Report of the
Comptroller and Auditor General of India

for the year ended March 2001

Union Government (Defence Services)
Air Force and Navy
No.8 of 2002

CONTENTS

PREFATORY REMARKS

Report for the year ended March 2001 has been prepared for submission to the President under Article 151 of the Constitution. The Report relates mainly to matters arising from test audit of the financial transactions of Ministry of Defence, Air Force, Navy, Coast Guard and associated Defence Research and Development Organisations. Results of audit of Ministry of Defence, insofar as they relate to Army and Ordnance Factories, Army HQ, Ordnance Factory Board, field units of Army, Ordnance Factories, associated Research and Development units and Military Engineer Services have been included in Report No.7 of 2002.

The Report includes 19 paragraphs.

The cases mentioned in the Report are among those which came to notice in the course of audit during 2000-01 and early part of 2001-02 as well as those which came to notice during earlier years, but could not be included in the previous Reports.

OVERVIEW

The expenditure on Air Force and Navy, including capital expenditure during 2000-01 was Rs 10,832 crore and Rs 7,481 crore respectively which together represents 35.57 per cent of expenditure of Rs 51,482 crore on Defence Services.

Some of the major findings arising from test audit of transactions of Air Force, Navy and associated Defence Research and Development Organisation included in the Report are mentioned below:

I Acquisition of Special Purpose Helicopter

Ministry contracted from a foreign manufacturer, nine special purpose helicopters which had not yet entered production phase. The vital systems of the helicopters were not evaluated and radar fell short of requirements. Negotiations were concluded in a hurry despite the final price being much higher than the estimate of the Navy.

(Paragraph 2)

II Procurement of unreliable fuses

Ministry's failure to take cognisance of technical problems faced in an earlier supply, resulted in procurement of unreliable fuses worth Rs 54.52 crore under the second contract concluded with the same firm.

(Paragraph 8)

III Procurement of a missile

Unnecessary procurement of certain missiles resulted in avoidable expenditure of Rs 24.77 crore. Procedure for selection of firm was irregular, and payment terms unduly liberal, violating norms. The price finalised by the empowered delegation was exorbitant resulting in additional expenditure of Rs 10.18 crore.

(Paragraph 16)

IV Defective contract leading to fraudulent payment

Faulty contractual provisions facilitated fraudulent drawal of USD 489,970 by M/S FXC International Aircraft Sales, USA. Ministry failed to fix responsibility even after four years.

(Paragraph 10)

V Recovery at the instance of Audit

Recovery of Rs 7.05 crore was effected at the instance of Audit. The amount recovered represents overpayment of pay and allowances to service personnel, and overpayments under various defence contracts.

(Paragraph 15 and 19)

VI Delay in procurement of Air targets

Requirement of indigenous air targets remains unfulfilled, for nearly a decade, despite investment of Rs 2.02 crore. Use of imported air targets proved costlier by Rs 4.40 crore. During 1993-99, Navy could conduct only a fraction of the projected firing sorties, leading to an alarming deficiency in meeting training needs.

(Paragraph 17)

VII Delay in development and production of indigenous mines

Despite nearly two decades of development and investment of Rs 4.14 crore, DRDO failed to achieve the basic objective of indigenous production of mines, which has compelled Navy to continue with the vintage mines of doubtful effectiveness, thereby seriously compromising operational preparedness.

(Paragraph 22)

VIII Delay in repair of an Aircraft

Ministry's failure to resolve the pricing for repair of a damaged aircraft delayed the repair of the aircraft which consequently has remained grounded for nearly ten years. Also, the front fuselage procured for repair nearly five years ago for Rs 5.43 crore remained unutilised.

(Paragraph 13)

IX Extra expenditure due to premature conclusion of contract

Premature conclusion of contract by Ministry, with a foreign firm, without ensuring availability of qualified engine for flight evaluation, led to extra expenditure of Rs 3.47 crore on life extension of the vendor's aircraft, besides blocking funds worth Rs 7.36 crore.

(Paragraph 21)

X Unnecessary import of explosive cartridges

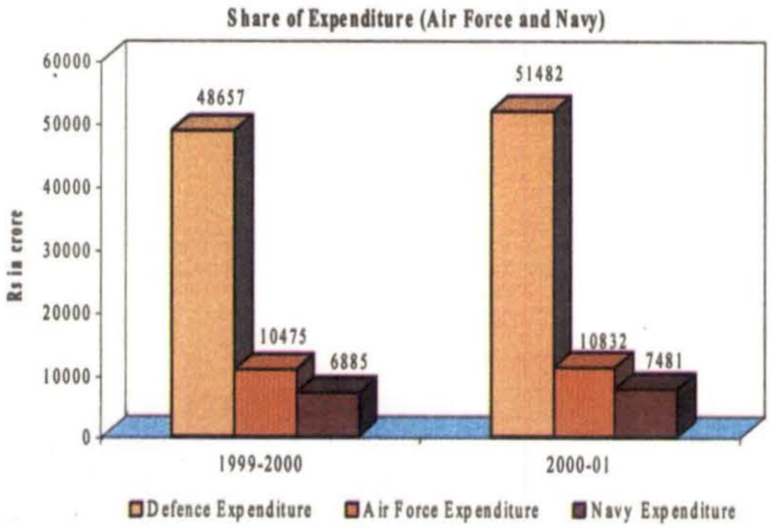
Ministry imported 34,000 explosive cartridges despite availability of adequate stock to meet four year's requirement. The imported cartridges were costlier by Rs 50.82 lakh as compared to the indigenous cartridges.

(Paragraph 12)

CHAPTER I : FINANCIAL ASPECTS

1 Financial Aspects

1.1 The total revenue and capital expenditure on Defence Services during 2000-01 was Rs 51,482 crore, which was 5.81 *per cent* higher than the expenditure of 1999-2000. The share of Air Force and Navy in the total expenditure on Defence Services in 2000 - 2001 was Rs 10,832 crore and Rs 7,481 crore respectively, including capital acquisitions. The expenditure on Air Force was 3.41 *per cent* and Navy 8.66 *per cent* higher than the expenditure during the preceding year.



1.2 The distribution among major areas of expenditure like capital acquisition, stores, pay and allowances and works during 2000-01, in Air Force and Navy, is shown in the table below:

	AIR FORCE		NAVY	
	Rs in crore	Per cent of total	Rs in crore	Per cent of total
Pay and Allowances	2070	19.11	1231	16.46
Stores	4607	42.53	1384	18.50
Works	733	6.77	397	5.31
Other Expenses	268	2.47	815	10.89
Capital Acquisition	**3154**	**29.12**	**3654**	**48.84**
Total	**10,832**	**100**	**7,481**	**100**

1.3 The summarised position of Appropriation and expenditure during 2000-2001 in respect of Air Force and Navy were as under:

(Rs in crore)

	Final Appropriation	**Actual expenditure**	**Total unspent provision (-)**
		NAVY	
REVENUE			
Voted	4095.06	3739.82	(-) 355.24
Charged	2.00	0.11	(-) 1.89
CAPITAL			
Voted	3824.31	3740.90	(-) 83.41
Charged	3.20	0.54	(-) 2.66
Total	7924.57	7481.37	(-) 443.20
		AIR FORCE	
REVENUE			
Voted	8120.75	7484.73	(-) 636.02
Charged	1.49	0.49	(-) 1.00
CAPITAL			
Voted	3389.92	3344.38	(-) 45.54
Charged	3.35	1.98	(-) 1.37
Total	11515.51	10831.58	(-) 683.93

The overall net unspent provision (voted and charged) under Revenue and Capital heads in respect of Air Force and Navy during the year 2000 – 2001 was Rs 1127.13 crore as against Rs 318.08 crore during the previous year, indicating a sharp increase of over 250 *per cent*. Of this, Rs 132.98 crore is under the capital head of account. Air Force and Navy together account for 57 *per cent* of the capital expenditure of the Defence Services.

1.4 Test check of various transactions and review of certain projects/activities relating to Air Force and Navy revealed instances of injudicious planning, delay in decision making, delay in upgradation of an aircraft, weaknesses in project implementation, extra expenditure, avoidable expenditure, losses and cost and time overruns in creation of facilities.

1.5 An amount of Rs 7.05 crore was recovered at the instance of Audit during the year.

CHAPTER II : MINISTRY OF DEFENCE

2 Acquisition of Special Purpose Helicopter

Ministry contracted for nine special purpose helicopters, which had not yet entered production phase, without evaluating vital systems and whose radar fell short of requirements. The prices quoted were negotiated only marginally even though quoted price was far higher than the estimated cost.

In order to enhance the operational capability of the Naval fleet against low level threat, Ministry sanctioned, in July 1999 and February 2001, acquisition of nine special purpose Helicopter 'X' from a foreign manufacturer. Two contracts were accordingly concluded in August 1999 and February 2001, for import of four and five helicopters respectively, with associated equipment and spares, at a total cost of USD 200.80 million, equivalent to Rs 894.82* crore. As per the terms of the contract, the helicopters were to be delivered between August 2001 and September 2003.

Scrutiny of records relating to the conclusion of the contracts revealed the following:

a) In contravention of the procurement procedure prescribed by the Ministry of Defence in 1992, the procurement action in this case was initiated without finalising the Naval Staff Qualitative Requirements. In their absence, the Government would not be in a position to determine whether the helicopters would fully meet the requirements of the Navy.

b) The helicopter selected was only a prototype and had not entered production phase. Moreover, the evaluation trials, conducted by a team of naval officers in a foreign country, were severely handicapped due to the following reasons:

   i) ability of the helicopter to provide fighter interception from ground station using data link could not be proved, as the ground receiver of the data link was not made available for evaluation, as according to the

* August 1999 – 1 USD = Rs 42.70
February 2001 – 1 USD =Rs 46.15

manufacturer, the prototype of the ground receiver was on trials. Naval HQ stated, in May 2001 that indigenous data link was under development by a Research Establishment and the ground receiver would be procured from the foreign manufacturer only in case the indigenous data link programme did not fructify;

ii) the helicopter was not fitted with any Electronic Support Measures, as these were not available with the foreign manufacturer. As a result, it was not possible to verify whether subsequent retrofitment of Electronic Support Measures System would be successful;

iii) Early Warning Radar, which is the most vital system of the helicopter, was of 1983 vintage. This was not evaluated by the Naval team as the foreign manufacturer did not provide appropriate targets (fighter aircraft). Also, the targets located on the radar could demonstrate only half the range of the radar claimed by the manufacturer, and the surface target detection capability of the radar could not be established;

iv) no ship was provided by the manufacturer for flight trials to determine the efficacy of landing aids and restrictions on night flying/landing during small deck operations; and,

v) IFF[1] system fitted on the helicopter was not acceptable to the Navy, as it was not compatible with the IFF fitted on Indian Naval ships and aircraft. The manufacturer had stated that an alternative IFF could be fitted on customer's request.

c) In the absence of competitive bidding (this being a single vendor), price negotiations based on cost estimation became critical for obtaining optimum value for money. However, the Ministry were able to obtain only a marginal discount of 5.7 *per cent* on the price offered even though the price offered (USD 14.8 million per helicopter equivalent to Rs 59.56[♣] crore) was almost 56 *per cent* higher than the Naval HQ estimation of Rs 38 crore. The Naval HQ estimate was based on the premise that the new helicopter was essentially an upgraded version of an earlier helicopter acquired in the 1980s. Naval HQ had made appropriate adjustments for the new version of radar, data link systems etc., while preparing the cost estimate. The price negotiations for the Rs 894.82 crore procurement with a single vendor were held on 4 days between 3 February

[1] Identification Friend or Foe

[♣] 1 USD = Rs 40.24

and 10 February 1998. Despite having made no major dent in the exorbitant prices offered, the negotiations were concluded on 10 February 1998 itself, even though the decision on the procurement was to be taken only after the newly elected Government would take over in early May 1998. In fact the contract was sanctioned only in July 1999. The higher price was attributed by the Naval HQ to unexplained factors including inflation.

d) Even though the quantities were increased from 4 to 9 after conclusion of negotiations, no effort was made to seek a further reduction in prices on this account.

e) The Ministry accepted the firm's pricing of spare engine, associated spares and equipment etc. at 55 to 65 *per cent* of the basic cost of the helicopter even though these constituted only 30 *per cent* of the basic cost for the earlier version of the helicopter, thereby indicating additional padding in the prices of spare engines, spares, etc. by the manufacturer.

Though the Government had procured an unproven helicopter, with 18 year old radar technology and incomplete trial evaluation, they were unable to negotiate any significant amount from the exorbitant price offered by the single vendor. Even allowing for a 5 *per cent* price escalation *per annum* in dollar terms and after providing for additional fitments with helicopters, the extra expenditure would still be to the extent of Rs 118 crore.

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

3 Response of the Ministries/Departments to Draft Audit Paragraphs

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

Draft Paragraphs/Reviews proposed for inclusion in the Report of the Comptroller and Auditor General of India, Union Government, Defence Services (Air Force and Navy) for the year ended March 2001, No.8 of 2002, were forwarded to the Secretary, Ministry of Defence between April 2001 and October 2001 through demi-official letters drawing his attention to the Audit findings and requesting Ministry to send their response within the stipulated six weeks. It was brought to the personal notice of the Defence Secretary that since the issues are likely to be included in the Audit Report of the Comptroller and Auditor General of India, which are placed before Parliament, it would be desirable to include Ministry's comments in the matter.

Despite above instructions of the Ministry of Finance issued at the instance of the Public Accounts Committee, the Ministry of Defence did not send replies to 10 Draft Paragraphs out of 19 Paragraphs included in this Report. Thus, the response of the Ministry could not be included in respect of these 10 paragraphs.

Ministry/Department	Total no. of Paragraphs on the Ministry/ Department included in the Report	No. of Paragraphs in which reply not received from the Ministry of Defence	Paragraph Numbers
Ministry of Defence	19	10	2, 4, 6, 8, 13, 15, 16, 17, 19 and 21.

4 Non-production of documents

As of December 2001, 18 files in respect of Air Force, and 34 files in respect of Navy, requisitioned for audit, during the period between October 1995 and March 2001 were not made available to Audit. This includes 29 cases (Appendix-I) where expenditure involved in each case is Rs 5 crore or more as detailed below:

Year	Air Force	Navy
1995-96	2	1
1996-97	1	3
1997-98	-	6
1998-99	3	3
1999-2000	1	4
2000-2001	-	5
Total	7	22

5 Follow up on Audit Reports

Despite repeated instructions/recommendations of the PAC, the Ministry did not submit remedial Action Taken Notes on 71 Audit Paragraphs.

With a view to ensuring enforcement of accountability of the executive in respect of all the issues dealt with in various Audit Reports, the PAC[2] decided in 1982 that Ministries/ Departments should furnish remedial/corrective ATNs[3] on all paragraphs contained therein.

The Committee took a serious view of the inordinate delays and persistent failures on the part of large number of Ministries/ departments in furnishing the ATNs within the prescribed time frame. In their Ninth Report (Eleventh Lok Sabha) presented to the Parliament on 22 April 1997, the PAC desired that ATNs on all paragraphs pertaining to the Audit Report for the year 31 March 1996 onwards be submitted to them duly vetted by Audit within four months from the date of laying the Reports in Parliament.

Review of outstanding ATNs on paragraphs included in the Report of the Comptroller and Auditor General of India, Union Government, Defence Services (Air Force and Navy) as of December 2001 revealed that the Ministry failed to submit ATNs on 71 paragraphs included in the Audit Reports up to and for the year ended March 2000 as per Appendix-II enclosed.

In twenty seven cases (Sl.no. 6, 10, 15, 17, 25, 27, 30, 34, 39, 44, 45, 50, 51, 52, 53, 54, 59, 60, 61, 62, 64, 65, 66, 67, 69,70 and 71 of the Appendix) ATNs had not been received at all from the Ministry.

Out of the 71 cases where Ministry has failed to submit ATNs, six cases (Sl.no. 1 to 6) are pending for more than five years, fifteen cases (Sl. no. 7 to 21) are pending for more than three years, and 50 ATNs are pending for up to three years.

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

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[2] **Public Accounts Committee**
[3] **Action Taken Notes**

CHAPTER III : AIR FORCE

Works Services

6 Non-supply of a rig by a foreign supplier

A foreign supplier had not supplied a rig for MiG BiS upgradation programme despite advance payment of Rs 7.80 crore in 1996.

Government concluded a contract in March 1996 with a State Corporation of a foreign country for the upgradation of MiG-21 Bis aircraft. The agreement, *inter alia*, provided for supply of an Avionics Integration Bench (rig) for the upgraded aircraft at a cost of USD 8.484 million, equivalent to Rs 31.23[♠] crore. The rig was to be supplied by July 1998 and installed in the technical accommodation of a SDI[1], which was to be constructed after its sanction by Ministry. The rig was also planned to be used for simulator training of pilots, as no such similar trainer aircraft was available. An advance of USD 2.12 million, equivalent to Rs 7.80[♠] crore was paid to the supplier in March 1996 on account of 25 *per cent* of the cost of rig.

Scrutiny of records in audit revealed the following:

a) The rig was required on completion of design and development phase of MiG Bis upgrade programme. Even though this phase was completed in December 2000, the supplier had not delivered the rig as of August 2001.

b) The proceedings of the Board of Officers on accommodation for the rig were sent to Air HQ in November 1996 for obtaining Ministry's sanction.

[♠] 1 USD = Rs 36.81
[1] Software Development Institute

The work was sanctioned in July 1999, for Rs 13.15 crore. The work is to be completed by July 2002.

c) However, in the meanwhile, since Ministry's sanction for accommodation of the rig was not forthcoming, Directorate of Aircraft Upgrade at Air HQ advised SDI, in June 1998, to identify an alternative temporary site for installation of the rig. Accordingly, SDI selected an alternative site in the premises of Hindustan Aeronautics Ltd. Bangalore and incurred an expenditure of Rs 59 lakh up to October 2000 to make the premises suitable for installation of the rig temporarily. The expenditure of Rs 59 lakh on preparation of alternative site for installation of the rig temporarily has remained infructuous.

Accepting the facts, Ministry stated, in October 2001, that the expenditure of Rs 59 lakh incurred on the temporary site included air-conditioning and power supply items, of which, items valuing Rs 35.28 lakh were planned to be re-used at the permanent location.

Thus, despite advance payment of Rs 7.80 crore to the supplier in March 1996 for supply of the rig and an expenditure of Rs 24[▿] lakh on un-retrievable items for preparation of alternative site for its temporary installation, the rig was yet to be received (November 2001).

7 Development of a Golf Course in an area reserved for storage of explosives

Under the guise of keeping the area around a disused airstrip clean, Air HQ developed a Golf Course inside the explosives area of an Air Stores Park in violation of regulations. This necessitated the provision of earthen traverses for Rs 47.98 lakh for the safety of the explosives sheds.

An Air Stores Park had an abandoned airstrip in its explosives area that had not been in use since 1946. On the excuse of keeping the area clean, and as a

[▿] Rs 59 lakh (-) Rs 35.28 lakh

precaution against fire, Air HQ decided in January 1997, to develop the area into a Golf Course/Sports Complex. Audit scrutiny revealed the following:

a) The Air Stores Park was not authorised under extant Government orders to have a Golf Course. Despite this, Air Force personnel from various units were temporarily employed for periods varying from 30 days to 89 days to develop the Golf Course/Sports Complex. A Wing Commander from HQ Maintenance Command, Air Force was attached to the park from May 1997 to oversee and coordinate the developmental activities, which were regularly monitored by Air HQ. Nevertheless, the details of expenditure on the development of the golf course/sports complex, when called for in Audit, were not furnished by the park authorities.

b) HQ Maintenance Command, Air Force sanctioned in August 1997 a tube well to cater primarily to the water needs of the Golf Course/Sports Complex. The tube well was completed in February 1998 at a cost of Rs 7.99 lakh.

c) Additions/alterations to the airstrip hut and construction of aircrew/ground crew rest room in September 1998 and October 1998 at a cost of Rs 8.85 lakh and Rs 8.98 lakh respectively, done with an ostensible view to reactivating the airstrip for small aircraft and helicopter operations were in fact for the purpose of providing facilities to the golfers, as neither the airstrip had been reactivated, nor any stores airlifted to/from the Park so far.

d) An inspection team of Air HQ, pointed out in March 1999 that the construction of the Golf Course/Sports Complex inside the "explosives area" was contrary to regulations, as this complex was within the "Outside Safety Distance" of "Danger buildings" (explosive sheds), and suggested that the Complex be separated by construction of a suitable boundary wall of "appropriate height and thickness" for safety and security of the explosives area. A Board of Officers held in February 2000 considered the suggestion, and recommended provision of traverses around certain explosives sheds, the necessity for which according to the board also had gained "urgency due to development of Sports Complex". Accordingly, HQ Maintenance Command, Air Force sanctioned in February 2001, provision of earthen traverses around explosive sheds at an approximate cost of Rs 47.98 lakh, and the work has been contracted for execution in July 2001.

Thus, by constructing a Golf Course/Sports Complex inside the explosives area of the park, in contravention of safety norms, Air HQ jeopardized safety/security. This necessitated provision of earthen traverses around explosive sheds at an estimated cost of Rs 47.98 lakh.

The matter was referred to Ministry in September 2001; despite reminders, no reply was forthcoming as of December 2001.

Provisioning

8 Procurement of unreliable fuses

Ministry contracted in August 1999 for 7,450 fuses at a cost of Rs 54.52 crore from a foreign firm, even though it was known that 1,550 similar fuses procured from the same firm in February 1995 at cost of Rs 6.34 crore were defective.

Ministry concluded a contract with a foreign firm in August 1999 for supply of 7,450 fuses at a cost of USD 12.68 million, equivalent to Rs 54.52[♠] crore, against a requirement projected by Air HQ to meet deficiencies in reserves, after making special provision in the Air Force budget for 1999-2000.

Audit scrutiny revealed that:

a) The contract for 7,450 fuses was concluded with the firm, even though serious technical limitations had been found in 1,000 similar fuses contracted in February 1995 from the same firm at a cost of USD 2.01 million (Rs 6.34[◊] crore). The fuses against the February 1995 contract, initially delivered by the firm in December 1996, had failed during trials conducted in January/February 1997 and again in April 1998 due to technical design defects. As a result, Ministry imposed a penalty of 550 additional fuses and the firm finally delivered 1,550 refurbished fuses in March-April 1999.

[♠] 1 USD = Rs 43

[◊] 1 USD = Rs 31.55

b) Though, an Air Force Technical Committee had recommended in April 1999 that additional fuses be procured only after completion of the production proving trials of 1,550 fuses supplied in March-April 1999, these trials were finally conducted in December 1999, in which a number of refurbished fuses failed. The defects were rectified only in September 2000.

c) The visit of an Air Force team for pre-shipment inspection of the first lot of fuses against the August 1999 contract was postponed in February 2000 on the ground that the supplier was first to provide lifetime warranty of fuses. However, the firm supplied 7,450 fuses against the contract of August 1999 in July–August 2000, without pre-shipment inspection by the Air Force, in violation of contractual provisions, and received payment.

d) All the fuses suffer from passivation effect of the batteries. According to the Operational Directorate at Air HQ, the depassivation process could never be fully guaranteed. They contended that even if 100 *per cent* battery depassivation and serviceability checks were carried out, there was no guarantee that the battery would have adequate capacity for further depassivation and serviceability checks, as these checks result in draining of the battery capacity to some extent. Accordingly, the Vice Chief of Air Staff recommended seeking a life time warranty in February 2000 in the light of the large number of failures that took place.

In reply, Ministry stated that the entire lot of 7,450 fuses had been accepted in view of the serviceability of the earlier supply established in September 2000, and Ministry was considering obtaining a lifetime warranty.

Failure to take cognisance of technical problems faced in an earlier supply before concluding a second contract for a larger quantity has created a precarious situation for the Air Force. The inherent weakness of the batteries has rendered the fuses unreliable. Since this issue was not negotiated before conclusion of the second contract or release of payment, any life time money back guarantee had to be negotiated afresh with the supplier.

The fact remains that 9,000 fuses procured by the Ministry at a total cost of 60.86 crore are not fully reliable.

9 Procurement of a defective system

Procurement of defective systems by the Air Force and disregard to maintenance requirements resulted in equipment valued at Rs 10.50 crore lying unserviceable, and the entire procurement valued at Rs 19.79 crore becoming unfruitful.

A contract was signed, in March 1994, with a foreign firm for USD 8.55 million, equivalent to Rs 26.97* crore, which value, included the supply of the following:

Description	Qty.	Unit price (USD)	Total price (USD)
Cockpit Laser Designation System	3	1,465,000	4,395,000 (Rs 13.87 crore)
Advanced CLDS Training System	1	628,000	628,000 (Rs 1.98 crore)
Intermediate Level Test Equipment	1	1,250,000	1,250,000 (Rs 3.94 crore)
Total			6.27 million (Rs 19.79 crore)

Audit scrutiny revealed the following:

a) CLDS[2] is needed to illuminate targets for attacking aircraft equipped with Laser Guided Bombs. Of the three CLDS supplied by the firm in May 1995, one was installed in the same month, one in June 1996, and the third in November 1998, by which time the warranty on the equipment had expired (July 1996). Further, the CLDS installed in November 1998 became unserviceable in February 1999, and is still out of commission.

* 1 USD = Rs 31.55
[2] Cockpit Laser Designation System

b) The Advanced CLDS Training System was installed in October 1995 and accepted by the Air Force unit, despite snags. The Advanced CLDS Training System has not been operational from the date of installation, as a result of which, the training of fighter pilots on CLDS has been deficient.

c) Intermediate Level Test Equipment required for servicing and testing of CLDS is also lying unserviceable since July 1998 for want of spares.

Air Force has not taken any effective steps to repair the equipment valued at Rs 10.50 crore. In the absence of Advanced CLDS Training System and Intermediate Level Test Equipment, the capacity of the Air Force to effectively exploit the CLDS itself is suspect, rendering the entire expenditure of Rs 19.79 crore unfruitful.

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

10 Defective contract leading to fraudulent payment

In the absence of pre-inspection provisions, a foreign firm submitted forged documents, and drew USD 671,600 without supplying the stores.

Ministry concluded two contracts in January 1996 and February 1996 with M/s FXC International Aircraft Sales based in USA, for supply of 48 pilot parachutes and 200 brake parachutes at a total cost of USD 671,600, equivalent to Rs 2.35* crore, to be delivered by May and June 1996 respectively. Audit scrutiny revealed the following:

a) Even though the procedure stipulates procurement directly from original equipment manufacturers, the contracts were concluded with a US firm for procurement of parachutes manufactured in Russia.

* 1 USD = Rs 34.99

b) The contract provided for 100 *per cent* payment against letter of credit as against the normal provisions of 90 *per cent* payment against proof of despatch. This difference amounted to USD 67,160 or Rs 23.50* lakh, which could have been withheld.

c) The firm encashed the letters of credit valued at USD 671,600 in August 1996 on the basis of documents, which were subsequently found to be fake. The 'Acceptance Test Certificate' furnished by the firm had not been issued by the manufacturer as required under the provisions of the contracts. The State Bank of India, Los Angeles made payment even though the air way bill submitted by the firm did not contain the stamp of freight forwarding agent which was a mandatory requirement.

d) No provision was made in the contract for pre-despatch inspection of the item by the buyers although a senior Air Force Officer is stationed in the foreign country. A similar contract concluded in November 1994 with the same firm for supply of similar items, stipulated submission of Final Acceptance Certificate from the Government representative in another foreign country, before release of the payment by the bank. The reasons for omitting the pre-despatch inspection clause from the said contract were not apparent. The contract also did not include standard clauses for arbitration, termination etc., on failure of firm to fulfill contractual obligations.

e) In November 1996/October 1997, the firm supplied 38 pilot parachutes without harness and 63 brake parachutes. The pilot parachutes were not usable without harness. The Department could only encash performance bonds of USD 33,580.

Ministry stated, in January 2002, that remedial measures such as pre-despatch inspection of the items by specialists at vendor's premises, inclusion of arbitration and penalty clauses in the contracts have been taken up to stop such payments on faked documents in future. However, the Ministry's reply does not address the vital issue of why the pre-despatch inspection clause, which was part of the earlier contract, was omitted in the present contract.

*** 1 USD = Rs 34.99**

As of December 2001, no claim had been filed against the bank or the firm to obtain refund of payment received by the firm fraudulently.

11 Extra expenditure in procurement of stores

Failure of Ministry and Air HQ to conclude a contract within the validity of the commercial offer of a foreign firm led to extra expenditure of USD 148,064 in one year.

Air HQ invited quotations in September 1997, for supply of certain stores for an aircraft, from its foreign manufacturer. In their commercial quote of January 1998, valid up to 11 April 1998, the manufacturers offered to supply eight items for USD 191,403.

Air HQ approached Ministry on 24 February 1998 for approval, since under the then existing orders, procurement of stores from the foreign manufacturer irrespective of value, required approval of the Ministry. Ministry, however, returned the case on 16 March 1998, wrongly stating that the proposed purchase was within the delegated powers of Air HQ under Ministry's order of 9 March 1998. Air HQ also failed to place orders on the firm within validity of offer, i.e. by 11 April 1998, in the absence of bulk allotment of free foreign exchange, which was not released by the Ministry by that time.

Air HQ invited fresh quotations in July 1998 from five firms including the original manufacturer. Finally, a commercial offer was received from the manufacturer in February 1999, quoting USD 317,665 for the said eight items. In the meantime, as requirement of three of the items had become critical, a contract was concluded in June 1999, with the manufacturers for supply of the three items at a cost of USD 230,500 plus an additional USD 21,803 for urgent delivery. The contract for the balance items was concluded with the manufacturer in September 1999 for USD 87,165.

Thus, delayed conclusion of the contract led to extra avoidable expenditure of USD 148,064 equivalent to Rs 64* lakh, which amounted to 76 *per cent* escalation in little more than a year.

*** 1 USD = Rs 43.30**

Ministry, while accepting the facts, stated in December 2001, that the delay in procurement of stores occurred mainly due to change in procedure for procurement of stores under enhanced powers. Ministry's contention is not tenable since the order on delegation of powers was effective only from 1 April 1998 and the proposal for the purchase was submitted by Air HQ to the Ministry in February 1998 itself.

12 Unnecessary import of explosive cartridges

34,000 explosive cartridges were imported for OP *Vijay* despite availability of sufficient stock and significantly low trend of consumption. Imported items were costlier than those manufactured by DGOF by Rs 50.82 lakh.

Air Force projected an urgent requirement of 41,955 explosive release cartridges in June 1999 during OP *Vijay*. Ministry approved the proposal in July 1999 and Air HQ placed an indent on DGOF[3], Kolkata in August 1999, for procurement of 7,955 cartridges, to be delivered during 2000-01. DGOF delivered the cartridges at a unit cost of Rs 600, between November 2000 and April 2001. Meanwhile, Ministry concluded a contract with a foreign firm in September 1999, for supply of the remaining 34,000 cartridges at a unit cost of USD 17.45, equivalent to Rs 749.47♠. The cartridges required to be supplied in 1999, were actually delivered in March 2000, and USD 593,300 was paid to the foreign firm in July 2000. Audit scrutiny revealed the following:

a) Between April 1997 and June 2001, the average annual consumption of cartridges was merely 4,350, even after meeting the operational requirements of the OP *Vijay* during 1999, which incidentally was only 304 cartridges.

b) Though the import was ostensibly for meeting the urgent requirements of OP *Vijay*, the contract for 34,000 cartridges was concluded only in September 1999, while the operations were over in August 1999 itself. At this time, Air Force was holding 17,599 serviceable cartridges, which was

[3] **Director General, Ordnance Factories**

♠**1 USD = Rs 42.95**

sufficient to meet four years' requirement. The contract was, therefore, unnecessary.

c) Import at a higher cost led to an avoidable expenditure of Rs 50.82 lakh as compared to indigenous cost of the cartridges.

Ministry stated, in August 2001, that DGOF did not have the production capacity to manufacture 34,000 cartridges at that juncture and the item had to be imported to fill up the deficiency in reserves.

The contention of Ministry, to justify the import, is not tenable, as the procurement was not in harmony either with the past consumption pattern, or the available stock of the cartridges at the time of import.

Miscellaneous

13 Delay in repair of an Aircraft

Failure of Ministry/Air HQ to resolve with HAL the issue relating to cost of fabricating the centre fuselage of an aircraft delayed the repair of the aircraft for over five years. The front fuselage procured nearly five years ago for Rs 5.43 crore also remained unutilised.

Aircraft "A" was damaged in an accident in October 1992 and required replacement of its front fuselage. Air HQ issued an RMSO[4] in June 1994, and HAL[5] Bangalore delivered the front fuselage in March 1997, at a cost of Rs 5.43 crore. However, the aircraft remained unrepaired with HAL as of November 2001. Audit scrutiny revealed the following:

a) In May 1995, aircraft "A" was inducted to HAL Bangalore for removal of its centre fuselage for fitting on trainer aircraft 'B' which had sustained extensive damages in an accident in June 1994.

[4] Repair & Maintenance Supply Order
[5] Hindustan Aeronautics Limited

b) In June 1995, HAL submitted a budgetary quote of Rs 18.06 crore for fabrication of centre fuselage for aircraft "A". Ministry did not accept this quote, since the quote did not satisfy the revised pricing policy effective from 1 April 1995. On the ground that the modalities of the new pricing policy were yet to be finalised, HAL stuck to its stand, but agreed in October 1995, to incorporate a clause in the RMSO that the final payment would be made in accordance with the revised pricing policy.

c) The issue of acceptance or otherwise of the budgetary quote has remained unresolved all these years, despite the fact that, HAL is a PSU[6], and is the manufacturer of the aircraft. Considering that Ministry has no alternative but to get the repairs done by HAL, and that HAL was agreeable to the final payment being made in terms of the revised pricing policy, Ministry's stand has resulted in continuing price escalation, and grounding of the aircraft for nearly ten years. Besides, the front fuselage procured at a cost of Rs 5.43 crore in March 1997 continues to remain unutilised.

d) In May 2001, HAL revised their budgetary quote to Rs 30.72 crore. The quote was yet to be accepted as of December 2001.

Ministry, in their reply, of January 2002, reiterated that, the repair of aircraft "A" could not be undertaken because of the change in pricing policy. Audit's stand however, was vindicated by the fact that when, in May 2001, Ministry finally placed a letter of intent on HAL, they specifically stated that the letter of intent was "without any commitment on price/cost", an option which was available to Air Force as early as in 1995 itself.

14 Avoidable inventory carrying cost of aircraft surplus stores

Failure of Air Force to dispose off surplus stores costing Rs 9.90 crore led to unnecessary inventory carrying cost of Rs 6.70 crore, which will continue to increase by Rupees one crore *per annum* till stores are disposed off.

Delay in disposal of surplus stores led to an avoidable inventory carrying cost of Rs 6.70 crore which will continue to increase by Rs one crore *per annum* till the stores are disposed off. The case is discussed below:

[6] **Public Sector Undertaking**

a) Ministry approved, during April 1994 and February 1996, the disposal of 7,770 and 1,740 surplus items of Hunter aircraft spares costing Rs 8.61 crore and Rs 1.29 crore respectively, stocked at an Air Force Equipment Depot.

b) Accordingly, in February 1995 and March 1996, the depot raised reports for disposal of 7,767 and 1,695 surplus items of Hunter aircraft spares.

c) However, all the 9,462 items remained undisposed off till November 1998, when the depot sought instructions from Air Force Command HQ/Air HQ regarding disposal or retention of the surplus items till December 2000, as in the meantime, in March 1998, the life of the Hunter fleet had been extended up to December 2000.

d) Though, in January 1999, Air Force Command HQ advised the depot to withhold disposal action of the surplus items, Air HQ in September 1999 instructed the Command HQ to rescind these instructions since the Government sanction for disposal of the aircraft spares had taken into account anticipatory requirements and the stores recommended for disposal were over and above the same. However, despite this clarification, the depot unilaterally cancelled all the reports of surplus stores in September 2000 on the ground that the life of the Hunter aircraft fleet had been further extended up to the year 2002. The approach of the depot lacked rationale as, even prior to the Air HQ clarification, the Government sanctions issued in April 1994 and February 1996 had clearly stated that the items were surplus and required disposal.

e) The inventory carrying cost in the Air Force is normally between 10 to 15 *per cent per annum* of the book value of the stores. Failure of the depot to dispose off surplus stores thus led to an avoidable inventory carrying cost of a minimum of Rs 6.70 crore as of April 2001, which will continue to increase by Rupees one crore *per annum* till the surplus stores are disposed off.

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

15 Recovery at the instance of Audit

Recovery of Rs 5.33 crore was made in four cases at the instance of Audit.

Recovery of Rs 5.33 crore was effected in four cases at the instance of Audit as discussed below:

Case -I

In terms of a contract agreement of August 1993 between Ministry and a foreign firm, Income Tax on fees for technical services rendered by the foreign firm was to be borne by Air Force. Payments under the contract were to be initially made by HAL[7], and reimbursed alongwith a profit of 7.5 *per cent* thereon, by Air Force through the CDA[8] or his representative.

Audit scrutiny revealed that, between December 1995 and June 1997, HAL claimed reimbursement towards Income Tax paid at the rate of 30 *per cent* on the technical fees remitted to the foreign firm, and Deputy CDA had accordingly reimbursed the amount in full. However, in terms of double taxation relief granted under Section 90 of the Indian Income Tax Act 1961, Income Tax was payable at the rate of only 20 *per cent*. Thus, reimbursement of Income Tax at the rate of 30 *per cent* by Deputy CDA, resulted in excess payment of Rs 2.42 crore to HAL towards Income Tax, besides profit of Rs 0.18 crore chargeable thereon.

This was pointed out by Audit in March 2000. When Deputy CDA took up the matter with HAL, they informed (March 2000) that a refund of Rs 2.09 crore had been received from Income Tax authorities in June 1999. HAL requested Deputy CDA to adjust the same against future payments. However, Deputy CDA recovered this amount only in February 2001.

It was noticed from the proceedings of June 1999 of the Income Tax authorities that the excess amount of Tax paid and actually refunded to HAL was Rs 2.42 crore. Thus, balance amount of Rs 0.33 crore excess paid towards

[7] **Hindustan Aeronautics Limited**
[8] **Controller of Defence Accounts**

income tax and Rs 0.18 crore towards profit was yet to be recovered from HAL as of October 2001.

Accepting the facts, Ministry stated, in November 2001, that though refund order from the Income Tax Department was for Rs 2.42 crore, an amount of Rs 0.33 crore was paid back to them on account of interest on delayed remittance of Income Tax and the net amount realised by HAL was Rs 2.09 crore only. Hence, the amount recoverable is only Rs 0.18 crore towards profit excess charged. Ministry's contention is not tenable as payment of interest on delayed payment of Income Tax was solely the liability of HAL, and not that of the Air Force. Thus, the amount recoverable from HAL as of November 2001 was Rs 0.51 crore (Rs 0.18 crore plus Rs 0.33 crore).

Case – II

During 1995-1998, four aero-engines belonging to the Air Force were withdrawn prematurely due to heavy consumption of oil and oil leak caused by the defective sealol seals fitted by HAL. Though the foreign manufacturer replaced the defective seals free of cost, HAL claimed full repair charges of Rs 92.73 lakh for the four aero-engines, which were paid by the Deputy CDA in 1998-99.

Since manufacturing defects in the seals should have been detected by HAL at the pre-fitment inspection stage itself, Audit held that the repair charges were not payable to HAL. On the matter being taken up in audit, the Deputy CDA (HAL) Bangalore recovered (December 2000) Rs 92.73 lakh from HAL.

Ministry stated, in November 2001, that the work done on engines included compliance of various modifications, calibrations etc., in addition to replacement of sealol seals, and payment of repair charges of the engines was in order. Ministry stated further that, sealol seals being proprietary items of the foreign firm, no tests were carried out by HAL at the pre-fitment stage and that consequent to failures observed on some of the new seals, a procedure was established in 1996 to carry out dynamic leak checks on all seals prior to assembly on the engines. The reply is not tenable, as due to negligence of HAL to carry out dynamic leak check on the sealol seals prior to assembly on the engines, the aero-engines had to be prematurely withdrawn and overhauled before completion of their scheduled Time Between Overhaul.

Case – III

Ministry leased an aircraft to HAL, Bangalore from April 1978 to March 2001. Under the lease, HAL would pay annual hire charges at prescribed rates, and the cost of maintenance/overhauls. Audit scrutiny of records revealed that though aero-engine 'X' belonging to the Air Force was overhauled and fitted on the leased aircraft, the cost of overhaul, amounting to Rs 55.69 lakh, recoverable from HAL, was not recovered by Deputy CDA (HAL). Additionally, Rs 79.92 lakh recoverable towards lease charges for the period December 1995 to March 1999 had not been recovered. This was pointed out in Audit in March 2000 and Deputy CDA (HAL) recovered Rs 1.36 crore from HAL, in December 2000.

Ministry accepted the facts in December 2001.

Case – IV

Ministry of Tourism and Civil Aviation accorded sanction in May 1982 for transfer of an airfield to Air Force from DGCA[9], with the stipulation that, DGCA would continue to collect landing and parking charges till such time the Air Force took over the airfield, and provided Air Traffic Services.

Air Force took over the airfield from DGCA in February 1987, but did not raise bills for the landing and parking charges of Indian Airlines aircraft. On this being pointed out by Audit in November 1988, there was protracted correspondence between the Air Force unit, Air HQ and the concerned Ministries till October 1993. Thereafter, the Air Force unit raised bills amounting to Rs 1.14 crore against Indian Airlines for the period February 1987 to February 1994.

Ultimately, a sum of Rs 95.34 lakh was recovered by Air Force from Airports Authority of India in August 1997; the balance of Rs 18.29 lakh was yet to be recovered.

Accepting the facts, Ministry of Defence stated, in November 2001, that efforts were under way to recover the balance from Airports Authority of India through Ministry of Civil Aviation.

[9] **Director General Civil Aviation**

CHAPTER IV : NAVY

Provisioning

16 Procurement of a missile

Unnecessary procurement of missiles for Kargil operations resulted in avoidable expenditure of Rs 24.77 crore. The rates contracted were more than twice those of 1996.

Navy imported 104 anti-aircraft missiles, for USD 5.72 million, equivalent to Rs 24.77* crore, on "single tender" basis, projected as required for Kargil operations. Audit scrutiny revealed the following:

a) At the commencement of the Kargil operations, Navy had in stock, 262 anti-aircraft missiles and 50 missiles given by Army. Despite this, an empowered delegation of Ministry, which had visited Russia during June-July 1999 in the wake of the Kargil operations, placed orders for 104 missiles for USD 5.72 million, equivalent to Rs 24.77* crore. The order was placed on single tender basis, even though alternative sources existed, as is evident from the fact that Army while procuring the missiles in 1995-96 had considered as many as four offers.

b) Against the price of USD 28,000 per missile paid by Army for their purchase from the same firm in March 1996, the empowered delegation finalised procurement in July 1999 at a unit cost of USD 54,000 (4 numbers) and USD 55,000 (100 numbers), that is, at almost double the earlier price. Similar Russian contracts in the past had generally provided for a maximum price escalation of 5 *per cent per annum*. Therefore, the price finalised by the empowered delegation was exorbitant, resulting in additional expenditure of USD 2.35 million, equivalent to Rs 10.18* crore, (even after allowing for the normal 5 *per cent* annual escalation).

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* 1 USD = Rs 43.30

c) Four missiles were received ex-stock, and the balance 100 missiles, were to be received within 40 days from the date of advance payment, which was released on 16 July 1999. However, the missiles were delivered only on 12 November 1999, 77 days after the scheduled date of delivery. Since there was no provision for liquidated damages in the contract, Navy could not claim any damages for the delay.

d) Navy had projected a long-term requirement for 240 Anti-aircraft missiles during the 9th plan. Even after the Kargil operations, as of June 1999, Navy had 312 anti aircraft missiles (262 `A' missiles and 50 'B' missiles) in stock. This, amply indicates that, procurement of the missiles in July 1999 at an unduly high cost of USD 5.72 million, equivalent to Rs. 24.77* crore was avoidable.

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

17 Delay in procurement of Air targets

Requirement of indigenous air targets remains unfulfilled for nearly a decade, despite investment of Rs 2.02 crore. Use of imported air targets proved costlier by Rs 4.40 crore. Non-availability of sufficient air targets exposes deficiency in training with consequential effects on operational preparedness of Navy.

Navy perceives the biggest threat to a ship at sea to be from the air, through missiles and aircraft. The combat preparedness of naval ships involves regular firing of weapons on aerial targets towed by Canberra aircraft. Till May 1992, the aerial targets were supplied by Air Force. Thereafter, in March 1993, Government approved import of six PTA[1] at a cost of USD 3.12 million, equivalent to Rs. 9.90* crore, and these were received in March 1994. However, these could be used only sparingly, as the cost of consumables on each sortie by the PTA ranged between Rs 14 lakh to Rs 22 lakh in foreign exchange.

[1] **Pilotless Target Aircraft**

* **1 USD = Rs 43.30**

Examination of the case revealed the following:

a) Even though Navy initiated the proposal for procurement of MLTT[2] from ADE[3] in December 1993, formal sanction was issued only in March 1996, after a delay of 27 months.

b) Navy, in turn, delayed placement of order with ADE by four months (July 1996) and further delayed release of advance to ADE by another five months (December 1996), though the advance was vital to commencement of production.

c) ADE also took more than 15 months (November 1997) to identify BEL[4], Bangalore as production agency for one of the critical sub-systems viz. AMDI[5]. The sub-systems which were delivered by BEL in January 2001 were yet to be put on trial (November 2001).

d) Of the 25 MLTTs delivered by ADE, 13 MLTTs received earlier were without AMDI, and the AMDI fitted in the remaining 12 MLTTs are yet to undergo necessary trials. Naval HQ admitted, in August 2001, that in the absence of proven AMDI, the system accuracy assessment, which is vital for training, could not be carried out.

e) The initial proposal of 1993 was intended to meet just one year's requirement of 70 MLTTs. However, till date, only a fraction of even one year's requirements has been met.

f) Non-availability of adequate MLTT led to an expenditure of Rs 5.46 crore on consumables on 39 firing sorties by use of earlier imported PTA during 1994-1998. Had MLTTs been used, the same 39 firing sorties would have cost only Rs 1.06 crore.

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[2] **Modified Lakshya Towed Target**
[3] **Aeronautical Development Establishment, Bangalore**
[4] **Bharat Electronics Limited**
[5] **Acoustic Miss Distance Indicator**

g) During 1993-1999, Navy could conduct only a fraction of the projected requirement of 1,440 firing sorties for training, indicating an alarming deficiency in achieving the projected requirement, reflecting adversely on defence preparedness of the Navy.

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

18 Non-commissioning of imported equipment

Delay in procuring deficient items for CTD systems imported during 1997 at a cost of Rs 68.35 lakh, resulted in non-commissioning of the systems for the last four years.

DPRO[6], Naval HQ, concluded a contract with a foreign firm in February 1997 for supply of three state-of-the-art, automatic CTD[7] systems used in Hydrographic ships for collection of navigational data at a cost of USD 190,975, equivalent to Rs 68.35 lakh[♠]. On receipt of the consignments between April and September 1997, it was noticed that certain vital components had been lost in transit.

Audit scrutiny revealed the following:

a) After a delay of 14 to 19 months, DPRO preferred a claim against the forwarding agent in November 1998, and received a refund of USD 5,750 in June 1999.

b) After a further lapse of one year from the date of receiving the refund, by which time the warranty on the CTD systems had expired, DPRO concluded a contract in June 2000 with the same firm, for procurement of the missing items at a cost of USD 8,057, equivalent to Rs 3.53[♦] lakh. The deficient items received by Navy in November 2001, were yet to be installed in the survey ships and the CTD systems made functional (December 2001). In the absence of the CTD systems, Navy had to

[6] Directorate of Procurement
[7] Conductive Temperature and Distance
[♠] 1 USD = Rs 35.79
[♦] 1 USD = Rs 43.81

depend on the manual method, which is time consuming, laborious and considerably less accurate than the automatic method.

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

Miscellaneous

19 Recovery at the instance of Audit

Recovery of Rs 1.72 crore was effected in two cases at the instance of Audit.

Incorrect grant of increment to the sailors and non-inclusion of agreed clause on special discount in a contract led to overpayment of Rs 1.72 crore, which was recovered at the instance of Audit as discussed below:

Case I

As per the recommendations of the Fifth Pay Commission and orders issued by Navy in January 1998, the pay of sailors (including Honorary Commissioned Officers and Apprentices) was to be fixed in revised scales w.e.f. 1 January 1996. Due to subsequent enhancement in the scales by Government, the pay of the sailors was re-fixed in the revised pay scales w.e.f. 10 October 1997. These orders stipulated, *inter alia*, that the next increment to a sailor, whose pay had been fixed in the revised pay scale at the same stage, was to be granted on the date he would have drawn his increment had he continued in the existing scale. However, if the pay had been fixed in the revised pay scale at a stage next above, the next increment was to be granted after 12 months qualifying service in this scale.

Scrutiny in March 1999 of pay fixation cases of sailors in Naval Pay Office revealed that sailors, whose pay had been fixed in the revised scale at the stage next above w.e.f. 10 October 1997, were granted increments on the dates they fell due in the existing scale i.e before completion of 12 months qualifying service in the revised scale, which resulted in over payment of pay and allowances to the sailors.

Naval Pay Office, at the instance of Audit, reviewed the pay fixation cases, and recovered in August 1999 – June 2000 Rs 1.50 crore on account of erroneous grant of annual increments to the sailors. This was confirmed by Ministry in August 2001.

Case II

Admiral Superintendent, Naval Dockyard, Mumbai concluded a contract in June 1998 with Hindustan Shipyard Limited, Visakhapatnam for repair/refit of a naval ship at a cost of Rs 4.69 crore (amended to Rs 4.81 crore in March 1999). However, the Admiral Superintendent failed to incorporate in the contract a special discount of 4.5 *per cent* offered by the shipyard during negotiations. This resulted in overpayment of Rs 21.66 lakh, which was recovered from the shipyard at the instance of Audit.

Accepting the facts, Ministry stated, in September 2001, that the discount clause could not be incorporated in the contract due to an oversight.

CHAPTER V :RESEARCH AND DEVELOPMENT ORGANISATION

Miscellaneous

20 Foreclosure of a critical project

Electronic Warfare System integrated on an aircraft has been tested using sub-standard testing methods involving serious flight safety hazard due to delay in completing minimum essential test facility.

Setting up of ATLAS[1] to provide a minimum essential secure and controlled environment for testing of Electronic Warfare Systems integrated on MiG aircraft and other ongoing programmes, was sanctioned in 1991 at an estimated cost of Rs 7.75 crore, which was revised to Rs 25 crore in January 1997. The cost was reassessed yet again in November 1997 at Rs 42.50 crore, but the project was stage closed in 1998. Testing of Electronic Warfare System developed on MiG aircraft in 1995 was not complete without ATLAS.
Audit scrutiny revealed the following:

a) Although the work of identifying the site and finalising the design to meet the initially perceived requirement had been completed in 1992 and techno-commercial quote of Rs 16.5 crore for the work received in 1993, yet, the project was not taken up for execution till 1995, as sanctioned funds were not adequate. Meanwhile, necessity arose to increase the size of ATLAS chamber to accommodate the larger and heavier SU-30 aircraft, which were under acquisition by Air Force. Consequently, the cost of ATLAS was revised to Rs 25 crore in January 1997 to provide for initial under-estimation and enhanced scope of work.

b) Nevertheless, the cost revision for ATLAS in 1997 did not take into account the unsuitability of the existing site to accommodate SU-30 aircraft and the resultant changes in scope of civil works. As a result, funds sanctioned for the project in January 1997 were found inadequate and the cost was reassessed yet again at Rs 42.50 crore in November 1997.

[1] **Anechoic Test Laboratory for Aircraft System**

c) The revised design to include SU-30 aircraft and selection of site could not be finalised even up to 1998 when the project was stage closed in June 1998 due to its high cost. A Committee constituted in 1997 to recommend future course of action on the project had while rejecting alternate methods of 'Testing on Open Range' and 'Hiring Facilities Abroad', on cost and security considerations concluded that

- the alternate method of 'Testing on Tarmac' adopted in the absence of the facility was not acceptable, since full power radiation could not be performed;

- external radiation and reflections from ground and surrounding objects resulted in inaccurate measurements leading to sub-optimal solution and hazard to personnel performing the tests and it was not possible to test Electronic Warfare Systems exhaustively without compromising security and that incomplete testing would pose serious flight safety hazard.

Thus, tardy progress by DRDO[2] and inaccurate financial forecasting and planning led to stage closing of the project, and also use of unacceptable testing methods for Electronic Warfare Systems to be used in the Air Force aircraft, which posed serious flight safety hazard and compromised security.

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

21 Extra expenditure due to premature conclusion of contract

Premature conclusion of a contract without ensuring availability of the qualified engine for flight evaluation led to extra expenditure of Rs 3.47 crore on life extension of the vendor's aircraft besides blocking Rs 7.36 crore.

The Aero-Engine Development Board approved, in July 1993, the flight evaluation of the Kaveri engine on an aircraft FTB[3]. The task was assigned to CABS[4]. Following technical evaluation and negotiations, Government accorded sanction, in November 1996, for FTB trials of Kaveri engine, at the premises of the foreign firm, at a total cost of USD 5.25 million, equivalent to

[2] Defence Research and Development Organisation
[3] Flight Test Bed
[4] Centre for Air Borne Systems

Rs 18.50* crore, plus Rs 2.52 crore for carrying out works relating to data acquisition, instrumentation etc. CABS concluded a contract with the firm in December 1996, for the flight evaluation of Kaveri engine, to be completed by May 1999. As per the contract, the qualified engine was to be delivered to the firm by September 1997 in order to complete the tests in time. Payment was to be made to the firm in six stages, after technical evaluation of performance at each stage. Before delivery for fitment on FTB for flight evaluation, the Kaveri engine was required to complete at least 2000 hours of ground and altitude test flights. The Technical Evaluation Committee, constituted by CABS had indicated in May 1996 that, the Kaveri engine (and its core engine Kabini), had completed 89 hours of such testing, and was expected to be ready for fitment on FTB between February 1998 and June 1998.

However, CABS informed the firm in November 1998 that, the engine was likely to be delivered only by December 2000. In April 1999, CABS further extended the likely delivery date to February 2001. This necessitated keeping the FTB aircraft serviceable till December 2004, for which purpose, CABS negotiated with the foreign firm, the additional cost of life extension of FTB aircraft at USD 0.8 million, equivalent to Rs 3.47♠ crore, and the total value of the contract was amended to USD 6.05 million (excluding taxes) to be paid in 10 stages. The firm had been paid USD 1.95 million, equivalent to Rs 7.36 crore, as stage payments, between April 1997 and April 2000, besides USD 0.8 million, equivalent to Rs 3.47 crore, between November 2000 and September 2001 towards cost of life extension of aircraft. However, the Kaveri and Kabini engines have cumulatively completed only 1030 hours of ground run as of November 2001 and the engines are not likely to be made available for FTB trials before December 2002.

Thus, the case reveals that:

a) Conclusion of the contract in December 1996 was premature as there was no possibility of the Kaveri engine completing 2000 hrs to qualify for flight evaluation by the scheduled delivery date of September 1997, because both Kaveri and its core engine Kabini had cumulatively completed just 89 hrs up to May 1996 and only 1030 hrs even as of November 2001.

b) The premature conclusion of the contract led to an additional expenditure of USD 0.8 million, equivalent to Rs 3.47♠ crore, on life extension of FTB aircraft, besides blocking of USD 1.95 million, equivalent to Rs 7.36 crore, for up to four years.

*** 1 USD = Rs 35.23**

♠ 1 USD = Rs 43.37

Accepting the facts, Ministry stated in November 2001 that, the decision to conclude the contract in December 1996 was prudent. Further, complexities in design and development of Kaveri engine, and certain other unforeseen circumstances delayed the delivery of the qualified engine for FTB tests, necessitating the extension of service life of FTB aircraft.

However, the fact remains that the conclusion of the contract in December 1996 was premature as assessment of CABS for making the engine available for testing on FTB after completing the requisite ground and altitude test of 2000 hours by September 1997 was unrealistic and grossly over optimistic, considering the complications involved in design and development of such an engine and that the engine had completed only 89 hours by May 1996. Even as of November 2001 only 1030 hours of testing had been completed.

22 Delay in development and production of indigenous mines

Despite nearly two decades of development, and investment of Rs 4.14 crore, DRDO has failed to achieve indigenous production of mines. Indian Navy consequently has low pool reserves.

Navy foresees that mines would serve as the most potential, cost effective and lethal weapon in underwater warfare to be used in both, offensive and defensive roles. To enable development and production of mines indigenously, Ministry sanctioned four Staff Projects between 1984 and 1992. Unlike R&D[5] Projects, where the outcome may be uncertain, Staff Projects are taken up against specific, well-defined requirements. Despite this, the four Staff Projects were beset with slippages in the development schedule, non-achievement of objectives, and defective products. The case is discussed below:

(i) Mine 'A'

Ministry sanctioned, in November 1984, a Staff Project at a cost of Rs 67 lakh for design, development and production of mine 'A' by a DRDO[6] Lab (the lab). The project was completed in March 1989, against target date of May 1987. After incurring an expenditure of Rs 63.68 lakh, the lab could develop only six mines against the ten envisaged. Navy, however, rejected the mines since their range

[5] Research & Development
[6] Defence Research & Development Organisation

was only 12 to 14 kilometres against the projected technical requirement of 20 kilometres.

(ii) Mine 'B'

In March 1988, Ministry sanctioned a Staff Project for development of mine 'B' by a DRDO establishment at an estimated cost of Rs 24 lakh. Against the scheduled date of completion of March 1992, the project was completed in November 1995. Navy accepted the mines for induction, and placed two indents in September 1996 and May 1997 on the establishment for supply of 425 mines, to be supplied, within one year, at a total cost of Rs 85 lakh. As of September 2001, 25 mines had been delivered. Trials on 3 mines were carried out satisfactorily.

(iii) Mine 'C'

In June 1987, Ministry sanctioned a Staff Project for 'Design and Development of mine 'C' at a cost of Rs 24.50 lakh to be completed by June 1988, extended to December 1991. The development project was completed in April 1992. Even before the development had reached its final stage, Ministry concluded a contract in May 1991 with a Corporation for manufacture and supply of 150 mine 'C' by August 1994 at a total cost of Rs 10.18 crore. Although the mine 'C' development project was claimed to have been "successfully closed" in April 1992, the design underwent several modifications thereafter, not only upto its "final" freezing in January 1993, but also subsequently. Consequently the Corporation was given clearance for bulk production only in March 1995, after four years of the placement of the order. Only five mines had been delivered as of September 2001.

(iv) Mine 'D'

To overcome the limitations of mine 'C', Ministry sanctioned another project in January 1992, for development of mine 'D' by a DRDO Lab at a cost of Rs 84 lakh (revised to Rs 99 lakh in 1996). The project, scheduled to be completed by 1995, was extended upto June 2000. The mines have now undergone user's trials and are awaiting orders by Naval HQ for limited series production.

Audit examination disclosed the following:

a) The expenditure of Rs 63.68 lakh on development of mine 'A' proved infructuous, as Navy rejected the mines, which had failed to meet the requirement of the Staff Project.

b) Although successful completion of the development project on mine 'B' in 1995 was claimed by a DRDO establishment, not even six *per cent* of the quantity ordered has been produced in the last six years (September 2001).

c) The basic objective of mine 'C' was to achieve a lethal range of up to 300 metres depth. Against this, the actual achievement of the indigenous mine 'C' was much less, necessitating the initiation of the Staff Project on mine 'D'. Obviously, the claim of the lab, that the Staff Project for mine 'C' was successful, was erroneous.

d) Even after seventeen years and an investment of Rs 4.14 crore, the Staff Projects failed to yield full benefits, compelling Navy to continue with vintage mines of doubtful effectiveness, thereby, seriously compromising operational preparedness.

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

Ravindran

(V. RAVINDRAN)
Principal Director of Audit
Air Force and Navy

New Delhi
Dated 13th March 2002

Countersigned

V. K. Shunglu

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

New Delhi
Dated 13th March 2002

APPENDIX – I

Details of files not produced to Audit

(Referred to in Paragraph 4)

Sl. No.	Sanction No. & date	Subject	Amount	Letter number and date of initial requisition	Last reminder sent on
		AIR FORCE			
1.	DRDO/Adv/S/511/270/S/ D(R&D) dated 30.9. 1993	Project Hiran	Rs.120.5 crore	162/D/R&D/1/95/ ASIEO dated 31.10.95	28.12.2001
2.	Air HQ/82308/325/ 006-95/ ENGD2 (Q)/10/ DOI/D(Air-I) dated 2.1.96	Payment against contract No. 325/006/95 dated 03/11/95 for supply of spares	USD 3317884.42 Rs 116026418.00 (1 USD=Rs.34.97)	126/D/S/14/72/XI dated 02/2/96	28.12.2001
3.	Air HQ/S.96081/14/8/ ASR/487/DO/D (Air-IV)/97 dated 31.3.97	On account payment for procurement of Indra.	Rs.58.642 crore	38/D/S/1/97 dated 22/7/97	28.12.2001
4.	14(20)/!/92/D(HAL) Vol.II dated 25.3.98	Adhoc approval for ALH	Rs.66.95 crore	30/D/S/3/98/AFA dated 03/7/98	28.12.2001
5.	PC 14(20)/4/91/ D(HAL) Vol-II dated 05.11.98	Revised estimate of ALH	Rs.530.20 crore	38/D/S/3/98/AFA dated 12.2.99	28.12.2001
6.	Air HQ/S.96080/1/3/ ASR/1737/US/D (Air-I) dated 10.11.98	Payment against contract No. 96080/1/3 dated 15/3/95	USD 2,73,46,850 Rs.116,77,10,495	45/D/S/23/87/ AFA/II dated 17/2/99	28.12.2001
7.	ADV-DRDO/108 A/637 /S/D(R&D) dated 01.1.91.	Project 'Tempest' and project 'Stefew' Project	Rs.146.41 crore	280/D/R&D/2/96/ AFA dated 24.2.2000	28.12.2001

NAVY					
1.	AR/0156/NHQ/4453/ D (N-I) dated 21/12/95	Re-engining of aircraft	Pounds 3,273,559	370/D/N/26/80 dt. 18/1/96	23/11/2001
2.	AO/9640/NHQ/332/S /DS(N) dated 25/3/96	Acquisition of four helicopters	Rs 23.50 crore	77/D/N/1/85/I dt. 13/5/96	23/11/2001
3.	AK/1378/SRE/NHQ/ 935/US/D(N-I) dated 21/3/96	Procurement of one Radar for the Indian Navy	Rs 10,68,71,618.70	91/D/N/4/96 dt. 23/5/96	23/11/2001
4.	MF.DY/5846/792/D (N-III) dated 26/3/96	Sanction for afloat support facilities at Naval Dockyard Mumbai	Rs 7,57,59,713	99/D/N/6/96 dt. 30/5/96	23/11/2001
5.	AV/0840/TEH/CG/41 4/DO(N-II) dated 28/3/97	Supply of two advance light helicopter to Coast Guard during 1998-99	Rs 49.50 crore	94/D/N/15/97 dt. 27/5/97	23/11/2001
6.	HY/H/1002/30/F/NH Q/ 2100/D(N-I)/97 dated 27/5/97	Tender for Hydrographic survey	Rs 19.36 crore	250/D/N/27/97 dt. 3/9/97	23/11/2001
7.	WP/2043/NHQ/2446/ D (N-I) dated 3/7/97	Procurement of 250 7.62 MM MAG 70 MMG by Indian Navy	Rs 7,94,60,999.51	238/D/N/28/97 dt. 4/9/97	23/11/2001
8.	DY/6231/NHQ/3822/ D (N-I)/97 dated 15/9/99	Provision of technical documents for repair of M-15E GT	Rs 5.14 crore	328/D/N/16/83 /II dt. 6/11/97	23/11/2001
9.	10(1)/97/3434/D(N-III) dated 26/11/97	Maintenance dredging at Mumbai for the post monsoon period of 1997	Rs 12 crore	493/D/N/30/85 /II dt. 10/2/98	23/11/2001
10.	FM/0657/RS/CGHQ/ 1531/US (CG)/D(N-II) dated 11/12/97	Special repairs/reconstruction of CGS Razia Sultana	Rs 1780 lakh	536/D/N/33/88 /VII dt. 27/2/98	23/11/2001
11.	AS/8713/II/NHQ/MO D/ 1089/S/D(N-I) dated 29/10/97	Contract No. 8713-II/NHQ/MOD dt. 19/9/96	Rs 6,88,99,776	16/D/N/53/97 dt. 15/4/98	23/11/2001
12.	WK/0113(A)/CGHQ/ 898/US(CG)/D(N-II) dated 27/7/98	Provision of berthing facilities at Porbandar	Rs 1129 lakh	246/W/N/4/95 dt. 5/11/98	23/11/2001

13.	PC to MF SP/6301/CCS/ 1954/D(N-I)/99 dated 13/4/99	Procurement of CCS system	Rs 36,09,88,170	204/D/N/56/97 /II dt. 9/6/99	23/11/2001
14.	10(1)/99/1300A/D(N-III) /99 dated 26/4/99	Maintenance dredging at Kochi for pre monsoon period of 1999	Rs 11.27 crore	463/D/N/30/85 /II dt. 29/9/99	23/11/2001
15.	10(12)/99/D(N-I) dated 14/6/99	Design and construction of indigenous Ship	Rs 1551.64 crore	646/D/N/12/99 dt. 28/12/99	23/11/2001
16.	MF/PL/1299/II/531/S /D (N-I) dated 20/7/99	Revision in the cost of eight ships	Rs 1447.10 crore	165/D/N/4/85/ II dt 31/12/99	23/11/2001
17.	F.MF/PL/3102/99/1/5 24/S/D(N-I) dated 15/7/99	Procurement of stores under SA 935612141009 dt. 2/7/99 to Contract No. 80/312508431 of February 4, 1993	Rs 15,88,27,939.50	159/D/N/25/94 dt. 31/12/99	23/11/2001
18.	TP/0581/Repl/NHQ/8 44/D(N-IV) dated 1/3/2000	Sanction for procurement of vehicles against replacement	Rs 6.91 crore	83/D/N/7/98 dt. 24/5/2000	23/11/2001
19.	WM/8916/Engine/NH Q/722/S/D(N-I) dated 24/8/96	Letter of credit against contract WM/8916/Engine dt. 6/6/96	Rs 5,62,09,125	162/D/N/2/96 dt. 13/7/2000	23/11/2001
20.	FM/0671/Vajra/MR-99/ 358/US (CG)/D(N-II) dated 14/3/2000	Medium refit of CGS Vajra	Rs 895 lakh	299/D/N/33/88 / VIII dt. 13/10/2000	23/11/2001
21.	AH/0251/ESM/I dated 2/6/2000	Supply of Eagle equipment	Rs 3830.135 lakh	310/D/N/40/94 /III dt. 16/10/2000	23/11/2001
22.	NHQ/1100/4/WL/ (906/2000)/D(N-III) dated 15/3/2000	Payment of rentals of Western Railway land	Rs 8,42,55,256	479/D/N/26/87 /VI dt. 23/1/2001	23/11/2001

APPENDIX-II

Position of ATNs outstanding as of December 2001

(Referred to in Paragraph 5)

Sl. No.	Report No. and Year	Chapter of the Report	Para No.	Pertains to	Brief subject	Remarks
ATN pending for more than five years						
1.	9 of 95	II	3	MOD	Unauthorised funding of a project	Final ATN awaited
2.	9 of 95	IV	15	Navy	Naval Air Stations	Final ATN awaited
3.	9 of 95	IV	27	Navy	Extra payments on power consumption	Final ATN awaited
4.	9 of 96	IV	2	MOD	Non installation of an imported communication system	Final ATN awaited
5.	9 of 96	IV	21	Navy	Delay in operational deployment of imported system	Final ATN awaited
6.	9 of 96	VI	39	R&D Org.	Delay in development-cum-production of a system	ATN not received
ATN pending for more than three years						
7.	8 of 97	IV	16	Navy	Submarine Fleet	Final ATN awaited
8.	8 of 97	IV	23	Navy	Procurement of Articles TEM-3 without cables	Final ATN awaited
9	8 of 97	V	29	Coast Guard	Wasteful investment on construction of jetty	Final ATN awaited
10.	8 of 97	VI	30	R&D Org.	Design and development of pilotless target aircraft	ATN not received
11.	8 of 98	II	2	MOD	Air transport facilities for VVIPs and OEPs	Final ATN awaited

12.	8 of 98	II	3	MOD	Delay in setting up of repair facilities	Final ATN awaited
13.	8 of 98	III	7	Air Force	Aircraft accidents in IAF	Final ATN awaited
14.	8 of 98	III	16	Air Force	Indecision on collection of scrap	Final ATN awaited
15.	8 of 98	III	21	Air Force	Delay in clearance of cargo	ATN not received
16.	8 of 98	IV	22	Navy	Construction of Frigates	Final ATN awaited
17.	8 of 98	IV	24	Navy	Non utilization of imported sonars	ATN not received
18.	8 of 98	IV	28	Navy	Extra expenditure due to delay in procurement of under water valves	Final ATN awaited
19.	8 of 98	IV	30	Navy	Purchase of sub-standard items	Final ATN awaited
20.	8 of 98	IV	33	Navy	Negligence in releasing a salvaged ship	Final ATN awaited
21.	8 of 98	V	34	Coast Guard	Recovery of over payment at the instance of Audit	Final ATN awaited
ATN pending upto three years						
22.	8 of 99	II	2	MOD	Non-recovery of liquidated damages	Final ATN awaited
23.	8 of 99	II	3	MOD	Idling of funds and loss of interest	Final ATN awaited
24.	8 of 99	II	4	MOD	Non-recovery of airlift charges	Final ATN awaited
25.	8 of 99	III	7	Air Force	Delay in provision of air surveillance system	ATN not received

26.	8 of 99	III	9	Air Force	Non-functional electro optical tracking and computing equipment	Final ATN awaited
27.	8 of 99	III	10	Air Force	Delay in sanctioning additional Bulk Petroleum Installation	ATN not received
28.	8 of 99	III	14	Air Force	Overpayment to a foreign firm	Final ATN awaited
29.	8 of 99	III	15	Air Force	Failure to obtain supply of critical armament stores	Final ATN awaited
30.	8 of 99	III	17	Air Force	Recovery at the instance of audit	ATN not received
31.	8 of 99	IV	18	Navy	Naval Dockyard, Mumbai	Final ATN awaited
32.	8 of 99	IV	19	Navy	Misuse of Gymnasium	Final ATN awaited
33.	8 of 99	IV	20	Navy	Saving at the instance of audit	Final ATN awaited
34.	8 of 99	IV	21	Navy	Extra expenditure in procurement of cotton stockinette	ATN not received
35.	8 of 99	IV	23	Navy	Award of fabrication of torpedo carriers to a firm under liquidation	Final ATN awaited
36.	8 of 99	V	25	Coast Guard	Acquisition of advanced off shore patrol vessels	Final ATN awaited
37.	8 of 99	VI	27	R&D Org.	Development of an airborne system	Final ATN awaited
38.	8 of 99	V	28	R&D Org.	Light Combat Aircraft	Final ATN awaited

39.	8 of 2000	II	2	MOD	Acquisition of SU-30 aircraft	ATN not received
40.	8 of 2000	II	3	MOD	Delay in procurement of maintenance equipment for helicopters	Final ATN awaited
41.	8 of 2000	III	6	Air Force	Formation of Southern Air Command	Final ATN awaited
42.	8 of 2000	III	9	Air Force	Injudicious procurement of helicopter rings	Final ATN awaited
43.	8 of 2000	III	11	Air Force	Compromised utilisation of communication equipment	Final ATN awaited
44.	8 of 2000	III	12	Air Force	Continuation of a helicopter unit without review of establishment despite reduction in its tasks	ATN not received
45.	8 of 2000	III	13	Air Force	Loss due to delay in raising of discrepancy reports	ATN not received
46.	8 of 2000	III	15	Air Force	Wrongful appropriation of public revenues to non-public fund	Final ATN awaited
47.	8 of 2000	IV	17	Navy	Project seabird	Final ATN awaited
48.	8 of 2000	IV	18	Navy	Avoidable expenditure due to failure in availing a cheaper offer	Final ATN awaited
49.	8 of 2000	IV	19	Navy	Provision of Photo Interpretation Centre	Final ATN awaited
50.	8 of 2000	IV	21	Navy	Extra payment to the contractor	ATN not received
51.	8 of 2001	II	2	MOD	Delay in induction of a surveillance system	ATN not received

52.	8 of 2001	II	3	MOD	Delay in development of a system	ATN not received
53.	8 of 2001	III	6	Air force	Upgradation of MiG Bis aircraft	ATN not received
54.	8 of 2001	III	7	Air force	Procurement and modification of Jaguar aircraft	ATN not received
55.	8 of 2001	III	8	Air force	Delay in setting up of repair facilities for helicopter engines	Final ATN awaited
56.	8 of 2001	III	9	Air force	Procurement of unreliable cells	Final ATN awaited
57.	8 of 2001	III	10	Air force	Procurement of a communication system	Final ATN awaited
58.	8 of 2001	III	11	Air force	Avoidable expenditure due to delay in placing purchase order	Final ATN awaited
59.	8 of 2001	III	12	Air force	Extra expenditure due to negligence	ATN not received
60.	8 of 2001	III	14	Air force	Sub-optimal utilisation of a radar	ATN not received
61.	8 of 2001	III	15	Air force	Overpayment to Hindustan Aeronautics Limited	ATN not received
62.	8 of 2001	III	16	Air force	Inadmissible payment to a Public Sector Undertaking	ATN not received
63.	8 of 2001	III	17	Air force	Non-utilisation of specialist vehicles and missiles	Final ATN awaited
64.	8 of 2001	III	18	Air force	Loss due to negligence of HAL	ATN not received
65.	8 of 2001	III	19	Air force	Loss of stores collected by Air Force representative abroad	ATN not received
66.	8 of 2001	IV	20	Navy	Delay in procurement of diesel generating sets	ATN not received

67.	8 of 2001	IV	21	Navy	Procurement of incorrect propeller shafts	ATN not received
68.	8 of 2001	IV	22	Navy	Extra expenditure in procurement of spares	Final ATN awaited
69.	8 of 2001	IV	23	Navy	Unauthorised deployment of Naval tanker for overseas purchase of oil	ATN not received
70.	8 of 2001	IV	24	Navy	Recovery at the instance of Audit	ATN not received
71.	8 of 2001	V	25	Coast Guard	Repair/refit of boats of IOC out of Coast Guard funds	ATN not received

Errata

Para No.	Page No.	Line	For	Read
3	6	Last column of the table	2,4,6,8,13,15, 16,17,19 and 21	2,5,7,9,14,16,17,18, 20 and 22
8	12	Last line	60.86 crore	Rs 60.86 crore