 1984), without their clearance. Thus, due to lack of co-ordination between the SW, DGSD and OFB a press with rated capacity lower than required was supplied, which would affect the achievement of envisaged production of 4.80 lakh number of component I.

Project-II

The project involved induction of 63 new machines. Of these, 61 were received and 53 were commissioned till July 1989. Two vital machines (CNC Turning machines) costing Rs. 130.14 lakhs were yet to be received by factory 'G'.

For supply of one CNC machine by July 1987 DGSD placed an order in April 1986 on the PSU at a cost of Rs. 30.44 lakhs. The machine developed by the PSU failed in inspection three times and its delivery period was refixed as February 1989. The machine was yet to be received (November 1989). For supply of the other CNC machine of imported origin, by April 1987, the DGSD placed an order on firm 'P' in March 1986. The delivery date was refixed as April 1989 due to delay by DGSD in settling the commercial terms with the firm, deputing their inspection staff, and also due to unsatisfactory performance of the machine noticed during inspection. The machine was yet to be received (November 1989).

B. Consequences of delay

Project-I

Under project I factories 'F' and 'K' were to produce shells and cases for the field gun ammunition type I.

The actual production remained low due to delay in the implementation of the project and an attempt to fulfil the commitment by transfer of resource from another production line resulted in severe set back to the other production programme as detailed below.

During 1985-86 and 1986-87, factory 'K' procured 68,564 empty shells, from trade and another 85,611 shells from factory 'F'. Procurement from trade involved an extra expenditure of Rs. 111.07 lakhs with reference to the factory's cost of production. Further to meet urgent requirements of Army for type I ammunition, factory 'K' restricted the production of forging for another ammunition resulting in short-fall of type of that ammunition. Thus, short supply of forgings led to short-fall in production.

Project-II

Project II envisaged manufacture of shells and cases of field gun ammunition of types II, III and IV. The implementation of project-II was dependent on the implementation of two other support projects, sanctioned separately and delay in the completion of the support projects contributed to the delay in the completion of project-II.

At the planning stage of project-II it was envisaged that rough forgings for shells would be supplied by factories 'K' and 'L'. The supplies of forgings were, however, depended on the completion of separate project sanctioned for those factories at a cost of Rs. 20 crores (revised to Rs. 28.54 crores in September 1987) involving replacement of one old shell forge line by July 1987 in each factory. The old shell forge lines have still not been replaced in those factories and thus the envisaged inter-factory supply line had not opened up so far as planned.

At the planning stage it was also envisaged that brass blanks for cases would be supplied by factory 'N' on the completion of the project for augmentation of the capacities for brass melting and strip making in that factory. The delay in the completion of this augmentation project in factory 'N' resulted in the non-supply of brass blanks.

To conclude, Project-I sanctioned in August 1981 and scheduled to be completed in August 1985 was completed by December 1988; the delay in completion was due to non-commissioning of an imported shell forge press for its unsatisfactory performance. The press was eventually accepted at a low rated capacity. Due to non-availability of the forge press the forgings for shell were purchased from trade involving an extra expenditure of Rs. 111.07 lakhs and utilisation of its production line for forgings for another type of ammunition led to shortfall in the production of that ammunition. Project II sanctioned in October 1983 and scheduled to be completed by July 1987 was yet to be completed. Apart from non-receipt of two vital machines the implementation of the project was considerably affected due to non-completion of two other support projects. Both the support projects are expected to be completed by March/September 1990.

The matter was referred to the Ministry in July 1989 and their reply has not been received (October 1989).

67. Rejection of ammunition and its empty bodies

Empties of an ammunition were being procured from trade by factory 'A'. In August 1986, factory 'A' placed an order on a firm for supply of 65,000 empties at Rs. 100 each, and the quantity was increased by another 65,000 in April 1987. The store was to be inspected and cleared by the Senior Quality Assurance Officer (Area Inspector) before despatch. During 1987-88, the firm supplied 75,000 empties after those were cleared by the Area Inspector.

In January 1988, six lots of filled ammunition, produced by using the empties supplied by the firm, were rejected in proof by the Controllerate of Quality Assurance Establishment, Armaments (CQA), assigning the reason as defective filling by factory 'A'. Factory 'A' stated that the failure was due to defective empties cleared in inspection by the Area Inspector. In February-March 1988, factory 'A' carried out a proof check of the empties and rejected nine lots (value: Rs. 18 lakhs) cleared in inspection earlier as those failed in the pull test. Thus, six lots of filled ammunition valued at Rs. 24.74 lakhs and nine lots of empties costing Rs. 18 lakhs stood rejected.

In April 1988 all the rejected lots of filled ammunition and empties were retested in the presence of representatives of factory 'A', CQA, Area inspector and the firm,. Out of six lots of rejected filled ammunition, one lot was sentenced serviceable, two were rejected and the rest were sentenced serviceable subject to replacement of a component. Out of nine lots of rejected empties, four were sentenced as serviceable, two were rejected and the rest were sentenced serviceable in relaxation of the norm.

Five lots (10,000 in number) of filled ammunition valued at Rs. 20.62 lakhs and nine lots (18,000 in number) of empties valued at Rs. 18 lakhs were lying with factory 'A' without any utilisation or rectification, while the factory was facing a shortfall of more than fifty per cent in the target of production. The value of shortfall in production during 1987-88 amounted to Rs. 108 lakhs for 52,438 rounds of ammunition.

The case reveals that

- two lots of empties, costing Rs. 4 lakhs cleared by Area Inspector earlier, were rejected on re-inspection and another two lots of filled ammunition costing Rs. 8.24 lakhs were also rejected due to defective empties and defective filling.

- on re-inspection, three lots of empties costing Rs. 6 lakhs were declared serviceable in relaxation of norms but these were lying unutilised pending settlement of certain disputes between the factory and the inspectorate on testing parameters. Besides, three lots of filled ammunition costing Rs. 20.62 lakhs cleared in re-inspection subject to replacement of a component were also lying with the factory as the condition of the replacement of the component was not clear to the factory.

- inadequate supply of empties led to shortfall in production of filled ammunition, the value of which worked out to Rs. 108 lakhs.

The case was referred to the Ministry in June 1989 and their reply has not been received (October 1989).

68. Replacement of weighing machine

Ordnance Factory, Khamaria (factory) manufacturing a type of bullet since 1971 placed a demand on the Ordnance Factory Board (OFB) in February 1982 for procurement of four automatic bullet weighing machines at an estimated cost of Rs. 39 lakhs. The machines were required in addition to technical reasons, for meeting uninterrupted production commitments to meet the demands from State Governments.

The OFB, after an evaluation of the requirement of the new machines based on production programme for bullets for the year 1983-84 to 1986-87 approved, in September 1984, the procurement of two automatic bullet weighing machines' at an estimated cost of Rs. 19.5 lakhs. The OFB placed an indent in September 1985 on the Directorate General, Supplies and Disposals (DGSD) for the procurement of the machines. On the title sheet of the indent, the nomenclature of the machine was indicated as "automatic weighing machine", while the specification was for 'automatic bullet weighing machine'. DGSD advertised the brief nomenclature as indicated on the indent, in the trade journal and in the tender notices. The Ministry intimated Audit in January 1990 that OFB could have also indicated in the nomenclature that the machines were to weigh and segragate bullets automatically. Due to inadequate nomenclature, the Indian agent of the foreign firm did not respond to the notice. Only one Indian firm responded to the notice but could not be considered for want of technical capability.

As advised by DGSD in July 1986, OFB placed a fresh indent in November 1987 showing the correct nomenclature of the machines. Of the three firms responding to the tender call of DGSD, the technical bid of the foreign firm was found acceptable (October 1988) by OFB. However, as per the price bid furnished by DGSD in January 1989 the cost of the machines of Fritz-Werner make was about Rs. 2.11 crores. In view of the exorbitant cost i.e. more than 10 times of that estimated in 1982, OFB decided in March 1989 to drop the import proposal and to go in for indigenous development of the machine.

Meanwhile, in March 1988 the factory intimated OFB that due to considerable deterioration in the accuracy and reliability of the existing old weighing machines, only one lakh rounds of bullets could be inspected per day as against the target production/inspection of 1.80 lakh rounds per day. The Ministry, in reply to the observations of audit, stated in January 1990, that the short-fall in production was due to the old machines in production line and not solely because of the bullet weighing machines. The contention of Ministry is not acceptable as the OFB has been fixing annual production targets with reference to the capacity of the machines in the production line and the factory had clearly specified that the backlog in production was due to the inaccurate and old weighing machines.

Delay in replacing the old, inaccurate and unreliable weighing machines led to considerable short-fall (21.10 million rounds) in the production of bullets for the State Governments during 1987-88 and 1988-89.

The value of shortfall in production during 1987-88 and 1988-89 was about Rs. 8.44 crores at actual production cost of 1986-87.

69. Delay in productionisation of a chemical

'Picrite', an organic chemical manufactured from guanidine nitrate of 99 per cent purity (GN 99) is required in the manufacture of triple base propellants. The Ordnance Factory Board (OFB) decided to produce GN 99 by upgrading GN 90 already in production in Ordnance Factory, Bhandara which involved augmentation of production of GN 90 and installation of purification plant.

OFB submitted a project proposal in February 1982 to the Ministry.

The estimated cost was assessed as Rs. 404.57 lakhs and Government sanctioned the project in April 1982. The project was to be completed by August 1985. The project cost included cost of 30 tonnes of additives to be imported. Contract for import of purification-cum-additive plant was concluded with the firm in September 1982 at a cost of Rs. 347.12 lakhs.

Out of eight ancillary items seven were received by September 1986 and the remaining one in May 1987 and the plant was commissioned in May 1987. All other major items of plant machinery, ordered during January 1983 to February 1984, were received by August 1985 and except one, commissioned in November 1986. The remaining machine was commissioned in June 1987.

It was initially decided to instal the plant in one of the existing buildings in Ordnance Factory Bhandara but after detailed scrutiny, the plant supplier opined that the existing building would not be suitable and a complete building with total floor area of 85 square metres would be necessary. The pressure requirement of steam was also found to be higher than envisaged requiring additional operations of the plant, which were not visualised earlier. Thus, planning of the civil works fell short of actual operational needs, and this necessitated revision in the scope of civil works involving additional expenditure and delay in its completion.

Between March 1983 and January 1987 the sanctioned cost was revised three times from Rs. 404.57 lakhs to Rs. 572.76 lakhs. Increase in the sanctioned cost was due to purchase of a larger quantity of additives, revision in the scope of civil works and for supervision charges for foreign technicians. The expenditure booked till July 1988, was Rs. 663.71 lakhs. The Ministry intimated Audit in December 1989, that the total project cost was yet to be compiled.

As a result of delay in the commissioning and production of GN 99 at Ordnance Factory Bhandara, Ordnance Factory Itarsi imported 2160 tonnes of GN 99 costing Rs. 3.90 crores during November 1985 to February 1987.

As per the contract of September 1982 with the firm, a separate order for import of 350 tonnes of 'additive' costing Rs. 67.47 lakhs was placed in May 1983 and the store was received in May 1985. By the time the additives were received, OFB obtained a new technology in March 1985 free of cost from the plant supplier, for manufacture of GN 99 without the use of additive. As a result, 329 tonnes of imported additives valued at Rs. 63.41 lakhs remained unutilised. The Ministry stated in December 1989, that at the time of concluding the contract for old technology, the new technology was under development and the firm expressed (November 1983) that the new technology would be transferred free of cost once developed. Finally after development, the new technology was transferred in March 1985, by which time the additives had been shipped. The Ministry further stated that out of 329 tonnes of additives, 12 tonnes were sold back to the supplier firm at DM 5000 per tonne. The Ministry, however, did not state the reasons for not using of full quantity of additives as per old technology before adopting the new technology. Further, 12 tonnes of additives were sold at DM 5000 per tonne against the purchase cost of DM 5049 per tonne (including agency commission but excluding customs, freight etc). 317 tonnes of additive valued at Rs. 61.09 lakhs were still lying with Ordnance Factory Bhandara (October 1989).

Thus, there was delay in completing the project due mainly to not planning the civil works in accordance with sanctioned schedule which necessitated revision in the scope and involved additional expenditure. The delay resulted in import of GN 99 worth Rs. 3.90 crores. Further additives worth Rs. 67.46 lakhs were imported for use in the plant, but without using the entire quantity of additives, a new technology not requiring the use of additives, was obtained, consequently additives valued at Rs. 61.09 lakhs remained unutilised.

70. Excess consumption of materials

The 'estimate' for any item of manufacture in Ordnance factories, provides, *interalia*, the quantum of material required to manufacture the ordered quantity, and also an allowance for unavoidable rejection (UAR) in the process of manufacture. Rejection beyond the UAR percentage is treated as 'abnormal rejection' which is treated as loss requiring regularisation after investigation:

In exceptional circumstances, to cover some sundry jobs of non-recurring nature, material can also be drawn through "Non-Recurring Rate Forms, Material" (NRM) over and above that provided in the estimate.

In the following cases, the causes of abnormal rejection were not investigated, and the amount involved were not regularised.

(i) Factory 'A' was manufacturing worm wheel from casting. The estimate for manufacture of the component provides UAR allowance to the extent of 50 per cent. Against one warrant (I) issued in December 1985 for manufacture of 80 worm wheel, 136 castings against 120 numbers (including UAR allowance) as per the estimate were drawn. Similarly against another warrant (II) issued in April 1986, for 100 worm wheel, the section drew 224 number of castings against 180 (including UAR allowance) as per the estimate. Thus against warrant I the actual rejection exceeded the limit of UAR allowance by 16 number of castings valuing Rs. 3.34 lakhs and against warrant II the excess drawal was by 74 numbers valuing Rs. 14.55 lakhs. the total amount of abnormal rejection in these two warrants worked out to Rs. 17.89 lakhs which has not so far been regularised as loss under the existing procedure (December 1989).

(ii) Ammunition 'X' and 'Y' are two regular items of production in factory 'B'. The UAR allowance in the estimate in respect of cartridge case for both ammunition 'X' and 'Y', was to the extent of 2 per cent. Against a warrant of 1985-86, for 50,000 rounds of ammunition 'X', the total number of cartridge cases drawn was 52,005 as against 51,000 (including UAR allowance). Against another warrant of 1985-86 for 40,000 rounds of ammunition 'Y', the total number of cartridge cases drawn was 43,593 against 40,800 (including UAR allowance) authorised. Thus, the excess drawal of cartridge cases beyond the quantity (inclusive of UAR allowance) authorised under the estimate was 1005 numbers valuing Rs. 2.71 lakhs for ammunition 'X' and 2793 numbers valuing Rs. 4.45 lakhs. The excess quantities were drawn through NRMs to cover the 'abnormal rejection' involved in the process of manufacture which is not an authorised procedure. However the reasons for the abnormal rejection had not been investigated and the loss involved not regularised so far (December 1989).

Thus, the abnormal rejection valuing Rs. 17.89 lakhs in factory 'A' had not been regularised and factory 'B' unauthorisedly covered abnormal rejection (Rs. 7.16 lakhs) by drawing material through Non-Recurring Rate forms over and above provided in the estimates.

The case was referred to the Ministry in July 1989 and their reply has not been received (November 1989).

71. Supply of binoculars

Three indents were placed by the Ministry of Home Affairs in February/April 1972 on the Director General, Ordnance Factories (DGOF) for supply of 920 binoculars. The DGOF in turn placed three orders on the Ordnance Factory, Dehra Dun (factory) in July 1972/September 1973 for manufacture and supply of the indented quantity without specifying any time frame for delivery. The factory supplied 382 binoculars during December 1975 to April 1980 against the indent of April 1972 and thereafter stopped production of the item. The earlier indent of February 1972 for which order was placed by the DGOF in September 1973 was not taken up for production. Production against the indent of April 1972 was short-closed in June 1987 and the indent of February 1972 was finally cancelled without compliance in March 1988. Thus, the indent of April 1972 remained open for 15 years till its short-closure in 1987 and the indent of February 1972 remained open for 16 years without any action although materials and components required for executing the orders had been procured/manufactured.

Short-closure/cancellation resulted in rendering Rs. 4.88 lakhs worth of materials and components procured/manufactured against the orders surplus. As these material and components had no alternative use, loss statements were prepared in March 1989. The loss was yet to be regularised (November 1989).

The Report of the Board of Enquiry constituted in June 1988 to investigate into the circumstances in which the loss was incurred, had recommended in February 1989 that orders should be accepted only if capacity existed and supply should be made within a realistic time frame and once orders were accepted, all efforts should be made to complete the supply within the accepted time schedule. The Ministry in reply to audit observations, stated in September 1989 that the orders were short-closed/cancelled as low priority was accorded to the production of the item and the capacity of the factory was required to be utilised for the production of high priority items.

Since in the present case no time frame for delivery was fixed and the orders were accepted without assessment of the availability of production capacity, short-closure/cancellation of the orders, 15 to 16 years after the placing of indents resulted in a loss of Rs. 4.88 lakhs while keeping the indentor's requirements unfulfilled for an unreasonably long time.

Provisioning

72. Needless import of product-support

In order to stabilise bulk production of different varieties of an aviation ammunition, Ordnance Factory Khamaria (factory) requested the Ordnance Factory Board (OFB) in January 1986 to obtain certain product-support from a foreign licensor. OFB conveyed the request to the Ministry in March 1986. The offer of the licensor was forwarded by an Indian Embassy (Embassy) in February 1987 to the Ministry requesting that it be processed before 15th March 1987. The offer was valued at Rs. 67.48 lakhs for four items.

Ministry sought the recommendation of the OFB on the licensor's offer. OFB could not finalise its recommendations by the specified date and requested Ministry on 26th March 1987 to get the validity of the licensor's offer extended up to 30th April 1987 and to obtain from the licensor the unit price of the items in order to assess their reasonableness. In April 1987 Ministry requested the Embassy to obtain extension of validity from the licensor up to the end of May 1987 and to obtain the unit cost of the items. On 30th April 1987, OFB decided not to import the items from the licensor as product-support had been indigenously established by them. On 8th May 1987 OFB intimated Ministry that the proposal for import of four items had been dropped. Ministry instead of communicating the decision to the Embassy asked OFB to intimate the Embassy direct from their end. OFB intimated the decision to the Embassy in June 1987. However, the Embassy had concluded a contract with the licensor on 7th May 1987 for the full quantity of the four items at a revised cost Rs. 52.09 lakhs.

Embassy clarified in June 1987 that the contract was concluded with the licensor on the basis of detailed discussions held in April 1987 in India. However, at the time of concluding the contract there was no financial sanction, nor were the minutes of the detailed discussions held in April 1987 available. Faced with a fait accompli, the factory intimated OFB that the brass discs (valued at Rs. 47.45 lakhs) need not be imported while the other three items might be imported, even though these were indigenously available. The Embassy advised in June 1987 that since the contract had already been concluded, any cancellation at that stage would have adverse effect on the future responsibility of the licensor in regard to the supply of various critical items.

Since the contract had already been concluded, concurrence of the Associate Finance of OFB for the foreign exchange commitment of Rs. 52.09 lakhs was sought in October 1987. In February 1988, the factory confirmed that the items had arrived in India and Associate Finance agreed to the proposal in March 1988 in view of the fact that the stores as per contract had already arrived.

Thus, due to lack of coordination among the OFB, Ministry and the Indian Embassy and due to unauthorised action without recorded basis, items indigenously developed and available were needlessly imported at a cost of Rs. 52.09 lakhs in foreign exchange. As the contract was concluded before the issue of financial sanction, post facto issue of financial sanction was a mere fait accompli.

73. Non-utilisation of clothing material

In pursuance of Government's decision in 1981 to outfit the officers at certain levels of the Army with terywool suits, Army Headquarters placed four indents on the Ordnance Factory Board (OFB) for supply of a total 16.34 lakh suits at an estimated cost of Rs. 500 per suit for production in Ordnance Factory Shahjahanpur (factory) subject to the condition that size rolls were finalised and given to the OFB. Defence Institute of Physiology and Allied Science (DIPAS) which was required to prepare the size rolls, prepared a size roll for 788 persons and this was sent to the factory. 56 suits were sent to DIPAS for carrying out physical fitment trials. In January 1985 after the suits were inspected, certain modifications to the templates of the suits were suggested. DIPAS requested the factory to provide them with another lot of 56 suits with modified templates in order to enable them to carry out wider anthropometric survey and provide the size roll for all-India frequency distribution. The factory refused to modify the templates. DIPAS could not finalise the size rolls and specifications. In January 1986, Director General Ordnance Factories intimated the Army to short-close the quantity of suits at 11,000 numbers for which materials had already been procured and to treat the rest of the indents as cancelled. The indents had not been cancelled. It was decided by the Army in February 1986 not to cancel the indents but to keep those pending till finalisation of the specification.

During December 1984 to March 1986, the factory had placed orders for 33,246 metres of terywool cloth partly on a private firm and partly on the Director General of Supplies and Disposals (DGSD). Out of which 18,150 metres of cloth valued at Rs. 28.34 lakhs approximately had been received by the factory.

No decision had been taken regarding the specifications. The proposal itself was being reprocessed for obtaining a fresh approval of the Government. Due to non-introduction of terywool suits despite its authorisation six years earlier material procured by Ordnance Factory Shahjahanpur valued at Rs. 27.61 lakhs was lying unutilised for the last three years.

The case was referred to the Ministry in May 1989; no reply has been received (January 1990).

74. Acquisition of material without production programme

Factory 'A' was procuring shell forgings from factory 'B' for the production of shell bodies for an ammunition. In April 1985, the Ordnance Factory Board (OFB) while fixing the annual production programme for the four year period 1985-86 to 1988-89 indicated that during 1988-89 factory 'A' was to produce only the quantity outstanding against pending orders. As on 1st April 1987, factory 'A' had outstanding orders for 51,265 shell bodies for which 58,442 shell forgings (including rejection allowance) were required. The stock of shell forgings as on 1st April 1987, including dues-in from factory 'B' and unfinished shell forgings in the pipe line, was 55,425 numbers. Thus, for clearing the outstanding orders, factory 'A' needed a further quantity of about 3000 numbers of shell forgings. But in September 1987, factory 'A' placed an order on factory 'B' for supply of 14,000 shell forgings and the latter supplied 14,611. Consequent on discontinuance of production of shell bodies in factory 'A', from July 1988, 18,899 shell forgings valued at Rs. 114 lakhs became surplus including 14,611 valued at Rs. 88 lakhs procured from factory 'B' in 1987.

The case was referred to the Ministry in July 1989 and their reply has not been received (October 1989).

75. Purchase of aluminium rods

Ordnance Factory Board (OFB)/Ordnance Factory Kanpur (OFC) placed four purchase orders during June 1981 to October 1987 on a firm for supply of 2.20 lakh kgs of aluminium rod (rod) at rates ranging from Rs. 39.66 to Rs. 52 per kg.

It was seen in audit that during the same period of time, the firm was showing a much lower cost of manufacture of rod by it for captive use for conversion of such rods into forgings against conversion orders placed by OFB/OFC. As per Central Excise Act, rods manufactured for captive use for conversion into forgings attracted payment of excise duty in addition to excise duty payable on the finished product i.e. forging.

The factory while accepting the higher rates for outright purchase of rod was aware from excise gate passes, in support of payment of excise duty by the firm against conversion orders, that the same rod actually had a lower sale price. But this information was not used by cross linking to the best advantage of Government and higher rates were accepted without comparison.

The Ministry in reply to audit observations stated (November 1989) that the comparison of cost worked out by Audit was not acceptable to them due to the following reasons:

(i) the rods were of different dimensions and different specifications;

(ii) while the rods for captive use were manufactured from scraps supplied free of cost by the factory, the rods supplied as finished products were manufactured from material procured from market;

(iii) excise gate passes indicated only the cost of material and not the sale price.

The reasons advanced by the Ministry are not tenable as:

(i) the supply orders for finished rods and for base forging using the rods in the process of manufacture, showed that both the types of rods conform to the same technical specification. Difference in dimensions is not material as price had been charged on weight basis;

(ii) the cost of rods captively used by the firm had actually been computed based on market price of ingots and not on the basis of scraps supplied free by the factory;

(iii) gate passes did not only indicate the cost of material but also indicated the sale price including the cost of production or manufacture and profit.

Thus, the OFB/factory made outright purchase of 2.20 lakh kgs of rods at higher rates ignoring the fact that the sale price of rods of similar specification manufactured by the same firm was much less. Purchase at higher rate involved extra liability of Rs. 42.21 lakhs.

76. Recovery of advance payments

In May 1973, Government recognised the saw mill of Madras Sapper Ex-Serviceman's Rehabilition Association (Association) as an ancillary industry to the ordnance factories for supply of, among other items, ammunition boxes. The order of May 1973 (extended from time to time) *interalia* contained a concession of 'on account payment' of 50 per cent of the value of supply likely to be made by the Association over a period of 12 months. Recovery of the amount of 'on account payment' was to be on pro rata basis from bills submitted by the Association.

During August 1983 to January 1985, Ordnance Factory Board (OFB) placed five orders on the Association for supply of three types of ammunition boxes to Ordnance Factory Chanda and a total amount of Rs. 92.57 lakhs as 'on account payment' was made.

Out of five orders placed, the Association completed supplies against two only within the delivery period extended by about six months.

Though supplies against four orders placed during August 1983 to July 1984 remained incomplete and an amount of Rs. 41.50 lakhs of 'on account payment' made against these orders remained unadjusted, the OFB placed yet another order in January 1985, and an amount of Rs. 24.44 lakhs was paid as 'on account payment' against the order.

Since the Association went into liquidation in April 1986 without completing supplies against three orders, a total amount of Rs. 43.13 lakhs paid as 'on account payment' for these orders remained unrecovered. The unrecovered amount included Rs. 18.66 lakhs being the unadjusted amount of 'on account payment' made against the order of January 1985.

Thus, though the performance of the Association was not satisfactory, OFB placed orders on them and sanctioned 'on account payments'. This resulted in rendering Rs. 43.13 lakhs unrecoverable of which Rs. 18.66 lakhs could have been avoided if OFB had taken into account the unsatisfactory performance of the Association in respect of earlier orders before placing the order in January 1985.

The case was referred to the Ministry in May 1989 and their reply has not been received (January 1990).

77. Purchase of piston assembly

Piston assembly 'air' and piston assembly 'exhaust', two components of the engine of a vehicle were being imported from a foreign firm as proprietary articles since the commencement of productionisation of the vehicle in an ordnance factory (factory). In May 1971, the Ministry constituted a Technical Committee for speedy indigenisation of various imported parts of the vehicle. Efforts made from 1971 till 1979-80 to indigenise these two components with trade assistance did not succeed.

In April 1983, the firm asked the factory, to indicate their requirements of two to three years as many items of regular supply had become obsolete. The factory assessed the long term requirements of each category of components. During negotiation, the firm offered the rate of £ 160 each for a quantity of 2000 numbers of the components of each category, and agreed to hold the same price for an additional quantity 5268 numbers of piston assembly 'air' and 5190 numbers of piston assembly 'exhaust'. Thus, the firm offered to supply a total numbers of 7268 piston assembly 'air' and 7190 numbers of piston assembly 'exhaust' at £ 160 each. Against this offer, supply order on the firm was placed in December 1983 for supply of 6892 piston assembly 'air' and 6814 piston assembly 'exhaust' at £ 160 each although order for the entire quantity for which negotiated rate advantage was available, could have been placed. As per the directive (February 1984) of the Ministry, efforts were again made from February 1984 to indigenise the production and two development orders on two trade firms were placed in September 1986 but successful development was yet to be achieved (October 1989). Meanwhile, another order for supply of 5226 numbers of each of the components at £ 244.61 each was placed on the firm in August 1986. Out of 5226 numbers of components of each category, 376 numbers of each category could have been purchased in December 1983 itself at the negotiated rate of £ 160 each.

Thus, due to not availing the full advantage of the negotiated rate, an extra expenditure of Rs. 11.18 lakhs in foreign exchange was incurred in subsequent procurement of the same components at higher rate.

78. Heat treatment of gun barrels

Metal and Steel Factory, Ishapore (factory), has two oil quenching tanks for heat treatment of gun barrels (barrels) and forgings for other ordnance stores. For heat treatment purpose, each of the tanks is required to be topped up with 3000 litres of fresh quenching oil (oil) per month. With repeated use over a period of time, the oil gets contaminated and requires to be replaced by fresh oil, as contaminated oil is detrimental to quenching operation of barrels when heat treated. During 1983-84 to 1986-87 (July 1986), of the 1050 barrels heat treated, 227 failed to achieve required physical properties after heat treatment and were subsequently heat treated again at an extra cost of Rs. 24.30 lakhs.

Audit investigation into the circumstances in which 227 heat treated barrels required reheat treatment brought out the following:

(i) The level of viscosity, flash point etc. of oil in use in the tanks were being assessed based on rise in oil-temperature after heat-treatment. This at best provided rough guidance based on experience and could not substitute regular technical examination.

(ii) During 1983-84 to 1985-86, the factory assessed, on adhoc basis, its requirement of fresh oil as 28,085 litres and received 26,445 litres. During 1986-87, after systematic assessment, the factory assessed its requirement as 1,40,000 litres of fresh oil and received 1,43,500 litres. This showed that, while bulk of the requirement of fresh oil by the factory was being met, the factory had failed to assess correctly its requirement of fresh oil during 1983-84 to 1985-86. The fact that during 1986-87 the requirement was more than of the requirements of three previous years taken together goes to show that lack of a systematic basis for assessment resulted in unrealistic provisioning action and consequently fresh oil required for topping the tanks to the required level was not available during this period. Ministry in reply to audit observations stated, in December 1989, that the main reason for not changing the oil earlier was mainly due to non-supply of the particular oil by IOC. It added further that the factory was using along with fresh oil some old oils also, which was having higher viscosity but technical means. The contention of the Ministry was not tenable as the assessment of requirement by the factory was unrealistically low for the period 1983-84 to 1985-86 as was evidenced from a sudden spurt in requirement during 1986-87.

(iii) During 1983-84 to 1986-87(July 1986) 299 barrels were rejected in inspection. Of these, 227 were on account of failures in heat-treatment. These barrels had to be re-heat treated.

(iv) In July 1986, the tanks were flushed and fresh oil was used. This immediately brought down the failures in heat-treatment. In July-August 1986 the factory disposed of 54000 litres of contaminated oil collected during flushing of oil from the tanks. The Board of Enquiry constituted in July 1987 confirmed that against the requirements of 3000 litres of fresh oil per month required for topping up the tanks, only 300 litres per month on an average was being used necessitating the use of large quantity of contaminated oil for achieving the desired oil level in the tanks.

Thus, adhoc assessment of requirement of fresh oil for quenching tanks resulted in the under-provisioning of fresh oil, which led to the use of oil below standard which resulted in failure of heat-treatment and barrels had to be re-heat treated at an extra expenditure of Rs. 24.30 lakhs.

79. Excess payment of excise duty

Audit examination of purchase records and the practice of scrutiny of suppliers bills brought out the following cases of avoidable excess payment of central excise duty:

(a) Ordnance Factory Board placed two purchase orders in November 1985 and January 1986 on firms 'A' and 'B' for supply of two types of laminated paper containers to a factory. Both types of containers attracted excise duty at the ruling rate on the date of despatch. The rate at the time of finalisation of contracts was 12 *per cent*. From March 1986, these two types of containers became wholly exempted from the levy of excise duty.

While firm 'B' did not claim payment of excise duty from the factory for the supplies made from March 1986, firm 'A' however, claimed excise duty for Rs. 2.34 lakhs for the supplies made from March 1986.

Thus an extra payment of Rs. 2.34 lakhs was made to firm 'A' which had not been recovered.

(b) During 1984 to 1986, Ordnance Factory Board/ ordnance factories purchased certain items of ammunition from firm 'C', which had been registered with National Small Scale Industries Corporation, for supply of certain ammunition items. The rate of excise duty which was earlier 10-12 *per cent* was increased to 15 *per cent* in respect of these items of ammunition for 1986-87. In February 1987 the Central Excise Department declared firm 'C' as a small scale industry from April 1986 under Government Notification of March 1986 which envisaged payment of excise duty at the rate of 5 *per cent advalorem*. The firm thus got the benefit of paying excise duty at 5 *per cent advalorem* from April 1986 against 15 *per cent advalorem*. Meanwhile, the firm which paid excise duty at 15 *per cent* under protest for the supplies made by them to the factories during April 1986 to January 1987 recovered Rs. 6.92 lakhs from the factories. Subsequently, when the firm was allowed the benefit of paying excise duty at the lower rate of 5 *per cent* for the supplies made during April 1986 to January 1987, they got the refund of difference in excise duty amounting to Rs. 6.79 lakhs (including Rs. 4.61 lakhs in respect of these five orders). The firm, however, did not pay back the amount received as refund, to the factories. After the audit observation was communicated, the factory held back the amount from the current bills of the firm relating to some other supplies.

Thus, passing of bills without reference to the tariff schedules resulted in avoidable and excess payment of excise duty.

The case was referred to the Ministry in July 1989; reply has not been received (October 1989).

80. Bulk order without development trials

To meet the production target of a type of fuse (fuze), Gun and Shell factory, Cossipore, (factory), in addition to its own production, was taking trade assistance for machining of brass stamping for rough bodies supplied by them.

To locate one more trade source, the factory in 1986, placed a development order for machining 100 rough bodies on a firm at Rs.9 each with an option clause to increase the quantity to 10,000. The firm offered their rate in April 1986 in response to a verbal request of the factory made on consideration that the firm was a small scale unit having CNC machine. As per the order, the firm was to submit 20 advance samples within 15 days of collection of the rough bodies, from the factory and to complete the bulk supply within two months after clearance of advance samples by the Inspectorate. The factory issued 1050 rough bodies to the firm in May 1986 after obtaining a bank guarantee for Rs. 0.64 lakh. The advance samples were cleared by the Inspectorate in June 1986 but the firm supplied only 536 machined bodies in August-September 1986, of which 40 were lost in transit. Though the firm failed to comply with the stipulated delivery period, the factory increased the ordered quantity to 10,000 in October 1986 and provided for issue of an additional quantity of 9000 bodies. The revised delivery schedule to complete the supply of the increased quantity was stipulated as 31st December 1986.

During November 1987 and April 1988 the factory issued a total quantity of 9450 rough bodies to the firm against a fresh bank guarantee of Rs. 10 lakhs valid upto 30th June 1989.

The firm supplied 3000 numbers of machined bodies valued at Rs. 3.72 lakhs (including cost of rough bodies) in October 1988 after clearance by the Inspectorate. The entire quantity was rejected by the factory in November 1988 due to stains and improper passivation. The factory intimated in March 1989 that the rejected bodies would be re-passivated in the factory at firm's cost and the firm would be allowed to supply the balance quantity in white condition without surface treatment at a reduced rate. It was observed by audit that till October 1989, no action to re-passivate the bodies had been taken by the factory, nor had the firm supplied the balance quantity of machined bodies. 3000 rejected machined bodies (value: Rs.3.72 lakhs) were lying in the factory (October 1989). Out of a total number of 10,500 rough bodies issued to the firm, 6745 numbers valuing Rs. 7.75 lakhs were lying with them (October 1989). The bank guarantee not having been renewed after its expiry on 30 June 1989, recovery of the cost of the outstanding rough bodies could not be ensured.

Thus, due to placing bulk machining orders without assessing the capability of the firm, rough bodies valued at Rs. 7.75 lakhs became irrecoverable with the expiry of the bank guarantee. Further failure of initial inspection resulted in the acceptance of defective machined bodies valued at Rs. 3.72 lakhs. These irregularities call for an investigation and fixation of responsibility.

The case was referred to the Ministry in August 1989 and their reply has not been received (October 1989).

81. Procurement of defective steel tubes

For procurement of 15,670 metres of steel tube for manufacture of empty torpedo tubes an ordnance factory (factory) issued a limited tender enquiry (TE) in July 1986 to seven firms stipulating four alternative specifications approved by the Controllerate of Inspection Ammunition. In response to the TE, four firms offered rates ranging between Rs. 35.05 and Rs. 118.26 per metre. The offers were considered by the tender Purchase committee in August 1986. At that stage the committee however on technical grounds decided to consider only one of the specifications as acceptable. The fact that only one of the four specifications was acceptable on technical grounds was not known to the tenderers. Only firm 'S' had tendered according to this specification. This was the third lowest offer quoting Rs. 110 per metre. Acceptance of tender was issued to firm 'S' on 20 August 1986 for supply of 15,670 metres of tube with the delivery schedule as 9000 metres by September 1986 and the balance by the end of November 1986 or earlier. This amounted to approving the contract on single tender basis.

The firm supplied 6235.12 metres of tube valued at Rs. 6.86 lakhs between November 1986 and March 1987 after inspection by Inspectorate of Armaments in the firm's premises. During processing of the tubes by the factory in November 1986, defects like dents on outer surface, longitudinal deep scratches on the inside surface and rust were noticed. The factory asked the firm in December 1986 to study the defects and eliminate them in future supplies. However, the subsequent supplies also had the same defects, and out of 6235.12 metres supplied till March 1987 a total quantity of 5427.38 metres valuing Rs. 5.97 lakhs were rejected. Since the firm did not replace the rejected stores, the factory foreclosed the order in August 1987 at the quantity supplied till March 1987. The factory asked the firm in August 1988 after foreclosing the order, to replace the rejected quantity but the firm refused on the plea that the stores supplied had duly been inspected by the inspecting officer before despatch and these had already been accepted by the factory and full payment had been made. The entire quantity of the rejected store valuing Rs. 5.97 lakhs was lying with the factory (October 1989).

OFB, while accepting the fact that the tender enquiry did not reveal a preference for any one of the four specifications contended that the decision of the Tender Purchase Committee to restrict consideration to only one specification was based on dimension, tolerance and other technical and reliability factors. The contention of OFB was not tenable as OFB had itself admitted that the four specifications were equally acceptable and no new factor could be introduced at the stage of evaluation of tender.

The case was referred to the Ministry and their reply had not been received (January 1990).

82. Purchase of unsuitable chemical

Ordnance factory, Varangaon (factory) required a chemical for manufacture of two components of an ammunition. In January 1985, the factory placed a demand on the Ordnance Factory Board (OFB) for procurement of 3700 Kgs of the chemical. The OFB placed an indent on Supply Wing (SW) of the Indian Mission in London in October 1985, i.e. nine months after the placement of the demand by the factory for the import of 3700 kgs of the chemical and SW concluded a contract in June 1986 for supply of the indented quantity at a total cost of Rs. 4.69 lakhs. As per the contract the store was to be inspected by SW before packing. This clause was subsequently amended in September 1986 as the inspection wing of SW was wound up and no agency was available for inspection. As per the revised inspection clause, the firm was to furnish a test certificate alongwith the store.

In September 1986, in view of the critical stock position of the chemical, the factory approached OFB for airlifting 1000 kgs. OFB sanctioned (November 1986) airlifting 800 kgs at an estimated cost of Rs. 0.44 lakh. The quantity airlifted was received in the factory in January 1987. The warranty and test certificates were received only in April 1987. However, on testing, the chemical was found unsuitable as the sodium content was higher than specified. The entire consignment was rejected.

The factory asked the firm in May 1987 to replace the rejected consignment immediately under warranty clause of the contract. Another consignment of 2900 kgs of the chemical was received by the factory in May 1987 but the entire consignment was again rejected due to the same reason. In June 1987, the factory asked the firm to replace the entire rejected quantity of 3700 kgs.

The firm supplied fresh samples of the chemical in December 1987 and February 1988, but on test, the samples were not found suitable by the factory. OFB intimated Audit in October 1989 that the firm had airlifted five kgs of fresh samples in March 1989, which was under collection from customs authority. On receipt of the same the chemical test and practical trial will be conducted. Final outcome was, however, not known (October 1989). Meanwhile rejected store valuing Rs. 4.69 lakhs was lying with the factory since 1987 without any alternative use.

It is, thus, clear that there is need to have more effective procedures for testing stores bought abroad so as to ensure that once these are imported they do not get rejected as sub-standard and can be used up without delay.

The case was referred to the Ministry in July 1989 and their reply has not been received (October 1989).

83. Scrapping of usable store

Ammunition Factory, Kirkee was producing an ammunition from empty components supplied by the Gun and Shell Factory Cossipore. The ammunition was also being exported against orders. Consequent on the short-closure of an export order in 1978, components etc. manufactured/procured by both the factories became surplus. Kirkee factory was holding surplus components valued at Rs. 28 lakhs and Cossipore factory Rs. 17.67 lakhs. In October 1984, Kirkee factory approached the Ordnance Fac-tory Board (OFB), for a fresh order for 20,000 numbers of the ammunition from the Army to utilise the surplus holding. However, while approaching the OFB for a fresh order from the Army, Kirkee factory did not take into account the surplus components etc. valued at Rs. 17.67 lakhs held by Cossipore factory, which was its feeder factory. OFB requested the Army for order in November 1984 and the latter placed an order for 77,400 numbers of the ammunition in March 1987. While OFB was negotiating with the Army for orders, Cossipore factory was not asked at any stage to hold the surplus components for prospective utilisation. The factory processed disposal action of the surplus components held by them and after obtaining the approval of the OFB (December 1986) scrapped the components in March 1987. However after obtaining a fresh order from the Army in March 1987, the OFB in June placed orders on Kirkee factory for manufacture of the ammunition. The feeder factory intimated that the components had already been scrapped and that it was not in a position to manufacture the components due to non-availability of capacity. To manufacture the ammunition against the order of the Army, Kirkee factory took action in April 1989 to procure the components from trade sources. The final outcome was not known (October 1989) but in the meantime more than two years have passed without acquiring the feeder components.

The case revealed that due to lack of co-ordinated action, proposal to utilise the surplus components was processed without taking into account the surplus holding of the feeder factory which was allowed to be disposed of while fresh orders were being negotiated. The discharge of the indent has been delayed by more than two years.

The case was referred to the Ministry in May 1989 and their reply has not been received (October 1989).

84. Delays in procurement

Audit scrutiny of the following cases of procurement of plant and machinery, tools, etc. revealed deficiencies in initiating the demands and processing the indents, avoidable delays at all stages, failure to include option clause, etc. resulting in extra expenditure of Rs. 91.77 lakhs.

Case-I

In November 1982, Ammunition Factory, Kirkee, proposed to the Ordnance Factory Board (OFB) for replacement of one lead antimony extrusion plant at an estimated cost of Rs. 35.35 lakhs. The proposal did not include spares required. In January 1983, the factory obtained a quotation, from a firm for Rs. 35.50 lakhs valid for three months, for an imported plant. The factory approached the Director General Technical Development (DGTD) for import clearance in August 1983. Import clearance was finally accorded by DGTD in May 1984.

The validity of the firm's offer of January 1983 expired and the firm revised (June 1984) the offer to Rs. 58.50 lakhs, valid up to December 1984. OFB placed an indent for the plant on Director General of Supplies and Disposals (DGSD) in January 1986 at an estimated cost of Rs. 35 lakhs without taking into account the cost increase communicated by the factory. In February 1986, DGSD called for additional copies of specifications and likely sources of supply which were furnished by the factory in March 1986.

In response to DGSD tender enquiry, only one firm submitted two offers for an imported plant. The first offer was for a 500 ton plant at a cost of Rs. 2.18 crores and the other offer was for a 250 ton plant at a cost of Rs. 1.65 crores. OFB released Rs. 92 lakhs and requested DGSD to place a Letter of Intent on the firm. In December 1986, DGSD informed OFB that the funds required would be Rs. 1.35 crores. During negotiations with the firm in January 1987, the requirement of funds increased to Rs. 1.49 crores which were released by OFB in March 1987. DGSD concluded the contract with the firm in August 1987 at a total FOB cost of Rs. 63.89 lakhs including agency commission at 10 per cent. Erection charges of Rs. 0.98 lakh were payable extra. According to the factory, the escalation in cost was basically due to fluctuations in exchange rate. This was not entirely correct as the increase in basic price of the plant alone was to the extent of Rs. 28.39 lakhs.

The plant was to be delivered within 14 months from the issue of order and opening of the letter of credit. The letter of credit was opened in April 1988. The plant was yet to be received by the factory (July 1989).

Thus, avoidable delays in processing the case at various stages resulted in escalation in the cost of the plant from Rs. 35.35 lakhs to Rs. 63.89 lakhs.

Due to non-availability of the plant, the factory placed orders on trade for outright purchase of 140 tonnes of lead antimony alloy wire (value: Rs. 44.86 lakhs) and fabrication orders for 716 tonnes (value: Rs. 48.31 lakhs) of the antimony alloy wire out of raw materials to be supplied by the factory.

Case-II

Based on a budgetary quotation, Ordnance Factory Khamaria, placed a demand on the OFB, in October 1982, for procurement of a universal grinding machine. OFB, after examining the factory's proposal, placed an indent on DGSD in May 1985 at an estimated cost of Rs. 15 lakhs.

DGSD forwarded the bids of nine firms in August 1985 to the OFB and the factory for technical-scrutiny and recommendation. The offers of firms 'A' and 'B' were found technically acceptable (July 1986). On the assumption that the lower offer on firm 'A' would be accepted, OFB made an additional commitment of Rs. 5 lakhs in July 1986. In September 1986, OFB asked DGSD to place order of firm 'A'. Due to revision of exchange rate effective from October 1986, DGSD asked OFB to provide additional fund for Rs. 12.47 lakhs which was provided by OFB in December 1986. DGSD accordingly placed the order on firm 'A' in February 1987 for Rs. 32.47 lakhs. The machine shipped by firm 'A' in March 1989 was yet to be received.

Thus, there was excessive delay at all stages and a proposal initiated in 1981 for replacing a machine was yet to fructify.

Case-III

Gun Carriage Factory, Jabalpur assessed in 1983 that the tools for machining of four components received along with an imported jig boring machine had outlived their life and some more items of tools had become necessary. The factory obtained the rates from a foreign firm in April 1983 which were valid up to August 1983. The factory placed a demand for 44 items of tools costing Belgian Franc (BF) 37.60 lakhs on OFB in July 1983 without furnishing essential supporting documents. Associate Finance of the OFB concurred in the propsoal in August 1984. Foreign exchange was however released in May 1985 after a fresh study of the requirements. Orders for supply of the items was placed by the Supply Wing of an Indian Mission abroad in August 1986 for supply by March 1987. The tools were received in the factory in March 1988 and taken on charge in September 1988 after expiry of the warranty period. Since the rates were valid up to August 1983 and the order could be placed only in August 1986 for BF 54 lakhs, an extra liability of BF 16.40 lakhs (Rs. 3.34 lakhs) had to be borne due to delay in placing the supply order.

Analysis by Audit of the reasons for delay, brought out that in addition to the submission of the proposal without supporting documents by the factory, incorrect information in regard to commissioning the machine was also furnished by the factory which delayed the decision making process. Further there were delays in complying with the piecemeal observations of the Associate Finance and in the flow of communication along the decision making channel.

Case-IV

In response to a tender enquiry issued by the ammunition Factory Kirkee, in January 1986, firm 'C' offered to supply 20,000 fuzes at a fixed price of Rs. 475 each and firm 'D' 10,000 fuzes at a fixed price of Rs. 500 each. Both the firms offered a 'buyer's option clause' to increase the respective quantity up to 50,000 numbers at the same rate. Orders were placed by the factory on firms 'C' and 'D' in August 1986 for 20,000 and 10,000 numbers respectively without the 'buyer's option clause.' Firm 'C' completed the supplies by October 1987 (extended) and firm 'D' by July 1987 (extended). During the currency of the two contracts while supplies by firms 'C' and 'D' were in progress, the factory purchased additional number of fuzes at higher prices.

A saving of Rs. 42.42 lakhs on purchase of 70,000 fuzes could have been effected had the 'buyer's option clause' been incorporated as offered by both the firms.

OFB stated in July 1989 that the 'buyer's option clause' was not included in the purchase orders in view of (i) availability of sufficient stock and dues of the item, (ii) lower price trend noticed inthe offer of firm 'C' (iii) according low priority to the item, and (iv) locating new sources of supply. The contention of OFB, was not acceptable as inclusion of 'buyer's option clause' in the purchase orders would not have made it mandatory for the factory to subsequently place orders, on the firms at the contracted rates when the market rate was lower.

All the four cases were referred to the Ministry in March-July 1989 and their reply has not been received (October 1989)

85. Non-extension of bank guarantee

In June 1983, the Ordnance Factory, Katni placed an order on a firm for supply of 100 tonnes of brass strips by conversion of scraps and virgin material to be supplied by the factory. The strips were to be delivered by August 1983 or earlier.

As per the order, the firm had to furnish necessary bank guarantee for an amount equivalent to the value of raw materials, to be lifted by it. Before lifting 30 tonnes of the material valued at Rs. 9.02 lakhs in August 1983, the firm furnished a bank guarantee for Rs. 9.10 lakhs valid up to 31st December 1983. On the request of the firm, the factory extended the delivery period in the order up to November 1983.

In September 1983, the firm submitted 18.50 tonnes of strip to the Controllerate of Inspection, Metals (CIM), for inspection. The CIM, however, did not inspect the store, and in January 1984, the Inspector of Armaments (I of A) was appointed as the inspecting authority. Again on the request of the firm, the delivery period was extended further up to 15th February 1984 by the factory. The firm submitted 15 tonnes of strip to the I of A in February 1984 for inspection but the entire quantity was rejected (March 1984).

In April 1984, the factory again on the request of the firm, extended the delivery period up to August 1984 and the bank guarantee was extended up to that date. In September 1984, the firm again requested the factory for extension of delivery period and also approached the bank for extension of the bank guarantee up to February 1985 which was granted. In view of critical financial position of the firm, the bank guarantee was not extended further. The Ordnance Factory Board however extended the delivery period up to November 1985 though the validity of the bank guarantee had already expired.

The firm had supplied only 6.12 tonnes of finished strips to the factory and was holding 23.42 tonnes of raw material valued at Rs. 7.04 lakhs. In July 1987, the firm intimated that they had stopped functioning.

As the opportunity of encashing the bank guarantee for recovery of dues had already been lost, the factory filed a civil suit against the firm in July 1987 claiming Rs. 7.04 lakhs. The court passed an *ex-parte* decree (September 1988) in favour of the factory. The decree had not been executed (October 1989) The prospect of realisation is remote as the firm was closed due to poor financial condition.

Thus, due to grant of extension of delivery period by the factory without ensuring validity of the bank guarantee, the very objective of obtaining the same as measure of safeguard of Government interest could not be achieved and this resulted in Rs. 7.04 lakhs becoming irrecoverable.

The case was referred to the Ministry in June 1989 and their reply has not been received (December 1989).

86. Inspection of stores

Ordnance Facory Board (OFB) placed an order on a firm in August 1983 for supply of brass strips of which 17.5 tonnes were to be supplied to Ordnance Factory, Varangaon (OFV). The stores were to be inspected by the Senior Inspector of Armaments (I of A). The order contained a warranty clause, valid for 12 months from the date of receipt of the stores at consignee's end, under which the supplier was liable to replace any defective stores, found during the warranty period. Out of 17.5 tonnes required by OFV, the firm supplied 12.1 tonnes of the stores between November 1984 and January 1986 after those were inspected and cleared by I of A. A total amount of Rs. 6.77 lakhs was paid to the firm. On local inspection in the factory, 5.7 tonnes valued at Rs. 3.19 lakhs of the stores were rejected only in November 1986 and April 1987, the factory asked the firm to replace the rejected stores. The firm refused (June 1987) on the grounds that the stores were issued after due inspection by the inspecting officer and the issue of rejection was raised nearly two years after despatch of the stores. Finally in July 1987, the firm intimated that they had suspended all operations due to unavoidable circumstances. An amount of Rs. 3.19 lakhs being the cost of rejected materials already paid for on the basis of clearance issued by I of A became irrecoverable. The OFB intimated Audit in October 1989 that the firm was intimated about the defects of the store in November 1985 but as seen in audit the discrepancy pointed out in November 1985 was regarding packing of the stores and not regarding specification.

The Quality Assurance Establishment (formerly I of A) stated in July 1989 that during inspection, the hardness, thickness etc. of the stores were found to be within the specified limits and that the practical trial and discrepancy against curvature on width etc. did not form part of specification. They further stated that the stains observed in the stores which was another reason for rejection, might have developed due to long storage at consignee's end. They also added that had the factory raised the defect reports within the warranty period, replacement of the rejected store could have been arranged.

Thus, delay by the factory in inspecting and raising the defect reports for the rejected stores within the warranty period resulted in a loss of Rs. 3.19 lakhs becoming irrecoverable as the supplier had already stopped operations.

The matter was reported to the Ministry in July 1989 and their reply has not been received (December 1989).

Plant and Machinery

87. Purchase of machines based on incorrect specification

Cordite Factory, Aruvankadu placed a demand on the Ordnance Factory Board (OFB) in March 1980 for three high capacity presses for extrusion of rifle size cordite by solvent process, in replacement of 29 old presses. In identifying the nature of the materials to be handled, the factory specified the complete composition and sizes of the materials including approximate solvent content as 'up to 35 *per cent*'. The OFB placed an indent on the Director General of Supplies and Disposals (DGSD) in October 1981 for procurement of three presses. A contract was concluded with a foreign firm in December 1983 for supply of the presses for Rs. 64.04 lakhs. The presses were received by July 1985. The civil works costing Rs. 29 lakhs were completed and the presses were erected in February 1987. The cost of procurement and erection of the presses, including the cost of civil works and agency commission of Rs. 2.9 lakhs, worked out to Rs. 1.31 crores. During commissioning, the performance of the presses was found to be unacceptable. According to the factory, the designed parameters of the presses were not in accordance with the specification.

The OFB advised the DGSD in March 1988 to ask the firm to complete/rectify the presses or else these would be rejected. The DGSD consulted the Ministry of Law who opined in April 1988 that the revision of the specification regarding the solvent content after the contract was concluded was indicative of the fact that the factory had not given the exact specification before the conclusion of the contract and therefore the case should be negotiated with the firm for a compromise. In December 1988, however, the OFB took the stand that it would be technically impossible to prove the contractual parameters with 35 *per cent* solvent content. Based on this technical opinion the Ministry of Law, suggested in December 1988 to issue a notice to the firm to prove the parameters of the contract in terms of its provision. The DGSD issued a notice to the firm in March 1989 contending that the presses were not designed as per the contracted specification and calling them to satisfactorily commission the presses by June 1989 failing which the presses would be rejected and replaced at firm's cost. The firm, however, in May 1989 rejected the contention of the DGSD. They, however, agreed to carry out modifications as decided in July 1988 based on the test results of October/November 1988, to determine the achievable capacity of the presses. The final ou.come was not known.

Thus, the conclusion of a contract for the procurement of three high capacity presses based on incorrect specification resulted in an idle investment of Rs. 1.31 crores and failed to provide the envisaged advantage of an improved mechanical process in the extrusion of the cordite.

The matter was reported to the Ministry in April 1989 and their reply has not been received (August 1989).

In the reply received from the Ordnance Factory Board it has been stated that changes in the composition and solvent contents mentioned in the original specification were necessitated due to change of product mix up subsequently. It has been added that the factory indicated the revised quality parameters to the firm before the presses were designed by the firm and in case the firm had any doubt about the quality parameters the matter should have been referred back to the factory for clarification.

88. Purchase of a briquetting plant

Heavy Vehicles Factory Avadi, decided, in June 1977, to acquire a briquetting plant for handling and disposal of alloy steel/aluminium swarf arisings, with the object of reducing wastage and effecting economy in the handling of swarf arisings and to fetch higher disposal price. A briquetting plant costing Rs. 6.72 lakhs was acquired and commissioned in September 1979. The plant was declared surplus in February 1985. As none of the other factories was interested in utilising the plant, disposal of the surplus plant by auction was proposed in January 1988. It had not been disposed.

Examination by Audit brought out that, while the factory expected a marginal advantage of Rs. 20 per tonne in the increased sale price of briquetted swarfs, the high briquetting cost of Rs. 212 per tonne wiped out that advantage and rendered the briquetting operation uneconomical. Thus, by converting the scraps into briquettes the factory stood to lose atleast Rs. 192 per tonne instead of gaining Rs. 20 per tonne. The briquetting operation was abandoned in February 1985, after converting only 36 tonnes of swarfs into briquettes out of 4062 tonnes of swarfs that had piled up during 1981-82 to 1984-85.

The Ministry intimated Audit in September 1989, that the operation of the briquetting plant became uneconomical as the cost of briquetted swarf could not be realised as expected due to fluctuating market conditions. This is, however, factually incorrect as the cost of operation of the briquetting plant itself was uneconomical even with reference to the ruling market price. Failure to assess the briquetting cost properly led to an injudicious investment of Rs. 6.72 lakhs which eventually proved to be uneconomical.

89. Supply of bogie type furnace

Machine Tool Prototype Factory, Ambernath placed an indent on the Director General of Supplies and Disposals (DGSD) in December 1983 for the procurement of one electrically heated bogie type furnace. This furnace was to replace an old furnace which was constantly breaking down and was to be delivered to the factory by December 1984. DGSD placed an order in January 1985 on a firm for the design, manufacture, supply, erection and commissioning of the furnace at a total cost of Rs. 5.40 lakhs excluding spares and taxes. Under the contract for supply, warranty was available for 15 months after the date of delivery or 12 months after erection and commissioning whichever was earlier.

The firm despatched a consignment in June 1985 but it was not complete to cover all items of furnace. The consignment was verified by the factory in the presence of the firm's representative in February 1986 with reference to the packing slips only. Payment of Rs. 5.44 lakhs being 90 *per cent* of the cost of the supply was made to the supplier in October 1985 by DGSD. The balance amount of Rs. 0.53 lakh was paid in May 1986 by DGSD, even though the supply was still incomplete and no final inspection had been carried out. In May 1986 the factory pointed out to the DGSD that the supplier had not supplied refractory bricks, the most crucial and expensive item of the package. By that time warranty had lapsed.

The firm while undertaking the commissioning of the furnace in July 1987, insisted on certain minor amendments in the contract as certain additional items were required prior to commissioning. These were accepted in April 1988. The furnace was commissioned in January 1989. Final inspection of the furnace was carried out by the inspecting authority of the DGSD in March 1989, thirty four months after the full payment was made to the firm and it was noticed that the furnace had got defective programme controller. In April 1989 the firm attempted to commission the furnace and failed due to overheating of transformers.

Since the new furnace was intended to replace the old one which was constantly breaking down, non-commissioning of the new furnace resulted in loss of production. Inter-stage loss was, however, not quantifiable. Ordnance Factory Board stated (March 1989) that the final assessment of loss of production was possible only after the furnace was commissioned.

The case reveals that there has been considerable delay in processing the replacement of the old furnace with a new one at every stage and no urgency has been shown at any point of time. The deficiencies in the system need to be identified for corrective action.

The case was referred to the Ministry in May 1989 and their reply has not been received (October 1989).

90. Infructuous expenditure on a cupola furnace

Ordnance Factory, Kanpur procured one cupola furnace costing Rs. 2.98 lakhs in September 1984 to replace an existing old furnace. The furnace could not be erected and commissioned as a clear site for its erection could not be provided.

In July 1986 the Ministry decided to off-load low technology items from the ordnance factories to trade. Persuant to Ministry's decision, the factory intimated the Ordnance Factory Board in January 1988 that the activity of its foundry section would be closed from 31st March 1988 and the requirement would be met from trade. The furnace had therefore no prospect of use, nor was any sister factory inclined to use it.

In December 1988 the factory decided to dispose of the furnace and approached the Army Headquarters for technical inspection. Final outcome was not known (August 1989).

The case reveals that without making suitable arrangement for the site for erection, the furnace costing Rs. 2.98 lakhs procured in September 1984 could not be erected till March 1988, when the activities of the foundry section were closed down rendering the entire expenditure on the procurement of the furnace infructuous.

The matter was referred to the Ministry in June 1989 and their reply has not been received (December 1989).

Other cases

91. Explosion in a nitroglycerine plant

In October 1988, the Ministry sanctioned release of foreign exchange amounting to Rs. 265.38 lakhs for importing a nitroglycerine plant for Ordnance Factory, Bhandara. This plant would replace one nitroglycerine plant destroyed in an explosion in May 1985. The plant destroyed in May 1985 itself had been installed in replacement of another nitroglycerine plant destroyed in an explosion in May 1975.

The explosion of May 1975 was commented upon in sub-paragraph 5.1 of paragraph 11 of the Report of the Comptroller and Auditor General of India, Union Government (Defence Services) for the year 1979-80. The Public Accounts Committee had recommended in April 1982 that considering the extreme climatic condition of the area, adequate precautions should be taken while operating the plant.

The plant destroyed in the explosion of May 1975 was replaced by a new plant in April 1979 imported from the same source. An explosion occurred in the new plant in May 1985 destroying the plant and the building housing it. A Board of Enquiry constituted in May 1985 by the Ordnance Factory Board (OFB) concluded that the accident could have been avoided had the safety measures recommended by the Board of Enquiry of 1975 constituted after the first explosion, been implemented. The Board of Enquiry investigating into the first explosion in 1975 had specifically recommended for the air-conditioning of the units and chilling of the spent acid both in storage and overhead tanks. These recommendations had not been implemented by the factory. The Board of Enquiry of 1985 did not consider the reasons for not implementing the recommendations of the Board of Enquiry of 1975 convincing and highlighted the failure of the factory management in implementing the established safety parameters in running a nitroglycerine plant. The Board of Enquiry of 1985 also pointed out by quoting from a British text book of explosives that nitroglycerine plants of the type imported by the factory had already been treated as obsolescent by British experts in 1972.

Air-conditioning of the plant room was sanctioned at a cost of Rs. 14.16 lakhs in January 1986 by the OFB after the second explosion.

Loss due to the explosion of 1985 was estimated to be of the order of Rs. 26.04 lakhs. Since there was no insurance cover, the entire loss would have to be borne by Government.

The OFB, in reply to the observations of Audit, contended in May 1989 that there were no managerial failures and that no industrial safety parameters had been violated in running the plant.

The facts, however, were that the plant based on obsolescent technology involving risk of explosion was imported without assessing the availability of improved risk free technology. The recommendations of the Board of Enquiry of 1975 in regard to air-conditioning was implemented only in 1986 after the second explosion.

The case was referred to the Ministry in April 1989; reply has not been received (December 1989).

92. Abnormal rejection - Avadi Factory

Rejections occurring in the course of manufacture, are allowed as unavoidable up to specified percentages and beyond these as 'abnormal rejections' which require to be written off. The regulations prescribe that abnormal rejections should be got investigated. In the case of and if the loss is to be written off by Ministry, an investigation by a Court of Enquiry is mandatory to know the causes of rejections for taking remedial measures to avoid recurrence of such rejections and to fix responsibility where necessary.

Audit noticed in Heavy Vehicle Factory, Avadi (factory) that

> abnormal rejections in 567 cases costing Rs. 94.80 lakhs occurring during 1975 to 1980 were written off by the Ordnance Factory Board (OFB) only in January 1987 as a special case considering the difficulties encountered by the factory in the timely processing of the cases;
>
> total number of cases of abnormal rejections occurring during 1980-88 but not regularised till March 1989, was 150 costing Rs. 140.05 lakhs which included 27 cases costing Rs. 93.89 lakhs requiring regularisation by the Ministry;
>
> abnormal rejections in 1098 cases valued at Rs. 227.68 lakhs relating to 1980-81 to 1984-85 were written off in December 1987 based on investigation carried out at shop level; and
>
> a Board of Enquiry (Board) appointed by the General Manager of the factory on 8th January 1988 after the manufacture of the related weapon system, was discontinued in March 1987. The Board examined only 18 cases out of 4969 cases of abnormal rejection relating to 1980-81 to 1986-87. The Board recommended for taking up of rejections due to bad materials, orderwise, with the suppliers and also increasing the rejection allowance on account of fluctuating quality of material. It also recommended for proper documentation and investigation of high value items at regular intervals. Orders were passed by the factory on the recommendations of the Board only in April 1988.

Thus, there was no regular investigation of cases of abnormal rejections, occurring continuously. Abnormal rejections, costing Rs. 322.48 lakhs occurring during 1975 to 1985, were regularised long after their occurrence as a special case. Abnormal rejections costing Rs. 140.05 lakhs pertaining to period 1980-88 had not been regularised (November 1989).

The case was referred to the Ministry in July 1989 and their reply has not been received (October 1989).

93. Pricing of wooden crates

Vehicle Factory, Jabalpur (VFJ) receives 'transfer case', an assembly of Nissan one ton vehicle (vehicle) from another feeder factory packed in wooden crates. Each transfer case is packed in one wooden crate costing, as per ledger rate, Rs. 602.34 (1987-88) and Rs. 626.17 (1988-89). During 1987-88 and 1988-89, VFJ received 1323 and 1354 transfer cases respectively from the feeder factory.

Although the wooden crates were taken on charge, it was noticed in Audit that their cost was not being included with the cost of transfer cases. As a result, the cost of the transfer cases remained under-priced and when such 'transfer cases' were assembled with the vehicle, the cost of the vehicle to that extent remained underpriced. The extent of under-pricing of 2677 number of transfer cases received during 1987-88 and 1988-89 was Rs. 16.45 lakhs.

Based on an examination order signed by the Foreman, Quality Assurance (Material) and Store Holder of factory, 4000 wooden crates valuing Rs. 25 lakhs were sentenced as timber fire wood (value: Rs. 0.52 lakh) in August 1988. As per the existing procedure the production section should draw raw materials from the store section on demand notes and the stores including scrap, etc. not required by the production section should be returned on return notes. These wooden crates were, however, not returned by the production section on return notes but dumped in the scrap yard. Thus, the system of accounting for drawal and return of stores was not being followed in the factory.

Before sentencing 400 wooden crates, valued at Rs. 25 lakhs to fire wood no investigation was conducted as to the reasons for the loss and to suggest remedial measures to avoid recurrence of such losses.

Due to not including the cost of wooden crates, the cost of transfer cases received in such wooden crates were under-priced which in turn resulted in under-pricing of vehicles.

The case was referred to the Ministry in July 1989 and their reply has not been received (October 1989).

94. Revision of sale price

According to the procedure prescribed by Government in June 1985, the sale price of stores manufactured in ordnance factories for sale to civil parties is determined for each item by a Pricing Committee in each factory. In March 1986, the Ordnance Factory Board (OFB) clarified that where the actual production cost of a store was not available at the time of issue, the sale price could be determined with reference to the last available actual cost, enhanced upto 30 *per cent* at the discretion of the General Manager of the factory to cover the general upward trend of cost.

Two ordnance factories 'A' and 'B' manufactured an item for sale to the Railways. The sale price of the item was fixed at Rs. 520 per 100 numbers in 1984. In their quotations, the factories stipulated that the quoted price was only an estimated price and was subject to revision. It was also stipulated that the actual or estimated maximum cost of production ruling on the date of despatch would be charged pending fixation of the sale price.

During 1986-87 to 1987-88 factory 'A' supplied 2,81,500 numbers (including 24,400 produced during 1985-86) of the item to the Railways at Rs. 520 per 100 numbers. The cost of production was Rs. 643.11 and Rs. 711.66 per 100 numbers respectively. The sale price was neither determined with reference to the last available actual cost of production enhanced up to 30 *per cent* nor was the actual maximum cost of production taken into account for sale of the item. It was observed by Audit that the Pricing Committee of the factories had not met during this period for fixing the sale price of the item. The Ministry stated in November 1989 that the Pricing Committee for factory 'A' met on 18th March 1986 when prices of all civil trade items excepting this item were revised and as the sale price of this item had to be reviewed jointly by both the factories, it took time to convene a Joint Pricing Committee. This was not tenable as delay of two years in convening the Joint Pricing Committee for the two factories located not far off from each other was an administrative delay and could have been avoided.

The sale price of the item fixed at Rs. 900 per 100 numbers by the Joint Pricing Committee in July 1987 was approved by the OFB in September 1987 and was made effective from October 1987. Thus, the revised sale price was effective from a prospective date and no decision was taken for the supplies made at a lower rate during 1986-87 and 1987-88 (September 1987).

With reference to maximum cost of production of the item, the Railways were under-charged to the extent of Rs. 3.55 lakhs by factory 'A'. Factory 'B' also under-charged the Railways to the extent of Rs. 2.11 lakhs for supply of 1,62,610 numbers of the item during 1986-87, but later recovered the entire under-charged amount from Railways during November 1988 to January 1989 at the instance of Audit. Factory 'A', however, did not take any action to recover the under-charged amount. OFB intimated Audit in September 1989 that the loss, if any, would be calculated with reference to the total volume of civil trade done by a factory in a year and not with reference to an individual transaction. The contention of OFB was not acceptable as the under-charge had the effect of reducing profit even when no overall loss was incurred.

95. Performance of a water supply scheme

Government accorded, in September 1970 administrative approval for augmenting the capacity of the existing water supply installations in Ordnance Factory, Katni from 0.7 MGD to 1.4 MGD at a cost of Rs. 22.10 lakhs. This was revised in July 1978 to Rs. 47.70 lakhs and in August 1981 to Rs. 64.97 lakhs. The work was executed by the Military Engineer Services (MES). Even-though there were defects in the works, the factory took over the installations from the MES in March 1985 subject to rectification of defects by the contractor. The final accounts of the scheme had not yet been compiled (November 1989). Expenditure booked against the scheme till October 1988 was Rs. 71.40 lakhs.

It was seen that while the existing water supply scheme continued to perform almost at peak capacity and yielded on an average 0.66 MGD against the installed capacity of 0.7 MGD, the new scheme aiming at augmenting the level upto 1.4 MGD added only marginally to the facility. Overall rate of supply to the factory for industrial and residential purpose remained in the range of 46.50 to 51.57 *per cent* of the augmented capacity envisaged. The factory continues to cope with the shortfall in water supply by restricting supply to residential colonies and by taking recourse to adhoc water conservation measures.

Thus, the water supply augmentation scheme which was approved in 1970 for Rs. 22.10 lakhs yielded only 2.85 *per cent* of the augmented capacity envisaged, after incurring an expenditure of Rs. 71.40 lakhs.

The Ministry stated in August 1989 that the scheme was capable of giving the envisaged yield and the poor performance was due to operational problems.

CHAPTER V

WORKS AND MILITARY ENGINEER SERVICES

96. Execution of defective work

In August 1977, Ministry accorded administrative approval for the provision of accommodation for office, store, mess and living accommodation for single officers,etc.of an Armoured Regiment at Jaipur for Rs.61.50 lakhs, revised to Rs.61.18 lakhs in October 1978. The Zonal Chief Engineer (CE) concluded a contract in December 1978 covering, inter alia, the main part of accommodation and also one type -IV residential quarter for Rs.46.97 lakhs. The work commenced in December 1978 and was to be completed in June 1980 but was extended up to June 1982.

In March 1982, it was observed that the stone masonary work was of substandard quality and did not conform to contract specifications. Bulges and cracks were observed in the walls and jointing with mortar was not done properly and there were hollows in the walls. In July 1981, due to unprecedented heavy rains and floods, the type-IV quarter which progressed about 47 per cent (Cost: Rs.0.19 lakh) was completely washed away and another stores building progressed about 56 percent(cost: Rs.0.50 lakh) was partly damaged. A technical Board of Officers (Board) investigated the defects and recommended (March 1982) interalia, that the defective masonary work should be re-done. Further thorough check of all the walls should be carried out and the joints and loose stones in masonary in other locations should be stripped completely and packed/filled fully with lime concrete/cement mortar.

In August 1982, the Zonal CE brought the matter to the notice of Engineer-in-Chief's Branch (E-in-C) who in turn opined,in October 1982,that the defects observed by the Board were, prima-facie, due to negligence in supervision of work apart from poor performance of the contractor and asked to look into the disciplinary aspects for action against the negligent supervisory staff and the contractor.

In spite of various notices, the contractor failed to rectify the defects and stopped the work and the contract was cancelled in November 1982, by which time an amount of Rs.32.25 lakhs had been paid to him. For rectification of defects (cost: Rs.2.85 lakhs) and completion of left over work (cost: Rs.6.25 lakhs) at the risk and cost of the defaulting contractor, the Commander Works Engineer (CWE) concluded a contract in April 1983 for Rs.35.58 lakhs which was completed in December 1984. The final bill of the defaulting contractor was passed for minus Rs.42.28 lakhs.

An arbitrator was appointed in November 1983 on the request made by the contractor. The department preferred a claim for Rs.44.86 lakhs including inter-alia, the extra cost incurred on rectification of defects (cost: Rs.2.85 lakhs) and completion of the incomplete work (cost: Rs.36.02 lakhs) on risk and expense plus 18 per cent interest. The contractor preferred a claim for Rs.21.32 lakhs plus 18 per cent interest. In August 1985, the arbitrator in his non-speaking award, had awarded Rs.1.85 lakhs plus 12 per cent interest in favour of the contractor and Rs.0.16 lakh only in favour of the department and set aside the department's claim.

The department, after obtaining legal advice from the Ministry of Law, filed a case in the Court of District Judge, Jaipur. The judgement was pronounced on 4th August 1989 interalia rejecting the department's plea and making the award a rule of the court.

Staff Court of Inquiry held in June 1982 found six MES officers and subordinates responsible for gross negligence in performing their duties and execution of sub-standard work. The General Officer Commanding-in-Chief directed in December 1982 the Zonal CE to take disciplinary action against the concerned officials and the same was stated to be still in progress (November 1989).

The Ministry stated in November 1989 that the E-in-C's branch were being reminded for finalisation of disciplinary action against the concerned persons.

Thus, no proper supervision of work was carried out by the executive authorities which resulted in extra expenditure of Rs.2.85 lakhs on rectification of defects. A sum of Rs.36.02 lakhs was spent in completion of the left-over works by the defaulting contractor. Disciplinary action contemplated in December 1982 against the concerned persons was yet to be finalised (November 1989).

97. Delay in completion of married accommodation

In October 1982, the Commander Works Engineer

(CWE), Kanpur concluded a contract for construction of married accommodation for two Junior Commissioned Officers,one Havildar and 12 Other Ranks of a unit for a lumpsum of Rs.7.37 lakhs. The work was required to be completed by December 1983 but in March 1984 extended up to June 1984.

The progress of the work up to March 1984 was 80 per cent and expenditure incurred up to September 1984 was Rs.7.77 lakhs. The contractor did not progress the work thereafter. The Military Engineer Services (MES) terminated the contract in October 1985 i.e. after a period of 18 months.

A Board of officers ordered by CWE Kanpur in December 1986, after a period of 14 months from the date of termination of the contract, to assess the extent of damage occured in the incomplete building and suggest remedial measures was not held at all. In January 1988 a fresh board was convened and the proceedings of the board were finalised in February 1988. The Board suggested reconstruction of balconies of all other ranks quarters. Subsequently in May 1989, final notice was issued to the contractor before carrying out the work at his risk and cost. Tenders for left- over work were issued in July 1989 after about four years of termination of contract. The cost of left- over work based on the contract with the defaulting contractor was Rs.1.47 lakhs which was scheduled for completion by March 1990 at an estimated cost of Rs.4.50 lakhs. Thus, the total cost of the work services estimated stood at Rs.12.27 lakhs as against the original cost of Rs.7.37 lakhs involving an increase of Rs.4.90 lakhs.

A sum of Rs.0.74 lakh as compensation in lieu of quarters (CILQ) to the service personnel for whom the accommodation was being built was paid during July 1984 to June 1989.

The Ministry in September 1989, stated that detailed justification giving reasons for not holding the board of officers for over two years had been called for.

Thus, delay of 18 months in termination of contract by MES and unduly long time of about four years taken in issue of tenders for left- over work (20 per cent)resulted in blocking of funds worth Rs.7.77 lakhs, increase in cost of work by Rs.4.90 lakhs and payment of Rs.0.74 lakh as CILQ to service personnel up to June 1989.

98. Delay in according financial concurrence

Regulations stipulate that when the amount of lowest tender exceeds the amount of administrative approval beyond tolerance limit, pending revision of administrative approval, concurrence of the competent financial authority should be obtained to avoid delay in acceptance of the lowest rate offered and contract concluded. In the following cases, due to failure to obtain financial concurrence of the competent financial authorities (CFA), the lowest tenderers backed out from their offers which resulted in retendering and consequential extra expenditure to the tune of Rs.5.06 lakhs.

Case I

In September 1986,the Ministry of Defence, Radar Communication Project Office (RCPO), accorded sanction for the construction of certain accommodation at a station for Rs.1.46 lakhs. Tenders for the above work were invited four times. The lowest rate obtained on 27th March 1987 was Rs.2.29 lakhs which was valid up to 26th May 1987. As the lowest rate exceeded the tolerance limit of the approved amount, a case for financial concurrence was forwarded by Commander Works Engineer (CWE) on 6th May 1987 after 40 days. The Chief Engineer (CE) RCPO, directed the CWE on 22nd May 1987 to submit the case through the Zonal CE. In the meantime the contractor expressed his inability to extend his offer beyond May 1987.

Tenders were reinvited in September 1987 and the lowest rate obtained was for Rs.3.70 lakhs which was considered reasonable. The financial concurrence was accorded in November 1987. The contract was concluded in November 1987 for Rs.3.70 lakhs and the work was completed in September 1988.

Case II

In October 1985 Air Headquarters (HQ) accorded sanction for the provision of married accommodation for airmen and MES key personnel at a station regularising their go-ahead sanction of February 1985 at a cost of Rs.79.91 lakhs.

Tenders for the married accommodation for airmen were issued in April 1986. The lowest rate obtained in August 1986 was for Rs.69.37 lakhs which was considered reasonable. The offer of the lowest tenderer was valid up to 30th September 1986. Since the amount of the tender exceeded the approved amount for the work, the Zonal CE approached the Engineer- in- Chief (E-in-C) in August 1986 for financial concurrence. The E-in-C referred back the case with certain observations to Zonal CE in September 1986. As the validity period was expiring on 30th September 1986, the Zonal CE requested the contractor on 19th September 1986 to extend the validity period which was not agreed to by the contractor. Tenders were reinvited in November 1986. The lowest rate obtained was for

Rs.73.03 lakhs which was accepted after obtaining financial concurrence in March 1987. The contract was concluded in March 1987 .

The Ministry stated in September 1989 that the lowest tender of Rs.2.29 lakhs could not be considered by the CFA as the CWE did not follow the proper channel for obtaining the necessary financial concurrence within the validity period of tender. The financial concurrence case was examined in E-in-C's Branch and in September 1986, CE, Calcutta Zone was asked to furnish certain clarifications which were sent by him in October 1986. The tenderer regretted his inability to extend the validity.

Thus, due to failure of the department to obtain financial concurrence in time, lowest tenderers backed out from their offers resulting in retendering and extra expenditure of Rs.5.07 lakhs.

99. Water supply scheme

To meet the water requirement of 1.65 lakh gallons per day against the existing supply of 20,000 gallons per day at a station, a Board of Officers (Board) recommended, in August 1976, a water supply scheme at a cost of Rs.17 lakhs. The Board also mentioned that although the nallah and land proposed to be utilised in the scheme were with the Army, a no objection certificate (NOC) regarding availability of the land was essential from the State Government of Jammu and Kashmir.

Sanction was accorded by Headquarters (HQ) Northern Command in February 1977 for the provision of water supply at an estimated cost of Rs.19.85 lakhs. Since the site selected by the Board has been encroached upon another Board held in January 1980 selected a new site. The work could not be taken up for execution till June 1982 as the NOC sought for in February 1980 from the State Government for tapping the source of water was received only in April 1982.The site for water treatment plant was handed over by the civil authorities to Military Engineer Services (MES) in June 1982. After receipt of tenders in May 1983, MES sought revision of sanction on current rates. Based on the revised estimates, HQ Northern Command, in April 1984, sanctioned the work at a revised cost of Rs.34.35 lakhs which was more by Rs.14.50 lakhs of the sanction accorded in February 1977.

Three contracts for execution of work were concluded. While the work under two contracts was completed in December 1985 and August 1986, the work under the third commenced in April 1984, was to be completed in August 1986 but extension of time was granted up to November 1987. Since the contractor could not complete the work, the contract was terminated in October 1988. Contract action for the balance work at the risk and cost of the defaulting contractor could not be taken up because of a stay order from the court (August 1989). The overall progress of the project as on 30th September 1988 was 83 per cent and an expenditure of Rs.25.77 lakhs had been incurred up to 1988-89.

In September 1989, the Ministry stated that the issue of sanction for the scheme without obtaining the NOC for tapping the source of water and without acquiring the land, was not proper. MES was being advised to negotiate with the contractor for recommencing the work or to approach the court for getting the stay order vacated and to consider taking suitable action against the defaulting contractor. Troops were being provided with water supply on restricted basis till the completion of the work.

To conclude, despite the recommendations of the board of officers (August 1976) to obtain the NOC from the State Government before taking up the work, the State Government was approached for obtaining NOC only in February 1980 after issue of sanction for the work. A water supply scheme, initiated in 1976, had not been implemented (September 1989) as 17 per cent works had still been pending for execution.

100.Unauthorised construction of buildings

In May 1984, Recce-cum-siting-cum-costing board recommended construction of a three storyed building for Chief Engineer, (CE) Jabalpur Zone, Jabalpur on a new site at an estimated cost of Rs.49.25 lakhs .The proposal was still (October 1989) under consideration in the Ministry of Defence (Finance).

In the meantime, the Military Engineer Services (MES) concluded three contracts in June 1987, August 1988 and October 1988 for Rs.15.28 lakhs for construction of office accommodation, storage shed and site office- cum-storage accommodation for the CE. The necessity for construction of the accommodation was neither accepted by the competant financial authority nor had any sanction been accorded.

The expenditure was met out of the funds available under contingencies of five projects. This action was not correct as project contingencies are meant for construction of office/storage accommodation at site, and some other purposes. In the process, expenditure in respect of one contract was met out of contingency provisions of three ongoing projects, two at Jhansi, one at Gwalior and that in respect of other two contracts, from an administrative approval given by Kendriya Vidyalaya Sangathan, New Delhi for construction of a school building at Jabalpur. The expenditure incurred on the work was Rs.19.13 lakhs (October 1989).

In October 1989, the Ministry suggested to Engineer-in-Chief's branch that the rate of contingencies for the project should be reviewed and distinct items of expenditure covered by three per cent estimate should be specified in detail so that it is not misused; alternatively offices of MES formations might be constructed out of contingencies of projects wherever required.

Thus, pending acceptance of necessity and sanction for construction of a new building for the CE Jabalpur, the MES constructed additional accommodation un-authorisedly by utilising funds of Rs.19.13 lakhs from contingencies of five projects at Jhansi, Gwalior and Jabalpur.

101.Construction of sports stadium

"Scales of Accommodation" authorise provision of sports stadium for a troop strength of 3000 or more. A Board of officers assembled in February 1986 recommended construction of a sports stadium at Bangalore taking into account the troop strength of all the units at the station which included civilian employees. Accordingly, Headquarters (HQ), Air Force Training Command, Bangalore sanctioned in March 1987 construction of a sports stadium with attendant facilities such as changing room, store room, toilet, etc. The work was completed in September 1988 at a cost of Rs.10.03 lakhs.

As the effective strength of troops excluding the civilians being not 'troops' fell short of the prescribed minimum strength of 3000 troops for entitlement of a sports stadium, its construction at a cost of Rs.10.03 lakhs was held as unauthorised and in violation of Government orders/regulations setting a new practice.

The Ministry stated in September 1989 that the Air HQ would direct the HQ Training Command to initiate action for sanction of the project as a special work by the Competent Financial Authority.

Thus, a sports stadium, was constructed at Bangalore at a cost of Rs.10.03 lakhs in contravention of Government orders/regulations.

102. Installation of air-conditioning plants

In the following two cases an expenditure of Rs.21.57 lakhs incurred on air-conditioning plants remained unfruitful.

Case I

Against a sanction issued by the Ministry in December 1979 the Military Engineer Services (MES) concluded a contract in June 1981 for the provision of air-conditioning and refrigeration of Photo Section, Central Radio and Radar Workshop, and Air Traffic Control, etc., at Gorakhpur for Rs.17.96 lakhs. A work order was placed in July 1981 for commencing the work in August 1981 and for completion in July 1982. The work commenced in January 1982, though the contractor brought to site materials worth Rs.14.98 lakhs and carried out civil works to the extent of Rs.0.50 lakh against which he was paid a sum of Rs.11.85 lakhs through running account. The contractor stopped the work in March 1983. Despite repeated notices, during the period August 1982 to December 1984 the contractor did not resume the work with the result that his contract was cancelled in March 1985. The MES prepared an inventory of complete/incomplete items of work in April 1985. In July 1985, the contractor obtained injunction restraining the department from making use of his materials at site, breaking open his locks and invoking any bank guarantees.

In July 1986, the contractor was requested to deposit Rs.10.07 lakhs for completion of leftover work at his risk and cost, materials found missing from site, recoveries on account of technical examination of work and compensation. The disputes arising from the contract were referred to arbitration by the department with department's claim amounting to Rs.34.34 lakhs. The arbitrator awarded (June 1988) Rs.9.36 lakhs in favour of the department. The MES intimated Audit in October 1988 that award was filed in court for implementation and a review petition had also been filed to vacate the stay obtained by the contractor so that the left over items of work could be got completed and also for encashing the bank guarantees lying with the department to meet part of arbitration award. An expenditure of Rs.17.11 lakhs was incurred on the work till September 1988. The airconditioning plant was not yet available for utilisation (September 1989) even after the expiry of over nine years. The existing window type airconditioners, which were to be replaced by central air-conditioning plant, were used as a stopgap arrangement.

Case II

In January 1974, MES concluded a contract for air-conditioning certain rooms of ordnance factory at Jabalpur for Rs.2.65 lakhs with probable date of completion as 14th October 1974. The work was completed in May 1976 and provisionally taken over by MES subject to rectification of defects. On the failure of the contractor to rectify certain defects and rejection of department's claims in arbitration,a fresh contract was concluded in November 1982 with another contractor for Rs.2.35 lakhs. The work was to be completed in two phases in March 1983 and August 1984. This contractor also failed to carry out the winter test satisfactorily resulting in cancellation of contract in April 1988. An expenditure of Rs.4.46 lakhs had been incurred on the work till April 1988. Action to rectify the defects was yet to be taken (September 1989).

In September and November 1989, the Ministry stated that the work of air-conditioning at Gorakhpur was delayed due to stay order and court case. Action was in hand to get the stay vacated by the court for concluding fresh contract at risk and cost of the defaulting contractor. The airconditioning plants at Jabalpur were still under lock and key of the contractor even after termination of contract in April 1988. A technical board of officer had been ordered to give its findings by 31st August 1989. Thereafter rectification work would be carried out at the risk and cost of the defaulting contractor and the plant would be handed over to users by 31st January 1991.

To conclude,

> The work of air-conditioning at Gorakhpur sanctioned in December 1979 and due for completion in July 1982 was still incomplete even after spending Rs.17.11 lakhs. Action was stated to be in hand to get the stay order of court vacated for conclusion of risk and cost contract.
>
> The work of air-conditioning at Jabalpur was lingering on for more than 15 years without any benefit having accrued to the users even after spending Rs.4.46 lakhs. Action to rectify the defects at the risk and cost of the defaulting contractor was yet to be taken (September 1989).

103. Non-commissioning of air-conditioning plant

In July 1981, Air Headquarters (HQ) sanctioned works services for aerial masts huts at an Air Force station at a cost of Rs.7.13 lakhs. The work interalia catered for air- conditioning at a cost of Rs.3.84 lakhs.

In January 1983, a Zonal Chief Engineer (CE) concluded a contract with a firm for supply, installation, testing and commissioning of air-conditioning plant at the Air Force station for a lump sum of Rs.3.84 lakhs. The work was to commence in February 1983 and was to be completed in November 1983.

On 7th November 1983, the firm intimated that the work under the contract had been completed and requested for an on account payment. In December 1983, Military Engineer Services (MES) pointed out certain items of work which were not completed and asked the firm to complete all the left over works.

In March and April 1984, the firm stated that the air-conditioning plant had already been installed/physically completed on 11th November 1983 and the plant was ready for phase-I test but due to non-supply of power and water at site by the MES the air-conditioning plant could not be tested. The firm was paid Rs.3.25 lakhs in October 1984.

A Board of Officers (Board) assembled in July 1985 under the orders of the Zonal CE to assess the defects/ discrepancy in air-conditioning plant, pointed out some minor defects and recommended that the firm be advised to conduct phase-I test. The firm did not turn up despite issue of several notices for completion of left over work and phase-I test.

Ultimately in June 1986, the Zonal CE cancelled the contract at the risk and cost of the firm. A Board ordered in August 1986, stated that the test was not possible as the plant was not in position to run. Accordingly, a fresh contract at the risk and cost of the original firm was concluded in January 1989 for Rs.1.20 lakhs for completion of the work within three months. The firm had, however, not turned up to take over the site to start the work in spite of various reminders. The contract was, therefore, cancelled on 28th April 1989. Another risk and cost tender was invited by the CE with no response. The work was yet to be completed (September 1989).

In September 1989, the Ministry stated that action was in hand to decide about the mode/agency for completing the work.

Thus, the air-conditioning plant costing Rs.3.84 lakhs though installed in November 1983 was lying without any use for more than five years ostensibly due to non-carrying out of requisite test and rectification of defects by the firm. Attempts to get the left over work done at the risk and cost of defaulting firm also did not yield any fruitful results (September 1989).

104. Fire fighting arrangements

Based on a sanction accorded in June 1983 by Naval Headquarters, a contract for provision for fire fighting arrangements for high rise buildings (five residential and two mess buildings) at Bombay was concluded in May 1985 by a Zonal Chief Engineer (CE) for Rs.21.90 lakhs. The work commenced in June 1985 and was to be completed by April 1986.

According to the provisions of the contract the department was to issue to the contractor vertically cast iron pipes for incorporation in the work. However, the Zonal CE procured horizontally cast iron pipes costing Rs.2.50 lakhs. These pipes were not tested at the time of delivery as the material was of tested quality. The contractor warned the department (in August 1985) against the issue of horizontally cast iron pipes as it might lead to leakage. In October 1985, the contractor was informed that work be carried out with horizontally cast iron pipes. Accordingly, during October 1985 and March 1987 a quantity of 1205 running metres of horizontally cast iron pipes valued at Rs.4.72 lakhs was issued to the contractor.

During the execution of the work, the contractor reported (January 1986)leakages in the pipes laid. In August 1987 the contractor was informed that during pressure test conducted, no pipes were found leaking and the leakages were on the sluice valves. However, in October 1987, the Zonal CE decided to take up the matter with the suppliers for replacing the defective pipes and considered the possibility of local purchase of vertically cast iron pipes.

One of the suppliers, who supplied the pipes, when requested (November 1987) to replace the defective ones stated (November 1987) that they were not bound by conditions of supply contract to replace them due to passage of time. In January 1988, while reviewing the work to be completed, it was observed that the pipes already laid even after tests could not be relied upon. The Zonal CE decided to use the horizontal pipes by modifying with centrifugally cast socket and spigot to make them flanged, in the balance work yet to be completed (October 1989). Accordingly, orders were placed to convert required number of horizontal pipes into flanged with spigot and sockets. The work using these modified pipes was yet to be completed (October 1989). Delay in supply of suitable pipes leading to prolongation of contract prompted the contractor to approach the contract accepting officer in April 1988 for termination of the contract.

The Ministry in October 1989 stated that the CE decided to supply horizontally cast iron pipes in lieu of the vertically cast iron pipes as procurement of vertically cast iron pipes would have taken more time as no rate contract existed for such pipes; procurement of vertically cast iron pipes from local market would have cost more and the material would not have been of tested quality; and working pressure of horizontally and vertically cast iron pipes was the same.

Thus, issue of horizontally cast iron pipes costing Rs.4.72 lakhs, to the contractor for incorporation in the work instead of vertically cast iron pipes resulted in leakage of the pipes laid. Subsequently, the horizontally cast iron pipes were modified to complete the balance work and also to replace the defective pipes already laid resulting in delay in fire fighting arrangements for high rise building for over three years. The work was yet to be completed (October 1989).

105. Works services for power requirement

The requirement of power for the Defence Establishment at a station was being met by captive generation from six generators. As the existing generating sets were not capable of taking additional load, in May 1982, Fortress Headquarters (HQ) approached civil authorities for supply of power from their sources. In August 1982, the civil authorities intimated that they would be in a position to meet the power requirement to the extent of 185 KW in 1982, 250 KW in 1983, 335 KW in 1984 and 475 KW in 1985 subject to the condition that the supply of 700 KW from Naval power house to civil was maintained. The power supply after 1985 was to depend upon installation of additional steam turbo generator of sufficient capacity on cost sharing basis between defence and civil.

Despite this indefinite and conditional assurance given by the civil authorities Fortress HQ sanctioned in January 1984, works services required for availing of power supply from civil sources at a cost of Rs.9.98 lakhs. In June 1984,Military Engineer Services (MES) concluded a contract for the work at a cost of Rs.10.28 lakhs. The work was completed in October 1985 at a cost of Rs.10.35 lakhs.The work relating to extension of power supply at a cost of Rs.0.42 lakh was also got completed through civil authorities in August 1985.

In September 1985, the civil authorities expressed their inability to meet the power requirement from their existing sources as the proposal for commissioning of thermal power station had been shelved by Government which the defence authorities were not aware of. Since the civil authorities had neither energised the line nor installed measuring equipment the assets costing Rs.10.77 lakhs remained un-utilised (January 1989).

In January 1986 MES planned, setting up a central power generating station with eight diesel generating sets of 750 KVA each at an estimated cost of Rs.3.92 crores in two phases (four numbers in each phase). In August 1986 HQ Eastern Naval Command sanctioned provision of one

750 KVA diesel generating set at a cost of Rs.46.98 lakhs. Subsequently in August 1988, Naval HQ sanctioned provision of two 750 KVA diesel generating sets at a cost of Rs.116.41 lakhs. The work under both the sanctions was yet to be completed (September 1989).

In September 1989, the Ministry stated that existing meagre power supply had to be shared as there was no alternative, by load shedding/sharing. The assets created had since been utilised to receive power supply beyond 475 KW. This contention was not tenable as the additional power supply for which the assets were primarily created had not materialised.

Thus,based on the indefinite and conditional assurance given by the civil authorities for supply of power to Defence and without ascertaining the prospects of installation of additional steam turbo generator on cost sharing basis, the assets created in 1985 at a cost of Rs.10.77 lakhs were lying un-utilised. The work for installation of three diesel generating sets at a cost of Rs.163.39 lakhs was yet to be completed (September 1989).

106.Sub-standard furniture

In December 1985, the Ministry accorded sanction for provision of special furniture for the College of Combat Mhow at a cost of Rs.44.53 lakhs. The Military Engineer Services (MES) concluded, in all, eight contracts for procurement of furniture at a total cost of Rs.26.64 lakhs during 1986-87. According to the special conditions to the contracts, articles of furniture were to be inspected and approved by the MES at three stages i.e. during course of manufacture, before finishing and after finishing and delivered at the prescribed place. Items of furniture worth Rs.26.22 lakhs against eight contracts (full supply against seven contracts and part supply against one contract) were received by the MES between October 1986 and January 1988. All the items of furniture were inspected and accepted by the MES and payment made to the contractors. As one of the contractors failed to complete supplies worth Rs.0.48 lakh, his contract was terminated in September 1988 at his risk and expense. The risk and expense contract was yet to be concluded (September 1989).

In the meantime, the furniture worth Rs.23.82 lakhs was handed over to the users who accepted items worth Rs.13.89 lakhs and rejected items worth Rs.9.93 lakhs being sub-standard. In May 1988, the users approached the Station Headquarters (HQ) to investigate the circumstances leading to the acceptance of sub- standard furniture by the MES. The Station HQ ordered on 11th May 1988, a Court of Inquiry (CI) to investigate the circumstances leading to the acceptance of sub-standard furniture and to pin-point responsibility and to submit the findings by 19th May 1988. The CI had not yet been finalised (September 1989). In June 1989, the MES assessed the cost of sub-standard furniture as Rs.10.10 lakhs and the same was lying in stock (September 1989).

In September 1989, the Ministry stated that the risk and cost tenders for balance/defective/ incomplete items of furniture were issued in October 1988. The lowest quoted amount was about Rs.15 lakhs and since there was no possibility for recovering this amount from the defaulting contractor the users were approached to accept all the furniture items with minor rectification/improvement except chairs cane bottom office steel for which users agreed. Action was in hand to repair or devalue the defective furniture also to procure incomplete supplies at the risk and cost of the dafaulting contractor. The matter had now been referred for appointment of an arbitrator to realise Government dues from the defaulting contractor. Delay in finalisation of the CI was due to non-availability of all witnesses posted to far off places and certain administrative problems to muster them. The Army HQ was further being directed to complete the CI within one month.

Thus, despite the specific provisions in the contracts for carrying out inspection at three stages the MES failed to inspect the furniture items properly resulting in acceptance of sub-standard furniture worth Rs.10.10 lakhs and the CI which was to submit its findings by 19th May 1988 had not yet submitted its findings (September 1989).

107. Provisioning of external services

In the following cases, execution of a work relating to residential accommodation was progressed despite change in deployment of Army units and work relating to sewage pumps was not executed so as to synchronise with the main work of sewage plants. This resulted into non-utilisation of assets costing Rs.197 lakhs for over two years.

Case I

In December 1980, Army Headquarters (HQ) accorded sanction for provision of 32 residential quarters for officers.

The work was released for execution by Command HQ in April 1982. A contract was accordingly concluded for Rs.66.03 lakhs on 5th January 1984. The work commenced on 17th January 1984.

On 18th January 1984, Army HQ intimated that due to change in deployment of Army units, the requirement of other than residential accommodation had been cancelled.

Despite this, the work for construction of residential quarters was progressed and completed in May 1987 at a total cost of Rs.100.24 lakhs.

Since there were no officers in the waiting list, the residential quarters remained vacant. In June 1989, 20 quarters were re-appropriated for storage of ordnance stores. Four quarters were occupied by the officers and eight quarters were re-appropriated as officers mess and single officers accommodation.

In October 1989,the Ministry stated that by the time the decision in change of deployment of Army Units was taken, the work for construction of residential quarters had already reached an advance stage of progress. This contention was not tenable as the decision was intimated on 18th January 1984 and the work commenced on 17th January 1984.

To conclude, despite change in deployment of Army units conveyed by Army HQ on 18th January 1984, the construction of residential accommodation which commenced on 17th January 1984 was progressed to completion. This resulted in non-utilisation of accommodation (Cost: Rs.100.24 lakhs) for over two years and subsequently re-appropriation of 20 quarters as storage accommodation.

Case II

Army HQ, Engineer-in-Chief's (E-in-C) Branch, decided in September 1976 for provision of an oxidation pond at a station for which administrative approval was obtained for Rs.99.43 lakhs in March 1980.

In September 1982, tenders were invited for the construction of sump for the sewage pump house with generating room, oxidation pond and laying of sewage line. The lowest tender was for Rs.95.96 lakhs which was beyond the tolerance limit of the administrative approval. A case for the financial concurrence was projected by Zonal Chief Engineer in January 1983. Financial concurrence was accorded in February 1983 for the entire project for Rs.151.28 lakhs. A contract was concluded by the Zonal Chief Engineer in February 1983 for Rs.95.95 lakhs. The work commenced in February 1983 and was completed in June 1986. The electrification work was got completed under another contract in December 1986 at a cost of Rs.0.91 lakh.

Contract for the sewage pump was concluded in January 1988 for Rs.4.56 lakhs after obtaining financial concurrence of the competent authority. The work commenced in February 1988 with probable date of completion by May 1988, which was yet to be completed (December 1988).

The Ministry stated in October 1989 that delay in commissioning the scheme was due to delay in procurement of pumps which was attributed to procedural delay in progressing and sanctioning of financial concurrence cases; as on date the scheme was operative. This contention is not tenable as the department accepts a tender only if the tendered rates are reasonable and the necessity for financial concurrence arises due to assessment of cost of the work below the reasonable level.

Thus, due to delayed conclusion of contract for sewage pump (Rs.4.56 lakhs) sewage works completed in June 1986 at a cost of Rs.95.95 lakhs could not be made functional till December 1988.

108. Mis-use of sanctioning powers

In April 1985, a Corps Commander issued a go-ahead sanction under operational military necessity for provision of storage accommodation for keeping sensitive and costly equipment by a workshop at Patiala.

Accordingly, Commander Works Engineer (CWE), Chandigarh concluded a contract in May 1985, at a cost of Rs.7.49 lakhs. The work comprising 10 sheds with varandah, commenced on 5th June 1985 and was completed in October 1985, at a total cost of Rs.7.80 lakhs. Covering sanction by the Corps Commander was issued in November 1985 for Rs.8.87 lakhs.

In the meantime, the workshop authorities in reply to the Divisional Headquarters letter dated 28th June 1985 intimated, in August 1985, that they did not possess any sensitive and costly equipment and as such no accommodation was required by them on an emergent basis.

Even though the Board of Officers assembled, in September 1985, recommended that provision of storage accommodation was an inescapable operational requirement, the accommodation was handed over in October 1985 itself to Central School, till then housed in a bungalow, at the station. Sanction for re- appropriation of the storage building up to 31st March 1988 on "no cost basis" was sought for in April 1987 by Military Engineer Services. In January 1989, the Station Headquarters (HQ) conveyed sanction for temporary re-appropriation of ten sheds as Central School up to 31st March 1989. The buildings were being used by Central School without any additions/alterations (October 1989) for four years.

In October 1989, the Ministry stated that due to security of buildings and delay in the arrival of stores and machinery these were handed over to Central School temporarily for better utilisation and as and when the stores arrive the accommodation would be handed over to the workshop. The contention of the Ministry is not tenable as the buildings constructed under operational military necessity were being used by Central School without any additions/alterations for four years indicating that these were constructed to suit their requirements.

The Ministry further stated that the Army HQ were requested to take suitable remedial/corrective action to avoid recurrence of such cases in future and also proper use of the built-up structure.

Thus, storage accommodation was constructed in October 1985 at a cost of Rs.7.80 lakhs on grounds of operational military necessity by concealing its end-use. It was not used for the intended purpose and was handed over to Central School for their use immediately after completion.

109. Delay in sanctioning a portion of work

With a view to having regular storage facility, for aviation fuel a Board of Officers (Board) assembled (November 1982) at a station to assess the requirement of the provision of storage tank. The Board assessed the cost of the project as Rs.6.47 lakhs, partly to be executed by Military Engineer Services (MES) (Rs.3.41 lakhs) and partly by Indian Oil Corporation (IOC) (Rs.3.06 lakhs).

In September 1983, another Board, assembled to consider user's suggestion for change in the dimension of refuelling shed, assessed the cost of the project as Rs.7.58 lakhs (IOC: Rs.3.06 lakhs and MES: Rs.4.52 lakhs).

In January 1984, the sub area commander accorded revised sanction for Rs.4.48 lakhs which again did not include works to be executed by IOC. The sanction was, further revised in January 1985 to Rs.8.03 lakhs indicating works to be executed by MES (Rs.4.52 lakhs) and IOC (Rs.3.51 lakhs).

In February 1985, a contract for the execution of MES works was concluded for Rs.4.43 lakhs. The work, commenced in March 1985,was completed in December 1985 at a cost of Rs.4.48 lakhs.

After 10 months of issue of sanction, MES approached the IOC in November 1985 for execution of works with a copy of the agreement, duly signed, which was earlier sent by IOC in October 1982. In December 1985, IOC expressed its inability to execute the work due to considerable increase in cost of the project, shortage of man-power and other problems.

However, IOC which was requested in November 1986 after 11 months,to prepare design and specification at current rates, sent the estimates for Rs.5.25 lakhs in December 1987, with a request to remit the amount. The amount was paid in April 1989 after 16 months of receipt of estimates. In the meantime, the January 1985 sanction was revised to Rs.10.18 lakhs in September 1988 due to increase in the cost of work. The work was yet to be commenced by IOC (September 1989).

The Ministry stated in September 1989 that the comments of staff authorities would be sent in due course. MES had no role to play till January 1985 as the IOC works were not included in the sanction issued by sub area commander. After receipt of sanction, the case was pursued vigorously with IOC. This contention is not tenable as after issue of sanction MES approached IOC after 11 months for execution of work, MES took 11 months to approach IOC for revision of estimates in November 1986 and it took 16 months to make advance payment after receipt of revised estimates and work has not yet commenced.

To conclude, due to delay in sanction of work, initiated in 1982, to be executed by the IOC, the works already completed in December 1985 by the MES at a cost of Rs.4.48 lakhs remained unutilised (September 1989) and their future utilisation was also not certain as work had not been commenced by the IOC so far (September 1989).

110. Utilisation of huts

In April 1985, a Corps Headquarters (HQ) sanctioned provision of 30 tent replacement scheme huts (TRS huts) at a station at a cost of Rs.18 lakhs and provision of ancillaries for 30 huts at a cost of Rs.16.80 lakhs revised to Rs.27.23 lakhs in February 1987. Sanction for external services was accorded in August 1985 at a cost of Rs.17.50 lakhs revised to Rs.21 lakhs in June 1986. The work for construction of huts was released for execution in June 1985, of ancillaries in March 1986 and that of external services in June 1986.

The work for construction of huts commenced in September 1985 and was completed in October 1987 at a cost of Rs.16.54 lakhs. Two contracts for execution of the work relating to ancillaries for huts were concluded with one contractor in February 1987 and November 1987. The work under the first contract for Rs.18.82 lakhs was commenced in March 1987 and was to be completed in September 1987. As the contractor failed to complete the work despite notices issued by the department the contract was terminated in November 1988. A risk and cost contract was concluded in March 1989 and the work was to be completed in November 1989. The work under the second contract for Rs.4.36 lakhs was commenced in May 1987 and was to be completed in October 1987. The work was completed in

June 1989. The expenditure incurred on ancillaries was Rs.25.15 lakhs up to January 1989.

The work for external services contracted in November 1987 for Rs.17.11 lakhs commenced in November 1987 and was to be completed in May 1989. An expenditure of Rs.18.42 lakhs had been incurred up to January 1989.

The work was delayed due to non-procuremnt of filteration plant for want of decision. The progress of work in September 1989 was 85 *per cent.*

Although the construction of huts was completed in October 1987 essential services like ancillaries, electricity and water supply were released for execution after 9 to 12 months of release of work for huts. These were to be completed through other contracts between September 1987 and May 1989 but had not yet been completed. As a result, the huts could not be utilised by the users (September 1989).

Ministry stated in September and October 1989 that delay in completion of ancillaries was beyond the control of the department and the same was likely to be completed by November 1989. This contention was not tenable as the works were sanctioned without synchronisation. The Ministry also stated that the huts remained un-utilised and these were handed over to the users in March 1989.

Thus, sanctioning/execution of works without synchronisation resulted in non-utilisation of huts constructed at a cost of Rs.16.54 lakhs since October 1987. The work of external services was being delayed for want of decision to procure a filteration plant.

111. Inferior quality of cement

According to existing instructions every consignment of cement is required to be tested to observe variations in strength *vis-a-vis* that specified in Indian Standards. In June 1984, Commander Works Engineer (CWE), Tezpur placed a supply order for supply of 2700 tonnes of ordinary portland cement on Cement Corporation of India Limited. Akaltara cement factory. At the instance of the supplier, the supply order was amended first in September 1984, for supply of pozzolena portland cement in place of ordinary portland cement and again in December 1984, for changing the delivery point up to which cement was to be transported by rail. CWE collected 1468 tonnes of pozzolena cement during January- February 1985 without getting it tested.

A further quantity of 187 tonnes was not accepted as it was completely set. While executing a work in a division it was found in February 1985 that the cement was substandard and not setting properly. A technical board, constituted by the order of Chief Engineer, (CE) Shillong, found on inspection, in April 1985 that the cement supplied was of inferior quality. CE Shillong ordered not to use the inferior quality of cement on works and the matter be referred to the concerned factory for getting replacement of the entire stock. Works executed with 294 tonnes of this cement had to be dismantled and re-executed at a cost of Rs.0.38 lakh.

On a complaint lodged by the CWE, a joint inspection of the inferior quality of cement supplied by the factory was carried out in August 1985 by a representative of the cement factory and Garrison Engineer concerned which revealed that the segregated inferior quality cement did not belong to the said cement factory.

The matter was further investigated by a Court of Inquiry as desired by CE in September 1985. The Court which assembled in April 1986 after 7 months opined that the cement received from different suppliers got mixed up due to negligence of Departmental officials and required further investigation to fix the responsibility.

Loss statement of Rs.13.75 lakhs for inferior cement was being processed (September 1989).

The Ministry stated in September 1989 that disciplinary action against the defaulters was in progress and the Engineer-in-Chief's Branch was being requested to finalise the proceedings expeditiously.

To conclude, 1468 tonnes of inferior quality cement costing Rs.13.75 lakhs was accepted without carrying out quality test. An expenditure of Rs.0.38 lakh was also incurred on redoing of work executed with inferior cement.

112.Leakage of bitumen

A quantity of 1306 tonnes of bitumen in 8347 drums was received between March 1983 and June 1985 by Garrison Engineer (R&D) Balasore against four supply orders placed between December 1982 and February 1985. Due to non- availability of suitable covered storage space, the bitumen was stacked in an open area. During the handing and taking over charge between two Barrack and Stores Officers in September 1987 a loss of bitumen came to notice. A Board of Officers, assembled in January 1988, assessed the loss as 203 tonnes of bitumen and opined that the loss was attributable to long storage and improper stacking/preservation. Despite this, no immediate remedial measures were taken to stop/prevent the continued leakage of drums. In July 1988, Chief Engineer Calcutta Zone reported the loss to Ministry stating that a Court of Inquiry

(CI) had been ordered in November 1987 by Station Headquarters (HQ),Balasore to investigate the circumstances leading to the loss in storage and to pinpoint the responsibility for the loss. The CI findings duly recommended by the Station HQ were sent, in June 1988, to HQ Bihar and Orissa sub-area. The CI opined that loss of 203 tonnes of bitumen valued at Rs.5.79 lakhs was due to gross negligence and indifferent attitude of departmental officers. No action had been taken against erring officers so far (August 1989).

The Ministry stated in August 1989 that remedial/ corrective measures had been taken by Chief Engineer, Calcutta Zone. Further Engineer-in-Chief's branch had been asked to complete the CI and forward the report to the Ministry urgently for taking action against the persons found blameworthy for the loss.

To conclude, improper stacking, long storage of bitumen in open, failure in taking preventive measures to stop leakage of drums and negligence of departmental officers resulted in a loss of 203 tonnes of bitumen costing Rs.5.79 lakhs.

113. Payment of electricity duty/tax

According to Article 287 of the Constitution of India no law of a State shall impose or authorise the imposition of a tax on the consumption or sale of electricity which is consumed by the Central Government or sold to the Central Government for consumption by that Government. Despite the Constitutional provisions two State electricity Board/ Company levied electricity duty/tax amounting to Rs.67.56 lakhs on electricity supplied to five Military Engineer Services (MES) divisions for consumption by Defence establishments as shown in the following paragraphs.

Case I

The Punjab State Electricity Board(PSEB) levied a tax in the form of electricity duty on electricity supplied to the MES for consumption by Defence establishments. Four MES divisions paid Rs.65.33 lakhs during 1984-85 to 1988-89. On being pointed out in Audit that electricity duty was not to be levied on electricity consumed by Defence establishments, the MES took up the matter in November 1988 with the PSEB who, in turn, intimated in December 1988 that only works falling under the Central Government were exempt from payment of electricity duty and further clarified that exemption of electricity duty was not applicable to electric load of family accommodation. Accordingly, the MES approached, in June 1989, the PSEB not to charge electricity duty on electricity load of other than family accommodation which was assessed as 49.98 per cent of the total load of a particular cantonment and requested for its refund. The amount was yet to be refunded (August 1989).

The Ministry stated in August 1989 that electricity duty had to be paid due to the refusal of the PSEB to grant exemption to the MES works and action to obtain the refund of the duty had been taken. Further the Engineer-in-Chief's Branch had issued suitable instructions to ensure that no such payments are made in future without raising the issue at appropriate high levels.

Case II

The Ahmedabad Electricity Company Limited. (company), Ahmedabad levied sales tax on the electricity supplied to a MES division at Ahmedabad for consumption by Defence establishments. Sales tax levied and paid by the MES during October 1984 to March 1989 was Rs.2.23 lakhs. On being pointed out in Audit, the MES took up the matter in February 1989 with the company for refund of sales tax paid. In March 1989, on the advice of the company, the MES approached the Collector of electricity duty, for grant of tax exemption certificate to obtain refund of the sales tax already paid.

The Ministry stated in July 1989 that the Collector of electricity duty had issued instructions to the company not to levy electricity duty and tax with effect from 6th March 1989. Refund bills for the sales tax already paid were being submitted to the company. Instructions were being issued to safeguard Government interest with a view that no such payments be made on electricity charges by concerned MES formations.

Thus, electricity duty/tax amounting to Rs.67.56 lakhs was paid by five MES divisions on the total electricity consumed during 1984-85 to 1988-89 without apprising the suppliers of the Constitutional provisions. The refund was yet to be obtained (August 1989).

114. Penalty charges on electricity

Military Engineer Services (MES) at Madras concluded in November 1967 an agreement with the then Madras State Electricity Board (Board) for supply of high tension (HT) power of maximum demand of 187.5 KVA. The agreement envisaged that in the event of the consumer requiring a demand in excess of 187.5 KVA, it should give the Board 12 months' notice in writing stating the maximum demand required. In case of consumption beyond the maximum demand without notice, penal levy at double the normal rate per KVA was payable for the excess.

In January 1982, the MES applied for additional load. The application being not in order and lacking in supporting load details, was returned in February 1982 by the Board. Thereafter the MES submitted in July 1985, the revised application for upward revision of the permitted maximum demand to 275 KVA. In the meantime, load in respect of certain areas fed by a low tension service was transferred to the HT service in March 1982 by the MES. Consequently, power demand for the HT service exceeded the maximum contracted demand of 187.5 KVA from November 1982.

In January 1986, the Board sanctioned additional maximum demand of 87.5 KVA, but stipulated in January 1988 that the additional demand would be effective from the date of rendition of revised test report after inspection.

The agreement enhancing the maximum demand was yet to be finalised by the MES (July 1989). In the meantime, the MES paid penal charges of Rs.3.53 lakhs from November 1982 to May 1989 for exceeding the maximum contracted demand.

In July 1989, the Ministry stated that the agreement had been finalised by the MES and sent to the Board in May 1987 for their signature and the case ragarding waival of penal charges had been taken up with the Board. It added that the Engineer-in-Chief's branch had been advised to look into the reasons for delay in sending application/ request for additional load to the Board and fix responsibility for the same..

To conclude, delay on the part of the MES to get the upward revision of the permitted maximum demand of electricity to 275 KVA from the Board led to payment of avoidable penal charges of Rs.3.53 lakhs during November 1982 to May 1989.

115. Payment for un-authorised electricity

An agreement was entered into in March 1979 between the Military Engineer Services (MES) division at Bhatinda and the Punjab State Electricity Board (PSEB) for supply of 1 MW electricity to the Bhatinda Cantonment. In March 1983, the PSEB was approached for increasing the demand load from 1 MW to 3 MW. The PSEB did not agree in November 1984 for enhancement of the load beyond 2 MW for want of spare capacity in power transformers and advised the MES to apply separately for load beyond 2 MW. However, the connected load was much more than the sanctioned load.

With a view to avoiding any inconvenience and hardship to three -phase commercial and bulk supply consumers, it was decided by the PSEB, in August 1984, to extend the facility of getting the unauthorised load regularised under a voluntary disclosure scheme up to March 1985. Consumers coming for regularisation of load up to that date were not to pay any load surcharge and the additional load was to be regularised after payment of the additional security charges and completion of formalities. A separate procedure was to be followed for consumers who did not come forward voluntarily for regularisation of load up to March 1985.

Besides intimating about the initiation of case for enhancement of load for 2 MW, the MES expressed, in December 1984, its inability to get the additional load regularised by 15th December 1984 instead of 31st March 1985. The matter remained un-resolved and the MES also did not get the actual connected load regularised. After expiry of the voluntary disclosure period , the flying squad of the PSEB checked the connected load of the MES in October 1986 and found the connected load to be 9927.196 KW which was later on revised to 6045.156 KW against the sanctioned load of 2000 KW and, therefore, imposed a penalty of Rs.39.64 lakhs.(Rs.19.82 lakhs each for regularisation of unauthorised load and for load surcharge), besides a security of Rs.13.48 lakhs for the additional load. However, for the actual unauthorised load of 4405.156 KW as finalised and agreed upon by both the parties a sum of Rs.22.03 lakhs (Rs.11.015 lakhs each for electric load regularisation and load surcharge) was paid in September 1988 under protest. In addition, payment to the extent of Rs.17.98 lakhs on account of extra security and service connection charges was also made by the MES in November 1986.

Another MES division at Patiala which was consuming electric load more than the sanctioned load of 1027.748 KW, did not get the additional load regularised under the scheme. In January 1986, the MES initiated the case for total demand of 1700 KW and the matter remained unresolved. Meanwhile, the flying squad of the PSEB also checked the connected load of MES Patiala in October 1986 and found that the connected load was much more than the sanctioned load and imposed a penalty of Rs.4.10 lakhs on the excess unauthorised connected load besides a penalty of Rs.1.90 lakhs for slow running of electric meter. The total amount of Rs.6 lakhs was thus paid in 10 monthly instalments to the PSEB between December 1986 and August 1987.

In September 1989, the Ministry stated that the PSEB circular of August 1984 was not received by MES divisions at Bhatinda and Patiala. This contention is not tenable as the MES Bhatinda was to get additional load regularised by 15th December 1984 instead of 31st March 1985.

The Ministry added further that eventhough the actual load was being reported from time to time and correspondence was also being made for revision of agreement, the PSEB imposed penalty and surcharge for excess load and the matter had been taken up with the PSEB for seeking arbitration.

To conclude,the two MES divisions being aware of the connected load which was more than the sanctioned load, failed to take advantage of the voluntary disclosure scheme by not disclosing their actual connected load to the PSEB by March 1985. Subsequently, as a result of detection by the PSEB, a penalty of Rs.28.03 lakhs was paid, which otherwise was avoidable.

116. Procurement of defective pipes

In February 1983, a Command Headquarters (HQ) accorded administrative approval and expenditure sanction under operational works procedure for procurement of 56.4 kms of high density polyethlene (HDPE) pipes for field water supply at a cost of Rs.89 lakhs, which was subsequently amended (March 1983) to 58.39 kms and raising the cost to Rs.92.16 lakhs. Garrison Engineer (GE), Engineer Park, Jodhpur placed five supply orders on five firms in February 1983 against tender inquiries floated by Command Chief Engineer (CE).

As per conditions of supply, the material was to be tested/inspected before despatch at factory by the Command CE or by his representative. Supplies were received during March-April 1983, inspected by the Controllerate of Inspection Engineering Equipment (CIE). No warranty period was specified in the supply orders. In May 1983, the GE reported to the Command HQ that in 5.69 kms of pipes inserts were not fitted properly or the pipes were found to be cracking at the joints. The firms which were notified of the defects during March to May 1983 replaced/repaired 5.69 kms of pipes.

As further defects were noticed in the pipes, the GE placed orders for repair of 14.25 kms of pipe at a cost of Rs.2.71 lakhs between July 1984 and January 1985. In the process of repairs, the length of pipes was shortened due to cutting of cracked portion at both ends resulting in loss of 1.996 kms of pipe costing Rs.3.15 lakhs. Subsequently, to ensure best utilisation, the samples of defective pipes were sent for testing to the Research and Development (R&D)Establishment , Pune in May 1987. The tests conducted were inconclusive due to limited test facilities in the establishment (October 1988). Further, 5.622 kms of pipes costing Rs.8.87 lakhs were surveyed and written off between March 1985 and December 1986 within a period of two to three years of their receipt due to usage. During Command CE's visit to the park in February 1988, one of the points projected to the CE was to examine final utilisation of 50.8 kms of HDPE pipes costing Rs.80.18 lakhs held on charge. A Court of Inquiry, ordered on 25th March 1989, to investigate into the circumstances under which 58.39 kms of pipes costing Rs.92.16 lakhs were procured, whether all technical aspects were considered before selection of pipes, proper trials were conducted before placing the order, etc., was to submit its proceedings by 25th April 1989. The proceedings were awaited (October 1989).

Thus, out of 58.39 kms of pipes costing Rs.92.16 lakhs procured from trade, defects were noticed in 5.69 kms of pipes which were replaced by the firms, whereas repairs to 14.25 kms of defective pipes at an extra expenditure of Rs.2.71 lakhs was also carried out. 5.622 kms of pipes costing Rs.8.87 lakhs were written off within a period of two to three years. The utilisation of 50.8 kms of pipes costing Rs.80.18 lakhs was not intimated. The Court of Inquiry, which was to submit its proceedings by 25th April 1989, was yet to submit its proceedings (October 1989).

The case was referred to the Ministry in June 1989 and their reply has not been received (November 1989).

117. Disposal of accumulated coal dust

Under a Command Chief Engineer (CE), a quantity of 39,251 tonnes of coal dust costing Rs.110.7 lakhs, based on stock book rates, was procured during 1981 to 1987 for issue to contractors. The coal dust was held with various Military Engineer Services divisions as on 31st August 1987.

The contractors were reluctant to lift the coal dust as the quality was not up to the mark and the issue rate was excessive. Although the issue rate was reduced from Rs. 650 to Rs.475 per tonne in September 1986, a quantity of 27,942 tonnes of coal dust (value:Rs. 78.70 lakhs approximately) was lying in stock (August 1989). Possibility of further deterioration of the existing stock lying in the open due to continuous exposure could not be ruled out.

The Ministry stated in August 1989 that the existing stock was likely to be liquidated in due course.

118. Accumulation of steel billets

Garrison Engineer (GE) Jaipur was holding 1687.12 tonnes of steel billets costing Rs.66.35 lakhs from 1982 onwards. The billets were procured by the Chief Engineer (CE) Jaipur Zone through various supply orders. This was a part of left- over quantity of the total procurement of 3,264.42 tonnes out of which a quantity of 1,330 tonnes was got re-rolled during 1982 itself. The GE Gandhi nagar (Gujarat) was also holding 247.30 tonnes billets valued at Rs. 9.73 lakhs procured in 1982. Thus the left-over quantity of billets held at Jaipur and Gandhi nagar worked out to 1934.42 tonnes valued at Rs. 76.08 lakhs.

The engineers had stressed the need for early re-rolling while submitting a proposal to the Ministry for re-rolling of the total left- over quantity of billets (1934.42 tonnes). In November 1985, Ministry accorded sanction for the re-rolling of the entire leftover quantity at a cost of Rs. 13.50 lakhs, with maximum 10 per cent wastage in the process of re-rolling.

On receipt of the Ministry's sanction, tenders were invited for the re-rolling job. The lowest rates of the first call received in April 1987 were conditional and therefore, tenders were reinvited in May 1987 and were received in July 1987. As the rates quoted by the lowest tenderer were in excess of the tolerance limit of the sanctioned amount, a case was sent to Engineer-in-Chief (E-in-C) branch in July 1988 for obtaining the financial concurrence of the Ministry for incurring expenditure up to Rs. 18.70 lakhs. The concurrence was yet to be accorded (September 1989).

In September 1989, the Ministry stated that due to acute shortage of small sections of rolled steel during 1981-82 steel billets were procured for further provisioning of re-rolling. However, Government sanction had been issued for re-rolling the remaining quantity. With a view to utilising the same, the E-in-C had been asked to take early steps for re-rolling of the unutilised quantity of billets.

Thus, a stock of 1934.42 tonnes of billets valuing Rs.76.08 lakhs had been lying in stock since 1982 without being re-rolled.

119. Procurement of steel bars

Mention was made in paragraph 29 of the Report of the Comptroller and Auditor General of India for the year ended 31 March 1988, Union Government, Defence Services, (Air Force and Navy) No. 3 of 1989 regarding procurement of 2599.58 tonnes of hot rolled deformed steel bars in lieu of tor steel costing Rs. 150.20 lakhs held in stock for more than two years in the Military Engineer Services (MES) division at Cochin and Bombay without any foreseeable utilisation.

Under an indent placed by the Engineer-in-Chief's Branch (E-in-C)in December 1985, a quantity of 1700 tonnes of steel bars was allocated to the Zonal Chief Engineer (CE), Bhatinda though no demand for the steel bars was placed by him. Out of a quantity of 1666.90 tonnes of steel bars (value:Rs. 97.85 lakhs) received by the Zonal CE during March to July 1986, 554.015 tonnes (value: Rs.32.52 lakhs) were incorporated in the various works and 435.44 tonnes (value: Rs. 25.56 lakhs) were transferred to seven MES divisions between September 1987 and August 1988 incurring an expenditure of Rs. 1.03 lakhs on its transportation and handling. A quantity of 250.051 tonnes (value: Rs. 14.68 lakhs) were issued for incorporation in works by these MES divisions. A quantity of 862.834 tonnes of steel bars (value: Rs. 50.65 lakhs) was still lying in stock with the Zonal CE and the MES divisions (September 1989) without any foreseeable utilisation.

In September 1989, the Ministry stated that the slow utilisation of steel bars was due to its limited utility and non-availability of requisite type of works in large number in the zone where these bars could be utilised. It added that necessary instructions to liquidate the surpluses on priority was issued by the E-in-C in September 1989 and also not to approve the steel items of restricted use for procurement in future.

Thus,out of 1666.90 tonnes of steel bars (value:Rs.97.85lakhs) being of limited utility, procured injudiciously, 862.834 tonnes (value:Rs. 50.65 lakhs) were lying in stock for over three years without prospects of its utilisation in the foreseeable future besides blocking of public money.

120. Disposal of surplus stores

Mention was made in paragraph 22 of the Report of the Comptroller and Auditor General of India for the year 1977-78, Union Government (Defence Services) pointing interalia the delay in disposal of stores in an Engineer Stores Depot (ESD) in a certain command. The Public Accounts Committee (PAC) in their 95th Report (1981-82) (Seventh Lok Sabha) recommended taking speedy measures for identification of surplus stores and their disposal. In the action taken note submitted by the Ministry in September 1982 contained in 95th Report (1981-82) (Seventh Lok Sabha) it was indicated that spares worth Rs. 4.64 crores in ESD 'X' in Eastern Command were approved for disposal in 1978-79. Engineer-in- Chief's Branch had approved tyres worth Rs. 31.25 lakhs held in ESD 'X' for disposal in September 1979. Taking into consideration the stipulated period of disposal as fixed by the Ministry in November 1980, the surplus stores should have been disposed of by June 1983. The Ministry intimated in November 1980 that tyres were being included in the lots of spares worth Rs. 4.64 crores under disposal.

Due to deletion of three items of current spares the value of spares awaiting disposal was revised to Rs. 4.46 crores in May 1989. Till September 1989, spares costing Rs. 3.53 crores were disposed of, spares costing Rs. 0.52 crore had been auctioned but letter of acceptance was awaited and spares costing Rs. 0.41 crore were awaiting disposal.

Pending disposal of surplus spares and tyres Rs. 1.73 lakhs had been incurred on care / maintenance and preservation of surplus stores during July 1983 to March 1986.

In September 1989 the Ministry stated that no expenditure was incurred on care/maintenance and preservation of stores after March 1986 since these items were planned for auction. Delay in disposal of stores was due to lack of bidding on minimum reserve price fixed, non-availability of separate storage for continuous segregation and auction etc. Disposal of spares takes a long time as these are not being disposed of alongwith the plants.

To conclude, spares worth Rs. 41 lakhs approved for disposal as early as 1978 were yet to be disposed of (September 1989). The abnormal delay in disposal of these surplus stores resulted in an avoidable expenditure of Rs. 1.73 lakhs by the end of March 1986 on their maintenance and preservation. Delay in disposal of spares would also cause further loss due to deterioration of spares with the passage of time.

121. Purchase of stores without urgency

Local purchases are resorted to meet emergent requirements to cater for stocking up to three months requirement and taking into account any dues-in (from normal source of procurement) and within budgetary provisions. For meeting such requirements the Commander Works Engineers (CWE) have been delegated financial powers of Rs. 0.50 lakh for direct purchase of stores in a single category against normal requirements and Rs. 0.75 lakh in emergent cases.

Notwithstanding the above provisions, the CWE, Allahabad placed supply orders for local purchase of Rs. 62.40 lakhs during 1983 to 1985 to meet the requirement of stores of Garrison Engineer (GEs) under his administrative control. Most of these locally purchased stores costing Rs. 24.46 lakhs remained unutilised for long (October 1989) as shown below.

Case I

Electrical stores worth Rs. 27 lakhs were purchased locally for the GE (Air Force), Gorakhpur against supply orders placed by the CWE during 1983 to 1985. Since these could not be utilised in more than two years the GE notified in April 1987 stores valued at Rs. 26 lakhs to the CWE for possible utilisation in other GEs, under his control. Despite this, stores worth Rs. 19.23 lakhs were lying in stock (October 1989).

Case II

(a) Sodium vapour lamps of various voltages with complete fittings and high pressure sodium vapour lamps and ignitors valued at Rs. 11 lakhs were purchased locally for GE (West), Allahabad against orders placed by CWE piecemeal between August 1984 and November 1985. No order of Station Commander existed for emergent switch over to sodium vapour lamps in the cantonment. Rates were accepted after justifying local purchase rates as 'reasonable' by adding 14.5 *per cent* on account of Uttar Pradesh Sales tax (12.5 per cent) and octroi (two per cent) plus 26 per cent on account of transportation, supervision, liaison charges and contractor's profit to the basic cost. Sodium vapour lamps worth Rs. 0.54 lakh were lying in stock (October 1989).

(b) Cables worth Rs. 4.63 lakhs were purchased locally against normal requirements between February 1985 and June 1985 without any urgency; of these cables worth Rs. 3.99 lakhs only could be consumed over two years. The balance stores worth Rs. 0.64 lakh were still (October 1989) held in stock.

(c) Eight refrigerators of 286 litres were purchased locally for GE (West), Allahabad against supply orders placed by CWE in September and November 1985. After receipt one of these was issued to a unit after eight months, another one after nine months, two after 10 months and one after two and half years and balance two (cost: Rs. 0.21 lakh) were still (October 1989) lying in store.

Case III

Orders were placed in November 1985 by CWE for 40 numbers of each spares of 56 " and 48 " sweep ceiling fans (cost: Rs. 1.67 lakhs). All these spares, if assembled, could give a complete fan but the total cost for such an assembled fan with spares procured worked out to more than Rs. 1600 each which was about three times the cost of one complete fan. Procurement of spares at exorbitant cost (with reference to the cost of a complete fan) lacked prudency on the part of the competent authority in exercising his powers to incur expenditure.

Case IV

Cables of various sizes/specifications were purchased locally for GE (Air Force), Bamrauli against supply orders amounting to Rs. 9.18 lakhs placed by the CWE during December 1984 to December 1985. Of this, stores costing Rs. 7.82 lakhs could be consumed during a period of about four years and balance stores valued at Rs. 1.36 lakhs were still held in stock (October 1989).

Case V

Electrical stores costing Rs. 8.11 lakhs were purchased locally for GE (East), Allahabad against supply orders placed by the CWE during August 1984 to July 1985 as emergent requirement but the stores worth Rs. 5.63 lakhs could be consumed in about four years. The stores worth Rs. 2.48 lakhs were still held in stock (October 1989).

Thus, locally purchased stores valued at Rs. 24.46 lakhs remained unutilised for two to four years indicating that there was no urgency for local purchase. Sodium vapour lamps costing Rs. 11 lakhs were locally purchased to replace the fluorescent lights even though there was no urgency for immediate switch over to these lamps. Eighty sets of spares for ceiling fans (cost:Rs. 1.67 lakhs) were purchased at about three times the cost of complete ceiling fan.

In October 1989, the Ministry stated that as the case was under investigation by the Central Bureau of Investigation and two Parliamentary Assurances were also pending it would not be appropriate to furnish reply without receiving investigation report.

122. Procurement of steel

In accordance with Government orders issued in 1971/1973, Chief Engineers (CEs) are authorised to make 100 *per cent* advance payment for purchase of steel from stockyards of main producers after ensuring that the quantity and quality of steel actually available is strictly in accordance with the offer made by the suppliers. Though the manufacturers were to deliver steel from their stockyards, in some cases deliveries were taken from their re-rolling mills. Garrison Engineer(GE) Bhandup collected the steel from re-rolling mills instead of from the stockyards of manufacturers involving an extra lead of 30 Km to 133 Km in transportation. The total quantity collected from re-rolling mills during January 1985 to September 1987 was 1481 tonnes and the amount paid for extra lead was Rs. 3.78 lakhs. In October 1988, the GE took up the matter with Steel Authority of India for obtaining refund of the amount from the suppliers who did not respond (September 1989).

The Ministry stated in September and December 1989 that some quantity of steel was collected from the re-rolling mills as per the delivery orders by the branch sales office of the stockyard. The prices ex-re-rolling mills were at par with the stockyard and the question of price adjustment did not arise.

Thus, collection of steel from re-rolling mills instead of stockyards resulted in an extra expenditure of Rs. 3.78 lakhs.

123. Irregular procurement of stores

In February 1984, Headquarters Central Command sanctioned a work for provision of water borne sanitation at Lucknow at an estimated cost of Rs. 36.26 lakhs. Accordingly Military Engineer Services (MES) concluded, in November 1985, a contract for execution of the work at a cost of Rs. 24 lakhs. The work was completed in May 1988.

In March 1986, the MES procured 45.34 tonnes HR sheets valued at Rs. 3.28 lakhs from the Steel Authority of India Limited, Kanpur, incurring Rs. 0.08 lakh on its transportation, against the above work even though the contract did not envisage supply of sheets to the contractor and was not used in the work in question.

In September 1989, the Ministry stated that a saving of approximately Rs. 3 lakhs was available which was utilised in the procurement of sheets to avoid lapse of funds and for use in other works. Out of 45.34 tonnes, 6.64 tonnes had been used in other work leaving a balance of 38.7 tonnes (value: Rs. 2.80 lakhs) which was transferred in January 1989 to another MES division at Lucknow against various works in hand which was yet to be utilised (September 1989).

Thus, savings of Rs. 3 lakhs under a work, which should have been surrendered, had been utilised irregularly in March 1986, for procurement of sheets, not required for the work.

The Ministry also added that Army Headquarters "Engineer-in-Chief's Branch have been asked to issue suitable remedial measures in this regard".

124. Recovery of water charges

Regulations stipulate that recovery of charges for water supplied to Cantonment Boards as per agreement will be all-in-cost rate which is obtained by dividing the total working cost of the operation of the installation by the quantity of water actually supplied per annum. The rate, so arrived, relating to the immediate preceding year is adopted prospectively for the year to avoid recovery from consumers retrospectively.

Military Engineer Services (MES) had been supplying water to Ahmednagar Cantonment Board (Board) since March 1982. No formal agreement had been entered into between the MES and the Board so far (June 1989) as the Board had not agreed to the recovery rates i.e. all-in-cost rate, as the matter was under correspondence which involved the Board, the Director General Military Lands and Cantonment now Director General Defence Estates (DGDE), Ministry and the MES. Engineer-in-Chief's (E-in-C) branch had in November 1984 indicated their inclination to accept the rates, arrived at, which included all expenditure incurred in supplying water up to the bulk supply point, and not all-in-cost rate, as contended by the Board.

Meanwhile, from March 1982 to February 1988 the recovery made was at a uniform rate of Rs. 4.03 per 1000 gallons which was the all-in-cost rate for 1979-80. Based on the difference between the annual all-in-cost rate and the rate adopted by the MES during the above mentioned period, the short recovery from the Board worked out to Rs. 37.49 lakhs.

The Ministry stated in July 1989 that the recovery rate was under correspondence and was yet to be finalised. E-in-C and DGDE had been requested to take urgent action to get the agreement concluded and recoveries of arrears effected/regularised with the approval of the Government.

To conclude, the Board was being supplied water without determination of the recovery rate and for the period March 1982 to February 1988 the recovery of water charges effected for water supplied was short to the extent of Rs. 37.49 lakhs. An agreement for supply of water could not be concluded for over six years (June 1989).

125. Non-recovery of service tax

According to the orders issued in October 1969, the recovery of service tax from service officers will be subject to a maximum of one per cent of their pay. At stations where the amount of service tax levied by local bodies is less than one *per cent* of their pay, the officer will pay the actual amount levied. The recovery of service tax from service officers up to June 1987, was subject to the condition that the payment on this account is made to local bodies by Military Engineer Services (MES) authorities and it was discontinued by Government from 1st July 1987 based on the recommendations of the Pay Commission.

A test check of four MES divisions in Southern Command revealed that eventhough the service tax/charges were regularly paid every year by the MES to the local bodies,no action was taken to recover service tax from service officers resulting in loss of Rs. 2.42 lakhs during the period April 1985 to June 1987. Internal audit authorities, though scrutinising these accounts at a regular interval, never pointed out this irregularity. In August 1989, the Ministry stated that Controller General of Defence Accounts (CGDA) had been requested, in July 1989, to recover the amount of Rs. 2.42 lakhs and also review the position in respect of other stations and recover the amount of service tax, if not recovered.

To conclude, service tax amounting to Rs. 2.42 lakhs paid by four MES divisions during April 1985 to June 1987 required to be recovered from service officers were yet to be recovered. Internal audit also never pointed out the non-recovery of service tax. Position in respect of other stations was stated to be under review by the CGDA.

126. Loss of iron sheets in transit

On 23rd August 1982, corrugated galvanised iron sheets weighing 110.49 tonnes valued at Rs.9.74 lakhs were despatched by Steel Authority of India Limited (SAIL) to a Military Engineer Services (MES) division. The MES made cent per cent payment in October 1982 for the stores, on proof of despatch, but the stores had not been received so far (August 1989).

According to the provisions of Indian Railways Act, if the stores are not received, a claim on Railways is required to be preferred within six months from the date of railway receipt, otherwise the claim is to be treated as time barred. The MES preferred two claims for the consignment on the concerned Railway with a covering letter dated 12th February 1983 which was actually despatched by registered post on 4th March 1983 i.e. after the expiry of six months period. In May 1983, the claims were rejected by the Railways being time barred as these were received after expiry of six months from the date of booking of stores. In

January and March 1986, the MES approached the concerned Railway authorities to settle the claim but it did not yield any result. In May 1986, a loss statement for Rs.9.74 lakhs was prepared by the MES for regularisation of loss without any investigation to pinpoint the lapses and the responsibility for the loss.

In August 1989,the Ministry stated that a Court of Inquiry ordered in September 1988 was to assemble in July 1989 and the Zonal Chief Engineer had issued remedial/ corrective instructions in July 1989.

Thus, failure on the part of the MES in preferring the claim on Railways within the prescribed period of six months had resulted in avoidable loss of Rs. 9.74 lakhs. A Court of Inquiry ordered in September 1988 after a gap of over five years was to assemble in July 1989 and its findings were awaited (August 1989).

CHAPTER VI

OTHER CASES

127. Non-collection of sales tax from bidders

According to instructions issued by the Ministry in August 1972, sales tax in respect of auctions conducted departmentally or under the agency of Director General of Supplies and Disposals is payable by the purchaser on the sale value. In February 1976, Army Headquarters (HQ) instructed all Commands that stock holders should get themselves registered as dealers so that sales tax in addition to sale value could be collected from the bidders in respect of departmental auctions. Director, Supplies and Disposals (DSD), Bombay was registered as a dealer in Maharashtra from April 1976. In April 1976, HQ Southern Command advised depots located in Maharashtra to cancel applications for registration and requested sales tax authorities not to treat depots as "dealers".

A sum of Rs. 81.45 lakhs had been paid as sales tax due on auction sales conducted by the depots under their own arrangements during April 1976 to October 1981 by the five depots without its recovery from bidders. Subsequently, the five depots got themselves registered as "dealers" in 1981.

The case was referred to the Ministry in June 1989 and their reply has not been received (November 1989).

128. Incorrect application of exchange rate

The Ministry concluded eight contracts with a foreign supplier between December 1974 and April 1984 for the supply of various defence equipment. The contracts, inter alia, provided for suppliers credit to the extent of 85 per cent of the contract value to be re-paid in 20 equal consecutive instalments spread over 10 years payable twice in a year i.e. 1st April and 1st October based on the deliveries of the goods. For all payments, the exchange rate prevailing on the date of payment was to be adopted.

The Controller of Defence Accounts (CDA) authorised in March 1987, September 1987 and March 1988 a total payment of RR 0.31 crore to be made on 1st April 1987, 1st October 1987 and 1st April 1988 to the bankers of the supplier at the exchange rate prevailing on those dates. During a test check of debit advices by Audit in September 1988 it was noticed that the Bank had adopted incorrect exchange rate and paid Rs. 496.43 lakhs instead of Rs.469.70 lakhs resulting in an excess payment of Rs.26.73 lakhs. CDA failed to detect the excess payment.

In September 1989, the Ministry stated that the Bank had already been requested to recover the balance amount and now they have been requested to furnish daily exchange rates on a regular basis, to overcome this difficulty.

L.V.B.

NEW DELHI
Dated the 28 FEB 1990

(R.V. BANSOD)
Director General of Audit, Defence Services

Countersigned

T.N. Chaturvedi

NEW DELHI
Dated the 2 [illegible] MAR 1990

(T.N.CHATURVEDI)
Comptroller and Auditor General of India