सत्यमेव जयते

REPORT OF THE

COMPTROLLER AND AUDITOR GENERAL

OF INDIA

FOR THE YEAR ENDED 31 MARCH 1987

No. 2 of 1988

UNION GOVERNMENT

(DEFENCE SERVICES)

REPORT OF THE

COMPTROLLER AND AUDITOR GENERAL

OF INDIA

FOR THE YEAR ENDED 31 MARCH 1987

No. 2 of 1988

UNION GOVERNMENT

(DEFENCE SERVICES)

TABLE OF CONTENTS

CHAPTER 9 — NAVY

CHAPTER 10 — OTHER TOPICS

PREFATORY REMARKS

This Report 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 1986-87 together with other points arising from audit of the financial transactions of the Defence Services.

The cases mentioned in the Report are among those which came to notice in the course of test audit during the year 1986-87 as well as those which had come to notice in earlier years but could not be dealt with in previous Reports; matters relating to the period subsequent to 1986-87 have also been included, wherever considered necessary. Chapter 1 gives an overview of this Report, bringing out the significant Audit findings.

CHAPTER 1

OVERVIEW

1.1 Budgetary Control

The total voted grant for the Defence Services—Army, Air Force, Navy and Capital Outlay on Defence Services, for the year 1986-87 was Rs. 10,712.71 crores. The actual expenditure was Rs. 10,910.16 crores. The resultant excess expenditure was Rs. 197.45 crores. Excess expenditure was incurred under all the four grants. Loss of stores including those sustained due to theft, fraud or gross neglect registered a steep rise from Rs. 5.29 crores in 1982-83 to Rs. 23.94 crores in 1986-87. **(Chapter 2)**

ARMY

1.2 Purchase of Combat dress

An offer, of Rs. 122 for the supply of one set of uniform, made against a tender, could not be availed of in April 1983 due to failure to indicate clearly the technical and commercial specifications. The Department further failed to clinch that deal through negotiations to sort out the problems on the technical and commercial specifications. As a result, a second tender had to be floated in June 1983 which resulted in a higher rate of Rs. 152.80 per set. The resultant extra expenditure in the supply order placed in November 1983 was Rs. 5.10 crores. An interesting feature of the case is that the department continued to get uniforms till March 1987 at the June 1983 price of Rs. 152.80 per set despite general price rise of inputs. **(Paragraph 9)**

1.3 Procurement of blankets

Defence requirements for blankets are met from a Defence ordnance factory, public sector undertakings and the open market. While the general market rate per blanket was Rs. 114.21 and the cost of its manufacture in the Defence ordnance factory, Rs. 120.99, the rate paid 'on cost plus basis' to the public sector undertakings was Rs. 161.70 per blanket. The current policy of procurement of blankets by Defence from the public sector undertakings on cost plus basis, resulted in an extra expenditure of Rs. 8.40 crores to the Defence Budget. **(Paragraph 10)**

1.4 Procurement of special purpose vehicles

Procurement of 62 vehicles by import, assessed as an "inescapable" requirement, mooted in August 1981, got delayed upto October 1983. Lack of prompt decision led to a price rise of Rs. 72 lakhs. **(Paragraph 11)**

1.5 Purchase of trailers

285 trailers were purchased from Bharat Earth Movers Ltd. at a cost of Rs. 10.60 crores. They were reported to be unreliable and partly used from February 1976 till the defect-rectification was completed in 1983-84. On the orders placed with the same company in November 1984 for supply of 288 trailers, the price paid was higher than the import cost; the cost difference being Rs. 6.56 crores. **(Paragraph 12)**

1.6 Defective re-surfacing of a runway

Re-surfacing work on the runway of an airport was completed in January 1985 at a cost of Rs. 1.99 crores. When put to use, the surface of the runway was found defective. As a result, the runway could be put to only restricted use since January 1986. The sub-standard work was attributed mainly to poor quality control by the contractor and lack of supervision by the department. **(Paragraph 20)**

1.7 Use of high strength cement as ordinary portland cement

Certain works require use of "high strength cement" which is costlier than ordinary portland cement. Such cement loses its high strength quality on prolonged storage, etc. and is required to be tested before use. 9,900 tonnes of high strength cement, having lost its high strength quality, was used as ordinary cement resulting in a loss of Rs. 28 lakhs. **(Paragraph 23)**

1.8 Irregular recruitment

In January 1984, Government, as a measure of economy in expenditure, imposed a general ban on recruitment, till September 1984 and extended its application till end of March 1985. The ban was further extended in terms of Government order dated 2nd April 1985. The content of that order was conveyed to the Command Chief Engineers by signal on 16th April 1985. Military Engineer Services branch in Southern Command had appointed 2,030 persons between 1st April 1985 and 18th April 1985 and 206 persons after 18th April 1985. On the irregular appointments made, in contravention of the general ban orders, the expenditure incurred till October 1986 was Rs. 3.60 crores. **(Paragraph 29)**.

1.9 Development of fuze

The development of a fuze for use in a gun fitted in naval ships, entrusted to Defence Research and Development in April 1971, was required to be completed by March 1973. Repetitive trials and rectification of several deficiencies noticed in the fuze developed went on from August 1972. In the final trial carried out from the ships, in February 1983, the performance of the fuze was found to be satisfactory. Between 1979—81, import of the fuze at a cost of Rs. 3 crores was resorted to. By the time the fuze was developed, it had become obsolete to the users combat requirement as the guns for which this fuze was developed, were expected to be phased out in 1990. The expenditure on this project, largely unfruitful, had also increased from the estimated cost of Rs. 14.50 lakhs to Rs. 42.40 lakhs. **(Paragraph). 30)**

1.10 Army Service Corps

A review on the working of Army Service Corps brought out certain deficiencies. Delays and shortfalls in the procurement and supply of goods by the central purchase agencies resulted in local purchases at higher costs. Such local purchases resulted in an extra expenditure of Rs. 1.63 crores. An escalation benefit permitted to a private firm, in the purchase of vanaspati, resulted in an additional expenditure of Rs. 30.23 lakhs. A proposal for effecting savings to the Defence Budget by securing defence requirements of petroleum products from public sector companies direct, remains to be implemented. 135 tonnes of tea, costing Rs. 30 lakhs, found "unfit for issue to the troops" was subsequently found "not unfit for human consumption" and utilised by mixing it with good tea in the proportion of 20 : 80. **(Paragraph 32)**

1.11 Military Farms

A review on the working of the military farms brought out persisting deficiencies on under-utilisation of capacity, purchase of milk from open market to the extent of about 60 *per cent* of the requirements and inflation of profits. Major part of the profit continued to be on interest earned on Government banking account. Part of a dairy complex was shifted to a new location but shifted back to the old one as the functioning of the farm from two locations was found to be uneconomical and unmanageable. The avoidable expenditure on this account was Rs. 18 lakhs. **(Paragraph 33)**

1.12 Defective ammunition

Certain defects in an ammunition, manufactured by an Ordnance Factory and supplied to the Army, were noticed as early as in 1975. No effective measures were taken to rectify the defects in the ammunition produced subsequently. The quantity of defective ammunition increased from 1.70 lakh pieces in 1980 to 3.72 lakhs in 1985, the value thereof being Rs. 10.42 crores. Repair of 2.92 lakh defective pieces between 1980 and 1985 at a cost of Rs. 20 lakhs did not prove successful as the repaired ammunition also developed the same defects. The entire stock of this ammunition was ordered to be surveyed to identify the defective pieces. 4.5 *per cent* of the all India stock was surveyed till September 1986, out of which 33 *per cent* of the ammunition, costing Rs. 54 lakhs, was found unserviceable. **(Paragraph 76)**

1.13 Canteen Stores Department

The financial transactions of Canteen stores department had been the subject matter of several discussions by the Public Accounts Committee from 1954 to 1966. The Committee desired that the Constitutional irregularity of Canteen stores department keeping its financial transactions outside the Consolidated Fund of India should be rectified. Part implementation of that recommendation was made in March 1977. Orders for full implementation, proposed in October 1982, have not yet been issued. According to general instructions, Government receipts should be credited to the Consolidated Fund of India and money required for expenditure should be withdrawn therefrom. But Canteen stores department had not been depositing its receipts to the Consolidated Fund of India, it utilised the receipts for its expenditure. It had also been keeping heavy amounts outside the Consolidated Fund of India. In April 1987, the financial-cum-administrative set-up of Canteen stores department came in for adverse comment by the Estimates Committee too. That Committee desired that the procedures and practices in Canteen stores department should be brought in conformity with the relevant provisions of the Constitution and the Financial rules. **(Paragraph 78)**

1.14 Other interesting cases noticed are as follows :

(a) Construction of a swimming pool for training Navy personnel, sanctioned in 1969, remained to be completed even after a lapse of 18 years. Failure to avail the tendered rates offered in 1980 and 1982 pushed up the cost of the work in the contract finalised in April 1985. **(Paragraph 24)**

(b) About two lakh coloured cotton vests, found below specifications, were purchased after effecting a price reduction at a cost of

Rs. 17 lakhs. The cotton vests, on receipt, were found to have serious defects on their colour fastness and not fit for issue to Army. After repeated consideration of the matter, segregation of the good and bad ones, and after exploring the possibility of redying them, the cotton vests, despite their poor colour quality, have all since been issued to the troops. (**Paragraph 43**)

(c) An equipment needed by a military hospital in 1981, imported in February 1982, at a cost of Rs. 4.42 lakhs, remained unutilised. The Indian agent's commission paid thereon at 20 *per cent* of the value was far in excess of the permissible limit of 7.5 *per cent* (**Paragraph 39**)

(d) A purchase order for import of an equipment costing US $ 10,24,290 included U.S. $ 24,032 for training abroad of four scientists. As only one person was trained against the payment, the cost of training was not fully utilised. (**Paragraph 31**)

ORDNANCE FACTORIES

1.15 General observations

There are 37 Ordnance and Clothing factories which function under the Department of Defence Production and Supplies. These factories produce a wide range of products required by the Armed Forces. The net cost of production during 1985-86 was Rs. 1,006.65 crores. This represented an increase of Rs. 93.31 crores over the preceding year. A selective audit of the working of the factories revealed that :

— The value of items remaining in the process of manufacture at the end of 1985-86 was Rs. 366.52 crores. Work on 177 items valued at Rs. 1.26 crores which had commenced between 1952-53 and 1974-75 had still not been completed even though they are required to be completed within 6 months normally. The Public Accounts Committee had recommended to Government in its 214th Report (1983-84) that arrears of old orders be wiped off to avoid infructuous expenditure.

— The value of non-moving and slow-moving stores showed an upward trend in 1985-86 compared to the two preceding years.

— All factories continued to work on systematic over-time during the year. Over-time paid amounted to Rs. 52.72 crores in 1985-86 against Rs. 47.26 crores in the previous year. (**Paragraph 13**).

1.16 Wasteful production

Ammunition produced on the basis of a faulty design developed by the Defence Research and Development Organisation was rejected by the Army leading to a loss of Rs. 23.81 lakhs. Ineffective inspection and lack of care during manufacture led to the substandard production of ammunition worth Rs. 5.56 crores during 1980-81 to 1985-86. This ammunition was rejected by the Army. In a third case, also, ammunition valued at Rs. 1.19 crores was rejected due to defective manufacture. [**Paragraphs 15(iv), 16(iii), 16(i)**]

1.17 Recoveries of Rs. 19.65 lakhs

Of an amount of Rs. 36.81 lakhs advanced to a particular firm in 1981—83 for the production of fuze bodies, Rs. 19.65 lakhs plus interest are still outstanding. The firm stopped functioning in July 1984 and the recovery has been pending for the past 3 years. [**Paragraph 17(ii)**]

1.18 Production of a fuze

Fuzes required for a particular ammunition could not be produced although the production facilities had been sanctioned by Government in 1962. Consequently, fuzes worth Rs. 1.07 crores were imported in 1983-84. Also, there was a shortfall in the production of related ammunition valued at Rs. 8.65 crores during 1984-85 and 1985-86. (**paragraph 18**)

1.19 Incomplete project

A project sanctioned in February 1980 at a cost of Rs. 5.67 crores for removing defects in the transmission assemblies of vehicles and scheduled for completion in March 1984 had still not been completed (October 1987). As a result, defective assemblies continued to be produced since 1984-85. Rs. 5.23 lakhs had been spent on their repair. (**Paragraph 19**)

AIR FORCE

1.20 Review on Chetak and Cheetah helicopters

A review of Chetak and Cheetah helicopters manufactured between 1963 and 1983 shows manufacturing delays leading to delays in the induction of these helicopters into squadron service of the IAF as well as avoidable cost escalation. Additionally, maintenance of the helicopters was problematic as evidenced by poor serviceability. The deficiency in the availability of helicopters was aggravated by a shortfall in the overhaul task. This affected flying efforts adversely besides leading to a shortfall in the rate of utilisation of the helicopters. It also entailed an increase in the maintenance reserve at an additional cost of Rs. 3.93 crores. A later project to modify the Chetak helicopters for an anti-tank role was also inadequately monitored and ineffectively supervised. The investment of Rs. 6.92 crores on the modification proved sub-optimal as critical parts of the missile system remained inoperable for long periods. Further, the weapon system itself stood degraded due to a paucity of missiles for both training and operational purposes. **(Paragraph 44)**

1.21 Development of an airborne radar system

An audit of a project for the development of an equipment by a Defence Research Establishment on the basis of specified Air Staff Requirement had revealed a significant time-lag between the initiation of the project in 1973 and its actual sanction in 1978. The project proved unsuccessful and had to be foreclosed in April 1986 after incurring an expenditure of Rs. 10.76 crores. In 1979, however, a review of the project had determined that the IAF's need for the equipment had ceased on account of serious slippages in development. The project was, nevertheless, allowed to continue until finally closed in 1986. In the event, the IAF had to resort to import of equipment with limited operational capability at a cost of Rs. 48.50 crores. **(Paragraph 45)**

1.22 Navigation System for the IAF Transport Fleet

Flawed procurement procedures were adopted by Government while executing a scheme to install a contemporary navigation system on the IAF transport fleet between 1978 and 1987. The more serious lapses related to contracting for equipment which had not been evaluated, evaluating the equipment subsequent to the contract at IAF cost, not enforcing contractual provisions which safeguarded the Government's interests in the event that the equipment fell short of claimed performance and fitting the navigation system on a particular type of aircraft even though it met the IAF's requirements only partly. These actions led to the investment of Rs. 96.67 lakhs in foreign exchange on the equipment and Rs. 36.67 lakhs on proving trials being largely unproductive. This is apart from the fact that 9 years after the first equipment was evaluated, the IAF transport fleet continued to have navigation systems of limited capability. **(paragraph 46)**

1.23 Installation of Instrument Landing Systems

It was seen that instrument landing systems acquired at a cost of Rs. 3.18 crores for 7 airfields were installed in a haphazard manner. There was a mismatch between the procurement of the systems, the acquisition of land and completion of related works services as also calibration of the equipment. As a result, the system was not operational in any of the airfields till June 1987 even though procurement action had been initiated as far back as 1980. The denial of this facility posed a serious flight safety hazard. Substantial savings that would have accrued but for the diversion of aircraft to other airfields in bad weather were also foregone. **(Paragraph 47).**

1.24 Idle investment on an Advance Landing Ground

141.48 acres of land was acquired at a cost of Rs. 12.85 lakhs in 1971 on which an advance landing ground was constructed at a cost of Rs. 8.04 lakhs. This investment of Rs. 20.89 lakhs has remained idle for 16 years since the IAF declined to use it on grounds of unsuitability. Meanwhile, 92.6 *per cent* of the land has been encroached upon. **(Paragraph 48)**

1.25 Defective Contracting

The full cost of an imported specialist vehicle (Rs. 9.11 lakhs) was paid to the supplier even before its receipt in India in an unusable state. No provision was made for transit insurance. Consequently, there is little prospect of either repairing the vehicle or recovering the cost 4 years after its receipt in February 1983. **(Paragraph 49)**

1.26 Surplus Oil

Poor co-ordination between two departments of Air Headquarters was revealed in a case which led to 7.27 lakh litres of oil valued at Rs. 46.82 lakhs being held surplus in September 1987. While the flying of Packet aircraft, which used this oil, was suspended gradually and the aircraft finally grounded in June 1982, procurement action for the oil was neither reviewed nor stayed even when the entire fleet was grounded. **(Paragraph 50)**

1.27 Poor utilisation of a machine

The Air Force failed to optimally utilise a machine procured in 1984 at a cost of Rs. 67.78 lakhs in foreign exchange to produce colour film cassettes for use in an aircraft navigation system. There was a serious shortfall in production due to a paucity of the required chemicals and inadequate environmental conditions with the result that 36 aircraft had been operating since 1983-84 with material operational limitations. **(Paragraph 51)**

1.28 Inventory Management

A review of the stores held by HAL on behalf of the IAF revealed poor inventory management, lack of co-ordination between Air Headquarters and HAL, breakdown of established procedures for the management of the stores and locking up of large sums of money on account of these failures. The review also revealed the absence of any effective monitoring arrangements by which the weaknesses in inventory management could have been identified by either HAL or the IAF, singly or jointly, for the purposes of taking corrective measures. **(Paragraph 52)**

NAVY

1.29 Procurement of SSK Submarines

The Government signed agreements in November-December 1981, for the procurement of four SSK class submarines for the Indian Navy. An audit review revealed certain features in the procurement processes. Government awarded the contract to a foreign manufacturer whose submarine was not the best on technical evaluation and whose overall costs, excluding spares, were higher by Rs. 11.41 crores as opposed to his competitor. There is evidence of defective price analysis in terms of a 355 *per cent* differential in the cost of spares quoted by the two manufactures going unquestioned. The Government did not obtain an unconditional and satisfactory Memorandum of Understanding with the foreign Government concerned for as long as 18 months after it decided to award the contract to the foreign manufacturer. As for the Navy, not only was it denied value for money (a technically less acceptable vessel at higher cost), it had to give up its necessary right of rejection in case the vessel exceeded specified "self noise" levels which are critical in operational terms. The review analyses these issues and lists out the avoidable cost. **(Paragraph 55)**

1.30 Modification of a Ship's weapon system

In a case, relating to the import of two sets of computer based electronic information system for the operations room of a ship, it was noticed that the Ministry of Defence had accorded preferential treatment to a foreign firm against the specific recommendation of an expert committee. The Navy had, however, effected substantial investment in designing the ship's system for ensuring compatibility to suit the equipment of another foreign firm in the light of the expert committee's recommendations. The preferential treatment led to a delay of 2 years in procuring the system and 21 to 45 months in equipping the ships besides additional expenditure of Rs. 3.47 crores on duplication and modification of facilities to cater to the norms of the system of the preferred foreign firm. **(paragraph 56)**

1.31 Naval Material Organisation

A detailed review of a Material Organisation set up to provide logistic support to ships and the repair organisation of the Navy revealed significant deficiencies in material management as evidenced by irregular and inadequate stock verification, excessive holding of repairable items over long periods of time, several instances of over provisioning, declining demand satisfaction and violation of accounting procedures apart from resorting to local purchase of items when sufficient stocks were available. The review points to the need for instituting a system to effect greater efficiency and economy in the management of stores. **(Paragraph 57)**

1.32 Construction of Yardcraft

A review conducted of the construction of Yard-craft required by Naval Dockyards for the purpose of replenishment of rations revealed abnormal delays of 13 to 20 years and cost over-runs in the supply of Ferry craft leading to (i) avoidable losses and additional expenditure of Rs. 505.36 lakhs, (ii) consequent hiring of Ferry craft from civil sources at a cost of Rs. 105.05 lakhs, and (iii) retention of old craft which had out-lived their useful life by effecting extensive repair amounting to Rs. 126.88 lakhs. These factors, cumulatively, had an adverse impact on the operational efficiency of the Navy. **(Paragraph 58)**

1.33 Setting up of Support Facilities

Support facilities required for six special vessels costing Rs. 18 crores procured by the Navy between May 1983 and May 1984 from a foreign country against an agreement signed in February 1981 could not be created to retain the specified operational capabilities since the facilities were not considered at the time of contracting the acquisition of vessels. The project report for the support facilities took 5 years for preparation. The facilities are estimated to cost Rs. 33.17 crores (approximately twice the cost of the acquisition of the vessels) and are expected to be ready by April 1990 when the vessels would have completed approximately half of their operational life. **(Paragraph 59)**

Other topics of Interest

1.34 There was irregular appropriation of Rs. 60.25 lakhs of revenue to a non-public fund account of the Navy realised on account of the sale of usufruct and fishing rights accruing out of land given by a State Government (in 1982) for locating a Naval Academy. **(Paragraph 60)**

1.35 A review of the construction activities in a Dry Dock Project had revealed that due to frequent changes in the design of the Dry Dock after the sanction of the project in 1978, there was a delay of 4 years in the completion of the project. This had necessitated hiring of another Dry Dock at a cost of Rs. 32.52 lakhs besides payment of escalation charges of Rs. 12.23 lakhs. Additionally, there was excess procurement of stores valuing Rs. 56.50 lakhs and additional work services costing Rs. 34.75 lakhs. **(Paragraph 61)**

1.36 An order placed on the Department of Electronics (between December 1975 and October 1978) for the procurement of Sonar simulators for the training of Sonar operators at a cost of Rs. 167 lakhs had not materialised till 1987. When supplied, the simulators will be of little use to the Navy as the Sonars specific to the simulators are being phased out from 1985 onwards. **(Paragraph 63)**

1.37 Some of the other interesting cases are:

— two instances of extra expenditure on procurement of stores through import when indigenous sources of supply existed **(Paragraphs 64 and 68)**;

— the import of 140 life rafts at a cost of Rs. 33.18 lakhs after substantially diluting inspection standard **(Paragraph 67)**;

— the non-utilisation of an equipment procured in 1978 at a cost of Rs. 6.55 lakhs for 9 years in the absence of a suitable site for its installation **(Paragraph 71)**; and

— the purchase of sub-standard soap bars on the grounds of operational requirement leading to soap valued at Rs. 1.25 lakhs lying in stock since February 1980. **(Paragraph 70)**

CHAPTER 2

BUDGETARY CONTROL

1. Budget and Actuals

The table below compares the expenditure incurred by the Defence Services in the year ended 31st March 1987 with the amount of original and supplementary appropriations and grants for the year :—

(i) *Charged Appropriations*

(Rs. in crores)

Original	6.26
Supplementary	19.22
Total	25.48
Actual Expenditure	18.42
Saving	(—)7.06
	(*per cent*)
Saving as percentage of the total provision	27.70

There were overall savings in the preceding 11 years also. The percentages of savings as compared to the total provision during the years 1981-82 to 1985-86 ranged between 14.41 and 62.40.

(ii) *Voted Grants*

(Rs. in crores)

Original	9105.74
Supplementary	1606.97
Total	10712.71
Actual Expenditure	10910.16
Excess Expenditure	(+)197.45
	(*per cent*)
Excess as percentage of the total provision	1.84

In the preceding year too, there was an excess of Rs. 104.21 crores under the voted grants.

2. Supplementary grants/appropriations

(a) *Supplementary grants*

Supplementary grants (voted) aggregating to Rs. 1606.97 crores were obtained in all the four grants during July 1986 to March 1987, as indicated below:—

(Rs. in crores)

Grant No.	Amount of Grant			Actual Expenditure	Excess (+) Saving (—)
	Original	Supplementary	Total		
19—DS—Army	5465.77	1109.65	6575.42	6675.78	(+)100.36
20—DS—Navy	680.10	25.00	705.10	742.84	(+)37.74
21—DS—Air Force	1867.39	296.32	2163.71	2208.40	(+)44.69
22—Capital Outlay on Defence Services	1092.48	176.00	1268.48	1283.14	(+)14.66
TOTAL	9105.74	1606.97	10712.71	10910.16	(+)197.45

In spite of obtaining supplementary grants, there was excess expenditure in all the 4 grants indicating that the supplementary grants obtained were inadequate in each one of the four grants.

(*b*) *Supplementary Appropriations (Charged)*

Supplementary appropriations (Charged) aggregating to Rs. 19.22 crores were obtained; Rs. 1.09 crores under Grant No. 19—Defence Services—Army and Rs. 18.13 crores under Grant No. 22—Capital Outlay on Defence Services. The final saving of Rs. 7.06 crores is attributable to saving under Grant No. 22-Capital Outlay on Defence Services, vide detailed below :—

(*Charged*)

(Rs. in crores)

	Capital Outlay	Revenue Head of Account	Total
Original	5.52	0.74	6.26
Supplementary	18.13	1.09	19.22
Total	23.65	1.83	25.48
Actual Expenditure	16.57	1.85	18.42
Saving	7.08	(+)0.02	7.06

3. Excess over Voted grants

There are, in all, 4 grants for Defence Services. All these grants disclosed excess expenditure. Excess aggregating to Rs. 197,45,48,920 over voted portion of these 4 grants as shown below, requires regularisation under Article 115 of the Constitutions :—

Grant No.	Total Grant Rs.	Actual Expenditure Rs.	Excess Rs.
19—DS—Army	6575,42,00,000	6675,77,85,223	100,35,85,223
20—DS—Navy	705,10,00,000	742,84,07,521	37,74,07,521
21—DS—Air Force	2163,70,50,000	2208,39,54,894	44,69,04,894
22—Capital Outlay on Defence Services	1268,48,00,000	1283,14,51,282	14,66,51,282
Grand Total	10712,70,50,000	10910,15,98,920	197,45,48,920

The excess under Army was mainly under 'Pay and Allowances' due to more expenditure on account of Government orders on 4th Pay Commission's recommendations; 'Transportation' due to increased rates in air fare, heavy movement of stores and maintenace of rolling stock; 'Military Farms' due to purchase of fodder at higher rates owing to drought conditions in some States and extra expenditure on procurement of milk at higher rates; 'Research and Development Organisation' due to more materialisation of stores and escalation in prices; 'Inspection Organisation' due to purchase of more materials than anticipated; 'Stores' due to more materialisation of Army Ordnance Corps, Veterinary, Army Service Corps and Engineer stores and more expenditure on Petrol, Oil and Lubricant to meet certain operational requirement. In regard to Sub-Heads 'Research and Development Organisation', 'Military Farms' and 'Inspection Organisation'; the expenditure exceeded the final grant during the preceding 9, 7 and 5 years respectively.

The excess under Navy occurred in all the Sub-Heads due to (1) more payments of Pay and Allowances to sailors and more expenditure on Pay and Allowances of Civilians than anticipated, (2) hiring of vessels/transport for certain exercises, (3) more materialisation of Naval Stores, (4) good progress of works and (5) more expenditure on repairs and refits.

The excess under Air Force was mainly under 'Pay and Allowances' due to recommendations of 4th Pay Commission; 'Stores' due to increase in the cost of aviation and provision stores; 'Works' due to more expenditure on maintenance of buildings/installations and 'Special Projects' due to better performance of work by a Public Sector Undertaking. In regard to Sub-Heads 'Works' and 'Special Projects', the expenditure exceeded the final grant during the preceding 8 and 10 years respectively.

The excess under Capital Outlay on Defence Services was mainly under 'Land' ('Army', 'Navy' and 'Air Force'), 'Construction Works' ('Army' and 'Navy') 'Naval Fleet', 'Naval Dockyard' ('Navy').

4. Control over Expenditure

The following are some instances of defective budgeting relating to voted grants:

(a) Instances in which supplementary grants remained wholly or partially unutilised:

(Rs. in crores)

Grant No. / Sub-Head	Original Grant	Supplementary Grant	Amount re-appropriated	Total Grant	Actual Expenditure	Saving (—)
19—DS—Army						
A.2—Pay and Allowances and Misc. Expenses of Auxiliary Forces	18.75	2.84	(+)3.27	24.86	20.51	(—)4.35
A.3—Pay and Allowances of Civilians	269.69	65.01	(—)13.93	320.77	290.12	(—)30.65
A.6—Ordnance Factories	963.07	223.05	(+)16.10	1202.22	1192.15	(—)10.07
22—Capital Outlay on Defence Services						
A.4(2)—Ordnance Factories Machinery and Equipment	72.80	27.00	(—)20.00	79.80	69.62	(—)10.18
A.5—Research and Development Organisation	76.24	5.00	(—)2.96	78.28	76.63	(—)1.65

(b) Instances in which re-appropriations made were wholly or partially unnecessary :—

(Rs. in crores)

Grant No. / Sub-Head	Sanctioned Grant	Amount Re-appropriated	Final Grant	Actual Expenditure	Excess (+) Saving (—)
19—DS—Army					
A.1—Pay and Allowances of Army	2074.48	(—)48.42	2026.06	2032.98	(+)6.92
A.2—Pay and Allowances and Misc. Expenses of Auxiliary Force	21.59	(+)3.27	24.86	20.51	(—)4.35
A.6—Ordnance Factories	1186.12	(+)16.10	1202.22	1192.15	(—)10.07
A.7—Research and Development Organisation	379.76	(—)27.97	351.79	361.12	(+)9.33
A.9—Stores	1907.82	(—)5.20	1902.62	1977.71	(+)75.09
20—DS—Navy					
A.5—Stores	443.00	(—)37.26	405.74	436.54	(+)30.80
21—DS—Air Force					
A.1—Pay and Allowances of Air Force	303.96	(—)6.96	297.00	314.89	(+)17.89
A.3—Pay and Allowances of Civilians	51.65	(—)3.39	48.26	50.24	(+)1.98
22—Capital Outlay on Defence Services					
A.1—Army					
A.1(1)—Land	102.02	(—)20.02	82.00	88.73	(+)6.73
A.1(2)—Construction Works	229.20	(—)8.75	220.45	240.50	(+)20.05
A.2—Navy					
A.2(3)—Naval Fleet	368.00	(—)21.50	346.50	394.90	(+)48.40
A.3—Air Force					
A.3(1)—Land	23.53	(—)9.00	14.53	16.42	(+)1.89
A.3(2)—Construction Works	73.96	(+)0.17	74.13	72.44	(—)1.69
A.4—Ordnance Factories					
A.4(1)—Construction Works	119.85	(—)0.90	118.95	119.21	(+)0.26

5. Injudicious surrender of Funds

In the following cases, surrender was made on 26th February 1987 although the actual expenditure exceeded the final grant. Thus the surrender proved injudicious :

(Rs. in crores)

Grant No. / Sub-Head	Original Grant	Supplementary Grant	Re-appropriation	Surrender	Total Grant	Actual Expenditure	Excess
20—DS—Navy							
A.5—Stores	443.00	..	(—)15.90	21.36	405.74	436.54	(+)30.80
22—Capital Outlay on Defence Services							
A.1(2)—Construction Works	229.20	..	(+)2.00	10.75	220.45	240.50	(+)20.05
A.2(3)—Naval Fleet	328.00	40.00	(—)17.92	3.58	346.50	394.90	(+)48.40
A.3(1)—Land	23.53	..	(—)1.97	7.03	14.53	16.42	(+)1.89
A.4(1)—Construction Works	99.85	20.00	..	0.90	118.95	119.21	(+)0.26

6. Persistent Savings

In the following cases there have been persistent savings during the last 3 years:

(Rs. in crores)

	Year	Original Grant	Supplementary Grant	Re-appropriation	Total	Actual Expenditure	Saving
Army							
A.3—Pay and Allowances of Civilians	1984–85	191.43	32.61	(—)2.06	221.98	218.89	(—)3.09
	1985–86	229.83	..	(+)23.62	253.45	244.42	(—)9.03
	1986–87	269.69	65.01	(—)13.93	320.77	290.12	(—)30.65
Capital Outlay on Defence Services							
A.4(2)—Machinery and Equipment	1984–85	73.00	..	(—)17.00	56.00	46.83	(—)9.17
	1985–86	65.00	..	(—)17.97	47.03	44.58	(—)2.45
	1986–87	72.80	27.00	(—)20.00	79.80	69.62	(—)10.18

7. Stores losses

Mention was made in the three preceding Reports of the Comptroller and Auditor General of India, Union Government (Defence Services) of stores losses including those sustained due to theft, fraud or gross neglect and written off during the years 1982-83 to 1985-86. While the total stores losses rose from Rs. 529.45 lakhs in 1982-83 to Rs. 2,393.54 lakhs in 1986-87 showing an increase of over 352 *per cent*, the losses due to theft, fraud and gross neglect increased from Rs. 140.50 lakhs in 1982-83 to Rs. 1509.08 lakhs in 1986-87 representing an increase of 974 *per cent*. The details are given in the table below :

Year	Total losses including due to theft, fraud or gross neglect	Losses due to theft, fraud or gross neglect	Percentage of losses over previous year due to theft, fraud or gross neglect
	(Rs. in lakhs)		
1982–83	529.45	140.50	
1983–84	1071.77	512.75	365
1984–85	1110.01	717.70	140
1985–86	1656.77	1019.24	142
1986–87	2393.54	1509.08	148

The details of individual losses exceeding Rs. 0.75 lakh due to theft, fraud or gross neglect and exceeding Rs. 2 lakhs due to other causes are given in the Appropriation Accounts of Defence Services, for the year 1986-87.

8. Outstanding rent and allied charges

Mention was made in paragraph 20(11.1) of the Report of the Comptroller and Auditor General of India, Union Government (Defence Services) for the year 1984-85 about outstanding rent and allied charges in respect of 5 Commands (excluding accommodation under Ordnance Factories) which showed an upward trend from Rs. 2.88 crores as on 30th June 1983 to Rs. 3.38 crores as on 30th June 1984. In November 1985 the Ministry of Defence informed that they had decided (July 1985) to accord top priority to realise rent and allied charges due from private parties, other Ministries concerned, etc. Notwithstanding this assurance, the total outstanding increased further to Rs. 3.97 crores as on 30th June 1987 as shown below :

Sl. No.	Category	Outstanding as on 30th June 1983 (Rs. in lakhs)	Outstanding as on 30th June 1987 (Rs. in lakhs)
1.	Displaced persons—Ministry of Rehabilitation, Department of State Government	9.98	11.46
2.	Other State Government Departments	74.48	46.84
3.	Other Central Government Departments	46.84	38.60
4.	Released/Retired Officers	29.58	57.62
5.	Departmental Officers in Service	25.11	32.39
6.	Departmental messes/clubs	10.81	11.31
7.	Private parties including Military Engineer Services contractors	70.11	138.98
8.	Cantonment Boards/Municipalities, etc.	21.19	59.31
		288.10	396.51

The above data indicates that in the cases of (i) released/retired officers, (ii) private parties including Military Engineer Services contractors and (iii) Cantonment Board/Municipalities etc. the increase in the span of 4 years from June 1983 to June 1987 was to the extent of 94.78 *per cent*, 98.22 *per cent* and 170 *per cent* respectively.

CHAPTER 3

MINISTRY OF DEFENCE

9. Purchase of combat dress from trade

0.1 In February 1982, Ministry of Defence decided to introduce from January 1983 combat disruptive uniforms for Junior Commissioned Officers and Other Ranks of the Army.

0.2 In September 1982, Army Headquarters (HQ), after exploring the possibility of getting the supply through the Director General of Ordnance Factories (DGOF), decided to secure the requirement of this uniform for two years, 1983-84 and 1984-85, from trade sources. Accordingly, two indents, one for 35.83 lakh jackets and another for equal number of trousers, both of vat printed fabric, were placed on the Department of Defence Production and Supplies (DDP&S) at an estimated cost of Rs. 56 per jacket and Rs. 50 per trousers. Jackets and trousers numbering 23.08 lakh each were desired to be delivered during April 1983 to December 1983 and 12.75 lakh sets during April 1984 to December 1984.

0.3 In September 1982, DDP&S decided against an open advertisement for this tender, on the ground that such an advertisement would result in a large number of offers including those from small suppliers. The assistance of Director General, Supplies and Disposals (DGSD), Defence R&D and the Export Promotion Council was taken to locate the possible bidders for supply of stitched garments and cloth and to do the fabrication. *Suo moto* bids from firms not included in that list were also proposed to be considered.

0.4 On 1st October 1982, DDP&S, to meet the indent for 35.83 lakh sets of uniforms, called for rates for :—

(a) supply of stitched garments in vat printed or pigment printed fabric;

(b) supply of only the cloth; and

(c) fabrication of the garments on free supply of cloth by Government.

0.5 On 29th October 1982, the tenders were opened. In all, 104 offers were received. The position of lowest rates was as under :

All inclusive rate for duly stitched garments	Rate for fabrication	Rate for vat printed fabric (per metre)
Jacket Rs. 58.50 each	Rs. 16 each	Rs. 14.75
Trousers Rs. 63.50 each	Rs. 16 each	Rs. 15.00
Total Rs. 122 per set	Rs. 32	

The lowest rate of Rs. 122 for stitched garments was quoted by nine firms. They had not specified the type of fabric but just stated "as per tender specification". Based on the separate rates quoted for fabrication charges and cost of cloth, the cost of one set of trousers and jacket worked out to Rs. 134.53. In view of this, and the saving of some cloth that could be effected by the fabricators while cutting the cloth, the lowest rate of Rs. 122 per set was found quite favourable.

0.6 By March 1983, it was decided to buy only the stitched garments made out of vat printed fabric and to limit the procurement to only 16.57 lakh sets during 1983-84. On this basis, a decision was taken to conduct negotiations with bidders who had a capacity to supply a minimum of 10,000 sets per month. The scope of the negotiation, mainly, was :—

(a) to get confirmation that the all inclusive rate quoted was for garments made out of vat printed fabric, and

(b) to obtain from the successful bidders a security deposit of 2.5 *per cent* on the value of the contract, limited to Rs. 75,000.

0.7 On the basis of the capacity criterion of 10,000 sets per month, 22 out of 85 bidders who offered all inclusive rates for supply of stitched garments qualified for negotiations. The negotiation was proposed to be held on 18th April 1983.

0.8 One of the firms who had quoted the rate of Rs. 122 per set confirmed that its offer was for vat printed fabric. At the same time about 13 firms, who were not called for negotiation, protested on the ground that the assessment of their capacity as below 10,000 sets per month was not correct.

0.9 Keeping in view among other things these protests and certain doubts on the validity of the capacity assessments of those firms made by the Inspection Authorities, the negotiation proposed to be held on 18th April 1983, was given up and it was decided to call for fresh tenders on an all inclusive rate basis for stitched garments on vat printed fabric from all the 85 firms who had earlier quoted for supply of stitched garments.

0.10 Revised tenders were received on 28th June 1983. As a result of these tenders and subsequent negotiations, the rates that emerged were between Rs. 152.80 (from one bidder) and Rs. 163.95 per set. While submitting the case seeking approval for placement of orders at rates varying from Rs. 152.80 to Rs. 163.95 per set, the DDP&S had not specifically brought out the facts that a rate of Rs. 122 per set was offered by nine firms in October 1982. On the orders passed on that proposal, the lowest rate was offered to all the other bidders. This rate was accepted by 19 others. As a result, in November 1983, orders for the supply of 16.55 lakh sets of uniforms were placed on 20 firms at the rate of Rs. 152.80 per set. The orders were required to be executed by the suppliers over a period of 12—14 months. The quantity of the orders from the 20 suppliers ranged from 10,000 sets from one supplier, 15,000 sets from another and 23,000 sets from three others etc.

0.11 An analysis of the above and the conclusion emerging therefrom are as follows :

(a) Army HQ had in September 1982, clearly specified its requirement in favour of vat printed fabric. Despite this specification, the tender enquiry of October 1982 contained, quite unnecessarily, the alternate specification of pigment printed fabric too. This resulted in the need for securing confirmation of and negotiation on the October 1982 tender rates.

(b) The combined capacity of eight out of nine firms, who quoted Rs. 122 per set in the October 1982 tender was 1.87 lakh sets per month, the capacity per annum being 22.44 lakh sets. This quantity is 35.6 *per cent* more than the quantity of 16.55 lakh sets ordered on the basis of second tender of June 1983. There had, therefore, been a failure to avail of the October 1982 tender rate of Rs. 122 per set offered by eight-nine bidders. The time over-run on the supply of the uniforms could have also been reduced. On the cost difference of Rs. 152.80 and Rs. 122, the avoidable expenditure on 16.55 lakh sets of uniforms procured was Rs. 5.10 crores.

(c) Vat printed fabric is a little more expensive than pigment printed fabric. The additionality for vat printed fabric was assessed at Rs. 1.50 per metre. On the weighted average of 6.89 metres of cloth needed per set, the additional cost per set was Rs. 10.33. Although one of the bidders of the October 1982 tender confirmed that his rate of Rs. 122 per set held good for garments made out of vat printed fabric, the additional cost could at best be Rs. 10.33 per set. On the basis of the October 1982 tendered rates separately for vat printed cloth and for fabrication charges, the cost per set worked out to Rs. 134.53. The extra expenditure on 16.55 lakh sets of uniforms, secured at the rate of Rs. 152.80, works out to Rs. 3.39 crores on the former cost analysis and Rs. 3.02 crores on the latter cost computation.

(d) The capacity criterion of 10,000 sets per month, which caused the protests and eventually led to the wrong decision to retender, was given the go by when orders were placed in November 1983 on the fresh tenders in so far as some of those orders were for supply of 10,000, 15,000 and 23,000 sets over a period of one year.

(e) The rate of Rs. 152.80 secured through June 1983 limited tender seems to be *prima facie* high not only with reference to the October 1982 tenders and the cost analysis indicated in the preceding paragraphs but also by the fact that the rate still (March 1987) holds good, despite general price increase of the inputs, vide data below :

(i) During August-September 1985, supply orders were placed for 19.28 lakh sets at the June 1983 rate of Rs. 152.80 on 35 suppliers, fourteen of them earlier ones and twentyone new entrants. The value of the order was Rs. 29.46 crores.

(ii) In January 1987, an order was placed by Army HQ (although it did not have the necessary powers) on a Public Sector Undertaking for supply of 2.5 lakh sets at the same rate. The value of the order was Rs. 3.82 crores.

(iii) In March 1987, orders were again placed for the supply of 10.48 lakh sets at the same old rate on 32 firms. The total value of this order was Rs. 16.02 crores.

(iv) In February 1987, DDP&S worked out an extra cost of Rs. 16.50 per set, over the last purchase price of Rs. 152.80 per set, on account of change in requirements for more quantity in larger sized uniforms. In spite of this, there was keen competition from the firms, old and new ones, in 1985 and 1987 to avail of the supply order at Rs. 152.80 per set. In fact one or two new firms offered even a price reduction of 3 to 4 rupees per set.

(v) One of the general price increase, according to the Economic Survey, published by the Ministry of Finance, the whole sale prices of manufactured textile articles increased from 241 points in May 1983 to 270 points in December 1986.

0.12 The Ministry of Defence, in October 1987, stated :

— The first tender enquiry was either vague or silent on various technical and commercial terms and hence not feasible to finalise.

— Changes in the technical and commercial specifications governing the supply in the second tender led to higher rates (pre-inspected vat printed fabric was one of the specifications in the October 1982 tender too). The earlier quoted rate of Rs. 122 per set was not realistic as would be evident from the fact that the same firms who had quoted Rs. 122 per set against the first tender quoted Rs. 152.80 against the second tender.

— Between 1984 and 1987, the price of fabrics increased by 10 *per cent*. Increased productivity in fabrication due to gain in fabrication experience and to keep their capacities occupied, the firms have a tendency to obtain orders at a marginal profit. These factors might have contributed towards the acceptance of the price of Rs. 152.80 even in 1987. (This only indicates that the profit margin and consequently the price of Rs. 152.80 was, at its earlier stages higher).

0.13 To conclude :

— The department failed to indicate clearly the technical and commercial specifications in the first tender.

— The department failed to clinch that deal through the next stage of remedial action attempted through negotiations to sort out the technical and commercial specifications.

— The rate of Rs. 122 per set offered in the first tender, by as many as nine bidders, cannot and was not in fact then dismissed as unrealistic as now contended.

— The rate secured through the second tender, Rs. 152.80, was higher not only by comparison to the earlier tendered rate but also in terms of the computations indicated in sub-paragraph 0.11(c) ante.

10. Procurement of Blankets Barrack for the Army

Approximately 10 lakh blankets are required annually by the Army. The demand to the extent of about 75,000 blankets is met by the Ordnance and Clothing Factory, Shahjahanpur although its sanctioned capacity is 2 lakh blankets per annum, and the balance by procurement from trade.

The Committee on Public Undertakings in its 40th Report (1981-82) had suggested consideration of the possibility of purchases of the entire requirements of Government on cost plus basis from the National Textile Corporation (NTC). They had made further suggestions relating to cutting down costs, improving sales management, financial viability, better marketing, selective modernisation and weeding out of surplus labour.

In December 1983, the Ministry of Commerce issued orders approving the following arrangements :

(i) All types of cotton/woollen fabrics purchased by Defence or by the Director General Supplies and Disposals (DGSD) (for other Departments) to the extent available from the NTC should be procured from NTC on a single tender basis.

(ii) Price of these commodities shall be calculated by the NTC and fixed by the Department of Textiles by associating a representative of the Chief Cost Accounts Officer.

In May 1984, the Ministry of Commerce extended the above concession to Government owned British India Corporation and Elgin Mills (BIC) too.

Although NTC and BIC were out of the line of manufacture of blankets barrack, they, after the issue of these orders, showed interest in the supply of blankets to the Army. During March 1984 to February 1985, DGSD placed three orders on NTC/BIC for supply of 8.70 lakh blankets.

DGSD placed 29 orders during April 1984 to March 1986 on trade for supply of 10.65 lakh blankets at rates varying from Rs. 78 to Rs. 119.70 per blanket, the weighted average rate for 1984-85 being Rs. 96.92

and for 1985-86 Rs. 114.21. The Army Headquarters (HQ) had also procured 2.86 lakh blankets from trade during July 1985 to December 1985 at rates varying from Rs. 108.50 to Rs. 111 per blanket, the weighted average rate being Rs. 110.74.

In July 1986, the Ministry of Defence (Ministry) decided to place their orders for supply of blankets direct on NTC/BIC instead of routing them through the DGSD. During September-November 1986, Army HQ placed four orders on the NTC/BIC for supply of 14.58 lakh blankets.

The Ministry of Commerce, Department of Textiles have fixed the rate of Rs. 161.70 per blanket for supplies which materialised during April 1984 to September 1985. For supplies materialising after September 1985, the rate of Rs. 161.70 was provisional subject to finalisation of the rate by Department of Textiles.

As compared to the highest weighted average trade price of Rs. 114.21 per blanket prevalent during 1984-85 and 1985-86, the price agreed to be paid to the NTC/BIC viz., Rs. 161.70 per blanket was 41.58 *per cent* higher resulting in extra expenditure of Rs. 8.40 crores (after allowing 10 *per cent* price preference to the Public sector undertakings).

On the high cost of production in NTC/BIC, it was stated by the Ministry of Textiles that :—

(i) for meeting Armed Forces requirements for blankets NTC/BIC used almost their entire woollen system capacities in the production of blankets. The production of blankets by them has meant a sacrifice as they had to give up production of higher priced goods for the civilian market;

(ii) the production of blankets damaged the cards which were meant for finer products; and

(iii) the Public Sector units had to pay higher wages and their overheads were higher.

At a meeting taken by DGSD on 3rd July 1986 to review the supply position of blankets ex-trade, five Panipat based private manufacturing units stated that NTC/BIC had bought finished blankets from them during the previous year at rates ranging around Rs. 120 and had obtained separate bills for (i) spinning, (ii) weaving and (iii) finishing charges. The Army HQ felt that the allegation, if found to be correct, had serious repercussions because they were paying Rs. 161.70 for the same blanket which the NTC/BIC had purchased at rates varying around Rs. 120. They accordingly reported the matter to the Ministry on 9th July 1986.

The Ministry stated (September 1987):

— They had not instituted any investigation on the allegation made by five Panipat based private manufacturing units.

— The December 1983 decision to place orders on NTC/BIC on cost plus basis was reviewed again by a Committee of Secretaries on 17th March 1986 which confirmed the continuance of existing policy. Although at the end of March 1986, the justification for Defence paying higher price to NTC/BIC and inflating Defence budget was raised, the decision ultimately arrived at was again to continue the same arrangement.

The following are the findings in this case :

— In Ordnance and Clothing Factory Shahjahanpur, where blankets are being manufactured, the cost of production during 1984-85 and 1985-86 inclusive of overheads was Rs. 119.14 and Rs. 120.99 respectively per blanket. Payments to NTC/BIC at Rs. 161.70 per blanket ranged between 33.65 and 35.72 *per cent* more than the cost of production in Government's own Ordnance and Clothing Factory, which is not working to its sanctioned capacity.

— The allegation that NTC/BIC purchased blankets from Panipat based private firms at rates varying around Rs. 120 was not investigated by the Ministry eventhough extra expenditure was involved.

— The procurement of 23.28 lakh blankets during 1984—86 from the NTC/BIC for a sum of Rs. 37.65 crores, at the rate of Rs. 161.70 per blanket, against the highest weighted average rate of Rs. 114.21 per blanket increased by 10 *per cent* on account of price preference admissible to these Public Sector Undertakings prior to December 1983 resulted in extra expenditure to the Defence Budget to the extent of Rs. 8.40 crores. This also resulted in unnecessary inflation of Defence Budget. The current policy of procurement of blankets by Defence from NTC/BIC on cost plus basis without any ceiling and unrelated to the ruling trade rate would require to be reviewed.

11. Avoidable extra expenditure on procurement of a special purpose vehicle

A special purpose vehicle manufactured by a foreign country was found to have several advantages over similar vehicles procured from another country during 1971-73. A protocol was signed in November 1979 in which the foreign country agreed to make an offer for the supply of 50 vehicles.

In December 1979, the Army Headquarters (HQ) assessed their requirement of these vehicles as 112 which was considered inescapable. In January 1980, the representatives of the foreign country in India were informed that the Government of India would conclude a conditional contract for the supply of 50 vehicles with an option for supply of additional vehicles at the same price.

As the foreign country did not agree to make this price applicable for the optional quantity of 62 vehicles, a contract was concluded in June 1980 for the supply of only 50 vehicles at the unit price (FOB) of $2,59,000 (Rs. 20.72 lakhs). After completion of trials, the vehicles were received between July 1982 and September 1983.

While that contract was in operation, the foreign country offered, in February 1981, to supply 62 more vehicles, subject to 5 *per cent* escalation per year from 1982 onwards over the contracted price. While this offer was under consideration of the Ministry of Defence (Ministry) in August 1981, the foreign country again offered to supply the 62 vehicles at an increased unit price of $ 3,18,000 with delivery by 1983. The offer was valid till 30th January 1982, later extended to April 1982, with a rider that the delivery time be also extended to 1984. Based on this offer, the total cost of 62 vehicles worked out to $1,97,16,000 (FOB). Though this offer was approved in principle in December 1981, it was proposed by the Ministry on 29th December, 1981 that further negotiations in regard to the final price and other conditions might be carried out by a Negotiating Committee. Though delegations from the foreign country came in February 1982 and June 1982 and the Indian defence delegation visited that country in November 1982, yet no progress was made. During the visit of another Indian defence delegation in October 1983, the foreign country agreed to supply 62 vehicles during the period from 1984 to 1987 as under :

Year	Qty.	Unit price on FOB basis	Total price FOB basis
		(in US Dollars)	
1984 . .	10	3,18,000	31,80,000
1985 . .	20	3,33,900	66,78,000
1986 . .	21	3,50,595	73,62,495
1987 . .	11	3,68,125	40,49,375
	62		2,12,69,870

The delegation signed a contract for 10 vehicles on 14th October, 1983 at a total cost of $31,80,000 on FOB basis and a supplementary contract was signed on 8th December 1983 for the balance quantity of 52 vehicles at a total cost of $1,80,89,870 on FOB basis. However, the price of 32 vehicles which were to be delivered during 1986 and 1987 was reduced to $ 3,33,990 each with revised delivery schedule by the end of 1985 by issuing an amendment on 2nd November 1985 to this supplement. In addition, a further reduction of $ 1,06,848 was also obtained on the price of 32 vehicles in December 1985. Thus, the total FOB cost of 62 vehicles amounted to $2,04,35,952 as against the earlier offer of $ 1,97,16,000 in August 1981.

The Ministry stated in September 1986 :

— The negotiating Committee was required to go into the pricing of spares and also to negotiate the rate of escalation being offered by the supplier *i.e.* 5 *per cent* per annum.

— The delay in the finalisation of August 1981 offer did not actually lead to any major losses (This contention of the Ministry is not acceptable as the question of 5 *per cent* escalation per year over the offered price of August 1981 as maintained by the Ministry would not have arisen beyond 1983 had this offer been accepted in time and the delivery of vehicles taken by 1983 as initially offered).

The case reveals that though there was immediate requirement for 62 vehicles yet the offer of August 1981 which was accepted in principle in December 1981 and was valid upto 30th January 1982 (later extended upto April 1982) was not finalised. Instead further negotiations were decided to be carried out notwithstanding the fact that the trend of escalation in price was evident from the offers of February 1981 and August 1981. The delay in the finalisation of the deal till October 1983 resulted in an additional avoidable expenditure of $ 7,19,952 (Rs. 72 lakhs approximately) in the procurement of 62 vehicles.

12. Purchase of Trailer 50 Ton transporter from BEML

Trailer 50 Ton transporter (Trailers) used to be imported. In 1974 M/s. Bharat Earth Movers Limited (BEML), a Public Sector Undertaking evinced interest in the development and manufacture of these trailers. The Department of Defence Production and Supplies (DDP&S) placed seven orders on BEML for supply of 998 trailers at a total cost of Rs. 65.22 crores between October 1974 and January 1987.

A review of these purchases in Audit has revealed the following facts :

The prototype and pilot trailer manufactured by BEML was subjected to user-cum-technical trials. Since no major defect was observed, the pilot trailer was approved in November 1975. BEML commenced supplies from February 1976 and by September 1980 completed supply of 285 trailers, (225 against the order of October 1974 and 60 against the order of September 1978).

However, during use of these trailers by the field units from 1977 onwards, a number of defects were noticed. Some of the defects were quite serious, such as cracking of the chassis, rubbing of the tyres with the underside of the platform, bending of rocker arm shafts and so on. Certain modifications suggested by a technical team were carried out; but did not prove successful and the trailers continued to show defects.

The matter was discussed by a high level committee in July 1980 to take stock of the serviceability of the existing BEML trailers and to discuss steps needed to be taken for ensuring adequate availability of trailers in future. The committee found that the defects noticed could be rectified and the defective trailers could be made operationally reliable within an acceptable time frame. As regards future supplies, the trailers were required to be redesigned.

A High Level Team, after conducting trials on 3 trailers, confirmed in their trial report dated 29th April 1981 that none of the earlier reported defects had recurred on trial trailers. A broad analysis of usage of trailers, as per defect reports received by the Authority Holding Sealed Particulars was as under :

(a) Trailers on which defect report not raised at all	159
(b) Trailers reported for minor defects not affecting usage	29
(c) Trailers, which remained serviceable at all times (a+b)	188
(d) Trailers put to use after rectifications	60
(e) Trailers not fully utilised because of delay in rectification = 285—(159+29+60)	37

However, in November 1982, the Army Headquarters (HQ) informed DDP&S that trailers supplied by BEML were found mostly defective and that 250 trailers were lying in the units/depots and these were not fit for issue due to various manufacturing defects. Rectification works including replacement of a defective component, *viz.* Rear Rocking Beam (in all the 285 trailers) were completed by BEML during 1983-84.

Meanwhile, BEML claimed an additional payment of Rs. 36,000 per trailer for replacement of the defective component. The claim on this account, for Rs. 1.03 crores on the 285 trailers, was not agreed to by the Ministry of Defence (Ministry). In August 1983, BEML, while accepting that decision, insisted that the Ministry should place on them the next order for about 300 trailers, the procurement of which was then under contemplation.

Taking into account the facts that trailers supplied by BEML were defective, its improved and modified version was under trials/evaluation and in the then shortage of trailers, Army HQ mooted a proposal in January 1984 for import of trailers at a unit cost of Rs. 4.07 lakhs each. The Ministry did not agree to that proposal on the grounds that :—

(a) BEML had already achieved import substitution for the trailers;

(b) BEML had a capacity of 15-20 trailers per month, which should not be diverted; and

(c) the cost and delivery schedules of other indigenous supply were no better than that of BEML and noted that the import cost, though quoted as Rs. 4.07 lakhs actually worked out to Rs. 7.49 lakhs after adding customs duty, etc.

While the proposal for import was rejected and the next order for 288 trailers placed on BEML in November 1984, no effective attempt was made to control/reduce the price of the trailers in terms of the relatively lower import cost. As against the import cost of Rs. 7.49 lakhs inclusive of customs, the rate actually agreed to be paid on the November 1984 order was Rs. 8.50 lakhs per trailer plus excise duty and Central Sales Tax working out to Rs. 9.77 lakhs per trailer alongwith an advance payment of 20 *per cent* of the value of the trailers, free of interest. The cost difference was Rs. 6.56 crores on this order for 288 trailers. The prices paid on the subsequent orders were more.

The Ministry, DDP&S, in October 1987, stated :

— The rectification carried out by BEML during 1983-84 on trailers which did not develop defects by then can be termed as product improvement to secure optimum reliability and dependability.

— The Department tried to negotiate a provisional price of Rs. 7.50 lakhs subject to cost verification for November 1984 order. The firm did not agree as according to it, the rate was not workable.

To conclude :

— Due to supply of defective trailers by BEML the Army was saddled with 285 operationally unreliable trailers procured at a cost of Rs. 10.6 crores. These trailers remained unreliable and undependable and partly unused from the date of their receipt from February 1976 onwards till the rectification work was fully completed during 1983-84.

— Due to the Department's failure to persuade BEML for negotiated price subject to cost verification, the BEML gained a cost difference of Rs. 6.56 crores on the supply of 288 trailers, as compared to the import cost, the order for which was placed in November 1984.

CHAPTER 4

ORDNANCE AND CLOTHING FACTORIES

13. General

1. *Introduction*

The ordnance factories are one of the oldest manufacturing establishments in the country. They function as departmental undertakings under the Department of Defence Production and Supplies producing a wide range of products needed for the defence preparedness, para-military forces, Civil Police, etc. Spare capacity is also used for producing items for civil trade. The number of factories has increased from 16 in 1947 to 37 in 1986. Group-wise classification of the factories is metallurgical-6, engineering-13, filling-5, chemical-4, ordnance equipment-5, armoured vehicles-3 and miscellaneous-1. Two factories under armoured vehicle group and the factory under miscellaneous group have not yet started production.

In 1979 the ordnance factories organisation was restructured for effective functioning. An Apex body called the Ordnance Factory Board (OFB) was constituted with a Chairman and 7 full time members. Two Additional Directors General of Ordnance Factories are incharge of the factories belonging to the ordnance equipment group (OEF) and the armoured vehicle group respectively.

The overall statistical data on the activities of the ordnance factories for the period 1983-84 to 1985-86 is shown in the annexure.

2. *Capacity and utilisation*

The project capacity and installed capacity of most of the old established factories are not known. In respect of some of the new factories/projects, the utilisation of capacity used to be depicted in the printed annual accounts of the factories. This has been discontinued from the accounts of the year 1984-85. The Controller of Accounts (Factories) informed (September 1987) that the information on project capacity and installed capacity through tables in the printed annual accounts has been dispensed with at the instance of the Chairman, OFB. The OFB stated (October 1987) that, as per latest Management Information System (MIS) developed, information on capacity utilisation in a different format was furnished regularly to the Ministry of Defence (Ministry) by the OFB. The information for the year 1985-86 called for (October 1987) in audit was yet to be received.

3. *Budget and actuals*

Budget grant and actual expenditure during 1983-84 to 1985-86 in respect of Revenue and Capital for ordnance and clothing factories were as under :

Year	Revenue		Capital	
	Budget grant	Actuals	Budget grant	Actuals
	(In crores of rupees)			
1983–84 .	857.185	797.43	89.98	81.70
1984–85 .	889.47	853.34	103.80	87.30
1985–86 .	954.58	1,007.02	120.85	133.55

The excess expenditure for 1985-86, as stated (October 1987) by the OFB, under Revenue Charges was mainly due to larger materialisation of supplies of stores than anticipated and under capital grant on account of civil works for time bound projects.

4. *Cost of Orders in hand*

The cost of outstanding orders in hand of the ordnance factories at the end of the year was not worked out though the accounting procedure provides that at the end of each year a list of all outstanding extracts will be prepared and the values will be worked out for budgetary purposes. The Controller of Accounts (Factories) stated (September-October 1987) that necessary instructions had been issued to all Accounts Officers of the ordnance factories to comply with the provisions laid down in the accounting procedure and the position as at the end of March 1985 and March 1986 were under finalisation.

5. *Work-in-progress*

As on 1st April 1985, 42,334 manufacturing warrants valuing Rs. 361.24 crores issued upto 1984-85 were outstanding. Of them, about 45 *per cent* (18,869 warrants) were cleared during 1985-86 and the balance (23,465 warrants valuing Rs. 95.17 crores) were awaiting completion at the end of March 1986. Together with the fresh manufacturing warrants issued during 1985-86 but not completed, 47,625 manufacturing warrants (valued at Rs. 366.52 crores) were outstanding at the end of the year under review (March 1986). The age of the work-in-progress and the manufacturing warrants against which the works remained incomplete as on 31st March 1986 were as under :

Year in which work started	Number of manufacturing warrants	Work-in-progress (in crores of rupees)
1952-53 to 1974-75	177	1.26
1975-76 to 1979-80	2,096	4.01
1980-81 to 1984-85	21,192	89.90
1985-86	24,160	271.35
	47,625	366.52

The normal life of a manufacturing warrant is only six months. In their 214th Report (Seventh Lok Sabha) (1983-84), the Public Accounts Committee desired the Government to devise measures to ensure that not only the arrears of old warrants were wiped out, but fresh accumulation of warrants was also not allowed to take place in view of the fact that in case of delay in completing the warrants, there was considerable risk of those becoming obsolete and the entire expenditure becoming infructuous.

The position indicated above does not show improvement.

6. *Civil Trade*

One of the objectives of the OFB was to maximise utilisation of installed capacity where necessary by diversification of production for civil and export markets. The value of civil trade, profit involved and amount of foreign exchange earned during 1983-84 to 1985-86 were as under :

	1983-84	1984-85	1985-86
	(In crores of rupees)		
Value of civil trade . .	36.01	32.56	38.04
Profit involved . .	2.16	1.60	1.88
Foreign exchange earned	1.26	0.87	1.21

The foreign exchange expenditure incurred in production of the civil trade items was not known.

7. *Overtime*

All the factories continued systematic overtime throughout the year 1985-86. The details of overtime work for the last three years were as under :

Year	Man-hours	Amount
	(In lakhs)	(Rs. in crores)
1983-84	841.76	42.55
1984-85	853.65	47.26
1985-86	890.64	52.72

8. *Inventory*

As against the total value of Rs. 713.31 crores and Rs. 740.51 crores in respect of inventories held in the factories as on 31st March 1984 and 31st March 1985 respectively, the total value thereof held as on 31st March 1986 was Rs. 730.62 crores as detailed below :

Particulars	Value in crores of rupees		
	31-3-1984	31-3-1985	31-3-1986
1. Working Stock			
(A) Active .	556.16	587.71	550.26
(B) Non-moving	37.55	33.86	38.08
(C) Slow-moving	38.83	42.45	47.21
2. Waste and obsolete	21.61	13.32	20.85
3. Surplus stores .	5.44	8.26	8.32
4. Maintenance stores	53.72	54.91	65.90
Total .	713.31	740.51	730.62

The stock holding in terms of average monthly consumption of direct and indirect stores worked out to 8.56 months against 9 months requirement on average in terms of all varieties of stores.

The total number of items of non-moving (stores not drawn for a continuous period of 3 years or more) and slow-moving (stores not drawn for a continuous period of 1 year) stores during the years 1983-84 to 1985-86 were as under :

Year	Non-moving		Slow-moving	
	Items	Value (Rs. in crores)	Items	Value (Rs. in crores)
1983-84 . .	1,18,057	37.55	40,306	38.83
1984-85 . .	1,22,841	33.86	37,013	42.45
1985-86 . .	1,11,237	38.08	34,299	47.21

9. *Stock Verification*

Annual stock verification carried out by an independent group under the control of the OFB/OEF Headquarters revealed the following deficiencies and surpluses in the factories :

Year	Deficiencies	Surpluses
	(In lakhs of rupees)	
1983-84	28.83	68.12
1984-85	108.37	48.24
1985-86	11.03	173.57

The case was referred to the Ministry in July 1987 and their reply has not been received (November 1987).

ANNEXURE
(Referred to in sub-para 1)
Overall Statistical Data

	1983-84	1984-85	1985-86
1. Average value of fixed capital assets (Rs. in crores)	467.80	506.75	546.07
2. Man-power (No. in lakhs)	1.78	1.83	1.85
3. Net cost of production (excluding inter-factory demands) (Rs. in crores)	803.93	913.34	1006.65
4. Capital output ratio	1 : 1.72	1 : 1.80	1 : 1.84
5. Factory cost analysis in terms of percentage of gross value of production :			
Material	67.40	65.90	66.16
Labour	6.80	6.75	6.83
Others	25.80	27.35	27.01
6. Gross contributed value of production less materials and outside supplies and services (Rs. in crores)	331.60	396.93	459.95
7. Wages (Rs. in crores)	69.10	78.60	92.83
8. Net contributed value (gross contributed value less wages) (Rs. in crores)	262.50	318.33	367.12
9. Net contributed value per Rs. 1 crore of fixed capital assets (Rs. in crores)	0.56	0.63	0.67
10. Average earnings per employee (Rs.)	14,122	16,110	17,982
11. Net contributed value per employee (Rs.)	14,714	17,420	19,861
12. Value of abnormal rejection (Rs. in crores)	4.12	5.68	5.77
13. Percentage of abnormal rejection on gross value of production	0.40	0.49	0.38
14. Customer composition (percentage of total issues net of Inter-Factory Demands) :			
Army	87.90	90.07	91.10
Navy, Air Force and others	3.85	3.05	2.96
Civil Trades	5.30	4.38	4.06
Own stock and capital works	2.95	2.50	1.88
15. Extent of requirement of stores (Armament, Ordnance, Clothing, Mechanical Transport) met by Ordnance Factories in terms of percentage :			
Army	54.94	54.80	54.54
Navy, Air Force and others	30.27	22.51	22.19
16. Value of inventories (Rs. in crores)	713.31	740.67	730.62
17. Surplus, obsolete, slow moving and non-moving inventories (Rs. in crores)	103.43	97.89	114.46
18. Norms of general inventory holdings in terms of months requirement	6 months	6 months	6 months
19. Inventories in terms of months consumption	10.89 months	10.43 months	8.56 months
20. No. of Warrants pendency :			
(*i*) Total No. of warrants pendency as on 31st March 1984/1985/1986	54,060	42,334	47,625
(*ii*) No. of Warrants more than one year old onwards on 31st March 1984/1985/1986	29,603	21,138	23,465
21. Normal manufacturing cycle/normal life of manufacturing warrants	6 months	6 months	6 months
22. Value of components and products in stock (Rs. in crores)	135.78	193.45	178.82
23. Components and products holding in terms of months production	1.61 months	2 months	1.58 months

14. Injudicious and unnecessary purchase of stores and machines

(i) *Extra expenditure in purchase of stores*

(a) In August 1984, factory 'X' requested a Public Sector Undertaking (PSU) to quote for supply of 1,200 Metric Tons (MT) of electrolytic copper wire bars, to meet the production programme for 1984-85 and to recoup stock. The PSU was the only supplier of the store, quoted (September 1984) Rs. 39,000 per MT (including excise duty but excluding other charges and levies), simultaneously indicating that the supplies would be invoiced at the rate of Minerals and Metal Trading Corporation (MMTC) ruling at the time of despatch. They further stipulated that the store would be supplied from November 1984 or in about 30 days from the date of receipt of the order after inspection and testing, if any, by the factory of PSU's works and complaints on quality would not be accepted once the store was despatched.

The factory placed an order on the PSU in October 1984 for supply of 600 MT of the store during 1984-85 (at 200 MT per month from November 1984) and 600 MT during 1985-86 (at 300 MT per month from May 1985). The order contained a rejection clause, that the PSU would bear the cost including transportation charges of materials rejected at destination.

After receipt of the order, the PSU requested (October 1984) for deletion of the rejection clause in the order before commencement of supply. The factory deleted the rejection clause in January 1985.

The PSU supplied 600 MT of the store during March 1985 (300 MT), April 1985 (231 MT) and May 1985 (69 MT) at Rs. 42,000 per MT and Rs. 45,300 per MT ruling in February 1985 and April 1985 respectively which involved an extra expenditure of Rs. 29.02 lakhs.

(b) Another factory 'A' invited (May 1984) quotation from the same PSU for supply of 48 MT of the same store. The PSU quoted (September, 1984) Rs. 39,000 per MT stipulating the same conditions regarding rate, inspection and delivery.

The factory placed an order on 28th September 1984 on the PSU for supply of 48 MT of the store by November 1984. As per the order, store found defective during processing at factory 'A' would be replaced by the PSU at their cost.

On receipt of the order, the PSU intimated the factory (28th September 1984) that the rejection clause in the order was not acceptable to them and should be deleted and that after the deletion of the rejection clause the store would be offered for inspection and despatch. The rejection clause was deleted on 11th December 1984 i.e. after about 2½ months.

When the rejection clause was deleted (December 1984), the stipulated delivery period of the store, as per the order (by November 1984) had expired and was not simultaneously revised. Only on 5th January 1985, the delivery period was extended till 25th January 1985 and it was further extended upto March 1985. After inspection (March 1985), the store (48 MT) was received in the factory in April 1985. Meanwhile, as MMTC increased the price of the store, the factory paid at Rs. 44,500 per MT ruling in March 1985 resulting in an extra expenditure of Rs. 2.25 lakhs.

14(ii) *Procurement of materials without proper planning*

Based on the two indents floated by Army authorities during May 1974 and January 1975, the Director General Ordnance Factories (DGOF) placed (July 1976) two orders on factory 'A' for production of 11,000 numbers of a charge for an ammunition.

For manufacturing 11,000 charges, factory 'A' procured raw materials worth Rs. 5.08 lakhs during March 1977 to March 1981. The factory also manufactured 6,000 numbers of a component worth Rs. 2 lakhs during July 1980 to October 1983 and earmarked 26.18 tonnes of one type of propellant and 19 tonnes of another type (total value Rs. 10.45 lakhs), left over with the factory due to cancellation/short-closure of other orders, for production of the charges.

The factory, however, could not take up production of the charges as certain particulars were not furnished by the Ministry of Defence (Ministry). In November 1984 the Ordnance Factory Board (OFB) instructed the factory to work out the financial repercussion after exploring alternative use of all materials and components procured/manufactured. The OFB stated (September 1987) that materials (value : Rs. 4.15 lakhs) were earmarked for alternative use and action to dispose of 4 items (value : Rs. 2.93 lakhs) was being processed.

The case was referred to the Ministry in May 1987 and their reply has not been received (October 1987).

14(iii) *Extra expenditure in the purchase of disc wheels*

Mention was made in paragraph 17 and paragraph 34 of the Reports of the Comptroller and Auditor General of India, Union Government (Defence Services) for the years 1981-82 and 1982-83 respectively regarding extra expenditure (Rs. 37.31 lakhs) in the purchase of two vehicle components by factory 'A' due to delay in negotiation of prices and finalisation of offers within the validity period. The Department of Defence Production (DDP) informed the Public Accounts Committee (July 1983 and January 1985) that necessary instructions had been issued (July 1983 and September 1984) to the Ordnance Factory Board (OFB) to take all care and speed in the finalisation of tender actions within the validity periods to avoid such extra expenditure.

In May 1984 factory 'A' invited quotations from firms 'X' and 'Y' (the only sources of supply) for 31,550 Shaktiman disc wheels to meet the production requirements upto July 1986. Firm 'X' quoted Rs. 700 each and firm 'Y' Rs. 665 each. The prices were firm and fixed and were valid till 30th September 1984. The TPC considered the comparative state-in case of firm 'Y'. The quotations were opened on 19th June 1984 and after obtaining certain clarifications from firm 'Y' regarding their offer, the comparative statement of tenders was put up to the Tender Purchase Committee (TPC) on 10th August 1984. The TPC considered the comparative statement of tenders on 13th August 1984. As the total cost of the purchase was beyond the financial powers of the General Manager of the factory, the case was forwarded to the OFB on 23rd August 1984. The OFB negotiated the prices with the firms on 20th September 1984 and the following settlement was reached:

Firm	Quantity to be ordered	Price per unit
	Nos.	Rs.
Firm 'X'	9,600	660.00
Firm 'Y'	19,500	660.00

As the procurement cost of the disc wheel was not within the powers of the OFB the case was forwarded to the DDP for approval on 27th October 1984. The approval was accorded only on 21st March 1985 and factory 'A' placed orders on firms 'X' and 'Y' on 19th April 1985 for supply of the disc wheels at the negotiated rate.

Meanwhile, due to increase in price of steel by the Steel Authority of India in February 1985 and increase in the imported cost of two components of disc wheels both the firms expressed (February 1985) their inability to the OFB to accept the negotiated price (Rs. 660 each). After placement of the orders firms 'X' and 'Y' refused (May 1985 and June 1985 respectively) to accept the orders and asked for price increase/re-negotiation.

The price was re-negotiated by the OFB in August 1985 and a firm and fixed rate of Rs. 780 per wheel was fixed. The DDP approved the rate in October 1985. The firms commenced supplies in August-September 1985 and completed the same in June-July 1986. The OFB stated (October 1987) that as per delivery programme settled in September 1984, firms 'X' and 'Y' could have supplied 2,400 numbers and 2,600 numbers respectively of disc wheels at Rs. 660 each till February 1985 and that belated placement of orders involved an extra expenditure of Rs. 6 lakhs. Thus, the Government had incurred an extra expenditure of Rs. 6 lakhs due to delay in finalising the tender.

The case was referred to the Ministry of Defence in July 1987 and their reply has not been received (October 1987).

14(iv) *Non-utilisation of a costly machine*

Mention was made in paragraph 17 of the Report of the Comptroller and Auditor General of India, Union Government (Defence Services) for the year 1982-83 regarding non-utilisation of precision and measuring instruments including a validator of imported origin, costing Rs. 42.56 lakhs.

One more case of procurement of defective measuring machine by the Director General Ordnance Factories (DGOF) from the same firm (firm 'A') an Indian agent of foreign supplier 'Q' (firm 'Q'), for factory 'X' more or less at the same time, as mentioned below, was noticed in Audit:

Against an indent placed (April 1977) by the DGOF, for procurement of one number of three co-ordinate measuring machine for factory 'X', the Director General Supplies and Disposals (DGSD) floated tender enquiry and forwarded (July-August 1977) the offers received from 5 firms for machines of imported origin to the DGOF/factory 'X' for recommendation. The lowest quotation of firm 'C' for model-I and II was between Rs. 8.18 lakhs and Rs. 21.49 lakhs whereas the quotation of firm 'A' for model-I to IV (firm 'Q' make) was between Rs. 12.40 lakhs and Rs. 17.36 lakhs. Factory 'X' recommended (October 1977) the lowest offer of firm 'C' (Rs. 8.18 lakhs excluding spares) for machine model-I, as the machine generally conformed to the tender specification and forwarded a list of spares required. Other offers, except that for machine model-IV of firm 'A' (cost : Rs. 17.36 lakhs) were rejected being not as per tender specification. According to the factory, machine model-IV of firm 'A', though satisfied dimensional requirements, but qualitative deviation (bridge type against cantilever type required) remained. The DGOF also recommended (November 1977) the machine model-I of firm 'C'.

The DGSD held a price negotiation meeting on 11th January 1978 when firms 'A', 'C', and another firm 'E' gave revised offers for the same machines which were forwarded by the DGSD (January 1978) to the DGOF/factory 'X' for comments/recommendations.

Though the revised offer of firm 'C' was also the lowest (Rs. 9.13 lakhs including spares), but factory 'X' recommended (February 1978) the highest offer (Rs. 11.33 lakhs) of firm 'A' for machine model IV, not considered suitable earlier due to qualitative deviation, on the ground that machine model IV generally conformed to the tender specification, was superior and capable of withstanding higher load condition and air bearing guaranteed life long. The lowest offer of firm 'C' was rejected for not meeting certain required specifications. Though DGOF did not consider the change of stand of the factory reasonable and also observed deviations in certain important parameters in the machine model IV of firm 'A' (the machine of firm 'C' had no such deviations), yet advised (March 1978) the DGSD to conclude the contract with firm 'A' for the machine model-IV. When DGSD requested (April 1978) DGOF to reconsider their recommendation, as the machine model-I of firm 'C' met the tender requirements, suitable for intended purpose and was cheaper, the DGOF did not agree and advised (1st May 1978) DGSD to place order on firm 'A'.

Meanwhile, on 28th April 1978 the DGSD intimated to DGOF that firm 'C' had agreed to provide work height capacity with granite swievel table as required by the factory at an extra cost of U.S.$ 2,000 (Rs. 0.16 lakh). In May 1978 DGSD again intimated that firm 'A' would charge U.S.$ 4,500 (Rs. 0.36 lakh) extra for 3 axis simultaneous readout system and requested the DGOF for final recommendation. On 18th May 1978 DGOF asked factory 'X' for their comments on the offers. Meanwhile, based on the recommendation of the DGOF (1st May 1978) the DGSD concluded a contract with firm 'A' on 15th May 1978 for supply of the machine model IV at a gross FOB cost of U.S. $ 96,435 (Rs. 7.71 lakhs) before the comments of the factory were received. Firm 'A', however, agreed to supply the 3 axis simultaneous readout system free of cost. Even after including the extra cost of Rs. 0.16 lakh, the FOB cost of the machine model-I of firm 'C' was cheaper by Rs. 2.27 lakhs than that of firm 'A'.

The machine which was to be delivered by 15th July 1978 was finally received in the factory in August 1979 but could not be successfully commissioned due to defects in the electronic calculator. Till August 1983 firm 'A' failed to rectify the defects and ceased to be the agent of firm 'Q'. In September 1986 the firm 'Q' replaced the defective calculator but the machine was not functioning properly. The Ordnance Factory Board stated (November 1986) that firm 'Q' was asked to depute their representative to commission the machine at the earliest. The machine is yet to be successfully commissioned (August 1987). Thus,

(i) rejection of lower offer for the machine of firm 'C' suitable for intended purpose, in favour of costlier machine of firm 'A' involved an extra expenditure of Rs. 2.27 lakhs; and

(ii) the machine (cost : Rs. 12.08 lakhs) procured in September 1979 could not be successfully commissioned (August 1987) due to defective electronic calculator.

The case was referred to the Ministry of Defence in April 1987 and their reply has not been received (November 1987).

15. Infructuous expenditure

(i) *Loss due to disposal of scrap*

Factory 'X' concluded a contract (October 1983) with firm 'A' for disposal of 175 Metric Tons (MT) of aluminium turning and boring scrap (scrap) at Rs. 12.27 per kg. As the firm failed to deposit the security deposit as per contract and lift the scrap within the stipulated period, the factory issued an ultimatum for cancellation of the contract in November 1983 and finally cancelled the contract in February 1984 at the risk and expense of the firm and forfeited their earnest money of Rs. 1.15 lakhs (August 1984).

Meanwhile, the factory issued (December 1983) a risk sale tender enquiry for disposal of the scrap. Of the three offers, the second highest offer of Rs. 9.06 per kg. of firm 'B' (valid upto 24th May 1984) was found acceptable. (The highest offer of Rs. 11 per kg. was rejected as the firm did not deposit the earnest money). The factory while forwarding (March 1984) the case to the Ordnance Factory Board (OFB) for advice, stated that the scrap was more than two years old and was oxidised due to constant exposure to atmosphere. The factory also stated that after cancellation of the contract with firm 'A', the firm was liable to pay Rs. 5.62 lakhs as damages due to their failure to execute the contract besides ground rent at 2 *per cent* per week on cost of unlifted quantity of the store. The OFB, however, advised the factory in July 1984 to drop the risk sale tender and to utilise the scrap for conversion into forgings on the ground that aluminium being a scarce material should not be parted with but converted into forgings for ready use. The factory concluded a contract (July 1984) with firm 'C' for conversion of 132 MT out of 175 MT of the scrap into 60,000 forgings. As per contract, firm 'C' lifted 37.62 MT of scrap till

November 1984 and thereafter declined to lift further quantity as the scrap was highly oxidised and unsuitable for conversion. The OFB advised (March 1985) the factory to issue good quality scrap to firm 'C' from fresh arisings. The factory issued 90.88 MT of scrap from another lot of fresh arisings to firm 'C' and withheld 3.50 MT of scrap towards storage charge/ground rent payable by the firm.

During October 1984 to May 1985, the factory retendered balance quantity of 135 MT (of 175 MT) of the scrap three times for disposal but no suitable offer was received. In July 1985 the scrap (125 MT ±25 *per cent*) was retendered for the fourth time, when, of the four offers, that of firm 'D' (Rs. 4.08 per Kg.) was the highest. The factory called (November 1985) all the four firms for negotiation but firm 'D' did not attend and firm 'E' offered Rs. 5.27 per Kg. which was accepted and a contract was concluded (November 1985) with them for disposal of the scrap. The firm lifted the scrap by February 1986.

Following points emerge from the case :

(a) The OFB advised the factory to drop the risk sale tender and utilise the scrap for conversion into forgings without properly considering the suitability of the scrap for conversion. As a result, out of 132 MT from the lot of 175 MT of scrap offered for conversion, firm 'C' lifted only 37.62 MT and the balance quantity (94.38 MT) was not suitable for conversion being highly oxidised. Later, the balance quantity of 125 MT ± 25 *per cent* (including 94.38 MT not lifted by firm 'C') of the lot of 175 MT of the scrap were disposed at Rs. 5.27 per Kg. resulting in a loss of Rs. 3.59 lakhs, computed with the rate (Rs. 9.06 per Kg.) obtained against risk sale tender.

(b) The OFB's advice to drop the risk sale tender and to utilise the scrap for conversion into forgings resulted in forfeiture of factory's legal claims of Rs. 5.62 lakhs as damages from firm 'A' for latter's failure to execute the contract of October 1983, besides ground rent at 2 *per cent* per week on cost of unlifted store.

The case was referred to the Ministry of Defence in March 1987 but their reply has not been received (November 1987).

15. (ii) *Purchase of a defective machine*

Against an indent (September 1974) of the Director General Ordnance Factories (DGOF), for procurement of a shot-blasting machine for factory 'X' the Director General Supplies and Disposals (DGSD) issued tender enquiry and forwarded (April-May 1975) the two offers received from firms 'P' (Rs. 4.40 lakhs) and 'Q' (Rs. 6.17 lakhs) to the DGOF/factory 'X' for recommendations. In June 1975 the DGSD requested factory 'X' to examine the offer of firm 'Q' as the performance of firm 'P' was not known to them and the firm also did not possess dynamic balancing facilities. The factory, however, recommended (June 1975) the offer of firm 'P' for being cheaper and for their capability to manufacture similar machines as verified by an officer of the factory. On the advice of the DGOF (August 1975) a technical team consisting of one officer each from factory 'X' and the DGSD Inspectorate, after visiting (September 1975) the works of firm 'P', opined that the firm could manufacture the machine as per the quotation.

Accordingly the DGSD placed an order (November 1975) on firm 'P' for supply of the machine (cost with accessories, packing, erection, etc. : Rs. 4.63 lakhs) to factory 'X' by 25th September 1976. the delivery period was subsequently extended till October 1978. The machine was received by the factory in October 1978 and as per terms of the order 90 *per cent* cost (Rs. 4.10 lakhs) was paid to the firm. When the machine was erected in April 1979 major defects were noticed. After rectification of defects by the firm in May 1980, the machine was commissioned in July 1980 but it again broke down in August 1980. Since the firm failed to repair the machine, the factory set up a Technical Board (February 1981) to locate the causes of failure of the machine. The Board observed (February 1981) that the design of the machine was defective. To meet the shot-blasting requirement the Ordnance Factory Board (OFB) placed an indent on the DGSD in September 1983 for another shot-blasting machine and the DGSD placed an order (February 1985) on firm 'S' for supply of another shot-blasting machine at Rs. 6.34 lakhs. The machine received by the factory in October 1985, was commissioned in December 1985.

Meanwhile, in a meeting held in April 1983 the firm expressed their inability to repair the machine. They, however, agreed to bear the repair cost up to a ceiling of Rs. 1.40 lakhs, if the machine was repaired by the factory. The factory repaired the machine (March 1984) at a cost of Rs. 1.38 lakhs and commissioned the same in July 1984. The Ministry of

Defence (Ministry) stated (October 1987) that for recovery of the repair cost from the firm, the case was referred by the DGSD to an Arbitrator, who awarded (March 1987) Rs. 1.03 lakhs in favour of the Government. Action to recover the awarded amount is under process (October 1987).

According to the Ministry (October 1987) even after repair, full efficiency of the machine could not be restored due to its inherent defects. Due to failure of the machine, shot-blasting of 381.87 tonnes of castings was done through trade firms during 1982-83 to 1984-85 at rates higher than those of the factory, resulting in an extra expenditure of Rs. 0.50 lakh.

Thus,

(i) the capability of firm 'P' to manufacture the machine was not properly assessed by factory 'X' and the technical team. The firm supplied a defective machine and had no technical expertise to rectify the defects;

(ii) the defective machine was not returned and neither the cost was recovered nor the firm was asked to replace the machine;

(iii) as the firm did not pay the repair cost (Rs. 1.38 lakhs) the matter was referred to an Arbitrator and the recovery of the amount (Rs. 1.03 lakhs) awarded by the Arbitrator is still under process (October 1987). Even after repair full efficiency of the machine was not achievable; and

(iv) due to failure of the machine, shot-blasting of 381.87 tonnes of castings was done through trade firms during 1982-83 to 1984-85 at higher rates involving extra expenditure of Rs. 0.50 lakh and another machine (cost : Rs. 6.34 lakhs) was procured in 1985.

15. (iii) *Bulk provisioning of a store resulting in loss*

Factory 'A' was manufacturing ammunition 'X' since 1971-72 against the demands of Army authorities. In order to develop the production of an ammunition of another design (ammunition 'Y') the Director General Ordnance Factories (DGOF) placed a development extract for one lakh rounds and a regular extract for one million rounds of ammunition 'Y' in February 1977, on factory 'B'. On receipt of the extract, factory 'B' placed two inter-factory demands (IFD) in April 1977 and March 1978 on factory 'C' for supply of 2.50 tonnes (increased to 2.80 tonnes in February 1978) and 23.60 tonnes respectively of brass cups. Factory 'C' supplied 2.80 tonnes of brass cups in December 1977 against the IFD of April 1977 and 14.50 tonnes of brass cups, till October 1978 against the IFD of March 1978. Meanwhile, against the development extract, factory 'B' undertook the manufacture of 1.20 lakhs cartridge cases and 1 lakh number of ammunition in May-June 1978. Till July 1981 the factory manufactured only 30,000 cartridge cases and 28,000 numbers of ammunition. In July 1981 the development of ammunition 'Y' was abandoned as during trial firing, stoppage due to misfeeding of rounds from magazine to the chamber resulting in occasional interruption in automatic functioning of the weapon, was noticed. The Ordnance Factory Board (OFB) stated (August 1981) that the Army authorities did not show interest in the development of ammunition 'Y' as their requirements were being met with ammunition 'X' supplied by factory 'A'. They also added that further orders for ammunition 'Y' were not forthcoming from the services. The regular extract for one million rounds of ammunition 'Y' placed on factory 'B' was transferred (June 1982) to factory 'A' for production of ammunition 'X'. The IFD for 23.60 tonnes of brass cups was short closed (September 1979) to 14.50 tonnes already supplied till October 1978. As a result of failure to develop ammunition 'Y', out of 17.30 tonnes of brass cups received from factory 'C', 15.80 tonnes valuing Rs. 3.70 lakhs remained unutilised in factory 'B'. The OFB stated (July 1987), that the cups were specially manufactured for ammunition 'Y' and hence could not be utilised as further development of the ammunition was suspended. The OFB further added that the cups were offered to two other factories which expressed their inability to utilise them. The cups were finally scrapped and converted into ingots at a total estimated cost of Rs. 0.13 lakh.

The case reveals that factory 'B' took bulk provisioning action of brass cups before successfully developing the ammunition. As a result of subsequent failure to develop the ammunition, 15.80 tonnes of brass cups valuing Rs. 3.70 lakhs remaining unutilised were scrapped and converted into ingots at a cost of Rs. 0.13 lakh (estimated).

15. (iv) *Loss due to defective design of an ammunition*

Based on trial performance, the Army authorities accepted, in 1962, an ammunition designed and developed by a Defence Research Establishment (R and D) for introduction in the services.

On an indent placed by the Director of Ordnance Services (DOS) in October 1965, the Director General Ordnance Factories (DGOF) placed an order on factory 'A', in August 1967 and another order in July 1975 for production of 24,000 rounds (including 500 rounds as development) of the ammunition.

Factory 'A' in turn placed demands on factory 'B' for supply of empty shell bodies (empties). Factory 'B' manufactured 6,600 empties during April 1971 to March 1977 of which 800 empties (value : Rs. 2.21 lakhs) failed in proof. In October 1974, the DGOF suggested to R and D to re-examine the design aspect of the empties, as the rejection was not due to defective materials or other characteristics. The R and D contended (February 1975) that the design was adequate for mass production. As the performance of the ammunition during trials was not as per parameters, Army opined (June 1977) that the ammunition was not acceptable for operational use. The order was shortclosed at 9,000 ± 5 *per cent,* rounds in November 1978.

Meanwhile, the Steering Committee while investigating the causes of failure, decided (July 1976) to conduct trials of the ammunition with another type of fuze (fuze 'R') instead of fuze 'S' originally considered. The Ministry of Defence (Ministry) also agreed (January 1977) to the decision and directed to suspend bulk production of the ammunition pending finalisation of trial programme.

The R and D modified (December 1978) the design of the empty to accommodate fuze 'R'. Pending trials with fuze 'R' further production of the ammunition was suspended till 1982-83. On the advice (January 1983) of the Ordnance Factory Board (OFB), factory 'B' manufactured 2,000 empties (value : Rs. 7.67 lakhs) during 1983-84 but the entire quantity was rejected during proof trial.

Factory 'A' shortclosed the demands for empties on factory 'B' at 5,634 empties till then supplied. Factory 'A', till 1983-84, supplied 4,987 rounds (value : Rs. 16.88 lakhs) of filled ammunition to the Army to be used for training purposes. There was no further manufacture of the ammunition after 1983-84.

Due to shortclosure of the order, surplus materials valuing Rs. 8.32 lakhs and semi-finished empties worth Rs. 15.49 lakhs were lying with factory 'B' since 1983-84.

The OFB stated (May 1986) that investigation of proof failure revealed that the design of the empties was faulty and according to factory 'A' (September 1986/August 1987) the ammunition was failing as the design was not workable.

Thus,

(i) the design of the ammunition developed by the R and D was faulty and not workable;

(ii) due to defective design 2,800 empties (value : Rs. 9.88 lakhs) manufactured by factory 'B' were rejected. As the performance of the ammunition was not acceptable to Army for operational use, the DOS shortclosed the order (for 24,000 rounds) at 9,000 ± 5 *per cent* rounds for use for training purposes; and

(iii) due to shortclosure of the order surplus materials valuing Rs. 8.32 lakhs and semi-finished empties valuing Rs. 15.49 lakhs were lying in factory 'B' (September 1987) since 1983-84.

The case was referred to the Ministry of Defence in July 1987 and their reply has not been received (October 1987).

15. (v) *Excess issue of raw materials*

Till May 1977, factory 'X' was fabricating Cellulose Nitrate sheets (CN sheets) into containers with disc for ammunition 'P'. After May 1977, the factory was issuing CN sheets for getting the fabrication work done by trade firms, against orders placed by them and by the Director of Defence Supplies (DDS). In December 1985, the factory placed an order on firm 'X' for fabrication of 2 lakh containers (increased to 4 lakh containers in July 1986) out of CN sheets to be supplied by the factory. The factory endorsed a copy of their order to the DDS. The factory issued 3,639 Kgs. (25,200 numbers) of CN sheets to the firm during January—November 1986 against the order. The consumption rate of CN sheets was about 909.75 Kgs. per 1 lakh containers. The firm completed the supplies between February—December 1986. The DDS also placed an order on the same firm in January 1986 for fabrication of 5.83 lakh containers out of the CN sheets to be supplied by the factory. The consumption rate of CN sheets as per the order was 1,670 kgs. per 1 lakh containers and at this rate the factory issued a total quantity of 9,730 kgs. of CN sheets between March 1986 and September 1986. Thus, while against factory's order of December 1985 on firm 'X', CN sheets were issued at the consumption rate of 909.75 kgs. per 1 lakh containers, against the order of January 1986 of the DDS on the same firm, CN sheets were issued at the consumption rate of 1,670 kgs. per 1 lakh containers. This involved an excess issue of 4,430 kgs. of CN sheets valuing Rs. 7.12 lakhs, to the firm against the order of the DDS.

The case was referred to the Ministry of Defence in July 1987 and their reply has not been received (October 1987).

16. Production loss

(i) *Rejection of an ammunition*

In Paragraph 13(iii) of the Report of the Comptroller and Auditor General of India, Union Government (Defence Services) for the year 1985-86, it was mentioned that the Ordnance Factory Board (OFB) directed (August 1983) that after considering the past performance of the components the filling factories could advise the feeder factories to supply the components for assembly in anticipation of clearance in proof test by the Inspectorate.

Due to supply of an ammunition by a filling factory to an Ordnance depot pending proof clearance of empty and filled fuzes there was heavy rejection of the ammunition after proof. Factories 'A' and 'B' were supplying empty shells for ammunition 'X' to factories 'C' and 'D' for filling in anticipation of satisfatcory result in proof test by the Inspectorates The filling factories were also filling these empty shells and supplying the ammunition to an ordnance depot since 1976 pending satisfactory proof results.

In June 1985, 14 lots (28,000 numbers) of shells (cost : Rs. 1.62 crores) of factory 'A' and 7 lots (14,000 numbers) (cost : Rs. 1.47 crores) of factory 'B' supplied to the filling factories during December 1984 to March 1985 were rejected after proof by the Inspectorate, due to large scale shifting of driving band during recovery proof. Subsequently during June 1985 to August 1985 one more lot (2,000 numbers) of factory 'A' (cost : Rs. 11.57 lakhs) and 3 more lots (6,000 numbers) of factory 'B' (cost : Rs. 62.90 lakhs) were also rejected for the same reasons. All these lots were, meanwhile, filled and issued to the depot by the filling factories in anticipation of satisfactory proof results.

In detailed investigations carried out firstly by Resident Inspectors in June and November 1985 and subsequently by Authority Holding Sealed Particulars (AHSP) the affected lots were found to have various defects *viz.* rusty groove surface, lifting of driving band in some samples, blackening of underneath of driving band, presence of cutting oil in the groove, etc. Subsequently after further investigation firing in August and December 1985 ammunition of 18 lots (36,000 numbers) out of the total 25 lots, were accepted as one time concession and balance 7 lots (14,000 numbers) were rejected. The cost of the finally rejected ammunition was Rs. 1.19 crores.

The AHSP remarked (April 1986) that there was a definite need to streamline the procedure for use of empty lots and their filling at the filling factories should be undertaken only after receipt of satisfactory proof results. Instructions have been issued by the OFB in May 1986 for supply of components to filling factories after satisfactory proof clearance.

The case was referred to the Ministry of Defence in June 1987 and their reply has not been received (October 1987).

16(ii) *Rejection in production of an ammunition*

In Paragraph 19 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 production of type 'A' ammunition (value : Rs. 1.99 crores) not satisfying the service specification by factory 'X' even after implementation of a modernisation project sanctioned by Government in April 1971 and completed in April 1978 at a cost of Rs. 6.05 crores to enhance and ensure quality production of the ammunition. Production of ammunition not satisfying the service specifications continued subsequent to April 1978.

During 1981-82 to 1985-86, out of 193.37 units of the ammunition manufactured 20.75 units (value : Rs. 487.36 lakhs) were rejected. A Preliminary Investigating Board constituted (January 1984) to locate the causes of rejection, opined (January 1985) that 90 *per cent* of the rejections during April 1979 to December 1983 were due to failures of the caps fitted with the ammunition. The Investigating Board further observed that the cap filling plant in the factory was quite old and the filling process involved lot of manual checks.

Besides, 12.07 units of caps (value : Rs. 16 lakhs) out of 264.44 units produced during 1981-82 to 1985-86, for the ammunition were also rejected. The factory stated (September 1984) that the machines for production of caps were old and outmoded. They further stated (June 1986) that the project sanctioned in April 1971 catered for enhancing quality production of the ammunition and that only essential machines were replaced under the project. Though in 1976, the factory initiated action to replace 4 old cap pressing machines, in February 1978, they placed a demand on the Director General Ordnance Factories (DGOF) for only one machine for which an order was placed on a Public Sector Undertaking (PSU) in October 1979. The machine (value : Rs. 3.57 lakhs) received in May 1982, was commissioned in December 1983 but after working for only five months (December 1983 to March 1984 and June 1985) due to defects, was lying idle till September 1985. After rectification of the defects by the PSU, the machine could be used from November 1985. Meanwhile, the factory also placed a demand on the DGOF in 1978-79 for procurement of 7 Power Presses for production of caps, in replacement of old presses. The demand was reduced to 3 numbers in 1983-84 and finally to one number in 1984-85 by the Ordnance Factory Board (OFB). The factory stated (June 1986) that due to financial stringency, it was decided to procure one machine of higher capacity. The Director General Supplies and Disposals (DGSD) placed an order (February 1987) on firm 'Q' for supply of a press at a cost of Rs. 27.48 lakhs. The press was expected to be supplied by April 1988 but as the firm had meanwhile gone into liquidation the DGSD retendered for the machine. Final outcome is yet to be known. The OFB stated (October 1987) that rejection of caps and ammunition at proof stage being inherent could not be fully eliminated with new machines but could only be minimised. The fact, however, remains that use of old machines for production and filling of caps resulted in heavy rejection of ammunition and caps during 1981-82 to 1985-86 which could have been minimised by timely replacement of such old machines.

The case was referred to the Ministry of Defence in July 1987 and their reply has not been received (October 1987).

16.(iii) *Rejection due to lack of proper vigilance*

Mention was, *inter alia,* made in paragraph 11 of the Report of the Comptroller and Auditor General of India, Union Government (Defence Services) for the year 1974-75 about rejection of ammunition 'X' in factory 'A'. The Public Accounts Committee (PAC) in their 3rd Report (1977-78) (6th Lok Sabha) recommended for revamping the inspection machinery in the ordnance factories for proper and effective quality checks at the production stage. In their Action Taken Note the Ministry of Defence (Ministry) informed (August 1978) the PAC that new techniques of quality control had been introduced in the ordnance factories to ensure quality control by the inspection organisation or by the ordnance factories at the production stage.

The production of ammunition 'X' commenced in another factory (factory 'C') from 1965-66. During 1980-81 to 1985-86, factory 'C' manufactured 7,362.19 units of ammunition of which 335.55 units valuing Rs. 555.02 lakhs (approximately) were rejected in final proof. One of the reasons for rejection was absence of flash holes in the cartidge cases. In August 1981 when factory 'C' referred the case of rejection of 30 units of the ammunition valuing approximately Rs. 34.94 lakhs manufactured in 1981, to the Ordnance Factory Board (OFB), the later opined (August 1981) that absence of flash holes in the cartridge cases revealed ineffective inspection practice in the factory while punching flash holes and advised the factory to exercise proper checks. However, defective manufacture continued to persist in subsequent production also. In January 1983 the factory again referred the cases of rejection of 160 units of the ammunition to the OFB who observed (February 1983) that the defects could have been avoided with adequate vigilance on the shop floor. The Director of Inspection Armaments (DIA) intimated (July 1983) to the OFB, that, a number of lots were rejected due to excessive misfire caused by absence of flash holes, composition missing in the primer, anvil missing and improper height of primer cap. According to the DIA these troubles were due to malfunctioning of microswitches in the priming machines which were not being promptly attended to by the factory. The OFB, however, stated (September 1983/October 1987) that defects like missing of composition in the primers, anvil missing, improper height of the primer could not be detected by microswitches. They further added that the microswitches were promptly attended to as and when defects were noticed but the machines had already out-lived their lives.

Though rejection of the ammunition started since May 1981, the General Manager of the factory constituted in June 1984 a Board of Inquiry to ascertain the loss due to rejection. The Board of Inquiry, after investigating 94.10 units of rejected ammunition opined (August 1984) that the ammunition was cleared at visual/dimensional inspection by the Inspectorate but were rejected at firing proof test due to casulties beyond acceptable limits and that the rejections were not due to bad material/workmanship. The Board of Inquiry assessed the net loss involved after breaking down 94.10 units of rejected ammunition (value : Rs. 132.62 lakhs) and adjusting the value of scrap recovered (Rs. 53.50 lakhs) to be Rs. 79.125 lakhs. The estimated labour cost in breaking the rejected ammunition was Rs. 1.12 lakhs. No further investigation was made after June 1984. The OFB stated (October 1987) that the factory had been advised for disposal of 335.55 units of the rejected ammunition.

Thus,

(i) continuance of production with outmoded machines and lack of proper inspection/vigilance resulted in rejection of 335.55 units of the ammunition valuing Rs. 555.02 lakhs approximately during 1980-81 to 1985-86;

(ii) for 94.10 units of rejected ammunition, the net loss was assessed to be Rs. 79.12 lakhs plus Rs. 1.12 lakhs towards labour charges for breaking the rejected ammunition;

(iii) the reasons for rejection occurring after June 1984 were not investigated; and

(iv) total net loss involved in the rejection of 335.55 units of the ammunition is yet to be assessed and regularised.

The case was referred to the Ministry in July 1987 and their reply has not been received (October 1987).

17. Non-recovery of amounts due to Government

(i) *Non-recovery of Trading Right Fee*

During May 1976 to January 1979, factory 'A' leased out 15 plots of land (plots) in the estate area to 15 lessees for a period of 5 years, on payment of monthly Trading Right Fee (TRF), conservancy and water charges for conducting specified trades. On expiry of respective lease period between May 1981 and October 1982 with 12 lessees, the factory got back plots with buildings on due dates from only 5 lessees and as the remaining 7 lessees refused to hand over the plots with buildings, the factory issued eviction notices on them in December 1982 (the lease period with 3 other lessees were to expire between July 1983 and January 1984). None of the 7 lessees vacated/handed over the plots to the factory and in July 1983, they represented to the Ministry of Defence (Ministry) for withdrawal of the eviction notices. In August 1983 the Ministry decided to give fresh lease for 10 years to such lessees who were in possession of buildings on the plots, at reasonable rent to be fixed, subject to review at suitable intervals. Accordingly, General Manager (GM) of factory 'A' constituted (September 1983) a committee to recommend the monthly TRFs recoverable, for each of the 10 ex-lessees, and subsequent increase of TRF in each case with intervals (in years) for such increase. The TRFs recommended by the committee were forwarded by the factory in October/December 1983 to the Ordnance Factory Board (OFB) who forwarded the same to the Ministry in May 1984. The Ministry appproved (August 1986) the revised TRFs and accorded sanction for extension of lease agreements with the ex-lessees *inter alia* stipulating that the revised TRFs were to be charged and arrears of TRFs at revised rates upto March 1986 were to be realised before signing of any lease deed.

Accordingly, factory 'A' informed (September 1986) all the 10 ex-lessees, that a fresh lease agreement for a period of 5 years from the respective dates of expiry of the old lease period could be concluded provided the ex-lessees pay, by 31st October 1986 (extended upto 31st December 1986), the arrears, at revised rates, accumulated till September 1986, from dates of expiry of the old lease period. The factory also informed that in case, arrear TRFs were not paid by due date, the lessees would be treated as unauthorised occupants and action would be taken for their eviction under existing Act. The ex-lessees, however, represented (October 1986) to the factory that the TRFs were fixed arbitrarily and asked for the basis for the same. They simultaneously forwarded a copy of their representation to the Ministry. The Ministry advised (December 1986) the OFB/ Factory 'A' not to take action to evict the ex-lessees till the issue of rent was decided and instructed (February 1987) the OFB to act as an Arbitrator as per the lease agreement and prescribe reasonable TRFs for the 10 ex-lessees. The OFB constituted (April 1987) another committee for fixing the reasonable TRFs. The committee submitted their report in May 1987 recommending the revised TRFs which were less than those already approved by the Ministry in August 1986, the OFB did not, however, agree to the TRFs fixed by the second committee and referred (July 1987) the matter to the Ministry. In reply to the Audit Para the Ministry stated (August 1987) that the same should be decided by the OFB.

As no final decision in this regard was taken, the ex-lessees continued to occupy the plots without any lease agreement and without paying any TRFs since the expiry of old lease period. The total arrear TRFs at approved rates accumulated till August 1987 works out to Rs. 5.69 lakhs.

17.(ii) *Non-recovery of advances paid to a firm*

Mention was made in paragraph 24 and paragraph 19 of the Reports of the Comptroller and Auditor General of India, Union Government (Defence Services) for the years 1980-81 and 1984-85 about non-recovery of Rs. 24.78 lakhs and Rs. 16.24 lakhs respectively outstanding out of advances paid to a firm on two different occasions. Two more cases of non-recovery of advances paid to the same firm by factory 'A' were noticed which are as under :

(1) An amount of Rs. 20.25 lakhs was paid to the firm in June 1981 as advance for supply of 50,000 forged bodies. As per order, suplies were to be completed by June 1982. Till July 1982 the firm supplied only 4,680 forged bodies and requested for extension of delivery period upto March 1983. Till March 1983 the firm supplied a further quantity of 16,020 forged bodies and requested for further extension upto March 1984 which was granted.

Though the performance of the firm against earlier order was not satisfactory, the factory placed another order (October 1982) on the firm for supply of 20,000 steel forgings valuing Rs. 73.60 lakhs. An advance of Rs. 16.56 lakhs was paid to the firm (October 1982—September 1983) for purchase of raw materials. As per order, the firm was to submit 25 steel forgings as samples for approval by the Inspectorate within two months from the receipt of the order and to commence bulk supply at 3,000 to 4,000 numbers per month, 6 months after approval of the samples. The firm submitted the samples in February 1983, but these were rejected due to certain dimensional deviations. The factory, however, gave clearance to the firm for bulk manufacture subject to eliminating the defects. The firm offered 1,000 forgings in February 1984 and samples drawn therefrom were found to be satisfactory. However, till June 1984 the firm could not commence bulk supply. No amount could be recovered out of the advance of Rs. 16.56 lakhs paid, as the firm stopped functioning from July 1984.

(2) The Ordnance Fatcory Board (OFB) also placed another order in March/June 1983 on the same firm for supply of 20,000 numbers of the forged bodies by 21st March 1984 to factory 'A'. As the firm failed to complete the supplies by the prescribed date, the OFB granted extension of delivery period upto July 1984.

Against the orders for forged bodies placed by both the factory and the OFB, the firm supplied till June 1984 a total number of 35,936 forged bodies against the total order of 70,000. Till November 1984, the factory recovered a total amount of Rs. 17.16 lakhs, out of the advance of Rs. 20.25 lakhs. An amount of Rs. 3.09 lakhs is yet to be recovered (August 1987).

Thus, out of the total amount of Rs. 36.81 lakhs paid to the firm as advances, a total amount of Rs. 19.65 lakhs plus interest thereon is yet to be recovered. The factory lodged (May 1986) a claim before the Official Liquidator of a High Court for the recovery of the dues. Final outcome is not yet known (August 1987).

The case was referred to the Ministry of Defence in May 1987 and their reply has not been received (October 1987).

18. Unsatisfactory production of a fuze

In paragraph 6 of the Report of the Comptroller and Auditor General of India, Union Government (Defence Services) for 1977-78 it was, *inter alia,* mentioned that :

— production of the authorised fuze 'X' for an ammunition could not be established (January 1979) due to frequent changes, during 1964 to 1972, in planning its production;

— the requirements were being met since 1963 by an alternative fuze 'Y'; and

— in February 1976, the Army placed an embargo on the use of fuze 'Y', but as there was delay in establishment of manufacture of fuze 'X', orders for 95,000 numbers of empty fuze 'X' were placed (August 1973 to December 1977) on indigenous firms and a contract was concluded (November 1977) for import of 50,000 numbers of filled fuze 'X' (cost : Rs. 125.68 lakhs).

The capacity created for manufacture of fuze 'X' at factory 'R' was 1.80 lakhs per annum in two ten hour shifts. The production of the empty fuze commenced in the factory in 1978-79. The total production achieved was 84,836 numbers only during 1979-80 to 1984-85. Orders were also placed on trade for 2,03,200 numbers (cost : Rs. 608.42 lakhs) during 1981 to 1985. The trade supplied 1,42,839 numbers till March 1986. There was inconsistent performance of the fuzes manufactured by the factory and also those supplied by the trade and 24,000 empty fuzes and 43,000 filled fuzes (cost : Rs. 172.5 lakhs approximately) rejected at empty and filled proof were awaiting rectification (June 1986). The Ordnance Factory Board (OFB) stated (November 1987) that of the rejected filled fuzes 20,000 numbers were rectified and utilised in production. A committee was formed in March 1986 by the Ministry of Defence (Ministry) to identify the defects/shortcomings in the manufacture of the fuze. The committee, *inter alia,* observed (April 1986) that certain components of the fuze were not being manufactured by factory 'R' as per drawings and that the recommendations made in April 1979 and November 1983 by an earlier committee under the Chairmanship of the Chief Inspector of Armaments in regard to (i) manufacture of the components according to drawings, (ii) setting up a dust free assembly room in the factory, (iii) changing the design of certain components as per the drawings of the foreign designer of the fuze etc., were not implemented. The OFB stated (November 1987) that drawings of some of the components had not yet been finalised by the Authority Holding Sealed Particulars and that delay in establishing the production of the fuze and its excessive rejection was mainly due to frequent changes in drawing/design of various components. The fact, however, is that the production of the fuze has not yet been successfully established and there has been excessive rejection in its production.

Due to the shortfall in production of the fuze and its inconsistent performance, import of 40,000 filled fuzes was made during 1983-84 at a total cost of Rs. 107.52 lakhs. Besides, due to non-availability of fuze there was considerable shortfall in production of the ammunition. The targets set up for the ammunition and actual production achieved during 1979-80 to 1985-86 were as follows :

Year	Target (in numbers)	Actual production (in numbers)	Percentage of shortfall
1979-80	60,000	44,833	25.28
1980-81	60,000	25,603	57.33
1981-82	70,000 (reduced to 30,000)	35,590	—
1982-83	60,000 (reduced to 30,000)	10,068	66.44
1983-84	80,000 (reduced to 30,000)	24,689	17.74
1984-85	90,000	70,028	22.19
1985-86	90,000	42,746	52.50

The value of the shortfall was approximately Rs. 865.88 lakhs in only two years of 1984-85 and 1985-86.

Although the Army had placed embargo on the use of the fuze 'Y', they agreed (April 1986), at the instance of the OFB, to accept 1,80,000 numbers of the ammunition with fuze 'Y' as a short term measure due to difficulties in production of fuze 'X'.

Thus,

- the Government sanctioned creation of facilities for manufacture of fuze 'X' in ordnance factories in May 1962, but production of the fuze could not be successfully established till August 1987;
- due to non-availability of fuze 'X' there was shortfall in production of ammunition during 1979-80 to 1985-86. The value of shortfall was approximately Rs. 865.88 lakhs in only two years of 1984-85 and 1985-86 and 40,000 filled fuzes (value : Rs. 107.52 lakhs) were imported during 1983-84; and
- as the production of fuze 'X' could not be established the Army agreed (April 1986) to accept 1.80 lakh numbers of ammunition with fuze 'Y' which is of inferior quality.

The case was referred to the Ministry in July 1987 and their reply has not been received (November 1987).

19. Delay in improving the quality of transmission system of vehicles

In paragraph 15A of the Report of the Comptroller and Auditor General of India, Union Government (Defence Services) for 1980-81, mention was made about the rejections of transmission assemblies fitted in vehicles manufactured at Factory 'A' and the expenditure incurred on rectification of the defective assemblies. Mention was also made therein about the delay in sanctioning a project for the provision of additional machinery and equipment for improving the quality of transmission assemblies. The Ministry of Defence (Ministry) informed (December 1982) the Public Accounts Committee that the delay in sanctioning (February 1980) the project was due to the paucity of funds in the Defence plan, and the expected date of commissioning the last machine was March 1984. The aim of the project was mainly to remove the defects in the transmission system of vehicles with a view to ensuring quality, durability, and safety of Army vehicles.

The estimated cost of the project was increased to Rs. 567.25 lakhs in April 1982 and total expenditure booked upto July 1987 was Rs. 386.25 lakhs. The committed expenditure so far on the basis of order placed for machinery was Rs. 605.00 lakhs.

The project was not yet completed (October 1987). It was found in Audit that the objective of the project could not be achieved due to delays in procurement and commissioning of machinery.

Twenty four machines and Material Handling Equipment (MHE) costing Rs. 605 lakhs ordered during June 1981 to March 1985 were received between March 1982 and November 1986 except MHE. The firm failed to supply the MHE (costing Rs. 3.73 lakhs) within the delivery period (December 1984) extended upto September 1986. The Ordnance Factory Board (OFB) stated (November 1987) that the Law Ministry has been approached for advice, if risk purchase was tenable.

Out of twenty four machines received, nineteen machines were commissioned in November 1986. The position in respect of the remaining five machines was as under :

(1) Sealed Quench Furnace-2 Numbers.

Tender enquiry for supply of the furnaces alongwith accessories and spares was issued by Factory 'A' in March 1983 and orders were placed only in March 1985 on a foreign firm and its Indian agent at a total cost of Rs. 65.43 lakhs. The delivery schedule in respect of both the orders placed on foreign and indigenous firms was by November 1985 extended finally upto December 1986. The imported equipment were received in November 1986 and the indigenous equipment by March 1987. The furnaces were, however, yet to be erected (October 1987) by the firm.

(2) Induction Hardening Furnace

Tender enquiry for supply of the furnace was issued in August 1982 and the order on an Indian firm was placed in December 1983 at a cost of Rs. 30.88 lakhs. The furnace to be supplied by July 1984 extended to September 1984 was received between January 1985 and March 1985 and awaiting (October 1987) successful commissioning by the supplier.

(3) Angular Head Cylindrical Grinding Machine—2 Numbers.

The machines were ordered (May 1982) on an Indian agent of a foreign firm at FOB (free on board) cost of Rs. 36.49 lakhs to be delivered by December 1982 extended to April 1983. One of the machines received in September 1983 was commissioned in March 1987 only due to the delay in replacement of a defective unit and demonstration of the performance of the machine by the supplier. The other machine received in December 1983 at Factory 'A' in damaged condition was repatriated (December 1985) for repair to the principal firm abroad where the machine had been treated as scrap as repairing the machine would exceed the cost of a new machine and the firm agreed (March 1987) to re-imburse an amount of DM 4.80 lakhs for the machine. The procurement of a substitute machine in lieu was yet (October 1987) to be decided by the OFB.

To sum up :—

(b) due to delay in completion of the project, the a cost of Rs. 292.86 lakhs raised to Rs. 567.25 lakhs scheduled to be completed in March 1984 has not been completed so far (October 1987) due to the delay in procurement and commissioning of machinery and

(b) due to delay in completion of the project, the improvement in the quality, durability and safety of vehicles is yet to be achieved. The Factory 'A' incurred an expenditure of Rs. 5.23 lakhs in the years 1984-85 to 1986-87 for rectification/repair of defective transmission assemblies.

The case was referred to the Ministry in July 1987 and their reply has not been received (October 1987).

CHAPTER 5

WORKS AND MILITARY ENGINEER SERVICES

20. Defective/sub-standard resurfacing of a runway

A runway at Station 'X' was constructed in 1950. In order to provide better riding surface and to obviate 'foreign object damage' hazard to the aircraft, a Board of Officers held in October 1979 recommended resurfacing of the runway. In the Memorandum for Expenditure Finance Committee, the Ministry of Defence (Ministry) indicated that the work was "operationally urgent". In October 1981 the Ministry accorded sanction for resurfacing of the runway of the air-field at an estimated cost of Rs. 140.21 lakhs. In June 1982, the Zonal Chief Engineer (CE) concluded a contract for Rs. 1.30 crores for execution of the work of provision of flexible and rigid overlays over the existing rigid pavement. The work commenced in July 1982 and was to be completed in January 1984. The work on the runway was actually completed in January 1985 at a cost of Rs. 1.99 crores and was handed over to the users in the last week of January 1985.

The runway was put to use from the end of January 1985 onwards. The concrete slabs started cracking and the flexible overlays also started breaking up. The contractor executed minor repairs to certain cracked slabs in May 1985. In September 1985, nine defective slabs were relaid although by then a large number of slabs had become defective and required relaying. In February 1986, the contractor refused to carryout further repairs stating that the defects pointed out were not of repair nature (maintenance) and that the work was executed by him as per specifications and control laid down in the contract and completed to the entire satisfaction of the department. As a result the runway could not be put to regular use; the extent of use since 31st December 1985 is only restricted.

The defective runway was examined (November 1985) by a Technical Board of Officers (Board) appointed by the Zonal CE. The Board observed the following :

(a) *Rigid Pavement*

(i) The compressive strength was less than that specified in the contract.

(ii) The bound between the old existing pavement and new overlays slabs was not perfect.

(iii) The test results recorded during the execution of work were not realistic.

(iv) A number of cracks had developed in the rigid overlay portion.

(b) *Flexible Payment*

(i) Gradations of aggregates used in asphaltic concrete were at variance from that specified in the contract and the aggregate actually used did not fall within the limit of acceptance.

(ii) The percentage of bitumen content was less than that specified in the approved job mix formulae.

The Board opined that :

(a) The strength requirement of slabs cast in the rigid overlay pavement were not as per laid down specification.

(b) The development of the cracks in rigid overlay work is indicative that slabs of overlay pavement had not been able to withstand the stress due to temperature, dry shrinkage and load.

(c) Dislodging of aggregate was due to poor quality of asphaltic concrete.

(d) Tests conducted during execution were not reliable.

Two scientists from Central Road Research Institute (CRRI) alongwith a representative of Engineer-in-Chief's Branch inspected the defective runway in February 1986. According to the report given after that joint inspection, the reasons for cracks in rigid overlay pavement might be due to :

— Low initial setting time.

— Higher shrinkage limit.

— Improper materials.

— Inadequacy in quality control.

— Higher percentage of voids in asphaltic concrete due to less percentage of fines.

The Command CE wrote to all CEs in February 1986 that an amount of rupees one crore was recoverable from the defaulting contractor on account of non-rectification of defects which were being rectified at his risk and cost and requested them to withhold payments due to the defaulting contractor in their respective areas.

The Ministry stated (September 1987):

- The runway was being used by users in a restricted manner from 31st December 1985.
- The sub-standard work was due to the poor quality control by the contractor and lack of supervision of the Department.
- There is no additional expenditure involved since defects pointed out during maintenance period were to be got rectified at the risk and cost of the contractor.
- Disciplinary proceedings have been initiated against the officers responsible for acceptance of sub-standard work as recommended by the Staff Court of Inquiry.

However, defects pointed out to the defaulting contractor during maintenance period have neither been got rectified at his risk and cost nor any amount withheld on account of non-rectification of defects (estimated cost : Rs. one crore) from the payment due to the defaulting contractor, by any of the CEs so far.

21. Injudicious retendering resulting in avoidable extra expenditure

The reasoned recommendations of a Commander Works Engineer (CWE) for according financial concurrence and acceptance of the lowest offer was turned down even on his reiteration of earlier recommendations and the re-tendering eventually resulted in avoidable extra expenditure of Rs. 3.34 lakhs.

In June 1979, the Director, Radar and Communication Project Organisation (RCPO) sanctioned construction of technical, administrative and domestic accommodation with external services at Station 'X' at an estimated cost of Rs. 18.68 lakhs.

Of the three valid tenders, received in December 1980 for execution of the work the lowest bid from Firm 'A' was for Rs. 22.60 lakhs. After negotiations, the bid amount was got reduced to Rs. 20.76 lakhs which was 76 *per cent* above the Standard Schedule of Rates (SSR) 1975. The offer was valid upto 31st March 1981.

As the work was to be carried out in the restricted area and the rates quoted for similar jobs at nearby stations were 100 *per cent* above SSR 1975 and taking note of the prevalent market trend, the CWE considered the revised rate as reasonable. The bid amount exceeded the amount of administrative approval by over 15 *per cent* the prescribed tolerance limit. Hence the CWE, on 28th February 1981, wrote to the Chief Engineer (CE) Air Defence Ground Environmental System (ADGES) for obtaining the necessary financial concurrnce. On 2nd April 1981, the CE ADGES conveyed the decision to retender the work as the rate received was not considered reasonable. In reply, the CWE intimated (9th April 1981) that there was no likelihood of securing a lower rate in retendering and requested reconsideration of the offer of firm 'A' which had agreed to extend the validity of its offer upto 14th April 1981. This was not agreed to and the CE ADGES reiterated the earlier decision in favour of a retender.

In the fresh bids received in June 1981, the lowest offer was for Rs. 23.87 lakhs finally revised to Rs. 22.91 lakhs, from the same firm 'A' which was the lowest bidder in the earlier tender of December 1980. The bid was not accepted and it was again decided, in December 1981, to retender the work.

The work was put to tender for the third time wherein the format of tender was changed from prepriced schedule to item-rate. The lowest offer (212 *per cent* over SSR 1975) was considered excessively on high side and it was decided to retender.

Fresh tenders were invited by the CE, ADGES for the fourth time by excluding certain items of work (estimated cost: Rs. 0.70 lakh) and including new items (costing Rs. 0.06 lakh). The offer of Rs. 26.89 lakhs, quoted by firm 'A' in September 1982, which was the lowest tenderer in the first and second calls, was again the lowest. The rates of the lowest offer were still considered on high side and tenderer was called to reconsider his offer, as a result thereof the tenderer gave further reduction and quoted Rs. 23.46 lakhs, which was 120 *per cent* above SSR 1975. The CE, RCPO concluded in November 1982 the contract with firm 'A' for Rs. 23.46 lakhs. The work commenced in December 1982 with probable date of completion by March 1984. The progress of the work in November 1986 was 99 *per cent.*

The items excluded from the tender were executed at a cost of Rs. 0.70 lakh under a separate contract which was completed in March 1986.

The Ministry of Defence stated in August 1987 that the department had acted bonafide and in good faith believing that by retendering the amount could be brought down but unfortunately this did not happen due to the continued disturbed conditions prevailing in the region of activity which could not be predicted at that point of time.

Despite the reasoned recommendations of the CWE. for according financial concurrence and acceptance of the lowest offer of Rs. 20.76 lakhs, received in the first call and a further plea to the effect that there was no likelihood of a lower rate in re-tendering, the decision for re-tendering without any prospect of a lower rate ultimately led to the award of the work to the same firm which happened to be the lowest on all the four occassions when tenders were floated and resulted in avoidable extra expenditure of Rs. 3.34 lakhs besides a delay of about 20 months in the commencement of the work, stated to be of urgent, strategic and important nature.

22. Extra expenditure due to delay in supply of cement to the contractors

According to Military Engineer Services (MES) Regulations, "where stores are required to be arranged by the MES no work will normally be commenced unless stores, adequate to ensure uninterrupted progress have been collected at the site of work". In the following cases failure of the department to supply stores to the contractors in time not only delayed the execution of works but also entailed extra payment of Rs. 4.95 lakhs to the contractors on account of idle manpower and machinery :

CASE NO. 1

In October 1977, a Zonal Chief Engineer (CE) concluded a lump sum contract for construction of a Kendriya Vidyalaya for Rs. 14.86 lakhs. The contract *inter-alia* provided for the issue of cement on payment under Schedule 'B' by the department to the contractor. The work commenced on 16th November 1977 and was expected to be completed by 15th February 1979. The date of completion of the work was extended to 30th April 1980 *inter-alia* due to non-issue of cement to the contractor in time. The work was actually completed on 30th August 1980. On the contractor's request, made in September 1982, for the appointment of an arbitrator to adjudicate certain disputes arising out of the contract, the Army Headquarters (HQ), Engineer-in-Chief's (E-in-C) Branch appointed in July 1983, an Arbitrator. In January 1984 the contractor submitted a claim for Rs. 11.20 lakhs to the Arbitrator stating that the prolongation of the contract *inter-alia* due to non-issue of cement when required by the contractor constituted a breach of contract and that he was entitled to be compensated for the loss suffered on account of idle manpower and machinery during the extended period of the contract. In April 1984 the department in their pleading in defence submitted that the delay in issue of cement to the contractor was suitably compensated by grant of extension of time. On 15th May 1984, the Arbitrator awarded payment of Rs. 3.79 lakhs to the contractor (including *inter-alia* Rs. 1.44 lakhs as damages for prolongation of the contract, Rs. 1.93 lakhs due to increase in cost of material and wages and Rs. 0.26 lakh as pendantelite interest from the date of appointment of the arbitrator to the date of award). On 31st May 1984, the Zonal CE referred the case to Ministry of Law for legal opinion which advised to implement the award. In September 1984, a sum of Rs. 3.79 lakhs was paid in satisfaction of the award.

CASE NO. 2

In October 1976, a Zonal CE concluded a contract for improvement of pavement at Rs. 21.19 lakhs. The contract provided for the issue of cement on payment by the Department to the contractor under Schedule 'B'. The work was to be executed in phases; Phase-I was expected to be completed by 3rd October 1977 and Phase-II, by 3rd June 1978. The date of completion of the work was extended from time to time and was last extended up to 24th May 1980 mainly due to delay in the issue of cement. The work was actually completed in May 1980. In September 1982/ April 1984 the cotractor submitted his claim for Rs. 14.82 lakhs/22.16 lakhs to the Arbitrator stating *inter-alia* that the failure of the department to supply cement when required for use in the work resulted in prolongation of the contract entailing loss on account of idle labour, idle/under utilisation of machinery and establishment etc. The Department in their plea submitted to the Arbitrator in January 1983 stated that appropriate extensions of time were granted to the contractor for the delay in issue of cement.

In June 1984, the Arbitrator awarded Rs. 1.16 lakhs in favour of the contractor on account of idle labour and establishment and idle/under utilisation of machinery etc. In February 1985, an appeal against the award was filed in the Court. The Court in its judgement of 2nd July 1985 decreed in favour of the award by the Arbitrator. In March 1986 a sum of Rs. 1.16 lakhs was paid to the contractor in satisfaction of the decree.

The Ministry of Defence (Ministry) stated in August 1987 that delay in obtaining the stores, particularly cement, is attributable to inadequate communication facilities, primitive mode of transportation and natural calamities, peculiar to the North-Eastern Sector. In the instant cases there was a failure of supply of cement and consequently the contractor was paid adequate compensation by way of extension of time within the frame-work of the contract. The contention of the Ministry is not tenable as the conditions peculiar to the region must have been taken into account by the Department in anticipating demand for stores and providing it within the time schedule for completion of work on time.

23. Loss due to use of high strength cement as ordinary cement

Certain works require the use of high strength cement (HS cement) which is costlier than ordinary cement. Procurement and use of HS cement in three Military Engineer Services (MES) Divisions revealed the following features:

Division 'A'

Out of 1,57,039 bags of HS cement received from 1982 to January 1985, the division could, utilise only 1,29,239 bags as HS cement. The remaining stock of 27,800 bags, received between December 1983 and April 1984 was recommended to be used as ordinary cement by a Board of Officers held in February 1986 as the stock had lost its strength considerably. This resulted in an avoidable loss of Rs. 4.75 lakhs.

The Ministry of Defence (Ministry) stated in October 1987 that the requirement of HS cement came down to 1,06,000 bags on retesting of materials on receipt of fresh stock of HS cement in December 1983 as well as obtaining of sand and aggregates from a different site.

The Division again received 4,282 MT of HS cement, 4,010 MT in November 1985, 189 MT in December 1985 and 83 MT in January 1986 against a contract entered into by the Director General of supplies and Disposals (DGSD) in September 1983 with a private firm. According to specification referred to in the contract, samples for testing were to be taken within a week of delivery and all tests were to be made within four weeks of delivery. The contract stipulated that defects/short supply were to be reported by the consignees within 30 days of receipt when joint sample was to be drawn and got tested.

The Division got the cement tested repeatedly between February and July 1986, all of which, indicated that the supply did not conform to the specifications laid down. It was also noticed that the test slab on which this cement was used, developed minor cracks within a month. The matter was reported to the firm in March 1986 and May 1986 but it contended (June 1986) that the cement was despatched only after it was inspected by the Inspecting Officer of the DGSD and that the complaints regarding alleged poor quality was not reported within the time limit of 30 days of the date of receipt.

The Zonal Chief Engineer decided, in August 1986, to use the inferior quality of HS cement as ordinary cement. This resulted in a loss of Rs. 9.70 lakhs.

The Ministry, in September 1987, stated :

— MES understood that the defective supply, stipulated in the contract to be reported within 30 days of its receipt, was limited to partially set/completely set cement. (This contention is not tenable as the contract contemplated reporting of defective supply within 30 days of its receipt and drawing of joint samples without any such qualification).

— It was the DGSD who had to take sample from the premises of the factory within one week of delivery of cement. The Ministry is reviewing the existing "Acceptance of Tender" used by the DGSD for procuring cement for MES works in the light of audit objections.

Division 'B'

Against an indent placed by a Commander Works Engineer (CWE), 290 MT and 15 MT of HS cement was received in the Division in April 1984 and January 1985 respectively for use in a work sanctioned in September 1983. The work was released for execution in June 1984, and a contract was concluded for the work in October 1984. A quantity of 303 MT of HS cement which had lost its high strength quality was diverted for use as ordinary cement resulting in loss of Rs. 0.94 lakh.

The Ministry stated in October 1987 that due to shortage of cement, utilisation of HS cement in other works as ordinary cement ensured that these works did not get delayed.

Division 'C'

A quantity of 4,050 MT of HS cement costing Rs. 60.87 lakhs was received in the Division between 16th November 1985 and 14th January 1986. In December 1985, 20 bags of cement were got tested and found to conform to the required specification.

The work of resurfacing of a runway for which HS cement was demanded, commenced on 15th November 1985. The work was required to be completed by 14th October 1986. As HS cement in bags in local storage for more than 3 months is required to be retested before use, it was again sent for testing on 7th April 1986 and it was found (July 1986) that the cement had lost its high strength for quality concrete work. It was decided in August 1986 to use the HS cement not conforming to laid down specifications, as ordinary cement in other works. The entire stock of 3,924 MT of HS cement was transferred to other divisions for use as ordinary cement. Based on difference in the stock book rate, the use of 3,924 MT of HS cement as ordinary cement had resulted in avoidable loss of Rs. 12.79 lakhs. In addition, an expenditure of Rs. 4.15 lakhs was incurred on handling/retransportation of cement to other Divisions.

The work pertaining to rigid pavement of the runway was held up in April 1986 due to deficiency in mix design as noticed in a technical inspection. The work was recommenced after sorting out this aspect and on receipt of fresh cement in September 1986 and was expected to be completed by end of August 1987. The work was completed in November 1987.

The Ministry, in October 1987, stated :

— The loss due to use of HS cement not conforming to specifications, as ordinary cement was not due to failure in proper planning of procurement of cement (This contention is not tenable as the entire quantity of HS cement was procured in full whereas the time schedule for completion of the work as specified in the contract was 11 months and the work actually completed in November 1987. HS cement in local storage for more than 3 months is required to be re-tested before use indicating the probability of its deterioration).

— The work could not be completed due to failure of HS cement, finalisation of remix design subsequently and non-availability of runway from 1100 hours to 1900 hours daily on account of operational requirements.

The following are the points that emerge :

— Effective measures were not taken to surrender or transfer the surplus HS cement or to regulate/reduce the inflow of fresh supplies, wherever required, when firm requirements underwent changes.

— Prescribed time schedule for conducting sampling test and reporting defective supply was not observed. Lack of clarity in roles of MES and the DGSD has also been noticed.

— There was failure to properly plan and stagger the supplies of HS cement with reference to the progress of work.

— Resurfacing work on the airfield which was scheduled to be completed by October 1986 was completed only in November 1987.

— The use of HS cement as ordinary cement resulted in a loss of Rs. 28.18 lakhs apart from expenditure of Rs. 4.15 lakhs on handling and re-transportation of cement for use elsewhere.

24. Construction of an Olympic size swimming pool

In October 1969, the Ministry of Defence (Ministry) sanctioned construction of a swimming pool at a Naval station for training officers and sailors at an estimated cost of Rs. 15.79 lakhs.

Paucity of funds at the initial stage, vascillation about the type of foundation (one of the components of the work), changes in specifications and repeated assessment of revised costs held up action on the work.

The sanctioned cost of the work was revised to Rs 34.80 lakhs in March 1978 and Rs. 34.87 lakhs in February 1979 (with raft foundation). In September 1983, the Naval Headquarters, sanctioned the work at a cost of Rs. 74.64 lakhs after deleting the provision for certain facilities like visitors' gallery, under-water illumination, etc.

Meanwhile, in April 1980, tenders for work relating to pile foundation were called for. The lowest tendered rate (June 1980) for the work was Rs. 16.82 lakhs. The Zonal Chief Engineer (CE) considered this rate reasonable and approached Engineer-in-Chief's (E-in-C's) Branch on 17th October 1980 for obtaining financial concurrence as the cost exceeded the approved provision therefor beyond the permissible limit of 15 *per cent*. The tendered rate was valid till February 1981. Concurrence for accepting that tender was not received till then.

In the fresh tenders called for in March 1982, the lowest quotation received in June 1982 for the same work was Rs 25.41 lakhs. The Zonal CE found the quoted rate reasonable, felt that retendering would not result in reduced rates and approached E-in-C's Branch on 31st July 1982 for obtaining concurrence for accepting that tender as the cost again was beyond the permissible tolerance limits in terms of the sanctioned estimate. This tender too was not accepted till its extended validity expired in Mid-February 1983.

In April 1985, a contract was concluded for the whole work at a total cost of Rs. 80.28 lakhs to be completed by November 1987. In this contract, the cost of pile foundation works out to Rs. 42.90 lakhs. This represents an increase of Rs. 26.08 lakhs over the rate available till February 1981, the first tender and Rs. 17.49 lakhs over the second tender valid till mid-February 1983 i.e. about two years earlier.

In the meantime, the requirement of training was being met by a smaller sized swimming pool in the same station.

The conclusions that emerge are as follows :

— The swimming pool for training purposes, the sanction for which was accorded as far back as 1969, is yet (October 1987) to be made available even after a lapse of 18 years.

— Despite advice by the Zonal CE to accept for the pile foundation work, the quoted rates of June 1980 which were valid upto February 1981 in the first tender and those of June 1982 which were valid upto mid-February 1983 in second tender, concurrence therefor was not accorded resulting in extra expenditure of Rs. 26.08 lakhs in terms of rates obtained in first tender and Rs. 17.49 lakhs in terms of the rates obtained in second tender.

The case was referred to the Ministry in June 1987 and their reply has not been received (October 1987).

25. Extra expenditure on the laying of water pipes

In March 1981 the Ministry of Defence (Ministry) accorded an administrative approval for development of external services for a Cantonment which *inter alia* provided for laying of 9,500 metres of 400 mm diameter cast iron (CI) pipes from a main canal to the water works area in the Cantonment. In July 1981, two supply orders were placed for the procurement of 9,500 metres of 400 mm CI pipes costing Rs. 39.14 lakhs.

A 250 mm pipeline of about 4,500 RM length was already in existence from the water works area in the Cantonment to another small canal which flows between the main canal and the Cantonment. While planning the work for execution, the Zonal Chief Engineer (CE) decided in June 1981 to (a) extend the existing 250 mm pipe line to the main canal and (b) to lay a second pipeline of 250 mm pipes from the water works area in the Cantonment to main canal, instead of laying one pipeline 400 mm dia pipes as provided for in the administartive approval.

In May 1982, the orders already placed for the supply of 9,500 RM of 400 mm pipes were cancelled/amended to reduce the supply to 2,260 RM.

In May 1984, the whole scheme was reviewed due to proposed induction of an additional brigade and it was decided to lay only one pipe line of 400 mm diameter as originally approved and to dismantle the extended 250 mm pipe line put up at a cost of Rs. 8.05 lakhs. Taking into account the balance quantity of pipes available with the department, a fresh order for the supply of 7,900 RM 400 mm pipes was placed in July 1984. The cost of pipes had by then increased. According to the supply order of July 1981, the cost of 7,240 RM of 400 mm CI pipes, cancelled in May 1982, was Rs. 29.83 lakhs against Rs. 47.43 lakhs paid against fresh supply order of July 1984. The work on the 400 mm pipeline was completed in August 1985.

The Ministry stated (October 1987) :

— Any variation in quantities and sizes at detailed planning stage was permissible. The work was technically sanctioned in June 1981 when the CE decided to lay two pipelines of 250 mm diameter (This contention is not tenable since the same Zonal CE had placed supply orders for procurement of 400 mm pipes for the work in July 1981).

— The revision to lay 400 mm pipeline was necessitated due to the proposed induction of an additional brigade (This revision was just a reversion to the originally approved 400 mm pipeline).

Thus, there was an extra expenditure of Rs. 17.60 lakhs on the procurement of 400 mm pipes which could have been avoided had the work been executed strictly in accordance with the original administrative approval.

26. Extra expenditure due to payment of higher sales tax

In accordance with Section 9 of Andhra Pradesh General Sales Tax (GST) Act 1957 and orders issued thereunder, sale of certain goods, including cement, produced in Andhra Pradesh, to any Central or State Government department located in that State and for use there was eligible to a lower rate of GST at 5.208 *per cent* with effect from 1st April 1984 to 12th February 1986 and again from 24th January 1987. A higher rate of 13.06 *per cent* was leviable on sales to non-Government departments or for sale outside the State.

There are twenty three Military Engineer Services (MES) Divisions located in Andhra Pradesh. In eight of those divisions where the application of the above dispensation was examined, it was noticed that the benefit of lower rate of GST applicable for consumption of cement by them was not being availed of; the payment of GST at the higher rate resulted in an extra expenditure of Rs. 11.16 lakhs (February 1987).

The Ministry of Defence stated in September 1987 that :

— Engineer-in-Chief's (E-in-C) Branch have written to the Director General Supplies and Disposals (DGSD) to instruct PAO to raise claims for re-imbursement of extra payment authorised to the factories on account of sales tax.

— It is proposed to request Government of Andhra Pradesh to adjust the extra payment made to them in this regard.

— E-in-C's Branch have written to the DGSD, Controller of Defence Accounts and Chief Engineers to ensure correct payment.

27. Delays in the recovery of amounts due to Government

On a work, construction of buildings at Patiala, assigned to a private contractor, abandoned by him half way through, got completed in February 1973 through another contractor at the risk and cost of the former, an amount of Rs. 17.85 lakhs became recoverable from the defaulting contractor. The department, however, had a bank guarantee furnished by him for Rs. 2.37 lakhs which represented the retention money.

At the instance of the defaulting contractor, an arbitrator (a serving officer) was appointed by the Court in April 1972. General conditions of this contract provided that arbitrator shall give his award within six months from the date of his entering on the reference or within the extended time. There was no concrete progress for over four years except a preliminary hearing held on 25th May 1976 and the arbitrator resigned in October 1976 on his promotion to a higher post. In February 1977, the department filed an application' in a civil Court for the appointment of another arbitrator. The new arbitrator appointed in November 1981 could not make any progress in the matter, as by that time, the whereabouts of the defaulting contractor became unknown. The new arbitrator had since retired. In November-December 1973, the department had put up a claim of Rs. 17.85 lakhs to the Arbitrator which *inter alia* included Rs. 12.06 lakhs on account of extra expenditure incurred to complete the incomplete work and Rs. 2.13 lakhs for overpayments made to the defaulting contractor.

The Ministry of Defence while confirming the facts stated (September-November 1987) that :

— Two officers and two supervisory staff had been awarded penalty of 'censure' on account of overpayment to the defaulting contractor.

— A demand draft for Rs. 4.86 lakhs (Rs. 2.37 lakhs as amount of bank guarantee and Rs. 2.49 lakhs as interest thereon) has since been realised.

The case reveals that :

— An amount of Rs. 17.85 lakhs due to the Government from a private contractor has remained un-realised for over 13 years since the completion of risk and cost contract in February 1973 because of lack of effective action for expeditious settlement. As against the normal period of six months stipulated in the contract agreement, the case is pending arbitration for over 15 years (September 1987) and in the meantime both the arbitrators had resigned on promotion/retirement from service.

— In the absence of adequate safeguards, the defaulting contractor had removed material worth Rs. 2.13 lakhs from the site for which he had already been paid. The Government have been unable to have the whereabouts of the defaulting contractor located during the last 12/13 years.

28. Acceptance of contract at extra cost due to delay in obtaining financial concurrence

Mention was made in paragraphs 22 and 21 of the Reports of the Comptroller and Auditor General of India, Union Government (Defence Services) for the years 1983-84 and 1984-85 respectively about extra cost due to delay in obtaining financial concurrence. In the remedial/corrective action taken notes issued by the Ministry of Defence (Ministry) in November 1985 and November 1986 respectively it was stated that necessary instructions had already been issued by Engineer-in-Chief's (E-in-C's) Branch in May and July 1985 to all concerned for expeditious progressing of the financial concurrence cases to avoid recurrence of such cases in future.

Tenders for strengthening of a runway were invited by a Zonal Chief Engineer (CE) in December 1984. The offer of firm 'A' which quoted Rs. 2.40 crores and was open for acceptance upto 8th May 1985, was the lowest and considered reasonable. As the lowest offer received was in excess of the amount (including 20 *per cent* tolerance limit) provided in the Administrative Approval, the CE approached the E-in-C's Branch on 16th April 1985 for obtaining financial concurrence for acceptance of the lowest tender. The financial concurrence was rejected in September 1985.

Tenders for this work were reissued by the CE on 10th October 1985. While reissuing tenders, certain modifications like provision of mobilisation advance of Rs. 16 lakhs, payment for advance on materials lying at site at 85 *per cent* instead of 75 *per cent* provided earlier necessitated due to amendment in the general conditions of the contract, specification of fixed quantity of bitumen in binder, specification of increased flexural strength for controlled concrete, were incorporated. The offer of firm 'B' which quoted Rs. 1.99 crores was the lowest and considered reasonable, was recommended by the CE for acceptance on 28th November 1985 to the E-in-C's Branch. The offer was open for acceptance upto 13th January 1986. The total liability based on the lowest tender worked out to Rs. 2.53 crores (including deviation orders and difference in cost of stores). While recommending the lowest rate, the CE stated that the reduction obtained in second tender as compared to the lowest rate obtained in the first tender was due to changes made and the additional facilities afforded to the contractor in the latter tender. The financial concurrence for acceptance of the lowest tender was communicated by the E-in-C's Branch to the CE only on 17th January 1986 by which time its validity had already expired on 13th January 1986. The firm regretted its inability to extend the validity. The CE, therefore, recommended on 31st January 1986 to the E-in-C's Branch for the acceptance of the second lowest tender of firm 'C' which had quoted Rs. 2.12 crores and sought for financial concurrence for accepting that tender on the grounds that one year had already lapsed between the receipt of first call and getting the financial clearance for the 2nd call and that with retendering not only workable season would be lost but also there was no likelihood of bringing down the amount further. While rejecting the case for acceptance of second lowest tender which was considered "very much on the high side", the E-in-C's Branch asked the CE on 24th March 1986 to issue tender for the third time for the work.

Tenders were reissued for the third time on 5th April 1986. During the third call, the special provisions incorporated in the second call (excluding mobilisation advance etc.) were omitted as advised by the E-in-C's Branch. The offer of firm 'A' (which was the lowest tenderer in the first call) which quoted Rs. 2.60 crores was the lowest. After negotiations the firm reduced the amount to Rs. 2.58 crores. Financial concurrence for acceptance of this offer was accorded by the Ministry on 19th August 1986 and a contract for the strengthening of the runway at the station was concluded by the CE with firm 'A' on 25th August 1986. The total liability of firm's offer of Rs. 2.58 crores (after taking into account deviation orders and difference in cost of stores) worked out to Rs. 2.87 crores.

To sum up, two tenders were accepted with the financial concurrence needed therefor :

(a) The lowest bid received in response to the October 1985 invitation of tenders for an overall assessed cost of Rs. 2.53 crores.

(b) The lowest bid received in response to the April 1986 invitation of tenders, after due negotiations, for Rs. 2.87 crores. The former bid, valid till 13th January 1986, could not be availed of due to delay in according the financial concurrence till 17th January 1986. The latter bid, on the consequent retender effort for the same work, resulted in conclusion of the contract at a higher cost by Rs. 34 lakhs.

(c) Despite general instructions issued by the E-in-C's Branch in May and July 1985 for expeditious clearance of financial concurrence cases, delay of the same nature persists resulting in avoidable additional expenditure.

The case was referred to the Ministry in July 1987 but their reply has not been received (October 1987).

29. Irregular recruitment in contravention of the general ban on recruitment

As a measure of economy in expenditure, Government, in January 1984, imposed a general ban on filling up of vacancies (except appointments made on compassionate grounds and in most exceptional circumstances through direct recruitment) and creation of fresh posts. This order was operative upto 30th September 1984. On 12th September 1984, Government issued orders extending the ban till 31st March 1985. Those instructions "stand extended until further orders" vide orders issued by Government on 2nd April 1985. The orders, *inter alia*, stipulated that all Ministries should issue suitable instructions to subordinate offices for strict compliance. The departmental directives also contemplate termination of services of any officials inadvertently appointed during the embargo in force invoking provisions of existing rules and administrative action against the erring officers.

The instructions regarding further extension of ban beyond 31st March 1985 were issued by them on 23rd April 1985, the Engineer-in-Chief's Branch informed all the Command Chief Engineers (CEs) by signal on 16th April 1985 about the extension of ban beyond 31st March 1985.

It was noticed in Audit that 2,030 recruitments took place from 1st April 1985 to 18th April 1985 and 206 recruitments were made by the Military Engineer Services (MES) in Southern Command after the 18th April 1985, the date on which the message by signal was received by the Command CE.

In November 1986, the Ministry of Defence (Ministry), while according sanction for filling up of 24,253 posts in MES (13,963 posts created during 1986-87 and 10,290 during 1987-88) on all India basis, regularised the 2,236 irregular recruitments made during April/May 1985 in Southern Command.

The expenditure incurred on the emoluments of the 2,236 persons irregularly recruited, for the period from April-May 1985 to October 1986, amounted to Rs. 3.60 crores approximately.

Similar irregularity was noticed in three Station Workshops in the same Command. Officers commanding of those three workshops recruited 34 civilian employees during the period between January 1984 and December 1984. Salaries paid to these individuals for the period upto March 1987 amounted to Rs. 8.44 lakhs. Two of those workshops intimated in April 1986 and March 1987 that the Government order of January 1984 imposing ban on direct recruitment had not been received by them till October 1984/December 1984 and that no irregular recruitment took place since then.

The Ministry, in October 1987, stated that a Court of Inquiry was convened in June 1986 to investigate the circumstances leading to the recruitment of 206 civilian personnel after 18th April 1985 in violation of the ban. As a result, the displeasure of General Officer Commanding was conveyed to two Service Officers and recordable warning was issued to three civilian officers.

The reply from the Ministry does not cover the recruitments made till 18th April 1985 and in the Electrical and Mechanical Engineer Branch.

To sum up :

— Ban on recruitment was an important general decision ordered by Government for strict compliance to achieve economy in expenditure.

— The agency responsible for the 2,030 irregular appointments made between 1st April 1985 and 18th April 1985 had not been identified.

— No action to rectify the irregular recruitment of 34 persons (salary paid : Rs. 8.44 lakhs) in three Station Workshops had been taken (June 1987).

CHAPTER 6

RESEARCH AND DEVELOPMENT ORGANISATION

30. Infructuous expenditure on the development of a fuze

In October 1969, the Naval Headquarters (HQ) proposed the development of a fuze (multipurpose role) required for use in particular type of gun fitted in Naval ships. The Naval HQ desired that if, for any reason the fuze in its multipurpose role could not be developed by the early Seventies, an interim fuze, intended for anti-aircraft role, must, however, be ready in all respects to cater for production by end of 1972. The requirement, as indicated by the Naval HQ, was 20,000 fuzes.

In April 1971, the Ministry of Defence (Ministry) sanctioned the development of the fuze at an estimated cost of Rs. 14.50 lakhs. The development of the fuze was entrusted to two Defence Research Development Establishments. The development work was required to be completed by March 1973. The production of the fuze was to be undertaken by a Public Sector Undertaking (PSU).

In the development of the fuze, repetitive trials and rectification of the several deficiencies noticed went on from August 1972 to June 1982. The final trial was carried out from the ships in February 1983 and the performance of the fuze was then found satisfactory. What was finally developed was only the interim fuze of limited role and not the proximity fuze in its multipurpose role. There was considerable delay in its development.

Meanwhile, the following events took place :

(a) As the development work was moving at a slow pace, between 1973 and 1981, the Naval HQ imported 12,794 combat fuzes at a cost of Rs. 325.95 lakhs, of which 8,794 Nos. valued at Rs. 301.57 lakhs were imported during 1979—81.

(b) With the availability of the imported combat fuzes and changed circumstances due to passage of time, the Naval HQ, in February 1976, reduced the requirement from 20,000 fuzes to 5,000.

(c) The Department of Defence Supplies placed an order for the supply of 5,000 fuzes including 400 fuzes as prototype for trial purposes, on the PSU in May 1976. Advances amounting to Rs. 19.40 lakhs were paid to the PSU during December 1975 to August 1981. The undertaking supplied 738 fuzes at a tentative cost of Rs. 13.97 lakhs between September 1976 and June 1982 for trials, which were used in users/technical trials.

(d) In March 1979, the sanctioned cost of the project was raised to Rs. 53.88 lakhs, including Rs. 2.5 lakhs in foreign exchange.

(e) The requirement of the fuzes was further reduced by the Naval HQ to 3,000 pieces in September 1980 and to 2,000 in March 1982 because the guns were being phased out. As the deficiency was only 2,000 fuzes and life expired combat fuzes were available for practice purposes, production of the item by the PSU did not find favour with the Naval HQ, who decided in July 1982 to live with the shortages. Accordingly production of fuzes by the PSU was closed in July 1982.

The Naval HQ intimated Audit in April 1984 that the project had to be closed as the fuze could not be successfully developed by the Defence Research and Development Organisation (DRDO) in time. The guns for which these fuzes were developed are expected to be phased out by 1990.

Till June 1983 two Research Etablishments had spent Rs. 42.4 lakhs (including Rs. 19.40 lakhs paid as advance to the PSU) on development of the fuze.

The Ministry, Department of Defence Research and Development stated in October 1987:

— Although, in July 1981, the phasing out of VT fuze by 1990 was indicated, the position seemed to have changed now as the Navy had in March 1987 placed an order for supply of 15,000 of the improved version of the fuze developed by DRDO.

— The fuze is even now useful to the Navy in the practice version as it had passed all phases of users trials.

As a result of the considerable time of over 13 years taken for developing the fuze.

(a) the intended import substitution had not materialised;

(b) by the time the fuze was developed, it had become obsolete to the users combat requirement; and

(c) the expenditure of Rs. 42.4 lakhs spent on the project has thus become largely unfruitful as the product will only be a practice version and its multipurpose role will not be achieved.

31. Payment of cost of training

On the basis of an indent placed by a Research Laboratory, the Supply Wing of an Indian Mission abroad (Supply Wing) placed an order (July 1985) for purchase of an equipment at a cost of US $ 10,24,290 including training charges of $ 24,032 for training of four persons. According to contract, cent percent of training charges were payable at the time of initial payment. In November 1986, the indentor informed the Supply Wing that only one (instead of four) scientist was being deputed for training and requested the Supply Wing to correspondingly reduce the cost of training. The Supply Wing accordingly requested the supplier (December 1986) to reduce the training cost by 75 *per cent* ($ 18,024). The supplier, however, refused (January 1987) to reduce the charges on the ground that the training included in the contract was based on their standard course price. The training charges were paid (January 1987) with the initial payment ($ 2.98 lakhs). Only one person was deputed for training in January 1987. Thus, by deputing only one person against cost of training already paid for four persons, the user department did not avail of the facility to get more persons trained abroad on the new equipment rendering the cost of training unfruitful to the extent of US $ 18,024 (Rs. 2.2 lakhs).

The Ministry of Defence stated (October 1987)—"Due to non-availability of equipment and delay in training programme the proposed training for four scientists was reviewed with respect to the peak of activities and flight preparations in the project. It has then been decided to reduce the training to one person who is the senior-most and who can absorb the technology and disseminate to his fellow scientists." The reply is not tenable as the training charges were paid for four persons and have been utilised for one person only.

CHAPTER 7

ARMY

32. Army Service Corps

1. *Introduction*

The Army Service Corps (ASC) is responsible for provisioning, receiving, holding, maintaining, transporting, issuing and accounting of all ration articles, common user items and petroleum, oils and lubricants for the Armed Forces. Supplies are arranged through central purchase, local contract and local purchase.

2. *Scope of Audit*

A study of the activities of the ASC in general and a test check of central provisioning done by the Quarter Master General (QMG) at the Army Headquarters (HQ), local contracts and local purchase by the ASC units/formations in 5 Army Commands was coducted by Audit during 1986-87.

3. *Mechanism*

The major items of central purchase comprise of rice, atta, dal, sugar, tea, vanaspati, coal and petroleum products. These items are centrally provisioned by the QMG in the Army HQ and are arranged mainly through Army Purchase Organisation (APO), Director General Supplies and Disposals (DGSD) and the Canteen Stores Department (CSD). Local contracts for supplies consist of firewood, charcoal and fresh food articles like vegetables, fruits and meat. Contracts are concluded by the Competent Financial Authorities (CFAs) ranging from Sub-Area Commander to the QMG. Local purchase is resorted to when supplies from normal sources are not available or for items for which demands are for very small quantities.

4. *Highlights*

Local purchase of certain articles following failure of supplies by the APO/CSD resulted in extra expenditure of Rs. 76.72 lakhs.

In another case, the local purchase of tea had cost the exchequer an additional expenditure of Rs. 18.79 lakhs.

Local purchase of vanaspati from other than normal sources resulted in extra expenditure of Rs. 67.66 lakhs.

Delay in conclusion of regular contracts for meat and fresh articles and consequent local purchase resulted in extra expenditure of Rs. 35.71 lakhs.

Tea, costing Rs. 30 lakhs, initially found unfit for issue to the troops was subsequently declared not unfit for human consumption by the same laboratory and mixed with good tea in proportion of 20 : 80 and supplied to the troops.

Rupees 30.23 lakhs were spent extra due to failure to deny price escalation on oil when the delivery period of vanaspati was extended.

Payment of service charges at 1 *per cent* to the DGSD for procuring petroleum products through the DGSD and not directly from trade inflated Defence budget by Rs. 1.50 crores per annum.

Excess charging of refraction losses in local grinding of wheat resulted in loss of Rs. 2.55 lakhs.

Combining the tender enquiry for meat, poultry and fish items, resulting in elimination of 'B' class contractors, followed by a grant of stay by Court led to local purchase at a higher cost of Rs. 9.63 lakhs.

Claims worth Rs. 2.68 crores with the Railway remain unsettled; some of them date back to 1968.

5. *Central Purchase*

5.1 *Supply of stores by the APO/CSD-shortfall*

5.1.1 During the year 1981, the APO faced problems in the procurement of certain articles. As a result, for meeting the day to day requirements of the troops, local purchases were made at higher prices. The QMG, after highlighting the inherent weaknesses in the procurement system of the APO, recommended the procurement of vanaspati, tea, cigarettes and tinned foodstuffs, through the CSD. In June 1982, Government decided that those articles could be procured for the years 1982-83 and 1983-84 either through the APO or CSD, at the discretion of the QMG and that from April 1984 onwards, the purchases should be only through the CSD.

5.1.2 The expectation of better performance by the CSD did not materialise. Slippages in delivery schedule of stores continued and the shortfall in the supply of day to day requirements was made good by local purchases at higher prices. During the period, April 1983 to June 1984, the additional expenditure incurred in such local purchases amounted to Rs. 76.72 lakhs.

5.1.3 In September 1984, a Working Group examined the functioning of the CSD in this regard. The level of performance of the CSD was found to be unsatisfactory. The deficiencies noticed were that the CSD was not fully equipped to handle the work and that it was not even conversant with the procedure to be followed in making Government purchases. Consequently, there were slippages in the delivery schedules for practically all the items of supplies assigned to the CSD. This, besides, causing huge extra expenditure to the State on account of local purchases, made it difficult to meet the day-to-day demands of the troops. Under these circumstances, the Working Group suggested restoration of the earlier arrangement of procurement by the APO.

5.1.4 In a meeting held in January 1985, it was brought out that although the decision to transfer the procurement to the CSD was taken in a hurry, Government should continue the *status quo* and sort out the CSD's procedural and financial problems.

5.1.5 The CSD continues to be incharge of the procurement. Its level of functioning continued to be unsatisfactory. Slippages in delivery schedules persisted. The consequential local purchases resulted in additional expenditure during the period from July 1984 to March 1986.

5.2 *Extra expenditure on procurement of vanaspati*

5.2.1 On an indent made by the QMG in November 1983, the APO concluded two contracts with a private firm on 6th February 1984 and 9th February 1984 for supply of 2,400 MT of vanaspati in ISI tins and 750 MT in non-ISI tins at rates ranging from Rs. 11,818 to Rs. 11,994 per MT at a total cost of Rs. 375.57 lakhs. The supply was to be made during February 1984 to April 1984 as under :

	Delivery dates		
	29-2-1984	31-3-1984	30-4-1984
	MT	MT	MT
ISI TINS (2,400 MT)	300	1,050	1,050
Non-ISI TINS (750 MT)	100	300	350

According to the contract 95 *per cent* of edible oil required was to be got allocated from the State Trading Corporation (STC). The supply rate of vanaspati was subject to variation with reference to changes in the then STC's selling rate of Rs. 8,500 per MT for edible oil.

5.2.2 There was a fire in the factory of the firm on 20th January 1984. This fact was not disclosed by the firm either during the course of negotiations conducted on 31st January 1984 or at the conclusion of these two contracts in February 1984. The firm agreed to the delivery schedule stipulated in the contracts despite that fire.

5.2.3 On 23rd February 1984 the firm sought extension of time for the delivery of first instalment of vanaspati which was due on 29th February 1984 on account of fire in their factory. The extension upto 19th March 1984 was granted by the APO without enquiring about the date of the fire. The firm sought further extension upto 25th April 1984 on the ground that their production plan was disrupted due to sudden collapse of steel structure in their factory. The firm also requested for further extension upto 7th May 1984. The APO after ascertaining the probable date of recommencement of production by the firm through the Composite Food Laboratory (CFL), Bombay and Chief Director of Vanaspati, extended the delivery date upto 15th June 1984.

5.2.4 The APO while granting extension invoked denial clause restricting increase in the excise duty, sales tax and other statutory implications but failed to deny the increase in the rate of imported edible oil. Therefore, the firm put forth the demand for increase in the rate of vanaspati by Rs. 950 per MT as rate of edible oil had been increased by STC from Rs. 8,500 to Rs. 9,500 per MT from 23rd May 1984 and also for increase in rates due to change in packing requirement from 16.50 Kg. to 15 Kg. which was revised by the Directorate of Weights and Measures with effect from 1st June 1984.

5.2.5 The increase in rate was negotiated with the firm on 28th July 1984 and the agreement reached was as under :

(i) An increase of Rs 950 per MT was to be paid for 400 MT already supplied.

(ii) An increase of Rs. 950 per MT and Rs. 42.50 per MT on account of new packing requirement were to be paid for 2,100 MT to be supplied in ISI tins.

(iii) A rate of Rs. 12,694.50 per MT which was based on quotation received on 19th July 1984 and being lower than the existing contract rate plus Rs. 950 per MT was to be for the supply of 650 MT in non-ISI tins.

Thus, under the two contracts, as against the original amount of Rs. 375.57 lakhs payable, an amount of Rs. 405.80 lakhs was paid. This had resulted in an avoidable expenditure of Rs. 30.23 lakhs.

5.2.6 The case reveals that :

- the firm, without disclosing and despite the fire in its factory, agreed to the stipulated delivery of supply during February 1984 to April 1984;
- the APO on its part, without ascertaining the date of fire granted the first extension (upto 19th March 1984);
- the supply of vanaspati which was to start from February 1984, started as late as 15th June 1984;
- even after knowing the facts about the fire the APO continued the operation of contract and granted extension of time without bringing the increase in rate of imported edible oil under the denial clause of the contract; and
- in the process incurred an additional expenditure of Rs. 30.23 lakhs.

5.3 *Payment of service charges to the DGSD for arranging supplies of petroleum products*

The procurement of petroleum products for the Army, other services and Para Military Forces is done by the QMG through the DGSD who arrange the supplies by concluding contracts with nationalised oil companies. For rendering the services, the DGSD charges one *per cent* of total value of such products purchased by the QMG. The QMG purchases petroleum products to the tune of about Rs. 150 crores per annum. As the rates of petroleum products are being controlled by the Ministry of Energy, Department of Petroleum and in order to effect savings in the Defence budget, the QMG suggested in February 1985 that procurement of the main grades of petroleum products be made from the nationalised oil companies by the QMG themselves by concluding direct contracts on the same terms and conditions as is being done by the DGSD. The suggestion was agreed to in principle by the Ministry of Defence (Finance) in February 1985 but withdrawn subsequently for some technical reasons and the revised final decision was awaited (October 1987). Service charges at 1 *per cent* continue to be paid to the DGSD without effecting the savings in Defence budget.

6. *Local purchase of central purchase items*

6.1 *Local purchase of tea during* 1983-84

6.1.1 In December 1982, Command 'A' projected to the QMG a demand for 660 MT of tea to be supplied from July 1983 to June 1984. In February 1983, the demand was revised to 449 MT. In May 1983, the QMG placed an indent on the CSD for arranging supply of 3,180 MT of tea for meeting the requirements of all the commands through supply order to be placed on a public sector firm. In July 1983, the requirements of tea for command 'A' were again revised by the QMG to 436 MT and the CSD was requested to take immediate action to place the supply order as the stock position of tea in the command was critical. According to the delivery schedule, 356 MT was to be delivered by the firm from Cochin and 80 MT from its Calcutta branch during the period, July to December 1983. However, till December 1983, the QMG issued despatch instructions (DI) for a total quantity of only 177 MT based on the quantity tendered and found acceptable by the CFL. There had, thus, been repeated reassessment of the requirements and shortfall in the supply even on the reduced demand.

6.1.2 Blending of tea by the firm was to be supervised by Defence representatives. Though the firm intimated that the blending would start in August 1983, the representative from the CFL did not report for inspection in time but only in October 1983, when the representative from the CSD was not available for supervision. Thus, the supervision/inspection and subsequent despatches by the firm got considerably delayed.

6.1.3 In the meantime, the stock position of tea became critical. Supply depots in the Command had to resort to local purchases. Such purchases between October 1983 and June 1984 aggregated to 180 MT of tea. The average local purchase rate was Rs. 34.40 per kg. as against the procurement rate, Ex-Central sources of Rs. 24 per kg. The extra expenditure thus, incurred was Rs. 18.79 lakhs.

6.2 *Tea initially declared unfit for issue to the troops subsequently declared as not unfit for human consumption*

6.2.1 On the tea supplied by the firm, during the year 1983-84, there were complaints from all the Commands that the tea received by them was of inferior quality and that the same had gone bad within the warranty period. On these complaints samples of the affected tea were sent to the Appellate Laboratory for analysis. The tea was found unfit for issue to troops and hence to be disposed off in the best interest of the State. The total quantity of tea thus declared unfit for issue to troops was 125 MT costing approximately Rs. 30 lakhs.

6.2.2 Subsequently, during 1984-85 supplies of tea were not materialising as per the delivery schedule. Thereupon the QMG decided to get fresh samples from the unfit stock analysed again by the Appellate Laboratory in order to avoid the huge loss to the State. It was found (May 1985) that although the tea did not conform strictly to the ASC specification, it was not unfit for human consumption and that its consumption did not involve any health hazard. The conclusion also indicated that lack of flavour and taste of the brew complained about were subjective and were based on psychological dissatisfaction. Consequently it was decided (7th May 1985) to issue the affected and segregated stock of tea to the units on priority basis by mixing it with good tea in the proportion of 80 *per cent* of good tea with 20 *per cent* of the affected tea and the affected stock of tea should be consumed by 31st July 1985 itself.

6.2.3 The quality of liquid tea made out of the blend of good tea, 80 *per cent* with sub-standard tea of 20 *per cent* would be inferior to liquid tea made of 100 *per cent* good tea. The result would be either inferior quality liquid tea or greater consumption of the blended tea to secure the required quality of liquid tea.

6.2.4 The Army HQ stated (October 1987) that the Army authorities had ordered Courts of Inquiry to ascertain the reasons and pin-point the responsibility for acceptance of sub-standard tea, which are in progress and final action will be taken as per the findings of these inquiries.

6.2.5 The case reveals that the tea which was initially declared unfit for issue to the troops and was to be disposed of, was later on declared fit for human consumption by the same Appellate Laboratory and was utilised without reflecting any loss to the Government.

6.3 *Procurement of Atta/Wheat*

6.3.1 Till 1983-84, the requirement of atta and other wheat products for the supply depots falling under Command 'A' were being arranged by the APO by concluding contracts for hiring of flour mills. However, the APO could not arrange the same from April 1984. As a short term measure the Command was authorised to resort to local grinding of wheat drawn from the Food Corporation of India (FCI) depots.

6.3.2 In August 1984, the QMG clarified that while resorting to local grinding, the accounting of wheat was to be done as per the provisions contained in the Ministry of Defence letter of 22nd December 1981 permitting the writing off of loss upto 1.5 *per cent* to cover refraction, dryage, etc. In December 1984 detailed procedure for grinding of wheat ex-FCI by supply depots was issued by the Command which, however, stipulated invisible loss including dryage allowance of 1.5 *per cent* (excluding refraction losses).

6.3.3 During the period April 1984 to September 1985, a total quantity of 13,525 MT of wheat was purchased by a supply depot for local grinding and the loss reflected was 202 MT (which worked out to 1.5 *per cent* of the total quantity procured). In addition a quantity of 148 MT of wheat was charged off as refraction losses. The total loss worked out to 350 MT out of 13,525 MT of wheat *i.e.* 2.59 *per cent* as against the permissible loss of 1.5 *per cent*. The cost of the excess quantity thus charged off as refraction losses was approximately Rs. 2.55 lakhs.

6.4 *Local purchase of vanaspati*

The quantities of vanaspati demanded by the Command 'A' during the year 1981 and 1982 were 5,969 MT and 5,830 MT respectively. Due to sudden and steep escalation in the prices of vanaspati and the reluctance shown by the suppliers to keep up the delivery schedule, the supplies did not materialise in full 2,882 MT of vanaspati and its substitutes were, therefore, locally purchased during the period July 1981 to June 1982. The value of that purchase was Rs. 405 lakhs. Based on the stock book rates of vanaspati prevailing during 1981 and 1982, the extra expenditure on these local purchases amounted to Rs. 67.66 lakhs. *Ex-post-facto* Government sanction regularising the above transaction, sought for in November 1983, was awaited (October 1986).

7. *Local purchase*

7.1 *Extra expenditure on local purchase of meat and other fresh articles of supplies during no contract period*

7.1.1 Pursuant to the mention made in Paragraph 43 II(b) of the Report of the Comptroller and Auditor General of India for the year 1976-77, Union Government (Defence Services) of the delay in conclusion of the contracts for the supply of meat, the Public Accounts Committee (PAC) in paragraph 1.185 of their 137th Report (Sixth Lok Sabha) 1978-79 *inter alia* observed that the Committee were deeply concerned to note that due to delay in finalisation of tenders for supply of meat, Government had to incur quite a substantial amount of additional expenditure in effecting local purchase of meat at higher rates during the intervening no contract period. However, cases of delay in conclusion of contracts continued. During 1981-82 to 1985-86, on the procurement of meat and other fresh articles through local purchase, extra expenditure incurred was

Rs. 35.71 lakhs during the no contract period, vide details below :

Command	1981-82	1982-83	1983-84	1984-85	1985-86
	(Extra expenditure in lakhs of Rupees)				
A . . .	0.24	0.39	0.96	1.80	3.27
B	0.15	0.79	14.12	5.81	2.63
C	—	—	—	0.48	—
D . . .	0.74	2.59	—	0.40	—
E	—	0.68	0.66	—	—
	1.13	4.45	15.74	8.49	5.90

7.2 *Avoidable extra expenditure of Rs. 9.63 lakhs due to non-conclusion of regular contract*

7.2.1 In Command 'B', prior to 1984-85 contracts for the supply of meat, poultry and fish were being concluded separately for each item. During 1984-85, a combined tender enquiry for all the three items was floated at a station. This clubbing together all these three items in a combined tender resulted in the increase of the value of the tender and eliminated 'B' class contractors for the supply.

On 27th July 1984, a 'B' class contractor filed a civil suit on the ground that by combining all the three items in one tender document, only 'A' class contractors were made eligible debarring 'B' class contractors. The Court issued stay order directing Government to maintain the *status-quo* in the tender dispute. The stay order was not got vacated. No regular contract was concluded on the combined tender enquiry for the above three items. Local purchases were made during the year 1984-85. No contracts, separately for meat, poultry and fish as was the practice in the past, were also concluded. The extra expenditure incurred on such local purchase, as compared to the lowest rates received on the above mentioned tender works out to Rs. 9.63 lakhs. In the succeeding year, however, contracts were concluded separately for meat, poultry and fish products.

8. *Railway Claims*

8.1 Railway claims preferred by ASC units in the different Commands but outstanding settlement as in October 1986 amounted to Rs. 268.32 lakhs. The oldest outstanding claim related to 1968-69.

8.2 A few interesting features noticed from these pending claims are as follows :

Command 'D'

(a) A consignment of 20 MT of tinned milk costing Rs. 4.09 lakhs was booked by one Supply Depot to another in November 1981. The expected serviceable life of the consignment was upto March 1982. The consignment did not reach the consignee by March 1982 and therefore, in April 1982 a Railway claim was preferred. The consignment reached the consignee's Rail head in April 1983 but since the life of the consignment had already expired, the consignee did not take the delivery stating that it had become unfit for human consumption.

(b) Out of a total outstanding Railway claims of Rs. 13.64 lakhs in a supply depot, claims amounting to Rs. 8.10 lakhs (59.83 *per cent*) pertained to the period from October 1980 to January 1986 representing non-delivery of complete wagons.

(c) In another supply depot, out of a total claim of Rs. 57.26 lakhs, claims amounting to Rs. 54.53 lakhs (95.24 *per cent*) represented non-delivery of complete wagons and the balance claim of Rs. 2.73 lakhs (4.76 *per cent*) represented short delivery of goods. An itemwise analysis of claims relating to missing of complete wagons represented, rice worth Rs. 32.18 lakhs, coal worth Rs. 6.60 lakhs, milk/butter worth Rs. 6.10 lakhs, sugar worth Rs. 3.58 lakhs, dal worth Rs. 1.92 lakhs, atta worth Rs. 1.60 lakhs and miscellaneous items worth Rs. 2.55 lakhs.

8.3 *Short recovery claims against Railways*

8.3.1 According to paragraph 250(C) of Stores Accounting Instructions of the Army (SAI), while assessing claims against Railways, the value of the goods should include its cost, packing and freight charges, represented by the credit notes. In a supply depot in Command 'B' claims were preferred during October 1982 to January 1985 against Railways at "free issue rates", which excluded the cost of packing and freight charges to the extent of Rs. 2.47 lakhs.

9. The matter was referred to the Ministry of Defence in August 1987 and their reply has not been received (October 1987).

33. Working of Military Farms

1. *Introduction*

The primary function of Military Farms (MFs) is to supply hygienic pasteurised milk and other dairy products to troops and military hospitals and dry fodder for animals. At some stations, the MFs maintain their own milch cattle for production of milk and also own agricultural land for growing fodder. The deficiencies in farm production of milk and dry fodder are met by purchases from the market. Farm produced and locally purchased milk is also issued to troops after processing.

At stations where MFs are not able to supply milk, Army Service Corps (ASC) arranges supply of milk by entering into regular contracts. Where no fresh milk can be issued either by MF or by ASC, tinned milk or milk powder is issued.

2. Mention was made in paragraph 36 of the Report of the Comptroller and Auditor General of India, Union Government (Defence Services) 1979-80 regarding working of MFs. The Public Accounts Committee (PAC) (1981-82) in their seventy-eighth Report *inter alia* made the following observations :

— Against a total capacity of 14,000 heads of cattle available in all MFs, the actual number of cattle held was 7,592; thus capacity utilised was only 52.8 *per cent*.

— The financial results of working of the MFs do not really represent the true picture inasmuch as the profits shown in the accounts are based on artificially inflated rates for free issues of milk to troops and hospitals which account for 95 *per cent* of the total issues.

— The profits include large amounts of interest earned by MFs on Government banking account.

— Bulk of the profits are earned by the farm Depots which only purchase milk from outside agencies for supply to troops.

The PAC recommended that the whole set-up of MFs should be reviewed and desired that Ministry of Defence (Ministry) should "examine seriously the possibility of handing over MF organisation to Co-operatives of ex-servicemen". Pursuant to the above recommendations, reiterated in 124th Report of the PAC (1982-83), the Ministry stated, in October 1983, that "although Government had tentatively decided that cattle holding farms will continue to be run departmentally as at present", two Expert Committees, one on dairy/farming to advise as to whether MF should continue as they are or restructuring/changes were necessary and the other on accounting procedures were set up in November 1982. These Committees were expected to submit their reports by November 1983 and December 1983 respectively. The Ministry intimated Audit in September 1986 that the Expert Committee report on dairy farming had been finalised but could not be submitted for Government decision as the report of the Expert Committee on accounting procedures was awaited. The Ministry further added that "as soon as the report on the accounting procedure is finalised, both the reports will be submitted to the Government for consideration and the decision taken will be communicated to audit."

3. A review of the performance and working results of the MFs conducted by Audit during the period 1981-82 to 1985-86 revealed as infra :

4. *Highlights*

Reports of the Committees on (i) Dairy Farming and (ii) Accounting procedures set up in November 1982, pursuant to the recommendations of the PAC, which were expected to be available at the end of 1983, have not been finalised till July 1987.

Capacity utilisation of MFs in terms of number of animals during 1981-82 to 1985-86 ranged from 53 to 60 *per cent.*

Major part of the requirement of milk continued to be purchased from the market and only 36 to 43 per cent raw milk could be produced by the farms.

Interest earned by MFs on Government Banking Account constituted the major portion (57 to 80 per cent of the profit.

Fixing of the free issue rates of milk on higher side compared to the cost of production also inflated the profits.

The cost of production of milk in six MFs was higher than local purchase rates by Rs. 78.71 lakhs and 15 non-cattle holding MFs purchased raw milk from the market and earned a profit of Rs. 127.71 lakhs.

Stores losses amounting to Rs. 8.97 lakhs were written off during 1981-82 to 1985-86 and losses of Rs. 21.53 lakhs were under investigation at the end of March 1986.

Increase in the number of milch cattle in five MFs did not result in commensurate increase in milk production; the shortfall amounted to Rs. 82.94 lakhs.

One MF sustained a loss of Rs. 7.22 lakhs due to non-inclusion of actual pasteurisation and delivery charges in the sale rates.

Shifting of a dairy complex to a new location in March 1979 and its transfer back to the old location subsequently involved an avoidable expenditure aggregating Rs. 18.10 lakhs.

5. *Performance appraisal*

As on 31st March 1986 there were 47 independent self-accounting MFs; 27 are cattle holding and produce milk, 15 purchase and issue milk after processing while 5 rear young stock only.

5.1 *Production of milk*

Against a total capacity of 14,000 heads of cattle available the actual number of adult milch cattle held during 1981-82 to 1985-86 varied from 7,372 in 1983-84 to 8,458 in 1985-86. The capacity thus utilised ranged from 53 to 60 *per cent.*

The overall dairy milk yield per animal per day during 1984-85 was the lowest. Despite increase of 373 (5.06 *per cent*) milch cattle during 1984-85, production of milk increased by 718 Kilo-litres (Kls) (3.80 *per cent*) only.

The milk purchased from market during 1981-82 to 1985-86 ranged from 57 to 64 *per cent* of the requirement of milk.

5.2 *Working results*

The working results of the MFs during the years 1981-82 to 1985-86 are given below :

	1981-82	1982-83	1983-84	1984-85	1985-86
	(Rs. in lakhs)				
Net profit inclusive of interest earned on Government account 'C' .	237.36	287.67	359.31	410.21	384.11
Interest earned (Included in net profit) .	159.99	181.87	205.75	243.79	306.47
Percentage of interest element in net profit .	67.40	63.22	57.26	59.43	79.79
Net profit excluding interest	77.37	105.80	153.56	166.42	77.64

Thus, the bulk of the net profit shown by the MFs is still on account of interest income, which was about 80 *per cent* in the year 1985-86. The reduction in net profit excluding interest in 1985-86 was due to loss sustained in cultivation section (Rs. 9.03 lakhs), Dairy section (Rs. 4.64 lakhs) and Fodder section (Rs. 12.43 lakhs).

The break-down of the profit of MFs, activity-wise, as given below, indicates that a major portion of the net profit for the last 5 years (from 1981-82 to 1985-86) was being obtained from dairy section where purchase of milk from market ranged from 57 to 64 *per cent.*

Activity-group	1981-82	1982-83	1983-84	1984-85	1985-86
	(Rs. in lakhs)				
Dairy . .	196.12	238.93	279.75	338.24	333.60
Cultivation .	(—)1.31	(—)0.32	2.89	0.61	(—)8.42
Fodder .	42.55	49.06	76.67	71.36	58.93
Total . .	237.36	287.67	359.31	410.21	384.11

Out of the total profit of Rs. 333.60 lakhs shown by the Dairy section during 1985-86, Rs. 127.71 lakhs was earned by 15 MFs which do not hold cattle but purchase milk from market.

5.3 *Pricing of milk*

Under the present system of fixation of rates for dairy products, supplied free to troops and military hospitals, separate sale rates are fixed for each station for a period of six months. These rates are fixed on the basis of local market rates of similar quality of milk likely to prevail during the next six months plus the actual cost of pasteurisation and delivery charges as per the last audited accounts. The local market rate is the sale rate of a recognised milk scheme operating in the locality, or in its absence, the rate as ascertained from civil authorities. In case of rising trend in the current market prices, the sale rates could be increased upto a maximum of 20 *per cent* over the market rate of the corresponding season of the preceding year. The rates for the "paying consumers" were to be less by 5 paise and 10 paise per litre in the case of officers and other ranks respectively. In the case of non-entitled customers, the payment issue rate would be the standard sale rate plus 10 paise per litre.

During 1981-82 to 1985-86, over 96 *per cent* of the milk traded was issued to the troops. The profit of the MFs arises out of the pricing of milk supplied free to the troops and costed at pre-determined sale rates and represents the difference between the cost of production and sale rates as will be evident from the following figures :

Year	Quantity of processed milk traded during the year (in lakhs of litres)	Quantity of milk issued to troops (in lakhs of litres)	Average purchase rate per litre	Average cost of milk produced in MF and purchased from trade after processing	Average issue rate for free supplies
			(in Rupees)		
1	2	3	4	5	6
1981-82	554.97	533.44	2.63	2.70	3.062
1982-83	553.00	531.25	2.92	3.12	3.550
1983-84	595.99	577.10	3.14	3.38	3.825
1984-85	677.16	657.87	3.42	3.68	4.10
1985-86	697.24	678.01	3.74	3.95	4.41

The issue rates of milk, fixed for free supplies under the existing pricing policy, were higher as compared both to the cost of production and average purchase rates.

Thus, the profit shown by the dairy section of MFs, which accounts for a major portion of the profit earned was on account of the high issue rates fixed by the MFs.

5.4 *Losses on account of issues of milk to paying consumers*

In Para 3.74 (Sl. No. 16) of their seventy-eighth Report, the PAC (1981-82) observed "It is unfortunate that as a quasi-commercial organisation, the MFs should have failed to recover the actual cost of production of milk from payment consumers thereby incurring losses. The Committee expect such losses will be avoided in future." In their action taken note dated 13th October 1982 the Ministry stated that recommendations of the PAC will be kept in view by the Expert Accounting Committee to eliminate chances of loss in future on account of sale of milk to payment customers. Meanwhile losses on payment issues due to difference between cost of production/ processing of milk and the price of milk charged to paying consumers amounted to Rs. 18 lakhs during 1981-82 to 1985-86.

5.5 *Stores losses*

Losses of stores written off during the years 1981-82 to 1985-86 were Rs. 5.08 lakhs, Rs. 1.27 lakhs, Rs. 0.65 lakh, Rs. 1.73 lakhs and Rs. 0.24 lakh respectively. Losses at the end of March 1986 amounting to Rs. 21.53 lakhs were under investigation.

6. *Other points of interest*

6.1 *Shortfall in production of milk*

MFs at Dehradun and Bangalore had a larger number of cattle in milk during 1983-84 to 1985-86 and during 1982-83 to 1985-86 respectively as compared to 1981-82. Similar was the position in MF at Agra, Panagarh and Jhansi after 1982-83. However, the production of milk did not increase proportionately due to lesser yield of milk per animal in the subsequent years. The resultant shortfall in the increased production of milk anticipated, was worth Rs. 82.94 lakhs. Even on a 50 *per cent* satisfaction of the anticipated increased productoin of milk, the deficiency was to the extent of over Rs. 41 lakhs.

6.2 *Cost of production of milk higher than the local purchase rate*

A comparison made between the local purchase rate of milk and its cost of production in the following MFs during 1981-82 to 1985-86 revealed that the latter was persistently higher resulting in a higher product cost of Rs. 78.71 lakhs on the quantity of milk produced in the farms.

Year	MF located at	Production cost per litre (In Rs.)	Local purchase rate per Litre. (In Rs.)	Difference per litre (Col. 3—4) (In Rs.)	Quantity of milk produced in farm (In Litres.)	Loss on home production Col. 5 (×) 6 (Rs. in lakhs)
(1)	(2)	(3)	(4)	(5)	(6)	(7)
1981–82	Lucknow	4.58	2.50	2.08	2,79,880	5.82
	Panagarh	2.51	2.23	0.28	1,94,211	0.54
	Dehradun	2.79	2.53	0.26	7,65,498	1.99
	Jabalpur	4.10	2.64	1.46	1,10,737	1.62
1982–83	Lucknow	4.75	2.91	1.84	2,53,747	4.67
	Panagarh	2.51	2.45	0.06	2,30,566	0.14
	Dehradun	3.34	2.92	0.42	6,13,058	2.57
	Jabalpur	6.05	2.76	3.29	85,861	2.82
1983–84	Lucknow	7.26	3.05	4.21	2,14,606	9.03
	Dehradun	4.13	3.03	1.10	6,68,811	7.36
	Jabalpur	6.04	2.97	3.07	1,02,253	3.14
1984–85	Bareilly	3.79	2.07	1.72	4,23,086	7.28
	Panagarh	2.95	2.79	0.16	2,46,495	0.39
	Lucknow	7.70	3.53	4.17	1,68,973	7.05
	Meerut	3.64	3.15	0.49	13,15,840	6.45
	Dehradun	3.23	3.20	0.03	8,56,830	0.26
	Jabalpur	6.31	3.28	3.03	89,307	2.71
1985–86	Bareilly	3.35	2.07	1.28	5,52,878	7.08
	Lucknow	7.21	3.74	3.47	2,10,655	7.31
	Jabalpur	7.77	3.72	4.05	11,968	0.48
					TOTAL	78.71

6.3 *Loss due to non-inclusion of cost of pasteurisation and delivery in the rates of milk*

As per the revised instructions issued in September 1981 and effective from October 1981 the sale rates of milk were to be fixed on the basis of local market rate, for similar quality of milk, likely to prevail during the next half year plus, *inter alia,* the actual cost of pasteurisation and delivery. In MF, Panagarh the cost of pasteurisation and delivery charges, included in the issue/sale rate of milk during the years, 1981-82 to 1985-86, was less than the actual expenditure incurred thereon resulting in a loss of Rs. 7.22 lakhs.

6.4 *Non-utilisation of Plant and Machinery*

A refrigeration plant costing Rs. 1.39 lakhs, received in MF Namkum, in March 1979 against a contract was to be installed and commissioned by the supplying firm. The firm resiled from their contractual liability and left the work incomplete. Five years after the receipt of the plant, in July 1984, the installation and commissioning of the plant was entrusted to another firm which completed the work in June 1986 pending commissioning of the plant, an expenditure of Rs. 2.71 lakhs was incurred on purchase of ice required for chilling the milk during 1979-80 to 1986-87.

6.5 *Under-utilisation of Milk Processing Plant*

In December 1979, MF, Deolali received a Milk Processing Plant which *inter alia,* included a refrigeration plant costing in all Rs. 4.61 lakhs.

When the unit was commissioned in October 1981, the functioning of the refrigeration plant was found to be unsatisfactory, which was attributed to non-installation of a separate transformer. Despite the recommendation of a Board as early as in March 1980, for provision of a 200 KVA transformer, approved by the MF Directorate in April 1981, the transformer could be installed only in October 1985. During the intervening period, due to inadequate supply of electric power and drop in voltage, an expenditure of Rs. 1.15 lakhs was incurred on purchase of ice between January 1982 and October 1985. Thus, the milk processing plant procured at a cost of Rs. 4.61 lakhs in 1979 could not be put to its optimum use till October 1985 entailing an avoidable expenditure of Rs. 1.15 lakhs on purchase of ice.

6.6 *Non utilisation of Instant Milk Chilling Unit*

In June 1976, the Ministry sanctioned the conversion of an existing young stock farm at Bir Sarangwal into a cattle holding farm at a cost of Rs. 10.13 lakhs. An Instant Milk Chilling Unit (IMCU) was procured in July 1978 at a cost of Rs. 1.44 lakhs. It could not, however, be installed as the building constructed in 1976-77 at a cost of Rs. 0.76 lakh to house the plant was found to be unsuitable. After a lapse of about 7 years, in May 1985 the IMCU was transferred to MF Ambala at the depreciated value of Rs. 0.80 lakh where it had been kept (January 1987) for emergent use only. In addition, the building constructed during 1976-77 at a cost of Rs. 0.76 lakh but subsequently found unsuitable for installation of IMCU also remained un-utilised.

6.7 *Loss on account of incorrect fixation of sale rate of cow's milk/standard milk*

Sale rates of dairy produce in MFs are to be fixed half yearly in accordance with the Government orders issued in September 1981. The sale rates of cow's milk and standard milk were not fixed correctly in MF Bareilly during 1983-84, 1984-85 and 1985-86. The details of the sale rate fixed and the correct rates applicable are as under :

Period	Sale rate per litre (Rs.)	Correct sale rate per litre (Rs.)	Difference per litre (Rs.)
1-4-1983 to 30-9-1983	3.74	4.06	(—)0.32
1-10-1983 to 31-3-1984	3.76	4.13	(—)0.37
1-4-1984 to 30-9-1984	3.80	4.21	(—)0.41
1-10-1984 to 31-3-1985	4.00	4.29	(—)0.29
1-4-1985 to 30-9-1985	4.22	4.01	(+)0.21
1-10-1985 to 31-3-1986	4.22	4.37	(—)0.15

The incorrect fixation of sale rates for the period from April 1983 to September 1984 was pointed out to the farm by Audit in July 1984. On the basis of the correct rates, the farm adjusted Rs. 1.53 lakhs on account of losses pertaining to the period 1st April 1983 to 31st March 1984 in the Annual Accounts of 1983-84. No adjustment pertaining to the losses for the period April to September 1984 had been carried out (February 1987). The correct sale rates for the period 1st October 1984 to 31st March 1986 are yet to be fixed.

The incorrect fixation of sale rates resulted in net loss of Rs. 1.89 lakhs during the years 1984-85 and 1985-86.

6.8 *Lesser fertility standard in a young stock farm*

The fertility standard actually achieved in Young Stock Farm Manjari was far below the standards prescribed in the Standing Orders, vide details below :

Age Group	Fertility Percentage prescribed in LSS* orders	Fertility Standard achieved in percentage		
		1983-84	1984-85	1985-86
21 to 24 months	80	32	30	25
Over 24 months	95	46	43	46
Over 30 months	100	70	67	62

6.9 *Fixing of free issue rate on the higher side*

Instructions issued by the Army HQ in September 1981 stipulate that where the guiding rate is based on the rate of milk as per civil milk scheme, no separate pasteurisation charges would be levied to arrive at the sale rate if the civil milk scheme rate is inclusive of pasteurisation charges.

In MF Jallandhar, while fixing the free issue rate of blended milk for the period from April 1985 to March 1986, pasteurisation charges at Re. 0.25 per litre were incorrectly added to the sale rate obtained from the State Milk Scheme functioning at the same station.

The incorrect inclusion of pasteurisation charges on the quantity of 2,07,206 litres of blended milk supplied to troops during the year 1985-86 resulted in inflating the profit by Rs. 0.52 lakh in the Annual Accounts of the farm for the year 1985-86.

6.10 *Avoidable expenditure in shitfng of a Military Farm*

Pursuant to an order of a Command HQ on planning and provision of technical and residential accommodation the MF at Bangalore, was to be shifted in phases to the new location at a distance of about 18 Kms.

As part of phase I, in January 1976, the Command HQ accorded sanction for provision of technical and domestic accommodation for dairy farm at the new location at an estimated cost of Rs. 11.50 lakhs which *inter-alia* catered for an overhead reservoir (OHR) at a staging of 40 feet, a dairy building, garages and 12 residential quarters. The dairy building and residential accommodation were completed in February 1978 at a cost of Rs. 10.30 lakhs and were handed over to the users in March/April 1978. The Dairy started functioning at the new location from March 1979.

The work on OHR commenced in September 1977. When the reservoir shaft was completed to a height of 13 metres (40′) from the ground level, the civil aviation authorities objected to further construction as the reservoir fell within the approach funnel of the runway. Further work on the OHR was suspended. In July 1979, it was decided to abandon the work completed till then and also to reduce the height of the staging to 30 feet as allowed by civil aviation authorities.

Meanwhile, a Board of Officers assembled in June 1979 estimated the infructuous expenditure on the construction of OHR upto 40 feet staging and also on dismantling of the shaft to 30 feet as Rs. 0.57 lakh.

As only the dairy complex was moved to the new location, raw milk was being transported thrice a day from the old location to the new one, at a distance of 18 Kms., involving an additional expenditure of Rs. 3.39 lakhs (Rs. 115 per day) from March 1979 to March 1987.

The functioning of the farm from two locations being uneconomical and unmanageable, a proposal initiated in April 1984 for shifting the dairy complex back to its original location was approved in November 1984.

Sanction for the special repairs of a building at the old location was accorded in September 1986 at an estimated cost of Rs. 3.84 lakhs.

The shifting of the farm to the new location in March 1979 and back to its old location involved an avoidable expenditure aggregating Rs. 18.10 lakhs (Rs. 3.39 lakhs on transportation of milk from March 1979 to March 1987, Rs. 3.84 lakhs on special repairs to a building at the old location, Rs. 10.30 lakhs being the cost of the buildings constructed at the new location and Rs. 0.57 lakh on construction and demolition of the OHR beyond 30 feet).

The matter was referred to the Ministry on 31st July 1987 and their reply has not been received (October 1987).

34. Loss due to taking wrong delivery of toluene by a Petroleum Depot

Against a supply order placed in February 1983 by the Ordnance Factory Board, an Oil Company despatched in July 1983, two wagons containing 46,275 litres (cost : Rs. 4.14 lakhs) of toluene to an Ordnance Factory. Toluene was to be used by the factory in the manufacture of explosives. These two wagons were placed (2nd September 1983) at Railway siding 'X' by the Railway authorities instead of at siding 'Y' (meant for the Ordnance Factory).

The Railway Receipt for the consignment was issued by the Oil Company to the Ordnance Factory in July 1983. However, on 2nd September 1983, a Petroleum Depot of the Army Service Corps located at the same destination station, on the presumption that the wagons contained diesel sent to them by a Petroleum Contract Unit (Unit) took delivery of the consignment against an indemnity bond as the wagons were received without any documents/particulars.

When the depot had decanted a quantity of 17,600 litres of toluene (cost : Rs. 1.58 lakhs) into one of their underground tanks which contained 8,800 litres of diesel (cost : Rs. 0.28 lakh), it was realised that the contents of the wagons were not meant for them. The balance quantity of 28,675 litres was decanted into MS drums and the matter was reported by the depot to the Ordnance Factory on 26th September 1983.

The factory representative visited the Depot on 26th September 1983.

Samples of toluene were tested by the concerned Inspectorate, at the instance of the factory and were declared unsuitable (7th October 1983) for the production purpose of the Ordnance Factory. The Inspectorate also observed that the drums were rusty, contaminated with oil, water and sedimentation. The Inspection suggested (November 1983) that the mixed stock of 26,400 litres, could be utilised as washing/cleaning material with due precautions against fire-hazards with the concurrence of Army Headquarters (HQ). On 5th October 1983, the Ordnance Factory preferred a claim of Rs. 3.09 lakhs on the Railways as compensation for the loss sustained by the factory due to wrong placing/delivery of the material by the Railways. As the claim was rejected by the Railways, the Ordnance Factory lodged a claim (March 1985) for Rs. 4.14 lakhs with the depot, which *inter-alia* included a claim for additional duties of Rs. 0.82 lakh paid by the Ordnance Factory as a result of change in the end-user of the item. The Ordnance Factory refused to accept toluene, packed in the MS drums on the ground that the item was not suitable for their use. Of the quantity of 28,675 litres of toluene, packed in MS drums, a quantity of 11,995 litres costing Rs. 1.07 lakhs was issued during 1984-86 to a Research and Development Laboratory for less sensitive use. The remaining stock of 16,680 litres (value : Rs. 1.49 lakhs) was utilised for issue against requirement of 70 MT Gas.

Regarding the mixed quantity of 26,400 litres contaminated with diesel, a Court of Inquiry held on 29th November 1983 and subsequent days, recommended suitable disciplinary action against the staff concerned for their negligence.

The Ministry of Defence stated (September 1987) that :

— Army HQ were raising compensation claim with the Railway authorities and also seeking exemption from excise duty.

— The Court of Inquiry had been finalised. As a result, one Subedar was warned for not exercising proper supervision and vigilance and was instructed to be more careful in future.

— The mixed stock of toluene and diesel was utilised for washing and cleaning purposes.

To conclude, taking wrong delivery of wagons containing toluene meant for an Ordnance Factory by an Army Petroleum Depot, on a mistaken assumption that the wagons contained diesel, resulted in—

(a) contamination of 46,275 litres of toluene costing Rs. 4.14 lakhs, and 8,800 litres of diesel, costing Rs. 0.28 lakh,

(b) additional payment of excise duty of Rs. 0.82 lakh due to change in the end use of toluene.

35. **Misappropriation of stores**

On a demand purported to have been made by an Ordnance unit, an Ordnance depot issued on 6th January 1984 stores (tent material) worth Rs. 5.29 lakhs to a Commissioned Officer. He carried them in five Army vehicles to a private house and had not delivered the stores to the Ordnance unit.

In June 1984, the Ordnance unit intimated the Depot regarding the receipt of certain stores which were never demanded by them. In response, the Depot intimated (July 1984) about the issue of tentage stores which were personally collected by their officer in January 1984 and the remaining items, which could not be issued at that stage were sent separately during February-April 1984 and requested for the clearance of issue voucher for the same. In August 1984, the Ordnance unit intimated the Depot that stores stated to have been collected by their officer were neither demanded by them nor received in their unit. Suspecting foul play, the Depot authorities, in August 1984 informed Command Headquarters (HQ) of the facts of the case and sought their advice.

In November 1984, a Court of Inquiry was ordered for investigation of the case. The main findings/recommendations of the Court of Inquiry were as under :

— The officer collected the stores on production of self made authority letter. The officer who collected the stores was solely responsible for the misappropriation and recommended recovery of the cost thereof from him.

— The depot management was also blamed for their overall slackness with a suggestion to the Ordnance Directorate to institute a Committee to improve the existing procedures to make them more fool-proof.

The General Officer Commanding of the Area, however, recommended for writing off the loss without recording reasons therefor and his recommendations were accepted by the Army HQ. The loss was not reported to the police.

The Ministry of Defence stated in October 1987 that :

— In order to eliminate any chances of fraudulent issue of stores, instructions have been issued to all Ordnance functionaries to take precautionary measures to avoid recurrence of such cases in future.

- The General Officer Commanding of the Area is empowered to give his opinion which, in his judgement, is fair and justified. Further action has to be initiated on the directions of the General Officer Commanding-in-Chief of Command. It is as a result of this that the General Court Martial was convened and the officer has been awarded the punishment of cashiering (dismissal with disgrace) and one year's rigorous imprisonment.
- The case was not reported to the Police since the same was not a theft case.

To conclude, although the benefit of the misappropriation of Government stores had accrued to some one, the loss of Rs. 5.29 lakhs on this account is now proposed to be borne by the Government and no reason has been assigned therefor.

36. Loss due to fire

Against an indent placed by the Director of Ordnance Services in May 1982, an Ordnance Factory despatched to an Ammunition Depot 585 boxes of a particular kind of ammunition worth Rs. 10 lakhs by rail on 7th May 1984. The wagon containing the ammunition, when it arrived at a Railway station *enroute* on 10th May 1984, was emitting smoke followed by intermittent explosions. The entire ammunition loaded in the wagon was completely destroyed and railway property costing Rs. 0.80 lakh, was also damaged.

According to instructions issued in 1978 by the Army Headquarters (HQ), escort should accompany consignments of this kind of ammunition. The above consignment of May 1984 was, however, sent unescorted.

An enquiry conducted by Railway authorities in May 1984 brought out that the ammunition exploded "due to burning of plasticised white phosphorus as a result of its exposure to the atmospheric air due to leakage and that the cause of leakage could only be due to manufacturing defect for which the factory was responsible". In its recommendations, the Committee observed that had the wagon been provided with an escort it would have been possible to avoid the "huge loss" that occurred in the accident. A claim for Rs. 10 lakhs lodged by the Depot with the Railways in August 1984 was turned down by the latter in October 1984. The accident also gave rise to a counter-claim of Rs. 0.80 lakh on Defence Department by the Railways for damages to their property.

The factory authorities held that the ammunition was manufactured as per procedure laid down and was inspected in all respects including transport worthiness and maintained that the fire could not be due to manufacturing defect and was due to loose-shunting.

The Ammunition Depot informed Audit (January 1987) that although the possibility of fire-hazard involved in unescorted rail traffic of such ammunition was brought to the notice of the Army HQ as well as to the Ordnance Factory Organisation in 1982, the factory authorities could not be prevailed upon to comply with precautionary measures laid down by the Army HQ.

The Ministry of Defence, Department of Defence Production (Ministry), in November 1987, stated :

- Ammunition loaded wagons were not escorted by the Ordnance Factories as stores emanating from or intended for the Director General of Ordnance Factories were not covered by the instructions issued by the Army HQ in 1978. Nevertheless, escorts from Depot are now being provided.
- Action was in hand to regularise the loss.

To conclude :

- The circumstances leading to the fire in the wagon containing ammunition have not been investigated by the Defence authorities to fix accountability for any lapse.
- The loss of Rs. 10 lakhs has not been regularised so far (October 1987).
- There had been lack of uniformity in procedures followed by the Army and Ordnance Factories in providing escort for such consignments.

37. Downgradation of new imported vehicles

Two imported vehicles (Tractors), costing Rs. 5.96 lakhs each, were received in the consignee stocking depot 'A' in December 1979 and May 1980. The vehicle received in December 1979 was inspected in April 1981, i.e. after 16 months. After final inspection it was classified, in July 1982, as Class IV, requiring major repairs. The other vehicle was inspected in April 1981, i.e. after 11 months. It was classified in V(a) condition, which signifies that it required specified repairs not amounting to overhaul.

Both these vehicles were sent to another Depot in January 1985 for carrying out the necessary repairs. When these vehicles reached that depot in March 1985, its Resident Inspector observed that the vehicle in Class V(a) condition (requiring specified repairs), had suffered "extensive damage in stock" at Depot 'A' and suggested investigation through a Court of Inquiry. The vehicle had done only 345 Kms.

The case reveals that :

— New imported vehicles, received in November/December 1979, acquired at a cost of Rs. 11.92 lakhs, could not be put to use (September 1987) pending extensive repairs.

— No action has been taken (September 1987) to investigate the loss and fix responsibility therefor even after a lapse of seven years.

— The case was referred to the Ministry of Defence in June 1987 and their reply has not been received (October 1987).

38. Non-utilisation of forging machine hammers

In October 1978, the Army Headquarters (HQ) placed an indent on the Director General, Supplies and Disposals (DGSD) for two forging machine hammers of 250 Kg. capacity for delivery by March 1979. These hammers were indented for use in Army Base Workshops at stations 'A' and 'B'. The only bid received by the DGSD from a private firm was for Rs. 3.08 lakhs per machine. On 2nd April 1979, the DGSD sent to the Army HQ a duplicate copy of the quotation for check of technical suitability, as desired by the latter and sought reply by 22nd April 1979. The fim's offer was valid upto 30th May 1979. In July 1979, the DGSD informed the Army HQ of their decision to return the indent for want of comments on technical suitability and advised that a fresh indent, after deciding about the requirements for the item, may be raised. The Army HQ continued to maintain that the item was required very urgently and requested (October 1980) the DGSD to reinstate the indent and arrange for early procurement of the machines.

In addition to the above, in 1981-82, the same workshops projected a requirement for three more machine hammers, but of a different specification, viz. 150 Kg. capacity-two units for the workshop at station 'A' and one unit for the workshop at Station 'B'. The consequential indent placed by the Army HQ on the DGSD in August 1982 was not for the 150 Kg. capacity. The specification for the three machines was erroneously indicated as 250 Kg. The hammers of 250 Kg and 150 Kg. capacity are not interchangeable. In October 1982, the same firm, the only bidder again, quoted Rs. 6.01 lakhs per machine hammer (inclusive of loose steel top costing Rs. 0.75 lakh) against the earlier quotation of March 1979 for Rs. 3.08 lakhs (excluding loose steel top). The DGSD informed the Army HQ in May 1983 that they did not consider the rate quoted by firm as reasonable. In the absence of an alternate source of supply for the item, the DGSD advised the Army HQ that they would place the order only after the latter confirmed that their requirement was absolutely essential. In August 1983 the Army HQ informed the DGSD that their requirement for the item was urgent for meeting fully the commitments on repair and manufacture work assigned to the Workshops and also asked to examine the rates as the price quoted by the firm was ten times more than the indented cost. Thereafter, the DGSD concluded a contract in August 1983/June 1984 for Rs. 17.81 lakhs (including Rs 2.01 lakhs for 3 units of loose steel top) for supply of 3 machine hammers of 250 Kg. capacity. These were received in April 1984 (one) and December 1984 (two) by the Army Base Workshops at station 'B' and station 'A' respectively. In September 1985, the workshop at station 'A' informed their Headquarters that they received two machine hammers of 250 Kg. capacity whereas their outstanding demand was for only one. These two machines were commissioned on 26th February 1987 by giving temporary connections. The machine hammer received at station 'B' in April 1984 has not yet been installed (April 1987).

Meanwhile, in January 1984, the DGSD accepted reinstatement of the Army HQ indent of October 1978. DGSD concluded another contract with the same firm in July 1984 for Rs. 11.14 lakhs for the supply of two machine hammers of 250 Kg. capacity against the earlier offer of Rs. 3.08 lakhs per machine. There was absolutely no necessity for concluding this contract as the supply of three machines of this specification against the requirement for two had already been arranged. This contract was short closed in March 1986 after supply of one unit to a Depot at station 'C' in January 1985. The machine is lying (February 1987) there without use.

The case reveals ;

— Against the urgent requirement of two machine hammers of 250 Kg. capacity which were available in 1979 for Rs. 6.16 lakhs. the Army HQ purchased in 1983/1984 four units at a total cost of Rs. 23.38 lakhs from the same firm. Assuming the steel tops for the two machines as essential (cost : Rs 1.34 lakhs), the avoidable expenditure was Rs. 15.88 lakhs—Rs. 11.51 lakhs on account of unnecessary purchase of two units of forging machine hammer of 250 kg. capacity and Rs. 4.37 lakhs due to delay in communicating technical suitability of the offers received in April 1979

— Despite the urgency pleaded in October 1978 for procurement of two machine hammers of 250 kg. capacity, only one of the four machines, received during April 1984 to January 1985 has been put to use. Funds blocked on this account amount to Rs. 17.45 lakhs.

— Delay in installation/commissioning of the machines has deprived the users of the benefits available under warranty clauses of the contracts.

— The demands of the workshops for three units of forging machine hammer of 150 kg. capacity initiated in 1981-82 remain unfulfilled.

The case was referred to the Ministry of Defence in June 1987 and their reply has not been received (October 1987).

39. Delay in commissioning of an imported equipment and payment of agency commission to Indian agent

In May 1981, the Director General, Armed Forces Medical Services (DGAFMS) placed an indent on Supply Wing of a Mission abroad (SW) for procurement of one Clinical Hyperbaric System with necessary accessories at an estimated cost of £ 29,235. The indent was accompanied with a proprietary article certificate in favour of firm 'A'. This equipment was required to facilitate treatment of cases of cold injuries, impending gangrene, burns, gas gangrene, carbon monoxide poisoning, severe infections, traumatic ischaemia, varicose ulcers etc.

In September 1981, SW concluded a contract with firm 'A' for the supply of the equipment by November 1981 at a cost of £ 26,132. The contract provided for payment of a 20 *per cent* commission, in Rupees, to the Indian agent on the value of the main equipment, £ 23,000 and optional accessories, £ 1,990. The commission worked out to £ 4,998 (Rs. 0.84 lakh) and formed part of the total cost of £ 26,132. The Indian agent was required to provide,

(a) services for erection and commissioning and
(b) after sales service.

According to the orders issued by the Ministry of Finance (Defence) in 1977, agency commission upto 7½ *per cent* could be paid for contracts where the Indian agent is to render after sales services in the shape of warranty assistance, assistance in installation and commissioning and/or technical advice. The agency commission provided in this case, viz. 20 *per cent* was far in excess of the maximum limit permissible.

The equipment was despatched to India in January 1982. In February 1982, firm 'A' was paid a sum of £ 21,134 being the cost of equipment and its accessories/spares. The equipment was received by a Depot at Station 'C' in June 1982. In August 1982, it was despatched to an Army Hospital at station 'D' where it was to be installed. On 5th August 1982, Indian agent informed the Hospital at station 'D', the room specifications for installation of the equipment. The requirement of accommodation for the equipment was initially projected in September 1982. In January 1983, an estimate for work services valuing Rs. 3.05 lakhs was prepared. As the estimated cost was considered high, the estimate was revised to Rs. 1.29 lakhs in October 1985; the same has not yet been sanctioned (October 1987). Meanwhile, in July 1984, Army Hospital at station 'D' informed the DGAFMS that the construction of new airconditioned room would take a long time and they had decided to install the equipment in an existing room. Though the equipment was not installed, the SW paid the agency commission of Rs. 0.84 lakh to the Indian agent on 20th March 1984. The equipment was stated to have been installed on 31st March 1987 in one of the existing rooms of the Hospital, but the clinical trials could not be carried out due to non-functioning of patient support unit of the equipment. Thus, the equipment costing Rs. 4.42 lakhs imported in February 1982 has not so far (October 1987) been put to use.

The Ministry of Defence, in October 1987, stated :

— Efforts are being made to commission the equipment as early as possible.

— The comments on payment of 20 *per cent* agency commission against maximum of 7½ *per cent* before installation of the equipment are being obtained from Supply Wing and the Director General Supplies and Disposals.

The case reveals that :

— Due to delay in installation of the imported equipment, a sum of Rs. 4.42 lakhs remained blocked unproductively from February 1982 to October 1987.

— As one of the accessories is non-functional, this imported equipment, needed in 1981, still remains unutilised.

— The payment of 20 *per cent* agency commission against the maximum permissible limit of 7½ *per cent* resulted in extra payment of Rs. 0.53 lakh to the Indian agent.

— The agency commission of Rs. 0.84 lakh was paid more than three years before the date of installation of the equipment.

— The delay in installation of the equipment has deprived the users of the benefits of the warranty clause which were available upto May 1983 only.

40. Purchase of defective mugs enamelled

Based on an indent placed in June 1982 by Army Headquarters (HQ), the Director General Supplies and Disposals (DGSD) concluded a contract in June 1983 with a private firm for supply of 2,57,720 mugs enamelled at a cost of Rs. 19.93 lakhs to be delivered at a Central Ordnance Depot (COD) by 31st October 1983. In October 1983, the quantity on order was increased by 64,430 mugs at a cost of Rs. 5.06 lakhs. The date of delivery was also extended from time to time upto 30th September 1984. According to general conditions of the contract, should the consignment be not in conformity with the stipulated specifications, the consignee had the right to reject the stores within 45 days of actual delivery at destination and seek replacement. The supply also carried a warranty of 12 months, against defective material, workmanship and performance, from the date of receipt by the consignee.

The COD received 2,32,071 mugs during November 1983 to March 1984 against 10 Inspection Notes (IN) duly inspected and passed by the Inspecting Officer viz. 'Inspector of General Stores' (IGS).

In February 1984, the Controllerate of Inspection, General Stores (CIGS) *viz.* 'Inspecting Authority', instructed COD to keep the consignments received against IN No. 2 dated 16th November 1983 and IN No. 3 dated 25th November 1983 and all the future consignments as and when received, segregated for 'standard check'.

Based on the advice of the CIGS rendered in April and June 1984, the COD informed the firm in June 1984 that the consignments received against IN No. 2 to 10 (2,05,949 mugs) had been rejected in 'standard check' by the Inspecting Authority "being chipped, improper packing not conforming to the laid down specifications and manufacturing defects". In the meantime, 13,038 mugs were issued to the units before the receipt of 'standard check' report.

In July 1984, the firm represented to the DGSD against the rejection as the same was communicated to them 45 days after the date of receipt of stores by the consignee. On consulted, the Ministry of Law in August 1984, opined that the rejection was not valid in Law. In September 1984, the DGSD communicated this decision to the COD. The COD, however, informed the DGSD in January 1985 that the stores had been rejected by invoking the warranty clause. In April 1985, the firm refused to participate in a "Joint Inspection" being arranged by the CIGS to get the defective mugs replaced by invoking warranty clause on the ground that the same was illegal.

In the meantime, a team of Officers of the Director General of Inspection (Stores) visited the COD on 23rd and 26th March 1985 to check the stores and observed that :

— chipping had occurred during handling on receipt and

— mugs withstood the impact test and as a result no chipping either at rim or elsewhere was noticed.

The Army HQ, however, did not agree with the above observations and pointed out to the Director of Inspection (Stores) in August 1985 that the IGS had passed the stores which were rejected by the CIGS because of faulty packing and manufacturing defects but the team of officers of the same organisation found chipping due to improper care in handling on receipt and not due to faulty packing which showed the varying standards of inspection at different levels.

The Ministry of Law, to whom the case was again referred opined in August 1985 that the rejection under the warranty clause too was not valid.

A joint inspection was carried out by the representative of the CIGS and the IGS from 2nd April 1986 to 11th November 1986 to arrive at the net acceptable quantity on 100 *per cent* check of consignments. The fiindings were as below :

	Numbers
(a) Quantity received against IN 2 to 10	2,05,949
(b) Quantity issued by COD prior to inspection	13,038
(c) Quantity inspected	1,92,911
(d) Quantity accepted	1,74,660
(e) Quantity rejected	18,251

18,251 mugs (costing Rs. 1.43 lakhs) rejected have not been replaced by the firm so far (October 1987).

As the firm failed to supply the balance quantity of 89,770 mugs, the DGSD cancelled the contract in March 1985 at the risk and cost of the firm.

The Ministry of Defence, in October 1987, stated :

— The consignee depot had taken action to inform the firm regarding the anticipated delay in clearing the inspection note within the specified period and also intimated the rejection within the warranty period.

— The firm disputed the rejection of 18,251 mugs and requested the DGSD to refer the matter to arbitration.

The case reveals the following :

(a) 2,05,949 mugs costing Rs. 15.92 lakhs were initially reported to be of sub-standard quality in terms of the standard check results and replacements thereagainst, attempted, could not be legally insisted upon due to delay of over 45 days in intimating the rejection to the supplier. The varying reports of the Inspecting authorities made it difficult to remedy the position under the warranty clause too.

(b) As neither the "Replacement Clause" under General Condition of Contract nor the "warranty clause" could be invoked against the contractor, the department had to accept 1,74,660 mugs which had been rejected on 'standard check'.

(c) 18,251 mugs, costing Rs. 1.43 lakhs, ultimately rejected in the cent per cent check, have not been replaced by the firm.

41. Loss in procurement of wax special

An ordnance factory regularly imports wax special (a proprietary item) from a foreign firm which supplies this item worldwide in pallets with standard packing.

Against a purchase order placed by an Indian Mission abroad on the firm in July 1981 for supply of 30,296 kgs. of wax special, 28,678 Kgs (net weight) of wax (value : $ 61,370.92) packed in 28 pallets, were shipped on 23rd October 1981 through an Indian Shipping agency. The consignment reached India [Embarkation Headquarters (EHQ) at Station 'A'] on the 6th January 1982. The EHQ surveyed the material between 1st February 1982 and 6th February 1982 and informed the consignee to depute a representative for repacking the material on 19th March 1982 (*i.e.* 41 days after survey). Meanwhile 23,701.30 kgs. of wax was repacked in 461 gunny bags and despatched by goods train on 27th March 1982, leaving a shortage of 4,976.70 kgs. valued at $ 10,650.14 (equivalent to Rs. 99,046).

The consignment was received at the factory on 7th April 1982. On finding, after inspection at final destination, that the wax was contaminated with dust and black tarry matter, the entire quantity was rejected by the Inspectorate of Military Explosives. The contaminated wax was processed (incurring expenditure of Rs. 11,895) and 22,901.30 kgs. of wax recovered resulting in loss of 800 kgs. wax valuing Rs. 15,921.

The consignee attributed the following reasons for the loss :

(i) use of paper packing by the supplier, and

(ii) repacking loose material in old gunny bags by the EHQ without consulting the consignee.

As regards shortage of wax, the Supply mission stated (August 1986) that a claim on the Indian Shipping agency for Rs. 1,17,705 towards material lost in transit was preferred by the EHQ of Station 'A' in June 1982. In this connection it may be stated that the vessel carrying the above consignment commenced unloading on 6th January 1982 and finished it on 12th January 1982. The Embarkation Commandant applied for survey only on 27th January 1982 after which the survey was conducted between 1st February and 6th February 1982 and the shortage of 4,976.7 kgs. wax was noticed. After filing a complaint with the police on 12th February 1982 and police investigation proved futile, the consignment was cleared on 15th/16th March 1982. The Port Authorities rejected a claim for Rs. 50,000 received from the Embarkation Commandant on the ground that the completed documents for taking delivery or application for survey were not submitted within 7 clear days from the date of landing of consignment. The Shipping agency rejected the claim in November 1985 on the grounds that "shortage/damage has been ascertained on survey which has been held after a lapse of abnormal period of its landing ex-the vessel."

Delay in communication and inappropriate action resulted in loss and extra expenditure to the tune of Rs. 1.27 lakhs.

42. Avoidable expenditure due to defective packing

Based on Thal Sena Mukhyalaya indent of September 1984, the Supply Wing of an Indian Mission abroad (Supply Wing) placed in February 1985 a purchase order for procurement of a computer system by May 1985 at a cost of $ 1,32,264, including agency commission, on a foreign firm with warranty for twelve months from its receipt in India. While placing the order, the supplier was informed that all items were to be boxed suitably for export to India. The original mode of shipment by sea was subsequently changed to 'By Air'.

The system was despatched in March 1986 in four different packages by Air India to Bombay and by train from Bombay to Agra (April 1986). While the consignment was under survey by railway authorities (August 1986) the ultimate consignee informed the Supply Wing on 26th August 1986 that one of the packages was lying in damaged condition.

In a joint inspection signed by the ultimate consignee and the Indian agent of supplier (September 1986) it was stated that a package containing the main computer system and equipment was received in damaged condition and the back plane of computer and winchester drive had sustained irrepairable damages. It was also stated in the report that the unit had received such a heavy banging that the stock on circuit modules on the controller boards had fallen out. No comment on the nature of packing appeared on this report. While the report was signed with Indian agent of the firm as a party, this report was termed provisional by the ultimate consignee. On further examination, the ultimate consignee pointed out in March 1987 (6 months after signing the joint inspection report) that on further examination it was revealed that the damage caused to the computer was due to faulty packing done by the supplier and the main cause of damage was the fact that the computer was not bolted on to the package.

Meanwhile, in November 1986, the matter was taken up by the Supply Wing with the supplier for replacement of the damaged unit on the basis of joint inspection report of September 1986 who disowned the responsibility stating that the system was shipped "FOB shipper and any damage that had occurred was the responsibility of the shipper" (December 1986).

The Supply Wing approached the ultimate consignee (December 1986) to take a decision on purchase/ repair of the unit with the approval of the competent authority, the cost of new unit being $ 35,000. Accordingly, Army Headquarters sanctioned $ 42,000 for purchase of one control unit as a replacement of the damaged part (March 1987).

Had the details regarding faulty packing been brought out by the ultimate consignee in the joint inspection report (which was done only after a lapse of six months), the supplier could have been persuaded to replace the unit and the expenditure of $ 35,000 (Rs. 4.58 lakhs) on purchase of the unit could have been avoided.

The claim for damages (Rs. 8.56 lakhs) preferred with the Railway authorities was rejected on the ground that each package valuing more than Rs. 500 had not been declared and extra percentage charges had not been paid at the time of booking the consignment.

The case was referred to the Ministry of Defence in May 1987 and their reply has not been received (November 1987).

43. Procurement of defective cotton vests

Against an indent placed by Army Headquarters (HQ) in August 1981 for the procurement of "cotton vests round neck half sleeves olive green" (hereafter called 'cotton vests') the Director General Supplies and Disposals (DGSD) concluded two contracts in July and September 1982 with a firm for the supply of 3.46 lakh cotton vests at a total cost of Rs. 33.34 lakhs.

2,16,258 cotton vests (value : Rs. 17.41 lakhs at 95 *per cent* cost released on proof of despatch) which were duly pre-inspected and passed for acceptance by the Defence Inspecting Officer with price reduction for deviation and accepted by the DGSD were received by the consignee Central Ordnance Depot (COD) during 15th June to 15 July 1983 as shown below :

Contract	Date of Inspection note under which supplies were passed and received	Number of cotton vests supplied (including control samples)	Price reduction
'Q'	16th May 1983	19,875	1 *per cent*
'P'	19th May 1983	74,323	1 *per cent*
'P'	10th June 1983	1,22,060	15 *per cent*.
		2,16,258	

On visual inspection it was found by the consignee that most of the bales were in damaged condition. On seeing the condition of the stores, the firm was asked telegraphically on 2nd August 1983 to associate themselves in checking which they did not do. On 20th August 1983, a Board of Officers was ordered by the Commandant COD for checking the supplies received against these three inspection notes. The Board of Officers observed that :

— Due to defective packing by the firm, the cotton vests were affected by rain water and had deteriorated rendering them unserviceable and not fit for issue to the Army.

— The item bearing olive green shade discoloured into whiteness due to watering effect and also during washing tests.

— The item had been found patchy dyed/off shade and bore different shades from piece to piece.

— Supplies received against inspection note of 10th June 1983 had been accepted by the Inspecting Officer under 15 *per cent* price reduction; indicating serious nature of defects, whereas similar supplies received against the other two inspection notes of 16th and 19th May 1983, though having the same nature of defects, had been accepted by the Inspecting Officer under 1 *per cent* price reduction.

The Board of Officers, therefore, recommended that the supplies received against the three inspection notes might be rejected. The Board's recommendation was approved by the Commandant COD on 23rd August

1983. The firm was informed on 21st September 1983.

The firm disagreed with the rejection of cotton vests and requested the DGSD in December 1983 to arrange for their joint inspection. On 14th January 1984, the Board of Officers in association with the representatives of the firm and the Chief Inspector of Textiles and Clothing (CIT&C)—'Inspecting Authority' rejected only 3,294 cotton vests. The Board, however, recommended that the acceptance of the cotton vests supplied at a price reduction of 15 *per cent* against inspection note of 10th June 1983 was subject to confirmation of Army HQ.

On the 5th March 1984 Army HQ ordered a Board of Officers to examine the cotton vests supplied by the firm under 15 *per cent* price reduction for their acceptance or otherwise. The Board of Officers headed by the CIT&C held on 9th March 1984,

(a) found that there was definite loss of colour on the first local wash and definite progressive loss of colour with every successive wash;

(b) noted that the acceptance of defective cotton vests was due to deliberate decision taken by Director General of Inspection in consultation with the Ministry of Defence (Ministry); and

(c) recommended that the cotton vests might either be rejected or redyed, the extra cost of redying beyond 15 *per cent* to be recovered from the firm.

The Army HQ thereafter decided on 31st August 1984 to get the affected vests redyed. The decision of the Army HQ could not be put through as the redying cost as per the tender enquiries worked out to Rs. 11.85 lakhs as against Rs. 1.65 lakhs available on account of recoveries made from the firm on account of 15 *per cent* price reduction in respect of supplies made against inspection note of 10th June 1983.

The Ministry stated in September 1986 that the entire quantity of cotton vests olive green had since been issued and fully utilised.

To conclude :

— 2,16,258 defective cotton vests supplied by the firm were accepted by the Defence Inspecting Officer at a price reduction of 1 and 15 *per cent* (value : Rs. 17.41 lakhs at 95 *per cent* cost released on proof of inspection and despatch).

— The cotton vests, on receipt found by the Board (August 1983) to have serious defects and not fit for issue to the Army, have nevertheless been accepted and issued to the troops.

CHAPTER 8

AIR FORCE

44. Review on procurement, maintenance, modification and utilisation of the Chetak and Cheetah helicopters

1. *Introduction*

An agreement was concluded in June 1962 by Government with a foreign firm whereunder Hindustan Aeronautics Limited (HAL) undertook licensed manufacture of the Chetak helicopter. Two separate agreements were concluded with the same firm in September 1970 for the manufacture of the Cheetah helicopter under licence and for the establishment of a helicopter industry capable of designing, developing and manufacturing helicopters of various ranges indigenously. The responsibility for the repair and overhaul of the helicopters rested initially with a Base Repair Depot (BRD) of the Air Force.

2. *Scope of Audit*

A review was carried out in Audit of the orders placed on HAL and payments authorised for the manufacture of helicopters. The overhaul task *vis-a-vis* production as also the consequences on account of delays in the supply of helicopters, cost escalation, shortfall in repair tasks and its effect on the operational commitments of the Air Force (IAF) were also examined in Audit.

3. *Highlights*

The review revealed several areas of concern. Manufacturing delays led to the delayed induction of both aircraft into the IAF as well as avoidable cost escalation. Subsequent maintenance, both by the BRD and HAL, was problematic and the shortfalls in overhaul task affected the flying effort considerably. Abnormal delays in overhaul necessitated an increase in the maintenance reserve from 24 to 30 aircraft. There seems to have been inadequate monitoring and lack of evidence in regard to effective supervision of the project to modify the Chetak helicopter for an anti-tank role. The investment of Rs. 6.92 crores on the modification was sub-optimal in terms of the long periods during which critical parts of the missile system remained inoperable. This coupled with the low availability of missiles resulted in a significant degradation of a weapon system specifically conceived for a designated role. The failure to maintain a system of this kind at effective levels has not been comprehensively evaluated by the Government both with a view to fixing responsibility as well as taking corrective measures.

4. *Details*

4.1 Sanctions to the purchase after manufacture of 196 Chetak helicopters and 190 Cheetah helicopters from HAL at an estimated cost of Rs. 37.76 crores and Rs. 66.92 crores respectively were accorded by the Ministry of Defence (Ministry) during October 1963 to February 1974 and November 1970 to January 1983 respectively. Firm orders placed by the Air HQ on HAL envisaged the supply of Chetak helicopters from 1965-66 to 1980-81 and Cheetah helicopters from 1972-73 to October 1986. However, there were delays in the supply of both helicopters ranging from three to seven years in the case of the Chetak helicopter and one to two years in the case of the Cheetah helicopter. The final prices payable to HAL worked out to Rs. 46.07 crores in respect of the Chetak helicopter and Rs. 68.65 crores in respect of the Cheetah helicopter.

4.2 The delay in the supplies resulted in the Air Force paying an extra amount of Rs. 3.65 crores and Rs. 2.45 crores in respect of Chetak and Cheetah helicopters. As opposed to this, an amount of Rs. 23.59 lakhs was recovered from HAL as liquidated damages on account of delayed supplies of Cheetah helicopter. Apart from the extra expenditure involved, the delay in the supplies affected the planned operational commitments of the Air Force.

4.3 The responsibility for overhaul and repair which was initially with the BRD was transferred to HAL from 1981-82. Meanwhile, the BRD could handle only 50 *per cent* of the task allotted to it for major servicing of the Chetak helicopter during 1979-80. HAL also could not complete major servicing to the extent of 30.77 to 80 *per cent* in respect of Chetak helicopters during 1981-82 and 1983-84 to 1985-86. In respect of Cheetah helicopters, the shortfalls during the period 1983-84 and 1984-85 worked out to 67 and 46.15 *per cent* respectively. Further, during 1982-83 to 1985-86 there was a shortfall ranging from 33.6 to 100 *per cent* in respect of category 'B' repairs for the Cheetah helicopter. With regard to engines, HAL fell short in the repair tasks during 1981-82 to 1983-84 by 8.3 to 16.3 *per cent*. More seriously, the time taken by HAL to carry out major servicing and category 'B' repairs of both helicopters was, on an average, 13.5 months for the Chetak and 30 months for the Cheetah helicopter. According to the Ministry this delay was attributable to the considerable time taken in replenishment of the deficient items either by fabrication or in arranging procurement. As a result of the abnormal time taken for repair by HAL, the element of maintenance reserve in respect of the Cheetah helicopter was increased from 24 to 30 in January 1983. This entailed an extra expenditure of Rs. 3.93 crores which could have been avoided had HAL taken steps to ensure the timely repair and overhaul of the aircraft. The Ministry, however, considered this incidental in view of the decision taken to rework the requirement of maintenance reserve at 25 *per cent* as against 12.5 *per cent* adopted earlier.

4.4 The considerable delays and the poor quality of maintenance were reflected in the serviceability of both types of helicopters from time to time. The deficiency in the availability of helicopters during 1984 to 1986 was to the extent of 3.4 to 7.8 *per cent* (Chetak) and 3.7 to 16.9 *per cent* (Cheetah). Both types of helicopters remained grounded during 1980-81 to 1983-84 to the extent of 8.7 to 23.6 *per cent* (Chetak) and 20.0 to 30.1 *per cent* (Cheetah). The figure for the calendar years 1984 to 1986 was 13.91 to 19.55 *per cent* and 17.89 to 27.49 *per cent* respectively. Consequently, there was a serious impact in terms of the flying effort sanctioned by Government as revealed in the table below:

Shortfall in Flying effort (per cent)

	1984	1985	1986
Chetak . . .	24.81	22.96	22.76
Cheetah . . .	37.94	26.19	13.55

Correspondingly, there was a shortfall *vis-a-vis* the authorised rate of utilisation (*per cent*) as shown below:

	1984	1985	1986
Chetak . . .	16.34	18.00	21.27
Cheetah . . .	31.44	24.57	19.17

4.5 In addition, there were 54 cases of premature engine withdrawal during the period January 1982 to March 1984. The Ministry were unable to indicate the expenditure incurred on the repairs of such engines.

4.6 The Army had evaluated the Chetak helicopter as a missile platform in an anti-tank role. The operational requirement was recognised in early 1971. The modified Chetak helicopters were delivered to the Air Force during 1976-77 and 1977-78 at a cost of Rs. 6.92 crores by HAL.

4.7 The delay in the modification of the helicopters notwithstanding, it was necessary to arm the helicopter appropriately for its designated role. An order for purchase of missiles at an estimated cost of Rs. 2.56 crores was placed by Air Headquarters on a Public Sector Undertaking (PSU) in March 1976. The quantities to be supplied were, however, not indicated due to a dispute about the cost of the missiles. The first batch of missiles was to be delivered by April 1976. The supplies were actually effected during 1977-78 to 1980-81 at a final cost of Rs. 1.92 crores. These were not adequate for even one year's training requirement and war wastage reserve of the IAF. Consequently, training was affected seriously and operational preparedness significantly compromised.

4.8 This was further compounded by the lack of regular and timely maintenance of the system. Certain items of the anti-tank missile system became repairable during 1978 to 1982. Their repair abroad was sanctioned by the Ministry only in July 1985. The items were received back after repair between January and July 1987. As a result, training was carried out on the ground and through airborne simulators even though it was considered desirable to carry out live firing. The Ministry stated in December 1987 that these problems could have been avoided had the repair and overhaul facilities for the anti-tank missile system been set up by HAL as sanctioned in January 1980.

4.9 The present strength of modified helicopters for the anti-tank role with the IAF is only 83 *per cent* of the authorised unit establishment in respect of 3 units as against 4 units planned to be equipped. The serviceability of the Anti-Tank Guided Missile Systems as on 1st January, 1985, 1st January, 1986 and 1st January, 1987 with reference to the availability of modified helicopters was 40 *per cent*, 40 *per cent* and 28 *per cent* respectively. As against the planned strength of modified helicopters, it worked out to 25 *per cent*, 25 *per cent* and 14.5 *per cent* respectively. The flying task which could not be achieved by three operating units of modified helicopters during 1985 and 1986 against the task authorised was to the extent of 28.03 to 28.98 *per cent* and 11.09 to 41.48 *per cent* respectively. The Ministry stated in December 1987 that the low serviceability was attributable to delays involved in setting up of the overhaul facilities by HAL and getting the items repaired abroad.

45. Development of an equipment

In order to improve the performance of an existing equipment fitted in aircraft 'A' and keeping in view the requirement of futuristic aircraft, Air Headquarters (HQ) issued an Air Staff Requirement (ASR) in November 1973 for equipment 'Y' to replace the existing equipment. The ASR was considered by a Public Sector Undertaking (PSU) and a Defence Research Establishment (DRE) and a feasibility report submitted. A Study Group recommended in September 1976 the development of equipment 'Y', jointly by the PSU and the DRE.

In the meantime, Government concluded a contract for procurement of aircraft 'AI', an improved variant of aircraft 'A', which was fitted with equipment 'X'. A contract for the licence manufacture of aircraft 'AI' with equipment 'X' was also concluded in August 1976. This equipment had certain operational limitations. The Air Force, therefore, reiterated in April 1977 the urgent need for the development of equipment 'Y' to replace equipment 'X'. It was stated that equipment 'Y', when productionised indigenously, would be used in aircraft 'AI' and other aircraft to be manufactured indigenously. The time frame for development of equipment 'Y' was estimated to be 9 years and considering the long development period, it was proposed to develop an interim version of equipment 'Y' (interim version) to meet the immediate requirement of the IAF for replacing equipment 'X'. It was expected that the project would be sanctioned in January 1977 and the interim version would be made available commencing from 1981-82 for fitment in aircraft 'AI'. While the total requirement of equipment 'Y' was estimated to be 200 sets, the requirement of the interim version was estimated at 150 sets.

Government sanctioned the project in July 1978. The development and production of equipment 'Y' and its interim version was to be carried out jointly by the DRE and the PSU at an estimated cost of Rs. 13.25 crores (free foreign exchange : Rs. 5.14 crores). Rs. 8.65 crores was allocated to the PSU and Rs. 4.6 crores to the DRE. The sanction specified that while the interim version would be developed by July 1981, the production of this version would commence from July 1983. The main equipment 'Y' was to be developed by January 1984 and its production was to commence from July 1987. While the responsibilty for the development of the main equipment 'Y' was assigned to the DRE, the development of its interim version was assigned to the PSU, which was also made the production agency for both versions. The development programme was taken up by the DRE in July 1978 and by the PSU in September 1978.

A Steering Committee was set up in May 1979 to monitor and co-ordinate the execution of the project. The project status was reviewed by a high level committee in December 1979, soon after the commencement of the project and, considering the changed circumstances, it was then decided that equipment 'Y' would not be required to be installed in any of the aircraft as envisaged. The execution of the project was, however, continued and the Steering Committee in their second meeting held in July 1980, stated that the interim version would be required for installation in aircraft 'AI' and also to replace equipment 'X'. The main equipment 'Y' would be required for installation in the Light Combat Aircraft (LCA).

While the execution of the project was in progress, the PSU felt it necessary to acquire design knowhow for the development of a transmitter. The PSU, therefore, entered into a contract with a foreign firm in June 1980 for its supply at a cost of Rs. 94.5 lakhs. The Brass-board model of the transmitter which was due to be delivered by December 1981 was actually supplied in June 1983. However, it had to be sent back in June 1984 to the suppliers as it failed after working only a few hours. As the delay in receipt of the transmitter was affecting the development of the project, the Steering Committee asked the PSU in December 1983 to develop the transmitter. The transmitter which was finally received after repair in November 1984 had certain deficiencies and the contract had to be terminated. A payment of Rs. 56.69 lakhs had been made to the firm till the termination of the contract. In the meantime, the PSU developed the transmitter which also had certain performance limitations. The delay in supply and development of the transmitter delayed the development of equipment 'Y' and its interim version.

By January 1985, it was realised that due to serious slippages in development, equipment 'Y' or its interim version would not be useful to the IAF even as a retrofit due to phasing out of the aircraft. It would also not be feasible to re-engineer and re-design equipment 'Y' to meet the requirement of the LCA. Finally, in April 1986, the Steering Committee decided to foreclose the project as there was no likely requirement by the IAF for the equipment 'Y' or its interim version. By that time an expenditure of Rs. 10.76 crores had been incurred by the PSU and the DRE on the project. Thus, the project which was initiated in 1973 and sanctioned in 1978 to meet a specific requirement of the IAF, was foreclosed in April 1986. This resulted in aircraft 'Al' being equipped with imported equipment 'X' valued at Rs. 48.50 crores having limited operational capability. The Ministry of Defence (Ministry) stated in October 1987 that due to unforeseen delays in obtaining know-how, sub-systems and components from abroad, which were beyond the control of the two organisations, the time frame could not be maintained. The Ministry further stated that the organisations made a large number of technological achievements in sensitive areas which would be useful in development of radar systems as well as multimode radar for future aircraft. The Ministry added that the capability created in the country through this project would be useful for the future.

The case reveals the following:

- The project for improving the performance of existing equipment initiated in 1973 was sanctioned only in July 1978 after a lapse of 5 years.
- The project proved unsuccessful and had to be foreclosed in April 1986 after incurring an expenditure of Rs. 10.76 crores. With that, the objective of meeting the requirement of futuristic aircraft was also not achieved.
- Although it was decided on the basis of a review in 1979 that the equipment would not be used for the IAF, the project was allowed to continue for over 6 years.
- Due to serious slippages in indigenous development, aircraft 'Al' produced indigenously had to be equipped with imported equipment 'X' valued at Rs. 48.50 crores having limited operational capability.

46. Modification of an aircraft navigation system

Air Force transport aircraft were equipped with an outdated navigation equipment 'X' which had operational limitations. With a view to replacing this equipment, Air Headquarters (HQ) proposed in June 1978, the flight evaluation of a newly developed airborne navigation equipment 'Y'. It was also proposed to install equipment 'Y' in aircraft 'A', 'B', 'C' and 'D' during 1980-81 and 1981-82. However, no Air Staff Requirement (ASR) was drawn up indicating the technical and cost parameters of the required equipment. Consequently, subsequent flight evaluation was against manufacturers' norms and not the users norms.

Equipment 'Y', manufactured by firm 'R', was flight evaluated on aircraft 'B' between December 1978 and January 1979 and was found suitable. In June 1980, Government approved the procurement of 50 sets of equipment 'Y' at a cost of Rs. 2.5 crores. A negotiating committee negotiated (January-April 1981) the purchase and licensed indigenous manufacture and recommended procurement of 50 sets of equipment 'Y' at a cost of Rs. 86.57 lakhs with an option to purchase an additional 50 sets. Considering the substantial future requirement of the equipment, the committee also advised licence manufacture of the equipment by a Public Sector Undertaking.

However, at the time of concluding the contract, firm 'R' offered a similar equipment 'Yl' which was found suitable by a technical committee on the basis of a paper evaluation. The equipment was not subjected to airborne trials. Accordingly, a contract was concluded in July 1981 with firm 'R' for the procurement of 50 sets of equipment 'Yl' (including associated equipment) at a cost of Rs. 96.67 lakhs in FFE, subject to their suitability being established through flight evaluation trials to be done in India subsequently. The contract conditions, *inter-alia*, included the following:

- In case the equipment, 'Y1' installed on any of the aircraft failed to meet the technical specifications, the buyer would be entitled to enforce a performance bond by which an amount of Rs. 13.94 lakhs would be recoverable from the firm.
- Notwithstanding the enforcement of the performance bond, the buyer may, at his option, require the seller to buy back that quantity of equipment 'Y1' which the buyer had earmarked against that aircraft in the event of equipment 'Y1' failing to meet the specifications on one or more of the aircraft.

Considering the urgency of the requirement, Government sanctioned (August 1981) airlift of the equipment at a cost not exceeding Rs. 9.99 lakhs. The equipment alongwith associated stores was received in India between September 1981 and February 1982. Modification of aircraft 'A', 'B', 'C' and 'D' with 37 units of equipment 'Y1' was sanctioned by Government in September 1981. Of the balance, 10 sets were to be kept as maintenance reserve and 3 sets were to be sent to country 'M' for fitment on aircraft 'E'. Two sets of equipment each were fitted on aircraft 'A', 'C' and 'D' and 4 in aircraft 'B' and were subjected to flight trials. However, during flight trials conducted in 1982 and 1983, the equipment did not meet the specified accuracies. Its fitment on aircraft 'A', 'C' and 'D' was, therefore, given up. However, firm 'R' was not asked to buy back that quantity of equipment which failed to meet the specified accuracies in terms of the contract. **Instead, it** was decided (July 1984) to fit the equipment on aircraft 'B' only as an aid to route navigation. Accordingly, Government sanctioned (July 1985) the fitment of 37 sets of equipment 'YI' on aircraft 'B' instead of on 4 different aircraft as sanctioned earlier.

The Ministry of Defence (Ministry) stated in August 1987 that incorporation of equipment 'YI' on aircraft 'B' was an operational necessity as the existing system on the aircraft had low accuracy and, therefore, the buy back clause was not invoked. The facts, however, appear to indicate that the IAF accepted a *fait accompli*. To illustrate, only 37 aircraft 'B' are going to be modified with this equipment instead of 66 available with the IAF. Further, the option clause was not invoked to order additional sets to modify the remaining 29 aircraft 'B'. Nor were any of the sets manufactured by HAL earmarked for modifying the remaining aircraft 'B'. Obviously, the primary objective to have an improved navigational aid on the IAF transport fleet to replace the existing outdated system has not been achieved. Aircraft 'A', 'B', 'C' and 'D' would continue to be operated with serious operational limitations.

As the equipment did not meet contractual specifications, an amount of Rs. 13.94 lakhs was recovered in March 1985 from the manufacturer by invoking the performance guarantee clause. An expenditure of Rs. 36.67 lakhs which was incurred during the process of flight evaluation conducted during 1982-83 and 1984 to establish the suitabiltiy of equipment 'YI' on aircraft 'A', 'B', 'C' and 'D' also proved largely unproductive. The Ministry stated in August 1987 that some expenditure was inescapable in flight evaluation which was a pre-requisite and a part of the process of selection before accepting the system.

The fact, however, is that there was no selection in this case. The equipment 'YI' was pre-selected and "evaluated" after the signing of a contract with firm 'R' contrary to the normal practice of evaluation preceding selection. Further, since the post-contract evaluation was against the manufacturer's norms, the trials were, in effect, meant to prove the equipment's capability. Accordingly, the cost of the trials should have been borne by the manufacturer and not the IAF. Upto June 1987, 28 aircraft 'B' were modified with equipment 'YI', 9 sets were awaiting installation and 7 sets were kept as maintenance reserve. The remaining 6 sets of equipment 'YI' had been sent to country 'M' for fitment on aircraft 'E'.

The case reveals that a major requirement of equipping the IAF transport fleet with a contemporary navigation system was not fulfilled inspite of an expenditure of Rs. 1.33 crores largely on account of flaws in the procurement and evaluation procedures followed. This resulted in aircraft 'A', 'B', 'C' and 'D' continuing to operate with serious operational limitations.

47. Delay in procurement, installation and commissioning of a system

The Ministry of Defence (Ministry) proposed, in May 1978, the procurement of five sets of instrument landing system (system) to be installed at Air Force (IAF) Stations 'A', 'B', 'C', 'M' and 'N'.

Approval of the Government was accorded in March 1980 for the procurement of five systems at a cost of Rs. 2.38 crores. A contract was concluded with a Public Sector Undertaking (PSU) in October 1980 for the supply, installation and air calibration of five systems at a cost of Rs. 1.90 crores. The contract stipulated that timely delivery was the essence of the contract and in case of delays Government would be entitled to recover liquidated damages at the rate of Rs. 20,000 for each month's delay subject to a maximum of 2 *per cent* of the total value of item(s) delayed.

In July 1981, the Air Headquarters (HQ) projected another case for procurement of two additional sets of the system for IAF stations 'E' and 'F'. Government sanctioned in April 1982 the procurement of the two systems at an estimated cost of Rs. 80 lakhs. The contract, however, was concluded with the PSU only in February 1985 (after nearly three years of its sanction) for the supply, installation and air calibration of two systems at a total cost of Rs. 1.28 crores—unit cost of Rs. 64 lakhs as against Rs. 38 lakhs contracted earlier thus, incurring an extra expenditure of Rs. 52 lakhs. The systems were to be delivered in August 1986, installed in January-March 1987 and air-calibrated in April-June 1987. In the meantime, Government sanctioned in October 1984, transfer of a system from station 'M' to station 'D' as similar equipment was sanctioned for station 'M'. There had, however, been a delay in delivery and installation of the systems and the delay was attributed to delay in the acquisition of land and non-completion of works services required for installation of the systems. Supplementary agreements were entered into revising the schedule of supplies and installation.

There was an abnormal delay in delivery, installation and calibration of the systems which ranged between 4 to 9 months in delivery, 25 to 36 months in installation and 15 to 33 months in calibration as compared to the revised schedule at four stations. In respect of two other stations, 'F' and 'N', there was a serious mismatch between the arrival of the systems and the completion of works services required to commission the systems. While the systems have been received in December 1986, the likely date of completion of works at Station 'F' is February 1990 whereas at Station 'N' the land required is yet to be acquired (October 1987). Further, the system, though received and installed at Station 'E' in July 1987 had not been calibrated (October 1987).

In summary, the acquisition of the systems and their installation was done in a haphazard manner with the result that none of the systems was operational as of June 1987. Apart from constituting a serious flight safety hazard, these delays have resulted in the foregoing of savings to the extent of Rs. 39.70 lakhs annually at Station 'E'. The Ministry have not provided information in regard to savings that could have been effected by the timely installation of the systems at other stations.

The Ministry stated in October 1987 that the loss of anticipated savings was only notional. The diversion of aircraft takes place due to a variety of reasons, namely, operational requirement, state of airfield, weather, availability of airfield aids and other factors. The Ministry further stated that extra expenditure on procurement of the 2 additional systems on account of delayed projection of requirements by Air HQ was mainly because the requirements of two additional systems were identified by Air HQ subsequently as a result of further operational appreciation. However, the Ministry did not clarify the basis for the fresh appreciation which arose shortly after the first contract had been placed in October 1980.

The Ministry's contention that the loss of anticipated savings was notional is not tenable. Air HQ had stated clearly in July 1981 that annual savings at Station 'E' after the provision of the system would be Rs. 39.70 lakhs. They had also stated that at Station 'F', as many as 98 aircraft had to be diverted to other bases over a two year period on account of bad weather in the absence of the system. This resulted in needless consumption of fuel and extra flying effort. Clearly, the timely provision of the system would have prevented the diversion of aircraft to other stations on account of bad weather.

48. Delay in disposal of land

In order to meet the operational requirements for an Advance Landing Ground (ALG) at Station 'A', land measuring 141.48 acres was acquired at a cost of Rs. 12.85 lakhs in October/November 1971 from a State Government.

The work on the ALG was undertaken by a unit of the Border Road Development Organisation (BRDO) in October 1971 and except for cattle fencing and Bailey bridges, the other items of work were completed in December 1971 at a cost of Rs. 8.04 lakhs.

In March 1972, the Air Force authorities who visited the site to take stock of the completed work reported that the airstrip was dusty with soft surface and uneven without soil stabilisation. The approach track was also soft and dusty. The ALG was, therefore, not considered suitable for operating any type of aircraft. The report also pointed out that bacause of some existing civilian houses on the approach to the airstrip, flying was considered hazardous. The completed works were handed over to the Military Engineer Services (MES) in June 1972.

While the remaining works were not taken up, the Engineer-in-Chief's branch stated in September 1973, that the Government had decided to transfer the ALG to the State Government and hence, no further expenditure on its maintenance needed to be incurred. The transfer was to be on the condition that all future liabilities on account of acquisition of land, expenditure in defending the appeals filed by land owners and contesting the appeals on their own were to be the liability of the State Government. The sanction of the Government for the transfer of land to the State Government at a cost of Rs. 12.85 lakhs was issued in August 1975. The State Government had, however, expressed their inability to take over the land on the ground that :

— 75 *per cent* of the airfield was under paddy cultivation by encroachers;
— eight persons were running shops in the area after constructing temporary huts; and
— a Panchayat office and road had been constructed on the land by the villagers.

The Air Force authorities meanwhile re-examined the possibility of utilising the ALG for raising an Air Force Unit at that place and in June 1976 stayed the handing over of the ALG to the State Government. In August 1982, it was finally decided by Air Headquarters (HQ) to dispose of the land to the State Government as the Air Force had no plans to utilise the land.

The State Government, however, did not consider it practicable to evict the unauthorised occupants and suggested in August 1984 that the cost of land (Rs. 12.85 lakhs) be written off by the Government of India so that they might accept the land. While no decision was taken on this request of the State Government, the Air HQ stated in November 1985 that the possibility of utilising the land by the Army was being examined. No final decision had been taken till March 1987. However, out of the total land acquired, 131.01 acres (92.6 *per cent*) were under encroachments as in April 1985.

The Ministry of Defence stated in November 1986 that the preparation of ALG at Station 'A' in 1971 was necessary in the context of Defence preparedness and the land was proposed to be utilised by the Army.

Thus, land acquired at a cost of Rs. 12.85 lakhs and work costing Rs. 8.04 lakhs for the ALG have never been put to use since the acquisition of land in November 1971. The land was under encroachment and a decision to utilise or transfer the land had not been taken till March 1987.

49. Procurement of a vehicle by a Research Establishment.

A proposal to purchase a specialist vehicle by the Snow and Avalanche Study Establishment (SASE) from a proprietary firm abroad was approved by Government in August 1980. The vehicle was meant for carrying passengers and payloads over difficult and varying terrain.

In July 1982, the Director General of Supplies and Disposals (DGSD) accepted the tender (A/T) of the Indian agent of the foreign firm for the supply of the vehicle at a cost of 1,87,985.75 Swiss Francs (Rs. 9.11 lakhs) which included freight and insurance from the factory to the port of shipment but excluded commission for the Indian agent. The A/T *inter alia*, provided that :

— the responsibility of the supplier would cease on receipt of store on board vessel at the foreign port;

— the supplier would be responsible for losses due to defective packing; and

— there would be free replacement of the vehicle if found to be defective due to faulty workmanship.

In view of the warranty clause, the A/T did not provide for inspection. Further, though the A/T provided that insurance, if required, had to be arranged by the Indentor, the indentor did not insure the consignment.

The vehicle despatched by the Supplier in January 1983 under a clear bill of lading was received at Bombay in February 1983 in a badly damaged condition. A combined Marine Survey Board consisting of representatives of Embarkation Headquarters, DGSD, and SASE held in Match 1983 opined that the damage to the vehicle was beyond economical repair and attributed the damage to defective packing and dumping of heavy spare parts inside the vehicle cabin without any packing. As the vehicle was not acceptable in that condition, the SASE requested the DGSD, in March 1983, to take up the matter with the Supplier, or their Indian agents, for free replacement of the vehicle. The SASE also wanted the vehicle to be despatched back to the supplier. The DGSD, however, decided not to return the damaged vehicle to the supplier as the price had already been paid. The vehicle was thereafter transferred to Chandigarh in September 1983 as there was no storage accommodation at Bombay.

As subsequent efforts by the DGSD to obtain a replacement or effect recoveries from the supplier yielded no results, the DGSD decided in December 1985 to appoint an arbitrator under the terms of the contract. The Ministry of Defence (Ministry) stated in September 1987 that the arbitrator had since been appointed. It was reported by the SASE that, in the absence of the vehicle, there was a drain on manpower and the organisation was put to considerable inconvenience.

The case reveals:

— there was no provision for transit insurance (the reply of the Ministry that, being a rugged vehicle, there was no need for insuring it, is not tenable);

— the A/T did not adequately protect the buyer's interests (the full cost of the vehicle had been paid to the supplier even though the vehicle was received in an unusable state);

— even after 4 years of the receipt of the vehicle in a damaged condition, no headway had been made in getting the vehicle repaired or effecting the recovery of the cost of Rs. 9.11 lakhs from the supplier; and

— the vehicle remained in a semi-assembled, unusable condition since December 1983.

50. Under-utilisation of a machine

Air Headquarters (HQ) proposed in May 1979 the procurement of a machine for production of colour film strips for use in an aircraft navigational system. The absence of this facility reduces the designed operational capability of the aircraft. Accordingly, the requirement was considered an urgent, inescapable, operational necessity. The Government concluded a contract in September 1981 with a foreign firm for procurement of the machine and associated equipment at a cost of Rs. 67.78 lakhs in Free Foreign Exchange (FFE). The machine was to be delivered by July 1983 but was received in May 1984.

The machine has not been housed in permanent accommodation till September 1987. Although construction of permanent accommodation had been recommended as far back as April 1982, it had not been sanctioned by Government so far (September 1987). Meanwhile, the machine was housed in temporary accommodation which had space constraints and inadequate facilities.

While initiating the project in May 1979, it was envisaged that 25 master cassettes of colour film per year would be used in the aircraft. However, since installation of the machine in December 1984, only 6 master cassettes have been produced for trials till March 1987 as against the envisaged target of producing 50 master casettes during the two years period from December 1984. The Air HQ attributed the shortfall in production to lack of storage space and inadequate facilities. These inadequacies apart, the production target was increased in March 1987 to 532 cassettes for the next five years.

The Ministry of Defence (Ministry) stated in September 1987 that the construction of temporary accommodation was necessitated to extract warranty benefits from the supplier before the lapse of the warranty period in January 1985. According to the Ministry, the slow rate of production of master cassettes was due to inadequate environmental conditions. The Ministry also stated that the production task of the master cassettes would commence from December 1987 after receipt of the required chemical from abroad for which indents have been raised. However, the Ministry did not explain why construction of permanent accommodation had been badly delayed. Meanwhile, 36 aircraft with the navigational system in which the use of 7 modules of the cassettes per aircraft was an inescapable operational requirement, had been inducted in service in phases since 1983-84 (September 1987).

The case reveals the following:

— Although provision of the machine was proposed in 1979 for an urgent, inescapable operational necessity and its purchase was effected in 1984, sanction for permanent installation of the machine had not so far been accorded (September 1987).

— Due to lack of technical storage space in the temporary accommodation and inadequate environmental conditions, the machine purchased at a cost of Rs. 67.78 lakhs could only produce 6 master cassettes in 2 years against the task of 50 master cassettes.

— The aircraft, which required the film strips produced by this machine, were inducted in service in phases from 1983-84 with this limitation on their operational capability.

51. Excess provisioning of imported lubricant oil

Oil OMD-370 (Oil) used for engine lubrication in certain types of aircraft by the Indian Air Force was provisioned prior to 1981 on the basis of quarterly review and 24 months Maximum Potential Establishment (MPE). Prior to 1981, the average lead time for receipt of oil in the Air Force Depots from the date of review was 17 months. In March 1981, however, the MPE was revised by Air Headquarters (HQ) from 24 months to 45 months which included 6 months for periodical review, 15 months for stock and 24 months for lead time.

As a result of a review carried out in May 1981 on the basis of revised norms, an indent was placed by the Air HQ in November 1981 on the Supply Wing (SW), London. In April 1982, the SW concluded a contract for the supply of 7.99 lakh litres at a cost of Rs. 51.46 lakhs.

In May 1982, the Air HQ placed another indent, based on a review carried out in November 1981, on the SW, Washington for the procurement of oil. A contract for the supply of 77,000 US gallons of oil at a cost of Rs. 19.76 lakhs, was finalised by the SW in June 1982.

While the provision reviews of May 1981 and November 1981 were based on the increased MPE of 45 months, the strength of the aircraft consuming the oil decreased by 18 *per cent* during 1981-82. From January 1982, the flying of Packet aircraft, which was a major consumer of this oil, was progressively suspended and the fleet was grounded in June 1982. In August 1982, the Air HQ advised both the SWs to cancel the order or explore the possibility of diverting the supply to other buyers. By that time, despatch details for a quantity of 3.09 lakh litres had been received. As the consignments were already despatched in June/July 1982, both SWs intimated their inability to cancel the contracts. The remaining contracted quantity was received by the Air Force in September/October 1982. Thus, against an MPE of 45 months including lead time of 24 months adopted for provisioning review on the basis of which tenders were invited in May 1981 and November 1981, the actual time taken in the receipt of oil was only 17 months and 11 months respectively.

Of the accumulated stocks of oil, the Air HQ could transfer only 0.79 lakh litres to the Navy in April 1986 and as at the end of September 1987, the Air Force held a stock of 7.27 lakh litres valued at Rs. 46.82 lakhs. In the meantime, the UE of aircraft consuming the oil was reduced by 95 *per cent*.

The Ministry of Defence (Ministry) stated in September 1987 that the MPE of 45 months was adopted to overcome perennial shortage of oil items caused by adoption of MPE of 24 months prior to 1981. Further, the Ministry stated that the utilisation of the oil was severely restricted due to grounding of Packet aircraft which was the biggest consumer of the oil and that this could not be foreseen in November 1981. It also stated that all possible efforts were being made to utilise the oil stocks.

Thus, while the flying of the aircraft was progressively suspended from January 1982 and the fleet was grounded in June 1982, the contracts were signed in April 1982 and June 1982. Accordingly, if the SWs had been advised in time the supply contracts could have been avoided.

52. Review on Air Force Stores held in the custody of Hindustan Aeronautics Limited

1. *Introduction*

Government prescribed, in September 1969, a policy regarding the provisioning and procurement responsibilities for spares required for overhaul repair of Air Force (IAF) equipment. Integrated responsibility was laid down for provisioning of spares on the overhaul agency and procurement mainly on Hindustan Aeronautics Limited (HAL) with a view to achieving economy and timely spare parts support for overhaul and repair tasks projected by the IAF. The policy prescribed in September 1969 was modified in May 1973. While the basic concept of responsibilities was retained, detailed instructions regarding storage, stock-taking, inspection and transfer of spares for HAL production in urgent cases from IAF stores held by HAL etc. were given.

2. *Scope of Audit*

A review was carried out in Audit to examine the implementation of Government's instructions in regard to the provisioning of stores held by HAL on behalf of the IAF for purposes of meeting the requirements of repair and overhaul tasks of HAL. The Audit examined particularly the operation of procedures prescribed for manufacture, custody, supply and transfer of stores as also the systems of payment and accounting.

3. *Highlights*

A review in Audit of the stores held by HAL on behalf of the IAF revealed poor inventory management, lack of co-ordination between Air Headquarters and HAL, breakdown of established procedures for the management of the stores and locking up of large sums of money on acconut of these failures. The review also revealed the absence of any effective monitoring arrangements by which the weaknesses in inventory management could have been identified by either HAL or the IAF, singly or jointly, for purposes of taking corrective measures.

4. *Details*

4.1 According to accounting instructions issued in May 1973 in respect of such stores, handling charges at 4 *per cent* of the value of stores held were payable to HAL as also 6 *per cent* agency charges in respect of bought out stores. Quantities as well as the condition of stores transferred from the IAF were to be ensured jointly by representatives from the IAF and HAL. Vouchers in support of the transfer were to be priced at the prevailing priced vocabulary rate (PV rate) for serviceable stores and, where rates were not available, prices indicated by IAF experts were to be accepted. Redundant items were not to be taken over by HAL. Fabricated items were to be credited to IAF stores and payment and handling charges in their respect to be based on invoices. Repairable stores were not to be mixed with serviceable stocks. To the extent possible, repairable items, including rotables and other equipment arising from aircraft or engines under repair or overhaul, were required to be serviced and installed on the same aircraft. Where these items were not repaired within a 2 year period, a report was to be made to the IAF and the cost of repairs recovered from HAL. Stores rendered redundant or obsolete were to be reported annually to Air Headquarters (HQ). The Air HQ were required to issue appropriate disposal instructions for the stores. The instructions also laid down that IAF stores with HAL would be utilised expressely for the repair or overhaul of IAF equipment. However, slow-moving or non-moving items could be spared for use by HAL on payment after approval of the Air HQ. Stores of the IAF held by HAL are as follows :

(i) Stores transferred from IAF.

(ii) Stores transferred by HAL to IAF stores from its own stores.

(iii) Stores fabricated by HAL.

(iv) Stores bought out by HAL from abroad.

4.2 As on June 1986 HAL held 2,23,802 items of stores valued at several crores of rupees on behalf of the IAF. Based on handling and agency charges paid to HAL during 1981-82 to 1985-86, the cost of inventory credited to IAF stores by HAL worked out as follows :

(Rupees in crores)

1981-82	19.41
1982-83	15.23
1983-84	15.17
1984-85	17.04
1985-86	19.67

4.3 As many as 40 *per cent* of the stores held by HAL on behalf of the IAF were non-moving and 30 *per cent* were slow-moving. At the Bangalore and Koraput divisions alone as many as 50,151 items were either slow-moving or non-moving. In addition, 11,271 obsolete and redundant items were held by HAL divisions as of March 1987. HAL had also procured certain items which increased the holding of slow-moving or non-moving items. Further, HAL had been using its stores for jobs entrusted to it by the IAF even though such stores were available in the IAF inventory held by it.

4.4 Contrary to orders issued in May 1973, HAL had been drawing large quantities of fast moving and expensive aircraft and engine spares from IAF stores from 1977 onwards for its own use without prior or even *post facto* approval of the Air HQ. Such transfer of stores, would affect the needs of the IAF in respect of repair and overhaul by HAL. Recovery towards the cost of these items has also not been effected fully from HAL. A sum of Rs. 260 lakhs only was recovered for the stores transferred during 1985-86.

4.5 The Koraput division of HAL had drawn stores in excess of actual requirements in the process of repair and overhaul of engines from 1982-83 to 1984-85 valued at Rs. 40.88 lakhs on account of breakage, spoilage etc. Based on the recommendations of the Chief Resident Inspector of the IAF, Rs. 40.88 lakhs were recovered by the Defence Accounts Department. However, the Division subsequently realised this amount under the head "Miscellaneous Expenditure" when working out a fixed cost quotation for repair and overhaul on IAF account.

4.6 Contrary to instructions, *ibid* 4,736 repairable items held by HAL from 1979-80 onwards were unrepaired as of April 1986. The cost of repair of these items had not been recovered from HAL. Separate bin cards for repairable stores in respect of items removed from IAF helicopters were not being maintained as required during 1985-86.

4.7 During the period 1972 to 1978, stores valued at Rs. 87.84 lakhs were transferred by HAL from its own stock to IAF stores. Payment procedures for stores so transferred upto 30th September 1977 were laid down by Government in May 1978. These stated, *inter alia,* that in respect of both fabricated and bought out items, HAL was to establish, specifically, a link between the items transferred and the work orders raised against the overhaul forecasts in support of the claim preferred for payment. Further, in respect of items transferred to meet inability demands, the Defence Accounts Department was to ensure before making payment that there were no balances in the stocks held by the relevant Air Force Depot necessitating issues of items from HAL stores. An on account payment of Rs. 62 lakhs for stores transferred upto September 30, 1977 was made to HAL in March 1978. This payment has not been adjusted (March 1987) since the following conditions were not satisfied :

(i) A link between stores transferred and work orders raised against overhaul forecasts was not established.

(ii) Cost documents for prices charged by HAL were not made available for verification.

(iii) Some of the stores transferred by HAL were not required for overhaul jobs.

4.8 HAL claimed (November 1987) practical difficulties in the retrospective application of these conditions and stated that this had been brought to Government's notice from time to time. Audit has not been informed of action taken by the Government in this regard.

4.9 In February 1985, the Air HQ was advised by the Defence Accounts Department that HAL had not complied with the accounting instructions issued in May 1973. Some of the more serious lapses are indicated below :

— Non-moving and slow-moving stores were not listed out.

— Redundant and obsolete stores were not listed out for obtaining disposal instructions.

— Items which could not be repaired were not disposed of and credit afforded to the IAF.

— The cost of repair of items removed from aircraft and engines on the overhaul line which had not been repaired within the stipulated two year period had not been credited to the IAF.

— Credit was not afforded to the IAF after the disposal of scrap arising out of removal of useful parts in respect of certain classes of condemned stores.

Subsequently, a joint IAF-HAL study indicated in June 1986 that :

— issues from IAF stores had been made by HAL for production purposes without obtaining prior sanction from Air HQ;

— stores were diverted for production purposes and *vice-versa* although these were required to be used exclusively for overhaul or repair;

— accounting documents did not have itemwise prices; and

— although HAL had carried out an exercise to identify non-moving and slow-moving items, the practice of doing this on a periodical basis was discontinued since there was no response from Air HQ who had been approached for disposal instructions.

5. The Ministry of Defence (Ministry) stated in November 1987 that the Joint Study Team did not find any serious situation in the inventory management of HAL held IAF stores. The Ministry, however, conceded that the study team had made "certain recommendations to make this inventory management more viable and effective in the areas of custody of overhaul/repair spares, price accounting, computerisation, stock-taking and also closer inter action between IAF and HAL in the areas like material budgetting commensurate with the overhaul task, review of slow-moving, non-moving items, cost of replacement/repairs, adequacy of the availability of the rotables, etc." The Ministry also stated that the shortcomings noticed by Audit would be overcome in due course.

53. Avoidable expenditure on purchase of aero-engines

On the basis of an indent placed in September 1982 by Air Headquarters (HQ) the supply Wing of an Indian Mission abroad (Supply Wing) placed an order in July 1983 for the purchase of two overhauled Aero Engines on a foreign firm at a cost of $ 46,000 (Rs. 4.88 lakhs). The size and residual life of cylinders forming part of engines were not specified. The engines were despatched by the shipping agent in September 1983 and received by the end user on 7th December, 1983.

As per the warranty clause of the contract, the engines were warranted for 100 flying hours or 90 days from the date of receipt by the end user or 12 months from the date of shipment whichever occurred first (warranty thereby expiring on 8th March 1984). In case of failure, the engines were to be returned to the firm on freight prepaid basis with complete log/defects report/date of receipt by the end user.

The engines when received, were found defective by the end user who informed the Supply Wing about this in January 1984 and also sent the detailed defect report in February 1984. The Supply Wing, however, apprised the firm of these defects only in April 1984 (one month after expiry of warranty). The Ministry of Defence (Ministry) stated in August 1987 that "the defects reported by the Air HQ had been communicated by the Supply Wing to the supplier on 30th January 1984 and defect report forwarded on 28th February 1984 which was within the warranty period". However, as per the Supply Wing, the firm claimed that they had not received the above communication in time. It is, however, seen from the records of the Supply Wing that no such letter was despatched prior to April 1984.

The firm while furnishing its comments (April 1984) disowned the responsibility of damages on the following grounds :

(1) The defects were not intimated within the warranty period.

(2) The type and size of cylinder to be fitted was not indicated at the time of placing the order.

(3) The engines should not have been installed if there was a physical damage.

(4) There was no major cause for return of engines. However, on it being suggested that the inspection/repairs may be got done by Hindustan Aeronautics Limited (HAL) the supplier did not agree to bear the cost of inspection by HAL. The firm, however, agreed in June 1984 to examine the Inspection Report of HAL.

On inspection by HAL, it was found (January 1985) that the main constraint on utilisation of the engine was the unknown life record of Cylinder Assembly. On life records of Cylinder Assembly being enquired from the firm, it expressed (September 1985) its inability to produce these records as these were not initially asked for and were not available.

The cost of repair of the engines was estimated (August 1985) at Rs. 6.72 lakhs (including labour charges of Rs. 1.34 lakhs). As these repairs were essential for putting the engines into use, the repairs were got done by HAL. The repair charges have not been accepted by the firm (July 1986).

Had the specifications *viz.* size and life of Cylinder been indicated at the time of placing the order and the firm informed of the defects within the warranty period, the expenditure of Rs. 6.72 lakhs incurred on the repair of aero-engines valuing Rs. 4.88 lakhs could have been avoided.

The Ministry stated (August 1987) that "the necessity for such a stipulation could not have been foreseen...................................... There is no precedent where the residual life and size of individual parts like Cylinders on an engine had to be specified in schedule of requirement".

54. Extra expenditure on procurement

(A) The Air Headquarters (Indentor) raised in February 1984 an urgent indent on a Supply Wing of an Indian Mission abroad (SW) for the procurement of 10 numbers of Pilot Parachutes, at an estimated cost of £ 22,260. The SW issued tender inquiries in April 1984, to two firms 'A' and 'B' who were considered to be the likely suppliers of the item. No tender inquiry was, however, issued to Firm 'C' although the part number of the indented item bore the abbreviated version of the name of the firm indicating that it was a proprietary item. Similar items were procured by the SW in August 1982 from Firm 'C'. Firms 'A' and 'B' expressed their inability to supply the item. In May 1984, the SW informed the indentor of the position and suggested that unless any other source of supply was indicated the indent should be treated as cancelled/withdrawn. In June 1984, the indentor intimated the SW by telex that the item was manufactured by Firm 'C'. Thereafter, the indentor sent four telex reminders between July 1984 and April 1985, to the SW, requesting finalisation of the contract. No action was taken by the SW till receipt of the sixth telex in July 1985 from the indentor. All the five telexes sent by the indentor between June 1984 and April 1985 were stated to have been misplaced in the SW. On receipt of the sixth telex, the SW issued a tender inquiry to Firm 'C' in August 1985. Firm 'C' quoted (September 1985) £ 5,979.56 per item. On receipt of this quotation the SW wrongly intimated the indentor, in December 1985, that the supplier had quoted £ 5,880 per unit and requested for sanction of additional foreign exchange. Firm 'C' agreed to extend the validity of its offer upto 4th March 1986, In October 1986, the indentor pointed out that he had already communicated the sanction for additional foreign exchange of £ 58,000 on 21st March 1986. followed by a reminder on 5th June 1986. On receipt of the indentor's letter dated 24th October 1986, the SW traced the misplaced file and contacted Firm 'C', who now quoted a revised price of £ 6,731.81 per unit. The SW, in December 1986, with the concurrence of the indentor, placed the order on Firm 'C' for 8 parachutes only. This resulted in avoidable extra expenditure of £ 6,018 (Rs. 1.04 lakhs).

In reply to Audit observations on the delay in conclusion of the contract, the SW stated in April 1987, that if only the firm had been mentioned in the indent or reference made to the procurement in the past, giving the previous contract details, the same would have been processed without delay; any loss suffered, therefore, is attributable to wrong/incomplete action on the part of the indentor.

The Ministry of Defence stated in November 1987 that the extra expenditure had been caused because the SW could not take any action on telex messages sent by the indentor in March and June 1986 as they were misplaced by the SW and only after receipt of further communication from the indentor in October 1986 could the SW trace the messages and take action to conclude the contract.

The fact remains that inaction by SW and the delay in communicating clearly the name of the supplier resulted in an avoidable extra expenditure of Rs. 1.04 lakhs.

(B) In December 1981, the Naval Headquarters (indentor) raised an operational indent on a Supply Wing of an Indian Mission abroad (SW) for procurement of compressed H.P. nitrogen cylinders. The quantity was amended in May 1982.

More than two years later, the SW issued an open tender inquiry on 22nd May 1984, clubbing the above requirement with five other indents received from Naval and Air Headquarters. The SW forwarded (September 1984) the quotations to the indentor for comments/acceptance. The indentor intimated in September 1984 his acceptance of the offer of firm 'A' with unit price of £ 212.75 ignoring the lower offer of firm 'C'. The SW sought (October 1984) necessary clarifications from the indentor for not selecting the offer of firm 'C'. The validity of the offer of Firm 'A' was also got extended upto 31st December 1984.

In his reply dated 14th November 1984 (received by the SW on 29th November 1984), the indentor clarified that though the offer of firm 'C' was technically acceptable, it was not considered on the ground of being conditional and that it may be accepted, if found cheaper otherwise. This was reiterated in the indentor's telex message dated 7th December 1984. However, as both these references were stated to have been misplaced in the SW, it was found necessary by the SW to send three reminders to the indentor in November 1984, March and April 1985. The indentor thereupon intimated (April 1985) the SW that the desired clarification had already been sent in November and December 1984.

In March 1985, the firm 'A' enquired from the SW whether a contract had since been placed. The SW did not however, follow up the matter till July 1985, when they requested firm 'A' to extend the validity of its offer from 31st December 1984 to 31st August 1985. Even thereafter the matter was not pursued by the SW till January 1986 when firm 'A' indicated that considering the time lag involved, it would not be able to revalidate its offer, solely for the small numbers of cylinders required. Firm 'A' quoted a revised unit price of £ 382.75 thus entailing an increase of 80 *per cent* over its original offer of July 1984. Although the price increase was considered by the SW to be unreasonable, in view of the pressing requirement of the indentor, a contract was concluded in April 1986 with firm 'A' thereby involving an avoidable extra expenditure of £ 6,800 (Rs. 1.18 lakhs). The amount will be Rs. 1.47 lakhs if the lowest tender of firm 'C' whose quotation the indentor had finally considered as technically acceptable was to be taken into consideration.

On this being pointed out (September 1986) by Audit, the SW stated in April 1987 that during reorganisation of the staff in the SW, there was serious dislocation of work, resulting in misplacement of the indentor's letter of November 1984 and firm 'A' was reluctant to supply the item at old rate if the entire quantity of the tender enquiry was not placed on it.

The fact remains that while the indentor required the supply of gas cylinders by October 1982, it was only in October 1986 that the supplies actually materialised at an extra avoidable expenditure of Rs. 1.18 lakhs.

CHAPTER 9

NAVY

55. Infructuous and avoidable extra expenditure in the acquisition of certain special purpose vessels

0.1. In the context of the security environment of the country, the Naval Headquarters (HQ) had expressed the need for acquiring certain special purpose vessels. Between 1976 and 1978, offers for the supply of the vessels were received from six shipyards in foreign countries. In February 1979 the Government set up a Price Negotiating Committee (PNC) for examining the offers in detail.

0.2. The offers were evaluated on the basis of specified Naval Staff Requirement by various agencies including the Naval HQ. Based on the recommendations of the PNC, Government approved short-listing of the offers of firm 'A' of country 'X' and firm 'B' of country 'Y' in April 1980. A Public Sector Undertaking (PSU) was also selected for the indigenous construction of the vessels.

0.3 The Naval HQ had also emphasised that the selection of ammunition 'Z' required for arming the vessels was a pre-requisite to the selection of the vessels. However, the release of ammunition 'Z' offered by firm 'D' of country 'Y' for use with the vessels of firm 'B' was subject to clearance by their Government.

0.4 According to the technical evaluation by the Naval HQ, the offer of firm 'A' was superior to the offer of firm 'B' by 174 points as the "best vessel" and by 84 points in the overall analysis.

0.5 According to the financial evaluation, the offer of firm 'A' for two vessels with two material packages (excluding spares) was cheaper by Rs. 11.41 crores.

0.6 The Ministry of Defence (Ministry), while confirming the above facts stated in September 1987 that it was only in the vessel's performance that firm 'B' was found below firm 'A' and in the case of transfer of technology and maintenance support the offer of firm 'A' was found below firm 'B'. The Ministry also mentioned that the financial evaluation indicated above was based on an unilateral offer of firm 'A' for a further reduction after the submission of the papers to the Government and that firm 'B' could not be given an opportunity to review their offer.

0.7 However, the offer of firm 'B' was superior by only 90 points regarding transfer of technology and maintenance support whereas the offer of firm 'A' was superior by 174 points as the "best vessel" for which criteria 50 *per cent* of the total points were allocated in the evaluation. The offer of firm 'A' was also superior by 84 points in overall assessment. In regard to the financial evaluation, it was known to the Government that firm 'A's offer excluding Base and Depot spares was cheaper. Instead of closing the option in favour of firm 'B', which Government knew was not the lowest, efforts could have been made to obtain revised offers.

0.8 In so far as the procurement of spares was concerned, the Ministry did not enquire into the abnormal variation in the prices of spares (355 *per cent*) quoted by the two firms although the spares philosophy of the Indian Navy was confirmed as understood by both the firms. The Ministry stated in September 1987 that the financial effect of the comparative cost of spares was only considered in passing. This point was crucial as borne out by subsequent events when firm 'B' increased the price of spares by Rs. 26.56 crores (compared to Rs. 19.31 crores offered by firm 'A') when the contract was to be concluded with firm 'B'.

0.9 Before entering into a contract with either of the two firms, the Government wanted to have a Memorandum of Understanding (MOU) which was intended to be a declaration of co-operative support between the two Governments and a pre-requisite for signing the contract. While the Government of country 'X' agreed wholly in May 1980 to the draft MOU without conditions, no such agreement had been reached with the Government of country 'Y' till 30th June 1980.

0.10 The Government approved (30th June 1980) the offer of firm 'B' of country 'Y' for procurement and indigenous construction of four vessels subject to the clearance of ammunition 'Z' to be supplied by firm 'D' and satisfactory acceptance of the essential features of the MOU by the Government of country 'Y' even though the offer of firm 'A' had emerged as the best techno-economic option and there was complete agreement with country 'X' on the MOU.

0.11 The Government of country 'Y' gave the clearance for sale of ammunition 'Z' of firm 'D' only in July 1980. However, instead of signing a satisfactory and acceptable MOU with the Government of country 'Y' a "Technical Assistance Agreement" was signed on 10th July 1981 and a Note Verbale was exchanged on 11th December 1981. The Ministry stated in September 1987 that while the administrative agreement proposed by country 'Y' originally was considered inadequate and did not meet the Government's own specified requirement, the final arrangement arrived at by exchange of a Note Verbale did cover this shortcoming. The provisions of the Note Verbale were subject to the constitutional and legal provisions of country 'Y' governing the export of armament and related material. In contrast, the draft MOU accepted by country 'X' did not contain such conditions.

0.12 The finalisation of Technical Assistance Agreement and Note Verbale with the Government of country 'Y' took eighteen months. Since the normal escalation clause operated during this period of eighteen months, Government was committed to an additional liability of Rs. 21.33 crores. Firm 'B', in the meantime, revised its prices upwards which necessitated further negotiations in August 1981. The increase in price (Rs. 101.55 crores) *inter alia* included:

— Rs. 5.80 crores as an *ex-gratia* one time payment due to revision of quotations by sub-contractors of firm 'B'.

— Rs. 27.20 crores (budgetary cost) for an increase in the cost of spares.

0.13 Since an agreement on the price of spares could not be arrived at, it was decided by the Government in November 1981 not to include the supply of spares in the contract but to procure them separately on a commitment from firm 'B' that it would supply the spares at fair and reasonable prices. Therefore, an *ad-hoc* provision of Rs. 32 crores was made. Ultimately, the spares originally quoted by firm 'B' at Rs. 5.44 crores and for which Government had provided Rs. 32 crores were being procured at a cost of approximately Rs. 60 crores. Of this, an amount of Rs. 16 crores had been paid upto September 1987. Had the abnormal variation in prices for spares quoted by the two firms prior to 30th June 1980 been analysed, the decision to exclude the spares from the main contract could have been taken earlier when the offer of firm 'A' was also available. This would have also resulted in the offer of firm 'A' being lower by Rs. 11.41 crores. Further, since the provision of Rs. 32 crores was 470 *per cent* higher than the estimate given by firm 'B' in June 1980 and was one of the factors which had tilted the scales in favour of firm 'B' during the comparative evaluation in June 1980 prior to the final selection of firm 'B', it is possible that firm 'B' had intentionally quoted a lower figure on spares though the spares philosophy of the Navy had been duly explained to the firm. Against a background of significant increase in the prices of spares and difficulties in negotiating an acceptable MOU, the Ministry did not explore the possibility of falling back on firm 'A' whose terms were advantageous. The Ministry stated in September 1987 that the negotiating committee did consider this option but did not pursue it further for the following reasons :

— firm 'B' had offered a better delivery schedule ; and

— similar problems could also arise in case negotiations were opened at that late stage with firm 'A'.

0.14 The Ministry's reply is not plausible on account of the following :

— To work out a satisfactory MOU (which, in the event, was not so satisfactory) the Government had laboured for a period of nearly 18 months. Had the earlier delivery schedule been a prime factor, the contract could have been concluded in June 1980 itself.

— The fact that firm 'A' had made an extension of their original offer made in May-June 1980 in February 1986 based on an enquiry of Government reveals that the Ministry's concern on "similar problems" arising in case negotiations were opened at that late stage with firm 'A' were groundless.

0.15 During negotiations in August 1981, it was argued by firm 'B' that after submitting their original offer in February 1979, their sub-contractors were no longer willing to maintain the same base price and the amount of escalation which firm 'B' had to pay to its sub-contractors was much more than the ceiling on escalation agreed to. Firm 'B', therefore, asked for Rs. 5.8 crores as an *ex-gratia*, one time payment to absorb these additional costs. This was accepted by Government. The claim of firm 'B' was not proved correct subsequently when the Naval authorities contacted a number of sub-contractors/suppliers of equipment to firm 'B' directly for the supply of a complete unit and spares. The quotations obtained were found considerably lower than the claims preferred by firm 'B'.

0.16 An important technical parameter of the vessel was "self-noise". The parameter was important enough to make Naval HQ insist on a "right of rejection" in the draft contract if the parameter was exceeded. Although firm 'B' was willing to accept penalties for a shortfall in the specified value of "self noise", it was not prepared to give a "right of rejection" to Government of India. The Naval HQ finally agreed to the position taken by firm 'B' in October 1981 with the stipulation that if the "self noise" parameters were exceeded, firm 'B' would analyse the reasons and take timely action for rectification before paying penalties. It was seen from papers made available to Audit, that an exacting technical requirement was not insisted upon on account of Government's apprehension that negotiations would break on this issue.

The Government's approval was obtained in November 1981 for the project at a cost of Rs. 359.59 crores.

0.17 Contracts were signed in December 1981 with firm 'B' for the procurement of 2 vessels and 2 material packages. Another contract was signed in December 1981 with firm 'D' for the supply of ammunition 'Z'. The vessels which were due for delivery in February and August 1986 were actually delivered in September and November 1986 after a delay of 3 to 7 months. The Ministry stated that a sum of Rs. 25 lakhs approximately has been recovered from firm 'B' as penalty for this delay.

0.18 The construction of 2 vessels by the PSU with the material packages contracted with firm 'B' which was to be completed in 1987 and 1988 respectively is expected to be completed only by 1990 and 1991. As a result of the abnormal delay in the completion of the vessels by the PSU the Navy will not be able to avail of the warranty of 30 months provided for the equipment ordered in the material packages. This is apart from the cost over-runs that are likely to occur and the impact which the delay will have on the operational commitments of the Navy.

0.19 The review, based on records made available to Audit by the Ministry, reveals the following :

— the price evaluation was defective in as much as the abnormal differential in the cost of spares was not analysed which led to much higher costs being incurred on spares subsequently;

— although a decision was taken in November 1981 to exclude the spares from the contract Government did not consider the fact that the offer of firm 'A' was lower by Rs. 11.41 crores;

— although the Government had approved in June 1980 the procurement of the vessel subject to a satisfactory acceptance of a MOU by the Government of country 'Y' only a conditional "Technical Assistance Agreement" was signed after a year and a half. This delay also resulted in delayed signing of the contract due to which firm 'B' sought a higher price as a one time, *ex-gratia* payment of Rs. 5.8 crores and extra expenditure of Rs. 21.33 crores on account of escalation in cost over one year arising out of delay in concluding the contract with firm 'B'; and

— an important technical parameter *viz.* "self noise", was not insisted upon in terms of the provision which did not allow the Naval HQ an unfettered right of rejection but merely left to the supplier to analyse the cause for excessive noise to remedy matters before paying any penalties. Clearly, the payment of penalties would be no compensation for an unacceptable noise level.

56. Introduction of a system on Naval ships—Infructuous expenditure thereon

0.1 The necessity of installing a computer based electronic system for the operations room of a ship required for activating the ship's tactical action and also for assisting the command in the decision making process was recognised in 1975 by the Naval Headquarters (HQ). It was decided to entrust the development of the system to the Department of Electronics (DOE). A decision was taken to equip Indian Naval Ship 'X' and frigates of series 'Y' under construction by a Public Sector Undertaking (PSU) with the system. The systems were to be delivered by DOE in October 1979 in respect of ship 'X' and April 1980 in respect of the first frigate of series 'Y' (Y1). As the development of the system by the DOE was behind schedule affecting the modernisation of ship 'X', Naval HQ cancelled the indent on DOE in April 1980 for development of the system for ship 'X' but retained the letter of intent placed for the system for frigates for future fitment in a ship to be nominated by the Navy as and when the DOE developed and proved the system fully. As an interim measure, a non-computerised system, available indigenously, was installed on ship 'X' at a cost of Rs. 104.06 lakhs during September-October 1982. A decision was taken in December 1980 by the Weapon and Electronics System Organisation (WESO) Steering Committee to resort to import.

0.2 The system manufactured by 3 foreign firms 'C', 'D' & 'E' was evaluated by different agencies *viz.* Defence Research Development Organisation (DRDO), DOE, Naval HQ and WESO during 1980-81.

0.3 Based on their evaluation of the system, the WESO steering committee had recommended in June 1981, the import of the system from firm 'C'. The Naval HQ commenced work on the operations room lay out in July and August 1981, to accommodate the system of firm 'C' in the frigates of 'Y' series (3 numbers) under construction in the PSU based on the WESO committee decision. Copies of the drawings received from firm 'C' were also forwarded by the Naval HQ to the PSU in November 1981 and the PSU was asked to proceed with the preparation of a mock up of the operations room on the basis of these drawings. The approved drawings were forwarded by the Naval HQ to the PSU in March 1982. The routing and lay out of cables were also undertaken on the 3 frigates as applicable to the system of firm 'C' because ship design and lay out is an involved and time consuming process and the total equipment fit had to be taken into account to arrive at a logical disposition of equipment and systems.

0.4 The Ministry of Defence (Ministry) appointed a Price Negotiating Committee (PNC) in September 1981 to commence price negotiations. While the choice of the system of firm 'C' had been clearly arrived at in view of expert recommendation, the Ministry had insisted in January 1982 that firm 'E' whose offer was also technically acceptable to the Navy should also be considered. Though this was accepted by the Navy, the Naval HQ did not make it clear either to the Ministy or in any of the subsequent PNC meetings that they had already issued instructions to the PSU to build the frigates compatible for the system of firm 'C'. This aspect, however, did not acquire material significance as the PNC, after examining various aspects, recommended in July 1983, the system of firm 'C' for further negotiations to be followed by award of contract as the overall offer of firm 'C' was less by about Rs. 16 lakhs. The Ministry, however, decided in October 1983 to purchase the system from firm 'E' provided it agreed to reduce the price to the level of firm 'C' as the Ministry reckoned that there was a distinct advantage in firm 'E's offer as it was promising delivery of the system five months earlier than firm 'C'. The Naval HQ, however, in a note of 26th November 1983 to the Ministry expressed preference for the system of firm 'C' explaining that :

— operations room lay out of all the 3 frigates had been undertaken on the basis of installation details of the system of firm 'C' and any change in the vendor at that stage would involve time and cost penalties. In addition, a minimum of 6 to 8 months would be required for carrying out alterations to the existing design; and

— saving of Rs. 90 lakhs in the cost of base repair facilities to be set up for the repair of the system as these facilities to that extent had already been contracted with firm 'C' for other equipment fitted on ship 'X'.

Notwithstanding the views of the Naval HQ, firm 'E' was called by the Ministry for negotiations starting from 7th December 1983. Firm 'E' after negotiations made the following concessions in their revised offer given on 12th December 1983 :

— reduction of 7.5 *per cent* in basic price ;

— reduction in escalation ceiling from 17 to 15 *per cent;* and

— delivery of partial system within 7 months instead of 8 months.

0.5 After receipt of the above offer from firm 'E', firm 'C' also delivered on the evening of 12th December 1983 an offer accepting a 5 *per cent* reduction on their basic prices. Firm 'C' also expressed their willingness to discuss an improvement in the delivery schedule. This was ignored. The Ministry, however, considered the price reduction offered by firm 'C' and proposed to firm 'E' on 14th December 1983 to reduce its basic price by 15 *per cent* and also reduce the ceiling on escalation to 14 *per cent* so as to make its offer comparable to the revised offer of firm 'C'. Representatives of firm 'E' protested against consideration of firm 'C's unsolicited offer. An assurance was, therefore, given to them by the Ministry that in case they were to accept the Ministry's proposal no further unsolicited communication from firm 'C' would be taken into account. Firm 'E' handed over a formal communication on the same evening *i.e.* 14th December 1983 accepting the proposal made by Government. However, before the Ministry met the representatives of firm 'E' on the same day, another letter was delivered by firm 'C' offering a further reduction of 2.5 *per cent* on the basic price and a reduction of 2 *per cent* in the escalation ceiling. This letter was, however, ignored.

0.6 The prices of the two firms after taking into account the second offer of firm 'C' stood as follows :

	Firm 'C'	Firm 'E'
Basic price	Rs. 13.69 crores	Rs. 13.79 crores
Enhanced price	Rs. 15.37 crores	Rs. 15.45 crores

0.7 Though the Naval HQ on 14th December 1983 once again advised the Ministry of the adverse implications of accepting the system of firm 'E', the Ministry decided in February 1984 to accept the offer of firm 'E' on the ground that :

— non-acceptance of firm 'E's offer after deliberations of over 2 years would seriously damage the Ministry's image and fairness in negotiations;

— early delivery offered by firm 'E' and the beneficial compensation with them on the research and development side would be of advantage; and

— firm 'E's price was also got reduced to the level of firm 'C'.

0.8 A contract was concluded on 19th April 1984 with firm 'E' at a basic price of $ 1,28,42,000 for 2 numbers of the system with an escalation limit of 14 *per cent*. Meanwhile, frigate 'Y1' had been commissioned in December 1983 without the computerised system after having a non-computerised system installed at a cost of over Rs. 100 lakhs as an interim measure.

0.9 The delivery schedule for 2 numbers of the system as per the contract was 20 and 22 months from the effective date of contract (19th February 1984) *i.e.* by December 1985 and February 1986. Firm 'E' delivered only a partial system in June 1985 and two complete sets of the system were expected to be delivered by September-October 1987 after a delay of 20 to 21 months.

0.10 The second frigate 'Y2' had to be commissioned in December 1985 with the partial system of the computerised system even after 20 months from the date of conclusion of the contract. In September 1985, the Ministry concluded another contract with firm 'E' for the supply of one more number of the computerised system for third frigate 'Y3' at a basic cost of $ 41,19,642 with provision for escalation. The firm delivered the main equipment to the PSU in December 1986 and the delivery of the remaining unit including spares had not been completed till September 1987.

0.11 According to the Naval HQ, the decision of the Ministry in February 1984 to import the system from firm 'E' instead of firm 'C' recommended by the WESO steering committee would result in :

— infructuous expenditure of Rs. 20.72 lakhs on account of procurement of a power panel and cables etc. (Rs. 4.25 lakhs), labour and profit of PSU (Rs. 16.47 lakhs), already incurred;

— additional expenditure of Rs. 235.95 lakhs (Rs. 78.65 lakhs per frigate) which is specific to the introduction of the system of firm 'E' instead of firm 'C';

— avoidable expenditure of Rs. 90 lakhs due to the erection of base repair facilities for the system of firm 'E' as these facilities to that extent had already been contracted with firm 'C' for other equipment fitted on ship 'X'; and

— the frigate becoming non-operational for about 12 months for the re-modification work.

0.12 The Ministry stated in August 1987 that the enquiries from the PSU had revealed that extra expenditure of Rs. 3.70 lakhs only was incurred for cabling, seating power panels etc. of the first frigate 'Y1' out of which Rs. 1.20 lakhs could be reutilised leaving Rs. 2.50 lakhs as infructuous expenditure and the Ministry further stated that no infructuous expenditure was involved in refitting the computerised system on frigates 'Y2' and 'Y3'.

0.13 The Ministry was, however, silent about infructuous expenditure of about Rs. 16.47 lakhs already incurred towards labour and profit of PSU in respect of the first frigate 'Y1'.

0.14 The Ministry further stated that while evaluating the offers, facilities existing with the users were not taken into account or given weightage and only like-to-like comparison of the offers were made. The Naval HQ was, however, of the firm view that the additional expenditure of Rs. 78.65 lakhs per frigate was specific to the introduction of the system of firm 'E' instead of firm 'C'.

0.15 The Ministry's position that the facilities existing with the users were not taken into account or given weightage while evaluating the offers would not be valid as this is one of the areas where the purchaser has to give suitable weightage to avoid multiplication of facilities and inventory, an important criterion in determining final selection in defence procurement.

0.16 Finally the primary consideration of an earlier delivery schedule which formed the basis for the Ministry's decision to award the contract to firm 'E' was also belied as firm 'E' was expected to deliver the 2 sets after a delay of over 20 to 21 months from the contracted date of delivery. No penalties were imposed on the supplier for late delivery even though the contract had provided for it.

0.17 The case reveals that :

— there were no well defined procedures prescribed for procurement of equipment from abroad;

— the specific recommendations of the WESO steering committee, PNC and the Naval HQ were ignored by the Ministry and preferential treatment was accorded to firm 'E'. One of the reasons for the rejection of firm 'C' being that if the order was not awarded to firm 'E', the Ministry's reputation would be seriously damaged;

— the Navy had gone ahead with advance action on the basis of the WESO steering committee's recommendation that firm 'C' was most suitable without obtaining prior approval of Government. No enquiry has been made as to how this had occurred nor has any responsibility been fixed; and

— the Ministry's efforts to bring firm 'E' at par with firm 'C' led to a delay of 2 years. This resulted in :

(a) delay in equipping the ships ranging from 21 to 45 months;

(b) additional cost on account of re-work for carrying out the modification and duplication of repair facilities to the extent of Rs. 3.47 crores; and

(c) frigates 'Y1' and 'Y2' being non-operational for additional periods of 12 months and 2 months respectively.

57. Review on the working of Material Organisation

1. *Introduction*

To meet the logistic needs of its ships and repair organisations, the Indian Navy has two Material organisations at station 'B' (MOB) and 'V' (MOV). In addition there are Naval Store Depots at three other stations which also meet the logistic needs of the fleet and repair organisations. The objective of these organisations is to arrange prompt supply of material at minimum cost with fewer occasions for rash purchases of stocks in order to promptly meet the demands of user units. The inventory of the Material organisations is built up by procurement, both centrally as well as locally, based on periodical reviews and against specific sanctions for refit and modernisation programmes.

2. *Scope of Audit*

A review on the working of the MOB was carried out in Audit with regard to provisioning, accounting, demand satisfaction and disposal of surplus holdings, etc. from the records of MOB, Controller of Defence Accounts, Navy (CDA) and the principal user units such as Naval Dockyard.

3. *Organisational set up*

The MOB was established in October 1972. The organisation is headed by a Material Superintendent who is assisted by Controller of Material Planning (CMP), Controller of Procurement (CPRO), Controller of Warehousing (CWH) and Controller of Technical Services (CTS).

4. *Highlights*

The review revealed significant deficiencies in material management in the MOB as evidenced by irregular and inadequate stock verification, excessive holdings of repairable items over long periods of time, several instances of over-provisioning, declining demand satisfaction and violation of accounting procedures apart from resorting to local purchases of items when sufficient stocks were available. The findings of the review given below point to the need for a comprehensive appraisal of existing procurement procedures with the objective of instituting a system to effect greater efficiency and economy.

5. *Provisioning*

5.1 Under the existing instructions, provisioning of stores is made on the basis of periodical reviews of assets and liabilities to maintain an optimum inventory by timely procurement of quantities required and disposal of quantities surplus to actual requirement to ensure avoidance of over-provisioning of stores. However, several instances of over-provisioning in disregard of the provisioning norms were noticed as detailed below :

5.2 *Item 'X'*

The average annual consumption of item 'X' during 1982 to 1986 was only 275.6 Kgs. Based on 4 indents placed by Naval Headquarters (HQ) the Director General of Supplies and Disposals (DGSD) concluded 7 contracts with 4 firms between August 1981 and June 1984 for procurement of 1,984 Kgs. of item 'X' at a cost of Rs. 34.59 lakhs. The supplies received between January 1982 and November 1984 were initially accounted for under 2 different part numbers and were merged together in April 1984. As on 1st March 1987, the MOB was holding stock of 1300.15 Kgs. costing Rs. 22.67 lakhs. At the present rate of consumption, this stock would last for nearly 5 years. Further, during the period from November 1983 to February 1984, MOB procured 138.725 Kgs. of item 'X' costing Rs. 2.66 lakhs under 6 local purchase orders notwithstanding the already available stock.

5.3 *Item 'Y'*

Based on 2 indents raised by Naval HQ, the CPRO procured 910 Kgs. of item 'Y' under two contracts in July 1981 and January 1983 with firm 'F1', at a cost of Rs. 13.24 lakhs. The stores received in January 1982 and November 1983 were first accounted for under 2 different part numbers. The stocks were merged together in April 1984. As on 1st March 1987 the MOB was holding a stock of 665.9 Kgs. of item 'Y', the average annual consumption of which during the period 1981 to 1983 was 63.436 Kgs. and that during 1984 to 1986 was only 4.6 Kgs. At this rate the stock of 665.9 Kgs. costing Rs. 9.79 lakhs would last indefinitely.

5.4 *Steel Plates*

In February 1978, Naval HQ placed an urgent indent on M/s. Hindustan Steel Limited, Calcutta, a Public Sector Undertaking (PSU) for arranging immediate rolling/supply to the MOB of 220 tonnes of type 'Z' plates required for repairs and maintenance of naval ships. The PSU supplied 215.05 tonnes of type 'Z' steel plates costing Rs. 8.93 lakhs between October 1978 and September 1979. MOB already had a stock of 25.851 tonnes of type 'Z' plates valuing Rs. 0.81 lakh. Till July 1985 there was no issue of this item. On being pointed out in Audit, the Ministry of Defence (Ministry) stated in October 1985 that the quantity was expected to be consumed progressively within four years. However, as on 31st March 1987, a quantity of 176.374 tonnes valued at Rs. 7.40 lakhs was still held in stock.

5.5 *Over-provisioning of Stores with shelf-life*

The existing orders on provisioning of stores stipulate that the quantity for procurement of shelf-life items should be arrived at discreetly by the provisioning officer with due regard to their shelf-life and past consumption pattern. However, the following cases of over-provisioning of shelf-life items were noticed in Audit :

5.5.1 *Paper document copying*

The shelf-life of this item is one year. The average consumption of the item during 1977 to 1979 was 30 rolls per year. In May 1980, 1,500 rolls were indented by Naval HQ against which the supply was received in April 1981, 670 rolls were issued in 1981 and 2 more subsequently. Thus, out of the quantity of 1,500 rolls received in April 1981, a quantity of 828 rolls valued at Rs. 3.49 lakhs whose shelf-life had expired, were lying in stock (March 1987).

5.5.2 *Battery Dry 15V*

The shelf-life of battery dry 15V (battery) is 6 months and the average consumption during the period from 1981 to 1983 was 609 numbers. However, based on a Naval HQ indent of October 1981, the CPRO concluded a contract in July 1983 with M/s. Toshiba Anand Battery, Cochin (firm) for the supply of 1,650 numbers of battery at a cost of Rs. 0.50 lakh. The supplies were received in October 1983. While the above order was pending, CPRO placed a local purchase order in August 1983 on the same firm for the supply of 865 numbers at a cost of Rs. 0.27 lakh which was received in October 1983. However, against a total receipt of 2,515 numbers only 927 were issued and the balance 1,588 numbers costing Rs. 0.48 lakh were declared unserviceable and transferred to disposal store house in May 1985.

5.5.3 *Paints*

The shelf-life of paints is one year. 36 items of life expired paints of various specifications costing Rs. 25.62 lakhs were held by MOB in March 1987. Of these 36 items, 9 items were received in the Depot after the expiry of a substantial portion of shelf-life. Out of the shelf-life expired paints worth Rs. 25.62 lakhs held in stock, stores worth Rs. 6.28 lakhs were procured through local purchase during April 1982 to December 1985.

The life expired paints held in stock were not sent to Surveyor of stores/Central Dockyard Laboratory for examination before expiry of shelf-life as required under existing instructions.

In yet another case based on the Naval HQ indent of June 1983, the MOB placed an order in February 1985, on firm 'F2' for the supply of 39,400 litres of paint anti-fouling red including 10,000 litres for MOV at a total cost of Rs. 24.23 lakhs. A quantity of 29,400 litres of the paint meant for MOB was received between July 1985 and March 1986.

In the meantime in March 1985, MOB placed 3 local purchase orders for a total quantity of 1,800 litres of the same paint on the same firm which was supplied in August 1985. Again in July and August 1985, MOB placed 3 more local purchase orders for a total quantity of 1,920 litres of the same paint on another firm 'F3' and the supplies materialised during November 1985 and June 1986.

Thus, a total quantity of 33,120 litres of paint was received by MOB between July 1985 and June 1986 against central and local purchase orders. Of these, MOB issued a total quantity of 22,024 litres between July 1985 and March 1987 to various ships/establishment and a Naval Dockyard. A quantity of 3,840 litres (value Rs. 2.36 lakhs) was returned by the Naval Dockyard as the paint supplied to them was shelf-life expired. As on March 1987 MOB was holding a stock of 14,936 litres of paint received against central purchase order of February 1985, the shelf-life of which had already expired.

6. *Accounting Matters*

6.1 *Computerisation of accounts*

An attempt to computerise the inventory system was made in April 1972 with the introduction of a computer costing Rs. 29.62 lakhs at MOB but the effort to achieve an integrated computerised material management system was not very successful and had co-existed with maintenance of manuscript ledgers. Efforts were under way (March 1987) to develop a new system for computerised accounts of inventory at a cost of Rs. 26.8 lakhs, by discarding the system installed earlier.

6.2 *Receipts*

As per the existing instructions, stores when received are to be taken on charge with least possible delay. It was, however, seen in Audit that 2,293 packages of stores received were lying un-opened for more than 3 months at the end of October 1986. The Ministry stated in November 1987 that a special team had been nominated in early 1987 and the job of opening was in progress. Apart from the delay in opening the packages and accounting of the stores contained therein, there were 502 vouchers valued at Rs. 84.11 lakhs pending for verification of credit by internal audit in the ledgers for the period from 1978-79 to 1985-86.

6.3 *Outstanding Specification Certificate of Quality*

Stores supplied by a foreign country are taken on charge on Certified Receipt Vouchers (CRVs). The specification certificate of quality (SCQ) accompanying the package is required to be linked by the CDA. It was seen in Audit that CRVs in respect of 82 SCQs valued at Rs. 7.86 crores, payment for which had already been made during 1973-74 to 1985-86, had not been linked by the CDA till March 1987.

6.4 *Outstanding Railway Claims*

126 Railway claims totalling Rs. 29.62 lakhs preferred against the Railways by MOB were outstanding since 1976-77 to 1985-86 (November 1987).

6.5 *Loss Statements*

Prompt action is required to be taken to finalise the losses incurred. Out of 343 loss statements valuing Rs. 25.57 lakhs raised during the period from 1981-82 to December 1986, only 261 loss statements valuing Rs. 5.58 lakhs were regularised. The remaining 82 loss statements for the period from 1981-82 to 1987 valued at Rs. 19.99 lakhs were yet to be finalised (March 1987).

In the audit of 100 loss statements, it was seen that in 69 cases, delay in raising the loss statements from the date of detection of the loss was more than 1 year out of which in 6 cases the delay was between 5 to 18 years. Similarly, in the case of regularisation of losses, the delay was more than 1 year from the date of detection of the loss in 75 cases out of which in 10 cases the delay was between 5 to 19 years.

6.6 *Demand Satisfaction*

All the demands for stores are received in CMP and are registered on a computer. After authorisation for issue, the demands are sent to CWH. The Management Information Service Cell maintains record of demands authorised for issue by CMP. During the period from 1983-84 to October 1986 the level of satisfaction of demands achieved by the MOB was as under :

Demand satisfaction achieved in percentage

Year	1983-84	1984-85	1985-86	1986-87 (Upto October, 1986)
	72	67.7	53.4	33.3

Thus, the demand satisfaction showed a downward trend over the years.

6.7 *Stock Verification*

6.7.1 Naval Store accounting instructions stipulate that the physical verification of all the items should be carried out periodically and all discrepancies between ground balances and ledger balances should be investigated and regularised under the orders of competent financial authorities. The stock verification carried out in MOB during 1979-80 to 1983-84 had revealed 29,827 cases of discrepancies. There were delays ranging from 19 days to 165 days for punching of demands to posting of the issues in the ledger and 10 to 60 days for initiation of receipt vouchers and transfer vouchers to its postings with the result that there was seldom any agreement between ground balances and the ledger balances. There were also instances of issues of store during the course of stock taking leading to incorrect assessment of ground balances. As discrepancies continued to persist, a Board of Officers was constituted in July 1985 at the instance of Audit to investigate the irregularities in the maintenance of the accounts relating to annual stock verification.

6.7.2 Though a large number of discrepancies had been reconciled, on the recommendations of the Board of Officers, 5,414 discrepancies remain to be reconciled at the end of September 1987 as detailed below :

Year	Number of discrepancies outstanding
1979-80	317
1980-81	32
1983-84	5,065
	5,414

(Value of discrepancies was not known as the ledgers were not priced).

Stock verification for the year 1984-85 was completed by July 1986 but stock verification for the years 1985-86 and 1986-87 had not been carried out till May 1987.

6.7.3 The Ministry attributed the delay in accounting of receipts, and posting of receipt/issue vouchers to acute shortage of manpower *vis-a-vis* phenomenal increase in the inventory due to induction of a large number of new ships and equipment, further aggravated by the ban on recruitment. While confirming the incorrect assessment of ground balances, Ministry admitted in November 1987 that the progress on stock verification was slow.

6.8 *Repairable Inventory*

Though the main reasons for the delay in repairs were attributed to non-availability of spares and long lead time involved in procurement of certain spares as also due to non-availability of required drawings/specifications for undertaking repairs, it was seen in Audit that a large number of repairable items were held in stock of the MOB for a long time as indicated below :

	With the MOB		With repair organisation	
Period	No. of item	Value (Rs. in lakhs)	No. of items	Value (Rs. in lakhs)
Over 1 year	866	8.82	5,842	60.16
Over 2 years	681	6.93	5,601	57.01
Over 3 years	4,192	40.56	4,475	43.22
	5,739	56.31	15,918	160.39

Thus, at the end of September 1986 the MOB was holding 21,657 repairable items valued at Rs. 216.70 lakhs for periods from over one year to over three years. Apart from this 5,274 items valued at Rs. 51.62 lakhs approximately which were declared beyond economical repair (BER) were also held for over one to three years without any disposal action being initiated by MOB.

6.9 *Disposal of surplus stores*

In its 35th surplus report which MOB had forwarded to Naval HQ in September 1986 it was stated that ERW boiler tubes of 47 types (48,720 Nos.) valued at Rs. 36.12 lakhs had become surplus due to decommissioning of ships for which they were procured and had been recommended for disposal. An audit scrutiny of the bin cards of all these items had revealed that in 20 cases valuing Rs. 17.26 lakhs fresh receipts/procurement made when sufficient quantities of these items were already available with MOB. In 6 out of 20 cases there was no consumption during 3 years preceding the date of last receipt and in another 3 cases valuing Rs. 1.51 lakhs due to avoidable local purchase the stock had become surplus. In the remaining 11 cases, items were procured when sufficient stock was available. Thus, the procurement of stores in all these 20 cases valuing Rs. 17.26 lakhs was avoidable.

6.10 *Delay in disposal of surplus equipment*

Disposal of 5 items of serviceable electrical equipments valued at Rs. 3.83 lakhs was sanctioned by Naval HQ in October 1976. These were declared by MOB to DGSD in March 1982 for disposal. The equipments were not disposed of by the DGSD as it was decided in an inter-departmental meeting between the Department of Supply and the Ministry that surplus metallic stores and alloys remaining un-disposed by July 1986 should be reverted to the stock holders.

The items were subsequently referred to the Metal Scrap Trading Corporation and one item costing Rs. 0.62 lakh was disposed of in June 1987. The other 4 items valuing Rs. 3.21 lakhs were awaiting disposal in August 1987.

7. *Other Topics*

7.1 *Extra expenditure on import of indigenously available items*

Based on a Naval HQ indent of November 1981 the Supply Wing of an Indian Mission abroad (SW) concluded a contract with a foreign firm 'FF3' in July 1982 for the supply of 19 items of machinery spares at a cost of Rs. 22.88 lakhs. The stores were received during July 1983 to March 1984. In February 1982, however, Naval HQ had also raised another indent on the Chief Inspectorate of Machinery and Spares at Station 'B' for indigenous development of 11 of the 19 items included in the contract at a cost of Rs. 2.47 lakhs. The records of MOB revealed that 7 of these 11 items had been procured earlier from indigenous sources against local purchase order placed between November 1974 and May 1981. The 7 items imported in July 1982 at a cost of Rs. 17.73 lakhs in foreign exchange would have cost only Rs. 6.60 lakhs based on last local purchase rates. Thus, an expenditure of Rs. 11.13 lakhs in foreign exchange could have been avoided as the items were earlier procured from indigenous sources.

7.2 *Local purchase of stores for modernisation project of a ship*

During March 1978 to January 1981, MOB procured locally 49 items of various types of valves and flanges valuing Rs. 10.9 lakhs against urgent demands raised by the project team for modernisation of ship 'S'. The valves supplied direct to the users in order to avoid delay were returned by the ship in December 1981 on the ground that due to delay in supplies materialising, the original valves had been refurbished and used by the ship. There was no issue of the flanges procured locally. Thus, stores worth Rs. 10.9 lakhs procured locally specifically for the modernisation of the ship were not utilised for the project and were being held in stock (May 1987).

7.3 *Procurement of broadcasting equipment*

7.3.1 In December 1973, Government sanctioned replacement of the existing broadcasting equipment which had outlived their useful life on board 9 ships at a total cost not exceeding Rs. 59.75 lakhs. Department of Defence Supplies placed an order on a private firm in January 1975, for the manufacture and supply of 68 items at a total cost of Rs. 55 lakhs. The supply was to be made between early 1976 and June 1977. The order provided for increasing the quantities based on system drawings to be prepared by the firm. The firm supplied system drawings in December 1978. Based on which the supply order was amended in October 1979 to Rs. 59.90 lakhs for supply of 87 items and the period of delivery was also extended upto December 1984. The Naval authorities had complained in September 1976 and August 1977 that the delay in supply was bound to adversely affect the programme of introducing the system on ships which were scheduled for refit.

7.3.2 Upto May 1987 the firm had supplied stores worth Rs. 55.97 lakhs of which stores valued at Rs. 31.76 lakhs were issued to different ships, leaving a balance of stores valued at Rs. 24.21 lakhs which were lying in deposit stock with MOB (May 1987).

Of the 9 ships for which the systems were procured 3 ships were decommissioned in September 1985, October 1985 and June 1986.

7.3.3 Thus, the delay in finalisation of the system drawings by the firm and failure to order exact quantities, keeping in view the likely decommissioning of ships had resulted in excess procurement of equipment worth Rs. 24.21 lakhs.

58. Construction of Yard Craft

1. *Introduction*

Yard craft form an essential complement of the Naval Dockyards and Base Repair Organisations of the Navy. These are used to replenish rations, stores, POL, ammunition, etc., to warships while they lie in harbour. They are also operated for ferrying personnel from ship to shore, shore to shore and *vice versa* while proceeding on duty, leave and for rest. Yard craft are ordered for construction depending upon these operational demands. The Yard craft plan of the Indian Navy for 1972—79 which was essentially a re-cast plan formulated earlier had *inter alia* included the construction of Ferry craft and Oiler.

2. *Scope of Audit*

A review was carried out in Audit of the construction and acquisition of the Ferry craft and the resultant consequences on account of delay in acquisition were examined with reference to the contract files in Naval Headquarters (HQ), hiring sanctions issued by the Ministry of Defence (Ministry), payments made by the Controller of Defence Accounts (Navy) and repair works of old craft undertaken in the Naval Dockyard, Bombay.

3. *Highlights*

The review had revealed that there was abnormal delay of 13 to 20 years and cost over-run in the supply of Ferry craft leading to (i) avoidable losses and additional expenditure of Rs. 505.36 lakhs, (ii) consequent hiring of Ferry craft from civil sources at Rs. 105.05 lakhs, (iii) retention of old craft which had out-lived their useful life by effecting extensive repair amounting to Rs. 126.83 lakhs besides, (iv) affecting operational efficiency of the Navy. In addition, the review revealed that the acquisition of a Ferry craft for Goa port while the Navy have no berthing facilities there resulted in the transfer of the Ferry craft to Naval Dockyard, Bombay which led to continuous hiring of Ferry craft at Goa involving additional expenditure of Rs. 31.81 lakhs during April 1979 to June 1987.

4. *Construction of 4 craft*

4.1 To cope with the increased commitments of the Navy, the Ministry accorded sanction in December 1969 for the construction of 4 ferry craft through the Director General of Supplies and Disposals (DGSD) at an estimated cost of Rs. 60 lakhs including Foreign Exchange (FE) element of Rs. 2 lakhs. The craft were required to replace the existing old ferry craft.

4.2 Against an indent placed by Naval HQ in February 1970, the DGSD concluded a contract with firm 'A' the lowest tenderer in March 1971 for the construction of 4 ferry craft at a total cost of Rs. 80.60 lakhs including delivery charges of Rs. 4.80 lakhs. All the 4 craft were scheduled for delivery by 10th March 1973.

4.3 In January 1972, the DGSD had unilaterally amended the contract, withdrawing their commitment to reimburse the sales tax charged on the project on the advice of Ministry of Law in August 1971, to the effect that contracts for supply of ships and river craft were in the nature of works contracts not liable to sales tax. The firm had objected to this unilateral decision but had continued with the construction reaching the third stage (completion of hull) and had received stage payments aggregating Rs. 37.93 lakhs upto April 1973. Thereafter, work on the craft was stopped by the firm. In July 1973, the representative of the firm pointed out that it was being put to additional financial burden due to increased payment of sales tax (instead of the concessional rate of central sales tax) on bought out items and machinery and offered to give an undertaking to the effect that in case it was ordered by a court of law that sales tax was not payable in such contracts, the amount of sales tax paid would be refunded. In order to resolve the deadlock, Department of Supply decided in April 1974 to accept the firm's proposal for reimbursement of sales tax on its giving necessary undertaking. The firm furnished (April 1975) the undertaking in the form approved by the Ministry of Law but in the meantime (March 1975) a general policy decision had been taken by the Department of Supply that no sales tax should be paid where the contract had been termed as 'works contract'.

4.4 In September 1975, the firm expressed financial difficulties and asked for escalation in the price on account of wages, major bought out items *vis-a-vis* plant and machinery. Therefore, a post contract negotiation was taken up with the firm in November 1976 and a net increase in prices of Rs. 47.31 lakhs was authorised, thereby increasing the total price of the contract from Rs. 80.60 lakhs to Rs. 127.91 lakhs. Based on this the firm was paid a sum of Rs. 18.11 lakhs representing 45 *per cent* of the increase in respect of bought out items against bank guarantee and the delivery dates were re-fixed. Based on the revised delivery schedule the first craft was to be delivered by April 1978 and balance 3 at regular intervals of 2 months thereafter.

4.5 The firm, however, failed to deliver the craft within the revised delivery dates. The Naval HQ while expressing their apprehensions about the intention of the firm, recommended cancellation of the contract in March 1979. The contract was terminated by DGSD on 15th June 1981 at firm's risk and expense.

4.6 The risk purchase action was initiated by DGSD in November 1981 and tenders were opened in February 1982. There were 9 tenders which included 2 from Public Sector Undertakings (PSU 'X' and 'Y'). The lowest quotation of Rs. 74 lakhs per craft from firm 'B' was, however, rejected because the firm had serious financial and technical manpower problems and their performance against an existing contract was poor, and an administrative decision was taken to negotiate and consider placement of contract only with the 2 PSUs. DGSD decided to place the order on PSU 'X' as their offer was considered to be the lowest technically acceptable. The final price was to be negotiated but in any case was not to exceed Rs. 1 crore per craft. A contract was concluded with PSU 'X' in August 1983. The four ferry craft were delivered between February 1986 and July 1986. The actual cost of construction of the 4 Ferry craft by PSU 'X' could not be finalised by the DGSD and as a result no demand could be raised against firm 'A' till October 1987.

4.7 The extra expenditure as a result of utilising the offer of PSU 'X' was Rs. 283.32 lakhs plus escalation thereon. As advised by the Ministry of Law, the amount for which a claim could be made on firm 'A' towards risk purchase loss would have to be restricted to the extra amount which would have been incurred had the contract been placed on firm 'B' and the extra amount which would have become payable to firm 'B' in completing the work upto 3rd stage. Thus, by placing the contract with PSU 'X' an amount of Rs. 233.73 lakhs would become irrecoverable.

4.8 Meanwhile, to meet the Naval requirements at Bombay, the Navy had to resort to :

— retaining 3 old craft which had outlived their useful life by carrying out extensive repairs. Expenditure incurred on such repairs during the period from 1973-74 to 1985-86 amounted to Rs. 61.37 lakhs and

— hiring Ferry craft from private launchers from July 1980 onwards. Expenditure incurred on such hiring during the period from July 1980 to July 1986 amounted to Rs. 105.05 lakhs.

5. *Construction of one Ferry craft for Goa*

5.1 The Indian Navy does not have any jetty of its own at Goa. Being a busy commercial Port, the Port Trust authorities accord low priority to Naval ships for along-side berthing. The non-availability of ferry craft at Goa was considered a serious operational constraint and Naval HQ proposed to the Ministry in January 1976 for the provision of one ferry craft for Goa. The Ministry accorded sanction in June 1976 at an estimated cost of Rs. 27 lakhs. However, the procurement cost was enhanced to Rs. 47.52 lakhs in January 1978 as the lowest quotation of firm 'B' for that amount was considered technically and commercially acceptable and a contract was concluded by the DGSD with this firm in March 1978.

5.2 The craft which was scheduled for delivery by April 1979 was actually delivered only in September 1983 after a delay of over 53 months.

5.3 In the absence of a Naval jetty at Goa, the Navy was entirely dependent on the Goa Port Trust for berthing facilities and quay charges of Rs. 3,000 approximately per day have to be paid to them. As this would entail considerable expenditure, Naval HQ issued orders in April 1980 for the diversion of the craft to Bombay till a berthing facility comes up at Goa. The craft on its receipt in September 1983 was, therefore, placed at Bombay though initially procured for use at Goa. The requirement of Navy at Goa, however, continued to be met by hiring launches and the cost of hiring during the period April 1979 to June 1987 amounted to Rs. 31.81 lakhs.

6. *Construction of an Oiler*

6.1 Naval HQ proposed in December 1966, the construction of one self-propelled oiler as replacement. The Ministry accorded sanction in June 1968 for the construction of the oiler at an estimated cost of Rs. 42 lakhs (including FFE Rs. 13 lakhs).

6.2 In February 1969, the Naval HQ raised an indent on the DGSD for the construction of the oiler. While the tenders were under scrutiny by the DGSD, the Naval HQ intimated in August 1969 certain changes in the specification of pumps of the oiler. As a result the DGSD obtained revised quotations and the quotation of Rs. 48 lakhs by firm 'C' was the lowest. Pending issue of revised Government sanction to cover the increased cost, the Naval HQ advised the DGSD to keep the offer of firm 'C' open as it was valid till 3rd November 1969. The validity date of the offer was accordingly got extended by the DGSD upto 3rd May 1970 in stages.

6.3 On 18th April, 1970 Naval HQ intimated that the revised sanction for enhanced cost of construction of the oiler was under issue and that the order be finalised with firm 'C' so as to take advantage of the offer within its validity date *i.e.* 3rd May 1970. The original sanction was amended on 7th May 1970 enhancing the estimated cost of the oiler from Rs. 42 lakhs to Rs. 50 lakhs. Firm 'C' on 5th May 1970 stated that due to increase in the price of the steel and machinery and escalation of wages, their quotation would be Rs. 51.48 lakhs. The firm later on agreed as a result of negotiations to lower the base price from Rs. 51.48 lakhs to Rs. 48 lakhs subject to the following adjustments :

— increase of Rs. 16,900 in the cost of the main engine and

— introduction of a wage escalation clause which did not exist in the original offer.

With the above stipulations, a contract was concluded in December 1970 by DGSD with firm 'C' at a contract price of Rs. 48.32 lakhs.

6.4 In accordance with the contract, the delivery was to be effected within 18 months from the date of issue of import licence for major items such as electric capstan, electro hydraulic steering gear etc. As the import licence for all the items could be issued to the firm only on 16th July 1973, *i.e.* after a lapse of over 30 months from the date of acceptance of the contract, the DGSD refixed the delivery date of the oiler as 4th September 1975 or earlier. The oiler could not be supplied by the firm within the stipulated delivery date and the firm in 1975 had sought for upward revision of price owing to steep increase in cost. This request of the firm was considered by the committee of Economic Secretaries in January 1976 when it was decided to allow the price increase to cover such inescapable escalation as they felt that the cancellation of the contract at that stage would necessitate retendering which might result in payment of higher prices and greater delays and also the loss of advance already made to the firm. Thereafter, the date of delivery of the oiler was revised on many occasions and the final date of delivery was extended upto 30th June 1986. The oiler was finally delivered to the Navy on 5th June 1986. The firm was paid a sum of Rs. 57.19 lakhs upto August 1986 on account of various stage payments.

6.5 In October 1986, the firm submitted a claim for overall costs amounting to Rs. 324.67 lakhs in respect of the oiler constructed by them on account of escalation of cost of labour, materials and overheads as against the original contract price of Rs. 48.32 lakhs. The Cost Accounts Branch of the Ministry of Finance after verification recommended in December 1986 for the payment of Rs. 319.95 lakhs against Rs. 324.67 lakhs claimed by the firm. The recommendations of the Cost Accounts Branch were under study at the level of the Naval HQ/DGSD and final decision was awaited in October 1987.

6.6 Due to the delay in the construction of the new oiler, the Navy had to keep the existing oiler, which had outlived its utility since 1966, in service to meet the Navy's requirements, thereby incurring heavy expenditure on its maintenance, repairs and refits. Expenditure incurred on such repairs and maintenance since 1967-68, *i.e.* since the time its replacement was being considered to 1985-86, amounted to Rs. 65.51 lakhs.

7. The Ministry stated in October 1987 that :

— a clear picture about the amount becoming irrecoverable as a result of placing order on PSU 'X' would emerge only after recoveries were made from firm 'A';

— heavy expenditure on the maintenance, repairs and refit of oiler 'B' could not be avoided as the contracted oiler was not available as scheduled to meet the Navy's requirement; and

— the fierry craft procured for Goa had to be stationed at Bombay due to non-availability of Naval jetty at Goa.

59. Delay in setting up of repair facilities for Naval ships

An agreement was signed in February 1981 with a foreign Government for the purpose of acquiring 6 special vessels at a cost of Rs. 18 crores. The vessels were delivered/commissioned between May 1983 and May 1984. Although maintenance and support requirement should have been considered and firmed up before the acquisition of the vessels or simultaneously, product support was not included in the contract for the acquisition of the vessels. A detailed project report was obtained after 2 years in October 1983 at a cost of Rs. 33.84 lakhs. Thereafter, it took 27 months for the Government to approve (February 1986) the augmentation of repair facilities at the Base Repair Organisation (BRO) at Station 'A' at an estimated cost of Rs. 26.22 crores. Of this, civil works were estimated to cost Rs. 10.57 crores and equipment Rs. 15.65 crores. The project is expected to be completed by early 1989.

Meanwhile, Naval Headquarters had obtained Government's approval between October 1983 and December 1985 for the creation of certain facilities required for the repair and refit of the vessels at the BRO at Station 'A' at a cost of Rs. 5.38 crores. The works were to be completed at various dates between the end of 1987 and April 1990.

Repairs in respect of the vessels and the various equipment that they carry were required to be undertaken at various intervals of time ranging from one year to 7.5 years. It was noticed in Audit that there was a serious mismatch between the schedule of repairs and creation of facilities. In fact, approximately half the normal operational life of the vessels would be over by April 1990 which is the probable date of completion of the facilities. The Ministry of Defence (Ministry) stated in January 1986 that only limited and emergent repairs of navigational equipment are being carried out by the BRO despite the lack of necessary support facilities. The Ministry stated in October 1987 that current repairs of 2 vessels were undertaken in 1987 by resorting to improvised repair/maintenance procedure and utilising the existing facilities of BRO.

Two contracts were signed with the foreign Government in September 1984 for the supply of equipment and instruments required for the proposed weapons workshops at the BRO at a cost of Rs. 1.23 crores. The supplies were received at Station 'A' in September 1986 but have been kept in storage pending the completion of the workshop building in 1989. Meanwhile, the warranty period on the equipment had expired.

The modified slipway at Station 'A' was expected to be completed only by mid-1989. Pending completion, dry docking requirements were being off loaded to available commercial docks. Expenditure on this account from 1983 to July 1987 amounted to Rs. 15.37 lakhs. Likewise, further expenditure would be incurred on this account till April 1990.

The Ministry stated in October 1987 that the project reports for the creation of new facilities/augmentation of existing facilities have to be studied which was a time consuming process. However, efforts were made to conclude product support contract expeditiously to avoid delay in setting up and commissioning shore infra-structure. As regards the equipment received in 1986 for which warranty had expired, the Ministry stated that these would be installed, tested and commissioned by a team of foreign specialists.

The case reveals that :

— support facilities required for the vessels in order to retain specified operational capabilities were not considered at the time of contracting the acquisition of vessels in February 1981;

— it took over 5 years preparing a detailed project report and obtaining Government's approval;

— the repair facilities were estimated to cost Rs. 33.17 crores *i.e.* approximately twice the cost of the acquisition of the vessels (Rs. 18 crores); and

— the support facilities were expected to be ready by April 1990 when the vessels would have completed approximately half of their operational lives.

60. Irregular appropriation of Government funds

In May 1982, Government decided to locate a Naval Academy at station 'A'. The land required for housing the academy was to be given by a State Government free of cost. This land was acquired by the State Government at an estimated cost of Rs. 25 crores.

The Naval authorities took over 979.65 hectares of land from the State Government and a detachment of the academy headed by a Project Officer was set up in January 1984 for custody of the land. The land acquired (January—June 1984) had 809 buildings standing thereon besides large plantations of coconuts, arecanuts, pepper, cashew, jackfruit and mangoes. Till February 1987, the entire crop from the plantation as also the fishing rights were sold by the Naval authorities to private parties on an annual basis. Out of a total revenue of Rs. 60.96 lakhs realised, only a sum of Rs. 0.71 lakh being the cost of sale of dead trees and the grazing rights was credited to the Government and the balance amount of Rs. 60.25 lakhs was credited to the Navy's regimental funds (non-public funds).

Though it was more than 3 years since the land along with 809 buildings was taken over by the Navy, the buildings were not handed over to the Military Engineer Services (MES) for care and upkeep. The Naval authorities allotted one building to a bank in December 1984 and 18 others to private parties in January 1986 without entering into any agreement with them and also no recovery of licence fee was made from them.

Ministry of Defence stated in August 1987 that :

> Government orders of 1977 and 1985 authorised local units to credit the revenue received from plantation etc., to the non-public funds.
>
> The Public Works Department had been asked to assess the rent for the building allotted to the bank and no building had been leased/rented to any contractor though details of the 18 buildings allotted had been intimated by the Naval authorities to the MES in January 1986.

An examination of the Government orders issued in 1977 and 1985 revealed that these are not applicable in the case of the Naval Academy when no troops are stationed and the Navy only exercised the protective custody of the land. Thus, the revenue of Rs. 60.25 lakhs realised on account of sale of usufruct and fishing rights which should have been credited to Government account was irregularly appropriated to non-public fund accounts of the Navy.

61. Construction of a dry dock

In September 1968, Government approved the setting up of a Naval Dockyard at an estimated cost of Rs. 95.90 crores. The Project report *inter-alia*, envisaged construction of two dry docks (South and North) contiguous to each other. The South dry dock was constructed between 1969 and 1979 at a cost of Rs. 21.17 crores and was handed over to the users in 1979. The Audit findings in respect of the construction of the South dry dock were mentioned in para 20 and 40 of the Reports of the Comptroller and Auditor General of India, Union Government (Defence Services) for the years 1975-76 and 1984-85 respectively.

Government's approval was accorded in August 1978 to the construction of the North dry dock at a cost of Rs. 14.78 crores. Naval Headquarters (HQ) later, decided that instead of one single compartment, as originally envisaged, the North dry dock should have two separate compartments, one for type 'A' vessels and the other for type 'B' vessels. The sanction was, therefore, revised to Rs. 17.77 crores including Rs. 1.24 crores in free foreign exchange by the Government in June 1980 and was envisaged to be completed by June 1985. The project cost was further revised to Rs. 37.40 crores in July 1987. The main reasons for the upward revision of project cost were :

— increase in the length of 'B' vessels compartment from 100 metres to 272 metres and

— sanctioning of supplementary works.

The progress of the work upto January 1987 was only 55 *per cent* and the project is now expected to be completed in September 1989 after a delay of over 4 years.

Audit scrutiny of execution of works services revealed some instances of abnormal delay and avoidable/extra expenditure as indicated below :

(i) Construction of 22 monoliths at a cost of Rs. 3.90 crores was awarded to firm 'C' in June 1981. The work under the contract which commenced in July 1981 was due to be completed by December 1982. The work was, however, completed in March 1985 after a delay of 26 months on account of which the Government had to pay escalation charges amounting to Rs. 12.23 lakhs. The Chief Engineer dry dock, confirmed in May 1987 that the escalation charges incurred were due to rise in prices over this period, which the contractor was forced to incur.

(ii) Contract concluded in May 1982 with firm 'D' for the construction of cellular coffer dam at a cost of Rs. 1.33 crores was to be completed by May 1983. The work comprised of pitching and driving of straight web sheet piles and 'T' junction piles to construct 5 circular cells and interconnecting arcs. However, the site for construction of cell-1 was not available due to delay in construction of monoliths by firm 'C' resulting in the construction of cell-2 first instead of cell-1. Because of this, additional works-laying of a separate road at a cost of Rs. 1.05 lakhs and shifting of centre of five cells involving an expenditure of Rs. 0.84 lakh were undertaken. This expenditure of Rs. 1.89 lakhs could have been avoided had there not been any delay in the construction of monoliths by firm 'C'.

(iii) Though the soil investigation of the project site was carried out in May 1980 by a specialist firm at a cost of Rs. 3.63 lakhs before the commencement of the project, 75 piles for the first cell during the construction of cellular coffer dam could not be driven to specified depths due to existence of rock Resultantly, it was decided to extract certain sheet piles of two cells and two arcs for inserting 'T' junction piles in their places and providing a new cell at an extra cost of Rs. 22.16 lakhs.

(iv) Contract entered into with firm 'D' had stipulated disposal of excavated soil within a lead distance of 1.5 Kms. to 4 Kms. However, the excavated soil was disposed of at a distance of 6.5 Kms. on the ground that no suitable site was available within the lead distance of 4 Kms. mentioned in the contract. This resulted in an extra payment of Rs. 10.70 lakhs to the contractor.

(v) 1,515 pieces of straight web sheet piles and 32 fabricated 'T' junction piles costing Rs. 162.59 lakhs were imported in March 1981 for construction of the coffer dam. Out of these, only 979 pieces (64.62 *per cent*) of straight web sheet piles and 24 fabricated 'T' junction piles were utilised, leaving a balance of 536 straight web sheet piles and 8 fabricated 'T' junction piles valued at Rs. 56.50 lakhs unutilised. Besides, at the time of receipt of imported piles, 42 straight web sheet piles and 2 fabricated 'T' junction piles had been found to be damaged and a board of officers had assessed the cost of the damaged piles to be Rs. 5.05 lakhs in April 1981. Although intimation was sent to the concerned Insurance Company in April 1981 itself, the formal claim was sent to them after 5 years in December 1986. In May 1987 the project authorities stated that the claim was being pursued with the Insurance Company.

The South dry dock which was completed in 1979 was designed to dock 6 ships at a time. However, due to non-availability of North dry dock which is contiguous to South dry dock, the same could not be put to its optimum use. The average dry docking of ships in South dry dock was only 3.8 ships and 4.5 ships respectively during the years 1978 to 1983 and 1984-85. Further, due to delay in completion of North dry dock, the dry dock of a Public Sector Undertaking had to be hired and an expenditure of Rs. 32.52 lakhs had been incurred during the period from 1985 to September 1987.

The case reveals that due to frequent changes in the design during execution of the project, the completion was delayed by more than four years necessitating hiring of a dry dock at a cost of Rs. 32.52 lakhs besides payment of escalation charges amounting to Rs. 12.23 lakhs to the contractor. Additional works services costing Rs. 34.75 lakhs had also to be undertaken in addition to excess procurement of sheet piles worth Rs. 56.50 lakhs.

The case was referred to the Ministry of Defence in July 1987 and their reply has not been received (October 1987).

62. Construction of office accommodation for a Naval Command Headquarters

Naval Command Headquarters (HQ) at station 'A' was functioning in a temporary, inadequate accommodation. With a view to constructing permanent office accommodation for the Command HQ, a siting-cum-costing Board was constituted in June 1980 and it recommended siting of Command HQ and allied facilities at complex 'B' with 4,600 square metres area at an approximate cost of Rs. 203.06 lakhs. The recommendation of the Board which was approved by the Command HQ in November 1980, however, did not take into account the following factors nor were these considered by the Command HQ while approving the Board proceedings:

— scope of future expansion in the available land and

— distance between Naval Base and Complex 'B'.

In June 1982, the Command HQ decided to provide part of the facilities during 1982-83 within an available financial allocation of Rs. 80 lakhs. Another Board of Officers was, therefore, constituted in July 1982 which had recommended construction of office accommodation in six storeys with a total floor area of 2,125.15 square metres as against the total requirement of 4,600 square metres which was sanctioned in September 1982 by Naval HQ at complex 'B', at an estimated cost of Rs. 64.26 lakhs.

The execution of the project started with the acceptance of contract for pile foundation in May 1983, the work on which was completed in December 1983 at a cost of Rs. 14.98 lakhs. The contract for superstructure works was not concluded eventhough a case for obtaining financial concurrence was made out in March 1984 by Command HQ to accept the lowest tender of Rs. 66.26 lakhs. Instead the location of the project came to be reviewed in May 1984 and the Command HQ felt that the location of Command HQ at complex 'B' suffered from the following drawbacks:

— The total land available would limit the scope for future expansion.

— The distance from Naval Base was 15 Kilometres and involved 30 minutes of journey time.

— There was insufficient space for location of command transport facility.

— Complex 'B' was surrounded by civil population which posed security problems.

— Complex 'B' being adjacent to sea did not permit underground construction.

Resiting of Command HQ was, therefore, considered inevitable and a Board of Officers was convened in September 1984 to examine and recommend a suitable alternative site for location of the Command HQ and utilisation of the pile foundation already laid at a cost of Rs. 14.98 lakhs. The Board considered the suitablity of locating the Command HQ at two sites, complex 'C' and Naval Base area and recommended that it should be located inside the Naval Base and the pile foundation laid at complex 'B' be utilised for building married accommodation. The Board did not consider complex 'C' suitable as the area was not developed and no external services were readily available.

A siting board was again convened in September 1985 to examine and recommend siting of the Command HQ in a six storeyed building at complex 'C', the location which was declared unsuitable by the previous Board. The proceedings of the Board recommending location of the Command HQ at complex 'C' was approved by the Naval Command in May 1986. Thereafter the Naval Command again revised its decision in October 1987 and decided to locate the Command HQ at Naval Base. But revised sanction for construction of the Command HQ was yet to be issued (October 1987). Sanction for construction of married accommodation for officers on the pile foundation laid in December 1983 at complex 'B' was issued by Government in March 1987. The pile foundation laid at a cost of Rs. 14.98 lakhs may not be completely utilised for construction of married accommodation as a reduction of Rs. 5.43 lakhs (10 *per cent* of plinth area rate) had only been made in the sanction on account of the existing pile foundation.

The Ministry of Defence (Ministry) stated in October 1987 that the location of Command HQ as decided earlier had to be reviewed at a high level due to changes in the environment five years later. This review was carried out as a part of normal planning cycle, after due deliberation and keeping in view the expenditure already incurred on pile foundation.

The case reveals:

— Instead of obtaining sanction of the Government for the entire project costing Rs. 203.06 lakhs, Naval authorities sanctioned in September 1982 a part of the project costing Rs. 64.26 lakhs.

— The project initiated in 1980 and sanctioned in September 1982 was reviewed in May 1984 after completion of pile foundation at a cost of Rs. 14.98 lakhs and the location was declared unsuitable. Later in May 1986 Naval authorities decided to relocate the Command HQ at complex 'C', which decision was again revised in October 1987 and it was decided to locate the Command HQ at Naval Base area.

— The pile foundation laid at a cost of Rs. 14.98 lakhs may not be fully utilised for construction of married accommodation as a deduction of Rs. 5.43 lakhs had only been made in the sanction for the existing pile foundation.

63. Procurement of Sonar simulators

Anti-submarine Warfare (ASW) School at station 'A' trains officers and sailors of the Indian Navy on ASW equipment. Sonar is one of such equipment for detection of movements of submarines. The average life of a Sonar is only 12 years and thereafter it has to be replaced by a new one. The Sonar operators are required to be trained sequentially:

(i) In the basic procedure of initial detection and classification of submarine contacts.

(ii) In the use of specific sonar equipment on board ships which the operators will be manning.

(iii) For combat training on board ship.

For training outlined at (i) and (ii) above, a duplicate sonar equipment fitted ashore with simulation computer or a ship-borne simulator to feed in the desired input into the sonar system is essential for effective training. Alternatively, the training can be imparted on a Harbour sonar simulator. For combat training on board ship, however, the training is to be imparted by live exercise between ships and submarines and ship borne simulator designed exclusively to suit the sonar equipment fitted on board ships.

Sonar type 'X' was introduced in the Indian Navy in January 1972. Thereafter Sonar type 'X' was fitted to more number of frigates constructed by a Public Sector Undertaking (PSU). Training of Sonar operators by installing a duplicate sonar type 'X' with a ship borne sonar simulator at ASW School were considered very expensive and it was, therefore, decided between July 1975 and March 1978 to procure 7 numbers of ship borne sonar simulators for the frigates and one Harbour Sonar simulator for ASW School. The Department of Electronics (DOE) was identified as the agency for the development/supply of the item and the following orders were placed on the DOE by the Ministry of Defence (Ministry) and the PSU for the development/supply of these simulators :

Sl. No.	Particulars of equipment	Date of placing order	Quantity ordered (set)	Total value per order (Rs. in lakhs)	Date of delivery as per the order	Remarks
1.	Ship borne simulator including on board spares.	31st December 1975	1	21.00 (FFE Rs. 6 lakhs)	31st December 1977	
2.	Base and Depot spares for ship-borne Sonar simulator.	—do—	7	20.00 (FFE Rs. 8.10 lakhs)	—do—	
3.	Ship borne Sonar Simulator including on board spares.	6th April 1978	5	105.00 (FFE Rs. 30 lakhs)	December 1978 to February 1981	Ordered by the PSU.
4.	Ship borne Sonar Simulator including on board spares.	15th July 1976	1	21.00 (FFE Rs. 6 lakhs)	1st July 1978	
5.	Harbour Sonar Simulator with its spares for ASW School.	30th October 1978.	1	99.00 (FFE Rs. 55 lakhs)	30th June 1981	

Even though the delivery was to be effected between December 1977 and June 1981, DOE has not delivered any of the sonar simulators till October 1987.

In the absence of Harbour Sonar simulators the training of Sonar operators are being done on models prepared by the ASW School. When the operators are posted to ships, they are given practical training on the Sonar fitted on board frigates. Consequently, ships and submarines have to be constantly scheduled for intensive training which is not considered to be cost effective because considerable amount of fuel and engine hours are consumed in such exercises. The training cost of fuel alone for just two crews in one training phase was estimated to be Rs. 6 lakhs in February 1976. During 1978 to June 1987, the Navy had trained 1287 Sonar operators by using Sonar type 'X' fitted on board frigates. The cost of training could not be worked out as no separate records were maintained. The Naval Headquarters (HQ) had stated in July 1986 that this system of training had been found to be most unsatisfactory.

In view of the unpredictable and indefinite status of DOE designed Harbour Sonar simulator, it was decided by Naval authorities to transfer to ASW school a Sonar type 'X' even though it was earlier considered very expensive necessitating the selection of a Harbour Sonar simulator. The Ministry stated in October 1987 that the Harbour Sonar simulator designed by DOE and the Sonar type 'X' transferred to ASW School was required for different aspects of practical training. The contention of the Ministry is not correct as the economics of having a spare sonar set for ASW School plus a ship borne simulator *vis-a-vis* a Harbour Sonar simulator was examined in April-May 1976 and it was established then by the Naval HQ that the Harbour Sonar simulator was more economical. Further it was also stated then by the Naval HQ that a complete sonar set was not required for ASW school but the requirement was only the display units, console, etc. alongwith the Harbour Sonar simulator. In August 1986, the Ministry had approved the installation of Sonar type 'X' procured at a cost of Rs. 57.75 lakhs for ship 'Z' but had not been installed due to delay in reconditioning and modernisation of ship 'Z' leading to its ultimate decommissioning in October 1985. This was commented upon in Paragraph 50 of the Report of the Comptroller and Auditor General of India, Union Government (Defence Services) for the year 1985-86. The transfer of Sonar and its subsequent installation at ASW school has not been completed till April 1987. Even after the installation of the Sonar type 'X' at ASW school it will not be able to impart effective training to the Sonar operator in the absence of a ship-borne Sonar simulator, simulation computer and the relevant control displays as no action has been taken to acquire them.

As Sonar type 'X' had exceeded the average life of 12 years, it was proposed to be replaced progressively from 1985 onwards with type 'O' Sonar which is self-contained for sonar simulation. Thus, the ship-borne Sonar simulator contracted with the DOE would not be of much use for the Navy.

The Ministry had stated in October 1987 that :

— trials carried out with the model of sonar made by DOE had not been successful and Naval HQ was progressing a case for short-closure of orders for 4 ship-borne simulators;

— the present status and likely date of delivery had not been indicated by the DOE in spite of repeated reminders; and

— the total payment made to DOE against the order was not known to the Ministry.

Thus, the case reveals the following :

— Orders placed between December 1975 and October 1978 on the DOE for the supply of simulators have not been met till October 1987.

— In the absence of these simulators, the Sonar operators were being trained on models and on Sonar fitted on board frigates and this training method was considered to be very expensive. In view of the unpredictable status of DOE designed Harbour Sonar simulators, the Government sanctioned, in August 1986, the installation of Sonar type 'X' at ASW school at a cost of Rs. 57.75 lakhs for training purposes, though such training method was considered very expensive.

— Shipborne simulators with Base and Depot spares ordered on DOE at a cost of Rs. 167 lakhs will hardly be of any use as the Sonar for which the simulators are specifically designed is being phased out progressively from 1985 onwards with a new Sonar type 'O'.

64. Extra expenditure in procurement of register assemblies for boilers

In July 1983, a Naval Command initiated action for procurement of 9 complete register assemblies (registers) for boilers of a Naval ship, 6 numbers for replacement during the refit of the ship in April 1984 and 3 numbers as spares. Against the requirement of 9 registers, the Controller of Material Planning (CMP) raised 2 different demands, one for 3 registers in July 1983 and another for 6 numbers in August 1983. These two demands *inter alia* indicated two different makes, 'X' and 'Y'.

The CMP's demand was approved by Naval Headquarters (HQ) in September 1983 and an indent to cover the demand of July 1983 for 3 registers was placed on the Supply Wing of an Indian Mission abroad (SW). The SW concluded a contract in December 1983 with firm 'A' for supply of 3 registers of make 'X' at a cost of Rs. 2.096 lakhs each in free foreign exchange (FFE). The registers were received in a Naval Store Depot (NSD) in January 1985. Against the demand of August 1983, Naval HQ placed another indent in January 1984 on the SW for arranging procurement of 6 registers of make 'Y' from another foreign firm 'B'. This indent was subsequently cancelled in 1984 because firm 'B' could not supply registers of make 'Y'.

Thereafter, in November 1984, Naval HQ raised an indent on the Controller of Procurement for procurement of 6 registers of make 'Y'. The offer of an Indian firm 'C' to supply the registers at a cost of Rs. 1.41 lakhs each was found acceptable to Naval HQ. But this indent was cancelled in October 1985, since the Naval Command pointed out that 6 registers of make 'X' were required for the ship, otherwise 3 numbers imported earlier in January 1985 would be rendered redundant.

Based on a fresh operational demand of December 1985 Naval HQ placed, in April 1986, an indent on Director General of Supplies and Disposals (DGSD) for the procurement of 6 registers of make 'X' and had sanctioned in July 1986 air-lift of the registers at a cost of Rs. 1.19 lakhs considering the urgency of the store. The DGSD concluded a contract in September 1986 with the Indian agents of the foreign firm 'D' for supply of 6 registers of make 'X' at a cost of Rs. 4.64 lakhs each. The total cost included an element of FFE of Rs. 25.11 lakhs. The terms of the contract included free delivery at consignee's end. These 6 registers were received in NSD in October 1986.

Meanwhile, during the refit of the ship which commenced in March 1985, 3 old registers which were beyond economical repair were used after reconditioning at a cost of Rs. 0.82 lakh and were subsequently replaced by 3 new registers.

The Ministry of Defence (Ministry) stated in September 1987 that though the demand of August 1983 showed correct part number and equipment details, the manufacture's name was incorrectly shown which resulted in non-availability of registers of original make at the time of refit. However, this error was discovered and it was felt that procurement of registers of the alternative make would have an effect of rendering 3 registers of the make procured earlier redundant. Arrangements were, therefore, made to procure other 6 registers also of the original make. Ministry further stated that the 6 registers were received during the period of refit which, however, got extended and the reconditioned registers were replaced by new registers for better utilisation of the ship.

The case reveals the following :

— Although 9 registers of the same make were required for refit of the ship, 2 indents were placed for different makes of registers which resulted in availability of only 3 registers at the time of refit.

— Due to delay in procurement of registers, 3 unserviceable registers were used after reconditioning at a cost of Rs. 0.82 lakh which had to be subsequently replaced by new registers.

— Government had to incur an avoidable extra expenditure of Rs. 15.26 lakhs (Rs. 4.64—2.096 × 6), due to procurement of 6 registers at a later date through DGSD.

— Though registers acceptable to Navy were available from indigenous sources, these were not explored prior to the import of September 1983. Even when the fact of indigenous sources came to be known, import at a later date in September 1986 had become unavoidable to ensure compatibility with the three registers already imported. In effect, an expenditure of Rs. 34.13 lakhs (including Rs. 31.39 lakhs in FFE) was incurred in importing registers against an indigenous cost of Rs. 12.69 lakhs.

65. Avoidable import of spares

Ship 'S' was commissioned in the Indian Navy in March 1958 and was due for decommissioning by March 1983. Owing to its poor material state and low operational viability, it was converted into a cadet training ship in 1976-77.

Based on a demand raised in August 1981 by the Controller of Material Planning (CMP) at station 'A' for the refit of ship 'S', the Naval Headquarters (HQ) placed an indent in December 1981 on Supply Wing of an Indian Mission abroad (SW) for arranging procurement of the gear box spares at an estimated cost of Rs. 20.84 lakhs. In April 1982, the foreign supplier offered to supply 8 complete clutch assemblies (consisting of 4 items) for 2 gear boxes instead of spares at a cost of Rs. 16.63 lakhs in free foreign exchange. However, in January 1983 the CMP asked the Naval HQ to cancel the demand of August 1981 for procurement of spares of gear boxes as the refit of the ship had been completed and no dues-out existed while cancelling the indent. In April 1983, Naval HQ had asked CMP to again assess the requirement keeping in view the lifetime requirement of the ship.

Based on a fresh demand for spares raised by the Naval dockyard in August 1983, Naval HQ again placed an indent in December 1983 on the SW and the SW concluded a contract in March 1984 for the supply of 8 complete clutch assemblies with the same foreign firm at a cost of Rs. 16.63 lakhs which was earlier not acceptable. The spares indented were non wearing items and no demand was outstanding for these items of spares. The items were received in Naval Store Depot (Depot) in October 1985.

However, the decommissioning of ship 'S' was approved by the Government with effect from June 1986 but actually decommissioned with effect from 30th July 1986. The spares received for the ship 'S' at a cost of Rs. 16.63 lakhs could not, therefore, be fitted on the ship and were lying in the depot. Their alternative use could not be effected as these items were not useable on other ships and their disposal action was yet to be determined (September 1987).

The case reveals the following :

— Indent for the spares which was cancelled in April 1983 was again raised in August 1983 without any justification as these were non wearing items and no demand was outstanding.

— The contract for supply of clutch assemblies for ship 'S' was finalised in March 1984 without keeping in view the impending decommissioning of the ship.

— 8 complete clutch assemblies imported at a cost of Rs. 16.63 lakhs became redundant as a result of decommissioning of the ship and their disposal action was awaited.

The Ministry stated in September 1987 that the procurement was arranged on the advice of technical experts who considered these assemblies essential as back up spares and that the chances of certain spares remaining unutilised after the decommissioning of the ship could not be eliminated. It would, however, be relevant to mention that this was not a case of spares already available remaining unutilised but of clutch assemblies specifically procured as back-up spares.

66. Avoidable extra expenditure on import of test instruments

Frigates 'X' and 'Y' constructed by a Public Secfor Undertaking (PSU) were fitted with equipment 'A' supplied by a foreign firm (firm 'B').

In January 1978 Naval authorities requested firm 'B' for supply of specifically designed test instruments for a Naval Dockyard for the maintenance of equipment 'A'. In response, firm 'B' offered to supply 6 test instruments at a total cost of Rs. 24.48 lakhs. The offer which was valid upto September 1978 was later extended upto January 1979.

The Naval Headquarters (HQ), however, decided in September 1978 to procure only 2 test instruments 'A1' and 'A2' from firm 'B' at a total cost of Rs. 5.51 lakhs as it was felt that the remaining instruments could be developed indigenously by the Research and Development Organisations/PSUs at an estimated cost of Rs. 10 lakhs. In January 1979, Naval HQ raised an indent on the Supply Wing of an Indian Mission abroad (SW) for the procurement of the 2 test instruments 'A1' and 'A2' at an estimated cost of Rs. 5.51 lakhs. The SW could not conclude the contract with firm 'B' at their original quoted price of Rs. 5.51 lakhs as firm 'B' was not prepared to extend the validity of their quotation beyond January 1979. The SW, however, concluded a contract in September 1979 with firm 'B' for the supply of the 2 test instruments 'A1' and 'A2' at a cost of Rs. 5.95 lakhs resulting in an extra expenditure of Rs 0.44 lakh.

After detailed discussions on feasibility of indigenous development of some of these test instruments, the Department of Electronics (DOE) informed Naval HQ in September 1980 that they would be in a position to develop and manufacture 2 test instruments 'A3' and 'A4' with associated accessories and spares. These instruments were considered absolutely essential for the efficient maintenance/repair of equipmnt 'A' in the Naval Dockyard. After a lapse of 18 months the Ministry of Defence (Ministry) accorded sanction in April 1982 for the procurement of 2 test instruments 'A3' and 'A4' from DOE at an estimated cost of Rs. 19 lakhs including Rs. 9.6 lakhs in Free Foreign Exchange (FFE) and placed a supply order on the DOE in May 1982.

The test instruments which were due for delivery by May 1983, could not be delivered by the DOE till October 1987. The non-availability of the test instruments 'A3' and 'A4' was adversely affecting the testing and maintenance of equipment 'A' and the essential post refit trials of equipment 'A' were being waived. Since the essential post-refit trials could not be waived as a permanent measure, the Naval HQ requested the Ministry in March 1985 to cancel the order placed on the DOE and accord approval to the import of the test instruments 'A3' and 'A4' from firm 'B'. The proposal for the import of the test instruments was finally approved by the Ministry in August 1986 after its clearance by the DOE in May 1986. However, the Ministry had not cancelled the supply order placed on the DOE till October 1987.

In September 1986, Naval HQ raised an indent on the Foreign Purchase Cell (FPC) of Naval HQ for the import of the 2 test instruments at an estimated cost of Rs 35.27 lakhs including airfreight of Rs. 3.20 lakhs. Based on this indent the FPC concluded a contract in September 1986 with firm 'B' at an estimated cost of Rs. 32.07 lakhs (excluding airfreight). The instruments were due to be delivered by March 1988.

The Ministry stated in October 1987 that according to the DOE the project could not be started due to lack of information. But according to the Ministry, the specifications for designing the equipment were given in the Supply order of May 1982. The Ministry further stated that the balance 2 items were procured by the PSU as a part of the items for the frigates supplied by the PSU.

Thus, the failure on the part of the DOE in supplying 2 instruments 'A3' and 'A4' had resulted in the import of the instruments at an extra expenditure of Rs. 14.52 lakhs and the essential post-refit trials of equipment 'A' had to be waived till the middle of 1988, by which time the instruments 'A3' and 'A4' were expected to be supplied by firm 'B'.

67. Procurement of life rafts by the Navy

Life Raft (raft), a life saving equipment, developed by the Directorate of Production and Inspection (DPI) was being used by the Indian Navy. Specification 'A' of the raft was updated and revised to specification 'B' by the DPI in 1983.

A tender enquiry against an indent of November 1984 for 140 rafts was responded to by 10 firms. The tender purchase committee (TPC), after negotiation with the tenderers, recommended the firm with the lowest offer which had quoted Rs. 0.237 lakh per raft manufactured indigenously under licence of a foreign firm. One of the basic aims at that time was to develop a source capable of manufacturing the rafts indigenously.

Prior to the acceptance of their tender in August 1985, the firm had submitted an advance sample in June 1985 which was found unsatisfactory in July 1985. The tender of the firm for 140 rafts was, however, not rejected. The letter of acceptance of tender (A/T) of August 1985 had specified rafts of specification 'B' and provided for the approval of a pilot sample.

Subsequently in September 1985, the Naval Headquarters (HQ) wrote to the Reserve Bank of India to consider favourably the application of the firm for release of foreign exchange for the import of rafts. It was also intimated that the raft to be supplied was of a foreign make. Thereafter in October 1985, the Naval HQ issued the following amendments to the A/T without assigning any reasons :

(i) Specification 'B' mentioned in the A/T was changed to specification 'B' or higher international standards.

(ii) Changing the venue of inspection from the firm's premises to the Naval Store Depot, Bombay.

The firm imported 140 rafts at a cost of Rs. 30.35 lakhs and supplied them in November 1985 at a cost of Rs. 33.18 lakhs as per the A/T even though the pilot sample had not been cleared. As the amended specification given in the A/T was vague, the TPC decided in December 1985 to accept the rafts with only 3 tests against the prescribed 30 tests with the firm's and original manufacturer's guarantee. Obviously, the acceptability of the rafts was not fully ensured.

The Ministry of Defence stated in October 1987 that there was an acute shortage of this important life saving equipment and the normal detailed testing would have taken a long period. It was, therefore, decided to accept the supplies after conducting certain essential tests.

The fact, however, remains that the orders for manufacture indigenously under licence were allowed to be amended to enable import of rafts and they were accepted after diluting the inspection standards substantially.

68. Extra expenditure on import of indigenously available stores

Against a Naval Establishment's demand for 12 numbers of a component of equipment 'X' (component) in June 1982, the Controller of Procurement (CPRO) had placed a local purchase order (LPO) in May 1984 on firm 'Y' for procurement at a cost of Rs. 2,250 each. The component was received in August 1984 and was issued to the users in September 1984.

A Naval Establishment placed another demand for 36 numbers of the same component on Controller of Material Planning (CMP) in July 1983 who in March 1984 placed a fleet operational demand to be airlifted (FODA) on Naval Headquarters (HQ). Import clearance for the component was given in September 1984 by Inspection authorities on the ground that the component had not been indigenised. The Naval HQ placed an indent on Director General of Supplies and Disposals (DGSD) for procurement of the 36 components in December 1984 at a total cost of Rs. 4.01 lakhs in Free Foreign Exchange. The DGSD concluded a contract in August 1985 with an Indian firm for import and supply of 36 components at a cost of Rs. 40,984 each and the total cost of Rs. 14.75 lakhs included customs duty of Rs. 8.43 lakhs. The entire quantity of component was received during May 1986 and July 1986 and was issued to users in July 1986. Although the component was procured locally by CPRO in May 1984 at the rate of Rs. 2,250 each, the second order was placed for import of equipment at the rate of Rs. 40,984 each. Thus, the component which was indigenously available at the rate of Rs. 2,250 each, was imported and received in May 1986 at a cost of Rs. 40,984 each resulting in extra expenditure of Rs. 13.94 lakhs.

The Ministry of Defence stated in October 1987 that the demand of July 1983 was an operational demand which gave very little time for the process of indigenisation.

— Thus, an indigenously available component available at a cost of Rs. 2,250 each was imported at a cost of Rs. 40,984 each resulting in an extra expenditure of Rs. 13.94 lakhs. The component for which an operational demand was placed in July 1983 was received after three years *i.e.* in July 1986.

69. Non-utilisation of a hydraulic press

In April 1973, the Naval Armament Depot (Depot), Visakhapatnam initiated a case for the replacement of a 120 ton press held by it by a 200 ton heavy duty hydraulic press (press) on the ground that the existing press, procured in 1958, had outlived its life. The press was required for reforming of fired cartridge cases of ammunition 'X'. In April 1975, Government sanctioned the procurement of the press. At about the same time, the ships, using ammunition 'X' were being progressively phased out commencing from 1975 and were completely phased out in 1984. The press was procured (cost : Rs. 2.71 lakhs) and installed at the Depot in February 1978. Although ammunition 'X' was in service upto 1984 when it was declared obsolete, the press was not put to use by the Depot. The Ministry of Defence (Ministry) stated in June 1987 that though ammunition 'X' was in service till 1984, the requirement of reforming of cartridge cases was not necessary because of availability of adequate stocks of ammunition and components on account of the phasing out of certain ships and establishments.

The non-utilisation of the press was reported to Naval Headquarters (HQ) in June 1983, who directed that the Depot try reforming cartridge cases of ammunition 'Y'. After carrying out extensive trials in this regard, it was found in March 1986 that reforming of cartridge cases of ammunition 'Y' was not feasible due to variations in the achieved dimensions. In September 1986, the Depot approached Naval HQ for disposal of the press. Naval HQ initiated action to find alternative uses for the press in the Navy. However, a decision for disposal/alternative use of the press was still awaited (June 1987). The Ministry stated in June 1987 that the reforming of cartridge cases of ammunition 'X' was no longer required due to phasing out of the ammunition from service. The reforming of cartridge cases of ammunition 'Y' was tried out but could not be established due to technical problems. It was, therefore, not possible to put the press to its intended use.

Thus, the press, procured in 1977 at a cost of Rs. 2.71 lakhs was not put to any use due to phasing out of the ships, which could have been foreseen. Action for its disposal/alternative utilisation was initiated by Naval HQ after 9½ years of its purchase.

70. Purchase of sub-standard soap bars

The Naval Headquarters (HQ) placed an indent in October 1978 on the Director General of Supplies and Disposals (DGSD) for procurement of 1,50,000 bars of soap laundry. The DGSD concluded a contract (A/T) in May 1979 with firm 'X' for supply of 12,50,000 soap bars (which included 1,50,000 for Navy) at Rs. 1.75 per bar. In October 1979, Defence Inspection agency tested samples of soap bars meant to be supplied to the Navy and found them to be substandard. However, as the entire quantity of 1,50,000 bars was required to meet operational requirement the consignment was cleared by the Inspection agency.

A quantity of 1,01,416 soap bars was received by the Naval Store Depot (Depot) in two lots during the period December 1979 and February 1980. A quantity of 150 soap bars was consumed during testing and 134 soap bars were received short. The soap bars received were subjected to a further test by Naval Inspection agency which found them to be poor in quality and smaller in dimension. Naval HQ, to whom the matter was referred to in January 1980 directed the Depot in February 1980 to identify and segregate defective soap bars and to invoke the warranty clause for obtaining replacement. The Depot had issued 30,007 soap bars and segregated a quantity of 71,409 soap bars of sub-standard quality and stopped further issue in March 1980.

Meanwhile, in March 1980, the Depot requested DGSD to take up the matter with firm 'X' for replacement of the sub-standard soap bars. Firm 'X' did not, however, agree to replacement on the plea that the soap bars were despatched after acceptance in inspection but offered a price reduction of 4 *per cent* for the soap bars supplied in the first lot. However, the Naval Inspection agency did not agree to accept both the lots even with price reduction. In December 1980, the DGSD cancelled the A/T for the remaining quantity to be supplied by the firm. Thus a stock of 71,409 soap bars costing Rs. 1.25 lakhs were lying with the Depot since February 1980. The Ministry of Defence (Ministry) stated in October 1987 that there was acute shortage of soap bars in the Navy and the inspection authority was, therefore, requested to inspect and release the stores as the entire quantity was operationally required. Ministry further clarified that it did not, however, imply that the stores though not conforming to the prescribed specifications be accepted. The decision to accept the stores under deviation was taken by inspection authority without prior consultation with the Naval HQ.

According to the Ministry, the operational requirements were met by resorting to local purchase of quantity 2,35,222 bars at a cost ranging between Rs. 1.77 and Rs. 2.77 per bar. The Ministry also stated that the matter regarding replacement of the sub-standard quantity under warranty clause was taken up with the supplier who did not respond. The Depot had been advised by the DGSD in March 1987 to auction the rejected quantity which had not been done till October 1987.

The case revealed the following:

— Despite adverse test results, supply of poor quality soap bars was accepted on ground of operational requirement.

— 71,409 sub-standard soap bars costing Rs. 1.25 lakhs were lying in Depot since February 1980 and the operational requirement were met by resorting to local purchase at a higher cost.

71. Non-utilisation of an equipment

In order to augment facilities for application of vinyl paint to ships during the docking period, Naval Dockyard (Dockyard) at station 'A' submitted a proposal in April 1972 to the Naval Headquarters (HQ) to procure an automatic shot blasting plant (plant 'X') along with other equipment, for surface preparation of steel plates before application of vinyl paint. In January 1975, Government accorded sanction for the procurement of certain equipment which included plant 'X' at a total cost of Rs. 56.102 lakhs (Free Froeign Exchange-FFE : Rs. 51.712 lakhs). In July 1975, the Naval HQ raised an indent on the Director General of Supplies and Disposals (DGSD) who concluded a contract (A/T) with firm 'N' in April 1976 for supply of the plant 'X' with accessories at a cost of Rs. 6.55 lakhs.

In October 1976, Naval HQ asked the Dockyard to review their proposal for procurement of another plant 'Y' which was similar to plant 'X' for the steel preparation shop as plant 'X' was expected to be supplied by April 1977. In November 1976, the Dockyard informed Naval HQ that plant 'X' was required for conversion work of ship 'Z' during April-May 1976 which work had already been completed and the order for plant 'X' might be converted into order for plant 'Y' as plant 'X' was not suitable for steel preparation shop.

Thereafter, in connection with the modernisation of the Dockyard, provision of equipment costing Rs. 149.67 lakhs were sanctioned by Government in December 1976. This sanction *inter alia* included provision of plant 'Y' at a cost of Rs. 33.53 lakhs for the steel preparation shop of the Dockyard.

In January 1977, the Naval HQ directed the Dockyard to confirm availability of plant 'Y' for the steel preparation shop with firm 'N' and the implication of converting the order for plant 'X' to meet the present requirement. After considering the performance capabilities of both the plants, the Dockyard reversed their earlier stand and wanted both the plants for the Dockyard. The Ministry of Defence (Ministry) explained in August 1987 that both plants were needed as a sequel to Navy's decision to vinyl paint all ships.

The plant 'X' was received during August-September 1978 and certain damages and deficiencies noticed were taken up with the suppliers in November 1978. Firm 'N' attributed the damage to storage of the plant in the open and agreed to make good the deficiencies at the time of erecting the plant.

Even though efforts were made by Naval HQ as early as December 1978, to install and utilise the plant it had not been installed due to non-availability of suitable space. Though a site, which was Port Trust land, was selected (May 1983) for installation of the plant, the land had not been handed over to the Navy so far (August 1987). Meanwhile, the warranty period of 18 months from the date of despatched had expired. The Ministry stated in August 1987 that land occupied by the Naval Stores Complex had been given by the Port Trust on lease. No permanent structure could, therefore, be constructed on the land till it was owned by them.

Meanwhile, firm 'N' which was to have supplied, installed and commissioned plant 'Y' by June 1986 at a cost of Rs. 32.67 lakhs had supplied the plant in March 1986 and installed it in January 1987 but the plant had not been commissioned till August 1987 as according to the Ministry, an automatic painting machine for which a turnkey contract was given to firm 'N' had delayed the supply of automatic painting machine due to delay in issue of import licence by the Chief Controller of Imports and Exports.

To sum up, the case reveals that plant 'X', the necessity for which was projected in 1972 and was purchased in 1978 at a cost of Rs. 6.55 lakhs was lying unused with the Naval Depot for more than 9 years due to non-availability of a suitable site for installation. Plant 'Y' (costing Rs. 32.67 lakhs) procured in March 1986 and installed in January 1987 has also not been commissioned till August 1987.

72. Non-utilisation of a search light projector

The installation of a search light projector at a Naval unit was considered essential in support of operations for illuminating any target that may attempt a clandestine approach.

In June 1972, Government sanctioned the provision of a search light projector with accessories and power supply equipment for a Naval unit. The projector without accessories was supplied ex-stock to the unit by a Naval Depot in August 1973 and the spares and the accessories were supplied by another Naval agency in March 1975. The construction of search light tower was completed in September 1974 at a cost of Rs. 0.25 lakh. Special repairs at a cost of Rs. 0.29 lakh to the search light tower which had developed structural cracks and supplementary works (Rs. 0.28 lakh) were carried out in 1978 and 1983 respectively. To provide power supply to the search light projector 3 equipment which included a transformer of 10 K.W. 24 VDC were also procured in 1976 at a cost of Rs. 1.58 lakhs.

An Audit scrutiny of the installation of the search light had revealed that in December 1983 when power supply equipment was started for the first time after procurement, it was realised that due to a mistake in the raising of indent in 1976, the transformer procured was not of required capacity. Naval Headquarters was approached by the Naval unit in October 1984 for sanction of a transformer of the required capacity which had not been accorded till August 1987. Thus, in the absence of transformer of the requisite capacity, the search light projector along with accessories costing Rs. 2.40 lakhs could not be commissioned even after 14 years of procurement.

The Ministry stated in August 1987 that the Naval Headquarters was processing the case to declare the search light projector obsolete.

73. Extra expenditure on procurement of stores lost in transit

The Naval Headquarters (HQ) in December 1975 proposed a thorough study of diving and history of decompression sickness of divers of the Indian Navy for minimising the high wastage rate amongst specially trained divers to estalish various safe parameters for this hazardous occupation. It was also proposed to carry out animal experiments initially, to be followed up with studies on human beings in recompression chambers. It was, therefore, decided to procure equipment 'A' and 'B' which were considered extremely urgent and absolutely inescapable operational requirement.

Equipment 'A' sanctioned for procurement at a cost of Rs. 2.18 lakhs in free foreign exchange (FFE) in March 1976 was imported and installed in an Institute in May 1977 for conducting experiments on animals and for imparting training.

As for equipment 'B' meant for carrying out studies on human beings, the Naval HQ proposed to procure it from firm 'X' at a cost of Rs. 23.24 lakhs in FFE, sanction for which was accorded by the Government in March 1979. The sanction did not include cost of installation of the equipment. The import of equipment 'B' was covered by customs duty exemption. Naval HQ placed an indent in June 1979 on the Director General of Supplies and Disposals (DGSD) for procurement of equipment 'B' at a cost of Rs. 23.24 lakhs but the DGSD crossmandated the requirement to Supply Wing of an Indian Mission abroad (SW) in August 1979. The SW concluded a contract in November 1979 for supply of this equipment at a cost of Rs. 19.80 lakhs. The equipment, accepted in inspection in October 1980, was shipped only in August 1981 after a delay of 10 months. Initially the packages after landing were not traceable for clearance and later these were traced in damaged condition and cleared after a marine survey. During the marine survey the loss could not be ascertained in the absence of packing list and invoice. The equipment 'B' was ultimately received by the Institute in October 1981.

On receipt of the equipment 'B' some items were found to be deficient which were referred to the firm 'X' which rejected the claim in January 1982 attributing the loss to theft. The Embarkation HQ also informed in December 1981 that no claim was tenable against steamer agents/port trust as no shortage/damage could be ascertained at the time of marine survey due to non-availability of invoices. Meanwhile, a lumpsum contract was concluded by a Chief Engineer in December 1981 with a Public Sector Undertaking (PSU) for installation of equipment 'B' at a cost of Rs. 7.35 lakhs. However, it was decided in August 1982 that the deficient items of equipment 'B' be provided by the PSU under their own arrangement. The contract agreement was accordingly amended in October 1982 to provide for the deficient items at a cost of Rs. 2.18 lakhs. The contract, however, did not include payment of customs duty. The deficient items were procured by the PSU in January 1983 and the equipment 'B' was commissioned in March 1983. The PSU claimed an amount of

Rs. 5.51 lakhs for procurement of deficient items which included Rs. 0.69 lakh on account of freight charges, insurance charges and transport and handling charges which were outside the terms of the contract and Rs. 2.51 lakhs on account of customs duty. Against the sanctioned expenditure of Rs. 23.24 lakhs for procurement of equipment 'B', an expenditure of Rs. 36.10 lakhs (including an expenditure of Rs. 7.35 lakhs on account of installation and Rs. 5.51 lakhs for procurement of deficient items) was incurred.

The Ministry of Defence (Ministry) stated in October 1987 that a covering sanction for Rs. 7.35 lakhs towards cost of installation was accorded by the Naval authorities in September 1987. The Ministry also stated that the loss of Rs. 5.51 lakhs on account of procurement of deficient items was yet to be regularised. According to the Ministry the delay in commissioning equipment 'B' had resulted in delay in providing Hyperbaric Oxygen therapy to patients, delay in commencement of saturation dives and delay in commencement of research projects.

The case reveals that:

— Equipment 'B' which was sanctioned in 1979 for conducting urgent studies was commissioned only in March 1983, the delay in commissioning the equipment had resulted in delay in commencement of research projects besides delay in providing Hyperbaric Oxygen therapy to patients and commencement of saturation dives.

— Due to non-availability of packing account/invoices the deficient items could not be detected at the time of marine survey and no claim could be preferred on the shipping agents.

— The deficient items were procured through the PSU at an additional cost of Rs. 5.51 lakhs.

— Though import of equipment 'B' was covered by exemption of customs duty an amount of Rs. 2.51 lakhs was paid to the PSU towards customs duty.

74. Payment of warehousing charges

Prior to April 1982, a Controller of Defence Accounts (CDA) was making provisional payments of airfreight for air consignments received from abroad pending sanction for the airlift. In April 1982, the Ministry of Defence (Finance) observed that in several cases, expenditure on airfreight wa incurred by the Naval Headquarters (HQ) without obtaining prior approval of the Government and then a request was made for regularisation of the expenditure. The Ministry also observed that CDA had made provisional payments towards airfreight which was against the cannons of Government procedure and the Controller General of Defence Accounts was requested to issue necessary instructions to stop such provisional payments. Accordingly, the practice of making provisional payments towards airfreight was stopped by the CDA in July 1982. Thereafter consignments were being cleared by availing the credit facility of 21 days provided by Air India after giving an undertaking. However, as payments amounting to Rs. 4.19 lakhs for periods exceeding 21 days were outstanding, Air India withdrew the credit facilities for Navy with effect from September 1983.

As per existing rules warehousing and allied charges were to be paid if the consignments were not cleared within 7 days. The payments of airfreight were delayed due to delayed issue of sanctions, resulting in delay in clearing consignments. The delay in clearance led to consequent payment of warehousing charges as indicated below:

1983-84	—	Rs. 2.56 lakhs
1984-85	—	Rs. 3.88 lakhs
1985-86	—	Rs. 0.60 lakh
1986-87	—	Rs. 1.99 lakhs
Total		Rs. 9.03 lakhs

No steps were taken by the Naval authorities to evolve a system for taking timely delivery of goods to avoid payment of warehousing charges. Instead a Naval Command HQ resorted to the irregular practice of authorising payments of airfreight by drawal of advances from Base Supply Officer (BSO) pending sanction by Government for such payments. Sanction of the Government for drawal of advances from BSO for provisional payments of airfreight was yet to be accorded (October 1987). Meanwhile, an amount of Rs. 60.12 lakhs was drawn from BSO for payment of airfreight, out of which sanction for payment of Rs. 36.55 lakhs was still awaited (October 1987).

The Ministry of Defence (Ministry) stated in October 1987 that delayed payment of airfreight was not the only factor delaying the clearance of consignments, other factors like late/non-receipt of cargo arrival notices, time involved in obtaining bank release orders and customs clearance also added to the delays in clearing of consignments. The Ministry had further stated that besides maintaining personal liaison with Air India, Custom authorities/Bank for early processing of papers concerning clearance of consignments, the Naval HQ did initiate action to ensure that consignments were not airfreighted without prior sanction.

To sum up :

— An avoidable expenditure of Rs. 9.03 lakhs was incurred towards payment of warehousing charges during the period 1983-84 to 1986-87 due to delay in obtaining sanction for airlift of the stores.

— Irregular provisional payments amounting to Rs. 60.12 lakhs were made for airfreight by drawing advances from BSO without proper sanction.

— No steps were taken by the Naval authorities to evolve a system for timely delivery of goods to avoid payment of warehousing charges.

75. Extra expenditure in procurement of an item

The Naval Headquarters (Indentor) raised (30th November, 1983) an 'Operational' indent (consisting of 7 items) on the Supply Wing of an Indian Mission abroad (SW). The indent was accompanied by five separate proprietary article certificates (PACs) for different items; PAC for item number 1 of the indent for supply of 2 units for 'Turbo Driven Cargo Pump' complete (consisting of a cargo oil pump and and a turbine non-condensing type) was in favour of firm 'A'.

In response to a tender enquiry issued by the SW on 5th January 1984, firm 'A' *inter alia,* quoted (29th March 1984) for the desired existing model of the cago oil pump at DM 149,375 each with a delivery schedule of 42 weeks. In order to avail of the usual trade discount allowed by firm 'A' in other cases, the SW held negotiations with them on 26th June 1984. During these negotiations it transpired that firm 'A' were not the actual manufacturer; the cargo pump was a product of firm 'B' and the turbine of firm 'C'. The SW issued tender enquiries to these firms on 27th June 1984.

Firm 'A' who had mentioned during negotiations on 26th June 1984 that their quotation was incomplete, submitted a revised quotation on 28th June 1984; the revised price quoted was for complete Turbo Driven Cargo Pump at DM 550,575 each (DM 149,375 each for Cargo Oil Pump and DM 401,200 each for Turbine non-condensing) with additional DM 44,000 for packing and delivery charges for the 2 units. The firm also stated that they would try to reduce the delivery schedule.

In response to the tender enquiries of 27th June 1984, firm 'B' quoted (18th July 1984) for Cargo Pump at DM 136,363 each with a delivery schedule of 42 weeks (subsequently on SW's request reduced to 35 weeks) and firm 'C' quoted (26th July 1984) for Steam Turbine at DM 310,000 each with a delivery schedule of 36 weeks. Subsequently on SW's request (14th August 1984) to quote for Cargo Pump sets complete, firm 'C' quoted (24th August 1984) for Cargo Pump also at DM 195,200 each with a delivery schedule of approximately 28 weeks.

Meanwhile, firm 'A', on their own, reduced (17th August 1984) their earlier quoted prices and offered a discounted price of DM 533,387 each for the complete Cargo Pump (DM 146,387 each for Cargo Oil Pump and DM 387,000 each for turbine non-condensing) with additional 4 *per cent* for packing and delivery charges and a delivery schedule of 38 weeks.

A price negotiation meeting was held (21st September 1984) by the SW with firms 'A' and 'C'; firm 'B' who had not agreed to supply the complete pump set were not called for negotiations. During negotiations firm 'A' offered a discount of 14 *per cent* and firm 'C' a discount of 2 *per cent* with a delivery schedule of 7.5 months. Taking into account these discounts, the price of two sets of cargo pump and turbine offered by firm 'A' was higher by DM 73,796 as compared to the separate offers of firms 'B' and 'C' taken together for pump and turbine respectively.

On 14th August 1984, the SW proposed that cargo pump and steam turbine may be ordered separately from firms 'B' and 'C' whose quotations were cheaper than those of firm 'A'. This was agreed to by the indentor in his telex of 25th August 1984 with the stipulation that the turbine and pump units should be despatched within compatible delivery schedules preferably simultaneously. After the negotiation meeting of 21st September 1984 the SW informed the indentor on 26th September 1984 that firm 'A' had since offered a discount of 14 *per cent.* The identor then stated (8th October 1984) that placing separate orders for pump and turbine on firms 'B' and 'C' respectively was not feasible for a matching delivery schedule and asked (27th October 1984) the SW to conclude contract with firm 'A' in anticipation of Government's sanction for additional foreign exchange. Accordingly, an order was placed on firm 'A' on 31st October 1984 for supplying 2 sets of Cargo Pump complete at a total cost of DM 954,122 with 38 weeks' delivery schedule. The foreign exchange sanction was accorded by the Government in February 1987.

The following points would arise :

(a) The fact that firm 'A' was not manufacturing cargo pump and turbine units but was procuring them from other manufacturing firms, was known to the indentor at the time of raising the indent. Issue of PAC in favour of firm 'A' was, therefore, erroneous.

(b) The final quoted rates of firms 'B' and 'C' who were the actual manufacturers of the two items were lower by DM 73,796 (Rs. 3.00 lakhs).

(c) The delivery schedules offered by firms 'B' and 'C' were 35 weeks and 32 weeks respectively as against 38 weeks of firm 'A'.

(d) It was clear that the apprehensions of non-matching delivery schedules were not based on facts and the Government were put to an avoidable extra expenditure of Rs. 3.00 lakhs.

The Ministry of Defence stated (November 1986) that :—

(i) it was more suitable to obtain the turbine as well as pump from firm 'A', the ship-builders, for compatibility of delivery schedule, correctness of matching and fitment, etc. and accordingly a PAC was issued in their favour;

(ii) the supplying firm, after matching and coupling the item, tested them and guaranteed their performances as a system unit. For expediency and economy also it was convenient to purchase the item from firm 'A' in a combination pack as it saved time and money required in matching and coupling the units if procured separately from two firms ; and

(iii) in their telex of 18th October 1984 the SW had intimated a delivery schedule of 30 weeks for firm 'A' which was less than that mentioned for other firms and it materially affected the indentor's decision to procure the item from firm 'A'.

These arguments are not tenable for the following reasons :—

(i) at the time of raising the indent, the indentor was aware that cargo pump and turbine units though used jointly were manufactured separately by firms 'B' and 'C' respectively and not by firm 'A', the ship-builders, in whose favour PAC was issued. In fact, in August 1984, the indentor was also prepared to buy the two units separately from firms 'B' and 'C' ;

(ii) firms 'B' and 'C' (manufacturers of pump and turbine units respectively) had offered the same models of the cargo pump and turbine units which were ordered from firm 'A' ; the unit was to be supplied with certain accessories necessary for fitment, etc., and as per contract, firm 'A' was not required to supply couplings, etc. for fitment/commissioning the unit ; and

(iii) Supply Wing intimated (May 1987) that the delivery schedule of 30 weeks (instead of 38 weeks) reflected in the telex was due to a typographical error as there was nothing on record to show that delivery schedule of firm 'A' was reduced to 30 weeks. Therefore, in fact, the delivery schedule of firm 'B' (35 weeks) and firm 'C' (32 weeks) was lesser than firm 'A' and hence the decision to place order on firm 'A' on the basis of earlier delivery itself was not based on the factual position.

CHAPTER 10

OTHER TOPICS

76. Defective ammunition

An ammunition manufactured and supplied by Ordnance Factories for use by the Army was found to suffer from two defects ; lid detachment from the body and cracking in the body itself.

The first defect was noticed as early as in 1975. The Director General of Inspection (DGI) attributed the defect to inadequate fusing of welding material between the ammunition body and the lid at the manufacturing stage. It was decided in December 1979 to repair the ammunition by rewelding of the loose|detached lids by PVC welding rods. The repair work was undertaken in 1980 when repairable holding was reported to be 1.7 lakh pieces. The ammunition so repaired also developed the same defect. The matter was reinvestigated by the DGI who recommended in June 1981 that the rewelded lids be further re-inforced with non-magnetic metal clips.

While the repeated processes of repairs were going on, new ammunition manufactured and supplied also suffered from the same deficiency insofar as, the number of defective pieces assessed at 1.7 lakhs in 1980 increased to 3.72 lakhs in February 1985. Out of these 3.72 lakh pieces, 2.92 lakhs were repaired till then at a cost of Rs. 20.44 lakhs. The total value of the 3.72 lakh defective pieces was Rs. 10.42 crores.

Rectification of the defect by use of non-magnetic metal clips also did not prove to be a satisfactory arrangement. Despite this reinforcement, the defect of lid detachment persisted. A new defect was also noticed in these repaired pieces ; they were not totally non-magnetic.

The other defect of cracking in the body of the ammunition was reported by one of the ammunition depots in March 1985. The ammunition developed cracks in its body containing the explosive material resulting in exposure of filling and its deterioration in storage. This defect was mostly confined to empty bodies supplied by two firms and it was felt that the defect could be due to use of re-cycled material, instead of virgin material. A few cases of the defect of body|lid cracking was noticed in respect of ammunition manufactured in 1982. The necessity of initiating large scale remedial measures were not contemplated prior to 1985.

Taking note of the above defects, in March 1985, orders were issued to suspend further repair of the ammunition. Its use even for practice purpose was also not acceptable to the users.

The Army Headquarters intimated in November 1986 that :

(i) 100 *per cent* survey by the DGI was in progress. Till 17th September 1986, only 4.5 *per cent* of the total stock could be surveyed. Of this, 47 *per cent* was declared serviceable, 20 *per cent* repairable and 33 *per cent* stock costing Rs. 54.11 lakhs was found unserviceable.

(ii) Any metal clip would be detectable by a latest device whether the metal is magnetic or non-magnetic. In March 1986, the DGI decided to do away with the use of metal clips altogether.

(iii) A technical group has been convened to study the condition of ammunition, design aspect and to identify the repair agency as well as to prepare a fresh repair schedule.

(iv) Final decision regarding write off of the loss due to premature downgradation, measures taken towards improvement of quality of material at pre-production stage and prospects of recoverable material from downgraded ammunition for reuse would be known on finalisation of recommendations of the technical group.

To sum up :

— Although defects in ammunition were noticed in 1975, the quantity of ammunition segregated for repairs rose from 1.7 lakh pieces in 1980 to 3.72 lakhs in 1985 valued at Rs. 10.42 crores approximately. No effective measures were taken to rectify the defects in the ammunition produced side by side as similar defects were also noticed in the ammunition of 1981 to 1984 manufacture. Ammunition costing Rs. 10.42 crores was unacceptable to the users.

— An expenditure of about Rs. 20.44 lakhs incurred on the repair of the ammunition had also become nugatory, as the repaired ammunition also developed the same defects.

— Of 4.5 *per cent* of the all India stock surveyed upto 17th September 1986, 33 *per cent* of the ammunition costing Rs. 54.11 lakhs had been declared unserviceable. The result of survey of the remaining 95.5 *per cent* of the all India stock is awaited.

— Action taken to improve the quality of material at pre-production stage, identification of repair agency, repair of repairable quantity/prospects of recovery of material for re-use from down-graded ammunition and write off of loss remain to be finalised (November 1986).

The case was referred to the Ministry of Defence in June 1987 and their reply has not been received (October 1987).

77. Delayed acquisition of land resulting in avoidable expenditure

In August 1971, the Ministry of Defence (Ministry) sanctioned acquisition of land measuring 292.45 acres at a cost of Rs. 35.09 lakhs for an Air Force unit at station 'A'. The land was proposed to be acquired under "Requisitioning and Acquisition of Immovable Property Act" (RAIP Act). This sanction could not be implemented for the following reasons :

(a) 'No objection Certificate' for the appropriate land was secured from the State Government in March 1980.

(b) For the reason that the land proposed for acquisition was "not built upon and no works have been carried out...........", the vacant land could not be acquired under RAIP Act.

Under the above circumstances, the Deputy Commissioner (DC) concerned suggested in April 1980 that the land may be acquired under Land Acquisition Act (LA Act) and sent a draft notification therefor for necessary approval and return. In February 1981, the DC intimated the acquisition cost of the land as Rs. 38.90 lakhs. A revised sanction was issued in November 1981 by the Ministry for acquisition of the land under LA Act at an estimated cost of Rs. 39.02 lakhs.

The draft notification received from the DC in April 1980 was not returned till March 1983. The notification was finally published in the State Gazette under section 4 of LA Act on the 12th October 1983 and under section 6 of LA Act on the 27th April 1985.

In the meantime, the cost of acquisition of the land, as reported by the State authorities, had increased to Rs. 321.96 lakhs. Accordingly, the Ministry issued revised sanction in March 1987 for the acquisition of land at a cost of Rs. 321.96 lakhs. The award for the acquisition of land was declared on 30th June 1987 and process of taking possession of land was stated to be in progress (November 1987).

The Ministry, in October 1987, stated :

— In 1972 the State Government refused to acquire the land. It was only in 1980 that they agreed to acquire the land.

— Draft notification received from the DC in April 1980 could not be returned before March 1983 for the reasons that a revised sanction had to be obtained for acquisition under LA Act and joint survey had to be carried out to identify the land on the ground.

The case reveals the following features :

— It took over eight years from the date of issue of Government sanction to obtain the 'No Objection Certificate' from the State Government for acquisition of the land.

— The draft notification received from the DC in April 1980 was returned in March 1983 *i.e.* after three years.

— The issue of sanction in August 1971 under RAIP Act instead of LA Act and consequent delays in processing the case had eventually resulted in additional liability of Rs. 286.87 lakhs.

78. Canteen Stores Department

Introduction

0.1 In July 1942, Government took over the business of supplying household requirements of troops, earlier catered by the Canteen Contractors Syndicate. "Canteen Services (India)" was then formed and run on commercial lines and was expected to be self-supporting. After the partition of India, Canteen Services (India) went into voluntary liquidation. In January 1948, the Canteen Stores Department (CSD) came into being as a Department under the Ministry of Defence (Ministry). The money belonging to the CSD and the income therefrom would be "revenues" within the meaning of Article 266 of the Constitution of India and shall form part of the Consolidated Fund of India (CFI).

Highlights

0.2 The financial transactions of the CSD had been the subject matter of several discussions by the Public Accounts Committee (Committee) from 1954-55 to 1965-66. The Committee desired that the Constitutional irregularity of the CSD keeping its financial transactions outside the CFI should be rectified. The Ministry accepted the recommendations. Part implementation was made under orders issued in March 1977. Orders for full implementation, proposed in October 1982, have not yet been issued. According to general instructions governing governmental receipts and expenditure, receipts should be credited to the CFI and money required for expenditure should be withdrawn therefrom but the CSD does not deposit its receipts to the CFI; it utilises the receipts for its expenditure. It had also been keeping heavy amounts outside the CFI.

Details

0.3 The CSD has been keeping its financial transactions outside the CFI. On the recommendations of the Committee, in its 14th Report (1954-55) and 52nd Report (1965-66), the Ministry issued orders on 28th March 1977 that with effect from 1st April 1977 the funds of the CSD would be merged with the CFI forming part of Civil Estimates under the Ministry. However, under the scheme for payment and accounting issued under these orders, the CSD was to open public fund accounts with effect from 1st April 1977 with the State Bank of India and Punjab National Bank. The cash balances as on 31st March 1977 as well as future receipts were to be credited into these accounts. Amounts in excess of Rs. 2 crores held in the bank at the end of the month, were to be deposited with the Reserve Bank of India for credit to Major Head 871, a head under Public Account of India. As a result, the transactions of the CSD came to be included in the Public Account of India and not the CFI.

0.4 Audit pointed out that the receipts of the Government were not being remitted into the CFI which was in violation of Article 266 of the Constitution and utilising receipts for departmental expenditure did not conform to the general instructions governing governmental receipts and expenditure.

0.5 The Ministry of Finance (Defence) considered these issues in a meeting held on 8th October 1982 and took a view that all receipts were to be remitted into the CFI and only imprests were to be kept by the CSD for day to day expenses.

0.6 However, orders to that effect have not been issued so far (September 1987). The receipts continue to be retained outside the CFI and utilised for departmental expenditure. Major financial transactions (outside the CFI) and the balances (outside the CFI) at the end of the following years were as follows :—

(In crores of Rupees)

Transactions during the years	1982-83	1983-84	1984-85	1985-86
A. Sales .	232.02	297.58	377.41	389.16
B. Purchases .	187.62	259.59	296.73	325.87
C. Balances outside the CFI at the end of respective years . .	9.32	19.30	27.02	31.00

0.7 In actual practice, bank balances in excess of Rs. 1 lakh in nationalised banks on any day were being deposited automatically in short-term fixed deposits. Such deposits in banks as on the last day of March 1983, 1984, 1985 and 1986 amounted to Rs. 586.05 lakhs, Rs. 1,319.05 lakhs, Rs. 722.05 lakhs and Rs. 190.05 lakhs respectively.

0.8 The Ministry stated (September 1987) that the requirement as per Committee's recommendations was basically to route financial transactions of the CSD through the CFI and this has been achieved by routing the receipts of department through budget head 068 as also seeking the Vote of Parliament for incurring expenditure. The Ministry added that the only deviation is that the department is keeping link between its receipts and expenditure which would otherwise be lost if expenditure is made independently without relating it to the quantum of receipts and that this method has proved efficient over the past ten years which has thus not only withstood the test of time but has also imposed financial discipline on the management of the CSD. Further, draft Government instructions pursuant to the meeting of October 1982 were not proceeded with as it was not found to be the best solution. The Ministry concluded that the Committee's basic recommendation has been met and the Committee have not made any observations in this regard, thereafter.

0.9 No remittances into the CFI are being made and operation of Head 068 is by a mere book adjustment. In this regard the Estimates Committee while on the subject observed (April 1987) as under :

> "The Committee are constrained to observe that the recommendations of the Public Accounts Committee made in their Report after Report regarding bringing the receipts and expenditure of the CSD under the purview of the CFI have been implemented by the Ministry in form only and not in letter and spirit and the same have been circum-

vented through a financial legerdemain by allowing the Department to maintain a grand imprest upto rupees two crores in the State Bank of India and Punjab National Bank with the proviso to deposit its receipts in excess of rupees two crores in the Reserve Bank of India—a stage that is never allowed to be reached as payments become due and receipts and expenditure are quarterly balanced............ The Committee, therefore, cannot but deplore that right from 1947 the Ministry of Defence has been less than sincere in bringing the financial set-up of CSD in conformity with the relevant provisions of the Constitution............... The Committee therefore strongly recommended that the Ministry should come to a decision at the earliest with regard to the financial-cum-administrative set-up of the CSD so that its procedures and practices are brought in conformity with the relevant provisions of the Constitution and the Financial Rules".

0.10 Thus, in spite of clear recommendations of the Committee made in 1965-66 that the Constitutional irregularity in keeping the financial transactions of the CSD outside the CFI should be remedied early, the Ministry after spending a lot of time and after considering some alternatives such as forming a corporate body or a cooperative society, are justifying the continuance of the *status-quo*, an irregular frame work. The Constitutional irregularity of keeping the financial transactions of the CSD outside the CFI has not been remedied.

NEW DELHI
Dated the 30 MAR 1988

(M. M. B. ANNAVI)
Director of Audit, Defence Services.

Countersigned

T. N. Chaturvedi

NEW DELHI
Dated the 30 MAR 1988

(T. N. CHATURVEDI)
Comptroller and Auditor General of India.

ERRATA

Page	Column	Line	For	Read
8	1	2	Constitutions	Constitution
15	2	8	$3,33,990	$3,33,900
22	1	9	.The TPC considered the comparative state-	in case of firm 'X' and 12th September 1984
26	1	5 from bottom	1986/August 1987)	1986)
32	2	20	(b) due to delay in completion of the project, the	(a) the project sanctioned in February 1980 at
33	2	5	Payment	pavement
44	1	16	coducted	conducted
48	2	11	59.83	59.38
83	2	7		add the word 'was' after the word 'procurement'

S/257 DADS/87