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REPORT OF THE

COMPTROLLER AND AUDITOR GENERAL OF INDIA

FOR

THE YEAR 1976-77

UNION GOVERNMENT (DEFENCE SERVICES)

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REPORT OF THE

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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 1976-77 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 1976-77 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 1976-77 have also been included, wherever considered necessary.

The points brought out in this Report are not intended to convey or to be understood as conveying any general reflection on the financial administration by the departments/authorities concerned.

CHAPTER 1

BUDGETARY CONTROL

1. Budget and actuals

The table below compares the expenditure incurred by the Defence Services in the year ended March 1977 with the amount of original and supplementary appropriations and grants for the year :

	(Rs. in crores)
(*i*) *Charged Appropriations*	
Original	*0.41*
Supplementary	*0.05*
Total	*0.46*
Actual Expenditure	*0.28*
Saving	*0.18*
	(*per cent*)
Saving as percentage of the total provision	*39.13*
	(Rs. in crores)
(*ii*) Voted Grants	
Original	2703.47
Supplementary	114.57
Total	2818.04
Actual Expenditure	2756.25
Saving	61.79
	(*per cent*)
Saving as percentage of the total provision	2.19

2. Supplementary Grants/Appropriations

(a) Supplementary grants aggregating Rs. 114.57 crores

were obtained in August 1976 (Rs. 0.15 crore) and March 1977 (Rs. 114.42 crores) as under :

(Rs. in crores)

Grant	August 1976	March 1977	Total
21—Army	—	89.09	89.09
23—Air Force	—	22.44	22.44
24—Pensions	—	2.89	2.89
25—Capital Outlay on Defence Services	0.15	—	0.15
Total	0.15	114.42	114.57

Grant No. 21—*Army* : The original grant of Rs. 1649.76 crores was increased—through a supplementary grant of Rs. 89.09 crores—to Rs. 1738.85 crores. The actual expenditure was, however, Rs. 1743.78 crores, resulting in an excess of Rs. 4.93 crores (0.28 *per cent* of the total grant).

Grant No. 23—*Air Force* : The original grant of Rs. 511.70 crores was increased to Rs. 534.14 crores through a supplementary grant of Rs. 22.44 crores obtained in March 1977 to meet the anticipated additional expenditure on account of larger receipt of stores. The actual expenditure during the year was, however, Rs. 525.82 crores, resulting in a saving of Rs. 8.32 crores of the total grant. 37.08 *per cent* of the supplementary grant, thus, proved unnecessary; no surrenders were, however, made.

Grant No. 24—*Pensions* : The original grant of Rs. 114.56 crores was increased—through a supplementary grant of Rs. 2.89 crores—to Rs. 117.45 crores. The actual expenditure during the year was, however, Rs. 119.16 crores, resulting in an excess of Rs. 1.71 crores (1.46 *per cent* of the total grant).

Grant No. 25—*Capital Outlay on Defence Services* : The original grant of Rs. 259.23 crores was increased to Rs. 259.38

crores through a supplementary grant of Rs. 0.15 crore obtained (August 1976) for certain additional civil works relating to Inspection Organisation, the estimated cost of each of which exceeded Rs. 25 lakhs. The actual expenditure during the year was, however, Rs. 215.77 crores, resulting in a saving of Rs. 43.61 crores (16.81 *per cent* of the total grant); of this, an amount of Rs. 29.07 crores was surrendered on 31st March 1977.

(b) Supplementary appropriations of Rs. 1 lakh under Air Force and Rs. 4 lakhs—under Army : Rs. 3.85 lakhs and Pensions : Rs. 0.15 lakh—were obtained in August 1976 and March 1977 respectively for meeting *charged* expenditure in satisfaction of Court decrees.

Against the total Appropriation of Rs. 2.50 lakhs under Air Force, there was a saving of Rs. 1.20 lakhs; thus, the entire amount of supplementary appropriation of Rs. 1 lakh obtained in August 1976 proved unnecessary.

As regards 'Pensions', supplementary appropriation of Rs. 0.15 lakh was obtained in March 1977 to recoup an advance of Rs. 14,767 from the Contingency Fund sanctioned by Government in January 1977 for making payment in satisfaction of a Court decree. The advance from the Contingency Fund was, however, not actually drawn as payment in satisfaction of the Court decree was not made before the close of the year. As such the supplementary appropriation proved unnecessary.

3. Excess over Charged Appropriation and Voted Grants requiring regularisation

The following excesses over *Charged Appropriation*/Voted Grants require regularisation under Article 115 of the

Constitution :

	Total Appropriation/Grant Rs.	Actual Expenditure Rs.	Excess Rs.
Charged Appropriation			
21—Army	*12,85,000*	*14,07,351*	*1,22,351*
The excess was due to larger payments than anticipated in satisfaction of Court decrees.			
Voted Grants			
21—Army	1738,85,12,000	1743,78,42,113	4,93,30,113
The excess was due mainly to more expenditure on transportation.			
24—Pensions	117,45,17,000	119,16,18,397	1,71,01,397
The excess was due to finalisation of larger number of commutation cases.			

4. **Control over expenditure**

The following are some instances of defective budgeting :

(a) *Instances in which supplementary grants were either not fully utilised or were utilised only partially* :

(Rs. in crores)

Grant / Sub-Head	Original Grant	Supplementary Grant	Total Grant	Actual Expenditure	Saving Amount	Saving Extent to which not utilised (*per cent*)	Amount reappropriated
21—Army							
(*i*) A.9—Stores	362.97	12.21	375.18	366.80	8.38	69	(—)7.01
23—Air Force							
(*ii*) A.5—Stores	334.56	22.44	357.00	342.52	14.48	65	(—)2.82
24—Pensions							
(*iii*) A.1(2)—Army—Rewards	0.55	0.34	0.89	0.38	0.51	Fully unutilised	(—)0.08
25—Capital Outlay							
(*iv*) A.6—Inspection Organisation	1.45	0.15	1.60	0.99	0.61	Fully unutilised	(—)0.41

(b) *Instances in which reappropriations made were wholly unnecessary* :

(Rs. in crores)

Grant / Sub-Head	Sanctioned Grant	Amount reappropriated	Final Grant	Actual Expenditure	Excess(+) Saving(—)
21—Army					
(*i*) A.5—Military Farms	12.62	(—)0.65	11.97	13.22	(+)1.25
(*ii*) A.7—Research and Development Organisation	48.27	(+)1.20	49.47	46.41	(—)3.06
23—Air Force					
(*iii*) A.6—Works	26.08	(—)0.25	25.83	26.60	(+)0.77
24—Pensions					
(*iv*) A. 1(1)—Army—Pensions and other Retirement Benefits	106.87	(—)0.75	106.12	108.52	(+)2.40

(c) *Instances in which there was an appreciable shortfall in expenditure compared to the Sanctioned/Final Grant* :

(Rs. in crores)

Grant / Sub-Head	Sanctioned Grant	Amount reappropriated	Final Grant	Actual Expenditure	Saving compared to	
					Sanctioned Grant	Final Grant
22—Navy						
(*i*) A.5—Stores	92.76	(—)16.96	75.80	73.57	19.19	2.23
25—Capital Outlay						
(*ii*) A. 1—Army (1) Land	10.00	(—)2.50	7.50	4.35	5.65	3.15
(*iii*) A.4—Ordnance Factories						
(1) Construction Works	20.25	(—)6.45	13.80	12.21	8.04	1.59
(2) Machinery and Equipment	44.30	(—)4.06	40.24	35.74	8.56	4.50

CHAPTER 2

MINISTRY OF DEFENCE

5. Manufacture of equipment with reduced life

Mention was made in paragraph 11 of the Audit Report (Defence Services) for 1969-70 regarding the reduction in life of an equipment manufactured by a public sector undertaking due to delay in coupling certain components of the equipment during manufacture.

Orders were placed by the user Service during December 1964—December 1971 on the undertaking for the manufacture of a certain number of the equipment at an estimated cost of Rs. 8.29 crores. A part quantity of the equipment covered by the first order of December 1964 was to be imported. Manufacture of the equipment in the undertaking was expected to commence in September 1967 with assembly of imported sections and to continue thereafter with imported/indigenous parts and raw materials. The planned rate of production was to be achieved 3 years after commencement of manufacture from parts and raw materials.

Production actually commenced in June 1968 and there were also shortfalls in delivery of the equipment by the undertaking against the dates of delivery stipulated by the users, as indicated below:

Order		Delivery	
Date	Percentage to total quantity	Stipulated	Actual
December 1964	14	April 1967	August 1968-August 1970
October 1966	28	March 1969	August 1970-April 1971
April 1968 . .	42	December 1971	April 1971-March 1974
December 1971 .	16	June 1973	62 *per cent* of the order delivered by March 1976

Till March 1976, the undertaking had delivered 94 *per cent* of the total quantity of the equipment ordered. The balance quantity had not been delivered (December 1977) as samples had failed in tests and had not been cleared in inspection. The undertaking had been paid (June 1977), on cost plus basis, Rs. 12.59 crores (including profit of Rs. 79.82 lakhs) towards part cost of the equipment delivered. In addition, 'on account' payments amounting to Rs. 5.97 crores had also been made (December 1977).

The undertaking had guaranteed that the equipment when stored under proper conditions and in original packings would have a reliable operational life of a certain period from the date of delivery to the users. The guaranteed life was restricted to this period mainly because a number of parts of the equipment had limited life.

The technical instructions relating to the manufacture also required that components (manufactured from parts/raw materials) in each of the two crucial sections of the equipment should be joined with each other within 6 months of the dates of manufacture of these components.

The user Service had planned its total requirement (including reserves) of the equipment after taking into account the number that would be available in serviceable condition each year on the basis of the guaranteed operational life.

Further, according to the manufacturing specifications, samples of sections/complete equipment under production were required to be selected by the Defence Inspectors and put to tests to determine their quality. Such tests were to be conducted by the undertaking in the presence of the Defence Inspectors for each batch of production simulating all possible conditions. Unless such tests were carried out and the results known, sections/equipment produced were not to be accepted in inspection. A sum of Rs. 41 lakhs was spent in these tests.

The Defence Inspectors had indicated to the users in 1971/73 that the guarantee of operational life given by the undertaking for this equipment was unrealistic as the undertaking had deviated from the manufacturing specifications. It was reported that the undertaking had :

— used parts, the life of which had expired fully or partially, in the manufacture of certain components;

— delayed the joining of components beyond the permissible time limit of 6 months of their manufacture.

Some of the equipment was also reported to have failed in certain tests that were conducted.

The deviations from the specifications during manufacture and their effect on the life of the equipment were discussed in a meeting held in the Ministry of Defence (Department of Defence Production) in March 1971 with the undertaking and the Inspectors. According to the undertaking, tests carried out on one of the sections after joining had not revealed any shortcoming. It was therefore decided that periodic checks should be carried out to ensure the serviceability of the crucial sections supplied as part of the equipment and that the undertaking would rectify/replace the sections which failed within the period of guarantee.

In the light of the above decision, the equipment manufactured by the undertaking continued to be accepted.

The matter came up for further discussion in the Ministry (Department of Defence Production) in January 1974 with the user Service Headquarters, the undertaking and the Inspectors. The undertaking stated that the parts used by it in manufacture had been tested for serviceability and that parts with short shelf life had also been kept hermetically sealed in plastic sealing composition to prolong their storage life. The users, however, insisted that only parts with adequate residual life should be used

in the manufacture of the equipment. According to the undertaking, parts with adequate residual life were not available, a few parts at crucial positions had been replaced and the manufacturing process had also been improved. It was therefore decided that the equipment should continue to be accepted by the users but that the crucial sections of the equipment from each batch of production should be checked annually by the undertaking with reference to the reliability and confidence level prescribed by the users. In case the rate of failure was higher (than prescribed), the entire batch was to be tested by the undertaking and defective sections repaired within the guarantee period, free of cost.

Samples from lots which had already completed or were nearing completion of their guaranteed life were accordingly not tested. Samples of subsequent lots of manufacture tested in the undertaking (July 1974—January 1975) revealed that the level of serviceability of the equipment was lower than that prescribed by the users. It was also reported by the Inspectors (July 1974) that tests conducted on the equipment kept under controlled storage conditions in the undertaking had shown that some equipment had failed after completing only 60 *per cent* of its guaranteed life.

The matter was further discussed in the Ministry in May 1975 and it was decided that in view of difficulties in obtaining vital parts for repair of defective sections the undertaking should concentrate on testing and repair of such equipment as would have adequate residual guaranteed life after the repairs were completed.

Consequently, a substantial part of the total quantity of the equipment delivered was not fully re-tested nor the defective ones repaired by the undertaking.

In regard to testing of the remaining equipment, it was reported in a meeting held in the Ministry in August 1975 that of the two crucial sections (A and B) it was not possible to repair section A and that there would be no point in repairing section

B unless section A was also found serviceable. It was therefore decided that samples of section A should be tested for serviceability. In case the desired confidence level was not achieved, the entire lot was to be segregated, after tests, into serviceable and unserviceable sections. This work had, however, not been taken up (December 1977). The matter regarding incidence of the cost of dismantling section A was stated to be under consideration (December 1977). As a result of the delay, the remaining guaranteed life of the equipment had got further reduced.

6. **Delay in setting up overhaul/repair facilities for aircraft**

Maintenance and overhaul of aircraft are required to be arranged at intervals recommended by the manufacturers. While routine maintenance of aircraft in use with the Defence Services is provided at the user units, overhaul and major repairs of airframes, engines and rotables are entrusted to the manufacturers/other agencies or are carried out at base repair depots as may be decided by the Ministry of Defence.

Mention was made in paragraph 47 of the Report of the Comptroller and Auditor General for 1975-76, Union Government (Defence Services) about delays in the setting up of overhaul and repair facilities for two types of aircraft procured from abroad.

Two more cases of establishment of facilities for overhaul and repair of aircraft (one imported and one manufactured indigenously) and delays in the utilisation of these facilities are mentioned in the paragraphs that follow. Reference is also invited to paragraph 46 of this Report wherein mention has been made of similar delays in respect of another aircraft.

Aircraft 'A'

I. *Assistance by supplier*

The contract concluded in August 1971 for initial procurement of the aircraft, which was inducted in squadron service in

1972, had envisaged the supplier's assistance in setting up overhaul facilities indigenously for its airframe, engine and rotables. The contract provided, *inter alia,* that :

— the supplier would accept upto 10 years from the date of delivery of the aircraft the purchaser's indents for additional delivery of engines, rotables and special equipment as well as spare parts necessary for operation, maintenance and repair of the aircraft and its engines;

— the aircraft, engines etc. would be overhauled and repaired by the supplier under separate contracts to be negotiated; and

— the supplier would indicate to the purchaser, at least 3 years in advance, the likely date from which manufacture of the aircraft would be discontinued.

On a formal request made to the supplier (June 1972) for rendering technical assistance in setting up overhaul/repair facilities indigenously, a working protocol was signed in October 1973. A team of foreign specialists visited India (June 1974) for collection of initial data required for setting up overhaul/repair facilities and considered utilisation of the existing facilities at a base repair depot.

II. *Project report*

Pursuant to a contract concluded with the supplier (March 1975), a project report for setting up overhaul/repair facilities was received in April 1976; it did not, however, indicate the estimated cost of the project or the time-frame for its completion.

III. *Necessity for the facilities*

While considering the proposal of the Air Headquarters for setting up facilities indigenously, the Ministry of Finance (Defence) had observed (July 1975) that heavy capital

investment on overhaul/repair facilities for aircraft (other types) had been made in the past without corresponding actual or anticipated output. That Ministry had also pointed out that the (present) project had already been delayed with the result that utilisation of the facilities proposed would be less than envisaged. The Ministry of Finance (Defence), therefore, suggested that :

— the economic viability of the facilities proposed should be gone into taking into account the total overhaul arisings, capital investment, time-frame, etc.;

— economic viability should be worked out separately for airframe and engine overhauls so that the two could be studied separately; and

— studies should be made of the possibility of setting up facilities for airframe and some rotables indigenously with minimum capital investment and getting the rest of the rotables and engines overhauled by the supplier.

On the matter being considered again in September 1975, the Ministry of Finance (Defence) suggested the setting up of facilities for airframe only as these could be utilised for a much longer period keeping in view the total life of the airframe which was much more than that of the engine.

As a result of the study of economic viability carried out by the Air Headquarters, the project for setting up the facilities was justified (December 1975—January 1976) mainly on the following considerations :

— the cost of indigenous overhaul of the airframe and the engine would be much less than that of overhaul abroad (the former being 37 *per cent* and 70 *per cent* respectively of the latter);

— the requirement of reserve airframes and engines would be less due to reduction in turn-round time;

— the cost of transportation and shipping of airframes and engines abroad would be eliminated;

— the aircraft would be in service until 1988;

— while in its country of origin overhaul/repair facilities for the aircraft would be available hardly for 2-3 years after it had become obsolescent, the Air Force would continue to use the aircraft for considerable time; and

— the dependence on the foreign supplier would be minimised.

IV. *Sanction for setting up facilities/works services*

In October 1976 the Ministry of Defence accorded sanction to the project for setting up overhaul/repair facilities for airframe, engine and associated rotables at a base repair depot at an estimated cost of Rs. 3.5 crores, being mainly the cost of equipment/machinery, overhaul publications, manufacturing drawings etc. to be procured from the supplier. Administrative approval to provision of accommodation and allied works for the overhaul/repair lines at an estimated cost of Rs. 48.01 lakhs was accorded in June 1977.

V. *Main events* . .

The main events relating to the setting up of overhaul/repair facilities are tabulated below :

—Contract for laying down general terms for supply of equipment and transfer of technical documentation for the project	—December 1975
—Contract for procurement of plant and machinery from the supplier	—May 1976
—Government approval for purchase of norms-of-consumption books	—June 1976

—Working protocol for acceptance of project report	—July 1976
—Contract for supply of overhaul publications	—August 1976
—Contract for manufacturing drawings for tools and equipment	—September 1976
—Plant and machinery started arriving	—November 1976
—Contracts for training of Air Force personnel	—October 1976—February 1977
—Board proceedings for works services approved by the Air Headquarters	—December 1976
—Initial indents raised for overhaul spares	—January 1977
—Government sanction for the establishment of project team	—February 1977
—Administrative approval for works services	—June 1977

As per PERT charts prepared (February 1977) by the Air Headquarters, the overhaul/repair line for airframe and rotables was expected to be commissioned by March 1979 and that for engine by January 1980.

VI. *Expenditure incurred*

The value of the contracts concluded and the expenditure incurred (upto March 1977) for setting up the facilities were as below :

	Value of contract	Expenditure
	(Rs. in lakhs)	
—equipment and machinery	235.73	54.53
—overhaul publications	24.97	—
—manufacturing drawings	2.25	—
—other expenditure :		
—project report	4.12	4.12
—training of Air Force prsonnel . . .	1.95	—
—norms-of-consumption books . .	0.02	0.02
Total	269.04	58.67

VII. *Utilisation rate of the aircraft*

As against the authorised task of 45 hours per month, the utilisation rate of the aircraft was restricted to 15 hours per month from 1974 onwards with a view to postponing the overhaul arisings. The actual utilisation rate achieved during the years 1974, 1975 and 1976 was 22 hours, 18.2 hours and 16.2 hours respectively.

VIII. *Overhaul arisings*

The overhaul arisings of airframe started from 1976-77 and those of engine from 1973-74. While the life before overhaul of both airframe and engine was the same, the overhaul/repair line for engine was scheduled to be set up by January 1980—nearly a year after that for airframe—and that too 6 years after the accrual of the first arising. The Air Headquarters stated (October 1977) that the initial arisings of engines were premature withdrawals which could not be planned.

In November 1976, the Air Headquarters anticipated that the total overhaul arisings of airframe by the end of 1976-77 would be 58.3 *per cent* of the annual capacity of the overhaul line (as per project report) being set up and that during 1977-78 the overhaul arisings would be 54.2 *per cent* of the annual capacity. The arisings would have been much more but for the restriction placed on utilisation of the aircraft.

IX. *Expenditure on overhaul abroad*

Pending creation of indigenous facilities, airframes and engines had to be sent abroad for overhaul/repair during 1974-75 and 1976-77, involving expenditure of Rs. 105.33 lakhs.

X. *Preventive repairs*

Pending the setting up of indigenous facilities, preventive repairs were planned (February 1977) to be carried out at the base repair depot with the assistance of foreign specialists with a view to extending the life of the aircraft, thereby delaying

overhaul arisings. The overhaul arisings of airframe upto 1977-78 (representing 112.5 *per cent* of the annual overhaul capacity) are planned to be subjected to preventive repairs during 1977-78 and 1978-79. Taking into account the fresh arisings during 1978-79, there would be a backlog by the time the overhaul line is commissioned (due date : March 1979).

The Ministry of Defence stated (December 1977) that :

— the time required to establish indigenous overhaul facilities for an imported aircraft is longer than initial overhaul arisings and pending creation of indigenous facilities it was necessary to get the overhaul done abroad; and

— though utilisation of the aircraft had been restricted from the initial plan, the operational commitment had not been sacrificed and its performance during 1974—1976 had been better than the restricted task of 15 hours per month.

Aircraft 'B'

I. *Induction in service*

A transport aircraft, manufactured indigenously by a public sector undertaking (manufacturer) with foreign collaboration, was inducted in service by the Air Force in 1964. 78 *per cent* of the total order (for the aircraft) placed by the Air Force had been supplied by the manufacturer (December 1977).

II. *Agency to undertake overhaul/repair*

In September 1965, the Ministry of Defence allocated the responsibility for overhaul/repair of the airframe, engine and rotables of the aircraft as follows :

Airframe	Overhaul : Agency not specified. Major repairs : Manufacturer.
Engine	Manufacturer.
Rotables	Responsibility to be shared by the manufacturer and the Air Force after mutual consultations. Signal equipment to be handled by Air Force.

At a high level meeting held in the Ministry of Defence in June 1966, it was decided to form a joint committee comprising the representatives of the manufacturer, another public sector enterprise (enterprise)—which had a fleet of such aircraft and Air Headquarters to examine the facilities already available with various agencies in India and make suitable recommendations for setting up of facilities for overhaul/repair of rotables. The committee recommended that as the enterprise was running scheduled flights with the aircraft and also having large repairable arisings, overhaul/repair facilities for the rotables be set up by it and that, in case of non-acceptance of the responsibility by the enterprise, necessary facilities might be set up by the manufacturer. The study carried out by the joint committee was not found to be comprehensive by the Ministry of Defence and the matter was accordingly reconsidered by another team which recommended in March 1967 that overhaul/repair of rotables (excluding signal items) and airframes of both the Air Force and the enterprise be carried out by the manufacturer. The manufacturer informed the Ministry in October 1967 that it would require 2½ years after the proposals were approved by its Board of Directors to establish the required facilities.

The enterprise was, however, reluctant to entrust the overhaul of its airframes and rotables to the manufacturer on the ground that it would not be economical and suggested that these be handled by the respective parties (Air Force/enterprise) themselves. The Ministry of Defence thereupon proposed (February 1968) that overhaul of the airframes and rotables belonging to the Air Force be entrusted to the enterprise. In March 1968 the enterprise informed the Ministry that it would require about 2 years to establish complete facilities in this regard and that it would not be possible for it to undertake the Air Force work earlier.

A fresh proposal submitted by the enterprise in October 1968 stipulated that :

— a fee of Rs. 13.20 lakhs per annum with an escalation of 10 *per cent* every year would have to

be paid;

— it would undertake overhaul/repair of aircraft of post-June 1965 manufacture only and not those of earlier manufacture which were of a type different from those in service with the enterprise; and

— overhaul/repair work would not be undertaken earlier than 1971.

The Ministry of Defence, after considering the proposals, decided in January 1970 to entrust the overhaul of airframe to the Air Force itself. The earlier allocation of responsibilities as envisaged in 1965 for overhaul/repair of engine (by manufacturer) and rotables (to be shared by Air Force and manufacturer) was allowed to stand. It thus took nearly 6 years after the induction of the aircraft in 1964 to finally decide on the agencies to undertake the overhaul of airframe and overhaul and repair of rotables.

III. *Establishment of overhaul facilities*

Overhaul of rotables and airframe was commenced in 1970-71 in an Air Force Depot with its existing facilities. Additional machinery and tool and ground equipment valued at Rs. 38.70 lakhs were ordered during 1973—1976 for augmenting the facilities. Machinery of value of Rs. 9.43 lakhs is, however, yet (December 1977) to be received and installed. In September 1973, additional civil works estimated to cost Rs. 11.58 lakhs were also sanctioned. The works had (November 1977) progressed up to 82 *per cent* and expenditure of Rs. 8.4 lakhs had been incurred.

IV. *Provisioning of spares*

In February 1964, the first aircraft with 3 months' maintenance spares had been delivered. About a year later, in January 1965, maintenance spares for 2 years for a certain

number (17 *per cent* of the total order) of aircraft were indented on the manufacturer. Soon after, these indents were withdrawn as it was decided to procure these items--which were either proprietary or bought-out—directly from abroad. Fresh indents were consequently floated in March 1965 for import of these spares. A team to plan maintenance spares for the aircraft was set up in June 1965 (one and a half years after induction of the aircraft) and its recommendations were received in February 1966. Additional spares based on these recommendations were indented by the Air Force in March—July 1967 and procured through the Department of Supply. Subsequently, in September 1969, the Ministry of Defence, with a view to rationalising the system of procurement of spares required by the Air Force, decided that procurement of spares on the basis of indents raised by the Air Force be entrusted to the manufacturer.

The position regarding the indents placed by the Air Force, supplies made by the manufacturer and outstanding items of spares (December 1977) was :

Year	Indented		Materialised		Outstanding		Remarks
	No. of items	Value (Rs. in lakhs)	No. of items	Value (Rs. in lakhs)	No. of items	Value (Rs. in lakhs)	
1970-71	163	17.57	149	17.32	Nil	—	14 items cancelled (Rs. 0.25 lakh)
1971-72	3,728	13.96	3,528	11.64	200	2.32	
1972-73	1,409	12.79	1,336	11.06	73	1.73	
1973-74	1,112	13.43	952	11.33	160	2.10	
1974-75	474	6.45	271	4.67	203	1.78	
1975-76	749	5.95	332	3.06	417	2.89	
1976-77	1,118	43.21	719	29.55	399	13.66	
1977-78	515	32.15	7	0.05	508	32.10	
Total	9,268	145.51	7,294	88.68	1,960	56.58	

V. *Overhaul tasks*

Overhaul of airframe and rotables by an Air Force depot commenced in 1970-71. The depot was to set up facilities for overhaul of about 94 *per cent* of the total rotables in the aircraft. Facilities for 60 *per cent* had been established (September 1977) in the depot. Overhaul of the remaining 34 *per cent* of rotables, for which facilities were yet to be established, was being carried out by the manufacturer/enterprise or by sending them abroad.

The overhaul arisings of the airframe/rotables and the quantity actually overhauled in the depot during the period April 1965—July 1976 were:

Year	AIRFRAME		ROTABLES	
	Arisings	Overhauled	Arisings	Overhauled
1965-66 . . .	—	—	9	—
1966-67 . . .	—	—	3	—
1967-68 . . .	—	—	—	—
1968-69 . . .	—	—	8	—
1969-70 . . .	1	—	3	—
1970-71 . . .	1	1	59	—
1971-72 . . .	2	—	941	557
1972-73 . . .	1	1	485	232
1973-74 . . .	—	—	1,699	414
1974-75 . . .	—	1	1,821	414
1975-76 . . .	—	1	1,830	916
1976-77 . . .	—	1	1,941	1,179
	5	5	8,799	3,712

The life between the overhauls of the airframe was enhanced in 1972-73 with the result that no airframe had fallen due for overhaul since then.

There was a large backlog in the overhaul of rotables some of which were lying in a repairable state for over 3 years.

Due to non-availability of overhaul facilities in the country, expenditure of Rs. 11.90 lakhs (in foreign exchange) was incurred on overhaul abroad of 241 items of rotables during the period April 1965—March 1976.

VI. *Consequences of delay*

For want of adequate overhaul/repair facilities and lack of adequate maintenance spares, the serviceability percentage of the aircraft ranged between 50 and 65 during the years 1965—1977. A large part of the fleet (22 to 37 *per cent* annually) had also to be grounded during this period, some for periods as long as 3 to 4 years for want of spares/rotables :

(Percentages)

Year	Aircraft service-ability	Aircraft grounded
1965	50	30
1966	60	22
1967	63	26
1968	60	23
1969	55	23
1970	56	37
1971	59	27
1972	63	25
1973	56	31
1974	59	25
1975	60	22
1976	65	23
1977	62	24

The Air Headquarters had stated (July 1974) that even the above level of serviceability could be achieved only by large-scale cannibalisation of parts and relaxations made by them in servicing of some components.

VII. *Further developments*

On the recommendation of a joint study team (of representatives of the manufacturer and the Air Force), the Ministry of Defence decided (August 1977) to transfer the responsibility for overhaul of airframe and rotables, including stocking of spares required for the purpose, to the manufacturer with effect from April 1978. The modalities of the transfer had yet to be worked out (October 1977). It was also envisaged that after the transfer of the responsibility, the skilled personnel available in the Air Force depot would be redeployed in front line units to increase the operational efficiency of the Air Force.

7. **Procurement of motor boats**

The procurement of 8 motor boats was approved (6 in August 1966 and 2 in March 1968) by the Ministry of Defence for providing inland water transport for logistic support to troops, survey and training.

On the basis of two quotations received in May 1969, the Department of Defence Supplies issued a letter of intent to a firm in November 1970 (later covered by a supply order in February 1971) for the manufacture of 8 motor boats at a cost of Rs. 22.24 lakhs (@Rs. 2.78 lakhs per boat). The letter of intent/order stipulated delivery of 2 prototypes by November 1971 and the balance at the rate of one boat per month after approval of the prototypes and specified the following schedule for payments :

— 15 *per cent* on laying the keel;

— 15 *per cent* on framing the boat;

— 15 *per cent* on completing the hull;

— 20 *per cent* on launching the vessel;

— 25 *per cent* on completion and delivery of the vessel after final inspection and trials; and

— the balance 10 *per cent* on the expiry of 6 months out of 12 months of warranty period.

No security deposit was obtained as the firm was registered with the Director General, Supplies and Disposals.

The period of delivery of prototypes was extended on four occasions as under :

Date of extension	Period of extension	Reasons for extension
1st July 1972. . . .	Upto 10th August 1972	Tests were delayed due to breakdown of model testing tanks.
21st September 1972 . .	Upto 30th November 1972	Steel for the boats was to be tested
25th January 1973 . .	Upto 31st March 1973	Additional time required for tests and trials of the boats and marine diesel engines.
30th April 1973 . . .	Upto 31st May 1973	Additional time required for the receipt of engines.

Meanwhile, in August 1971, the firm claimed the first stage payment of 15 *per cent* (Rs. 3.34 lakhs) on the ground that keel for all the 8 boats had been laid. A total payment of Rs. 2.50 lakhs was made (November 1972—March 1973) to the firm against hypothecation deed and indemnity bond as well as insurance cover for the first three stages in respect of 2 prototypes which were inspected by the Defence Inspectors during November 1971—March 1973.

There was no progress in the manufacture of prototypes after March 1973. In May 1974, the firm declared a lock out due to financial and other difficulties. Thereafter, in March 1976, a performance notice was served on the firm for completion of supplies by 15th July 1976 failing which the contract was to be cancelled and the boats purchased at the risk and cost of the firm. Efforts to take possession of the prototypes from the premises of the firm did not succeed (July 1976) as these could not be removed without permission of the High Court.

In September 1976, the Department of Defence Supplies cancelled the supply order at the risk and cost of the firm and asked the firm to refund Rs. 2.50 lakhs paid to it. The registered letter sent to the firm was, however, received back by the Department undelivered. In April 1977, the Legal Adviser (Defence) advised that :

— action could be taken on the hypothecation deed and indemnity bond furnished by the firm either (without the intervention of the Court) under the Defence of India Rules or by making an application to the Court and obtaining an order therefrom; and

— arbitration proceedings could also be simultaneously initiated.

The Department did not consider it appropriate to take recourse to the Defence of India Rules or to make an application to the Court. Arbitration proceedings were also not initiated. No other action had also been taken for recovery of the amount paid to the firm. Further, even 9—11 years after the proposal for purchase of boats was approved no boat had been procured either from the firm or from any other supplier (December 1977).

The Ministry of Defence stated (December 1977) that :

— hypothecation deed was not enforced as it was thought appropriate to negotiate with the firm for an amicable settlement before moving a Court; this could not, however, be done as the whereabouts of the Director of the firm were not known;

— risk purchase action was not legally tenable as the firm was manufacturing the boats to its own design and specification and an order could be placed on another firm only to that firm's design;

— according to a letter received (November 1977) from the firm, the work would be resumed very soon and at its instance the matter regarding restoring the order for 2 boats was under consideration;

— tenders for procurement of boats from other suppliers were under consideration; and

— in the absence of these boats, training was carried out to the extent possible with the old boats available with the units.

8. **Manufacture of gliders**

In March 1962—June 1963, the Ministry of Defence sanctioned the manufacture by an aircraft manufacturing depot (later merged with a public sector undertaking) of 300 gliders for use by the National Cadet Corps. The estimated cost of the glider was Rs. 15,000 each. The time schedule drawn up for manufacture of the first 265 gliders provided that these would be completed by 1965. Till April 1965, however, only 57 gliders had been manufactured. The slow pace of the manufacture of gliders as also their non-utilisation by the National Cadet Corps units for want of facilities—like airfields, hangars and training instructors—was commented upon in para 11 of the Audit Report (Defence Services), 1966.

In December 1968, the Ministry of Defence had informed the Public Accounts Committee (Para 1.18 of the 48th Report of the PAC—4th Lok Sabha—1968-69) that in view of the difficulties experienced by the National Cadet Corps in recruitment of instructors and in provision of airfield facilities by the State Governments, the requirement of gliders had been reviewed and that it had been decided in December 1965 to limit the production to 105 gliders. Production of 105 gliders was completed by the depot (undertaking) in June 1971 and the price was fixed by the Ministry of Defence (August 1970) at

Rs. 52,000 per glider. Of these, 10 gliders had since become unserviceable and 2 were awaiting repairs (January 1978). Of the balance 93 gliders, 76 gliders were in actual use with the National Cadet Corps, 15 gliders had been loaned to Flying Clubs and other organisations and 2 gliders had been sold to foreign Governments (December 1977).

As a result of curtailment of the orders for manufacture to 105 gliders (against 300 proposed initially), tools worth Rs. 8.20 lakhs and raw and partly fabricated materials costing Rs. 12.99 lakhs had been rendered surplus with the undertaking and were yet to be utilised/disposed of (December 1977) over 6 years after production of the gliders was completed.

The Ministry of Defence stated (January 1978) that the surplus materials/tools with the undertaking were not disposed of earlier as it was hoped that new orders for manufacture of additional gliders might materialise. The Ministry added that it was decided in October 1977 that additional gliders would be of new design and that the undertaking had been advised in December 1977 to dispose of surplus items which might not be required and that any loss arising from the disposal would be borne by Government.

CHAPTER 3

ORDNANCE AND CLOTHING FACTORIES

9. Shortfall in production of an ammunition

Mention was made in paragraph 7 of the Audit Report, Defence Services, 1969 about the long delay in the establishment of indigenous production of a new ammunition under a project (estimated cost : Rs. 87.11 lakhs) sanctioned in June 1960 and consequent import of the ammunition and its components. The Public Accounts Committee (1969-70) had been informed (119th Report, Fourth Lok Sabha) by the Ministry of Defence, during examination of the paragraph, that efforts to produce the ammunition had failed because the foreign sources from which help had been expected had shown reluctance to pass on the designs and drawings and indigenous efforts had to be made to fill the gap.

A capacity for production of 20,000 numbers of the ammunition per annum on single 8-hour shift basis had been envisaged under the project. The ammunition was to be assembled and filled at factory 'A' and its main components were to be manufactured in other factories as indicated below:

Propellant	Factory 'B'
Fuse, shell assembly and fin assembly	Factory 'C'
Cartridge case	Factory 'D'

Propellant

The Public Accounts Committee (1971-72) had been informed (26th Report, Fifth Lok Sabha) by the Ministry of Defence in November 1970 that after satisfactory production of an experimental batch of 1,000 kilograms of the propellant

a 10-tonne lot had been manufactured for further technical trials and that the final technical report on the trials was awaited. The propellant was, after the trials, found to conform fairly to the stipulated requirements and thereupon a further quantity of 32 tonnes of the propellant was extruded at factory 'B' during February 1974 to June 1974. These could, however, be cleared for service use by March 1976 only.

Fuse

While the propellant had been developed and cleared for service use, the fuse was still to be cleared (December 1977). A development order had been placed on factory 'C' for 2,000 fuses as far back as in November 1959. The manufacture and assembly of the fuse against this order could be completed only in January 1977. These had, however, not been cleared for service use (December 1977).

Shell and fin assemblies and cartridge case

Besides the problems relating to propellant and fuse, there were bottlenecks in production of shell and fin assemblies and cartridge case also. Production of these components in the feeder factories was much less than that required for assembly of 20,000 rounds of the ammunition per annum as indicated below:

Year	Shell and fin assemblies produced in factory 'C'	Cartridge cases produced in factory 'D'
	(in 2 × 10 hour shifts)	
	Numbers	Numbers
1970-71	2,020	Nil
1971-72	495	2,200
1972-73	1,760	7,400
1973-74	5,060	500
1974-75	980	1,594
1975-76	1,178	Nil
1976-77	10,260	6,202

Shell and fin assemblies

The Ministry stated (December 1977) that although production of shells had been established in factory 'C' for quite some time, the production had got retarded due to erratic performance of the shells produced and the problem could be resolved and acceptance of the user obtained sometime in 1976 only. The production of shell and fin assemblies was particularly low in 1971-72 and 1974-75 on account of non-availability/insufficiency of necessary forgings.

Cartridge case

There was no production of cartridge cases during 1970-71 due to non-availability of special steel sheets. The public sector undertaking, which had supplied these sheets in February 1966, had expressed its inability to supply these against subsequent indents but was requested in June 1971 to accept an order for 317 tonnes. Specifications were also modified to overcome the difficulties expressed by the undertaking. During February 1973, 42,270 tonnes of steel sheets were supplied by the undertaking. Three cases out of a lot manufactured from these sheets submitted to the Inspectorate (January 1974) passed the proof test; the factory was, however, asked by the Inspectorate (May 1974) to produce a batch of 500 cases and submit it for inspection. This had not been done so far and about 38 tonnes of steel were lying unutilised (December 1977). In the meantime, to meet the production requirements, the factory procured about 400 tonnes of imported steel at a total cost of Rs. 15.39 lakhs. A further order for 200 tonnes of imported steel was placed on an overseas Supply Mission by the Director General, Ordnance Factories (DGOF) in September 1977.

Factory 'D' was asked (August 1973) by factory 'A' to withhold supplies of cartridge cases and to discontinue further production upto March 1975 as it had heavy accumulation of cartridge cases due to varnishing plant limitations and inadequate supply of shells from factory 'C' and as it anticipated

aggravation of storage problems with the impending arrival of imported cartridge cases.

The production of cartridge cases in factory 'D' continued, however, to remain suspended till March 1976 after which it was resumed under instructions from the DGOF.

Production of ammunition

Although the sanctioned capacity of factory 'A' was 20,000 numbers of the ammunition per annum on the basis of a single shift of 8 hours, the actual production programme assigned annually (upto 1975-76) was much lower. Even these lower targets could not, however, be achieved, as indicated below:

Year	Production programme given by the DGOF	Actual production in factory 'A'
	Numbers	Numbers
1970-71	—	915
1971-72	6,000-8,000	7,474
1972-73	4,000	3,889
1973-74	10,000	3,068
1974-75	10,000	1,400
1975-76	15,000	5,892

Note.—The production was achieved on a single shift of 8 hours with overtime.

In 1976-77, however, the factory produced 20,070 numbers of the ammunition as against 20,000 programmed for production during that year. Till 31st March 1977, factory 'A' had supplied 0.43 lakh numbers of the ammunition against the orders of the Services totalling 1.48 lakhs upto May 1967.

According to the DGOF (November 1973), the capacities created against the sanction of June 1960 were inadequate for achieving the planned production of 20,000 numbers of ammunition per annum on a single shift of 8 hours and he, therefore, recommended provision of balancing plant and machinery (mainly for production of shells and cartridge cases) and civil works for achieving it. The capacity (20,000 numbers) was

expected to be achieved within three to four years from the date of sanction of the project. Government sanctioned (April 1976) an additional investment of Rs. 307.65 lakhs (increased to Rs. 353.65 lakhs in August 1977) for this purpose.

Imports of the ammunition and its components were resorted to from time to time in order to meet the Services' requirements. As per the Appropriation Accounts of the Defence Services for the year 1974-75, complete ammunition worth Rs. 932 lakhs and components valued at Rs. 76 lakhs were imported upto 1974-75 due to the delay in the commencement of and persistent shortfall in production. In addition, contracts were concluded in September 1944 and January 1977 for import of components (shells, fins, filled fuses and cartridges) at a cost of Rs. 148 lakhs and Rs. 9.02 lakhs respectively.

Some of the supplies received (October 1975—January 1976) against the contract of September 1974 were found defective and a claim for Rs. 27.46 lakhs lodged (March 1977) with the supplier is yet to be settled (January 1978).

10. **Production of vehicles in ordnance factories**

Shaktiman and Nissan vehicles were being assembled in an ordnance factory 'A'—Shaktiman 3-ton from 1959, Nissan 1-ton from 1960 and Nissan Patrol from 1962—in collaboration with foreign firms 'X' and 'Y'. Agreements with firm 'X' for manufacture of Shaktiman 3-ton and with firm 'Y' for manufacture of Nissan 1-ton vehicle had been concluded in September 1958 and February 1960 respectively; the latter was later extended in December 1961 to cover manufacture of Nissan Patrol. Such components of the vehicles as could be produced indigenously were being obtained from different ordnance factories, largely by utilising the existing surplus capacity, and from trade. Following the Chinese aggression in 1962, the feeder factories had to undertake other priority items and, besides, large deficiencies in the holding of vehicles were revealed. It was,

therefore, considered necessary to augment the facilities for manufacture of vehicles and to centralise these along with component manufacturing capacity in a self-contained unit. The existing facilities in other ordnance factories (including 'A'), used exclusively in the manufacture of these vehicles, were also to be transferred to this unit.

In November 1965, Government sanctioned the setting up of factory 'B' at an estimated cost of Rs. 32.06 crores with facilities for annual production of 13,200 Shaktiman and Nissan vehicles (6,000 Shaktiman, 4,200 Nissan 1-ton and 3,000 Nissan Patrol). The sanction was subsequently revised twice—once in December 1970 to Rs. 41.53 crores and again in January 1973 to Rs. 46.84 crores. The revisions were necessitated due to—

(a) cost of procurement of additional plant and machinery not provided for in the sanction of 1965;

(b) increase in the cost of procurement of plant and machinery already provided for in the project sanction of 1965; and

(c) cost of machines planned originally for transfer from other factories but which could not ultimately be spared.

At the planning stage, a total requirement of 22,000 Shaktiman vehicles, 32,900 Nissan 1-ton vehicles and 14,900 Nissan Patrol for the years 1966 to 1973 was projected by the Army, the maximum requirement in a year being 3,800 Shaktiman vehicles, 4,300 Nissan 1-ton vehicles and 2,400 Nissan Patrol. The decision to set up capacity for 13,200 vehicles per annum, although in excess of the Army's requirement, was taken in order to obtain advantage of economics of scale. The plan also envisaged production of a civil version of the Shaktiman vehicle and generation of sufficient market demand for the Nissan vehicle to make use of the higher capacity.

The factory was expected to commence production after 3 years from the date of sanction of the project (*i.e.* November 1968) and reach full production after 4½ years in all (*i.e.* May 1970). It was also expected that the factory would achieve 90 *per cent* indigenous content in both Shaktiman and Nissan vehicles in the fifth year from the sanction of the project (*i.e.* 1970-71). The time schedule laid down for commencing production and achieving full target capacity could not, however, be adhered to.

The assembly of Nissan Patrol, Nissan 1-ton and Shaktiman vehicles commenced in factory 'B' in June 1970, November 1970 and March 1972 respectively. While transferring the assembly line of Nissan 1-ton vehicles from factory 'A' to factory 'B', 346 vehicles held by the former were also transferred to the latter for issue to the Army. Though full expenditure on all operations provided for in the estimates had been incurred on these vehicles by factory 'A', it was found, when these were tested at factory 'B' before issue to the Army, that some items pertaining to engine, gear box, body, drivers' seat etc. required replacement, besides other minor adjustments and repairs. Factory 'B' had to spend Rs. 18.88 lakhs on these vehicles to make good the deficiencies, of which the cost of items replaced was about Rs. 15 lakhs.

The requirements indicated by the Ministry of Defence in March 1973 for the years 1973-74 to 1976-77, the production programme assigned to the factory by the Director General, Ordnance Factories and the actual production achieved during these years are shown below:

	Requirements indicated by the Defence Ministry			Production programme assigned to the factory			Actual production		
	Shaktiman	Nissan 1-ton	Nissan Patrol						
	S	N	NP	S	N	NP	S	N	NP
1973-74	3,000	4,000	1,000	2,100	3,000	900	2,400	3,000	1,400
1974-75	4,200	5,000	1,000	2,000	3,000	596	2,000	2,550	596
1975-76	4,800	5,600	1,200	3,071	3,600	750	3,151	3,889	801
1976-77	6,000	5,600	1,600	3,067	3,600	700	3,492	4,170	914

The lower production programme assigned to the factory was stated to be due to financial constraints imposed by the Apex group of the Planning Commission and lack of service orders. However, as on 31st March 1973, the Army's assessed deficiency of 3-ton vehicles was 13,497. Further, during the period 1973-74 to 1975-76, Government had procured 6,568 3-ton vehicles (cost : Rs. 44 crores approximately) from trade to meet a part of the deficiency in the Army's holdings.

The project report had estimated a requirement of 8,732 employees for optimum production of 13,200 vehicles. As on 1st April 1975, the factory had a manpower of 9,034 employees for production of about 50 *per cent* of the optimum production. In July 1976, Government formed a committee to review the manpower in the factory, the final outcome of which is awaited (December 1977).

Although indigenous content of 90 *per cent* was to be achieved in both Shaktiman and Nissan vehicles by the end of 1970-71, according to the accounts compiled by the Controller of Defence Accounts (Factories), the percentages of indigenous content achieved in 1975-76 were as under :

Shaktiman 3-ton	60.00
Nissan 1-ton	36.70
Nissan Patrol	32.50

The shortfall in indigenous content was due mainly to failure to establish indigenous production of certain components of the vehicles which had to be imported. There was also delay in the establishment of indigenous production of grey iron and malleable iron castings required for production of the vehicles. For production to full capacity by factory 'B', it was estimated that castings worth approximately Rs. 2.96 crores per year would have to be imported. The establishment of a foundry for production of the castings with almost entirely indigenous raw materials had been sanctioned by the Government in October 1967 at a cost of Rs. 963.52 lakhs (subsequently revised to Rs. 1516.96 lakhs in December 1975). Although the intention was that there should be no substantial gap between the commissioning of factory 'B'

and that of the foundry, considerable delay took place in the commissioning of the foundry. Its probable date of commissioning was revised from time to time and trickle production commenced from June 1976. The Ministry stated (January 1978) that the commissioning of the foundry was delayed due to late completion of civil construction owing mainly to delayed receipt of foundation and design data of various vital items of plant and machinery from the suppliers and changes in the design of drawings of underground galleries by the foreign consultants.

The agreements with firms 'X' and 'Y' (concluded in 1958 and 1960 respectively) were valid for a period of 10 years after which the licencee was at liberty to continue the manufacture and market the vehicles without payment of research and development charges/technical assistance fee and royalty fee to the licensor. However, both the agreements were extended several times. The agreement with firm 'X' was last extended upto December 1978 and that with firm 'Y' upto February 1978. The main reasons for extension of the agreements were stated by the department to be :

— for firms 'X' and 'Y' : the firm's assistance was required for supply of certain major components of the vehicles, indigenous manufacture of which could not be established ;

— for firm 'Y' : Nissan 1-ton vehicle had gone out of production in its country of origin and without extension of the agreement the firm could not be committed to continue supply of the factory's requirements of components for manufacture of Nissan vehicles ;

— for firm 'X' : the firm's assistance was required for—

(a) development of a civil version of the vehicle, and

(b) development of a new type of vehicle namely, single rear-wheel version.

As a result of the extension of the agreements, research and development charges/technical assistance fee and royalty fee as

provided for in the respective agreements had to be paid to firms 'X' and 'Y' during the extended period of the agreements. During the period July 1973 to December 1976 (for which payment particulars were collected in audit), the total amount paid to the foreign collaborators on this account was Rs. 99.25 lakhs.

11. **Production of T.N.T. in a factory**

In connection with the modernisation and augmentation of T.N.T. production in an ordnance factory, sanctioned by the Government in February 1970 at a cost of Rs. 7.67 crores (amended to Rs. 7.72 crores in June 1972), a contract was concluded with a foreign firm in February 1970 for supply of complete plant for production of T.N.T. and requirements of spare parts for continuous operation of the plant for three years. The rated capacity of the plant was to be one tonne per hour of military grade T.N.T. and it was to be capable of producing 500 tonnes monthly on the basis of 22 working days in a month and three 8-hour shifts per day. The plant was, in addition, to be capable of producing monthly 20 tonnes of military grade D.N.T. The contract price was 6,515,000 Swedish Kroners (Rs. 93.07 lakhs) subsequently amended to 6,603,000 Swedish Kroners (Rs. 94.33 lakhs). The firm undertook to deliver the equipment (f.o.b. foreign port) in 24 months after receipt of the first instalment of payment or, as the case may be, from the date on which all technical matters in respect of essential equipment had been clarified, whichever was later.

The contract provided for:

— inspection by the firm of equipment, components and materials to be supplied by it ;

— warranty for stores, equipment and components supplied by the firm and their satisfactory working condition for 12 months after commissioning of the plant but not later than 32 months after the last shipment of equipment ;

— final performance and guarantee tests at site under the supervision of the firm's representative; and

— issue of a taking-over certificate by the Director General, Ordnance Factories on successful completion of all performance tests as also on plant being put into operation satisfactorily at site.

The firm undertook to act as technical adviser to the Director General, Ordnance Factories in organising, constructing, planning and commissioning the plant supplied by it. The time schedule as established with the firm in December 1972 was as follows:

1. Construction of building by Military Engineer Services	1st January 1973
2. Arrival of foreign technicians for erection . .	10th January 1973
3. Completion of erection	Middle of August 1973
4. Commissioning of the plant	September 1973—January 1974

The supply of essential equipment was completed by the firm in April 1972 and it was received in the factory by July 1972. Sanction for civil works for erection of the plant, estimated to cost Rs. 211.85 lakhs, was issued in May 1971. The buildings in shell form were, however, actually made available to the factory in February 1973. The erection of the T.N.T. plant was completed in May 1974 as against August 1973 planned.

Although erection of the T.N.T. plant was completed in May 1974, the commissioning trials could not be started before January 1975 since the water lines connecting the process buildings were made available by the Military Engineer Services only in November 1974.

According to the contract with the firm, the plant was to be run, initially to produce acceptable grade of T.N.T./D.N.T. and, later under settled and steady conditions at the stated output for a total period of 15 days. The contract provided for production of T.N.T. at the rated output with set point 80.2° centigrade. Although the plant was under commissioning trials since January 1975, continuous production at the rated output (500 tonnes per month) was still to be achieved and the plant was consequently

yet to be taken over contractually by the factory (December 1977). The firm undertook a test run in April 1976 for 48 hours at 75 *per cent* outturn, of which material of specified quality was to the extent of 47 *per cent* only. Efforts were made by the firm in December 1976 to upgrade the plant capacity by adopting new settings and other modifications in operating conditions. While the outturn could be brought up to 85 *per cent*, material of specified quality was to the extent of 20 *per cent* only. At higher outturn level the plant showed unstable conditions. Upto July 1977, the plant had produced in course of commissioning trials 2,814 tonnes of T.N.T., of which 528 tonnes only (20 *per cent* approximately) were of the quality specified in the contract *viz.* with set point 80.2° centigrade. Of the remaining quantity, the set points were as follows:

1,358 tonnes	—	80° centigrade.
701 tonnes	—	79.5° centigrade and above but below 80° centigrade.
227 tonnes	—	Sub-standard.

Although set point of 80.2° centigrade had been specified in the contract, under the existing specification T.N.T. with set point of 80° centigrade and above was graded as T.N.T. grade I and T.N.T. with set point 79.5° centigrade and above but below 80° centigrade was graded as grade II. The requirement was for grade I T.N.T. only but grade II T.N.T. also had limited use.

The Ministry stated (December 1977) that the plant was subsequently (after July 1977) run by the factory at 85 *per cent* capacity, that T.N.T. of set point 80.2° centigrade and above to the extent of 90 *per cent* could be produced from the plant and that the performance of the plant was, therefore, encouraging. The Ministry added that, although the plant had not been contractually taken over, it had been temporarily taken over for production purposes from April 1976 and was being worked to meet the service requirements since then.

12. **Delay in providing forging facilities in a factory**

Mention was made in paragraph 6 of the Report of the Comptroller and Auditor General of India for the year 1973-74, Union Government (Defence Services) that there had been delay in the erection of a 2500-ton forging press in an ordnance factory and that it had hampered the production of barrel forgings required for part I of a weapon. The erection of the press was completed in August 1975 and it was commissioned in the same month.

The 2500-ton press had been procured in replacement of an old 2000-ton press to meet the increased demand for heavy barrel forgings. In July 1968, when the Director General, Ordnance Factories (DGOF) had put up the proposal for this press, the requirements on the basis of the tentative programme for the year 1969-70 had been indicated as follows:

— 370 heavy barrel forgings as against estimated production of 86 in 1968-69 and actual production of 55 and 57 forgings during 1966-67 and 1967-68 respectively ;

— 252 smaller barrel forgings as against estimated production of 180 in 1968-69 and actual production of 73 and 108 forgings in 1966-67 and 1967-68 respectively.

As regards ancillary facilities, namely, re-heating, machining and heat treatment facilities, required by the factory for production of barrels upto P.Y.T. (Passed Yield Test) stage, the DGOF had stated (July 1968) that he had already taken action separately to procure plant and machinery, estimated to cost about Rs. 98 lakhs, either against new projects already sanctioned or as replacement of old and worn-out plant and machinery. No detailed assessment of the adequacy or otherwise of the ancillary facilities to meet the target of production had, however, been made. No further requirement of ancillary facilities had also been indicated but it was brought out that the capacities for ancillary facilities already envisaged would be matched/utilised when the new forging press was set up.

In May 1972, the factory reported to the DGOF that the capacity for heat treatment of barrels, provided by way of replacement of the old plant and machinery, was sufficient for 140 barrels per annum only and asked for augmentation of the heat treatment capacity. No additional facilities for re-heating and machining were, however, asked for by the factory. DGOF set up a technical committee in August 1972 to review the existing facilities and capacities at the factory from forging stage to P.Y.T. stage with reference to a revised annual target set by the DGOF in January 1973 of 360 heavy barrel forgings and 430 smaller barrel forgings. The committee, after examining the process schedule for manufacture, the factory's proposal of May 1972 for augmenting heat treatment facilities and taking into consideration the plant and machinery already provided for, recommended in July 1974 augmentation of facilities in the factory for re-heating, machining and heat treatment at a cost of about Rs. 304 lakhs including provision for civil works.

Based on this recommendation, the DGOF put up a proposal to the Ministry of Defence in December 1974 for sanction of Rs. 224 lakhs (excluding cost of plant and machinery which could be procured out of the annual grant of the factory for renewal and replacement). It was stated that immediate acceptance and sanction of the project were necessary to avoid serious bottlenecks at a later date. After providing for future escalations in prices, Government accorded sanction in February 1976 for Rs. 255 lakhs (amended to Rs. 265.57 lakhs in November 1976) for procurement of additional ancillary plant and machinery, connected civil works and services to augment the production capacity of barrel forgings in the factory. Implementation of the project was expected to take four years and the additional facilities would therefore be available not earlier than February 1980.

The technical committee had assessed (1974) the capacity of the press at 60 *per cent* utilisation factor as 600 heavy barrel forgings. The production programme given to the factory as well as the actual production of barrel forgings after commissioning

of the press were, however, much less than the production envisaged by the DGOF in 1968 and 1973 as indicated below :

	Production programme		Actual production	
	1975-76	1976-77	1975-76	1976-77
Heavy barrel forgings . .	25	80	25	80
Smaller barrel forgings . .	230	232	233	232

NOTE.—Production of smaller barrel forgings called for utilisation of 20 *per cent* of the capacity required to produce heavy barrel forgings (as per assessment of the technical committee).

In order to meet the requirements, imports of heavy barrels/barrel forgings had to be made. In 1976 the value of orders placed for import of 400 barrels for a weapon was Rs. 2.34 crores.

The Ministry stated (January 1978) that the imports attributable to shortfall in production of barrel forgings were not due to inadequacy of ancillary facilities but to delay in commissioning of the new press and unsatisfactory fuctioning of the old one.

13. **Loss in meeting a service order**

Against an indent by the Director of Ordnance Services, the Director General, Ordnance Factories placed an 'extract' on an ordnance factory in July 1969 for manufacture of 7,600 canvas containers. The factory procured in March 1971, through the Director General, Supplies and Disposals, 29,438.90 metres of canvas cotton valued at Rs. 2.94 lakhs for manufacture of the containers. This material was held by the factory in the same bin which contained a stock of 20,573.41 metres of canvas cotton procured in August 1964 and April 1968.

The factory commenced manufacture of canvas containers (against the 'extract' mentioned above) in July 1971 and 435 containers were tendered for inspection in August 1971. Of these, 200 containers were accepted by the Inspector of General Stores, Kanpur and the rest (235) were rejected due to minor defects. In September 1971, when further two lots of 100 containers each were tendered for inspection, the Inspectorate sent a few samples of the containers to the Chief Inspector of Textiles and Clothing, Kanpur for testing the breaking strength of

the material used as canvas cotton had limited shelf life (5 to 7 years). The latter reported in November 1971 that the breaking strength of the canvas cotton was much lower than that required and advised the factory to stop further manufacture of containers pending sample test of each lot of the material. By October 1971, the factory had completed manufacture of the entire quantity of 7,600 containers ordered on it (cost : Rs. 8.87 lakhs).

In June 1973, the Chief Inspector of Textiles and Clothing, Kanpur reported to the Director General of Inspection that the containers had got damaged on dropping during dropping trials and consequently had been recommended for rejection. He, however, considered that the containers could be used for one 'air drop' or two and to avoid total loss to the exchequer he recommended acceptance of the lot of 7,600 containers under a deviation for reduced durability. In August 1974, Army Headquarters decided to accept these for one drop only. On inspection (November 1974—October 1977), 2,054 containers (cost : Rs. 2.40 lakhs approximately) were rejected finally being unsuitable even for one 'drop'.

In September 1972, a one-man Board of Enquiry was convened by the General Manager to investigate the rejections. The Board concluded that the main cause of rejection was the low breaking strength of canvas cotton which was sub-standard even at the time of receipt in the factory.

The Ministry stated (January 1978) that the material received in 1971 was merged with the earlier stock and it could not be said with certainty whether the samples tested for breaking strength were actually made from the earlier stock of material or were from the new supply. The Ministry added that the actual loss involved due to rejection of 2,054 containers was being worked out for regularisaion.

14. **Stores lying unutilised**

(a) *Shell bars*

In March 1972, factory 'A' took on charge 263.65 tonnes of shell bars (cost : Rs. 7.03 lakhs) supplied by a public sector

undertaking against its operational indent of July 1971. The shell bars supplied by the undertaking had been produced by it in thirty distinct casts. In April 1972, samples from seven casts, when tested by the factory, failed to conform to the prescribed proof stress value and this was reported by the factory to the undertaking. After an on-the-spot investigation, the undertaking disputed the method of test adopted by the factory and the matter remained under correspondence and discussion for about four years. In the meantime, the factory carried out two more tests—in October 1972 and January 1973—and as a result shell bars from seven casts were accepted. In February 1976, joint testing of the remaining twenty-three casts was agreed upon. As a result of joint testing in the premises of the undertaking in January-February 1977, shell bars from fifteen casts were accepted and those pertaining to eight casts (approximate cost : Rs. 1.87 lakhs) were finally rejected. Shell bars from twenty-two casts (approximate cost : Rs. 5.16 lakhs), which had been finally accepted by the factory had not, however, been utilised (December 1977).

The Ministry of Defence stated (December 1977) that the undertaking had been approached by the Director General, Supplies and Disposals for replacement of the rejected quantity or refund of its cost and that the shell bars accepted would be utilised in the near future.

(b) *Cold rolled steel sheets*

The same factory 'A' placed (June 1975), a purchase order on a public sector undertaking for 100 tonnes of cold rolled steel sheets (34 months' requirement at the rate of nearly 3 tonnes per month) for production of a component of an ammunition, stipulating delivery "as early as possible". The undertaking issued on 25th August 1975 a sale order for the sheets at Rs. 2,943 per tonne ex-factory. Meanwhile, on grounds of urgency the factory placed an order on the same undertaking on 12th August 1975 for supply of 100 tonnes of imported steel sheets at Rs. 4,885 per tonne, which were available for delivery

ex shelf, and advised the undertaking (September 1975) to suspend production on its order of June 1975. The order for indigenous steel was finally cancelled on 2nd January 1976.

The delivery period stipulated in the purchase order of August 1975 for imported steel was "not later than October 1975". However, only 2.568 tonnes were received upto November 1975; 96.549 tonnes were received in December 1975, out of which 86.549 tonnes were taken on charge by the factory in September 1976 and the balance of 10 tonnes had not been inspected and taken on charge (December 1977). Out of 89.117 tonnes of the material taken on charge, 38.017 tonnes had been issued to the production section till July 1977. The balance quantity (including 10 tonnes under inspection) valuing Rs. 3.23 lakhs approximately had not been utilised (December 1977).

The Ministry stated (December 1977) that orders for imported steel were placed in view of uncertainty in supply of indigenous steel and better quality of the former. The Ministry added that the material was not utilised as production of the component for which it was to be utilised could not be stepped up to the desired level due to over-riding priority given to production of other stores.

(c) *Nylon fabric*

On the basis of limited technical trials, clearance was given for production in factory 'B' of supply dropping parachute using nylon fabric and the Services placed two indents in August 1966 and January 1967 for 880 parachutes in all. Against these indents, the factory took provisioning action for manufacture of the quantity ordered and imported 2,80,765 metres of nylon fabric between April 1972 and June 1975. The nylon fabric so imported was, however, not utilised for production of parachutes as, in September 1972, the Army Headquarters had intimated that user trials with the prototypes of

the parachute made available by the Research and Development Unit had disclosed deficiency in performance and that, therefore, its introduction into service with the material used had not been recommended with the result that production of the parachute was suspended.

The Ministry stated (January 1978) that 1,37,300 metres of the fabric had been utilised by the factory for manufacture of other parachutes and that the value of nylon fabric which remained unutilised was Rs. 12.55 lakhs (December 1977).

15. **Extra expenditure in the purchase of a propellant**

In October 1973, the Director General, Ordnance Factories (DGOF) placed an indent on an overseas Supply Mission for procurement of 12,210 kg. of a propellant conforming to stipulated specification for use in an ammunition. The material being a proprietary product of a foreign firm, a contract was concluded by the Supply Mission with the firm on 30th January 1974 for supply of the material at the rate of £ 1.165 per kg. As material of the same specification had been supplied earlier by the firm against a contract of May 1967, the Supply Mission included in the contract, in addition to the indentor's specification, a stipulation that the supply was to be exactly the same as that made against the earlier contract of May 1967.

Against the contract of May 1967, 14,220 kg. of the propellant had been received in April 1968. It had been reported by the DGOF to the Ministry of Defence in December 1970 that the entire quantity of the propellant had failed to give the specified ballistic performance when it was tried in the ammunition and that the propellant had ultimately to be rejected by the factory. It was, however, only in April 1974 (on getting a copy of the contract of January 1974) that the DGOF brought the position to the notice of the Supply Mission and requested that the contract be amended to provide for certain

additional tests indicated by him to obviate supply of unserviceable material. The stipulation that the supply should be exactly the same as that made against the earlier order of May 1967 was also desired to be deleted. The additional tests could not, according to the Ministry (December 1977), be indicated while placing the indent as the DGOF was made aware of these for the first time in March 1974 by the Directorate of Technical Development and Production (Air), the Authority Holding Sealed Particulars for the material.

When the firm was approached for carrying out the amendments suggested by the DGOF, it agreed (16th July 1974) to carry out only a part of the tests provided it was supplied with the required components. The Supply Mission requested the DGOF on 23rd July 1974 to despatch the components required by the firm but the concerned Inspectorate suggested in August 1974 an alternative method of testing, which was communicated to the Supply Mission by the DGOF on 9th October 1974. The firm declined to undertake tests other than those it had accepted earlier in July 1974. The firm's proposal was ultimately accepted and the Supply Mission was advised by the DGOF accordingly in February 1975. The components required by the firm were despatched to it on 28th June 1975.

Consequent on the delay in the commencement of production due to the time taken to settle the question of tests, the firm sought on 18th August 1975 a revised price of £ 2.70 per kg. on account of increase in its manufacturing cost. After negotiations, only a token reduction from £ 2.70 to £ 2.63 per kg. could be effected and the contract price was amended accordingly on 30th October 1975.

The omission to link the experience of the supply against the contract of May 1967 while placing the indent in October 1973 and the subsequent delay in finalising the mode of testing the propellant to ensure its suitability for the intended

use resulted, thus, in an increase of £ 17,887.75 (Rs. 3.39 lakhs) in the contract price.

The Ministry stated (December 1977) that the delay stood justified as there was every possibility of obtaining unserviceable material, as was the case with the contract of 1967, had no effort been made even after the conclusion of the contract to ensure proper inspection of the propellant.

16. **Extra expenditure in procurement of an item of store**

Against an operational indent placed (September 1974) by the Director General, Ordnance Factories (DGOF) on an overseas Supply Mission for procurement of 24,246 numbers of an item of store, a proprietary article of a foreign firm, he received the details of the firm's quotation (price : £ 0.995 each) in March 1975. As the specification and drawing numbers mentioned in the quotation were different from those mentioned in the indent, the DGOF forwarde quotation to the concerned factory (March 1975) with n ructions to intimate, in consultation with the Controller of Inspection (Ammunition), Kirkee (CI, Kirkee), whether the offer of the firm was acceptable. When the factory sought clearance of the revised specification and drawing from the CI, Kirkee on 10th April 1975, the latter could not locate the revised specification and drawing (sent to him by the DGOF in 1974) and called for these from the DGOF.

On 30th April 1975, the DGOF and the factory received a clarification from the Supply Mission that the specification and drawing quoted in the indent and those mentioned by the firm in its quotation were identical, the difference being one of tolerance only. This clarification was, however, made known to the CI, Kirkee by the factory on 2nd July 1975 only. The CI, Kirkee gave his approval to the specification on 10th July 1975 and its acceptance was conveyed by the factory to the Supply Mission on 16th July 1975. Meanwhile, the validity of the quotation, which had been extended up to 15th May 1975, expired and the firm demanded a higher price of £ 1.393 each. Contracts were concluded with the firm on 29th September 1975 and

19th February 1976 covering the entire quantity ordered at the rate of £ 1.393 each.

As note was not taken of the revised specification and drawing and prompt action was not taken on the clarification in this regard received from the Supply Mission with the consequential delay in communicating acceptance of the offer to the Supply Mission, extra expenditure of Rs. 2.01 lakhs (in foreign exchange) had to be incurred in the purchase of 24,246 numbers of the store.

The Ministry of Defence stated (December 1977) that the time available for acceptance of the material within the validity period (up to 15th May 1975) on receipt of details of the tolerances was short as three agencies were involved in the decision, namely, the DGOF, the user factory and CI, Kirkee.

17. **Heavy rejections in the production of an item**

The standard estimates for the cost of production of various items in the ordnance factories include an element of unavoidable rejections, which is determined by the General Managers of the respective factories. Rejections in excess of the provision in the estimates are treated as 'avoidable' and the loss on that account is required to be regularised under sanction of the competent authority (General Manager and higher authorities) after investigation.

For production of cartridge cases for an ammunition in a factory, the following percentages of rejections at different stages of production were provided for by the factory in the standard estimate prepared in December 1967 :

(i) Brass slabs (casting)	10
(ii) Brass blanks (rolling from brass slabs) . . .	12.5
(iii) Cartridge cases (forming from brass blanks) . . .	10

There were heavy rejections of brass blanks and cartridge cases against a manufacturing warrant issued by the factory in January 1970 for production of 1 lakh cartridge cases. While the percentage of rejection of brass blanks was 25.84 as against

12.5 provided for in the estimate, the percentage of rejection of cartridge cases (produced from blanks) was as high as 46.22 as against 10 provided for in the estimate.

The total cost of the excess rejections was assessed (by the factory and its accounts office) at Rs. 22.39 lakhs. Although the warrant had been closed in August 1971, a loss statement was prepared by the factory in March 1976 only and the loss was yet to be regularised (December 1977). The Ministry stated (December 1977) that investigation of the loss by a Board of Enquiry had been suggested by Integrated Finance and that it was under consideration of the Director General, Ordnance Factories.

Rejections of cartridge cases produced in the factory continued to be heavy in the subsequent years. As against the normal percentage of 10, the actual rejection percentage varied between 25.6 and 28.9 during the years 1971-72 to 1976-77 and the total cost of excess rejections (over 10 *per cent*) during these years was Rs. 1.36 crores. These rejections were not, however, viewed as 'avoidable' and treated as a loss, as in the meantime, in May 1971, the percentage of unavoidable rejections in the final stage of production, namely, of cartridge cases from blanks, had been increased by the General Manager of the factory from 10 to 30. The norms for rejection in the earlier stages of production, however, remained unchanged.

It was stated by the Ministry of Defence (December 1977) that the causes of heavy rejections in the production of cartridge cases during 1970-71 had been analysed and it was found that the normal rejection percentage of 10 provided in the estimate of December 1967 was not realistic considering the very old condition of the plant and equipment. The percentage of unavoidable rejection of cartridge cases had, therefore, it was stated, been revised to 30 in May 1971. The Ministry also added that the rejections remained more or less at that level in the subsequent years since bulk of the rejections was due to inherent defects in the basic material, the quality of which could be improved only by installing more modern brass melting facilities and use of better quality scraps.

18. **Construction of magazines**

In April 1969, the necessity for construction of five magazines—four with a capacity of 136 tonnes each and one with a capacity of 66 tonnes—for an ordnance factory was accepted. According to the Safety Regulations, a minimum safety distance of 84 metres had to be maintained between two magazines. The Siting Board held in May 1969 prepared a lay-out plan fixing locations of the magazines keeping in view the safe distance required to be maintained.

Construction of the magazines at an estimated cost of Rs. 9.53 lakhs was sanctioned in July 1971. A contract was concluded by the Military Engineer Services (MES) in January 1974 for Rs. 13.61 lakhs. The work was completed in October 1975. In March 1975, the factory, after an on-the-spot examination, pointed out to the MES that magazines 2 and 3 had not been located as indicated in the sketch attached to the lay-out plan and that the distances between magazines 1 and 2 and magazines 2 and 3 were only 60 metres and 44 metres as against 110.6 metres and 90.5 metres respectively provided in the sketch.

The MES contended (June 1975) that the distances required to be maintained between two magazines had not been specified in the sketch and that the magazines had been located as indicated in the sketch without making any change. According to the factory, however, the distances to be kept between two magazines should have been, in the absence of specific indication of the distances, as per the scale to which the sketch was shown to have been made.

As a result of not having maintained safe distances between two magazines, the storage capacity of magazines 1, 2 and 3, according to the factory, got reduced to 70, 36 and 36 tonnes respectively from 136 tonnes each. In order to overcome the deficiency caused by incorrect locations and to achieve the storage accommodation envisaged for them, additional works were sanctioned by the factory in December 1977 for provision of additional safety measures for magazine 2 at an estimated cost of Rs. 1.90 lakhs.

The Ministry of Defence stated (December 1977) that the examination of locations was handicapped by the magazines being planned for construction in hilly area with undulating ground covered by thick growth of trees. It was also stated that, to avoid recurrence of such cases in future, instructions had been issued for specifying the minimum distance to be maintained between two magazines in the drawing itself.

19. **Procurement of annealing furnaces**

In April 1964, the Director General, Ordnance Factories placed an indent on the Director General, Supplies and Disposals for procurement of six annealing furnaces in replacement of old furnaces in an ordnace factory. On scrutiny of the tenders forwarded by the Director General, Supplies and Disposals, the Director General, Ordnance Factories, after consulting the factory, recommended in December 1964 acceptance of the offer of a firm which was the second lowest and conformed to the specifications (the lowest tender being incomplete). He, however, advised the Director General, Supplies and Disposals to obtain a guarantee from the firm for trouble-free performance with automatic temperature control equipment since difficulties had been encountered by other ordnance factories in the performance of the furnaces supplied by the firm. The Director General, Supplies and Disposals, while placing orders on the firm in December 1964 for supply of six furnaces (total cost : Rs. 5.70 lakhs), stipulated that the contract was subject to the contractor guaranteeing the performance of the automatic temperature control equipment. The firm was also asked to send a copy of the relevant guarantee to the Director General, Supplies and Disposals, the inspecting officer, the Director General, Ordnance Factories and the factory.

The drawings for the furnace were forwarded by the firm to the factory in June 1965 for approval. After protracted correspondence regarding technical details, the drawings were finally approved by the factory in October 1969 subject to certain modifications. All the six furnaces were received in the factory in February 1970. However, while two (out of six) furnaces were

installed (installation cost : Rs. 1.41 lakhs) in the factory in March 1971, one only was commissioned in April 1973.

No guarantee had been received from the firm for trouble-free performance of the automatic temperature control equipment as provided in the contract. Shortly after commissioning the furnace, the factory reported to the firm (April 1973) that even at 650°C the plate inside the furnace got twisted and that the panel board and controller got very hot. These defects were rectified by the firm in July 1973 but more defects were noticed and reported by the factory to the firm in November 1973 for rectification.

After further exchange of correspondence, the firm, in July 1975, declined to accept responsibility for the defects as in its opinion these had arisen due to lack of proper storage of the furnaces, their rough handling and lack of regular maintenance. It further pointed out that the warranty, which was valid for one year from the date of supply of the plant (*i.e.* December 1970), had expired. In order to settle the dispute, however, the firm offered a price reduction of Rs. 1,000 per furnace towards the cost of repair of fan assemblies. The factory, on the other hand, reported to the Director General, Supplies and Disposals in October 1975 that the defects pointed out by it could not be rectified by the firm and that these were on account of wrong and defective design. The factory also stated that the firm's offer of reduction in price was not acceptable.

The firm was paid Rs. 4.51 lakhs (representing 80 *per cent* payment) in June 1970 and Rs. 0.57 lakh (representing 10 *per cent* payment) out of the balance of 20 *per cent* (payable after erection, final inspection and test run of the plant) in August 1973.

The firm served a legal notice in February 1976 for payment of the balance amount together with liquidated damages and interest. The factory, on the other hand, requested the Director General, Supplies and Disposals in February 1976 to ask the firm to take back the furnaces and refund the full amount already

paid as the furnaces were technically not suitable for the purpose for which they had been procured. The dispute had not been settled (December 1977).

As the new furnaces could not be made use of, the factory stated (November 1977) that the old furnaces were being run with increased maintenance and often with erratic results.

20. **Non-recovery of dues from a private firm**

In response to an enquiry from a private firm, an ordnance factory offered in December 1972 to fabricate the following garments at the rate quoted against each :

Trousers (handloom) . .	Rs. 4.50 each
Jackets (handloom) . . .	Rs. 6.50 each
Packing charges . . .	Re. 0.10 per piece

The raw material and the packing material were to be supplied by the firm.

The terms and conditions offered to the firm, *inter alia,* included the following provisions :

(i) the firm should establish an irrevocable letter of credit for the total value of the order with the State Bank of India in favour of the Controller of Defence Accounts (Factories), Calcutta, and

(ii) in the event of the garments not being paid for in full and not taken delivery of by the firm within one month of intimation given by the factory, the General Manager of the factory would be entitled to sell the garments at the risk and expense of the firm.

The firm accepted the rates and the other terms and conditions and placed orders for 30,000 trousers and 15,000 trousers with jackets (suits). Subsequently, the rates were reduced in March 1973 to Rs. 4.40 and Rs. 6.35 per trouser and jacket respectively on the firm offering to press and pack the garments itself.

Trousers numbering 28,052 and suits numbering 8,846 were fabricated by the factory for the firm during the period February 1973 to May 1973, out of which 27,606 trousers and 8,480 suits were issued to the firm during March 1973 to May 1973 after these had been inspected and accepted by the firm's local representative.

The firm had not opened a letter of credit as stipulated and the factory too had not insisted on it before commencing supplies. On 3rd March 1973, the General Manager of the factory gave instructions to issue the garments on pre-payment of fabrication charges by the firm. For the first two consignments, payment was made by the firm on 15th March 1973 after taking delivery of the garments. The third and fourth consignments were issued on pre-payment of fabrication charges. However, from the fifth consignment onwards, issues were made without ensuring pre-payment and the firm did not make any payment for these consignments. As against the total fabrication charges amounting to Rs. 2.13 lakhs due from the firm for the garments issued, the firm had paid Rs. 0.98 lakh only. It refused to pay the balance amount of Rs. 1.15 lakhs on the ground that there were heavy rejections of the garments by its foreign buyers on account of colour variations, oil marks, chalk marks and unmatched buttons and button holes. It did not also take delivery of 446 trousers and 366 suits which had been fabricated by the factory and for which Rs. 5,897 were recoverable from the firm. In April 1974, the firm served a legal notice claiming Rs. 6.15 lakhs from the factory.

A Board of Enquiry appointed by the Additional Director General, Ordnance Factories (ordnance equipment factories

group) in September 1974 to investigate the case observed *inter alia* that :

— the mode of payment originally stipulated was not adhered to by the factory and was changed later without formal amendment to the contract ;

— even the revised terms of payment were not adhered to in respect of all issues ;

— the financial stability of the firm was not got verified by the General Manager before waiving pre-payment.

Two officials of the factory were found responsible by the Board for various lapses in the conclusion and execution of the contract.

According to the Legal Adviser (Ministry of Defence) (December 1974 and January 1975), while the contract was *ab initio* void as it was not signed for and on behalf of the President of India, it was possible to proceed against the firm legally as the firm had accepted the offer and the conditions attached to it. A civil suit against the firm was accordingly filed in February 1976 claiming Rs. 1.46 lakhs (Rs. 1.21 lakhs plus interest thereon) from the firm. It had not, however, been possible to serve the court's summons on the firm (December 1977).

The Ministry of Defence expressed its inability (December 1977) to offer any comment on the audit para as the relevant files were with the Central Bureau of Investigation in connection with the charges framed by it against officers of the department. The Ministry, however, stated that a departmental enquiry had been ordered and was in progress.

CHAPTER 4

WORKS

21. Excess payment of electricity charges

Electricity was/is being provided to users at a station by obtaining supply from a State Electricity Board. The Station authorities are responsible for payment of bills in respect of electricity utilised by entitled non-paying consumers (other ranks). In respect of officers who pay their bills directly to Board the difference between the rates charged and the concessional rates they are entitled to is reimbursed to them.

Under the Tariff of the Board, a lower rate is applicable for domestic consumption and a higher rate for non-domestic consumption. The benefit of the lower rate of tariff applicable to domestic consumption of electricity (recorded on 2,492 meters in married quarters for other ranks and singlemen's barracks) was not being availed of by the Garrison Engineer and electricity charges were being paid at the non-domestic tariff rate from May 1967 onwards till November 1976 (except for 2 months, *viz.*, April-May 1972, for which the Board had billed at the domestic tariff rate). In August 1969, Audit had pointed out to the Garrison Engineer that consumption of electricity in married quarters of other ranks should be correctly got charged at the domestic tariff rate. The Board was approached in November 1969 and again in November 1971 for billing at the domestic tariff rate.

Audit had also pointed out in 1969 that the Board had been charging for consumption of electricity in certain married officers' quarters at the station at the non-domestic tariff rate. On the matter being taken up by the Garrison Engineer, the Board agreed in January 1970 to charge for such consumption

at the domestic tariff rate in future. The overpayment for the period November 1967—December 1969 was worked out by the Garrison Engineer as Rs. 0.11 lakh (against which a refund of Rs. 0.08 lakh was received in October 1976).

After protracted correspondence, the Board replied (August 1974) that the existing practice of billing for electric consumption in the blocks of other ranks in the cantonment area at the non-domestic tariff rate would continue.

In December 1976, the Board finally agreed to revise the billing procedure from October 1975. According to the Garrison Engineer, the overpayment for electric consumption for the period January 1970—October 1975 amounted to Rs. 27.10 lakhs. The Garrison Engineer could not calculate the amount overpaid for the period prior to January 1970 as details of consumption were not available (December 1977).

The excess payment for the period November 1975—July 1976 was worked out by the Garrison Engineer as Rs. 9.96 lakhs (subject to check by the Board). Refund was yet to be afforded by the Board.

The Ministry of Defence stated (December 1977) that :

— the Garrison Engineer did not know till it was pointed out by Audit in 1969 that the Board was billing for domestic consumption at the non-domestic tariff rate and that this lapse was due to lack of co-ordination between the various agencies processing the bills for payment;

— since 1969 efforts were made to get the Board to bill correctly for the appropriate categories of consumers but the Board declined to change the category/grant refund or give reasons for its decision;

— bills were being correctly made by the Board from December 1976 onwards;

— overpayments made for the period prior to January 1970 would be worked out from old records and the Board would be approached for refund; and

— no useful purpose would be served by holding a Court of Inquiry because of time-lag extending over a period of 18 years.

22. **Incorporation of incorrect data in a contract**

In June 1977, a High Court dismissed a petition of a Commander Works Engineer for leave to appeal to the Supreme Court against its earlier judgment (March 1977) upholding the compensation awarded by an arbitrator appointed by the Engineer-in-Chief in respect of a work done by a contractor. An amount of Rs. 9.88 lakhs was paid to the contractor in August 1977 in terms of the Court decree in addition to Rs. 5.81 lakhs admitted by the Department. The salient features of the dispute were as follows :

Tenders were invited (January 1969) by a Zonal Chief Engineer for the construction of access roads to a Naval depot at a station (cost as per schedule of rates : Rs. 5.38 lakhs). Two quotations—one for Rs. 7.80 lakhs and the other for Rs. 5.49 lakhs, 45 *per cent* and 2 *per cent* respectively over the above cost—were received. The Zonal Chief Engineer accepted the lower tender and concluded a contract with the tenderer in May 1969. The work was to be completed within 9 months. Earthwork *inter alia* comprising the following was provisionally included in the contract :

	Quantity in Cu.m.	Rate/Cu. m.
Rough excavation in hard soil . . .	44,300	Rs. 5.78—7.13
Excavation over areas in hard soil . .	2,420	Rs. 4.19—5.94
Excavation over areas in ordinary rock .	550	Rs. 8.41—9.83

The contract also provided that no deviation changing the original nature and scope of the contract should be ordered beyond ± 50 *per cent* of the value assessed of individual trade items specified in the contract.

Earth required for the work was to be obtained by excavation from 5 specified quarries. Work commenced in June 1969 and in September/October 1969 the contractor informed the Garrison Engineer that hard soil in 2 quarries had been excavated and sought permission to start work in ordinary rock. The Garrison Engineer approached (October 1969) the Commander Works Engineer seeking approval for a deviation order to the contract on the plea that cutting hill-sides in laterite *i.e.* ordinary rock (not catered for in the contract), was required in all the quarries. The proposed deviation order provided for 33,225 Cu.m. of 'rough excavation in soft (ordinary) rock' at the rate of Rs. 9.05—10.70 per Cu.m., by reducing an equal quantity from 'rough excavation in hard soil', involving an estimated additional expenditure of Rs. 1.14 lakhs. In February 1970, the contractor requested a quick decision in order to complete the work before monsoon, failing which the work was likely to be delayed for another year resulting in loss to him. In March 1970, after inspection of the site by the Zonal Chief Engineer and the Commander Works Engineer along with the contractor, the Commander Works Engineer intimated to the Garrison Engineer that the strata were only 'hard soil' and that the question of deviation order did not arise. The contractor was informed accordingly by the Garrison Engineer and directed to complete the work by the due date.

Representations were made by the contractor (March—July 1970) indicating his disagreement, inability to complete the work in time and intention to claim compensation for delay in decision. The contractor also cited the recommendations of the Garrison Engineer classifying the work as 'rough excavation

in soft rock', disputed the decision to treat it as 'rough excavation in hard soil' and requested the Zonal Chief Engineer to reconsider the decision with a view to avoiding arbitration in the dispute. The Zonal Chief Engineer informed (July 1970) the contractor that the dispute could be referred to arbitration only after completion of the work under the terms of the contract. He, however, suggested that four patches—two selected by him and two by the Garrison Engineer—might be left undisturbed in each quarry in order that the soil could be examined if an arbitrator were appointed. Work was recommenced in August 1970 and completed in March 1972.

Soon after recommencing the work, the contractor informed the Garrison Engineer that the work being done by him was in 'water and liquid mud and interrupted by tides' and that he should be allowed extra payment on that account. This was, however, not agreed to by the Garrison Engineer as no extra charges were payable under the contract due to site conditions. Since the dispute still persisted, the Engineer-in-Chief in November 1970 (during the course of execution of the work) appointed a Superintending Engineer of the Zonal Chief Engineer's office as an arbitrator.

The arbitrator (who retired from service in November 1971) awarded in July 1972 a sum of Rs. 8.91 lakhs in favour of the contractor against his claims totalling Rs. 12.60 lakhs as under:

	Amount awarded (Rs. in lakhs)
—The extra amount claimed by the contractor on account of classification of the strata as ordinary rock instead of a hard soil was worked out for 825 Cu. m. under the deviation limit in the contract and for the balance quantity at enhanced rates (Rs. 9.05—10.29 per Cu. m.). The Commander Works Engineer contended that both excavation and earthwork were to be treated as one item for the purpose of deviation limit under the contract and that the extra amount payable, even assuming that excavation was in ordinary rock, worked out to only Rs. 0.66 lakh. The arbitrator, however, admitted the claim in full.	2.69

—The claims of the contractor for an extra amount of Rs. 8.87 lakhs on account of his working in foul positions (water, mud, tidal conditions etc.) and loss due to flood were contested by the Commander Works Engineer on the ground that no joint records of quantities of work affected had been submitted in support of these claims. The arbitrator did not, however, accept this contention and partly admitted the claims.	6.22
Total	8.91

The award of the arbitrator was contested by the department in a Court mainly on the following grounds:

— the general conditions of contract had been wrongly interpreted in that instead of determining the maximum quantity of work permissible under the contract by increasing the total value of all excavation and earthwork by 50 *per cent,* the quantity of individual items of excavation and earthwork had been enhanced; and

— no records had been relied upon to ascertain the quantity of earth sunk and soil washed away and the award was based on hypothetical quantities given by the contractor.

The case was, however, dismissed (October 1975) by the Court on the plea that:

— the award could not be remitted or set aside when a mistake did not appear on the face of it;

— the work (excavation in hard soil) had been radically changed which should have required fresh agreement; and

— the contractor had to work in the rainy season and floods due to the delay by the higher authorities in approving the recommendations made by the Garrison Engineer.

A Court decree accepting the award with 6 *per cent* interest payable from the date of decree was accordingly issued.

An appeal filed by the Commander Works Engineer against the Court decree in May 1976 was dismissed (March 1977).

The following interesting points were observed in this connection:

— The quantity of 'excavation over areas in ordinary rock' indicated in the contract (550 Cu.m.) was unrealistic, the actual quantity excavated being 35,002 Cu.m. Even before tendering, the Garrison Engineer had suggested (March 1969) that cutting of hill-sides should be indicated as both 'hard soil' and 'laterite' (ordinary rock)—without any break-up—but this was not agreed to.

— The Ministry of Finance (Defence) had pointed out (June 1973) that incorrect data of soil conditions incorporated in the tender had led to arbitration and consequent loss which had to be regularised and responsibility fixed.

— In his statement to the arbitrator, the contractor had stated (April 1972) that he had never applied for arbitration and that the Engineers on their own had nominated the arbitrator.

— The payment made to the contractor by way of interest alone worked out to Rs. 0.96 lakh. The total cost of the work amounted to Rs. 15.69 lakhs *i.e.* 286 *per cent* of the contracted cost.

The Ministry of Defence stated (December 1977) that it was not a case of incorporating incorrect data of soil conditions in the tender documents but that of classification of the excavated material and that the contention of the Department leading

to the classification of the excavated material was not accepted by the arbitrator. The Ministry added that the extra payment allowed to the contractor was not being treated as a loss to Government.

23. **Defective planning and siting of field-flush latrines**

In August 1973, a Formation Commander ordered the convening of 3 recce-*cum*-siting Boards of Officers for provisioning of field-flush latrines and cook houses for certain units at a station. The Boards recommended *inter alia* construction of 1,055 latrines for these units. Pursuant to the recommendations of the Boards, the Formation Commander issued three separate sanctions on 20th September 1973 for three jobs 'A', 'B' and 'C' for provision of field-flush latrines and cook houses at the station. The jobs were to be executed under the operational works procedure.

Two contracts were concluded by a Commander Works Engineer in October 1973 for the works covered under jobs 'A', 'B' and 'C', which included *inter alia* construction of 990 field-flush latrines.

In November 1973, the sanction in respect of job 'C' was cancelled and a fresh sanction for its commencement issued under para 11 of the revised works procedure; covering sanction was subsequently issued by the Formation Commander in April 1974 for Rs. 7.02 lakhs.

In June 1974, the question of providing roofs over the latrines was considered but the work was not taken up due to financial constraints. The work against the two contracts (of October 1973) was completed during May-June 1974. Latrines numbering 809 were handed over to the users immediately after their completion in July 1974 and the remaining (181) in August 1974 after commencement of rains.

In August 1974, the Garrison Engineer brought to the notice of the two contractors that the covering of the pits of the field-

flush latrines had sunk and called on them to rectify the defects. In the same month, however, the latrines and the soakage pits collapsed due to ingress of rain water before these were put to use.

A Court of Inquiry convened in September 1974 by the Formation Commander and a Technical Board convened by the Commander Works Engineer in December 1974 attributed the causes of the failure of the field-flush latrines mainly to:

— improper siting of the field-flush latrines;

— non-provision of overhead cover over the seats;

— inadequacy of design of the soakage pits;

— non-provision of shoring and strutting to soakage pits;

— non-provision of area drainage;

— non-execution of work by contractors as per contract specifications; and

— inadequacy of supervision.

The Zonal Chief Engineer agreed (May 1976) with the findings of the Court of Inquiry and the factors that contributed to the failure of the soakage pits as pointed out by the Court and recommended to Corps Headquarters that :

— recovery be made from the contractors for use of small size ballies and non-application of creosote oil; and

— departmental action against supervisory staff be taken for slackness in supervision work.

In the meantime (September 1975), a Board of Officers was convened by the Formation Commander for assessing the extent of essential repairs and improvements required for the field-flush latrines. The Board did not recommend (November 1975) any repairs as these would be costlier than the original

cost of the field-flush latrines itself. The requirements of the units were met by constructing 500 deep-trench latrines through contracts during June 1976 at a cost of Rs. 0.95 lakh.

In February 1977, the Garrison Engineer pointed out that expenditure, if incurred, on repairs would be infructuous and recommended that the field-flush latrines be abandoned. Another Board was convened in July 1977 for the purpose of retrieving, accounting, conditioning and pricing of all items of field-flush latrines and connected stores of soakage pits; its proceedings were awaited (December 1977).

The field-flush latrines constructed at a cost of Rs. 2.39 lakhs had thus to be abandoned even before being put to use.

A sum of Rs. 0.06 lakh had been recovered from the contractors' bills.

The Ministry of Defence stated (December 1977) that :

— due to reduction of funds under 'operational works', fresh sanction in respect of job 'C' was issued (November 1973) under the revised works procedure to avoid delay in the execution of the work;

— since the field-flush latrines had collap[illegible] to ingress of rain water and it was not [illegible] repair them, there was no alternativ[illegible] abandon the damaged latrines;

— disciplinary action, if any, would be taken against the concerned officers/staff for their lapse on finalisation of the Court of Inquiry proceedings held in September 1974; and

— the Board convened in July 1977 had since finalised its proceedings and further action would be taken after their approval by the Army Commander.

24. **Re-laying of crane track**

In December 1962, the Ministry of Defence accorded sanction for the construction of a wharf at a Naval station at an estimated cost of Rs. 130.03 lakhs (revised to Rs. 125.00 lakhs in February 1970). The project included provision for erection and commissioning of one 20-ton portal crane and 1120-feet crane track for its operation. The laying of crane track formed part of a contract for civil works of the project which was concluded with a firm 'A' by a Zonal Chief Engineer in December 1963. The crane track, completed (June 1967) at a cost of Rs. 1 lakh, was handed over to the users in August 1967.

Meanwhile, against an indent placed by the Zonal Chief Engineer in July 1965, a contract was concluded by the Director General, Supplies and Disposals with a firm 'B' in June 1966 for erection, testing and commissioning of a 20-ton portal crane at a cost of Rs. 12.57 lakhs (foreign exchange : Rs. 1.70 lakhs). The crane was to be fabricated, erected and commissioned by a sub-contractor of firm 'B' and the work was to be completed within 16 months, later revised to 24 months, from the date of order and issue of import licence *i.e.* by 31st March 1972. The crane was, however, erected in October 1974 due, according to the department, mainly to delay in release of foreign exchange, issue of import licence, change in design of some of the components and lock-out in the factory of the sub-contractor.

The officers of the Chief Inspectorate of Engineering Equipment, detailed for inspection of the crane, pointed out (October 1974) that the crane could not be tested for long track motion due to the following :

— adequate test load was not available;

— power supply to the crane could not be made for its long travel in the absence of controls for plug boxes beyond 100 feet;

— the concreting work adjoining the track had not been scraped off for about 2/3rd of the distance (this had also been pointed out by the sub-contractor in November 1972);

— difference between track levels to the extent of 9/16″ maximum in the horizontal plane would affect the stability of the crane;

— the track was wavy and as such did not provide a linear path for 6 sets of crane wheels ; and

— the track was not 'true' for most of the length as it was found covered with mud and dust.

According to the Inspectorate, the above factors would also have affected the performance of the crane and its life.

A length of the first 200 feet of the crane track was repaired/rectified by the sub-contractor at his own cost and the crane was taken over by the user in March 1975. Another length of 100 feet of the track was got repaired/rectified by the Military Engineer Services through a local firm in June 1975 at a cost of Rs. 0.06 lakh.

In August 1975, a Board of Inquiry was constituted by the Naval Command to examine the serviceability or otherwise of the track and also to give technical opinion on the repair work being undertaken on the track. The Board found that the standard of repairs to the rectified portion (first 300 feet) of the track was not very satisfactory and that the track beyond 300 feet was unserviceable due to variations in levels of two portions of the track. The Board also opined that :

— level defects had possibly been existing even at the time of completion of the track although the completion report of the track did not mention any discrepancy in respect of levels or alignment variation;

— the Garrison Engineer and other officers of the Military Engineer Services Division had accepted an inferior quality of work without proper control and precise check during various stages of laying the track and at the time of final completion; and

— the Zonal Chief Engineer could have made a provision in the contract for civil works to associate the sub-contractor for the supply of crane with the laying of the track on wharf.

At the instance of the Commander Works Engineer, a technical expert of a public sector undertaking was consulted and he suggested complete re-laying—instead of repairs—of the track. The Naval Command accordingly sanctioned in June 1976 re-laying of the track at an estimated cost of Rs. 3.27 lakhs. The re-laying of track was completed (April 1977) at a cost of Rs. 3.29 lakhs.

Thus, as a result mainly of the delay in the supply of the crane, there was :

— an infructuous expenditure of Rs. 1.06 lakhs on the first laying of the track;

— increase of Rs. 2.29 lakhs in the cost of re-laying of the track;

— non-utilisation of the crane (cost : Rs. 12.57 lakhs) during October 1974 —April 1977; and

— avoidable expenditure of Rs. 1.46 lakhs on hiring of cranes from outside agencies during April 1968—July 1974.

The Ministry of Defence stated (December 1977) that :

— at the time of completion of work in June 1967, the track was tested, as was found feasible, without the crane and the statement that the work completed in 1967 was faulty was just a presumption on the part of the Board of Inquiry of August 1975;

— during June 1967—October 1974 the track remained unused without any maintenance and defects (pointed out by the Defence Inspector in October 1974) developed in the track due to loading and unloading of heavy packages on the track, heavy traffic over wharf and saline/corrosive atmosphere of the area;

— re-laying of crane track was justified as the rails were required to be replaced after a certain period, particularly in the corrosive atmosphere;

— increase in the cost of re-laying of the track was due mainly to increase in prices and also due to change in specifications to suit the crane as per current practice; and

— no details regarding utilisation of the crane (October 1974—April 1977) and expenditure on hiring of cranes from outside agencies were available.

25. **Splitting up of a scheme relating to augmentation of water supply at a station**

In May 1972, a Board of Officers convened by a Command Headquarters recommended augmentation of water supply (from 25 lakh gallons to 50 lakh gallons per day) to be undertaken in two groups each comprising three phases, for meeting the immediate as well as the future requirements of the Army and the Cantonment Board at a station. Group I comprised three phases as under:

Phase I : 4 overhead reservoirs of 50,000 gallons each and related rising and distribution mains.

Phase II : Raising existing weir at the river source by 2 feet.

Phase III : Pumps, filter house, settling tanks and additional reservoirs of 3.5 lakh gallons capacity in all.

In February 1973, the Command Headquarters ordered—due to operational military necessity—the commencement of work of improvement in water supply (Phase I) costing Rs. 12.09 lakhs approximately under para 11 of the revised works procedure. In such cases, earliest possible steps are required to be taken to regularise the action by issue of a covering sanction by the competent financial authority. This estimate *inter alia* catered for 4 overhead reservoirs and related rising mains and pipelines.

In July 1973 the Engineer-in-Chief pointed out that, since the additional requirements of the Cantonment Board and the future requirements of the Army were not definite and the existing facilities were capable of meeting the immediate requirements of the station adequately, sanction for phase I of the scheme under the special provisions relating to operational military necessity was not fully justified.

In September 1973, the rough cost of the works under phases II and III was estimated as Rs. 29.10 lakhs.

Despite recourse to the special provisions, the work (phase I) commenced only in August 1974, 18 months after the issue of para 11 sanction. A Commander Works Engineer, in an engineer appreciation of the scheme, stated (October 1974) that the cost of the work (phase I) had escalated to Rs. 17 lakhs and that the facilities could be utilised only if the raising of the weir (initially planned in phase II) and additional pumping facilities estimated to cost Rs. 4.50 lakhs and Rs. 0.70 lakh respectively were also provided under phase I, thereby raising the total estimated cost of the work (phase I) to Rs. 22.20 lakhs. As this revised estimate exceeded the limit of Rs. 20 lakhs (upto which a Command Headquarters is empowered to sanction works), the Chief Engineer directed the Zonal Chief Engineer in January 1975 that the scope of the work be restricted to Rs. 20 lakhs by relegating one or two reservoirs and connected items to subsequent phases of the scheme.

Accordingly, in February 1975, the Command Headquarters issued an amendment to the para 11 sanction (of February 1973)

changing the revised scope of the work (phase I) as suggested by the Commander Works Engineer in October 1974.

During June—December 1975, estimates for works under phases I, II and III (taking into account the changes in their scope) for Rs. 19.94 lakhs, Rs. 18.01 lakhs, Rs. 18.81 lakhs respectively were prepared by the Military Engineer Services. The revised estimate for phase I catered for the provision of weir, rising mains, booster pumps and one overhead reservoir. The total estimated cost of the works in respect of the three phases of group I thus worked out to Rs. 56.76 lakhs.

The Command Headquarters accorded in December 1976 administrative approval to phase I of group I at an estimated cost of Rs. 19.94 lakhs.

The three phases of group I of the scheme taken together would have required sanction of the Ministry of Defence but the work was thus split and sanction accorded to the first phase by the Command Headquarters.

The value of work done under phase I at the end of June 1977 amounted to Rs. 19.11 lakhs including Rs. 12.20 lakhs on account of laying of pipelines which had been completed in August 1975 (on the basis of 4 reservoirs as against 1 reservoir provided in the sanction of December 1976). The re-scheduling of priorities and relegation of certain overhead reservoirs to subsequent phases resulted in the pipes having been laid at a cost of Rs. 5.03 lakhs but serving no purpose.

The Ministry of Defence stated (December 1977) that :

— since the scheme for augmentation of water supply would have taken a long time for sanction, the work of 'improvement in water supply', which had been included in the new major works programme for 1973-74, was sanctioned and as such there was no intention of splitting up the scheme,

— the work as sanctioned in December 1976 constituted a complete complementary service to the existing assets and could not be termed as a 'split' work,

— the project as sanctioned pertained to improvement of the existing water supply for the Army's requirements and was carried out as per actual requirements on the ground and

— pipelines laid as actually required at site were in use for improvement of water supply and no more reservoirs were required.

CHAPTER 5

PROCUREMENT OF STORES AND EQUIPMENT

26. Contract for supply of empty bodies of an ammunition

Heat and practice versions of empty bodies for an ammunition were being manufactured by an ordnance factory (sanctioned capacity 42,000 numbers : actual production about 21,000 numbers). In December 1963, an order for 25,000 numbers of empty bodies (heat version) was placed through the Director General, Supplies and Disposals on firm 'A'. Under the terms of this order, bulk production was to commence only after the approval of a sample. On the successful completion by the firm of development of a sample of this item in August 1968 (*i.e.* after 5 years), approval for bulk production was under consideration by the Department of Defence Supplies. In August 1969, the Department decided to meet part of the then existing deficiency of empty bodies by placing an order on trade. In January 1970 the Director General, Ordnance Factories (DGOF) suggested that the order on trade should be for practice version only as the ordnance factory was not manufacturing this version any longer. Since development work on the heat version had already been completed (by firm 'A'), it was decided by the Department of Defence Supplies to modify the design of the practice version to conform to that of the heat version and to place orders on trade for 75,000 numbers of empty bodies (practice version). The Department of Defence Supplies, after negotiations with firm 'A' and another firm 'B', concluded (December 1970) a contract with firm 'B' (the offer of which was lower) for supply of 75,000 numbers (at the rate of Rs. 252 each for the first 50,000 and Rs. 239.40 each for the remaining), the delivery to be completed within 25 months of the approval of a sample. Firm 'B' did not, however, make any supply owing to financial difficulties.

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In January 1972, the Army Headquarters reviewed the requirements of the ammunition (both heat and practice versions) in the context of a proposal to introduce a more sophisticated weapon in service. At a meeting held in February 1972 in the Ministry of Defence, it was decided that manufacture of the ammunition by the DGOF should be suspended and that the contract with firm 'B' for supply of empty bodies should be cancelled without financial repercussions. The contract with firm 'B' was not, therefore, pursued further.

In July 1973, the Army Headquarters, on a further review of the requirements of the ammunition (heat and practice versions), revived their outstanding order for the ammunition and suggested that the supply be completed in a period of two to three years. In March 1974, the DGOF requested the Department to expedite the supply of empty bodies (practice version).

The Department of Defence Supplies thereupon invited (March 1974) fresh quotations for supply of 75,000 empty bodies (practice version). Negotiations were initiated with 3 firms 'A', 'C' and 'D', the quotations of which ranged from Rs. 600 to Rs. 1,000 per unit.

In June 1974, at the instance of the Ministry of Finance (Defence), the Army Headquarters reviewed their requirement of practice ammunition and agreed to reduce the order to 50,000 numbers covering the requirement upto 1981-82 at reduced scales of training as induction of the new weapon (referred to earlier) was likely to commence from 1978-79 and phasing out of the existing weapon would be completed by 1982-83 only. The schedule of manufacture of practice ammunition that was considered acceptable to DGOF was as follows :

Year	Numbers
1974-75	10,000
1975-76	15,000
1976-77	15,000
1977-78	10,000
	50,000

It was also stated that the DGOF would not require supply of empty bodies from trade for the above schedule of manufacture. The Ministry of Finance (Defence), therefore, suggested (June 1974) that empty bodies might be manufactured by the ordnance factory in view of the cheaper cost of manufacture by it (Rs. 527) when compared to the offer of the trade (Rs. 600).

However, a contract was placed in October 1974 on firm 'C' with the concurrence of the Ministry of Finance (Defence), for 37,551 numbers of empty bodies (the balance of 12,449 numbers to be manufactured by the ordnance factory) of the practice version at a cost of Rs. 600 per unit (total value : Rs. 2.25 crores) for delivery during July 1975—July 1976, on the following grounds :

— the trade price compared favourably with the cost of production in ordnance factory, if elements of profit, escalation, financial charges were taken into account ;

— the capacity for production of empty bodies in ordnance factory had already been diverted to other items of manufacture and the DGOF would have no objection if orders were placed on trade after consideration of balance of advantage;

— negotiations had already been finalised with the firm.

In February 1976, the contract with firm 'C' was amended providing for grant of 'on account' payment to the extent of 90 *per cent* of the value of raw materials and components upto a ceiling of Rs. 20 lakhs. The 'on account' payment was to be made against suitable bank guarantee and was to carry interest at 12 *per cent* per annum. A total sum of Rs. 13.35 lakhs was paid as 'on account' payment to firm 'C' in 2 instalments (Rs. 7.49 lakhs in August 1976 and Rs. 5.86 lakhs in September 1976).

Firm 'C' submitted advance samples in November 1975 against the stipulated date of April 1975. Clearance for bulk production was given by Inspectorate of Armaments in February 1976. The first consignment of supplies was delivered in August 1976 but was rejected in November 1976 by the Senior Inspector of Armaments as "the store was found not acceptable". Consequently the Department of Defence Supplies cancelled (November 1976) the contract. The 'on account' payment of Rs. 13.35 lakhs made to firm 'C' was outstanding but the bank guarantee furnished by firm 'C' was not invoked. In December 1977, after review by the Department of Defence Supplies, the contract with firm 'C' was revived for a quantity of 28,000 numbers (against the contracted quantity of 37,551 numbers) to be supplied by October 1978.

The Department of Defence Supplies stated (December 1977) that as the contract had been revived, the bank guarantee furnished by firm 'C' stood automatically revalidated.

Since only a very limited supply of practice ammunition was being made by the DGOF since 1971-72, the Army had been meeting the requirements of training at reduced scale with heat ammunition which was more expensive.

27. **Extra expenditure on the procurement of Naval equipment**

A foreign firm was the proprietary manufacturer/supplier of an equipment used in a class of Naval boats which were under production in the country and were scheduled for commissioning from December 1971 onwards. The initial requirements of the equipment were covered in two contracts concluded with the firm by an overseas Supply Mission in June 1970 and March 1971 at the following rates (subject to 4½ *per cent* discount) :

Type	Rate per unit
'A'	£5,450
'B'	£4,300
'C'	£4,450

In March 1973, the Naval Headquarters placed an indent on the Supply Mission for additional requirements (together with

requisite spares) of types 'B' and 'C'. These were covered in a contract concluded (September 1973) by the Supply Mission with the same firm at the following rates (subject to the same discount) :

Type	Rate per unit
'B'	£4,460
'C'	£3,880

To cover future requirements, the contract included an option clause for additional quantities of type 'B' to be ordered by 30th June 1974 at the same price. The clause also provided for a reduction of £ 100 in the unit price if the total order exceeded a specified number.

Meanwhile, the Naval Headquarters (May 1973) obtained quotations from the same firm for further requirements of types 'A' and 'B'. The unit prices quoted (subject to the same discount) were £ 7,125 and £ 4,730 respectively, the offer being valid upto 31st August 1973 (later extended upto 31st January 1974). Based on these rates, the Naval Headquarters initiated in November/December 1973 a proposal for obtaining Government sanction for these further requirements.

The proposal was approved by Government on 18th May 1974 and on the same day the Naval Headquarters conveyed by cable the Government sanction to the Supply Mission. The formal indent was, however, sent later on 20th July 1974. Neither the Naval Headquarters nor the Supply Mission had considered specifically taking advantage of the option clause in the contract of September 1973.

The Supply Mission invited fresh quotations on 27th July 1974. The rates quoted (September/October 1974) by the same firm valid upto 31st December 1974, being considerably higher than the rates mentioned in the indent, the Supply Mission sought (25th October 1974) the approval of the Naval Headquarters to the rates quoted and also provision of additional foreign exchange. The approval of Government was conveyed to the Supply Mission on 28th December 1974 and the Supply Mission concluded a

contract with the firm on 30th December 1974 at the following rates :

Type	Rate per unit
'A'	£ 8,960
'B'	£ 5,000

The contract of 30th December 1974 resulted in an avoidable extra expenditure of £ 22,221 (Rs. 4.21 lakhs) on account of type 'B', the requirements of which could have been ordered by 30th June 1974 under the option clause of the contract of September 1973.

While conveying approval of Government to provision of additional foreign exchange on 28th December 1974, a request had also been made to the Supply Mission by the Naval Headquarters to get an option clause incorporated in the contract for placing orders later for additional quantities at the same rates. The Ministry of Defence stated (September 1976) that the Supply Mission could not get an option clause incorporated in the contract as it had to conclude the latter before the expiry of the offer on 31st December 1974.

The Ministry of Defence also stated (November 1977) that it was not in a position to verify at this stage the exact circumstances in which the Naval Headquarters sought fresh quotations for type 'B' directly from the firm when an option clause for buying more equipment existed in the contract of Septem 1973.

The Ministry added that the Supply Mission had not taken any action on the cable sent by the Naval Headquarters on 18th May 1974 in the absence of any specific direction in it for placing formal orders. The Naval Headquarters had since issued necessary instructions (December 1976) emphasising the need for giving clear directions to the Supply Mission in such cases.

28. **Delay in acceptance of quotations resulting in extra expenditure**

In September 1973, a memorandum of understanding was signed between a foreign supplier and the Ministry of Defence

for the procurement of 2 sets of pontoon bridge at a price of Rs. 321.80 lakhs per set on c.i.f. terms. The memorandum envisaged further negotiation on technical and price questions.

On 31st October 1973, the representative of the supplier in India communicated the supplier's approval to bring down his offer from Rs. 321.80 lakhs to Rs. 306 lakhs per set provided both the sets were ordered on him. Thereafter, the Ministry asked the supplier's representative for a further reduction in price from Rs. 306 lakhs to Rs. 305 lakhs per set. The supplier's representative, however, stated that the revised price quoted was the lowest that the supplier could offer.

On 7th November 1973, the Ministry requested the Indian Mission in the country where the supplier was located to seek clarification from the supplier whether his offer of Rs. 306 lakhs per set was on the basis that order for one set be placed immediately with an option to place another order for the additional set within 6 months. The Ministry also requested the Mission to persuade the supplier to accept the price of Rs. 305 lakhs per set which had been arrived at after detailed consideration.

On 13th November 1973, the supplier's representative informed the Ministry that the offer of Rs. 306 lakhs per set was valid provided the contract was signed within 3 weeks and that the price for the additional set would be the same. The supplier's representative also intimated that a delegation could leave for India immediately on receipt of confirmation of the offer.

Soon after, the Ministry enquired (15th November 1973) from the Indian Mission the outcome of the efforts made by it to seek price reduction of Rs. 1 lakh per set from the supplier before the supplier's delegation could be formally invited to come to India for conclusion of the contract. On 16th November 1973, the Mission informed the Ministry that since the question of fixation of price had been decided at the 'highest' level, there was no scope for any further bargaining.

On 21st November 1973, the Ministry asked the supplier's representative to arrange for the visit of the delegation for further

negotiations. While the supplier's offer of Rs. 306 lakhs per set lapsed on 3rd December 1973, the delegation came to India only in February 1974. During negotiations, the delegation pointed out that, in view of escalation in the price of raw materials and increase in freight charges, the offer of Rs. 306 lakhs per set was no longer valid and later asked for an increase of Rs. 76.5 lakhs per set. After considerable discussions, on 4th March 1974, it was mutually agreed that the equipment would be supplied at the rate of Rs. 309 lakhs per set on c.i.f. terms. A contract was accordingly concluded on 5th March 1974 at the rate of Rs. 309 lakhs per set stipulating delivery of the two sets by December 1974 and March 1975. The sets were, however, delivered during September—October 1975.

Non-acceptance of the supplier's offer within the validity date, the extension of which had also not been formally sought, thus resulted in an extra expenditure of Rs. 6 lakhs.

The Ministry stated (December 1977) that :

— they had no control over the timing of the visit of the supplier's delegation ; and

— as a result of negotiations conducted in India, they had succeeded in obtaining reduction in the price from Rs. 321.80 lakhs (quoted in the memorandum of understanding) to Rs. 309 lakhs per set.

29. **Avoidable expenditure on the procurement of ground sheets**

Based on indents placed by the Director of Ordnance Services in July 1964 for the procurement of ground sheets, the Director General, Supplies and Disposals concluded a contract with a firm in November 1964 for the supply of 97,600 ground sheets at a cost of Rs. 12.44 lakhs (unit rate : Rs. 12.75). The quantity on order was later, in February 1965, raised to 98,884 numbers and again in April 1965 to 99,600 numbers. The supplies were to be completed, in equal monthly instalments, by September 1966.

The firm had supplied 31,989 numbers by September 1966. In October 1966, the delivery period was extended upto February 1967 and in consultation with the Director of Ordnance Services the following further extensions were granted by the Director General, Supplies and Disposals from time to time :

In		Upto	
April	1967	July	1967
September	1967	March	1968
April	1968	June	1968
August	1968	November	1968
January	1969	May	1969
June	1969	March	1970

In spite of extensions of time aggregating 3½ years, against the order for 99,600 ground sheets, the firm had supplied a quantity of 62,674 (last supply in August 1969) leaving a balance of 36,926. Out of the supplies made by the firm, 3,097 sheets were stated to have been initially rejected and 37 sheets were received short by the consignee depot. Of the rejected quantity, 2,488 sheets were subsequently accepted under price reduction and the balance 609 sheets were finally rejected. In view of the poor performance and at the instance of the Director of Ordnance Services, in July 1970 the Director General, Supplies and Disposals cancelled the residual quantity on contract with a view to procuring it at the risk and cost of the firm.

However, against the risk purchase tender enquiry opened in September 1970, the firm quoted a unit rate of Rs. 12.75 (*i.e.* the same as in the original contract of November 1964) and a contract for 36,926 ground sheets (value : Rs. 4.71 lakhs) was placed on the same firm again in October 1970 for supplies to be completed by November 1971. Incidentally, on the basis of separate tenders opened in August 1970, the same firm was awarded a further contract for 13,550 ground sheets at a unit rate of Rs. 18.50 and the supplies against this contract were completed between August 1971 and August 1972.

Since no supplies were effected by the firm against the risk purchase contract of October 1970, in March 1972 this contract was also cancelled at the risk and cost of the firm.

Against the second risk purchase tender enquiry opened in April 1972, the firm again quoted the same rate of Rs. 12.75 whereas against another tender enquiry at about the same time (March 1972) the firm had quoted a unit rate of Rs. 31.50. On this occasion, however, it was decided to ignore the firm's offer as unrealistic, and on 1st July 1972 the Director General, Supplies and Disposals informed the Director of Ordnance Services that :

— the lowest acceptable offers ranged from Rs. 30.50 to Rs. 33 each,

— additional funds should, therefore, be made available by 18th July 1972 to cover the residual quantity and that

— according to legal advice no valid risk purchase could be effected in this case, but only general damages could be claimed.

This was followed by protracted inter-Ministerial correspondence and after about 3½ years (November 1975) the Director of Ordnance Services advised the Director General, Supplies and Disposals that since the quantity could not be covered by a valid risk purchase, it had been decided in consultation with the Ministry of Defence to cancel the residual quantity on indent.

The outstanding qnantity of 36,926 ground sheets was included in a fresh indent raised by the Director of Ordnance Services in April 1976. This was covered by the Director General, Supplies and Disposals in a contract concluded in August 1976 at a unit rate of Rs. 38.40 involving an additional expenditure of Rs. 9.47 lakhs as compared to the original rate of Rs. 12.75 and an avoidable expenditure of Rs. 2.92 lakhs as compared to the lowest acceptable offer of Rs. 30.50 received in April 1972.

The Department of Supply stated (February 1977) that :

— extensions of delivery period were allowed from time to time at the firm's instance on account of scarcity of raw materials, increase in prices, labour unrest etc.

— the indentor had in December 1968 advised against cancellation of the contract due to high prevailing rates,

— on the advice of the Ministry of Law a claim of Rs. 3.45 lakhs on account of general damages had been preferred against the firm and the matter referred to arbitration and

— the extra expenditure (Rs. 2.92 lakhs) could have been avoided if additional funds had been provided by the indentor by April 1973.

The Ministry of Defence stated (March 1977) that additional funds could not be provided by April 1973 as requested by the Director General, Supplies and Disposals due to inter-Ministerial correspondence. The Ministry added that additional expenditure of Rs. 9.47 lakhs had to be incurred as no valid risk purchase could be effected by the Director General, Supplies and Disposals.

30. **Procurement of hoods sliding**

Hood sliding is a fitting on a particular type of aircraft for providing clear and distortion-free vision to the pilots. Prior to 1968, the provisioning of this item was done on the basis of past consumption. This was stated to have resulted in the grounding of a large number of aircraft from time to time, affecting the serviceability and operational capability of the fleet. With a view to rectifying the situation, in December 1967, the Air Headquarters initiated a proposal that future provisioning for this item be based on a life cycle of 4 years which was considered to be not materially different from the trends of consumption but had the advantage of eliminating dependence on varying consumption data

from year to year. The proposal was approved by the Ministries of Defence and Finance (Defence) during February—April 1968.

A review carried out in August 1970 on the revised basis (of 4 years' life) disclosed a net requirement of 33 numbers which was covered by an order placed in June 1971 on a foreign firm 'A' (stated to be the proprietary manufacturer of this item) through a Supply Mission abroad at a unit rate of £ 1,800.

In a subsequent review in February 1972, the procedure approved in 1968 was given up and on the basis of past consumption no deficiency was revealed. In another review conducted in July 1973, the requirement was computed at 14 numbers on the basis of one year's consumption instead of 24 numbers on the usual basis of two years' consumption. In the indent raised in November 1973 the quantity was further reduced to 10 numbers. In view of the increase in costs reported in the meantime by the Supply Mission, a special review was carried out in May 1974 which revealed a net requirement of 52 numbers. In spite of the substantial deficiency, the earlier quantity of 10 numbers indented in November 1973 was allowed to stand. An order was accordingly placed on firm 'A' on 30th July 1974 at a unit rate of £ 3,700.

A fresh review on 4th July 1974 disclosed a requirement of 25 numbers which was scaled down to 10 numbers. The indent for this quantity was, however, raised 7 months later in February 1975 and was covered in an order placed by the Supply Mission in October 1975 on another firm 'B' at a unit rate of £ 8,750 reflecting an increase of over 136 *per cent.*

Further two reviews carried out by Air Headquarters and an Equipment Depot in October 1975 revealed additional requirements of 19 and 44 numbers which were scaled down to 15 and 10 respectively. The requirements were covered through amendments in December 1975/August 1976 to the earlier contract (October 1975) at a unit rate reduced to £ 8,050 for the increased quantity (35 numbers).

Inadequate assessment of requirements and delays in procurement action thus resulted in an avoidable/additional expenditure (in respect of 25 units of hood sliding) of Rs. 19.55 lakhs in foreign exchange.

The Ministry of Defence stated (March 1977) that :

— the revised basis of 4 years' life was not adopted as the same would have resulted in over-provisioning and

— the deficiencies revealed in each review were scaled down on the basis of past experience.

31. **Avoidable expenditure on the procurement of aircraft spares**

On the recommendation of the repair agency, an Air Force Equipment Depot carried out a review (as on 1st April 1974) of certain spares of an airframe to meet the immediate repair tasks. Based on this review, in July 1974 an indent for 4 numbers of an item (estimated cost : £ 1,650 each) was placed by the Air Headquarters on the Director General, Supplies and Disposals, who, in September 1974, cross-mandated the indent to a Supply Mission abroad. The item was to be procured on a 'proprietary' basis from a foreign firm.

At about the same time (September 1974) another review (as on 10th June 1974) covering the requirements up to May 1979 (including repair tasks) revealed an additional requirement of 15 numbers of the same item. The procurement of this quantity (estimated cost : £ 1,650 each) was approved by the Ministry of Finance (Defence) on 27th November 1974 and necessary foreign exchange released on 26th December 1974.

In the meantime, on 12th December 1974 the Supply Mission informed the Air Headquarters that the foreign firm had offered the item at £2,038.27 each. The offer valid up to 10th January 1975 was later extended up to 21st January 1975. On 20th January 1975, the Air Headquarters communicated acceptance of the firm's offer together with the necessary release of additional foreign exchange for 4 numbers covered by the indent of

July 1974. The Supply Mission accordingly concluded a contract with the firm on 27th January 1975.

Although the firm's offer was open until 21st January 1975, the indent for the additional requirement of 15 numbers was placed by the Air Headquarters on the Supply Mission only on 12th February 1975. This quantity was thereafter covered in a fresh contract with the same firm in July 1975 at an increased cost of £ 3,057.40 each, resulting in an avoidable expenditure of about Rs. 2.89 lakhs in foreign exchange.

The Ministry of Defence stated (March 1977) that :

— the price of £ 2,038 was valid only for 4 numbers of the item ; and

— the Supply Mission had in another case clarified that in the case of proprietary items, unit prices tended to go up with an increase in the quantity as the items having gone out of production, manufacturing facilities had to be set up afresh.

The Ministry added (December 1977) that 3 out of the 15 numbers of the item ordered had been received in April 1977.

32. **Procurement of coaches passenger**

Based on a review as on 30th November 1973 carried out in January 1974, the Air Headquarters placed (April 1974) an indent on the Director General, Supplies and Disposals through the Director of Technical Development and Production (Air) for procurement of 20 coaches passenger at a total estimated cost of Rs. 17.91 lakhs (at Rs. 89,562 each). As per the indent, the supplies were required by May 1974. According to the specifications furnished with the indent by the Director of Technical Development and Production (Air) to the Director General, Supplies and Disposals in June 1974, the coach passenger was required to be built on the chassis of a particular make (firm 'A').

On 30th August 1974, the Director General, Supplies and Disposals enquired from firm 'A' about the price of the chassis and the guaranteed delivery date, and simultaneously requested the Director of Technical Development and Production (Air) to furnish the necessary proprietary article certificate in favour of this firm. On 6th September 1974, the Director of Technical Development and Production (Air) advised the Air Headquarters to furnish the requisite certificate. On 21st September 1974, the Air Headquarters informed the Director General, Supplies and Disposals that no such certificate had been insisted upon in the past for procurement of the same item with similar specifications and requested that the indent be processed as hithertofore. On 14th October 1974, the Director General, Supplies and Disposals clarified that, except for items which were covered under rate contract, proprietary article certificates in respect of all other stores of specified model and make were required before procurement action could be initiated. In the meantime, firm 'A' quoted Rs. 82,064 per chassis with the stipulation that the price prevailing at the time of delivery would apply irrespective of the date of order.

As regards body-building, the lowest offer according to the tender enquiries opened on 17th October 1974 was for Rs. 31,500 per coach from firm 'B'. On 8th November 1974, firm 'B' confirmed that the rate quoted for body-building was firm and without price variation clause. The offer was valid upto 17th December 1974. As a proprietary article certificate had not been furnished by the Air Headquarters till then in spite of reminders issued during 29th October—5th December 1974, the Director General, Supplies and Disposals asked firm 'B' to extend the validity of its offer by about a month (upto 18th January 1975). No reply was, however, received from firm 'B'. Ultimately, on 21st January 1975, the Director General, Supplies and Disposals informed the Air Headquarters that the indent had been treated as cancelled and that the offers received for body-building had been allowed to lapse for want of proprietary article certificate.

Meanwhile, on 18th December 1974 the Air Headquarters informed the Director General, Supplies and Disposals that action was being initiated to obtain the proprietary article certificate. The required certificate was furnished to the Director General, Supplies and Disposals on 14th May 1975.

Based on fresh quotations, in September 1975 the Director General, Supplies and Disposals concluded contracts for body-building with firms 'B' and 'C' at the rate of Rs. 52,000 (16 Nos.) and Rs. 44,750 (4 Nos.) per coach respectively. Another contract for supply of 20 chassis at the rate of Rs. 85,506 each was concluded with firm 'A' in October 1975. The supply of chassis was completed by November 1975 while the work of body-building was completed by May/August 1976.

The delay in furnishing proprietary article certificate for the chassis, thus, led to corresponding delay in placing the order for body-building resulting in extra expenditure of Rs. 3.81 lakhs.

The Ministry of Defence stated (December 1977) that :

— according to Air Headquarters there was no requirement of proprietary article certificate as the Director General, Supplies and Disposals had procured chassis for the coaches without the requisite certificate against rate contract as well as by entering into contracts during 1971—1973 ; and

— since the item was not on rate contract the issue of procuring a similar item from the rate contract list or of procuring article of a particular make on a proprietary article certificate had to be sorted out.

33. **Procurement of tins rectangular**

In May 1971, the Director of Ordnance Services placed an 'operational' indent on the Director General, Supplies and Disposals through the Chief Inspectorate of General Stores for procurement of 50,000 tins rectangular at an estimated cost of

Rs. 1.20 lakhs (unit rate : Rs. 2.40). The delivery period was indicated as October 1971—March 1972.

The Director General, Supplies and Disposals received 4 offers against the tender for the tins, which was opened in July 1971. The offer of firm 'A' was the lowest at Rs. 3.25 per unit but it did not conform to the specifications; firms 'B', 'C' and 'D' had quoted Rs. 4.05, Rs. 5.60 and Rs. 10 respectively. The Director General, Supplies and Disposals, while intimating these offers to the indentor, enquired whether the offer of firm 'A' was technically acceptable as the specifications did not conform to the requirements. The Director General, Supplies and Disposals also suggested that the indent could be covered on firms 'B' and 'C' after verifying their capacity (as they were unregistered firms) and sought additional funds to cover the indent depending upon the acceptable offer.

In view of the procurement difficulties pointed out by the Director General, Supplies and Disposals and the Director General, Ordnance Factories having agreed to supply the item, the indentor requested (August 1971) the Director General, Supplies and Disposals to treat the indent as cancelled, which was finally done on 17th September 1971.

Meanwhile, on 8th September 1971, the Chief Inspectorate of General Stores informed the indentor that the offer of firm 'A' was generally acceptable. Five days later, on 13th September 1971, in view of pressing requirements, the indentor revised the indent to 50 *per cent* of the projected requirements *i.e.* 25,000 tins, to be procured from trade and the balance 50 *per cent* was ordered on the Director General, Ordnance Factories.

In October 1971, the Director General, Supplies and Disposals informed the indentor that on the basis of capacity reports firms 'B' and 'C' had been recommended for placement of order for Defence requirements and added that the stores offered by these two firms were according to the specifications. At about the same time, the indentor communicated acceptance of the stores offered by firm 'A' although not conforming to specifications. In November 1971, the indentor increased the quantity to be procured

from trade to 29,200 numbers for delivery during December 1971—February 1972. At this stage, the Director General, Supplies and Disposals asked the indentor once again to provide additional funds to cover the demand on the next higher tenderer on the ground that the stores offered by firm 'A' were not according to specifications. While additional funds were made available in December 1971, acceptability of the offer made by firm 'A' was reconfirmed by the Chief Inspectorate of General Stores in January 1972.

In March 1972, firm 'A' revised its offer to Rs. 3.52 per unit due to increase in the cost of tin plates. Thereafter, the Director General, Supplies and Disposals notified the firm about acceptance of its tender (at the higher price) and on 18th April 1972 concluded a contract for supply of 29,200 tins rectangular at a total cost of Rs. 1.03 lakhs (at the higher rate). The contract did not stipulate submission of any advance sample by the firm for inspection.

Meanwhile, on 17th April 1972, firm 'A' requested the Director General, Supplies and Disposals to incorporate the specifications offered by it in the contract stating that (i) it would not be possible to subject the tins to either hydraulic pressure test or handle pull test as the firm did not have equipment for these tests and (ii) the containers would withstand the required test pressure. Three months later (July 1972), the Chief Inspectorate of General Stores suggested to the Director General, Supplies and Disposals incorporation in the contract certain amendments relating to specifications and to air pressure/hydraulic pressure/handle pull tests. The latter, however, pointed out (August 1972) that amendment regarding these tests could not be incorporated unilaterally, especially when this requirement was not indicated before the contract was concluded.

The Chief Inspectorate of General Stores suggested (September 1972) to the Director General, Supplies and Disposals further amendments to the contract to provide for submission of advance samples. Accordingly, the Director General, Supplies and Disposals issued an amendment in October 1972 incorporating

changes in specifications and providing for submission of advance samples. The firm did not agree (3rd November 1972) to the change in specifications but agreed to tender advance samples conforming to its own specifications amplified in its letter of 17th April 1972. The samples submitted by firm 'A' were, however, rejected by the Chief Inspectorate of General Stores in January 1973 as they did not conform to the specifications included in the amendment issued in October 1972. Thereafter, the firm was asked to submit further samples but the firm expressed (April 1973) its inability to supply tins conforming to the specifications included in the amendment to the contract and offered to supply only according to its own specifications.

In June 1973, the Director General, Supplies and Disposals informed the indentor that as per the opinion of the Ministry of Law there was no concluded contract because of dispute between the parties regarding specifications etc. and as such the contract could not be cancelled at the risk and cost of firm 'A'. The contract was ultimately cancelled in January 1974 without financial repercussion on either side.

Thereafter, it was decided to cover these quantities on the Director General, Ordnance Factories. As a result of review as on 1st October 1975, a demand for the net deficiency of 53,200 numbers (estimated unit rate : Rs. 7.65) was placed on the Director General, Ordnance Factories in January 1976. The concerned ordnance factory, however, agreed to meet only 50 *per cent* of the demand in 1977-78 and the balance in 1978-79. The unit cost of production (during 1975-76) of the factory was Rs. 15.73.

Non-finalisation of specifications before the conclusion of contract in April 1972 and ignoring the next higher offer of firm 'B' *viz.*, Rs. 4.05 per tin, resulted in an extra expenditure of Rs. 3.41 lakhs, besides abnormal delay in materialisation of supplies required on operational basis.

The Ministry of Defence stated (January 1978) that :

— owing to operational requirement of tin containers

the offer of firm 'A' was accepted though it was not according to specifications mentioned in the tender enquiry,

— the firm having confirmed that the tins would withstand the required test pressure, the Chief Inspectorate of General Stores took it to mean that due to lack of test facilities the firm would not subject the item to these tests at its end but had no objection to carrying out of the tests by the Inspectorate, and

— the sample tins did not withstand the tests as guaranteed by the firm in its letter of 17th April 1972 ; the supplies did not materialise from firm 'A' because of non-adherence to the quality promised by it and not because of non-finalisation of specification before conclusion of the contract.

34. **Avoidable expenditure on the procurement of paints**

In March 1974, the Director of Ordnance Services placed an indent on the Director General, Supplies and Disposals for procurement of two items of paints as follows :

Item	Total quantity (litres)	Estimated rate (Rs. per litre)	Deliveries required			
			1974-75		1975-76	
			Litres	Period	Litres	Period
'A'	87,700	5.40	19,700	January-February 1975	68,000	May/August 1975
'B'	28,700	5.25	3,700	February 1975	25,000	April/June 1975

The indent indicated that necessary funds had been provided in the budget estimates.

In May 1974, the Director General, Supplies and Disposals proposed procurement of 23,000 litres (26 *per cent*) of item 'A' at Rs. 6.10—Rs. 6.85 per litre and 11,110 litres (39 *per cent*) of item 'B' at Rs. 5.80 per litre under the 'tolerance' clause in the

subsisting contracts operative upto May 1974 (subsequently extended upto August 1974 and further upto 5th November 1974) and August 1974 respectively, and suggested that the requirement of deliveries be suitably advanced to enable the 'tolerance' clause to be invoked during the currency of the contracts. The Director of Ordnance Services, however, agreed (May 1974) to the procurement of 3,700 litres only (against 11,110 litres offered) of item 'B' under the 'tolerance' clause and suggested the procurement of item 'A' as per the delivery period (January-February 1975) indicated in the indent on the ground that advancement of deliveries was not possible due to budgetary constraints.

In July 1974, the Director General, Supplies and Disposals reiterated the proposal adding that it would involve advancement of deliveries by a few months only (to October—December 1974), and also sought provision of additional funds for supply of the residual quantities (item 'A' : 64,700 litres; item 'B' : 17,590 litres) at the increased rates of Rs. 14.90—Rs. 18.70 and Rs. 10 per litre respectively based on the offers received in June 1974. The Director of Ordnance Services did not, however, agree to the proposal on grounds of budgetary constraints in respect of item 'A' and of poor performance of the contractor in respect of supplies of item 'B' under the subsisting contract and insisted on procurement of the items as per the delivery periods already indicated in the indent. In August 1974, the Director of Ordnance Services communicated his approval to procurement of the entire quantity at the increased rates, involving an avoidable extra expenditure of Rs. 2.01 lakhs in respect of quantities (19,700 litres of 'A' and 3,700 litres of 'B') which were required during 1974-75 but which materialised during 1975-76.

The Ministry of Defence stated (March 1977) that the decision of the Director of Ordnance Services in refusing the advancement of deliveries was actuated by the best motive of seeing that the budget (1974-75) was not upset. However,

as per the indent (sub-para 1 refers), funds had been provided in the budget for procurement of 19,700 litres of item 'A' and 3,700 litres of item 'B' during 1974-75.

35. **Extra expenditure due to belated placing of order**

The Ministry of Defence had sanctioned in September 1968 the procurement at an estimated cost of Rs. 121.55 lakhs (foreign exchange : Rs. 66.24 lakhs—later (June 1971) increased to Rs. 84.09 lakhs) of certain engineering equipment as spares for naval vessels being built in the country. During a review in March—June 1972 of the procurement action in respect of these spares, the Naval Headquarters felt the necessity of procuring by import one set of rotating elements for gearing equipment as spare since the first and the third naval vessels under construction were fitted with a make of gearing equipment different from that in the other vessels. Accordingly, in January 1973 the Ministry of Defence, while further amending the sanction issued in September 1968 to Rs. 162.91 lakhs (foreign exchange : Rs. 126.73 lakhs) to cover escalation, *inter alia,* approved the import of one set of rotating elements.

In response to an enquiry by Naval Headquarters, a foreign manufacturer quoted in May 1973 a price of £ 57,000 (including agency commission of £ 605) subject to escalation with delivery schedule of 64 weeks for a ship set of rotating elements. In June 1973, the Naval Headquarters sought the necessary foreign exchange release and in November 1973 the Ministry of Finance sanctioned Rs. 13 lakhs in foreign exchange towards cost, freight and handling charges.

In March 1974, *i.e.* after a lapse of 5 months, the Naval Headquarters raised the indent on the Director General, Supplies and Disposals. The indent was supported by a 'proprietary article' certificate in favour of the foreign manufacturer and indicated the delivery requirement as March 1975.

In April 1974, the Director General, Supplies and Disposals invited quotations from the local representative of the foreign

manufacturer, who quoted (June 1974) a price of £ 88,154 (including agency commission of £ 8,014) subject to escalation. Since the foreign firm was agreeable to a direct order from an overseas Supply Mission with lesser agency commission, the Director General, Supplies and Disposals decided (August 1974) to cross-mandate the indent to the overseas Supply Mission. Simultaneously, the Director General, Supplies and Disposals requested Naval Headquarters to arrange additional foreign exchange as the quotation was higher than the estimated price indicated in the indent by Naval Headquarters.

However, on the advice of the Supply Mission, the Director General, Supplies and Disposals invited in September 1974 single tender enquiry from the foreign manufacturer who quoted a price of £ 83,600 subject to escalation. The firm also offered fixed price quotations of £ 113,250 and £ 116,200 (including 5 *per cent* agency commission) for delivery by end of March 1976 and end of May 1976 respectively. The Naval Headquarters obtained release of additional foreign exchange at the escalated prices in May 1975. The Director General, Supplies and Disposals cross-mandated (August 1975) the indent to the Supply Mission and the Supply Mission concluded a contract with the firm in December 1975 at a cost of £ 100,425 subject to escalation. No agency commission was, however, payable. The rotating elements were scheduled to be delivered in June 1977 but had not been delivered (December 1977).

In spite of the approval to the procurement of rotating elements having been given in January 1973, there was delay in contract action until December 1975 resulting in an increase in cost of about £ 43,425. Further, these elements were to have been procured and be available as a spare during construction but this object had not also been fulfilled since the first and the third vessels were commissioned during June 1972 and February 1976 respectively.

The Ministry of Defence stated (December 1977) that the major part of the delay had been caused by the reluctance of the Director General, Supplies and Disposals to cross-mandate the indent to the Supply Mission in spite of the 'proprietary article' certificate of the Naval Headquarters and added that the Supply Mission could have contracted for the item by the end of 1974 had the indent been cross-mandated in August 1974.

CHAPTER 6

UTILISATION OF EQUIPMENT AND FACILITIES

36. Import of defective special purpose carriers

During July—October 1971, the Ministry of Defence concluded 3 contracts with two suppliers 'A' and 'B' for supply, *inter alia,* of 250 numbers of special purpose carriers at a total cost of Rs. 1028.25 lakhs, as detailed below :

Month in which contract was concluded	Supplier	Quantity contracted	Rate	Total value	Scheduled delivery date
			(Rs. in lakhs)		
July 1971 . .	'A'	100	3.87 (FOB)	387.00	July-August 1971
July 1971 . .	'B'	100	4.275 (CIF)	427.50	To be completed by 31st August 1971
October 1971 .	'B'	50	4.275 (CIF)	213.75	November 1971

The quality and proper functioning of these carriers were guaranteed by supplier 'A' upto 5,000 km. or till 12 months from the date of delivery, whichever was earlier. The guarantee offered by supplier 'B' was similar except that the 12 month period was to be reckoned from the day of arrival of these carriers at an Indian port. The contracts also specified the range of ambient temperature for the engine as (−) 40°C to (+) 50°C.

The contracts envisaged that final inspection would be carried out by the purchaser in India. The conditions for

acceptance inspection, *inter alia,* stipulated that the normal operating temperature of oil in the engine would be 80°—90°C and that for short spells the maximum permissible oil temperature could be 110°C. The maximum permissible temperature in the gear box was not to exceed 110°C but for short spells temperature upto 120°C was permissible.

Ninetynine carriers delivered by supplier 'A' were received in India during October-November 1971 (one carrier having been supplied earlier in 1970 for trial purposes). Carriers numbering 150, delivered by supplier 'B' were received in India during October 1971—January 1972.

User trials conducted during March-April 1971 on the carrier received from supplier 'A' in 1970 had indicated that the engine had a tendency to overheat. The remaining carriers received from the two suppliers were inspected by the Directorate of Inspection during October 1971—February 1972 and accepted.

On receipt of a defect report from a user unit regarding overheating of oil in the engine/gear box in 70 carriers received from supplier 'A', a joint investigation was carried out by the representatives of supplier 'A' and of the Directorate of Inspection in July 1972. During this investigation, overheating of oil was confirmed and it was also revealed that the oil temperature in the engine/gear box under ambient temperature condition of 40°—41°C rose to 120°C and beyond within 45 minutes to 1 hour. Temperatures beyond 120°C could not be recorded specifically since the gauge fitted to the carrier was calibrated upto 120°C only. Thereafter, the matter was discussed with supplier 'A' who assured the purchaser that operation of the engine/gear box would be quite safe even when the oil temperature reached 120°C since the lubricating oil used in India was of a superior quality and that he was satisfied that the working temperature would not go beyond 120°C under Indian conditions. This assurance was incorporated in

a memorandum of understanding signed between the supplier and the Ministry on 25th July 1972.

About the same time, the Directorate of Inspection informed the Ministry that (1) since the warranty of the first lot of carriers (19 numbers) received from supplier 'A' was to expire in August 1972, a formal claim would have to be preferred on the supplier before that date, (2) the carriers received from supplier 'B' suffered from similar defects of overheating since the maximum temperature of engine oil recorded was 117°C and (3) the defect of overheating which was due to inadequacies of design should be examined by Research and Development (Vehicles) Organisation on the basis of which a decision should be taken regarding their future use. The Directorate of Inspection considered (August 1972) the defect of overheating to be of a very serious nature as it would affect the life expectancy of the engine and the gear box assemblies. The Directorate also observed that the performance of the carriers was not upto the prescribed specifications. In view of the defect, instructions had been issued not to deploy these carriers in certain regions.

In September 1972, supplier 'A' issued an amendment to the operating instructions to the effect that the oil temperature might be allowed to go upto 120°C for a short period.

In February 1973, the Ministry informed supplier 'A' that by specifying the maximum acceptable temperature as 120°C the problem of overheating had not been resolved and asked him to suggest suitable remedial measures or modifications to the engine and gear box assemblies with a view to obviating the effect of overheating. Supplier 'A', however, replied that the functions of the engine and gear box assemblies were not affected by overheating.

The defect of overheating in respect of the carriers received from supplier 'B' was taken up with him by the Ministry in April 1973 by which time the warranty had already expired.

In September 1973, the Directorate of Inspection informed the Ministry that, in view of the serious limitations imposed by the defect of overheating on the deployment of the entire fleet of carriers, the users were pressing for a solution to the problem both in regard to provision of temperature gauges with extended registration range to measure temperatures beyond 120°C and for effecting improvements/modifications in order that the defect was entirely removed.

Since no tangible solution to the problem was suggested by the suppliers, the Directorate of Inspection decided in September 1974 to carry out a study with a view to evolving a suitable modification for removing the defect. The study which was taken up in October 1974 and completed in May 1976, brought out that, pending modification, deployment of the carriers was severely restricted during summer and that the users were not satisfied with their performance.

The modification evolved by the Inspection organisation was incorporated in 10 carriers for user/technical trials which were completed in January 1977. The modification was approved by the Army Headquarters in March 1977 for implementation on the remaining 240 carriers (95 received from supplier 'A' and 145 from supplier 'B'). The cost of modifications was estimated at about Rs. 6 lakhs on material alone.

In the meantime (December 1976), supplier 'A', who had been asked to bear the actual cost of modifications, replied that no obligation lay with him either in regard to reconstruction of the engine and gear box or in regard to participation in the cost of modifications carried out in India.

In June 1977 both the suppliers were requested to make necessary cost compensation for the modifications. Replies from the suppliers were awaited (December 1977).

The Ministry of Defence stated (December 1977) that the modification stores were under procurement and that the work

of modification of 240 carriers was expected to be completed by the summer of 1978. The Ministry added that none of these carriers had remained off-road due to overheating.

37. **Procurement of costly equipment from abroad for trial purposes**

In paragraph 10 of the Report of the Comptroller and Auditor General for 1974-75, Union Government (Defence Services), mention was made about the foreclosure of a project for development of an indigenous aircraft by a public sector undertaking (hereafter undertaking) as efforts during the years 1956 to 1974 to locate a suitable engine for the aircraft had failed.

In 1961, a certain equipment was envisaged to be fitted to the aircraft (under development) to meet the requirements of the Air Force. For this purpose, 2 sets of the equipment were to be procured by the undertaking from a foreign firm for evaluation trials to be followed by a further order for 40 sets. The evaluation trials of the equipment were to be conducted in four phases—phases I and II by the undertaking and phases III and IV by the Air Force. Two sets of the equipment (f.o.b. value : £ 64,332) were procured by the undertaking against a contract concluded by an overseas Supply Mission during January 1962 and were received during 1962—1965.

Meanwhile (April 1964), the Ministry of Defence sanctioned the procurement of another set as standby, along with test equipment, at an estimated cost of Rs. 25.32 lakhs—later revised to Rs. 17.32 lakhs in May 1965—for use in trials under phases III and IV. This additional set along with test equipment was procured (f.o.b. value : £ 1,06,810) through the undertaking against a contract concluded by the Supply Mission in November 1964. Meanwhile (September 1964), the role of the aircraft had been changed by the Air Headquarters and consequently the need for the equipment no longer existed.

A Study Group set up by the Air Headquarters recommended in February 1965 deletion of the equipment from the aircraft. Evaluation trials of the equipment were, however, carried out to

gain experience and knowledge of the equipment and its possible application later on.

Two sets of the equipment were fitted on aircraft 'X' and 'Y'. Trials (phases I and II) were conducted by the undertaking during 1965-66 on aircraft 'X' alone, as the cooling system on aircraft 'Y' had not been completed. The additional set along with test equipment was received by the Air Force during August 1966 and trial tests (phases III and IV) were conducted on aircraft 'X' during August 1966—July 1967. Aircraft 'Y' (fitted with the equipment), which was held by the undertaking, was returned to the Air Force in September 1968.

Aircraft 'X' fitted with the equipment was lost (April 1968) in an accident and as regards aircraft 'Y' the Air Headquarters ordered in February 1970 demodification of the equipment and upgradation of the aircraft. The work was taken up by the undertaking in November 1971 but had not been completed (December 1977).

An expenditure of Rs. 44.34 lakhs as detailed below had thus proved infructuous :

— Rs. 8.83 lakhs (inclusive of cost of 2 sets of imported equipment of which one was lost in an accident) incurred by the undertaking for trial tests under phases I and II and reimbursed to it ;

— Rs. 29.51 lakhs (including cost of one additional set, test equipment etc.) incurred by the Air Force on trial tests under phases III and IV ; and

— Rs. 6.00 lakhs on demodification work.

Two sets of the equipment together with the associated test equipment were being held in an Air Force Equipment Depot since February 1970 and were awaiting disposal.

The Ministry of Defence stated (December 1977) that the cost of procurement of the equipment was part of the expenditure in the development of indigenous aircraft and should be treated as an investment in education.

38. **Delayed installation and under-utilisation of air-compressors**

In February 1965, the Air Headquarters projected a requirement, *inter alia,* of 3 static air-compressors (estimated cost : Rs. 0.60 lakh) for starting the aero-engines of a certain type of aircraft. The proposal was accepted by the Ministry of Finance (Defence) in May 1965. The requirement of compressed air for this purpose as well as for maintenance of airborne equipment was till then met by use of low capacity mobile compressors and by purchase from civil trade.

After a further review, the Air Headquarters revised their requirements (September 1966) to 6 air-compressors—one each for six Air Force units—at an additional cost of Rs. 2.75 lakhs (for 3 sets). The financial implications and the comparative evaluation of different types of air-compressors was under consideration until May 1968 (19 months) when the Air Headquarters pointed out that the proposal would result in considerable savings (not quantified) in the expenditure on purchase of compressed air from civil trade for the purpose of starting aero-engines. The proposal was finally approved by the Ministry of Finance (Defence) in June 1968.

Foreign exchange (Rs. 5.83 lakhs) was released in October 1969 and in November 1969 the Air Headquarters initiated procurement action for 6 compressors (estimated cost : Rs. 5.83 lakhs) by an indent placed on the Director General, Supplies and Disposals, which was cross-mandated to a Supply Mission abroad. Additional foreign exchange of Rs. 3.76 lakhs was released later in May 1971 to cover additional fittings of pipes and filling stations.

With additional drying equipment static air-compressors could also be utilised for charging air bottles for maintenance of airborne equipment. In July 1971, at the instance of the manufacturer, the Supply Mission enquired from the Air Headquarters whether drying plants were also required for use with the compressors. The Air Headquarters declined and suggested that contract be finalised for compressors without drying plants.

A contract was accordingly concluded (July 1971) with the foreign supplier for 6 compressors (including spares) at a total cost of about Rs. 9 lakhs, delivery to be completed by April 1972. The contract included an option for ordering drying plants later at a unit cost of about Rs. 0.43 lakh for delivery matched with that of the main equipment but it was not exercised. The equipment was covered by a warranty for 12 months from the date of actual commissioning or 16 months from the date of shipment whichever was earlier.

In June 1972, the Air Headquarters instructed the Air Force Commands to get the requirements of works services (for installing the compressors) assessed and executed on the highest priority. The compressors were shipped during September—November 1972 and received in India towards the end of 1972/early 1973. These were received/installed at the Air Force units as under :

Unit	Received in the unit in	Installed in	Cost of works services (Rs. in lakhs)	Remarks
'A'	February 1973	December 1973	0.41	Shifted (July 1975) to another unit 'G' where it awaited installation (December 1977)
'B'	March 1973	August 1973	0.64	
'C'	July 1973	May 1974	0.07	
'D'	September 1973	October 1973	1.07	
'E'	September 1973	February 1974	0.29	Shifted (June 1974) to another unit 'H' where expenditure of Rs. 0.36 lakh was incurred on its installation; again shifted (April 1975) to another unit 'J' where it awaited installation (December 1977)
'F'	January 1974	October 1974	0.07	

In the absence of drying plants, the compressors could be utilised only for starting aero-engines and not for production of

dry compressed air required for airborne equipment. In November 1973, the Air Headquarters initiated a proposal for procurement of drying plants comprising dehumidification and de-oiler units. The proposal for procurement of 6 drying plants at a cost of Rs. 4.06 lakhs was finally approved by the Ministry of Finance (Defence) in April 1975 on the considerations that :

— the spare capacity would be gainfully utilised to meet the maintenance requirements of compressed air (18,000 cylinders per annum) with a consequential saving of Rs. 14.21 lakhs per annum ; and

— any disruption in supplies from trade would adversely affect the aircraft serviceability.

On the basis of an indent raised by the Air Headquarters in April 1975, an order was placed by the Department of Defence Supplies on a firm in October 1975 for 6 drying plants at a total cost of Rs. 4.58 lakhs (foreign exchange : Rs. 1.23 lakhs). The drying plants were scheduled for delivery within 6 months after approval of a prototype (which was to be delivered by April/May 1976). The plants had not yet been delivered (December 1977).

As a result of non-procurement of drying plants initially, expenditure on purchase of dry compressed air from trade would continue to be incurred till these are received/commissioned.

The Ministry of Defence stated (March 1977) that the initial proposal for procurement of compressors had envisaged their use for providing compressed air for starting aero-engines and not for meeting the requirements of dry compressed air or in lieu of air bottles for maintenance of airborne equipment. The Ministry added that the procurement of drying plants (along with compressors) from abroad in 1971 would have involved expenditure of Rs. 2.58 lakhs in foreign exchange.

39. **Procurement of ammunition stores**

In June 1971, an offer was received from a foreign supplier for supply of a certain number of gun barrels (second category)

and related ammunition (of 1954—1956 production). These stores were required for a certain type of tank.

In September 1971, the Ministry of Defence accepted the offer for supply of the gun barrels and related ammunition (value : Rs. 4.27 lakhs). While under the "General Terms of Sale and Delivery" of the supplier's offer any claim on account of bad quality of the goods delivered and/or defective/short supplies was to be notified within 8 days of the arrival of the goods at destination, the order placed on the firm stipulated that the ammunition should be proof checked by the supplier before despatch and in the event of it being found unsatisfactory on receipt in India it should be replaced free of cost.

The stores, shipped in December 1971, reached India in February 1972. The gun barrels were received in a central ordnance depot in May 1972 and, on inspection by the Controller of Inspection (Weapons) in June 1972, were found unacceptable due to certain dimensional defects, superficial surface cracks, etc. A defect report was sent by the depot to the Army Headquarters in July 1972 for onward transmission to the supplier.

A claim for replacement of the defective gun barrels was lodged by the Ministry of Defence with the supplier (November 1972) who, however, rejected it (January 1973) on the ground that it had not been presented in time and that the barrels were as per the offer made and could be used in aircraft guns or for training.

The question of utilisation of the gun barrels was taken up by the depot authorities with the inspection authorities, who stated (February 1974) that the barrels did not pertain to the land services. A year later (February 1975), the Ordnance Directorate enquired from the General Staff Branch whether the latter had projected the requirement of gun barrels to the Ministry of Defence. The General Staff Branch denied (March 1975) having projected this requirement and later, in June 1975, expressed its inability to give disposal instructions for the gun barrels as these could not be put to use. No decision had so far

been taken (November 1977) on the utilisation/disposal of the barrels received 5 years ago.

The ammunition was received in another depot in May 1972 but without any lot marking thereon. The consignment was, therefore, held without any check proof.

The Ministry of Defence had stated (February—April 1977) that :

— the order for ammunition was placed on the basis of demand projected by the Ordnance Directorate ;

— the defect report in respect of gun barrels could not be submitted earlier as the barrels were to be inspected by the authority holding sealed particulars and final report was to be prepared after considering all relevant aspects by the Inspection Directorate ;

— the question of replacement of defective barrels was recently taken up again with the foreign supplier but the latter expressed his inability to replace them 'after a lapse of 4 years';

— the possibility of utilisation of the gun barrels by the Air Force was also considered but the Air Headquarters stated that the gun barrels were of no use to the Air Force ;

— the ammunition was recommended by the inspection authorities for acceptance for service use without check proof in the absence of check proof facilities due to non-availability of its particulars/specifications;

— the ammunition was serviceable and would be utilised against training requirements by 1981-82 ; and

— the normal shelf life of the ammunition was not known.

40. **Non-utilisation of an equipment**

Six Air Force units were supplied each with 3 diesel generating sets of 500 kw. capacity received from abroad during 1963-64.

During December 1966, one of the Air Force units—under Air Command 'X'—reported heavy carbonisation in the engine of one of the generating sets due to low loads ranging from 4 to 24 *per cent* of its capacity, thereby affecting its performance. The problem of excessive carbon deposits was referred (October 1968) to the foreign supplier of the generating sets, who suggested that the generating sets be used to their maximum capacity for an hour each week by utilising dummy loads.

In April 1969, the Air Headquarters decided to introduce loading panels of 50 kw. capacity (estimated cost : Rs. 0.12 lakh each) to serve as dummy loads for the generating sets.

Against indents placed by the Air Headquarters during September 1970—February 1971, 25 loading panels were procured by the Director General, Supplies and Disposals at a cost of Rs. 2.85 lakhs. The loading panels were received in an Equipment Depot during March 1972—May 1973, 24 panels were issued (at the rate of 4 per unit) to the Air Force units and 1 to a base repair depot for use with the generating sets.

In January 1974, Air Command 'X' reported to the Air Headquarters that in view of the requirement of power for a communication system being installed in the vicinity of the user unit, 4 loading panels held by that unit would not be required. The Air Headquarters advised (February 1975) the unit that the panels be utilised by it till the load for the communication system was connected.

In July 1975, another Air Command 'Y' reported to the Air Headquarters that loading panels were not necessary due to the following reasons :

— no excessive carbon deposits were noticed in spite of operating the generating sets at about 25 *per cent* of their capacity since 1968 ;

— installation of loading panels and using them as dummy loads would increase fuel consumption abnormally ;

— the use of dummy loads might shorten the life of the components ; and

— the performance of the generating sets had been quite satisfactory in spite of operating them at reduced loads

and suggested re-examination of use of loading panels as dummy loads. The Air Headquarters, however, advised (August 1975) the Air Command that :

— the loading panels could be utilised for load testing of the generating sets as and when necessary or after overhaul ; and

— works services for housing the loading panels should be provided on priority basis.

Nine loading panels were installed in 2 units and the base repair depot during July 1974—July 1976. 4 panels were temporarily installed in July 1977 in another unit and the balance of 12 panels (cost : Rs. 1.37 lakhs) was yet to be installed (December 1977).

The Ministry of Defence stated (December 1977) that :

— the average power supply drawn so far from the generating sets was of the order of 25 kw ;

— the panels would continue to be required until sufficient load was drawn from the sets and also for testing the latter during inspection/after servicing ; and

— administrative approval for execution of works services in respect of 3 units where the loading panels had not been installed had been accorded during June 1974—March 1977 but the works could

not be commenced as the cost of the works services was considered high and efforts were being made to finalise the same at minimum cost.

41. **Purchase of an equipment**

Naval ships, after refit, are subjected to tilt tests for alignment check of the weapons system on board, and a ship has to be dry docked for 3 days for this purpose. A foreign firm claimed (May 1973) that it had developed an equipment which would eliminate the need to dock ships for carrying out tilt tests and reduce the time for tilt tests to 40 minutes. The firm also stated that trials on prototype of the equipment had been successfully carried out by the Navy of a foreign country. The firm offered to supply this equipment at a 'budgetary estimate' of £ 17,250 each.

In September 1973, the Naval Headquarters proposed to the Ministry of Defence the procurement of 2 sets of the equipment at an estimated cost of £ 40,000 for use by two Naval dockyards. In justification of the proposal, the Naval Headquarters stated that tilt tests were carried out in 3 ships annually and that the use of the equipment would result in a saving of Rs. 0.32 lakh annually, apart from releasing the dockyard(s) for 9 days for other repairs.

In November 1973 the Ministry of Defence sanctioned procurement of the equipment at an estimated cost of Rs. 7.60 lakhs. Against an indent placed by the Naval Headquarters on a Supply Mission abroad in December 1973, a contract was concluded with the firm in August 1974 for supply of 2 sets of the equipment at a total price of £ 56,100 (*i.e.* Rs. 10.66 lakhs)—an increase of 63 *per cent* over the 'budgetary estimate' of May 1973. In terms of the contract, 80 *per cent* of the contract value was to be advanced in 4 equal instalments within 12 months of the date of contract; these payments were not related either to the progress of manufacture or to delivery of the equipment. The balance 20 *per cent* was to be paid on delivery of 2 sets of equipment f.o.b. The equipment was to be covered by a warranty

against defective material for 12 months from the date of despatch *ex*-works. The 4 advance payments were accordingly made during February—October 1975. The equipment (2 sets) scheduled for delivery by December 1975 was inspected in August 1976, shipped in September 1976 and received by a depot in January 1977. The warranty for the equipment expired in September 1977.

One of the dockyards, where the equipment was to be used, stated (December 1976) that tilt tests were not carried out in the type of ships handled by the dockyard. The Ministry of Defence stated (December 1977) that one of the sets delivered by the firm was not complete and could not be issued. The Ministry added that the complete set was issued in September 1977 to the other Naval dockyard and was being used for carrying out tilt test.

42. **Non-utilisation of power generation facilities**

In 1966, the Naval Headquarters initiated a proposal for establishing a power house at a port with a generating capacity of 2000 kw. to meet the shore power requirement of visiting as well as naval vessels based at the port.

In September 1967/November 1969, the Ministry of Defence accorded sanction, *inter alia,* to construction of power house and provision of electric supply at an estimated cost of Rs. 87.21 lakhs. The Ministry also accorded (October 1969) a separate sanction to the procurement of additional equipment as well as its installation at an estimated cost of Rs. 39.50 lakhs.

The sanction accorded in September 1967 catered for power supply of 2000 kw. (provisional) comprising 1700 kw. for use by the Navy and 300 kw. for civil use. This was, however, increased in November 1969 to 3000 kw. (including 1000 kw. as standby). In October 1971, the requirement of power for a base repair organisation to be established at the port was assessed by a Board of Officers at 1360 kw. The Naval Command did

not, however, recommend (July 1972) augmentation of the generating capacity (already sanctioned) as the maximum demand was not likely to exceed 2000 kw. during the next 5 years or so.

A contract (value : Rs. 63.81 lakhs) for the supply and installation of 3 generating sets of 1000 kw. each was concluded by the Chief Engineer (located at the port) with a public sector undertaking in October 1970. The supply and installation of these sets were completed in September 1976. Civil works relating to the power house were completed earlier in January 1975 at a cost of Rs. 17.36 lakhs (as against the sanctioned estimate of Rs. 3.63 lakhs). Another contract (value : Rs. 39.08 lakhs) was concluded in 1972 for supply and installation of the additional equipment. The work scheduled for completion by June 1977 had not been completed (December 1977).

The power requirements at peak load of the Navy at the port were re-assessed in February 1977 at 390 kw. for the years 1977 and 1978 and at 1200 kw. from 1979 onwards subject to completion of the base repair organisation by the end of 1978.

The local Naval authorities had been advised (April 1976) by the undertaking that the generating sets would require to be put to use immediately to near full load capacity as otherwise due to climatic conditions at the port the sets were likely to deteriorate very fast. It had, however, not been possible to commission the power house (December 1977) due to the low load available (150 kw.).

Thus, apart from the risk of deterioration of the generating sets, which were yet to be commissioned (December 1977), the facilities being created (sanctioned cost : Rs. 1.27 crores) were not expected to be utilised fully even in the near future.

The Ministry of Defence stated (January 1978) that :

— the power requirements were envisaged to cater for the base repair organisation and for ships to be based at the port as well as those which would visit the port ;

— power utilisation would have peak periods when fleet units would visit the port and low utilisation when only a few ships visit the port ;

— testing of the generating sets had since been completed with the artificial load provided by the undertaking ;

— the power house was expected to be commissioned in April 1978 ; and

— sale of spare power for civil use was under consideration.

CHAPTER 7

ARMY

43. Purchase contracts in two Commands

I. *Mode of purchase by Supply Depots*

The role of the Army Service Corps includes provisioning, receiving, holding, maintaining, transporting, issuing and accounting of all items of supplies and petroleum, oils and lubricants for the Armed Forces. Supplies are arranged through central purchase, local contract and local purchase. The main central purchases comprise rice, atta, dal, sugar, oil, coal and petroleum products and are arranged centrally by the Army Headquarters (HQ) through various Central purchase organisations.

Local contracts for supplies consist of all fresh food articles (vegetables, fruits, meat, etc.), firewood and charcoal, action for which is initiated by Sub-Area/Area HQ. Contracts are concluded by the competent financial authorities ranging from Sub-Area Commander to the Quarter Master General (QMG). The powers of the QMG are subject to the concurrence of the Ministry of Finance (Defence) (above Rs. 10 lakhs and upto Rs. 25 lakhs) and Government (above Rs. 25 lakhs). The authority initiating action forwards all tenders received, with its recommendations, to the Controller of Defence Accounts (CDA) of the Command for scrutiny in his capacity as Financial Adviser, after which these are forwarded to the sanctioning authority. If the latter does not accept the opinion of the CDA, reasons are to be recorded on the comparative statement of tenders.

Local purchases are to be resorted to when supplies from normal sources are not available or when demands are very small.

COMMAND I

II. *Review of meat contracts*

Among the local contracts administered by the Supply Depots, those for supply of meat form the highest in value. The value of purchases of meat by the Supply Depots in Command I during the last 5 years, as indicated by the CDA, was as follows :

Year	Value of purchases made (Rs. in crores)
1972-73	2.55
1973-74	2.13
1974-75	5.17
1975-76	3.13
1976-77	4.04

(a) *Arbitration cases decided in* 1976-77

Until 1971, while inviting tenders for supply of meat, quotations were called for separately for 'meat fresh' and certain specified items of 'edible offals'. From 1971, in the Command a change was made in the schedule to the tender. The contractors were invited to specify rates in two parts; Part I for 'meat fresh' and specified 'edible offals' separately, and Part II for 'meat fresh including edible offals'. Although in Part II, the rate for meat was inclusive of edible offals, there was a clause in the special conditions to the contract which provided that 'edible offals such as kidneys, liver, tongue, brain and sweet bread if required will be taken over for issue at the rate of meat fresh'. The change in the schedule to the tender and its effect on the special condition were not referred to the legal authorities, though required under the rules, but the CDA had

been consulted in the matter. Contracts for meat from 1971-72 onwards were concluded and administered under this pattern.

Two contracts (value : Rs. 9.41 lakhs and Rs. 22.65 lakhs) for supply of meat during 1973-74 to two Supply Depots Nos. 1 and 2 were awarded to contractor 'A' who had quoted rates in Part II—meat fresh including edible offals. (The contractor did not quote for Part I of the tender). Soon after the commencement of the contract, the contractor repeatedly represented to the Sub-Area HQ that the depots were not accepting edible offals 'which they were required to do under the accepted contract' and that he was suffering considerable loss. The contractor was informed in June 1973 by the Sub-Area HQ that edible offals would be taken only if required as per the special conditions of the contract. Meanwhile, the shortfall in the supply of meat (as a result of not accepting offals offered in lieu of meat) was made up by local purchase of authorised substitutes during November 1973—March 1974 at the risk and expense of the contractor at an extra expenditure of Rs. 1.32 lakhs for both the depots. In January 1974, the contractor requested that an arbitrator be appointed to settle the dispute under the provisions of the contract. The position in respect of the two contracts is indicated below:

Supply Depot No. 1

In January 1974, the contractor filed an application in a Court of Law for stay of recovery of extra expenditure or of withholding of payment of bills and also for issue of directive for the appointment of an arbitrator in pursuance of one of the conditions of the contract or for the appointment of an arbitrator by the Court itself.

In April 1974, the Army HQ submitted to the Court that the contract was being operated correctly in accordance with the special conditions of the contract and that edible offals were

to be taken only if and when required; it had, however, no objection to refer the dispute to arbitration.

The Court held (August 1974) that since the parties had agreed to refer the case to arbitration no recovery should be made from the bills till adjudication of the case. In the meantime (May 1974), the QMG appointed the Sub-Area Commander as the arbitrator.

The contractor in his claim before the arbitrator (July 1974) made the following submissions:

— The special condition in the contract regarding acceptance of edible offals if required was inconsistent with the basic contract, which was for meat and edible offals, and could not override the latter.

— The expression 'edible offals' included spleen, head, brain, trotter, etc. which were not being accepted and this had resulted in a loss of Rs. 3.56 lakhs.

— He was not liable to pay for purchases of substitute items.

In defence, the Sub-Area HQ stated as follows:

— Provision existed in the contract for disputes regarding quantity and quality of supplies being decided by the Sub-Area Commander whose decision was to be final and binding.

— There was a specific clause stipulating that the supply was subject to the approval of the Supply Officer or his representative. The Department was not bound to accept any meat fresh or edible offals offered.

— The contract clearly provided for recovery of extra expenditure in purchases necessitated by the contractor's failure.

The arbitrator in a non-speaking award awarded (October 1974) Rs. 1.75 lakhs (out of Rs. 3.56 lakhs claimed) to the contractor and also upheld the contractor's claim (Rs. 0.55 lakh) against the amount recoverable on account of risk purchases made by the Army.

The award of the arbitrator was contested by the Sub-Area HQ in a Civil Court.

The Court held (December 1975):

— There was room for ambiguity in the definition of edible offals in the special conditions of the contract;

— In regard to the risk purchase expenditure incurred, the essential requisite was rejection of supplies offered in accordance with the contract. When such rejection had become a matter of dispute touching on interpretation of the other terms of the contract, purchase of supplies could not be at the cost of the contractor.

The Court, therefore, decreed that the Department was not entitled to any relief.

In addition to the above findings, the Court also observed:

> "..... it is rather to be regretted that the Government should have taken the attitude of resisting the award made by the arbitrator who was none other than the Commander of ..... Sub-Area. Even under ..... the general special conditions ..... it is the decision of the Sub-Area Commander that is final and binding on both parties. The arbitrator appointed by the QMG was none other than the Sub-Area Commander. The fact that he gave his decision as the arbitrator and not as a Sub-Area Commander exercising administrative authority does not in reality make the decision any the less than that of the Sub-Area Commander."

In April 1976, it was decided that no further appeal was to be preferred. The contractor was paid an amount of Rs. 1.97 lakhs (inclusive of interest) in April 1976 in pursuance of the Court decree.

Supply Depot No. 2

In regard to the contract for supply of meat to Supply Depot No. 2, the contractor claimed (April 1974) Rs. 7.91 lakhs on the same grounds as were urged by him in the pending case. The defence submitted by the Army authorities was also the same as that submitted to the arbitrator in the case of Supply Depot No. 1. The arbitrator (a different one) awarded (January 1977) an amount of Rs. 3.92 lakhs in favour of the contractor and also upheld the contractor's claim (Rs. 0.77 lakh) against the amount recoverable on account of risk purchases made by the Army. In March 1977, the Legal Adviser to the Ministry of Defence advised that the arbitrator's award need not be challenged for the following reasons :

— The right to accept or reject certain edible offals with respect to quantity and quality rested with the contract operating officer and appeal from his decision lay to the Sub-Area Commander. No decision was taken by the contract operating officer regarding the quality and consequently no appeal had been filed to the Sub-Area Commander.

— The matter of specification and particularly that portion of the animal not required was not raised earlier before the arbitrator and it would be difficult to take up the point before the Court.

— Although the award looked erroneous, it would be difficult to challenge it successfully in a Court of competent jurisdiction.

An amount of Rs. 3.99 lakhs (including interest) was paid (May 1977) to the contractor in satisfaction of the award.

The Ministry of Defence stated (January 1978) that the award in the case of Supply Depot No. 2 was influenced by the award in respect of Supply Depot No. 1, appeal against which had not been upheld by the Court and it was in this context that the Legal Adviser had advised not to make an appeal in this case. The Ministry added that it was one thing to make a charge of misconduct against an arbitrator under the Arbitration Act but quite another to get it accepted by the Court.

Similar cases arose in the administration of meat contracts in 23 other Supply Depots in the Command. The total of the claims amounted to Rs. 61.17 lakhs. All the cases were referred to arbitration and the position (September 1977) was as under :

	Amount of claim	Amount awarded
	(Rs. in lakhs)	
— 2 claims decided against Government (May 1977) .	2.95	1.05
— 3 claims decided against contractors but challenged in Court; decision awaited	13.13	
— 2 claims decided against contractors and accepted by Court	4.92	
— 9 claims decided against contractors and filed in Court to make the awards rule of Court; decision awaited .	18.33	
— 6 claims pending before arbitrator(s) . . .	19.78	
— 1 claim yet to be submitted to arbitrator by contractor	2.06	
	61.17	

The points noticed in this connection were as under :

— The contractual provisions involved in the disputes were identical.

— The submissions by the contractors were identical.

— Security deposits held are refundable to the contractors only after the accounts are finally settled. In the case of one depot, the arbitration award required the security deposit to be forfeited. The

security deposit of Rs. 0.35 lakh had, however, been refunded (June 1975) even before the award was published (April 1977).

The procedure for invitation to tender for meat including edible offals was discontinued from the contract year 1974-75 from which period rates were to be quoted only for meat with the special condition that specified edible offals if required would be supplied at the rate of meat fresh.

(b) *Contracting patterns*

The pattern of contracts for the years 1970-71 to 1977-78 for meat for Supply Depots Nos. 1 and 2 in close proximity indicated that the contracts were awarded to contractor 'A' during the entire period as under:

Supply Depot No. 1			Supply Depot No. 2		
Period	Rate per 100 kg.	Value	Period	Rate per 100 kg.	Value
(1)	(2)	(3)	(4)	(5)	(6)
	Rs.	Rs. in lakhs		Rs.	Rs in lakhs
1-4-70 to 31-3-71	423.80	12.71	1-4-70 to 31-3-71	431.80	20.73
5-4-71 to 31-3-72	591.00	17.73	5-4-71 to 31-3-72	595.50	29.78
1-4-72 to 31-3-73	588.00	9.41	1-4-72 to 31-3-73	590.00	20.65
*1-4-73 to 31-3-74	522.80	9.41	*1-4-73 to 31-3-74	524.80	22.65
1-4-74 to 30-9-74	839.80	8.82	11-4-74 to 30-9-74	838.80	17.67

*These contracts led to arbitration as mentioned earlier.

(1)	(2)	(3)	(4)	(5)	(6)
	Rs.	Rs. in lakhs		Rs.	Rs. in lakhs
6-10-74 to 31-3-76	876.80	27.62	6-10-74 to 30-9-75	876.80	36.96
29-4-76 to 30-9-76	767.00	8.28	27-12-75 to 30-9-76	846.80	35.68
(No contract for the period 1-10-76 to 28-11-76—local purchase made at average rate of Rs. 835.00 per 100 kg.)			(No contract for the period 1-10-76 to 31-1-77—local purchase made at average rate of Rs. 891.82 per 100 kg.)		
29-11-76 to 30-9-77	715.80	19.33	1-2-77 to 30-9-77	934.80	25.24

Tenders for meat for Supply Depot No. 2 were invited 7 times during 1975-76. The negotiated lowest rate (on the sixth occasion) was of contractor 'B' at Rs. 874 per 100 kg. for one year. Contractor 'A' did not quote. On a reference made for financial advice, the CDA indicated in October 1975 that additional tendering was not advisable and that contract could be concluded with the lowest tenderer after invitation to reduce the rate. A reduced rate (after negotiation) of Rs. 863.50 (16.9 *per cent* lower than the average local market rate and 1.6 *per cent* lower than the last contract rate) was recommended by the Command HQ to the QMG. The rate, however, was not agreed to by the QMG who indicated that an additional tender was desirable. Accordingly, another tender (seventh) was floated, the lowest rate received being of contractor 'A' for Rs. 846.80 per 100 kg., which was 3.4 *per cent* lower than the last contract rate, was accepted and a contract for Rs. 35.68 lakhs for the period from 27th December 1975 to 30th September 1976 (9 months) was awarded on 24th December 1975 to contractor 'A'.

Meanwhile, the earlier contract had expired and local purchase was resorted to at varying rates from contractor 'A'. The average rate for local purchase worked out to Rs. 864.35 per

100 kg., which was 2.1 *per cent* over the new contract rate but 1.5 *per cent* less than the last contract rate.

The Ministry of Defence stated (January 1978) that the local purchase rates were subject to local market conditions whereas a contractor holding a contract might not depend on local availability and that the rates quoted by him would be based on his assessment of the market trends during the period covered by the contract.

Contractor 'A' was also holding the meat contract for Supply Depot No. 1 for 18 months (October 1974—March 1976) at the rate of Rs. 876.80 per 100 kg. The subsequent contract for Supply Depot No. 1 was also awarded (26th April 1976) to contractor 'A' for a period of about 5 months ending September 1976 at Rs. 767 per 100 kg.

The Ministry stated (January 1978) that the rates tendered for one year contract were probably based on an apprehension that there would be further rise in the remaining part of the year due to fluctuations in the meat market on account of exports.

Since the contracts for both depots ended on 30th September 1976, action was taken to conclude contracts from 1st October 1976 to 30th September 1977 as under:

Supply Depot No. 1

First call	10th August 1976
Number tendered . . .	2 (contractors 'C' and 'D')
Lowest tender . . .	Rs. 744 per 100 kg. (contractor 'C')

It was considered that since the response was not encouraging, an additional call might be attempted. No invitation to reduce the rates was extended to the lowest tenderer. In the additional call, there were four tenders including that of contractor 'A' who had not tendered earlier. The rate of contractor 'A' (Rs. 715.80 per 100 kg.) was the lowest and it was

accepted by the QMG. The contract concluded on 23rd November 1976 was to commence from 29th November 1976. It was noticed that during the interim period all local purchases were made from contractor 'A' at an average rate of Rs. 835 per 100 kg.

Supply Depot No. 2

The lowest rate of Rs. 727 per 100 kg. of contractor 'D' (on the third occasion) was recommended for acceptance on 30th October 1976. Before approval (of QMG) was received, the contractor resiled (3rd November 1976) from his offer on the ground that, while the rate quoted was for supplies commencing from 1st October 1976, his tender had not been accepted till that date. On a reference by the local Army authorities whether the second lowest tender of contractor 'C' (Rs. 734 per 100 kg.) could be considered for acceptance, the QMG directed on 15th November 1976 that an additional call be issued and that, in case it was found to be higher, the rate of Rs. 734 per 100 kg. quoted by contractor 'C' be accepted. The lowest rate obtained on next call being Rs. 935 per 100 kg., the second lowest tender of contractor 'C' was recommended for acceptance. As contractor 'C' also resiled and contractor 'E' who was the third lowest withdrew his offer on the ground that considerable time had elapsed since he quoted and that the arrangements made by him for supply had been cancelled, the QMG directed that fresh tenders be invited if the lowest rate of Rs. 935 per 100 kg. could not be reduced on negotiation. In the subsequent call, the lowest rate was Rs. 955 per 100 kg. of contractor 'E' which was considered high. In the next call, the lowest tendered rate of Rs. 934.80 per 100 kg. was that of contractor 'A' who had not tendered earlier. In response to a further call, contractor 'A' quoted Rs. 948 per 100 kg. The contract was finally awarded to contractor 'A' who had agreed to the earlier rate of Rs. 934.80 per 100 kg. A contract (value : Rs. 25.24

lakhs) was therefore concluded with him on 29th January 1977 (after a delay of 4 months) for the period February—September 1977. Meanwhile, local purchase was effected from contractor 'A' at an average rate of Rs. 891.82 per 100 kg.

The rate of contractor 'A' in respect of Supply Depot No. 2 was higher than that in respect of Supply Depot No. 1, though practically at the same station and for the same period, by Rs. 219 per 100 kg. The delay in finalising the contract (Supply Depot No. 2) when an economical rate (Rs. 727 per 100 kg.) was quoted earlier, resulted in an extra expenditure of Rs. 6.16 lakhs owing to the increased rate accepted later and Rs. 1.40 lakhs on account of local purchase (October 1976—January 1977) at higher rates.

The Ministry stated (January 1978) that meat rates shot up abnormally during October—November 1976, that the tenderers who had resiled from their offers forfeited their earnest money of Rs. 1.07 lakhs and were removed from the list of approved contractors for a period of one year, that the delay could not be helped due to resiling by tenderers and that local purchase had to be resorted to at the prevailing rate.

Supply Depot No. 3

For the period October 1976—September 1977, a solitary tenderer quoted (August 1976) Rs. 625 per 100 kg. (4.9 *per cent* lower than the last contract rate and 50 *per cent* below the average local market rate) which was recommended for acceptance on 29th September 1976. The tenderer, however, resiled on 5th October 1976 on the ground that he had not received the acceptance letter by 1st October 1976 (from which date supplies were to commence) and had diverted his activities since he was not sure whether the tender would be accepted. The department forfeited his earnest money of Rs. 0.10 lakh which was challenged in Court (March 1977). During the period October—8th December 1976, local purchases were made at an average rate of Rs. 742 per 100 kg.

In the meantime, fresh tenders were floated twice without response. In the third call, contractor 'A' who had not quoted earlier was the lower of two tenderers (Rs. 787 per 100 kg.) and was awarded the contract for the period 9th December 1976—30th September 1977.

Supply Depot No. 4

In response to a tender enquiry for the supply of meat for the period October 1976—September 1977, a single tender (Rs. 687 per 100 kg.) from contractor 'F' was received in August 1976 (valid up to 1st November 1976). The rate was brought down to Rs. 611 per 100 kg. (0.97 *per cent* lower than the last contract rate and 38.90 *per cent* lower than the local market rate) on negotiation (10th September 1976). The tender, recommended to the QMG on 13th October 1976, was approved by him on 3rd November 1976.

Meanwhile, the tenderer withdrew his negotiated offer of Rs. 611 per 100 kg. on 27th October 1976 due to decline in the price of skin (which is disposed of by contractors) but agreed to supply meat at the original quotation of Rs. 687 per 100 kg. Another tender was invited (31st January 1977) and a contract was concluded with contractor 'B' at the lowest tendered rate of Rs. 786 per 100 kg. (an increase of 28.64 *per cent* over the earlier approved rate) for March—September 1977. The delay in accepting the rate quoted in September 1976 resulted in an extra expenditure of Rs. 4.92 lakhs. The CDA observed (July 1977) that a contract could have been concluded at the original tendered rate of Rs. 687 per 100 kg. as offered by the tenderer while resiling from the negotiated rate.

The Ministry of Defence stated (January 1978) that in this case it was considered that the contractor had resiled from his offer and as such the question of considering his earlier rate did not arise. However, as mentioned earlier, though the contractor had withdrawn from his negotiated rate (Rs. 611 per

100 kg.) he had agreed to supply meat at his earlier rate of Rs. 687 per 100 kg.

Supply Depot No. 5

In response to tenders for supply of meat for the period October 1976—September 1977, the lowest rate obtained after negotiation was Rs. 670 per 100 kg. on the fourth call (33 *per cent* lower than the market rate and 10.30 *per cent* lower than last contract rate). The rate was considered most economical in consultation with the CDA and recommended for sanction on 18th September 1976. The QMG, however, suggested further negotiations with the contractor ('G') to bring down the rate but there was no response from the contractor. By the time contract with contractor 'G' for the period 25th October 1976 to 30th September 1977 was sanctioned by the QMG, the contractor indicated that the rate quoted in August 1976 was for commencement of supplies from 2nd October 1976 and in the absence of acceptance of tender by that date and because of sharp rise in prices in the local market he had to resile. The acceptance letter issued to the contractor was not accepted by him and the earnest money of Rs. 18,200 deposited by him was forefeited (January 1977).

A contract for the period 16th April 1977 to 30th September 1977 was finalised with contractor 'B' at the rate of Rs. 795 per 100 kg. which was 6.43 *per cent* higher than the last contract rate. The extra expenditure due to delay in finalising the contract thus worked out to Rs. 3.04 lakhs (cost of local purchase for the interim period : Rs. 2.19 lakhs at average rate of Rs. 929.58 per 100 kg. and conclusion of contract at higher rate than that agreed to earlier : Rs. 0.85 lakh).

The Ministry stated (January 1978) that the validity of the tender was up to 31st October 1976 and as such the revocation was not binding; further, the contract was rescinded and the contractor was liable to pay compensation on account of

risk and expense purchase in addition to suspension of business for one year.

III. *Maintenance of butchery accounts*

The conditions of supply, on the basis of which rates are quoted, include a requirement to maintain at all times a reserve of animals of not less than 3 days' supply in the depot butchery based on the average number of animals slaughtered daily. It was observed from a test check of the butchery accounts that this condition was not being enforced and reserves often came down to below 50 *per cent* of the number expected to be provided.

Under the contract for supply of meat to Supply Depot No. 6 for 1973-74 (value : Rs. 18.38 lakhs), contractor 'H' could not build up the stipulated reserve and the depot purchased the required number (2,541) of animals for Rs. 2.98 lakhs and handed them over to the contractor for slaughter. In his bills (up to November 1973), however, the contractor claimed payment for full supply of meat at the contract rates, *viz.* Rs. 1.55 lakhs, without payment of the value of the animals provided by the Department. While the correctness of the procedure was being questioned by the CDA, the contractor obtained (J ber 1973) Court orders to refer the question of non-accep ce of edible offals (of the animals slaughtered) to arbitration, including the attendant risk and expense purchases, and for stay against recovery of Government claims on this account. Although the question of expenditure incurred on building up the minimum reserve of animals was not in any way connected with the rejection of edible offals, the value of animals handed over to the contractor was not recovered from him and payment of his claim was made in February 1976 when the contractor brought in a contempt of Court notice. In addition, the immediate advantage gained by the contractor by sale of skins and offals of animals provided by the Department was stated (by the Supply authorities) to have amounted to Rs. 0.76 lakh.

Such purchases had initially been brought to the notice of the depot authorities by the CDA in December 1973. Later, internal audit had advised that proper records should be maintained to indicate the contractor's acknowledgment and utilisation of live stock for conversion to meat. The depot authorities stated (October 1976) that no records had been kept as the purchases were deemed to be the property of the contractor.

While agreeing with the points brought out regarding non-maintenance of reserve, the Ministry of Defence stated (January 1978) that it was not practicable or advisable to enforce the provision relating to maintenance of reserve as 'this would virtually amount to running the contract at Government expense'.

When the contractor failed continuously from October 1973 to make supplies, the CDA advised (November 1973) the QMG that the contract might be rescinded. Risk purchases continued to be made until March 1974 when the contract was rescinded 27 days before the due date of expiry. One of the conditions accepted by the Court in December 1973, while not agreeing to withholding of bills already preferred, was that the contractor was under obligation to make supplies till 31st March 1974 and that he might suffer irreparable injury if his bills were withheld. No supply was made by the contractor from October 1973 to the end of the contract period during which expenditure of Rs. 5.55 lakhs was incurred by the Department on local purchase.

The Ministry of Defence stated (January 1978) that the matter regarding recovery involved in the risk and expense purchase was under arbitration.

The above contract had an enabling provision to pay the contractor at rates fixed under a control order if the latter were

lower than the contract rates, as under :

> "As long as there is no control order under which the maximum price is fixed below the agreed price, Government shall pay for the goods supplied at the agreed rates and in the event of such control order being made and put into force, the price shall be maximum so fixed under the control order at the time of delivery".

In February 1975, one year after rescission of the contract in March 1974, contractor 'H' informed the QMG that a price control order had come into force on 16th August 1973 and that he was entitled to the difference between the contract rate and the rates in the control order. While the Ministry of Law felt that payment at control order rates, which represented the maximum price permissible, was not involved as the contract rates were lower, directions of the QMG were received (September 1975) that if there was a control order the price should be the maximum fixed under the order and that the contract rates should be varied accordingly for the period during which the order remained in force. The contractor was paid (March 1976) an amount of Rs. 1.75 lakhs on account of the difference between the contract rate and the maximum rates stipulated in the control order.

The Ministry of Defence stated (January 1978) that the payment was authorised in consultation with the Ministry of Law whose view was that the control order should be taken as an Act of Legislature and that the contract rate should be varied accordingly.

IV. *Purchase of eggs*

A contract was concluded in April 1973 with the same contractor 'H' for supply of fresh eggs for the period April 1973—March 1974. Due to default by the contractor, risk purchases (value : Rs. 0.50 lakh) were resorted to during 28th October 1973 to 30th March 1974. The contractor, however,

moved the Court in May 1974 for settlement of the dispute through arbitration on the ground that he had supplied the entire quantity of eggs covered by the contract. The Court directed (April 1975) the Army authorities to appoint an arbitrator in terms of the arbitration clause of the contract. The award of the arbitrator was awaited (September 1977).

In the meantime (September 1975), the contractor claimed an amount of Rs. 0.22 lakh being the difference between the price paid for the eggs supplied and the price fixed under the control order. No decision on the claim had yet been taken (September 1977).

COMMAND II

A review of the contracts concluded for articles of fresh supplies in Command II revealed the following :

Station 'X'

In response to tenders invited (May 1975) for supply of meat/poultry/eggs/bread at station 'X' for the period October 1975—September 1976, the overall lowest tender received in June 1975 from contractor 'I' was 13.1 *per cent* lower than the last contract rates. The rates were valid upto 1st November 1975. The Area HQ recommended acceptance of the offer of contractor 'I'.

In August 1975, the CDA advised the Command HQ that attempts be made to bring down the rate of bread quoted by contractor 'I' from Rs. 328 to Rs. 320 per 100 kg. and to increase the rate of skin (of slaughtered animals) to be purchased by the contractor from Rs. 3 to Rs. 8 each. The CDA also suggested that an additional tender be issued to contractor 'J' who had offered telegraphically (5th August 1975) to quote lower rates (contractor 'J' had not quoted against the tender enquiry of May 1975).

Contractor 'I' declined to reduce the rate of bread and to increase the purchase rate of skin. He also did not respond to

a request to extend the validity of his offer upto 30th November 1975. Command HQ could not process the case further within the validity period (1st November 1975).

Fresh/additional tenders were floated on different occasions and the response to these was as under :

Date of tender	*Period of supply*	*Lowest rate*	*Remarks*
7th November 1975 15th November 1975 22nd November 1975	December 1975—September 1976	No response	
29th November 1975	8th January—30th September 1976	Contractor 'K' quoted 11.3 *per cent* (later 9.4 *per cent* during negotiations) higher than the last contract rates.	The rates were considered by the Ministry of Defence/ Ministry of Finance (Defence) to be very high.
6th February 1976	Upto 30th September 1976	Contractor 'J' quoted 7.8 *per cent* higher than the last contract rates.	Tender was not accompanied by earnest money and was considered not valid.

Subsequently, contractor 'K', on being approached again, reduced his rates further to 7.4 *per cent* higher than the last contract rates. A contract (value : Rs. 19.10 lakhs) for the period 25th March—30th September 1976 was finally concluded with contractor 'K' on 24th March 1976.

Failure to finalise a contract with the lowest tenderer on 1st call and consequent local purchase (1st October 1975—24th March 1976) at higher rates resulted in an extra expenditure of Rs. 6.71 lakhs for the period upto 30th September 1976, as assessed by the Area HQ.

The Ministry of Defence stated (December 1977) that a Court of Inquiry was proposed to be held to pin-point responsibility with regard to the extra expenditure.

Station 'Y'

In response to tenders invited (May 1975) for supply of meat for the period October 1975—September 1976 at the

station, the lowest quotation (7th June 1975) of contractor 'L' was found to be 2.8 *per cent* higher than the last contract rates. Additional tenders were invited on 21st June 1975 but there was no response. On 3rd call, the lowest quotation (30th June 1975) of the same contractor 'L' was 0.4 *per cent* lower than the last contract rates.

With a view to obtaining more favourable rates, fresh/additional tenders were issued on 6 different occasions during 12th July—2nd September 1975 but without any response.

Thereafter, on the advice of the CDA, it was decided to conclude a contract with the lowest tenderer on 3rd call (contractor 'L'). The tenderer, however, resiled (6th October 1975) from his offer since the date of commencement of supply (1st October 1975) was already over. On being approached, the second lowest tenderer on 3rd call, contractor 'M', also did not respond. Thereafter, additional tenders were invited on 5 different occasions during 22nd October 1975—24th January 1976. The lowest quotation of contractor 'N' (24th January 1976) was 7.2 *per cent* higher than the last contract rates. A contract for the period 12th March—30th September 1976 (value : Rs. 20.78 lakhs) was concluded (6th March 1976) with contractor 'N'.

Failure to finalise a contract with the lowest tenderer on 3rd call and consequent local purchase (1st November 1975—11th March 1976) at higher rates resulted in an extra expenditure of Rs. 1.16 lakhs for the period upto 30th September 1976.

The Ministry of Defence stated (December 1977) that the loss was due mainly to observance of the contract procedure and tendering/retendering at the instance of the Accounts authorities as well as lowest tenderers resiling from their offers. The Ministry added that the loss would be mitigated to a certain extent due to forfeiture of earnest money of the tenderers who resiled from their offers.

44. **Holding of chassis of 1-ton vehicle**

As per the approved 'vehicle body building' programme communicated by the Army Headquarters in October 1969,

an Army Base Workshop 'X' was entrusted with the task of fabrication of bodies on 401 chassis of a 1-ton vehicle. In June 1970, the task was transferred to Army Base Workshop 'Y' and was included in its body building programme in May 1972.

In connection with the task of fabrication of bodies on chassis of 1-ton vehicle to be carried out by Base Workshop 'Y' a central vehicle depot received 461 chassis (manufactured by an ordnance factory) from a central ordnance depot during May 1971—August 1972. In all 401 chassis had been issued by the central vehicle depot to Base Workshop 'Y' upto March 1975.

The task of fabrication of bodies on 401 chassis was executed by Base Workshop 'Y' during December 1971—September 1975. All the chassis after fabrication were received back in the central vehicle depot in batches during January 1973—November 1975.

Of the remaining 60 chassis received in the central vehicle depot in May 1972, one had been issued to an Army unit for fabrication of a specialist vehicle, another 57 were moved out in March 1977 to other depots for fabrication of specialist vehicles and the balance two were earmarked (March 1977) for development of other specialist vehicles. Further developments are awaited (January 1978).

The Ministry of Defence stated (January 1978) that according to the Army Headquarters (July 1968) these 60 chassis were intended to be utilised for fitment of new version of an equipment when developed. The Ministry added that since this was not likely to be finalised in the near future efforts were made for re-utilisation of these chassis and as a result the chassis were moved out as indicated above.

Computed at the manufacturing cost (1971-72), the value of these chassis for which no use had been found for about five years amounted to Rs. 23 lakhs.

45. **Loss of engineer stores**

According to the instructions issued by the Army Headquarters in March 1966 regarding measures for elimination of losses in transit, all full wagon consignments within the Defence Services are required to be checked by a Board of Officers each at both despatching and receiving ends.

Fiftyseven consignments of asbestos cement sheets and ridges valued at Rs. 13.15 lakhs, despatched by rail in full wagon loads by an Engineer Park and two other Military Engineer Service formations, were received in an Engineer Works Section during January 1969—January 1971. A major portion of these stores (value : Rs. 12.77 lakhs) had been despatched by the Engineer Park.

In all the consignments, the stores were found broken or damaged while taking delivery from the Railways. Twentyfive consignments (23 during January—March 1969 and 2 in May 1970) had been unloaded by the consignee in the presence of Boards of Officers which had opined that breakages/damages did not occur during transit as no broken pieces had been found inside the wagons.

Eleven discrepancy reports for breakages/damages amounting to Rs. 0.66 lakh in respect of the consignments received during January—March 1969 were raised against the Engineer Park and another consignor formation during February-March 1969. The Engineer Park, while declining to accept the discrepancy reports, pointed out that the stores had been properly packed and loaded in wagons in the presence of Boards of Officers and that whatever losses were caused had occurred in transit and be treated as such. The other consignor also did not accept the discrepancy reports.

Boards in respect of the remaining consignments had not been constituted at the consignee's end and as such no discrepancy reports in these cases were raised against the consignors.

Stores as despatched were taken on charge by the Engineer Works Section and unserviceable stores valued at Rs. 1.76 lakhs

were struck off charge and treated as 'losses under investigation'. In January 1974, the Engineer Works Section brought the entire matter to the notice of the Commander Works Engineer and in September 1974 suggested that a Board of Officers be convened for investigating the 'gross irregularities'.

In September 1975, the Administrative Commandant of the station where the Engineer Works Section was located constituted a Court of Inquiry to investigate the losses due to breakages etc. but the Court did not assemble. In October 1976, the Sub-Area Headquarters constituted a fresh Court of Inquiry and the inquiry was in progress (December 1977).

Meanwhile, pending investigation, the loss of Rs. 1.76 lakhs on account of unserviceable stores was awaiting regularisation.

The Ministry of Defence stated (December 1977) that:

— the Court of Inquiry ordered in September 1975 could not be held due to change in location of the Engineer Works Section resulting in change in jurisdiction of Station Headquarters;

— disciplinary action against the defaulting officials responsible/action to regularise the loss would be taken on finalisation of the Court of Inquiry proceedings; and

— Board of Officers is now being convened for supervising loading/unloading of each incoming and outgoing consignment to avoid recurrence of such lapses.

CHAPTER 8

NAVY

46. Procurement and overhaul of an aircraft

I. *Procurement of aircraft*

On the recommendations of the Naval Headquarters, the Ministry of Defence issued two sanctions in November 1969 and April 1970 (both amended in March 1971) for acquisition of certain aircraft inclusive of related ground equipment and spares, training of personnel etc. at a total cost of Rs. 8.99 crores. In January 1970, a contract for supply of two-thirds of the envisaged number of aircraft (without ground equipment) was concluded by the Ministry of Defence with a foreign firm 'X' for Rs. 3.16 crores in foreign exchange. The contract provided for an option to be exercised by June 1970 for the balance requirement (one-third) at the same price (Rs. 1.58 crores). In April 1970, the Ministry exercised the option for the residual requirement. The aircraft were delivered during November 1970—August 1971.

In February 1971, a high powered committee recommended immediate procurement of an equal number of additional aircraft. The unit price of the aircraft had escalated by about 31 *per cent* by April 1971. Procurement of the additional aircraft at an estimated cost of Rs. 7.20 crores was approved by the Ministry in May 1972 with a similar option as in the earlier contract. These were covered by sanctions issued by the Ministry in August 1972/May 1973. A contract was concluded in July 1972 with the same foreign firm for the additional requirements (value : Rs. 7.92 crores) at a unit price nearly 53 *per cent* higher than in the first contract. The aircraft which were due for delivery during June 1973—March 1974 were delivered

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by the firm during August 1973—June 1974. An amount of Rs. 5.94 lakhs was recovered by way of liquidated damages.

According to the Ministry, the increase in cost was attributable partly to modifications to the aircraft and partly to escalation in prices.

II. *Setting up of overhaul facilities*

Overhaul of engines was proposed (September 1969) to be entrusted to a public sector undertaking which in view of small arisings did not recommend establishment of overhaul facilities. However, in a meeting held in the Ministry in August 1970 it was decided that these facilities be set up by the undertaking.

The cost of setting up the facilities, to be borne by the Navy, was estimated by the undertaking from time to time as follows :

	Total	Foreign exchange element
	(Rs. in lakhs)	
July 1970	53.36	33.08
September 1971	83.56	57.23
May 1972	93.50	56.41

In August 1973, the Ministry accorded sanction for setting up these facilities (with some initial spares) at a cost of Rs. 93.50 lakhs (foreign exchange element : Rs. 56.41 lakhs), later revised in June 1975, at the instance of the undertaking, to Rs. 134.78 lakhs (foreign exchange element : Rs. 93.51 lakhs). There was thus an increase of Rs. 81.42 lakhs (153 *per cent*) in the total cost and of Rs. 60.43 lakhs (183 *per cent*) in the foreign exchange element over the original estimates of cost (July 1970).

The Ministry stated (March 1977) that the estimates of July 1970 were based on broad proposals received from a foreign firm 'Y' and did not include overhaul of certain equipment, that the public sector undertaking furnished revised estimates in April 1975 (based on quotations received in August 1974) and that the revised sanction issued in June 1975 took into account certain modifications in facilities aimed at minimising recurring expenditure.

According to the undertaking (January 1976), overhaul of engines/accessories would be taken up from February-March 1978. The total expenditure incurred by the undertaking on the project up to July 1977 amounted to Rs. 53.35 lakhs (40 *per cent* of the sanctioned cost).

Studies to determine the overhaul life of the engines fitted in the aircraft in Indian environment were still in progress (December 1977). In the meantime, two engines were sent abroad in March 1975 for being stripped and having all the parts inspected and gauged at the test cells with the manufacturers. Expenditure of Rs. 3.70 lakhs was incurred for this purpose.

The Ministry had stated (March 1977) that there were certain delays in establishing engine overhaul facilities at the public sector undertaking due to prolonged negotiations with firm 'Y'. The Ministry had added that this delay did not have any adverse effect on the operational availability of the aircraft.

The planned utilisation of the aircraft was 300 hours per annum. The actual utilisation was, however, only 60 *per cent* of the planned utilisation till November 1977.

III. *Provisioning of engines*

Two indents raised by the Naval Headquarters during December 1969 and June 1973 for procurement of a certain number of spare engines for the aircraft were covered by contracts entered into with firm 'Y' in May 1970 and March 1974 respectively. The unit price for the second batch (uprated version) contracted in March 1974 was 93 *per cent* higher than in the earlier contract.

The requirement of these engines was justified by the Naval Headquarters with reference to the total aircraft procured (not the number authorised for the units) and on the basis of a turn-round time of 9 months for repair to the engines (as against

7 months as per norms of the Air Force). On this basis, there appeared to have been over-provisioning of spare engines to the extent of £ 2.74 lakhs (Rs. 52.14 lakhs).

The Ministry of Defence stated (December 1977) that the requirement of engines was based on a turn-round time of 9 months which is an accepted practice in the Navy and that the operational environments of the Navy were more severe whereby the equipment was subjected to more frequent defects. However, the turn-round time used for provisioning purposes represents the time required for repairs and that spent in transit and has no relation to the operational environments of the Navy which are relevant for fixing the overhaul life of engines.

IV. *Non-utilisation of a test equipment*

The servicing schedule of the aircraft prescribed in December 1970, enjoined a routine analysis of the engine oil to provide an early warning of likely engine failure. For this purpose, samples of the oil were being sent to a laboratory abroad for analysis. With a view to establishing the facility for oil analysis, the Ministry of Defence accorded sanction in December 1971 (later revised in February 1974) to the procurement of test equipment along with spares, etc. at a total cost of Rs. 2.48 lakhs (foreign exchange : Rs. 2.32 lakhs). This equipment was identical to the one used by the laboratory abroad.

Against an indent raised by the Naval Headquarters in March 1972, a Supply Mission abroad concluded a contract with a firm for supply of the equipment with spares, etc. at a total cost of $ 15,841 (including 15 *per cent* Indian agent's commission).

The equipment was received in India in March 1973. However, it could be installed at a Naval inspection establishment after a year (March 1974) as certain indigenous auxiliary materials worth Rs. 0.15 lakh (sanctioned cost) required for installation had not been procured simultaneously. At the end of March 1974, the warranty for the equipment expired.

Upon installation and testing it was noticed that :

— certain types of analysis could not be done due to non-availability of oil standard ;

— readings for the same set of samples recorded by the equipment in the Naval inspection establishment and in the laboratory abroad differed widely ;

— efforts to utilise Naval technical personnel proved abortive due to high degree of skill required to operate the equipment and

— the spares provisioned were based on the manufacturer's recommendations which did not take into account operation under tropical conditions.

The equipment broke down frequently due to defects and had to be repaired in June 1977 at a cost of Rs. 2,070. Samples of oil had to be sent to the laboratory abroad even after installation of the equipment in March 1974, involving an expenditure of Rs. 0.57 lakh (April 1974—July 1977).

The Ministry stated (December 1977) that proposals for additional technical personnel required were under its consideration.

47. **Infructuous expenditure on repairs to a ship**

Repairs/refits to ships are undertaken according to approved refit programme. Besides the defect lists prepared by the ship's officers, the repair agency carries out a detailed survey of the ship to determine the extent of repairs necessary to make the ship operationally fit.

A naval ship (of 1945 vintage) acquired in 1949 from abroad had outlived its life span of 20 years. After incurring expenditure of Rs. 22.70 lakhs on repairs during July 1970—April 1971, the ship was kept operational since it was the only one of its type and its replacement was not available immediately.

In November 1973 the Ministry of Defence accorded sanction to dry docking of and repairs to the ship at a shipyard at a cost of Rs. 42.90 lakhs, later (August 1975) enhanced to Rs. 44.17 lakhs arising out of additional items of repair work. The sanctioned cost did not, however, include Rs. 2.17 lakhs being the cost of stores and equipment to be provided by the Navy for repairs and the cost of repairs done at a Naval Dockyard. The repairs were justified on the ground that :

— the ship was the mainstay of the Navy for logistic support,

— a replacement was expected to be available only in 1975-76 and

— after repairs the ship would have a further life of 3 years.

The repairs to the ship were commenced in December 1973 and completed in September 1974. Though it was expected that the repairs would give it a 3-year lease of life, the ship, after completion of the repairs, was in service for about a year only. Even during this period it frequently developed defects requiring repairs and therefore could have operational sailing, in all, for 83 days only during September 1974—October 1975.

The Commanding Officer of the ship reported (August 1975) that the structure of the ship was weak and that the ship might suffer damage in heavy weather endangering the lives on board. He added that the general state of the main propulsion machinery was in a bad shape and that boilers, engines and auxiliary machinery broke down frequently during passage. In February 1976, the Naval Headquarters recommended decommissioning and disposal of the ship on the grounds that :

— it had outlived its life of 20 years and had been earmarked for disposal during 1976,

— its hull and machinery had deteriorated to an extent where its continued retention in service would involve very heavy expenditure without corresponding operational availability and

— it could not be kept going without a substantial investment which, however, would not be cost effective.

In April 1976, the Ministry accorded sanction for decommissioning and disposal of the ship, and in February—March 1977 it was sold as scrap to a private party for Rs. 16.53 lakhs.

Inability to make a correct assessment of the condition of the ship and its likely life after repairs when preparing the detailed survey in 1973 resulted in a substantial part of Rs. 44.17 lakhs (plus cost of stores, equipment and repairs provided at the Naval Dockyard) spent on repairs to the ship becoming infructuous.

The Ministry of Defence stated (December 1977) that :

— while the need for replacement of the ship was accepted in 1973, financial constraints had not permitted its replacement and it was retained in service to avoid depletion in force,

— repairs became increasingly costlier as the ship was nearly 30 years old and had already outlived its normal operational life,

— during survey carried out before commencement of the refit, defects of the nature found subsequently could not be detected and the major defects started occurring after 9 months of repairs and

— achievement by the ship of 83 days of strenuous sailing in adverse weather conditions after repairs was considered very good.

CHAPTER 9

AIR FORCE

48. Recovery of charges for use of Air Force aircraft

The Air Force provides, on recovery of charges, facilities for airlift to Central Government Ministries/Departments, State Governments, public sector undertakings, other organisations and individuals against general authorisations issued by the Ministry of Defence and also against specific sanctions issued by the Ministry from time to time. These include assistance rendered by the Air Force to various Central Ministries/departments and State Governments for relief/rescue operations during floods and other natural calamities. The responsibility for assessment of airlift charges in accordance with the rates prescribed by the Ministry and recovery of the amounts due from the users devolves on the Air/Army Headquarters.

The Air Force units/formations render 'Flight Returns', every month, of airlifts provided under the above arrangement to the Service Headquarters for initiating necessary action for recovery of dues from the users concerned. Normally the amounts recoverable are determined having regard to the type of aircraft used, number of flying hours put in, duration of halt etc. but for relief/rescue operations, recovery rates are assessed in each individual case in consultation with the Ministry of Finance (Defence).

A check of the records showed that there have been considerable delays in working out the amounts due from the users and in effecting recovery from them. As on 30th September 1977, there were 195 cases pertaining to the period April 1963—March 1977 where the amounts due for airlifts provided had not been computed by the Air/Army Headquarters due reportedly

to the flight returns rendered by the units being without necessary/correct particulars. The year-wise details are indicated below :

Period of airlift	No. of cases
1963-64 to 1967-68	26
1968-69 to 1972-73	33
1973-74	10
1974-75	14
1975-76	47
1976-77	65*
	195

The Ministry of Defence stated (December 1977) that the concerned units had been reminded by the Air Headquarters for expediting submission of the outstanding returns. The Ministry added that procedural delays inherent in the present system were being examined by the Air Headquarters with a view to streamlining it and reducing delays.

Even for journeys for which bills had been issued, a sum of Rs. 3.95 crores was outstanding (30th September 1977) for recovery in 1,132 cases as stated below :

Year of billing	Awaiting recovery	
	No. of cases	Amount (Rs. in lakhs)
1	2	3
1959-60	1	..
1960-61	1	0.04
1961-62	2	0.29
1962-63	3	0.14
1963-64	15	2.36
1964-65	29	5.87
1965-66	27	2.48
1966-67	35	3.04

*Does not include cases pertaining to flights undertaken till 31st March 1977, of which flight returns were not received or were received late and not billed for till that date.

1	2	3
1967-68	27	7.80
1968-69	56	12.98
1969-70	114	22.48
1970-71	96	20.24
1971-72	141	32.53
1972-73	70	19.66
1973-74	120	15.11
1974-75	92	25.76
1975-76	88	129.13
1976-77	215	95.55
	1,132	395.46

The user-wise analysis of the outstanding (confined to cases where the amounts due exceeded Rs. 5,000 each) is as under :

(Rs. in lakhs)

Year	Central Ministries	State Governments	Others
1961-62	..	0.30	..
1962-63	0.07	..	..
1963-64	0.05	1.83	0.32
1964-65	..	4.57	0.98
1965-66	..	1.86	0.32
1966-67	..	2.42	0.15
1967-68	0.12	7.47	..
1968-69	0.42	9.18	2.50
1969-70	0.52	17.10	4.00
1970-71	0.24	12.65	3.75
1971-72	1.39	18.52	9.91
1972-73	2.13	7.95	8.64
1973-74	1.56	3.88	2.62
1974-75	1.90	9.89	11.29
1975-76	12.91	40.42	12.70
1976-77	8.05	22.49	52.17
	29.36	160.53	109.35

The Ministry stated (December 1977) that to supplement the efforts of the Air Headquarters full details of outstanding

recoveries had been forwarded by the Ministry to various users during September—November 1977 for expediting clearance.

49. **Provision of bulk petroleum installations at airfields**

Until November 1962, Defence bulk petroleum installations at airfields for storage and supply of aviation fuels were operated and maintained by the Air Force. In November 1962, the Ministry of Defence concluded an agreement with a public sector undertaking (hereafter undertaking), in terms of which the undertaking was to construct, at its own cost, bulk petroleum installations at airfields as required by the Air Force from time to time subject, *inter alia,* to the following conditions :

— installations would be constructed in accordance with the specifications and requirements of the Air Force ; and

— land for the construction of installations would be made available by Government to the undertaking on payment of 10 *per cent* of the normal rent assessed in accordance with the rules in force from time to time.

Under this agreement, bulk petroleum installations owned by the undertaking were constructed at 24 airfields during March 1963—November 1964 and were operated and maintained by the undertaking. However, the Defence bulk petroleum installations already existing continued to be managed by the Air Force itself. In a meeting held in the Ministry of Defence in August 1965, it was decided—for reasons of economy, operational efficiency and proper quality control—to transfer to the undertaking the management, operation and maintenance of the Defence bulk petroleum installations at airfields also. The terms and conditions for transfer of these bulk petroleum installations to the undertaking were as follows :

— A joint survey of the installations by the Air Force authorities and the undertaking would be carried out

with a view to ascertaining their present condition and the possibility of their being brought up to the standard of quality control required by the Air Force.

— A statement showing the present value of the installations and the annual hire chargeable from the undertaking would be prepared for the purpose of considering whether the undertaking would take over these installations on outright purchase basis or on rental basis.

The agreement of 1962 had stipulated payment of rent by the undertaking for the Defence lands on which it had constructed its own bulk petroleum installations and the policy decision of 1965 had also envisaged payment of hire charges for the Defence installations transferred to the undertaking. No rent/hire charges in respect of both the installations have, however, been recovered from the undertaking so far (December 1977).

According to the Air Headquarters, rent bills had not been raised by the Military Estate Officers and the Military Engineer Services authorities as a copy of the agreement (of 1962) had not been forwarded to the Director, Military Lands and Cantonments until 1968. In January 1976, the Director, Military Lands and Cantonments issued instructions for assessing the rent/hire charges to be recovered from the undertaking. Boards of Officers were accordingly held at 21 airfields during February—March 1976 and the amount outstanding on account of rent of land and other properties handed over to the undertaking was worked out at Rs. 25.11 lakhs, which was intimated to the undertaking by the Air Headquarters in September 1976.

The Ministry of Defence stated (December 1977) that the case regarding recovery of rental charges was under consideration in consultation with the public sector undertaking and that every effort was being made to finalise it early.

A review by Audit of two Defence bulk petroleum installations at stations 'X' and 'Y' revealed the following :

I. *Station 'X'*

In December 1958, the Ministry of Defence had accorded sanction to the provision of a bulk petroleum installation at station 'X' at an estimated cost of Rs. 6.5 lakhs. The installation, constructed during 1960—1965 at a cost of Rs. 6.23 lakhs, could not be commissioned as it was lacking in quality control standards required by the Air Force. In September 1966, a joint inspection by the Air Force, Military Engineer Services and the undertaking revealed, *inter alia,* that :

— the petroleum tanks could not be used as these had not been epicoated and had also not been provided with floating suctions; and

— the undertaking had its own depot at the station and was, therefore, not prepared to operate the Defence installation.

Since it was not economical to revive the Defence installation, the joint inspection team recommended that it should be dismantled.

About 5 years later (July 1971), the Air Headquarters accorded sanction for modifications to the installation at an estimated cost of Rs. 1.64 lakhs plus 16½ *per cent* supervision charges payable to the undertaking in order to bring it to quality control standards. The work was entrusted to the undertaking and completed in October 1971 at a cost of Rs. 1.64 lakhs. The installation was handed over to the undertaking in December 1971 for operation and maintenance. Since July 1972, the installation had not been put to use by the undertaking as it had enough storage facilities of its own to meet the Air Force requirements and also due to the fact that sales had gone down. In February 1973, the undertaking requested the Air Headquarters to arrange taking over of the installation by the Air Force. In March 1975, the undertaking repeated its earlier

request stating that it had no means to safeguard the installation against theft or damage. After protracted correspondence, a Board of Officers ordered by the Air Force authorities to assess the condition of the installation observed (August 1975) that:

— the installation was in an unserviceable condition and an estimated expenditure of Rs. 2.57 lakhs would be required to make it serviceable; and

— the installation had not been guarded for a considerable period and certain accessories were either missing or broken

and recommended that security guards be positioned at the installation for round-the-clock vigil.

Thus, the installation constructed by the Air Force during 1960—1965 at a cost of Rs. 6.23 lakhs and modified in 1971 after incurring further expenditure of Rs. 1.64 lakhs had remained unutilised since July 1972. The expenditure incurred on modifications was avoidable as a joint survey team had earlier recommended dismantling of the installation since there was no requirement of this storage tank.

The Ministry of Defence stated (December 1977) that dismantling of the installation recommended by the joint inspection team was not agreed to by the Air Headquarters as there was shortage of tankage. The Ministry added that the installation was used during 1971 conflict and that it could not be used subsequently as the undertaking had enough storage facilities at the station and was not prepared to operate the Defence installation.

II. *Station 'Y'*

A Defence bulk petroleum installation comprising 31 tanks constructed at station 'Y' (cost : Rs. 11.47 lakhs) was not in use by the Air Force after March 1965 as the undertaking had constructed its own installations at the station. The undertaking was not inclined to operate the Defence installation as in its

opinion it did not meet its quality control standards. In view of urgent operational necessity, the Air Headquarters ordered in July 1971 commencement of work of modifications to these tanks to be executed by the undertaking, for which a covering sanction was issued in February 1972 for Rs. 4.72 lakhs plus 16½ *per cent* supervision charges payable to the undertaking. The work was completed by the undertaking at a total cost of Rs. 4.86 lakhs, against which a sum of Rs. 1.34 lakhs was yet to be paid to the undertaking (July 1977). A Board of Officers convened for the purpose of certifying the modification work done by the undertaking and handing over the installation to the undertaking observed (April 1975) that :

— in the absence of the original specifications of the installations, the extent of modification work done by the undertaking could not be checked;

— no record of handing over of the bulk petroleum tanks to the undertaking for modification work was available with the Air Force authorities;

— list of equipment replaced/rendered surplus was not available;

— no stage inspection had been carried out by the Air Force authorities while the modification work was in progress; and

— flushing of the system and functional test were not carried out after modification.

The Board, therefore, opined that no useful purpose would be served by handing over the bulk petroleum tanks to the undertaking for use.

In view of the findings of the Board of Officers, the Air Force authorities insisted that the undertaking carry out functional tests of the modified tanks before handing over these to the undertaking. In March 1976, the Air Headquarters approached the Ministry of Defence to request the Ministry of Petroleum

and Chemicals to impress upon the undertaking to take over these tanks after functional tests and utilise them for refuelling purposes.

Thus, 31 petroleum tanks costing Rs. 11.47 lakhs and later modified at a cost of Rs. 4.86 lakhs had not been put to use.

The Ministry of Defence stated (December 1977) that the undertaking had agreed in June 1977 to take over the installation and that the formalities for handing/taking over were in progress.

50. **Delay in the installation of airfield lighting equipment**

In order to meet the requirements of the Air Force, the Ministry of Defence sanctioned in September 1963 the procurement of 22 sets of airfield lighting equipment from indigenous sources at an approximate cost of Rs. 2.69 crores with foreign exchange content not exceeding 25 *per cent*.

Initially, it was proposed to procure the equipment from trade through the Director General, Supplies and Disposals. Later, with the object of manufacturing the equipment in an ordnance factory, a collaboration agreement was entered into in July 1965 with a foreign agency. Production in the ordnance factory commenced in early 1968.

In September 1965, the Air Headquarters had projected an 'operational' requirement of 22 sets (estimated cost : Rs. 2.00 crores) including one imported set for delivery during March 1966—July 1967. In March 1967, the requirements 'were scaled down to 20 sets and revised again to 22 sets (estimated cost : Rs. 2.70 crores) in August 1968.

Installation of the equipment was originally intended to be undertaken by the ordnance factory. Later (June 1969), the Ministry of Defence decided to entrust this responsibility to

the Military Engineer Services as the ordnance factory had no experience in such installation.

The imported set was partially installed for trial purposes in March—April 1966 and finally installed at an airfield in December 1968. The balance 21 sets were supplied by the ordnance factory during 1968—1977.

The works services required for installation of the lighting equipment at 21 stations were sanctioned during the period July 1967—September 1976 at a cost of Rs. 184.75 lakhs. Of the 21 sets supplied, 10 sets were installed (up to December 1977) at a cost of Rs. 60.83 lakhs. Due to non-completion of works services, the remaining 11 sets of the equipment (value : about Rs. 174.31 lakhs) were awaiting installation (December 1977).

A few cases of delay in installation of the sets are given below :

(i) The lighting set to be installed at airfield 'A' was supplied during September 1969—November 1976. In April 1969, 16.98 acres of land required for the installation work were acquired. In March 1970, the Air Headquarters accorded sanction to the provision of works services for installation of the equipment at an estimated cost of Rs. 7.66 lakhs (amended to Rs. 12.18 lakhs in June 1976) and the work was commenced in November 1972. In February 1975, when 55 *per cent* of the works services had been completed and had reached a stage when runway lights could be fitted, the Garrison Engineer pointed out lack of security arrangements in the absence of security fencing around the airfield. The Garrison Engineer expressed inability to instal the equipment for fear of pilferage and damage to costly equipment. Some thefts of the components of the equipment (value : Rs. 0.09 lakh) were also reported in June 1975.

In the meantime, a siting-cum-costing board had recommended in January 1974 provision of security fencing around the airfield to protect the property and the installations. The Command Headquarters accorded sanction (June 1975) to the erection of double security fencing around the airfield at an estimated cost of Rs. 11.63 lakhs. The work was completed in November 1976.

In the absence of security fencing, installation of lighting equipment (approximate cost : Rs. 18.44 lakhs) was delayed.

The Ministry of Defence stated (January 1978) that it would take nearly two years to complete the installation work after receipt of all stores.

(ii) The lighting set to be installed at airfield 'B' was delivered during December 1969—June 1975. Sanction for acquisition of 19 acres of land required for installation work was accorded in July 1969 at an estimated cost of Rs. 1.39 lakhs. Sanction to works services for installation of the set at a cost of Rs. 6.70 lakhs was accorded by the Air Headquarters in August 1969. Out of 19 acres of land required, about 4 acres were taken over by the Air Force by February 1975 and the balance in April 1977. Installation except for approach lights was completed in August 1976.

Pending complete installation, the lighting set (approximate cost : Rs. 19.31 lakhs) supplied during December 1969—June 1975 was lying unutilised.

The Ministry stated (January 1978) that installation at this airfield was split into two phases—major runway and approach lights—due to certain problems encountered in the acquisition of land for installation

of the approach lights. The Ministry added that the work of installation of approach lights was nearing completion.

(iii) At another airfield 'C', the lighting equipment was delivered during October 1969—January 1976. The works services required for installation of the set were sanctioned in January 1970 and September 1976 at a cost of Rs. 10.55 lakhs. Eighty *per cent* of the work had been completed (December 1977). The work of installation was held up due to non-acquisition of land required for approach lights, sanction for which had been accorded in March 1976 at an estimated cost of Rs. 0.04 lakh.

Pending completion of the installation work, the lighting set (cost about Rs. 12.70 lakhs) supplied during October 1969—January 1976 was lying unutilised.

The Ministry stated (January 1978) that utilisation of the set could start after completion of installation which itself required about 2 years after receipt of all stores.

51. **Development and manufacture of an electronic equipment**

The development of two numbers of an electronic equipment for a certain type of aircraft, entrusted (April 1970) by the Air Headquarters to an Air Force unit, was reportedly completed successfully (including environmental tests in a national laboratory) in December 1971 at a cost of Rs. 0.05 lakh.

Meanwhile, in September 1971, the Air Headquarters had initiated a proposal for the manufacture of 117 numbers of the equipment (as designed and developed by the Air Force unit) by a base repair depot. The equipment was intended to increase the survivability of the aircraft on operational tasks. Taking into account the time required for obtaining components from abroad

manufacture of the equipment was expected to commence 12 months after sanction of the proposal and production was estimated at the rate of 10 numbers per month.

In order to meet urgent operational requirements, the Air Headquarters submitted another proposal for the fabrication of 25 (out of the total requirement of 117) numbers of the equipment by the designer unit itself, which was sanctioned by the Ministry of Defence in October 1971 at an estimated cost of Rs. 0.71 lakh. The requisite quantity was manufactured during October 1971—November 1972 at a cost of Rs. 0.43 lakh. Evaluation trials of the equipment were carried out during December 1971—March 1972 when a number of defects were pointed out by the user units.

In July 1972, an Air Command pointed out that the equipment manufactured by the designer unit would not serve much useful purpose and would require modifications to give better performance. According to the Air Headquarters, the defects noticed were mostly removed by September 1972.

Meanwhile, in December 1971, the Ministry of Defence sanctioned the manufacture of the balance quantity of 92 numbers of the equipment by the base repair depot at an estimated cost of Rs. 2.83 lakhs (foreign exchange : Rs. 1.36 lakhs).

In July 1972, it was decided by the Air Headquarters to go ahead with the import of components required for indigenous manufacture of the equipment. Indents for procurement from abroad of test equipment and components (estimated cost : Rs. 1.35 lakhs) were accordingly placed on a Supply Mission abroad indicating the date of delivery as December 1972; the supplies were received during May 1973—January 1975.

In July 1973, the Air Headquarters agreed to a limited environmental test being carried out on the pre-production models fabricated by the designer unit. The pre-production models were, however, flight-tested only during August 1973 and again

during May—October 1974 when the defects noticed were stated to have been removed. Meanwhile, the Air Headquarters decided (February 1974) that the equipment having already been operated successfully for over 2 years, its type approval by the Directorate of Aeronautics or by any other external agency was not necessary. While communicating this decision to the base repair depot, the Air Headquarters stated that fitment of the equipment to the aircraft be cleared by them.

Manufacture of the equipment was taken up by the base repair depot from April 1975. As against the order for 92 numbers of the equipment, 51 numbers were actually manufactured by the depot by June 1976 when further production was stopped due to non-procurement of components on account of escalation in prices. The expenditure incurred was Rs. 2.02 lakhs on materials (including foreign exchange of Rs. 1.25 lakhs).

During air trials in January 1976, it was observed that the equipment manufactured by the base repair depot did not function properly. According to environmental tests conducted at the Defence Electronic Research Laboratory during November-December 1976, the equipment manufactured by the base repair depot was not found fit for operational use due to certain defects.

In March 1977, the Air Headquarters decided that test modification work on 2 sample sets (out of 51 sets of equipment manufactured) should be carried out at the base repair depot and that after successful completion of all tests on the sample sets the remaining sets should be modified. It was anticipated that manufacture of mod kits and introduction of the equipment in service would take 8 to 10 months and would cost Rs. 0.70 lakh (June 1977).

The Ministry of Defence stated (December 1977) that :

— the equipment fabricated by the designer unit was introduced in service in spite of shortcomings as it was urgently required for operational tasks,

— according to Air Headquarters, environmental tests were not carried out before manufacture of 51 sets by the base repair depot as two prototypes had already been subjected to limited environmental and other tests considered necessary,

— 51 sets manufactured at a cost of Rs. 2.02 lakhs were still not airworthy as these were awaiting modifications, and

— no additional manpower was provided to the base repair depot for manufacture of these sets.

CHAPTER 10

OTHER TOPICS

52. Non-recovery of excess customs duty

The Department of Defence Supplies placed a supply order in May 1971 on firm 'A' for supply of 41 crash fire tenders at a cost of Rs. 2.90 lakhs per unit. Under the terms of the supply order, customs duty on f.o.b. value (not exceeding Rs. 1.30 lakhs per unit) of chassis and imported components, insurance and freight was to be paid on the basis of actuals. The customs duty was to be paid initially by the firm and then reimbursed on proof of payment with reference to the original customs bills of entry and exporters' invoices.

Seventeen crash fire tenders were imported through port 'X' in December 1971 and the balance 24—in 2 consignments of 15 and 9—were imported through port 'Y' in November 1971 and January 1972 respectively. The firm preferred claims of Rs. 33 lakhs for reimbursement of customs duty (Rs. 11.50 lakhs in respect of 15 in December 1971, Rs. 7.70 lakhs in respect of 9 in February 1972 and Rs. 13.80 lakhs in respect of 17 in February 1972). The reimbursements were authorised during December 1971—February 1972 against bank guarantees. The crash fire tenders were delivered in January—March 1972 and the bank guarantees were released on 21st March 1972 and 28th April 1972.

The customs duty had been assessed initially, in the absence of separate details of cost of chassis and mounted equipments, on a total cost of Rs. 64.28 lakhs. As mounted equipments were not liable to customs duty, the firm claimed and obtained refund of customs duty on this account from the customs authorities but did not inform the Ministry of Defence of the refunds obtained. When Audit brought to the notice of the

Ministry of Defence in August 1973 a refund of Rs. 2.43 lakhs paid to the firm in March 1973 in respect of the consignment imported through port 'X', the Ministry asked the firm in December 1973 to repay the amount to Government. As, however, the firm did not repay the amount, the Ministry referred (November 1975) the case to arbitration (in terms of clause 16 of Schedule 'B' of the supply order).

The firm also obtained (March/April 1976) refund of customs duty (Rs. 3.80 lakhs) in respect of the 2 consignments imported through port 'Y'. On this being brought to the notice of the Ministry by Audit in July 1976, the Ministry asked the firm (in August 1976) to repay this amount also to Government. In April 1977, the Ministry referred this claim too to arbitration.

The arbitrator appointed in November 1975 had to be changed in June 1976 and again in July 1976 as the persons nominated were not available for the work subsequent to their appointment. Award of the arbitrator is still awaited (December 1977).

The Ministry stated (December 1977) that as there was no chance of the contractor voluntarily coming forward to repay the money the matter had to be referred to arbitration, firstly, as there was an arbitration clause in the contract and, secondly, the alternative of filing of a suit was considered more expensive. The Ministry also stated that at its instance a provision had been made in a subsequent supply order placed by the Director General, Supplies and Disposals on the same firm for withholding payments due thereunder to the extent of the refunded customs duty.

53. **Clearance of air consignments of imported stores**

Defence stores procured from abroad are normally despatched by sea. Stores may, however, be airlifted on grounds of urgency with prior sanction of the competent financial authority. In emergent cases stores may be airlifted without prior sanction subject to the condition that *ex post facto* sanction

of the competent financial authority is obtained by the indentor immediately after the decision for airlift is taken. Delivery of air consignments is obtained by the Embarkation Headquarters from airway companies by surrendering the airway bills received from the consignees.

Provisional advances are drawn from the Controllers of Defence Accounts concerned by the Embarkation Headquarters for payment of freight in respect of air consignments which require *ex post facto* sanctions. Out of the provisional advances so drawn by the three Embarkation Headquarters, a sum of Rs. 14.12 lakhs in respect of 400 air consignments remained unadjusted as at the end of December 1976 for want of *ex post facto* sanctions of the competent financial authorities. The year-wise details of the unadjusted advances are given below :

(Rs. in lakhs)

Year	Number of air consignments				Unadjusted amount			
	Embarkation Headquarters				Embarkation Headquarters			
	'A'	'B'	'C'	Total	'A'	'B'	'C'	Total
Prior to 1972	6	—	—	6	0.06	—	—	0.06
1972	15	—	—	15	0.34	—	—	0.34
1973	33	—	1	34	1.32	—	0.06	1.38
1974	64	4	2	70	2.09	0.97	0.09	3.15
1975	59	4	2	65	3.70	0.39	0.25	4.34
1976	141	65	4	210	2.35	2.39	0.11	4.85
Total	318	73	9	400	9.86	3.75	0.51	14.12

In case of failure to clear consignments within 7 days from the date of landing, warehousing charges are required to be paid in cash to the customs authorities. During 1972—1976, the three Embarkation Headquarters paid warehousing charges amounting to Rs. 12.00 lakhs on account of non-clearance of air consignments within the prescribed period; of these, Embarkation

Headquarters 'A' accounted for a major portion (Rs. 10.96 lakhs), year-wise break up of which is as under :

Year	Number of consignments received	Warehousing charges paid (Rs. in lakhs)
1972	741	0.10
1973	951	0.88
1974	1,450	1.15
1975	1,305	3.27
1976	1,748	5.56
Total	6,195	10.96

One consignment of the value of Rs. 0.10 lakh airlifted in October 1973 was not taken delivery of by Embarkation Headquarters 'A' as the airway bill with connected documents had not been received by it from the consignee. The consignment was ultimately auctioned by the airway company in March 1975.

An analysis of the extent of delay in forwarding air consignments after their landing in India by the Embarkation Headquarters to the consignees showed the following position.

	Number of air consignments received						Percentage					
	1975			1976			1975			1976		
Embarkation Headquarters	'A'	'B'	'C'	'A'	'B'	'C'	'A'	'B'	'C'	'A'	'B'	'C'
Forwarded												
—within 10 days of landing	131	40	64	245	49	70	10	7	65	14	5	76
—within 11—30 days of landing	256	272	32	666	612	18	20	48	33	38	57	20
—within 31—90 days	515	219	2	632	365	4	39	39	2	36	34	4
—over 90 days	225	37	—	98	38	—	17	6	—	6	4	—
—Details not known	178	—	—	107	—	—	14	—	—	6	—	—
Total	1,305	568	98	1,748	1,064	92						

The delay in forwarding the air consignments was stated to be due to reasons such as :

— delay in customs clearance of the consignments due to incorrect forwarding of airway bills, non-receipt of invoices, incomplete/insufficient description of stores and documentation, time-lag in detailing of consignees' representatives for survey of damaged consignments etc; and

— despatch of several consignments meant for different consignees in a single package.

The purpose of airlift of the consignments at considerable cost on grounds of urgency was, thus, not served in a large number of cases.

While considering certain cases of naval cargo airlifted during 1972-1973 for issue of *ex post facto* sanction(s) to airlift the stores, the Ministry of Finance (Defence) had observed (November 1975) that "broadly speaking any consignment air freighted which does not find its way in full to the ultimate user within one week of its landing in India by air has been needlessly airlifted".

The Ministry of Defence stated (January 1978) that :

— delays in obtaining *ex post facto* sanctions by the indentors for consignments airlifted (without prior sanction) were due to factors like delay in receipt of airway bills, insufficient details of consignments and incomplete particulars;

— increase in the warehousing charges was due mainly to increased rates of these charges over the years and certain measures taken by the customs authorities from June 1976 like (i) withdrawal of 'Note and Pass' system (except for consignments received from certain countries), (ii) introduction of cash settlement of transactions in lieu of book debits and (iii) physical inspection of stores by the customs authorities;

— the free time allowance of 7 days at present provided for clearance of air consignments was inadequate and a proposal to increase the period to 10 days had been initiated;

— since 5 days were required for arranging transport and providing escorts before the stores could be despatched, the observation of the Ministry of Finance (Defence) was not a reasonable one; and

— areas of responsibility of each party involved in the airlift of defence stores procured from abroad were defined in Army Headquarters orders issued in August 1977.

(S. M. MAITRA)

Director of Audit, Defence Services.

NEW DELHI
Dated the 20 MAR 1978

Countersigned

(A. BAKSI)

Comptroller and Auditor General of India.

NEW DELHI
Dated the 20 MAR 1978