Report of the Comptroller and Auditor General of India

Union Government (Defence Services)

Air Force and Navy

No. 20 of 2011-12

Report of the Comptroller and Auditor General of India

for the year ended March 2010

Presented in Lok Sabha on : 0 8 SEP 2011

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Union Government (Defence Services) Air Force and Navy No. 20 of 2011-12

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PREFACE

This Report for the year ended March 2010 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, associated Research and Development Units and Military Engineer Services. Results of audit of Ministry of Defence, in so far 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 a separate report.

The Report includes 25 paragraphs.

The cases mentioned in the Report are among those which came to notice in the course of audit during 2009-10 and early part of 2010-11 as well as those which came to notice during earlier years, but could not be included in the previous Reports.

OVERVIEW

The total expenditure of the Defence Services during 2009-10 was ₹ 1,45,781 crore. Of this, the Air Force and Navy spent ₹ 33,259 crore and ₹ 22,935 crore respectively. The combined expenditure of the two services accounts for 38.54 per *cent* of the total expenditure on the Defence Services. The major portion of the expenditure of the Air Force and Navy is capital in nature, constituting almost 56.77 *per cent* of their total expenditure.

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

I Delayed acquisition of armaments for a frontline fighter aircraft

Flawed approach in acquiring 16 MiG-29K aircraft, at a cost of ₹ 3,405.61 crore without finalising the associated package with the procurement of the aircraft, in January 2004, led to delivery of six aircraft in December 2009 without weapons. Subsequently, five more aircrafts were delivered in May 2011. The armament for the aircraft were contracted for only in March 2006 which led to non delivery of weapons till October 2010, adversely affecting the operational capabilities of the aircraft. Besides, the Beyond Visual Range missiles contracted for the aircraft, at a cost of ₹ 93.68 crore, has had an unsatisfactory track record with Indian Air Force

(Paragraph 2.1)

II Extra expenditure on procurement of Low Level Transportable Radar

Acquisition of critical requirement of air defence surveillance system was beset with delays at each stage in the pre-contract finalisation process. Further, avoidable additional payment of ₹ 57.46 crore was made by the Ministry to M/s Bharat Electronics Limited (BEL) without justification due to inadequate negotiations during procurement.

(Paragraph 2.2)

III Extra expenditure on operation of a surveillance system

Indian Air Force procured two vital surveillance systems at the cost of ₹ 676 crore. One of the system met with an accident and has become non operational since May 2009. It is not likely to be available to IAF for another two years. The accident was attributable to failure in keeping track of weather changes, inadequate supervision of the ongoing snubbing activities and follow up on maintenance activities. Besides, the fabric used in both the systems have also started decaying prematurely causing excessive leakage of helium resulting in extra expenditure on operation cost.

(Paragraph 2.3)

IV Procurement of unsuitable communication sets

Air Defence V/UHF links play a vital role in all air operations. Ministry / IAF accepted communication equipment, designed and developed by Hindustan Aeronautics Limited (HAL), even though the equipment did not meet technical requirements. Despite spending ₹ 116 crore and considerable period of time, IAF's critical requirement for communication equipment is yet to be fulfilled.

(Paragraph 2.4)

V Abnormal delay in procurement of Precision Approach Radar

Indian Navy inordinately delayed the procurement of Precision Approach Radar resulting in an additional expenditure of ₹ 2.01 crore over and above the initial quote. The radar intended to be purchased on fast track basis was commissioned in April 2009, eight years after initiating the procurement process. Post commissioning, the performance of the radar has been erratic.

(Paragraph 2.5)

VI Delay in procurement of urgent aviation stores through Indian Embassies

Procurement of critical and urgent aviation stores/spares through Indian Embassies was beset with delays at each stage. The decision-making even at Air HQ was slow and led to delay in conclusion of contacts. The contract delivery schedules were significantly longer, thereby, undermining the urgency of procurement.

(Paragraph 2.7)

VII Avoidable expenditure on procurement of spares

Failure in placement of supply order under option clause resulted in an avoidable expenditure of ₹ 4.29 crore in the subsequent procurement of spares. Besides, due to delay in procurement, established infrastructure remained idle for want of spares for considerable time.

(Paragraph 3.1)

VIII Unfruitful expenditure on procurement of flare cartridges

Out of 20,000 flares procured for use on the MiG 21 Bison aircraft upgradation project, 19,540 flares costing ₹ 3.09 crore exhausted their shelf life of seven years in store. Thus procurement of flares was rendered unfruitful due to expiry of flare cartridges before being placed with operating squadrons, where they could have been put to use.

(Paragraph 3.2)

IX Avoidable expenditure in procurement of spares for a helicopter

There was abnormal delay in processing the case for procurement of spares for KA-31 helicopters. Further, Indian Navy's failure of to get the validity of the quote of a firm extended resulted in an avoidable expenditure of ₹ 10.71 crore.

(Paragraph 4.1)

X Avoidable expenditure in procurement of Winch Reel Hydraulic

Lack of due diligence by the Tender Evaluation Committee at the initial stage in processing of tenders for procurement of Winch Reel Hydraulic led to delay in procurement and an avoidable expenditure of ₹ 9.73 crore.

(Paragraph 4.2)

XI Extra expenditure in procurement of Gas Turbines

Breaking up the procurement order of nine gas turbines by Indian Navy led to an extra expenditure of ₹ 2.49 crore as the subsequent procurement of five gas turbines was at a higher cost.

(Paragraph 4.3)

XII Inordinate delay in installation of SPL Plotting Tables on submarines

SPL Plotting Table is a navigation and tactical plotting system which can plot the ships own position as well as it can plot the data received from the unit sensors. Four SPL Plotting Tables procured at a cost of ₹ 6.05 crore could not be installed onboard the submarine for about four years after their receipt. Continued disuse meant that, these Plotting Tables lost their warranty cover in September 2008 without these being utilised.

(Paragraph 4.4)

XIII Tardy progress in execution of a Water Supply Scheme

There was an inordinate delay on part of the Military Engineer Services (MES) for over seven years in execution/commissioning of Water Supply Scheme at Visakhapatnam. The expenditure of ₹ 4.53 crore did not serve the objective of providing adequate and clean water to Defence Personnel.

(Paragraph 4.6)

XIV Loss of stores in transit

Failure of Aeronautical Development Establishment (ADE) to comply with the extant orders for insuring against loss or damage in transit resulted in a transit loss of stores worth ₹ 10.63 crore meant for Light Combat Aircraft (LCA) programme.

(Paragraph 5.1)

XV Savings/recoveries at the instance of audit

An amount of ₹ 1.31 crore was recovered/adjusted in two cases in respect of Navy and ₹ 31.56 crore in three cases in respect of Air Force was saved only after having been pointed out by audit.

(Paragraph 3.6 and 4.10)

CHAPTER I: INTRODUCTION

1.1 About the report

The office of the Principal Director of Audit, Air Force and Navy (PDA/AFN) is responsible for auditing the accounts and the financial transactions related to Indian Air Force, Indian Navy, Indian Coast Guard and associated Research and Development (R&D) undertaken by the Defence Research and Development Organisation of the Ministry of Defence, linked Military Engineer Services (MES) offices and integrated Defence Accounts Department units dealing with these services. The audit exercise is carried out on behalf of the Comptroller and Auditor General of India in accordance with Article 151 of the Constitution of India.

The audit effort can be classified under three distinct types of audits: Financial Audit, Compliance Audit and Performance Audit.

Financial Audit is the review of financial statements of an entity that seeks to obtain an assurance that the financial statements are free from material misstatements and present a true and fair picture.

Compliance Audits scrutinise transactions relating to expenditure, receipts, assets and liabilities of the audited entities to ascertain whether the provisions of the Constitution of India, applicable laws, rules, regulations and various orders and instructions issued by the competent authorities are being complied with.

Performance Audits are in-depth examinations of a program, function, operation or the management system of entity to assess whether the entity is achieving economy, efficiency and effectiveness in the employment of available resources.

This report is on matters arising from the Compliance Audit of Indian Air Force, Indian Navy, Research and Development Organisation and associated activities and entities. The report contains findings pertaining to capital and revenue acquisitions, installation/upgradation of systems, blockage of funds and work services. Total financial value of cases commented upon in this report is ₹ 3,700 crore. A brief financial analysis of the expenditure incurred on the Air Force, Navy, R&D (related to Air Force and Navy) and Coast Guard as a part of the over-all Defence budget of the country has also been included.

1.2 Authority for Audit

Article 151 of the Constitution of India and Section 13 of the Comptroller and Auditor General's (Duties, Powers and Conditions of Service) Act, 1971 govern the scope and extent of audit. Detailed methodology of audit and reporting formats are prescribed in the 'Regulations of Audit and Accounts, 2007'.

1.3 Planning and Conduct of Audit

Audit areas are prioritised through an analysis of risks so as to assess their criticality in key operating units. Expenditure incurred, operational significance, past audit results and internal control issues are amongst the prime factors which determine the severity of the risks. This exercise in turn guides the formulation of the annual audit programme. The number of units selected for audit is determined by matching the high-risk areas with available resources. Besides, high-value capital acquisitions and procurements are audited by specially constituted dedicated teams.

In general, interaction with the auditee is encouraged from the initial stage in the auditing process. Audit findings are communicated during discussions at the end of an audit exercise and followed up in writing through Local Test Audit Reports / Statement of Cases. The response from the auditee is considered and results in either settlement of the audit observation or referral to the next audit cycle for compliance. Some of the more serious irregularities are processed for inclusion in the audit reports which are submitted to the President of India under Article 151 of the Constitution of India, for laying them before each House of Parliament.

At present, the audit universe of the office comprises of 851 units. During 2009-10, audit of 227 units/formations was carried out by using 7,142 man days.

1.4 Internal Control and co-ordination between Internal and External Audit

The Finance Division of the Ministry of Defence is headed by the Secretary (Defence/Finance)/ Financial Advisor (Defence Services). The SDF/FADS is responsible for financial scrutiny, vetting, advice and concurrence of all proposals of the Ministry of Defence. FADS is also responsible for internal audit and for accounting of the defence expenditure. Internal financial advice is provided both at the Headquarters level as also at levels of Command Headquarters and other units. Internal financial control is further aided by periodic internal audit by the Controller General of Defence Accounts (CGDA), the Head of the Defence Accounts Department, who functions under the FADS. The Principal Controllers of Defence Accounts, Air Force and Navy functioning under CGDA are located at Dehradun and Mumbai respectively. They are responsible for internal audit, financial advice at unit level and for scrutiny, payments and accounting of all personnel claims and bills for supplies and services rendered, construction, repair works, miscellaneous charges etc. received from Air Force and Navy units.

The internal audit mechanism is expected to be effective in implementing the rules, procedures and regulations enunciated in the form of Defence Procurement Procedure, Manual, Codes, etc. The office of PDA/AFN actively seeks assistance and co-operation from internal audit in audit examination and scrutiny. Internal auditors have to carry out 100 *per cent* checks. The external/statutory audit bases its audit on sample / test check. The Inspection Reports (IR) generated by external audit on the basis of Local Audit are issued to auditee units as well as their internal auditors i.e. Defence Accounts Department. These IRs are pursued to their logical conclusion after ascertaining the views of the internal auditors. Draft paragraphs proposed to be included in the audit report are sent to Defence Secretary. Simultaneously, a copy is also forwarded to CGDA. The Ministry furnishes its response only after vetting by the FADS.

1.5 Auditee Profile

1.5.1 Organisation – Key responsibilities

The Ministry of Defence at the apex level frames policies on all defence related matters. The Ministry is divided into four departments, namely Department of Defence, Department of Defence Production, Department of Research and Development and Department of Ex-Servicemen Welfare. Each department is headed by a Secretary. The Defence Secretary functions as the

Head of the Department of Defence and is also responsible for coordinating the activities of other departments

The Indian Air Force is headed by the Chief of Air Staff. Air Headquarters (Air HQ) is the apex body and chief management organisation of the Indian Air Force. The ultimate and overall administrative, operational, financial, technical maintenance and control of IAF rests with Air HQ. Operational and maintenance units of IAF normally consist of Wings and Squadrons, Signal Units, Base Repair Depots and Equipment Depot.

The Indian Navy is headed by Chief of Naval Staff. Naval Headquarters (NHQ) is the apex body and chief management organisation and is responsible for command, control and administration of the Indian Navy. Operational and maintenance units of Indian Navy consist of Warships and Submarines, Dockyard, Naval Ship Repair Yards, Equipment Depots and Material Organisations.

The Coast Guard is the youngest service of the armed forces of India and was created to protect the country's vast coastline and offshore wealth. The Director General, Coast Guard exercises general superintendence, direction and control of the Coast Guard.

Military Engineer Services (MES) is one of the largest Government construction agencies. Engineer-in-Chief is the head of the MES. The MES is responsible for conclusion of contracts, execution of work services and maintenance of existing buildings of the Armed Forces. It works under the Engineer-in-Chief Branch of Army Headquarters.

The Defence Research and Development Organisation undertakes design and development of weapon systems and equipment in accordance with the expressed needs and the qualitative requirements laid down by the services. Certain laboratories are dedicated exclusively to Air Force and Navy like the Gas Turbine and Research Establishment (GTRE), Aeronautical Development Agency (ADA), Electronics and Radar Development Establishment (LRDE) and Centre for Airborne System (CABS) etc. These organisations also render scientific advice to the Service Headquarters. They work under the Department of Defence Research and Development of Ministry of Defence.

The Defence Accounts Department is headed by the Controller General of Defence Accounts, New Delhi who functions under the Financial Advisor, Ministry of Defence. The Department provides services to the Armed Forces in terms of financial advice and accounting of Defence Services receipts and expenditure as well as Defence Pensions.

1.6 Significant Audit Observations

Audit has, over the years, commented on many critical areas of Defence Sector pertaining to Indian Air Force, Indian Navy, Indian Coast Guard and dedicated R&D projects. The Ministry of Defence, on its part, has taken several measures in response to these observations. An important step taken to improve procurement procedures has been the introduction of Defence Procurement Procedure and Defence Procurement Manual and their regular updation.

The present Audit Report points out significant deficiencies/ short comings in the procurement processes followed - both under Capital and Revenue – by Ministry of Defence as well as by the Services Organisation. In high-value capital expenditure cases, the acquisition process lacked proper planning, effective price negotiation and proper monitoring etc. Flawed approach in acquiring 16 MiG 29K aircraft at a cost of ₹ 3,405.61 crore without finalising the associated weapon package with the contract for the aircraft in January 2004 led to delivery of six aircraft in December 2009 without any weapons. Subsequently, five more aircraft were delivered to Indian Navy in May 2011. The armaments for the aircraft were contracted for only in March 2006 which led to non-delivery of weapons till October 2010, adversely affecting the operational capabilities of the aircraft (Paragraph 2.1). Critical requirement of air defence surveillance could not be fulfilled even three decades after it was first thought necessary. Not only acquisition of critical Low Level Transportable Radars was delayed; an additional expenditure of ₹ 57 crore was incurred as Bharat Electronics Limited, the designated production agency for the radars, charged substantially higher rates than the cost charged by M/s Thales, France for the supply of some identical equipment (Paragraph 2.2). Inadequate weather monitoring was instrumental in one Aerostat system being damaged in an accident in May 2009. The repair of the damaged Aerostat is estimated to cost ₹ 302 crore. The contract for undertaking the repairs to the Aerostat has not been concluded till June 2011 (Paragraph 2.3). IAF's critical requirement of jam-resistant and secure radio sets has not been met even after spending ₹ 116 crore as Ministry/IAF accepted communication equipment despite the fact it did not meet technical requirements (Paragraph 2.4). Protracted negotiations for procurement of Precision Approach Radar delayed its availability to a Naval unit for over eight years, besides, Navy ended paying ₹ 2.01 crore more for the radar (Paragraph 2.5). On the revenue side, inordinate delay in installation of Plotting Tables onboard four submarines has resulted in a blockage of ₹ 6.05 crore for about four years. The plotting tables have since lost their warranty cover (Paragraph 4.4).

Several cases have been highlighted where more vigilance on the part of Service Headquarters was required for instance an expenditure of ₹ 3.09 crore incurred on procurement of flare cartridges was rendered wasteful due to life expiry of flare cartridges before being put to use in operating squadrons (Paragraph 3.2). Despite an expenditure of ₹ 4.53 crore, the objective of providing adequate and clean water to Defence Personnel at Visakhapatnam has not been met for over seven years (Paragraph 4.6).

Instances of violation of contractual terms and disregard of instructions have also been reported. An avoidable expenditure of ₹ 10.87 crore was incurred in procurement of spares for KA-31 helicopters due to failure of Navy to get the validity of the quote of the firm extended (Paragraph 4.1). Lack of due diligence by Navy in possessing the case for procurement of Winch Reel Hydraulic led to an avoidable expenditure of ₹ 9.73 crore (Paragraph 4.2). Stores worth ₹ 10.63 crore meant for LCA programme were lost in transit. Though required, these stores were not insured (Paragraph 5.1).

1.7 Financial Aspects relating to Air Force and Navy

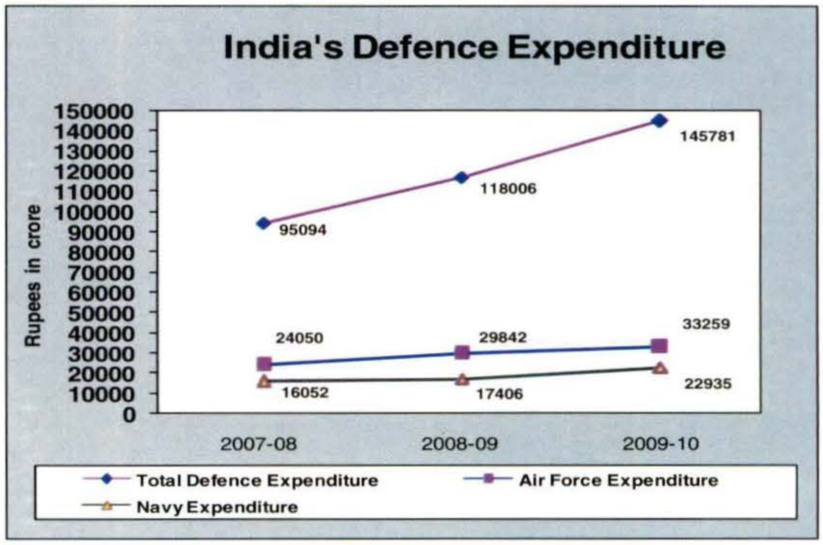
India's Defence Budget is broadly categorised under Revenue and Capital Expenditure heads. While Revenue expenditure heads includes Pay and Allowances, Stores, Transportation and Work Services etc., Capital expenditure heads covers expenditure on acquisition of new weapons and ammunition and replenishment of obsolete stores with modern variety.

Indian Defence expenditure increased by 23.53 *per cent* from ₹ 1,18,006 crore in 2008-09 to ₹ 1,45,781 crore in 2009-10 primarily due to annual increment, DA, Leave Encashment, enhancement of travel entitlement by 6th CPC and 60% of pay arrears. The share of the Air Force and the Navy in the total expenditure on Defence Services in 2009-10 was ₹ 33,259 crore and ₹ 22,935 crore which together constituted approximately 38.54 *per cent.*

1.7.1 Defence Expenditure

1.7.2 The Indian defence expenditure, as depicted above, does not include the expenditure on the pensionary benefits of retired defence personnel and expenditure incurred on Defence civilian staff like Defence Accounts Organisation, Defence Estates Organisation, Secretariat of the Ministry of Defence, Defence Canteens and Coast Guard Organisation. Indian defence spending increased from ₹ 95,094 crore in 2007-08 to ₹ 1,45,781 crore in

2009-10 with an average annual growth of 26.65 *per cent*. As a percentage of GDP, the Defence expenditure has shown an upward turn during this period from 1.92 *per cent* to 2.34 *per cent* as shown in the graph below:



Historically, revenue expenditure accounts for the bulk of the Defence Budget. Out of the total Defence expenditure, the share of revenue defence expenditure has gone up from 60.61 *per cent* in 2007-08 to 64.94 *per cent* in 2009-10 while the share of capital expenditure has gone down from 39.39 *per cent* to 35.06 *per cent* during the same period as shown in the table below:

Defence Expenditure

(₹ in crore)

Year	Annual Expenditure			Percentage increase over previous year	Expenditure as percentage of CGE	Expend-iture as percentage of GDP
	REVENUE	CAPITAL	TOTAL			
2007-08	57,632	37,462	95,094	7.24	12.86	1.92
2008-09	77,088	40,918	1,18,006	24.09	12.72	2.11(Q)
2009-10	94,669	51,112	1,45,781	23.53	13.88*	2.34*

CGE - Central Government Expenditure
*** - Revised Estimates**
Q - Quick estimate

1.7.2.1 Air Force and Navy Expenditure

The total expenditure incurred by the Indian Air Force and Navy during 2007-10 ranged between 42.17 and 38.54 *per cent* of the total Defence Expenditure. In the year 2009-10, while Air Force expenditure rose by 11.45 *per cent* from ₹ 29,842 crore to ₹ 33,259 crore, the Navy expenditure increased by 31.76 *per cent* from ₹ 17,406 crore to ₹ 22,935 crore compared to the previous year. The distribution of Defence expenditure is depicted in the following table:

(₹ in crore)

Year	DISTRIBUTION OF DEFENCE EXPENDITURE					
	Army	Air Force	Navy	Ordnance Factories	R&D	Total
2007-08	47,421	24,050	16,052	1,425	6,146	95,094
2008-09	59,688	29,842	17,406	3,309	7,761	1,18,006
2009-10	77,556	33,259	22,935	3,521	8,510	1,45,781

1.7.2.2 Air Force Expenditure

A broad summary of Air Force expenditure is given below:

Air Force Expenditure

(₹ in crore)

Year	Total	Percentage change over previous year	As a percentage of total Defence Expenditure	Revenue	Capital
2007-08	24,050	(-) 2.60	25.29	10,558	13,492
2008-09	29,842	(+)24.08	25.29	13,244	16,598
2009-10	33,259	(+)11.45	22.81	14,708	18,551

1.7.2.3 Capital Expenditure

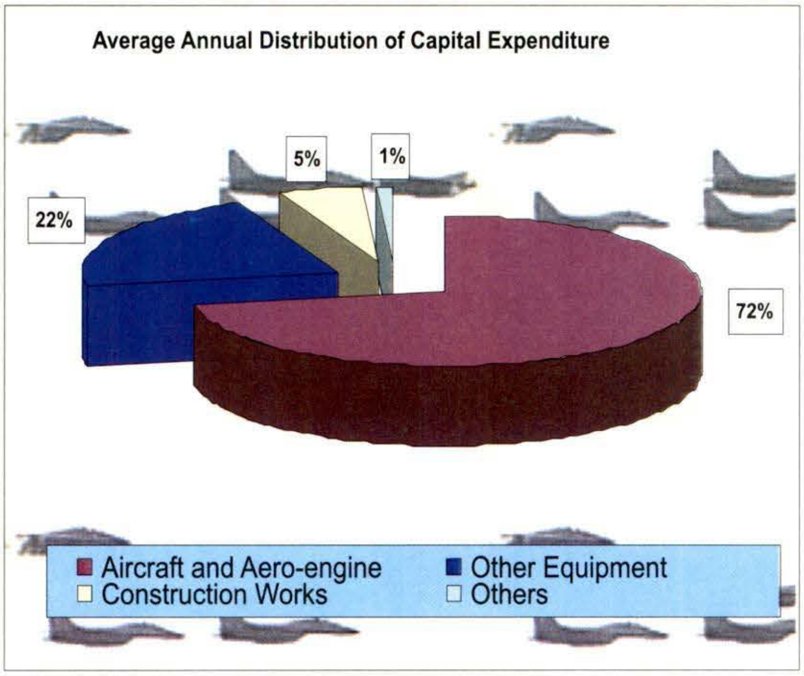
The capital expenditure on Air Force rose by nearly 37.49 *per cent* during 2007-08 to 2009-10. In absolute terms, capital expenditure increased from ₹ 13,492 crore in 2007–08 to ₹ 18,551 crore in 2009-10.

The capital expenditure of IAF was mainly incurred on acquisition of new aircrafts and modernisation/ upgradation of the existing aircrafts. The average annual distribution of expenditure over different categories for the last three years is depicted below in the table as well as in the graph:

Capital Expenditure

(₹ in crore)

Year	Aircraft and Aero-engine	Construction work	Other equipment	Others	Total
2007-08	11,119	775	1,502	96	**13,492**
2008-09	11,268	817	4,304	209	**16,598**
2009-10	12,097	905	5,317	232	**18,551**



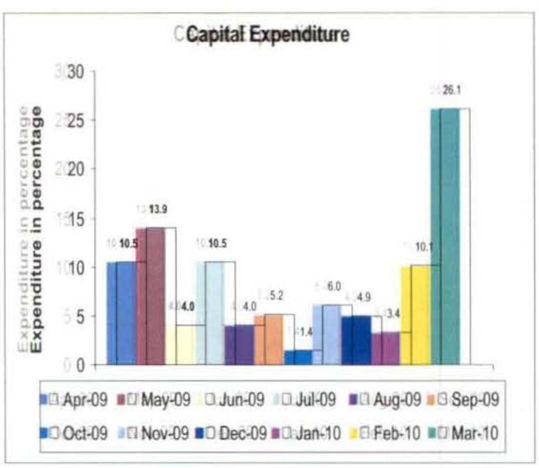
1.7.2.4 Revenue Expenditure

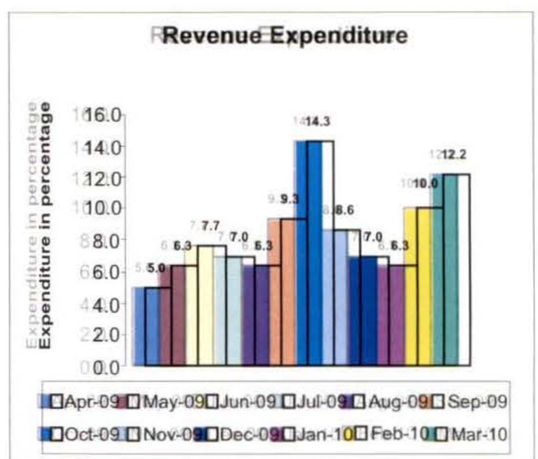
During the three year period under consideration, revenue expenditure of IAF increased by 39.31 *per cent* from ₹10,558 crore in 2007-08 to ₹14,708 crore in 2009-10. The revenue expenditure of IAF was mainly incurred on stores and special project, transport, works and pay and allowances. The average annual distribution of expenditure over different categories for the last three years is depicted below:

(₹ in crore)

Year	Pay and allowances	Stores and special project	Works	Transport	Others	Total
2007-08	2,830 (27%)	6,191 (59%)	1,167 (11%)	225 (2%)	146 (1%)	**10,559**
2008-09	4,681 (35%)	6,820 (52%)	1,317 (10%)	249 (2%)	176 (1%)	**13,243**
2009-10	6,971 (47%)	5,640 (38%)	1,560 (11%)	358 (3%)	179 (1%)	**14,708**

Flow of Capital and Revenue expenditure during the year 2009-10 is indicated below:





Scrutiny of expenditure revealed that there was a substantial increase in the Capital expenditure of IAF in the month of March 2010. IAF incurred about 26.10 *per cent* of the capital expenditure in the month of March 2010 alone and 39.6 *per cent* in the last quarter of financial year. The flow of revenue expenditure also fluctuated considerably over the months.

1.7.25 Indian Navy Expenditure

A broad summary of Navy expenditure is given below.

Navy Expenditure

(₹ in crore)

Year	Total	Percentage change over previous year	As a percentage of total Defence Expenditure	Revenue	Capital
2007-08	16,052	(-) 1.65	16.88	7,117	8,935
2008-09	17,406	(+) 8.44	14.75	7,949	9,457
2009-10	22,935	(+) 31.76	15.73	9,587	13,348

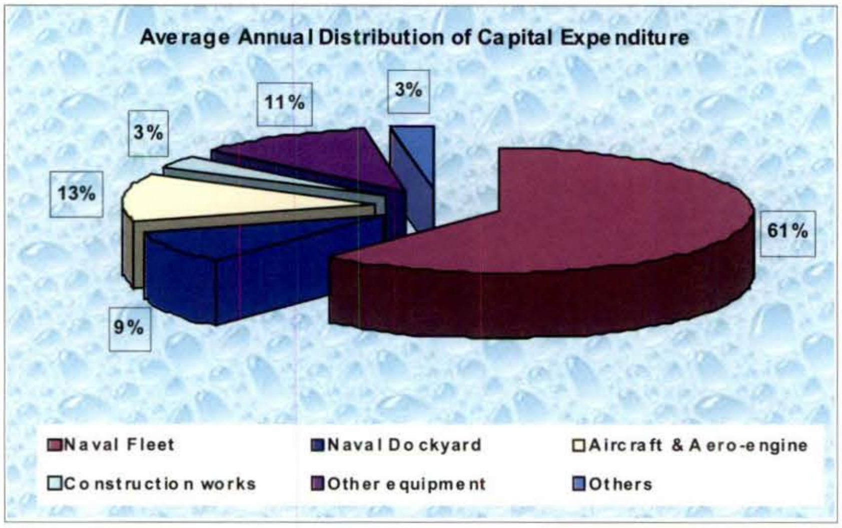
1.7.26 Capital Expenditure

The capital expenditure of Navy increased by 41.14 *per cent* primarily on account of acquisition/construction/upgradation. The average annual distribution of expenditure over different categories for the last three years is depicted below in the table as well as in the graph:

Capital Expenditure

(₹ in crore)

Year	Naval Fleet	Naval Dockyard	Aircraft and Aero-engine	Const-ruction Works	Other Equip-ments	Others	Total
2007-08	6,162	668	410	285	1,162	248	8,935
2008-09	5,404	1,164	538	406	1,716	229	9,457
2009-10	7,460	720	3,603	308	868	389	13,348



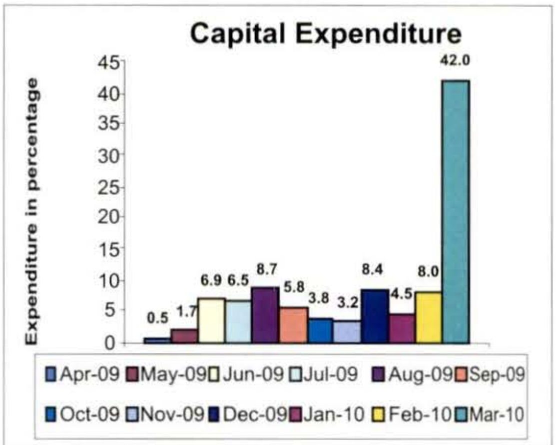
1.7.2.7 Revenue Expenditure

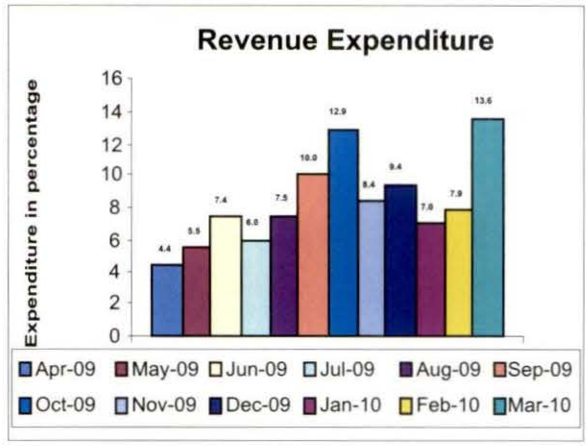
During the three year period under consideration, revenue expenditure of Navy increased by 34.70 *per cent* from ₹ 7,117 crore in 2007-08 to ₹ 9,587 crore in 2009-10. The revenue expenditure of Navy was mainly incurred on stores, transport, works, repairs and refit of aircraft carriers/frigates/other warship and pay and allowances. The average annual distribution of expenditure over different categories for the last three years is depicted below:

(₹ in crore)

Year	Pay and allow-ances	Stores	Works	Trans-port	Repair/ Refit	Others	Total
2007-08	1,784 (25%)	3,179 (45%)	558 (8%)	142 (2%)	735 (10%)	719 (10%)	7,117
2008-09	2,714 (34%)	2,967 (37%)	632 (8%)	180 (2%)	525 (7%)	931 (12%)	7,949
2009-10	3,971 (41%)	2,957 (31%)	645 (7%)	233 (2%)	572 (6%)	1,209 (13%)	9,587

Flow of capital and revenue expenditure during the year 2009-10 is indicated below:





Scrutiny of expenditure revealed that there was a substantial incurrence of capital expenditure by the Navy in the month of March 2010. Navy incurred about 42.08 *per cent* of the capital expenditure in the month of March 2010 alone and 54.5 *per cent* of the capital in the last quarter of the financial year. This reflects poor expenditure management by the Navy and is in deviation from the guidance of the Ministry of Finance which enjoins that expenditure during the month of March should be limited to 15 *per cent* of budget estimates, and the last quarter spending should not be more than one third of the budget. Revenue expenditure also fluctuated considerably over the months.

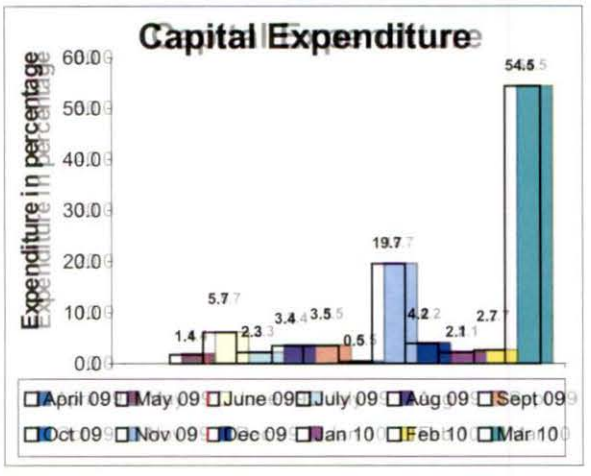
1.8 Coast Guard Organisation

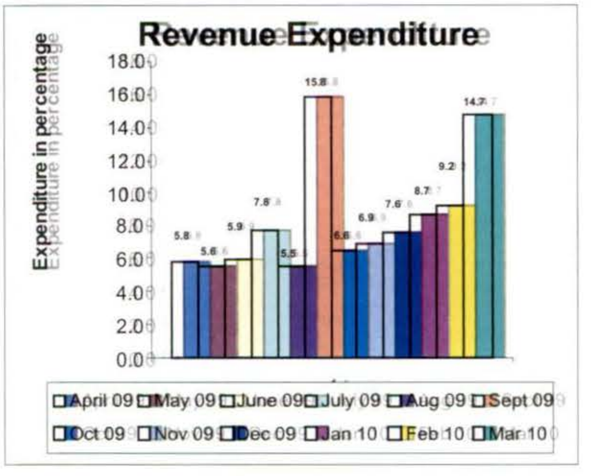
The budgetary allotments and expenditure incurred during the last three years are tabulated below:

(₹ in crore)

Year	Budget Estimates			Final Grant/ Appro-priation	Expenditure			Percent-age of BE which could not be utilised
	Capital	Revenue	Total		Capital	Revenue	Total	
2007-08	735.61	418.02	1,153.63	852.37	255.38	413.21	668.59	42.05
2008-09	949.63	520.17	1,469.80	1,090.18	506.43	520.71	1,027.14	30.11
2009-10	1,300.42	604.37	1,904.79	1,525.72	908.05	621.10	1,529.15	19.72

Flow of Capital and Revenue expenditure during the year 2009-10 is indicated below:





Scrutiny of expenditure revealed that there was a substantial incurrence of capital expenditure by Coast Guard in the month of March 2010. Coast Guard incurred about 54.5 *per cent* of the capital expenditure in the month of March 2010 alone and 59 *per cent* of the capital in the last quarter of the financial year. This reflects poor expenditure management by the Coast Guard and is in variance with the guidance of the Ministry of Finance which enjoins that expenditure during the month of March should be limited to 15 *per cent* of budget estimates, and the last quarter spending should not be more than one third of the budget. Revenue expenditure also fluctuated considerably over the months.

Although the Ministry obtained substantial hikes in the Budgetary Estimates for the Coast Guard in 2008-09 and 2009-10 about one-fifth of the provisions approved could not be spent. The non utilisation of BE provisions under Capital Budget has also been substantial in 2008-09 (47 *per cent)* and 2009-10 (30.21 *per cent*).

1.9 Receipts of the Air Force, Navy and Coast Guard

The details of receipts and recoveries pertaining to Air Force and Navy and Coast Guard during the last three years for the services that they have provided to other organisations/departments are given in the table below:

(₹ in crore)

Year	Receipt and Recoveries in respect of Air Force	Receipt and Recoveries in respect of Navy	Receipt and Recoveries in respect of Coast Guard
2007-08	456.95	166.31	81.13
2008-09	570.50	158.02	11.60
2009-10	468.13	241.30	31.09

1.10 Appropriation and Expenditure

The summarised position of appropriation and expenditure during 2007-08 to 2009-10 in respect of the Air Force and the Navy is reflected in the table below:

(₹ in crore)

AIR FORCE									
	Final Grant	Actual Expend-iture	Total Excess/ Savings (+) / (-)	Final Grant	Actual Expend-iture	Total Excess/ Savings (+) / (-)	Final Grant/	Actual Expend-iture	Total Excess/ Savings (+) / (-)
REVENUE	**2007-2008**			**2008-2009**			**2009-10**		
Voted	10,663.58	10,556.01	(-) 107.57	12,632.21	13,242.58	(+) 610.37	15,271.84	14,707.05	(-) 564.79
Charged	1.94	0.98	(-) 0.96	2.04	0.79	(-) 1.25	2.91	1.17	(-) 1.74
CAPITAL									
Voted	13,594.87	13,489.68	(-) 105.19	16,539.12	16,591.21	(+) 52.09	18,624.97	18,542.76	(-) 82.21
Charged	3.88	2.31	(-) 1.57	5.81	6.98	(+) 1.17	11.10	8.01	(-) 3.09
Total	**24,264.27**	**24,048.98**	**(-) 215.29**	**29,179.18**	**29,841.56**	**(+) 662.38**	**33,910.82**	**33,258.99**	**(-) 651.83**
NAVY									
REVENUE	**2007-2008**			**2008-2009**			**2009-10**		
Voted	7,172.68	7,115.58	(-) 57.10	8,190.56	7,948.42	(-) 242.14	9,435.70	9,586.21	(+) 150.51
Charged	1.37	1.29	(-) 0.08	1.63	0.36	(-) 1.27	4.23	0.88	(-) 3.35
CAPITAL									
Voted	8,892.10	8,934.47	(+) 42.37	9,195.86	9,454.86	(+) 259.00	13,284.33	13,272.36	(-) 11.97
Charged	6.40	0.69	(-) 5.71	8.40	2.39	(-) 6.01	74.87	75.45	(+) 0.58
Total	**16,072.55**	**16,052.03**	**(-) 20.52**	**17,396.45**	**17,406.03**	**(+) 9.58**	**22,799.13**	**22,934.90**	**(+) 135.77**

An analysis of the Appropriation Accounts, Defence Services for each of the three years has been included in the Report of the Comptroller and Auditor General of India for the relevant years, Union Government – Accounts of the Union Government.

1.11 Audit Impact

1.11.1 Response of the Ministry to Draft Audit Paragraphs

On the recommendations of the Public Accounts Committee (PAC), 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.

The Draft Paragraphs proposed for inclusion in this Report were forwarded to the Secretary, Ministry of Defence between 30 August 2010 and 10 December 2010 through demi-official letters drawing attention to the audit findings and requesting a response within six weeks.

Despite the instructions of the Ministry of Finance issued at the instance of the PAC, the Ministry did not send replies to 5 Draft Paragraphs out of 25[1] Paragraphs included in this Report. Thus, the response of the Ministry could not be included in respect of these paragraphs.

1.11.2 Action Taken Notes on Audit Paragraphs of earlier Reports

With a view to enforce accountability of the executive in respect of all issues dealt with in various Audit Reports, the Public Accounts Committee desired that Action Taken Notes (ATNs) on all paragraphs pertaining to the Audit Reports for the year ended 31 March 1996 onwards be submitted to them, duly vetted by audit, within four months from the laying of the Report in Parliament.

Review of outstanding ATNs on Audit Paragraph relating to the Air Force, Navy and Coast Guard as on 31 July 2011 showed that the Ministry had not submitted the initial ATNs in respect of 10 out of 55 paragraphs included in the Audit Reports up to and for the year ended March 2009 as shown in Annexure-I.

[1] The introductory remarks included in Chapter I of this report were not forwarded to Ministry for their comments

1.11.3 Outcomes

Findings of earlier reports have resulted in various procedural changes in Defence Procurement Procedure as well as systemic changes in operations of the audit entity. In addition, each year's audit also results in savings and recoveries. During last three years, recoveries to the extent of ₹ 36.37 crore (₹ 31.56 crore in respect of current Audit Report) and savings to the extent of ₹ 8.26 crore (₹ 1.31 crore for current Audit Report) were effected at the instance of Audit.

CHAPTER II: MINISTRY OF DEFENCE

2.1 Delayed acquisition of armaments for a frontline fighter aircraft

The Indian Navy (IN) followed a flawed approach in acquiring its new fighter aircraft fleet by not finalising the associated weapon package with the contract for the aircraft. 11 out of 16 MiG 29K aircraft, acquired at a cost of USD 740.35 million, (₹ 3405.61 crore) have been delivered in December 2009 and May 2011. No item of armament contracted for in March 2006 has been delivered as of October 2010 adversely affecting the operational capabilities of the aircraft. Further, the IN has selected a BVR missile with an unsatisfactory track record. Lastly, the complete armament package finalised for the aircraft contains certain ammunitions worth USD 20.98 million (₹ 93.68 crore) which did not have the approval of the competent authority.

Under the aegis of the Inter Governmental Agreement (IGA) signed by the Government of India with the Government of the Russian Federation in October 2000 for procurement of an aircraft carrier along with deck-based aircraft for onboard operations, the Ministry of Defence in January 2004 concluded a contract with Russian Aircraft Corporation "MiG" (RAC-MIG) for procurement of MiG 29K aircraft.

A chronological summary of the procurement process for MiG 29K aircraft and weapon equipment package is tabulated below.

Sl. No	Date	Event	Financial Implication	Remarks
1.	October 2000	IGA for procurement of aircraft carrier(INS Vikramaditya) with deck-based aircraft	-	-
2.	February 2003	Selection of MiG 29K for INS Vikramaditya by Indian Navy	-	-
3.	January 2004	CFA approved procurement of 16 MiG 29K	USD 740.35 million (₹ 3,405.61 crore[1])	Contract signed on 20 January 2004 (without associated armament package)

[1] 1 USD = ₹ 46

4.	January 2004	CFA approved un-negotiated armament package	USD 139.48 million (₹ 641.59 crore[2])	Approval of the competent authority was obtained on the armament package on a "cost not exceeding" basis without deliberating on the weapon package.
5.	March 2006	Contract concluded for armament package by the Ministry	USD 132.85 million (₹ 593.18 crore[3])	Armament package included procurement of spares, test equipments hitherto not included and reduced quantities of bombs, cartridges from CCS approved armament package.
6.	December 2009	Indian Navy received six aircraft without any weapons/armaments	-	Aircraft delivered not exploited with ammunition.
7.	May 2011	Indian Navy received five more aircrafts	-	Aircraft are likely to be inspected by Navy between August and October 2011 for acceptance

Mention has already been made in paragraph No.2.2.3.4 of the Report of the C&AG of India, No.7 of 2010-11 that the delay in delivery of the aircraft was attributable to the fact the aircraft prototypes along with the weapon and equipment fit were yet to be proved and certified by the Russian Certification Agencies. Audit further reviewed the acquisition of the weapons package complement for the MiG 29K aircraft.

I. Procurement of aircraft sans armaments

The Defence Procurement Board in February 2003 approved the selection of MiG 29K as the deck-based aircraft for INS Vikramaditya (aircraft carrier). After receipt of the approval, given the necessity to dovetail the arrival of the aircraft with the induction of the aircraft carrier, Naval HQ began negotiations for the aircraft due to their longer delivery schedule as compared to the armament package. Indian Navy was guided by assurance given by RAC MiG, the Russian vendor that the weapons would be supplied within 18 - 24 months. Deliberations on the weapon package were, thus, postponed and delinked from the negotiations for the aircraft and it was decided to include an armament

[2] 1 USD = ₹ 46
[3] 1 USD = ₹ 44.65

package on a "cost not exceeding" basis in the proposal mooted for obtaining approval of the Competent Financial Authority (CFA).

Thus, approval of CFA was obtained in January 2004, for the procurement of 16 MiG 29K aircraft at a cost of USD 740.35 million (₹ 3,405.61 crore[4]) with the armament package still under finalisation at an un-negotiated cost not exceeding USD 139.48 million (₹ 641.59 crore). The Ministry concluded a contract with RAC-MiG in January 2004, for procurement of 16 MiG 29K at a cost of USD 740.35 million without an associated weapons package. Thereafter, Naval HQ (February 2004) sought the Ministry's approval for initiating negotiations for procurement of armaments for the MiG 29K fleet. The Ministry, in July 2005, approved undertaking of negotiations with RAC-MiG but was critical of the approach to buy an aircraft without its weapons.

Though, as mentioned above, decision to delink the negotiation for the armament and aircraft was based in part upon the assurance given by the RAC MiG that the weapons would be supplied within 18-24 months, the contract ultimately signed had a delivery period of 49 months. Thus, even though delivery of MiG 29K was delayed by more than two years, failure to freeze requirements and conclude the contract resulted in the fighter aircraft being delivered and exploited without ammunition.

Audit noticed that in December 2009, Indian Navy received six aircraft without any weapons/armaments. Subsequently, in May 2011 Indian Navy received five more aircraft, which are likely to be inspected by Navy between August and October 2011 for acceptance. Audit further noticed that till October 2010, Indian Navy has received (in November 2009) only one system, meant for preparation of weapons, out of the total 26 items contracted for. The 18 different types of armaments, six items of spares and one type of operation and maintenance publications are also yet to be received.

II. Determination of Armament Package and its rationalisation

The weapon fit for MiG 29K approved by the CFA in January 2004 at a cost not exceeding USD 139.48 million was for the first stage which caters to the needs of the first batch of 16 aircraft for a period of four years and included a tentative list of 14 different types of munitions and two systems[5]. The list did not include the requirements of critical items such as spares, ground support

[4] 1 USD = ₹ 46

[5] Erlan 2 information system and OKA-E1 system

equipment, test equipment etc. As a result, RAC-MiG, in August 2005, submitted a commercial quote of USD 138.08 million, which did not include training documentation, ground support equipment, spares and training weapons. Since these items were considered essential, the Navy then undertook an exercise to ascertain the requirement of support facilities for fully exploiting the armament package. These requirements were communicated to RAC-MIG during technical discussions.

However, this obviously entailed higher expenditure. Given the CFA approved ceiling and the fact that Indian Navy had imprudently worked out the details of the weapons package prior to seeking approval, a rationalisation exercise to cut costs by restricting quantities was undertaken. Out of these 16 items, two items were deleted from the list. After deletion of the two items, namely a logistic management system (ERLAN-2) and S-24 rocket (costing USD 4.51 million) from the CFA approved cost of USD 139.48 million, a sum of USD 134.96 million only was available for induction of armaments.

Post-rationalisation, the quantities of three different types of bombs approved by the CFA in January 2004 were reduced by 37.50, 43.75 and 15 *per cent* respectively. To realize full scale of armaments, procurements would have to be made in future which will entail higher costs.

Audit also noticed that the contract concluded by the Ministry in March 2006, *inter alia,* included procurement of spares, test equipment and increased quantities of approved armament worth USD 20.98 million (₹ 93.68 crore[6]), which were not envisaged at the time of seeking approval of CFA. The procurement of additional items which did not carry CFA approval was worked out, within the cost ceiling approved by CFA, by reduction in quantities of certain ammunitions.

III. Serviceability of Missiles is suspect

A critical armament for the MiG 29K aircraft is a BVR missile, which augments the 'Beyond Visual Range' capability of the aircraft. The missile "X", one such BVR missile was acquired by the Indian Air Force between 1999 and 2002. However, the serviceability status of the missile, in evidence prior to the Navy contract of March 2006, has been poor as brought out in paragraph No. 3.2 of the Report of the C&AG of India, No. CA 18 of 2008-09.

6 1 USD = ₹ 44.65 as on March 2006

High rate of unserviceability was noticed by IAF since 1999 from the first lot of missiles received. By November 2005, IAF decided against refurbishing the missiles "X" after life expiry and started considering a suitable replacement for future procurements. Nonetheless, Indian Navy concluded the contract in March 2006 for supply of armaments for MiG 29K aircraft which, *inter alia,* catered for supply of 40 Air to Air missiles (Missile "X") at a cost of USD 21.88 million.

Audit noted that there was a delay of 51 months in finalising the weapon package for MiG 29K aircraft, Indian Navy failed to adopt an integrated approach to utilise the data/knowledge base of IAF and consequently ended up by procuring 40 missiles worth USD 21.88 million (₹ 97.67 crore[7]) whose serviceability has been found unreliable by the IAF.

Thus, the Ministry modified the decision of CFA by decreasing the quantity of approved armament and procured additional items worth ₹ 93.68 crore which were not envisaged at the time of seeking approval of CFA to sustain within the financial ceiling. Further, Indian Navy procured Air to Air missiles (Missile "X") costing USD 21.88 million which had a track record of poor serviceability for which the IAF is seeking replacement since November 2005.

The matter was referred to the Ministry in November 2010; their reply was awaited as of July 2011.

2.2 Extra expenditure on procurement of Low Level Transportable Radar

Acquisition of critical Low Level Transportable Radars was considerably delayed besides additional expenditure of ₹ 57 crore without justification.

Air Defence (AD) is critical to the nation's security both during war and peacetime. Successful air defence is dependent upon four cardinal capabilities i.e. detection, identification, interception and destruction. It is imperative that an AD system incorporates radars of appropriate type in adequate numbers as the detection capability is attained through AD radars.

[7] 1 USD = ₹ 44.65 as on March 2006

In 1982, the Indian Air Force (IAF) reviewed its requirements for high, medium and low level radars to ensure effective radar surveillance from 50 meters upwards. In order to provide a credible low level detection capability[8], the IAF put up a proposal to acquire 37 Low Level Transportable Radars (LLTRs), which was approved 'in principle' by Raksha Mantri in January 1998. Ministry initiated procurement process on four occasions between March 1998 to February 2002 and finally concluded two contracts in July 2009. While one contract was concluded with M/s. Thales, France (OEM[9]) for procurement of six Fully Furnished (FF) LLTRs along with communication and associated equipments and breakdown kits for 13 radars along with Transfer of Technology (ToT) at a total cost of ₹ 572.20 crore. The other contract was concluded with M/s Bharat Electronics Limited, Ghaziabad (BEL) at a total cost of ₹ 699.54 crore for manufacture and supply of the 13 LLTRs from breakdown kits supplied by OEM along with communication and associated equipments. Audit scrutiny of the acquisition revealed the following:

I. Inordinate delay in finalisation of contract

The Raksha Mantri (RM) accorded 'in-principle' approval in January 1998 for procurement of 37 LLTRs in two phases, i.e. 19 LLTRs to be procured in the 9th Plan (1997-2002) and the remaining 18 LLTRs in the 10th plan (2002-07). Although Requests for Proposal (RFP) for 19 LLTRs were issued by the Ministry on four occasions in March 1998, February 2001, July 2001 and February 2002, yet the acquisition process had to be aborted each time due to changes in the requirement of ToT and lack of transparency as indicated below:

Sl. No.	Month of Issue	Extent of ToT in RFP	Reasons for cancellation
Ist RFP	March 1998	None	Due to anonymous complaints.
IInd RFP	February 2001	Full ToT	Scientific Advisor (SA) to RM was in favour of only limited ToT for repair and maintenance facilities not for manufacture as it would affect their indigenous R&D efforts. RFP with full ToT was cancelled.

8 Detection of enemy air strikes flying at low level to avoid early detection and execute a surprise attack

9 OEM – Original Equipment Manufacturer

IIIrd RFP	July 2001	Limited ToT for mainte-nance only	SA to RM agreed to procurement and manufacture of LLTRs through full ToT route. RFP with limited ToT was cancelled.
IVth RFP	August 2002	Full ToT	Representations were received from Israel's side and from other dignitaries regarding rejection of M/s ELTA offer. The case was re-examined and the entire procurement process was cancelled in May 2004 by RM.

In October 2005, as per the Defence Procurement Procedure (DPP), the Defence Acquisition Council approved the procurement of 19 LLTRs under 'Buy and Make' with ToT and the balance 18 under 'Make category'. However the two contracts were finally signed only in July 2009. Procedural hurdles in finalisation resulted in pre-contract process taking up more than four years after re-establishment of requirement in June 2005. The details of timelines actually taken for the procurement *vis à vis* timelines contemplated in the DPP-2005 were as under:

(in months)

Sl. No.	Activity	Time to be taken as per DPP-2005	Actual time taken
1.	Acceptance of Necessity(AON)	1	5
2.	Request for Proposal	4	11
3.	Technical and Field Evaluation	17	19
4.	Technical Oversight Committee recommendation	1	4
5.	Commercial Negotiation to finalization of contract	6	10
	Total Time	**29**	**49**

As against the envisaged time of 29 months, the procurement took 49 months due to delay in each stage. This apart, with the two contracts being signed only in July 2009, the entire process took more than 11 years. Air Headquarters (Air HQ) while admitting that there was a void in the air defence, stated in September 2010 that remedial actions have been taken to ensure the best possible air defence surveillance with the existing radars and the induction of Aerostat has also alleviated the situation. Air HQ reply is not tenable as out of two Aerostat commissioned in March 2007 and November 2008, one is non-functional since May 2009. Moreover, while projecting the requirement for LLTRs, Air HQ had emphasised that the requirement of LLTR would continue to exist in spite of the acquisition of Airborne Warning and Control System (AWACS) and Aerostat.

Ministry in its reply (January 2011) attributed the delay in procurement of LLTRs to lack of agreement over ToT and complaints, leading to finalization of contract only in July 2009. However, fact remained that every step in the contract finalization process had taken additional two to seven months and the actual time taken between AON leading to signing of the contract in 49 months as against the stipulated 29 months. Ministry further stated that IAF had taken remedial measures by deploying available radars. Reply was not tenable as the radars deployed by IAF in the absence of LLTR's were either 2D radars, obsolescent or had very low detection range.

II. Extra expenditure in procurement of support equipments

The fourth RFP issued in February 2002 was cancelled in May 2004 after reaching the stage of Commercial Negotiations with OEM and BEL. As per the negotiations, BEL was to finalize details of the payments with OEM. Thereafter, contract was to be finalized between BEL and Ministry. In August 2003, BEL offered a total package cost of ₹ 789.438 crore including ₹ 388 crore (equivalent to 74.0528 Million Euro[10]) payable to Thales on the premise that the total order package alongwith associated equipments for 19 LLTRs (with 3D specification) would be placed on BEL and BEL in turn would place an order on Thales for the total package including cost of ToT, Training, Documentation, Spares Package and Depot Level Repair Facility. After cancellation of this RFP, Ministry finally concluded two contracts in July 2009 with Thales and BEL. Audit compared the two contracts with Thales and BEL in 2009. Rate comparison of support equipments in respect of the two

[10] 1 Euro = ₹ 52.50

contracts concluded in July 2009 with M/s Thales and BEL revealed wide variation ranging from 18 to 201 *per cent* in respect of 12 out of 16 items having identical specification. Cost of equipment charged by BEL was substantially higher than the cost charged by M/s Thales, which led to an additional avoidable expenditure of ₹ 57.46 crore (as shown in the table below) to BEL:

(₹ in lakh)

Sl No	Items	Unit cost (Thales) contract	Unit cost (BEL) contract	Diff-erence	Qty purch-ased	Variation in per-centage	Extra cost per radar
A	**B**	**C**	**D**	**E (D-C)**	**F**		
1.	Lorry 3 Ton 4x4	15.28	18.24	2.96	1	19	2.96
2	Station wagon 4x4	7.28	9.41	2.13	2	29	4.26
3	Car 5 CWT	5.87	8.30	2.42	1	41	2.42
4	Motor cycle 100 cc	0.44	0.58	0.14	1	30	0.14
5	Bicycles	0.02	0.03	0.01	1	50	0.01
6	Trailers	2.83	3.50	0.67	7	23	4.69
7	Tentage	55.79	88.06	32.27	1	58	32.27
8	Mobile kitchen	15.28	33.89	18.60	1	121	18.60
9	Fork lifter	9.64	12.45	2.81	1	29	2.81
10	Set of surveillance equipment	88.01	103.54	15.53	1	18	15.53
11	Mobile toilets	2.29	6.92	4.63	1	201	4.63
12	Communication shelter	431.16	784.88	353.72	1	82	353.72
			Total				**442.02**
			Extra cost for 13 radar				**5,746.52 lakh**

Thus, the support equipment directly procured from foreign OEM was more economical. M/s BEL, a DPSU sourced these equipment from OEM but charged an exorbitant mark up. Clearly, Ministry during commercial evaluation and negotiation stage overlooked this aspect leading to an extra expenditure of ₹ 57.46 crore.

Ministry in its reply justified the additional payment to BEL towards procurement of support equipments on the plea that the offered package cost of M/s BEL was cheaper than the OEM and the benchmarked cost. Giving a reference of DPP 2005, Ministry further stated that once the commercial offer are opened and the quoted price of the vendor were found within the benchmark fixed, then there should be no need to carry out any further price negotiation.

However, Ministry's reply is not acceptable as DPP provisions do not prohibit Commercial Negotiating Committee (CNC) for effective negotiation and comparison of prices offered by OEM as well as BEL, for achieving greater economy in public spending. The offer of M/s BEL, a Defence Public Sector Undertaking (DPSU), being the designated agency was not based on competition, but was result of nomination, which called for rigorous price negotiation. This was possible particularly when the quote of M/s BEL to Ministry was available after receipt of the offer of M/s Thales. Thus, Ministry ought to have compared M/s BEL's rates with those of M/s Thales so that the difference of ₹ 57.46 crore for supply of identical equipments, over what was charged by M/s Thales, within a comparable period, could have been addressed and strict economy enforced.

Thus, a critical requirement of air defence surveillance could not be fulfilled even three decades after it was first thought necessary due to frequent changes in the requirement of ToT as well as delay at each stage in the pre-contract finalization process. Further, additional expenditure of ₹ 57 crore was incurred by the Ministry without justification. The shortfall in the holding of LLTR would impact adversely the Air Defence cover against low flying aerial threats.

2.3 Extra expenditure on operation of a surveillance system

To meet low level surveillance requirement, IAF procured two Aerostat systems at the cost of ₹ 676 crore. Due to inadequate weather monitoring, one of the Aerostat met with an accident and became non operational since May 2009. Besides, the fabrics used in both the systems have also started decaying prematurely causing recurring extra expenditure on operation.

For air surveillance, four types of platforms *i.e.* static ground based, vehicle mounted mobile, aircraft and elevated platform (Aerostat) are used. To meet low level surveillance requirement, Aerostat based radars are considered useful. Aerostat radar is an Aerial Early Warning System consisting of four dimension array radar, communication intelligence and electronics intelligence equipments installed in a large helium filled aerodynamically shaped balloon. It can operate at an altitude of approximately 15,000 feet above sea level and can support payload consisting of radar capable of detecting a low flying fighter sized aircraft up to 250 km and SIGINT system capable of gathering signal intelligence. Aerostat is also a weather intensive system. Apart from the positioning of operational and maintenance manpower, Aerostat operating unit has an approved establishment of meteorological manpower for enhancing forecasting of weather phenomena for safe Aerostat Operation.

In 1996, Indian Air Force (IAF) worked out the requirement of six Aerostat system to provide gap free low level surveillance coverage over the large areas. To meet immediate critical requirement, it was proposed to procure two systems initially. Based on the CCS approval, Ministry, in March 2002, concluded a contract with M/s Rafael, Israel for supply and installation of two Aerostat based surveillance system at a total cost of USD 145 million (₹ 676 crore). Each system comprised of two subsystems i.e. Payload (electronic equipment) supplied by M/s Rafael and Aerostat Balloon supplied by M/s TCOM of USA to Rafael. M/s Rafael as the prime vendor was to provide product support for both the sub-systems. The Systems were commissioned in March 2007 and November 2008 at two Aerostat Units at site "A" and site "B" respectively. Audit examined the operation and maintenance of the systems since commissioning and noticed the following:

I. Non-availability of the system for operational role

The Aerostat System was commissioned at Aerostat Unit 'A' in March 2007. The maintenance schedule of Aerostat system involves activities like change of ropes, inspection of payloads/sensors, checking of the helium leakage and fabric conditions etc. The SOP[11] for 'snubbing'[12] required light wind conditions, that weather changes were to be watched at all time, the wind direction was within limits and thus required continuous monitoring. Accordingly, the Aerostat Unit "A" had authorised posts of four Meteorological officers and nine posts of Meteorological Assistant.

As against the authorization of four Meteorological officers and nine Meteorological Assistants the unit had no Meteorological officer and only two Meteorological Assistants in position. Inadequate manpower at the unit resulted in failure to continually monitor the development of clouds/changes in winds direction and the Aerostat balloon along with its airborne payload met with an accident in May 2009 and was damaged substantially, while under planned maintenance by IAF personnel.

Based on a Court of Inquiry constituted to investigate the accident of the Aerostat, three officers were held responsible for their failure in adequate supervision of the ongoing snubbing activities and follow up on maintenance

[11] SOP - Standard Operating Procedure
[12] Snubbing period - Restraining of Aerostat to carry out maintenance activity

activities being carried out in the unit. Further, *inter alia,* it observed that there was failure to continually monitor the development of cloud, updation of weather activity in the area, in adequate cautioning Duty Flight Director on the likelihood of wind direction change which had an indirect bearing on the accident. Based on these findings, all the three officers were awarded severe displeasure for six months. The officers thus failed to carry out their responsibilities which led to the accident of the Aerostat costing ₹ 338 crore.

The repair of damaged system is estimated to cost US$ 63 million (₹ 302 crore)[13]. The recovery programme[14] of the damaged Aerostat would take 18 months from the commencement of repair work. However, Air HQ / Ministry of Defence could issue RFP to vendor for damage assessment in April 2010 only and the contract is yet to be concluded (June 2011).

Air HQ stated, in August 2010, that though the case for posting of Meteorological officers was referred to Directorate of Meteorology, it was opined that due to acute shortage of officers, Met officers had to be posted at flying stations, to meet the day to day requirements. It further added that the strength of Meteorological Assistants at Aerostat Units has been increased from three to five which would be adequate to meet the requirements. Despite increasing the strength of Meteorological Assistants from three to five, their strength is still below the sanctioned strength of nine Met Assistants at the unit. This coupled with non posting of Met Officers at the units is a severe constraint in their functioning.

Ministry in its reply (January 2011) attributed the accident to failure to continually monitor the development of clouds during snubbing period of the Aerostat and stated that instructions have been issued to Aerostat Units to be extra vigilant during weather sensitive activities. It further added that posted establishment of Met officers *(i.e.* 57 *per cent* of sanctioned strength) in IAF is barely enough to cater to requirements of flying stations. Ministry's reply confirms the shortage in positioning Met Officers which was a mandatory requirement as Aerostat is a weather intensive system and any mishap not only affects surveillance capability of IAF but also has huge cost implications.

II. Excessive leakage of helium

The life of an Aerostat is 10 years from the date of inflation. The vendor in its technical proposal assured full life by citing various safety and testing factors

[13] 1 US$ = ₹ 48
[14] Recovery Programme= Consist of Damage assessment and repair

undergone by the Aerostat. However numerous problems were noticed in the Aerostat at both the locations.

In the case of Aerostat Unit 'A', it was observed:

- Aerostat fabric started showing signs of decay after third year of operational life/inflation.
- The helium leakage had increased from the specified 30 lbs/day to 140 lbs/day (August 2008) due to development of cracks in fabric.
- Aerostat flight duration in air ranged from 3 to 24 days as against prescribed 28 days per month between April 2008 and April 2009.
- The average height also remained less than 10,000 feet as against the desired altitude level of 15,000 feet.

In the case of Aerostat Unit, 'B', it was observed that:

- Aerostat fabric started showing signs of decay in the fourth year of inflation life.
- The helium leakage had increased from specified 30 lbs/day to 170 lbs/day (January 2010) due to development of cracks in fabric.
- The average flight duration was 20 days in a month as against prescribed 28 days each month during the period from November 2008 to February 2011.
- The lower flight duration was sustained by refilling of helium 3 to 14 times in a month.

Therefore, IAF not only found it difficult to maintain altitude and continuous flight operation of one month impacting aerial surveillance adversely but also incurred extra expenditure of approximately Rupee one crore annually at each site on procurement of helium gas due to excessive leakage.

Scrutiny of the contract agreement revealed that inspite of request from M/s Rafael to enter into a tripartite agreement with M/s TCOM, the OEM of aerostat balloon, which encountered decay in fabric, leakages etc., the Ministry of Defence failed to enter into such an agreement. The absence of such an agreement adversely affected the repair of the aerostat balloon.

While Air HQ stated (August 2010) that M/s Rafael has been approached for reimbursement of the cost of excessive leakage in June 2010, Ministry in its reply (January 2011) stated that under normal operational conditions purity of helium above 94 *per cent* is required to be maintained, achieved by purification process performed twice in a year. Due to excessive helium leakage, necessity of this process has been obviated. Ministry computed the savings of ₹ 18.50 lakh per site due to obviating the purification process.

The reply is not tenable because as per OEM[15] defined purification cycle, the expenditure on purification cycles twice a year per site worked out to ₹ 32 lakh per year whereas cost due to excessive helium leakage at one site alone works out to ₹ 91 lakh[16]. Thus, there was an excess expenditure of ₹ 59 lakh per annum on account of helium leakage for each site even after obviating the purification process.

In sum, a vital surveillance system procured at a cost of ₹ 338 crore remained non-operational since May 2009 and is not likely to be available to IAF for another two years due to its damage in accident attributable to failure in keeping track of weather change. Non-positioning of adequate Meteorological staff, a mandatory requirement, for operation of vital and expensive weather intensive system had safety repercussion on Aerostat system. The case shows improper planning and unprofessional approach on the part of IAF for optimal utilisation of a system that was procured at a huge cost. By the time system will be made operational *i.e.* by 2012, at considerable expenditure of ₹ 302 crore, 80 *per cent* of its prescribed life would be over. In the meantime, operational preparedness would also be impacted adversely. Besides, the operation cost of the other system has also increased due to excess leakage of helium as the fabric used in the system is decaying prematurely.

2.4 Procurement of unsuitable communication sets

Ministry / IAF accepted communication equipment, designed and developed by HAL, even though the equipment did not meet technical requirements. As on date, IAF's critical requirement of jam-resistant and secure radio sets has not been met even after spending ₹ 116 crore and considerable period of time.

Air Defence V/UHF[17] communication links play a vital role in all air operations. The radio sets available with the Indian Air Force were scheduled to be phased out by 2004. In order to meet this replacement requirement and other future needs the Ministry of Defence sanctioned, in March 1993, a project for designing and developing two each airborne and ground-based

[15] OEM - Original Equipment Manufacturer
[16] One of the sites became non –operational due to accident.

[17] V/UHF - Very/Ultra High Frequency

secure V/UHF (INCOM) R/T[18] sets at a total cost of ₹ 2.62 crore by M/s HAL[19] Hyderabad. As per the sanction, the IAF was to share 50 *per cent* of the development cost amounting to ₹ 1.31 crore. HAL was to offer airborne sets to IAF for flight trials by June 1994 and ground-based sets for trial by March 1995. The INCOM airborne sets were planned for equipping different types of aircraft in IAF with the aim of indigenisation, uniformity and inter changeability of sets.

The R/T sets so developed were to be as per JSQRs[20] formulated in March 1987. As V/UHF links/networks are susceptible to electronic counter-measure and, thus, vulnerable to deliberate interference and jamming by the enemy, the INCOM sets to be developed were expected to be 'jam- resistant'. However, during the development stage itself, certain concessions in specifications were granted by Air HQ in view of technological constraints. Based on the performance of the system during laboratory evaluation, IAF accepted the INCOM airborne radio sets in 1996 and signed a contract with M/s HAL in March 1997 for supply of "X" number INCOM sets for aircraft "A" at a total cost of ₹ 70.89 crore. HAL sought more concessions in 1999 and 2001 to facilitate completion of the certification process and for clearance of system for flight trials. The delivery of the sets for the aircraft "A" fleet continued till 2004 during which time evaluation trials revealed poor performance and unreliability of the system with respect to range, inter-frequency interference, software and frequent breaks in communication.

Despite being aware of these unsatisfactory trial results and the fact that the INCOM sets were expected to be used in a highly sophisticated environment in the future for data linking and for communication with an airborne warning system, five more contracts were signed between July 2003 and March 2006 by Ministry with HAL for induction of "Y" number INCOM on various aircraft fleets at a cost of ₹ 45.24 crore with temporary concessions. These concessions were to be made good subsequently during further development process. Most of the sets have been supplied between March 2004 and July 2010.

Audit observed that the performance and reliability of the newly delivered sets was also far below the requirements of IAF. Contracted specifications in the area of frequency range, speech secrecy and anti jamming etc, considered vital for flight safety of combat fleet, have not been met. This has led to aborted

[18] R/T - Radio/Telephone
[19] Hindustan Aeronautics Limited
[20] JSQRs - Joint Staff Qualitative Requirements

missions, potentially unsafe situations in the air and low aircraft availability. The ECCM[21] modes have not been proven to be satisfactory on any aircraft.

HAL failed to rectify these defects and instead stated, in May 2008, that they had reached the limit of their technological capability to develop the sets any further. HAL, therefore, sought a permanent waiver to the deviations from the JSQRs. HAL also indicated that existing deviations of INCOM sets were due to system-architectural limitations and could not be corrected without total redesign. This would be equivalent to a *de novo* development cycle. The development project was closed in 2008.

IAF stated (February 2009) that the below-par performance of the INCOM had been adversely affecting operations on aircraft fleets where the INCOM is installed. As the INCOM sets have not been able to meet the entire replacement requirement for the existing radio sets, in the mean-time, IAF continues to use the obsolescent radio sets which have outlived their life. Air HQ accepted, in February 2010, that operations are adversely affected due to continued use of the existing sets as they are unreliable and can no longer be maintained due to non-availability of spares.

Accepting the facts, Ministry, however, stated in December 2010 that the entire expenditure of ₹ 116 crore could not be treated as unfruitful as the INCOM sets continued to be used on aircraft albeit with reduced capability. Ministry's reply is not acceptable as the main requirement of the IAF was to replace the V/UHF R/T sets with INCOM system having secure and jam resistant feature. This was to be met by incorporating ECCM capability consisting of encryption/decryption system. Since the airborne system supplied by HAL did not have ECCM feature, the very purpose of inducting the system has been defeated. Thus, even after spending ₹ 116 crore and a considerable period of time, the INCOM equipment developed could not meet the IAF requirement of jam-resistant and secure radio sets rendering the entire expenditure unfruitful.

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21 ECCM= Electronic Counter Counter Measure

2.5 Abnormal delay in procurement of Precision Approach Radar

Protracted negotiations for procurement of Precision Approach Radar delayed its availability to a Naval Unit for over eight years. The negotiations were also not fruitful in achieving any price reduction as Navy ultimately ended paying ₹ 2.01 crore more for the radar.

The Ministry of Defence (Ministry) promulgated the 'Fast Track Procedure (FTP)' in 2001 in order to ensure expeditious procurement for urgent operational requirements. The time frame envisaged under the FTP from the initiation of proposal to contract signing is three and a half to five months.

A Precision Approach Radar (PAR) is an important navigation equipment which is used for guiding the aircrafts for landing on the runway. It is an essential aid as the existing fighter aircraft of the Indian Navy are not equipped with airfield/runway approach instruments and thus, require to be 'recovered', both during day/night and bad weather using ground-based radars. The requirement of PAR is all the more essential in inclement weather when the visibility is low. A PAR, commissioned at INS Hansa in 1991, was rendered unserviceable since 1999 due to ageing and non-availability of spares. HAL[22], the OEM[23], was unable to repair the radar and indicated in March 2000 that the process would be uneconomical since the reliability of the radar could not be established. Thereafter, a Board of Officers, in November 2000, declared the radar as beyond economical repair and recommended its replacement. The Ministry of Defence, in September 2001, approved the procurement of one PAR on "Fast Track Basis" as a replacement for the existing PAR at INS Hansa.

I. Delay in contract conclusion and increase in cost

The Ministry, in March 2002, concluded a contract with HAL, Hyderabad for supply of 17 PARs at a unit cost of ₹ 11.09 crore to meet the requirements of Indian Air Force. This contract included an option clause according to which the purchaser could purchase an additional system within 18 months before the end of the production deliveries in the contract. Audit observed that the 'option' clause did not mention the price at which the option would be

[22] Hindustan Aeronautics Limited
[23] Original Equipment Manufacturer

exercised. The 'option' clause merely provided that the purchaser shall have an option for procurement of additional system, but stipulated that the cost thereof would have to be negotiated and agreed to by both parties. The Navy decided to include its PAR requirement in April 2002, on the grounds of criticality and urgency, under the option clause of the contract concluded by the Ministry in March 2002.

In turn, HAL, in May 2002, submitted their budgetary quote at ₹ 13.23 crore for the radar. A PNC[24] was held in October 2002 during which the Committee opined that since HAL was now supplying 18 sets of PARs to the Ministry of Defence, it should obtain price advantage with the foreign supplier. The PNC also held that HAL should supply the PAR to Navy at the contract price of ₹ 11.09 crore, if not less. HAL, however, did not agree to make supplies to Navy at the IAF rates, owing to variation in exchange rate of Euro since the time of their conclusion of contract with IAF. Audit noted that the increase of ₹ 2.14 crore in the quote for supply of PAR to Navy could not be justified on grounds of FE variation alone, as this amounted to only ₹ 0.50 crore[25]. When HAL was asked to review their price for the radar and submit their revised proposal, HAL (January 2003) revised their quote upward for the radar to ₹ 14.92 crore. Another PNC held in April 2003 also proved to be inconclusive as HAL stuck to their prices. HAL was reluctant to supply PAR to Navy at their quote to IAF because costs like wage revision, idle hours, gratuity etc. are reimbursed by IAF additionally to HAL directly. Clearly, Ministry could neither effectively formulate and exercise option clause nor effectively intervene to ensure that HAL, a DPSU set up for Aviation needs of the country, fulfils the needs of Navy, timely and at reasonable cost. Thereafter, Navy revised its negotiating stand and suggested that HAL should waive the 10 *per cent* profit included in the prices quoted and the Ministry in June 2003 took up the case for omission of 10 *per cent* profit from the price quoted by HAL. In April 2004, HAL, submitted a revised offer of ₹ 15.81 crore. In April 2004, the proposal was de-linked from the IAF contract and a PNC held in the same month worked out a mutually agreed price of ₹ 15.24 crore which was exclusive of any profit.

The Ministry, in October 2004, accorded sanction for the procurement of PAR, from HAL, Hyderabad at a cost of ₹ 15.24 crore (inclusive of spares and services).

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[24] Price Negotiation Committee

[25] The exchange rate of Euro vis-à-vis a `registered an increase ₹ 2/- in the intervening period i.e ₹ 43/- per Euro to ₹ 45/- per Euro.

Thus, the inclusion of an option clause that provided for negotiation and the resultant inflexible stands of Ministry and HAL led to a stalemate. This resulted in delay of about 30 months in finalisation of contract with a consequential extra expenditure of ₹ 2.01 crore. Against the FTP prescribed timelines, the contract finalisation was delayed by almost four years.

II. Avoidable Payment of ₹ 0.87 crore

It was further seen that the rate (₹ 15.81 crore) quoted by HAL Hyderabad in April 2004 for supply, installation and commissioning of radar at INS Hansa which, *inter alia,* included a profit element @ 10 *per cent* amounting to ₹ 1.44 crore and ₹ 0.03 crore for installation and commissioning. The PNC held in July 2004 worked out a mutually agreeable price of ₹ 15.24 crore for the radar, which was exclusive of profit. Audit noted that though the PNC apparently achieved omission of the profit element of ₹ 1.44 crore yet cost of installation and commissioning of the radar was increased from ₹ 0.03 crore to ₹ 0.90 crore for which no transparent reasons were recorded, leading to an avoidable payment of ₹ 0.87 crore to HAL.

Accepting the facts, the Ministry, in February 2011, stated that though HAL agreed to waive off the profit element, yet the price for installation and commissioning of the system and subsequent assurance of product support for 20 years was still required to be paid to HAL, thereby, resulting in increase of cost. The contention of the Ministry is not tenable as the element of 'other charges' was neither quoted by HAL in any of their quotations nor was this issue discussed in any of the PNC meetings.

III. Radar is defect-prone

HAL supplied the radar in October 2008 and commissioned it at INS Hansa in April 2009. Thus, the requirement of a PAR, at INS Hansa, though felt way back in 2000 and sanctioned by the Ministry for procurement on 'fast track basis', could materialise only in 2009. The Ministry accepted that the Military flying during the interim period (October 2008 – April 2009) was undertaken utilising other navigational aids at the Air Stations with certain operating restrictions during periods of bad weather/poor visibility.

The performance of the PAR commissioned in April 2009 has also not been defect free. It was noticed that there was recurrent failures in the channels of radar, which resulted in despatch of parts of radars to the OEM. Ministry also admitted that the radar has continued to experience defects post its commissioning in April 2009.

The case relating to 'fast track' procurement of Precision Approach Radar by the Indian Navy revealed that on account of an open ended option clause and non-intervention by Ministry for speedy supply of radars to Navy by HAL the procurement process was inordinately delayed and resulted in an additional expenditure of ₹ 2.01 crore over and above the initial quote. Inadequate scrutiny in Integrated Headquarters, Ministry of Defence (Navy), contributed to an avoidable payment of ₹ 0.87 crore towards 'Other charges' in the total additional expenditure of ₹ 2.01 crore. The radar intended to be purchased on fast track basis was commissioned in April 2009, eight years after initiating the procurement process.

2.6 Avoidable expenditure in procurement of Naval Stores

Failure on the part of MO, Mumbai to exercise the option clause for repeat procurement of VLF-HF Receiver led to an avoidable expenditure of ₹ 68.95 lakh.

The Ministry, in March 2008, concluded an agreement with M/s Bharat Electronic Limited (BEL) for supply of 204 VLF-HF Receiver (with MSK attachment, accessories and associated equipments) at a cost of ₹ 32.96 crore (excluding taxes). The agreement, *inter alia*, provided that the buyer had the right to place another order on the seller for purchase of additional 50 *per cent* quantity at the same cost, terms and conditions, on or before 12 months from the date of agreement.

In February and March 2009 when the agreement was under execution, Material Organisation (MO), Mumbai placed two purchase orders on BEL for supply of 11 and 13 sets of VLF-HF at a cost of ₹ 1.90 crore and ₹ 2.75 crore respectively.

Audit noticed, in May 2010, that:

- MO, Mumbai, though being the main procurement agency for the naval stores and equipments for naval formations, failed to exercise the option for placing a repeat order on BEL, in terms of the agreement of March 2008, and instead resorted to an independent procurement.
- The rates accepted by MO, Mumbai in the two purchase orders were higher by ₹ 28.64 lakh and ₹ 40.31 lakh (including 12.5 *per cent*

VAT)[26] *vis à vis* the rates accepted by the Ministry in March 2008. This resulted in an avoidable expenditure of ₹ 68.95 lakh. MO, Mumbai accepted, the audit finding in August 2010.

The matter was referred to Ministry in December 2010; their reply was awaited as of July 2011.

2.7 Delay in procurement of urgent aviation stores through Indian Embassies

Procurement of critical and urgent aviation stores/spares through Indian Embassies abroad was beset with delays. The Air Wings did not demonstrate due diligence in inviting commercial offers from prospective vendors and in concluding the contracts after receipt of expenditure angle sanction from Air HQ. Even the decision-making at Air HQ was slow and led to delay in conclusion of contracts in a number of cases. The contract delivery schedules were significantly longer thereby undermining the urgency of procurement. The vendors failed to meet the contract delivery schedules for which no liquidated damages were levied. The spares support for Advance Jet Trainers was inadequate.

I. Introduction

Procurement of urgent defence stores through Indian Embassies abroad is guided by the Defence Procurement Manual (DPM). The Defence Attachés abroad are required to take immediate procurement action on receipt of urgent indent from the Service Headquarter, either under their delegated financial powers or in consultation with the local IFA[27]. The DPM provides for a time frame of 90 to 180 days for delivery of urgent stores from the date of signing of contract.

II. Scope and audit objective

Audit conducted a selective scrutiny of 55 procurement cases of urgent and critical aviation stores finalised by Air Wings of four major Embassies abroad[28] between November 2007 and June 2010 at a total cost of USD 1.21 million (₹ 6.30 crore). This included scrutiny of nine procurement cases

[26] The actual extra expenditure is worked out after adding 12.5% VAT on the difference in prices of 2008 agreement and February/March 2009 prices

[27] Integrated Financial Advisor

[28] Moscow, Kyiv, London and Paris

valuing ₹ 1.89 crore in Moscow and 17 cases valuing ₹ 2.73 crore in Kyiv for aircraft and equipment of Russian or ex-soviet origin[29]. Besides, 23 purchase orders placed by Air Wing London at a cost of ₹ 1.34 crore to provide material support to Advance Jet Trainers (AJT) and six purchase orders placed by Air Wing Paris at a cost of ₹ 0.34 crore for Embraer aircraft dedicated to VVIP duties were also examined in audit. The purchase transactions were examined to seek an assurance that all the procurements were timely, economical and efficient and met the key criteria of preventing Aircraft on Ground (AOG) situation or cutting down on AOG periods and that the operational commitments of the Indian Air Force (IAF) were not hampered.

III. Audit findings

Audit scrutiny of procurement of urgent and critical aviation stores/spares in four Embassies revealed a number of inadequacies which are discussed in the succeeding paragraphs.

(a) Delay in inviting commercial offers by Air Wings

In 21 out of 27 indents (78 *per cent*) raised by the Air HQ, Air Wing London invited commercial offers from the manufacturer of AJTs (M/s BAE Systems, UK) after a time lag of 02 to 30 days. In case of procurement of two items[30] repeat requests for quotes were issued to BAES after a time lag of 76 days and 138 days respectively. These delays were critical as it had a spiralling affect on conclusion of contracts and timely availability of items. The Ministry stated (July 2011) that at times there had been delays in floating request for proposals due to delay in receipt of indents from the Air HQ through mail bag or receipt of corrupt or incomplete indent details via fax. However, measures have been instituted to ensure that request for quotations are floated on the day of the receipt of the indents. The reply is not tenable as audit referred to the delays that had taken place after receipt of indents from the Air HQ.

Similarly, Air Wing Moscow took 74 days in inviting commercial offers from the prospective vendors for procurement of 10 lines for AN-32 aircraft. No reasons for delay in inviting offers were available on record. The Ministry accepted that there had been delays on the part of the IAF in floating request for proposals.

29 AN-32 aircraft, MI-17 Helicopters, ST-68 Radars and MiG fighters
30 Jack Assy, Main Under Carriage Door and Cable Assy

(b) Limited tendering

Though Air Wing Kyiv has 17 registered vendors, yet in eight out of 12 indents raised by Air HQ (67 *per cent*) Air Wing invited commercial offers only from two[31] suppliers. A limited offer not only precluded competition, it also did not provide a reasonable assurance about the reasonability and fairness of the prices so achieved. The Ministry stated that all efforts are being made by the Air Wing to ensure competitive, fair and viable prices including broadening of vendor base. The name of two additional firms have been recommended to Air HQ for registration with IAF.

(c) Delay in receipt of quotes from vendors

In 16 out of 27 indents (59 *per cent*) BAES submitted quotes after time lapse of 10 to 218 days from date of issue of request for proposal by Air Wing London. The Ministry stated that BAES does not stock majority of items and it has to obtain quotes from its sub-vendors. The Ministry, however, opined that the solution lies in having a long-term product support and pricing contract which was stated to be under consideration.

(d) Delay in according approval by Air HQ

In five out of 17 contracts concluded by Air Wing Kyiv, the Air HQ took at least two to nine months to convey expenditure angle approval or technical suitability of an item, which was significant and led to delay in conclusion of contracts. In particular, for procurement of *Drive of Pump and Fuel Pump* for MiG 29 aircraft, Air HQ took five months to merely convey its approval to the budgetary quotes of the supplier. The Ministry stated that while the delay may appear inexplicable, in reality when cases are referred for technical or pricing clarification a lot of effort is put in. The issue is referred to the concerned Base Repair Depot for a thorough technical appreciation and comments. At times it goes through a couple of iterations, thus, causing delays. While there is no denying the fact that clarification on technical and pricing issues are both vital and time consuming, there is a definite scope for reducing the time frames if viewed in the context of urgency of requirements.

(e) Deficient price negotiation system

The Air Wing Kyiv routinely despatched letters to the short-listed suppliers requesting them to reduce the rates. No minutes of the meeting of price negotiations held with the suppliers were available on record. Against an indent for procurement of *Device UV-454* for ST-68 Radar raised by the Air HQ in October 2008, Air Wing Kyiv negotiated with two vendors *viz.,*

[31] Either M/s Spets alone or M/s Spets and M/s Aviant

M/s Spets Techno Export and M/s Tasko Export. The contract was finally awarded to M/s Tasko Export after 14 months in December 2009 even though the difference between the initial offered price of M/s Spets Techno Export and the final contract price was merely USD 250. The Ministry stated that as per recommendations of audit, Air Wing Kyiv is maintaining the minutes of meetings of price negotiations as well as a diary of action for every indent. It added that all efforts are made to negotiate prices which may not be successful every time due to limited source of supply and vintage of equipment.

(f) Delay in conclusion of contracts by Air Wings

Air Wing London placed only four POs on time (*i.e.,* very next day of receipt of quotes from BAES). The remaining POs were placed after a time lag of two to 11 days (14 cases) and 21 to 40 days (five cases). Delay in awarding contracts after receipt of quotes was not justified. For instance, Air Wing did not exercise adequate discretion to avoid delays in procurement of *Cable Assy* and *Unit Brake*. Audit observed that Air Wing initially held the POs in abeyance as the price quoted by BAES for these two items was on the higher side. However, Air Wing accepted the same prices subsequently and placed POs for these two items after a time lag of seven months and two months respectively. The Ministry attributed the delays, *inter alia*, to time taken in referring the cases to the local IFA. The reply is not tenable as only four out of 23 POs were beyond the delegated financial powers of the Wing that required approval of local IFA and the remaining 19 POs were processed by the Wing within its own powers. The Wing was, therefore, expected to act promptly in decision-making and accorded highest priority to the operational commitments of the Services.

In Moscow, Air Wing concluded three contracts for 22 lines (out of total 33 lines) for AN32 aircraft after an inexplicable delay of 42 to 82 days from the dates of receipt of expenditure angle approval from the Air HQ. In one case, the Air HQ took more than four months to merely answer the query of a vendor regarding the requisite length of the *Hose* to be fitted on AN32 aircraft. Similarly, the contract for *flight data recording units* for Mi17 helicopters was awarded to M/s Aviahelp after a delay of six months in February 2010 even though Air HQ had approved the transaction in favour of Aviahelp way back in August 2009. In another case, Air Wing Moscow unnecessarily kept the procurement of *Spring and Fork Bushing* for Mi17 helicopters on hold for 10 months and took retendering action in July 2010 only after Air HQ enquired about the status of procurement of these two items. Procurement of *Fuel Regulating Pump* for Mi17 helicopters was also delayed by at least eight months as Air Wing initially shortlisted (June 2009) a vendor on the basis of his lowest quotes who, incidentally, did not furnish the requisite OEM[32] certificate, as per condition stipulated in the request for proposal. The contract was belatedly awarded to another vendor (M/s Aviahelp) in February 2010 despite the fact that Aviahelp was the only vendor (out of four) who had submitted the quotes with OEM certificate way back in May 2009.

The Ministry accepted that there had been delays in concluding contracts for Russian spares. It added that procedures have been put in place to minimize the delays. On Procurement of *Fuel Regulating Pump* the Ministry stated that the OEM certificate subsequently submitted by the lowest vendor (M/s Russavia) was found to be invalid and, therefore, the contract was awarded to M/s Aviahelp, the second lowest vendor. The Ministry's reply is not acceptable for the reason that M/s Russavia did not furnish (May 2009) the mandatory OEM certificate along with commercial quotes and, thus, its quotes should not have been considered in the first instance, as per condition stipulated in the request for proposal. The Ministry attributed the delay in procurement of flight *data recording units* to delay in receipt of CFA sanction (November 2009), finalization of draft contract with the vendor and national holidays in Russia on account of Christmas (January 2010). The contract was eventually signed in February 2010. The Ministry, however, did not explain the conduct of Air Wing Moscow for unnecessarily keeping the procurement of other two items (*Spring and Fork Bushing*) on hold for 10 months.

In Paris, POs in five out of six cases were placed after a time lag ranging from 03 days to 96 days from the date of receipt of quotes from M/s Embraer.

(g) Long lead time for delivery

In London, the expected lead time for delivery of critical stores for AJTs varied from 73 days (2½ months) to 465 days (15½ months), which was significantly higher than the lead time of 90 days indicated by Air HQ in the indents or that stipulated in the DPM (180 days maximum). Longer delivery schedules not only undermined the objective of urgent procurement but also raised concerns over the serviceability of aircraft and their sustained availability for pilot training at the air base. The Ministry stated that despite concerted efforts by Air Wing, BAES is unable to supply the items within the stipulated period due to non-receipt of items from their sub-contractors. The Ministry added that the Air HQ through the Ministry of Defence is in the process of finalising a long-term product support program with BAES to ensure uninterrupted supply of spares and consumables within the stipulated time period, as recommended by audit.

[32] Original Equipment Manufacturer

In case of procurement of Embraer spares, while Air HQ intended the stores to be delivered within "four hours" of placement of POs, the AOG priority stores were actually delivered by Embraer after time lag of 01 to 99 days. The lead time for delivery was significant considering that these were single source procurement from the manufacturer of aircraft that has a worldwide customer support network, including one in France. The Ministry stated that "four hours" quoted in the indents is based on the assumption that stocks are available in the warehouse. Such a time frame appears a little unrealistic and unachievable for the reason that if the item is not readily available "off the shelf" the vendor normally quotes a lead time of few weeks for its procurement. The Ministry further added that M/s Embraer had already forwarded a list of suppliers to Air HQ and efforts are afoot to enter into a contract agreement with the suppliers.

(h) Failure to adhere to contract delivery schedules

In six contracts examined by audit for purchase of spares for AN32 aircraft the Russian vendors failed to maintain the original or the extended delivery schedules. Only 10 out of 33 lines were delivered within the schedule indicated in the contracts; 17 lines were delivered/partially delivered after a delay ranging from 17 days to 810 days (27 months); and the remaining six lines were not delivered even after a time lag of 365 days to 870 days (29 months) as of August 2010. Incidentally, no liquidated damages (LD) were levied on the vendors, though provided for in the contracts, for their failure to supply the stores by the dates specified in the contracts. Non-supply of critical AOG items on time admittedly affected the fleet serviceability of AN32 aircraft and hampered the operational commitments of the IAF. The Ministry stated that the firms have been asked to remit the LD amount in respect of all the cases where delays have taken place in delivery of spares.

Likewise, delivery of 10 *Pilot Parachutes* for MiG 29 aircraft contracted on fast-track in September 2008 at a total cost of USD 99,990 was delayed by 53 days for which no liquidated damages were levied on the firm (M/s RAC-MiG). The Ministry stated that M/s RAC-MiG is the only vendor authorized to supply spares for MiG 29 aircraft as per Russian decree. Since the procurement was carried out under General Contract signed between the Russian side and the Indian side in 1999, no LD was levied on M/s RAC-MiG for delay in supply of pilot parachutes, as per provisions of the contract. The fact, however, remains that it took an overall 17 months (April 2008 to August 2009) for the critical demand for this vital flight safety equipment to be met from date of raising of indent by the Air HQ, thereby defeating the very purpose of taking up the procurement on fast-track.

(i) Advantage of minimum order quantity and volume discount not obtained

There were inconsistencies in approach on the part of Air Wing London while availing of the advantage of minimum order quantity (MOQ) from BAES. Similarly, the advantages of discount on bulk orders or volume discounts offered by BAES were not availed of in number of cases[33]. The Ministry stated that MOQ considerations will be taken into account wherever felt advantageous. It added that Air Wing does not have the details about the requirement of bulk orders for the particular fleet and only quantities indicated in the indents raised by the Air HQ are processed. The Ministry reiterated that the Air HQ is in the process of finalizing a long-term support contract through Ministry of Defence which should obviate this problem to a large extent.

(j) Flaws in pricing of indent and price anomalies

The method of pricing of indents by Air HQ was either based on assessed prices or the last purchase prices, which appeared to be flawed. In Kyiv, huge variation of 11 *per cent* to 265 *per cent* was noticed between the estimated prices of the indents raised by Air HQ and the actual contract prices. Similarly, price quoted by BAES for supply of certain items[34] for AJTs was 273 *per* cent and 563 *per cent* higher than the price assessed by the Air HQ. Further, there was no pricing policy in force to carry out purchase of spares for the AJTs in a fair and transparent manner. For instance, for supply of *PSP Lowering Line*, BAES quoted two different rates (GBP 676.42 and GBP 583.86 each) within the same calendar year 2009. Similarly, for *Cable Assy 24 P9* and *Cable Assy 24 P7*, BAES quoted two different rates of GBP 1,875 each in March 2009 and GBP 795.83 each in October 2009. The Air Wing London agreed (June 2010) the need for formulation of an authentic annual price list which would facilitate comparison of quotes with the approved price list.

The Ministry accepted that pricing of indents for spares of Ukrainian origin had always been a problematic area as the assessed price or the LPP do not give a realistic datum despite exercising due diligence. The problem is further compounded by demand-supply gap and the tendency of the former Soviet bloc countries to quote erratic prices. On pricing of AJT spares the Ministry stated that BAES frequently change their price list and confirm that their prices are as per the current approved rate list. Negotiations with BAES also did not yield desired results. It added that the Air HQ is in the process of

[33] Cable Assy 24 P9, Cable Assy 24 P7, Starter Contactor and Hose Assy
[34] Jack Assy Main Under Carriage Door and Twin Detonator Unit

drawing up a fair and transparent pricing policy with BAES through Ministry of Defence.

IV. Conclusion

To sum up, procurement of critical and urgent aviation stores through Indian Embassies abroad exemplified huge and unexplained delays at every stage. Delays were observed in inviting commercial offers from the prospective vendors. The contracts were not awarded immediately after obtaining expenditure angle sanction from the Air HQ. The decision-making at the apex level was tardy and led to delay in conclusion of contacts in a number of cases. There were grave anomalies between the estimated prices of indents and the actual contract prices. The contract delivery schedules were longer thereby seriously undermining the urgency of procurement. The vendors failed to adhere to the delivery schedules for which no liquidated damages were levied. The spares support for AJT operations in India was poor as the Air HQ was yet to draw up a long-term product support program with the manufacturer of the aircraft. The Ministry's acceptance of the facts only underscores the need for revamping the whole procedure for procurement of critical and urgent aviation stores through Indian Embassies.

CHAPTER III : AIR FORCE

Procurement

3.1 Avoidable expenditure on procurement of spares

Delay in exercising option clause led to an avoidable expenditure of ₹ 4.29 crore in the procurement of spares.

Air HQ placed two supply orders on two Russian vendors in October and November 2006 for procurement of 170 and 10 items of 'I[1]' level spares at a cost of USD 10,029,978 and USD 4,965,896 respectively for setting up of 2nd line servicing of rotables/aggregates of Su-30 MKI at No. 2 Wing. Details of the two contracts along with the terms of agreement for the option clause are given in the table below:

Sl. No.	Vendor	Date of order/ contract	Number of items	Value	Option clause conditions
1.	Joint Stock Company "Aviation Holding Company" "SUKHOI"	11 October 2006	170	USD 10,029,978	The buyer (i.e. the Indian Air Force (IAF)) had the right to place a separate order on the seller till the expiry of warranty period for the equipment at the same prices provided that the delivery of the equipment ordered under the option clause was before 31 March 2007. In case, delivery was after 31 March 2007, the cost would be escalated through the application of a mutually agreed escalation formula.
2.	Federal State Unitary Enterprise "Production Association Ural optical and Mechanical Plant"	20 November 2006	10	USD 4,965,896	The placement of the additional / separate order should be on or before 31 March 2007. Beyond this date, the cost would be calculated as per the existing pricing philosophy prevailing at the time.

1 'I' Level= 2nd line servicing at Wing level (i.e. Intermediate level)

In August 2007, IAF initiated another proposal for the procurement of the same items for No.15 Wing. Air Officer-in-Charge Maintenance (AOM) accorded 'In Principle Approval' in August 2007 for procurement of these spares under the option clause after allowing escalation for the year 2007 at the rate of four *per cent* as per the agreed price escalation philosophy between M/s Rosoboronexport (ROE), Russia and the Indian Government. However, Ministry/Air HQ failed to exercise the option clause till 31 December 2007, the dates up to which escalation of 2007 was valid. In January 2008, both the vendors confirmed their readiness to supply these items at the rates of 2008. In May 2008, the Competent Financial Authority accorded approval for Acceptance of Necessity (AON) at 2008 price level. However, the Ministry in October 2008 placed supply order for 163 spares at a cost of USD 11,131,293 (₹ 47.86 crore) at 2009 price level on Joint Stock Company "Aviation Holding Company" Sukhoi and 10 spares in November 2008 at a cost of USD 5,371,482 (₹ 23.10 crore) at 2008 price level on Federal State Unitary Enterprise "Production Association Ural optical and Mechanical plant".

Thus, the spares which could have been procured under option clause in 2007 at a total cost of US$ 15,506,110, were actually procured at a cost of US$16,502,775 resulting in an avoidable expenditure of US $996,665 (₹ 4.29 crore)[2] on procurement of 173 spares.

Accepting the facts, Ministry stated in April 2011 that procurement of the spares under the option clause of the existing contracts, which was valid till March 2007, was not feasible as the requirement for spares for No.15 Wing was calculated only in August 2007 and it would not have been advantageous to procure the equipment before setting up the facilities. Ministry's reply is not acceptable as Audit has worked out the avoidable expenditure due to non exercising of option clause by December 2007, when quantity vetting was approved by AOM by August 2007 and the requirement was urgent. Thus, failure in placement of supply order by December 2007 resulted in an avoidable expenditure of ₹ 4.29 crore. Besides, due to delay in procurement of spares infrastructure established at No.15 Wing also remained idle for want of spares for considerable time.

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[2] 1 US$ = ₹ 43

3.2 Unfruitful expenditure on procurement of flare cartridges

Expenditure of ₹ 3.09 crore incurred on procurement of flares was rendered wasteful due to expiry of flare cartridges.

In March 1996, Ministry of Defence (Ministry) concluded a contract for supply of CMDS[3] to be used on the MiG 21 Bison aircraft upgradation project. The contract, *inter alia,* included supply of 20,000 IR flares expendables (flares) at a cost of USD 700,000 (₹ 3.16 crore)[4] with a delivery schedule of May 1997. The requirement of the flare cartridges was projected and procurement was made in consonance with upgradation of 125 MiG Bison aircraft scheduled to commence from 1998 and be completed by September 2001. Further, there was additional requirement on account of two other aircraft fleets, i.e. MiG 23 and MiG 27, on which the CMDS system was also to be installed. Given this requirement and upgradation schedule and keeping in view the limited shelf-life of seven years of the flares, it was planned to utilise the entire stock against the CMDS projects of all three fighter fleets[5] by 2002. As the upgradation project was progressing slow due to delay in indigenous development of certain avionics systems coupled with the delay in flight testing, the delivery was staggered in August 1999 till July 2002, to synchronise the deliveries of flare cartridges so as to meet the operational requirement of upgraded Bison aircraft inducted in the field units. The firm completed the entire supply of flares in three lots of 240, 120 and 19,640 in February 1997, September 1999 and July 2002 respectively.

Audit examination revealed that out of 20,000 flares, only 390 flares[6] were utilised while 70 were rendered unserviceable in November 2007. The remaining 19,540 flares costing ₹ 3.09 crore exhausted their shelf life of seven years (i.e. up to 2009) in store. Air Storage Park (ASP) in their reply stated (June 2010) that the reasons for non-issue of the item was non-availability of release order though stock position of the item was regularly being forwarded to IAF on a quarterly basis.

3 Counter Measure Dispensing System (CMDS) is an airborne defensive system which protects the aircraft against radar guided and infra red seeking and ground launched anti aircraft missiles.

4 1 USD = ₹ 45.13

5 321 aircraft (125 MiG 21, 48 MiG 23 and 148 MiG 27)

6 Out of 390, 60 flares were supplied directly to Russia and were used during Design and Development phase, 300 flares were used for trials and remaining 30 were issued to defence establishment between 2004 and 2007.

Ministry, in February 2011, stated that the holding of flares in the stores was necessary due to prevailing security scenario. It further added that as Ops requirement did not arise till 2009, the item was not released but kept in the stock. On the other side, in contradiction of Ministry's reply, Air HQ accepted in January 2011 that 19,540 flares were demolished after shelf life expiry due to delay in upgradation project. It further added that wasteful expenditure due to life expiry of flares can be avoided by granting life extension for gainful utilisation of available stock. As regards Air HQ contention that the flares could not be utilised due to delay in upgradation, Air HQ argument was not convincing as the delivery of the upgraded aircraft was done in a phased manner beginning from 1998-99 and completed in 2007-08. By 2004-05, nearly 80 *per cent* of the upgraded aircraft *i.e* 96 out of 125 had been received after upgradation and these flares could be issued to operating units up to 2009. Ministry's reply is also silent on how the training requirement of MiG Bison met by holding of all flares in the stock. Besides, Ministry in their reply also stated that keeping in view the audit observation and to improve management of such expendable store, Air HQ reviewed the existing system and issued necessary instructions(January 2011) to Commands/ED/ASP for intimation of expiry of stores well in time.

However, the fact remains that the expenditure of ₹ 3.09 crore was rendered unfruitful due to life expiry of flare cartridges before being put up to use in operating squadrons.

Contract Management

3.3 Extra expenditure on procurement of Main Rotor Blade due to non-availing of contractual provisions

Failure to exercise repeat order clause resulted in an extra expenditure of ₹ 1.14 crore on procurement of 15 Main Rotor Blade.

In April 2007, Air HQ concluded a contract with M/s KS Avia Lavia for procurement of 30 sets of Main Rotor Blade(MRB) for Mi17 Helicopter @ USD 98,100 (₹ 44.15 lakh)[7] per set. The contract *inter alia,* contained "option" as well as "repeat" order clause. Under these clauses, the buyer had the right to place separate order on the seller up to 50 *per cent* of the original quantity within the currency of the contract and 50 *per cent* of the original

[7] 1 USD= ₹ 45

quantity within 12 months from the date of receiving the last lot under option and repeat order clauses respectively. As per the terms of the contract, the supplier was to complete the supply by October 2007 and the same was supplied within the time frame i.e. by 28 September 2007. Thus, the order under option and repeat option clause could be placed up to October 2007 and September 2008 respectively.

Headquarters Maintenance Command raised an urgent indent in July 2007 for procurement of 35 sets of MRB. In August 2007, Air HQ decided to procure 15 sets under option clause of the contract of April 2007. However, Air HQ issued an addendum to contract ibid in November 2007 for procurement of 15 sets only @ USD 98,100 (₹ 44.07 lakh)[8] per MRB under option clause after a delay of three months. For remaining 20 sets, Air HQ issued RFP in January 2008 and a contract was concluded with M/s Aviazapchast for procurement of 20 sets @ Euro 86,507 (₹ 51.65 lakh)[9] per set. Thus, 15 MRB which could be procured at a cost of USD 1,471,500 (₹ 6.61 crore) under repeat order clause were procured at a cost of Euro 1,297,605 (₹ 7.75 crore) in August 2008. This resulted in an avoidable expenditure of ₹ 1.14 crore.

Air HQ stated, in April 2010, that both the 'option clause' as well as 'repeat order' cannot be exercised as per provision of Defence Procurement Manual (DPM) 2006. It further added that under the power of AOM as CFA, only 15 sets could be more procured. Ministry also, in February 2011, stated that a maximum of 15 MRBs could have been procured against the option or repeat clause irrespective of the fact whether option clause or repeat clause or both were used as per provision of DPM-2006. On the other side, Air HQ accepted that applicability of Repeat order could have been exercised only after the completion of supplies of previous order and this would have been possible only after 31 July 2008 (i.e. as per addendum issued in November 2007).

The reply is not acceptable since DPM-2006 did not expressly forbid exercise of repeat and an option clause simultaneously nor prohibited enforcement of existing legally binding contracts. Neither did the contract specify that exercise of the option clause nor the repeat clause were mutually exclusive. Therefore, invoking of contractual conditions which ensured that expenditure of public moneys is not *prima facie* more than the occasion demanded was both possible as well as necessary. The Ministry's contention that order under repeat order clause could have been placed after 31 July 2008 is factually incorrect as the repeat order clause could have been utilised anytime up to

[8] 1 USD = ₹ 44.92
[9] 1 Euro = ₹ 59.70

28 September 2008. Further, audit noticed that in July 2007 itself M/s Avia Lavia had offered to supply 30 additional sets (for option and repeat clauses) at existing rate of USD 98,100 per unit, if order was placed by 25 July 2007 and advance was released. While making the offer, the firm also stated possibility of increase in prices of MRB in near future. Regarding procurement of only 15 sets under AOM power, Air HQ could have approached next higher CFA to avail benefit of repeat order clause, for which sufficient time was available.

Thus, failure to exercise repeat order and option clause led to extra expenditure of ₹ 1.14 crore.

3.4 Avoidable loss on fabrication of refuellers

An investment of ₹ 1.65 crore incurred in 2005 on procurement of 24 chassis remained idle for the last five years due to delay in fabrication of refuellers. Due to non invoking of option clause, an avoidable expenditure of ₹ 28.35 lakh was incurred on procurement of seven refuellers and Government was also denied its forfeiture claim of ₹ 28.79 lakh.

Indian Air Force acquired 55 Ashok Leyland chassis at a cost of ₹ 3.78 crore during February-March 2005. These chassis were to serve as a base for fabrication of refuellers of 11 Kilo Litres (KL) capacity. In September 2005, Air HQ placed two supply orders on M/s Skytech and M/s Standard Casting for supply and fabrication of 28 and 27 refuellers respectively @ ₹ 11.75 lakh per refueller. M/s Standard Casting supplied the refuellers during August 2006 and May 2008. However, the supply order placed on M/s Skytech was cancelled in January 2008 as the firm could not supply the ordered quantity inspite of repeated extension of delivery period. Hence, Air HQ floated an open tender in April 2009 for fabrication of 24 refuellers and placed a supply order on M/s Standard Casting in February 2010 @ ₹ 15.80 lakh per refueller. Audit scrutiny of the case revealed the following:-

(i) Air HQ issued a Limited Tender Enquiry to five firms in March 2004 for fabrication of refuellers. The technical bids of all five firms were found acceptable. On opening of commercial bids, M/s Skytech emerged as L-1. At the time of finalisation of the supply order, Principal Director (Purchase) remarked on the lack of capability of M/s Skytech in fabricating refuellers within a period of 20 months if the entire order of 55 refullers is placed on them as the firm had not fabricated any refuellers in the last five years and stated that Air Force would, thus, remain without 11KL refuellers for the next 3 - 4 years if a order was placed on the firm. Thus, though Director General Aeronautical Quality Assurance (DGAQA) had cleared the firm's capabilities, in view of the capacity constraints of the firm, it was decided to split order*s* between L-1 (M/s Skytech) and L-2 (M/s Standard Casting) subject to the condition that L-2 accepts the rate of L-1.

(ii) As per supply order placed on M/s Skytech, the firm was required to submit a pilot sample within four months i.e. January 2006 and to complete the supply within eleven months from the date of issue of Bulk Production Clearance. However, firm failed to submit the pilot sample by the stipulated date. In January and in February 2006, when the firm was issued a reminder, the firm explained its inability to supply the prototype due to financial constraints. Despite repeated extension of delivery period, the firm did not supply the pilot sample ultimately.

(iii) The supply order placed on M/s Skytech in September 2005 *inter alia* also provided for depositing of Performance Bank Guarantee (PBG) by the supplier @ 10 *per cent* of the total cost of the order i.e ₹ 32 lakh. In February 2006, the firm requested for allowing them to submit PBG for a value of ₹ 2 lakh due to heavy financial burden. Citing an amendment issued to DPM-2005 in January 2006, Air HQ relaxed the terms and conditions and allowed M/s Sktytech to deposit PBG of 5 *per cent* even though this was in deviation of the already placed supply order. The firm deposited the PBG amounting to ₹ 16.45 lakh in March 2007. This led to financially accommodating the firm. Air HQ justified the relaxation on the ground that Defence Procurement Manual (DPM) 2005, in vogue on that date stipulated that only 5 *per cent* is payable by the supplier. The contention of Air HQ in the instant case points to the selective application of DPM-2005 by Air HQ to the benefit of the contractor. For instance, with regard to the option clause, Air HQ did not include 50 *per cent* of the total quantity in the supply order of September 2005 on the ground that the proposal was processed prior to issuance of DPM 2005.

(iv) Ultimately in January 2008, supply order was cancelled as the firm could not supply the refuellers or even the pilot sample which was to be supplied by January 2006. On cancellation of the supply order, the Internal Financial Adviser advised in July 2008 for forfeiture of the entire amount of PBG amounting to ₹ 16.45 lakh. However, based on the contractor's request, Air HQ finally forfeited only 25 *per cent* (₹ 4.11 lakh) amount on the ground that firm was executing another contract. The action financially accommodated the firm was in addition to the reduced PBG deposited by the supplier.

(v) The supply order placed in September 2005 on M/s Standard Casting, *inter alia* contained option clause to the effect that the purchaser reserved the right to place an order on the firm for additional quantity up to 25 *per cent* of the ordered quantity at the same rates, terms and conditions during the currency of the contract i.e. till supply of entire order was completed. The supply order placed on M/s Standard Casting was under execution at the time of canceling the order of M/s Skytech and Air HQ could have placed the order for seven refullers (i.e. 25 *per cent* of the ordered quantity) under option clause. However, Air HQ failed to exercise the option clause and placed another supply order after following open tender route on the firm in February 2010. This resulted in an extra expenditure of ₹ 28.35 lakh on procurement of seven refuellers.

Justifying the non availing of option clause, Ministry stated, in January 2011, that the supply of seven refuellers under option clause was not sought to avail economy of scale by merging the failed supply order quantities with future requirement of 38 refuellers. The reply is not tenable as audit noticed that Air HQ, citing urgent necessity (November 2008) pursued the case for the 24 refuellers separately and de-linked the same from the indent for 38 refuellers, In January 2009, it was decided to cancel the indent for 38 refuellers and process the case for only 24 refuellers alone. Thus, by not availing of option clause extra expenditure was incurred. Additionally, the 24 chassis were lying unutilised since 2005.

Miscellaneous

3.5 Unauthorised sanction of works services violating Scales of Accommodation

Sanctioning and execution of unauthorised works in five cases resulted in an irregular and avoidable expenditure of ₹ 4.84 crore.

Works Services in Defence Services are to be sanctioned and executed as per provisions contained in the Scales of Accommodation (SOA), Defence Services. Instances of violation of provisions were noticed in five cases and in all the five cases direction given by the Air Force Stations were irregular and needed approval of higher authorities before sanction. These are discussed below:

Case I

The SOA for Defence Services-1983 authorise a sports complex including a Gymnasium Class II for a station having a troop strength between 1,000 - 2,500. Based on the recommendation of a Board of Officers held in June 2006, Air HQ accorded an Administrative Approval in July 2007 for provision of an indoor sports complex comprising a Gymnasium Class II at AF Station Singharsi, Jharkhand at an estimated cost of ₹ 1.18 crore. Audit scrutiny revealed that the troop strength of Air Force Station, Singharsi was only 582. Thus, the construction of the Gymnasium was unauthorised.

On this being pointed out by Audit, Chief Engineer (CE), Shillong stated in December 2009 that these work services were sanctioned for 1050 personnel which included Military Engineer Services (MES), Kendriya Vidyalaya(KV) employees and their families. The reply of the CE is not acceptable as the troop strength does not constitute civilians of MES and KVs in terms of SOA.

Accepting the facts, Ministry stated in March 2011, that the work is not authorised as per SOA 1983 and HQ Eastern Air Command has been advised by Air HQ to initiate Statement of Case (SOC) for regularisation of the work as a special item of work Remedial action to avoid recurrence of such cases, including the need to fix responsibility for sanctioning the unauthorised work, would be taken by the Ministry when the regularisation SOC/proposal is submitted by Air HQ for approval of Ministry of Defence.

Case II

Based on the recommendation of Board of Officers held in July 2006, HQ Eastern Air Command (EAC) accepted the necessity and accorded Administrative Approval with the concurrence of Integrated Financial Advisor (IFA) in July 2007 for construction of an examination hall with the total plinth area of 1031.18 sq. metre (SM) area at Airmen Selection Centre (ASC), Barrackpore at an estimated cost of ₹1.71 crore.

Audit examination revealed that the SOA 1983 provides for provision of the maximum plinth area of 100 sq. metre for an examination hall. Hence, the sanction issued by HQ EAC with the concurrence of IFA for the excess area of 931.18 sq. metre was irregular. Audit noticed excess provision of 931.18 sq metre for an examination hall would lead to an extra expenditure of ₹ 1.54 crore. On this being pointed out by audit, Air Force authorities stated, in January 2010, that due to increase in the number of candidates it had become imperative to build a larger examination hall in the ASC so that the seating capacity could be increased. The Unit reply is not acceptable as it is in breach of the SOA.

Accepting the facts, Ministry stated in March 2011, that since the work is not authorised as per SOA 1983 and HQ EAC has been advised by Air HQ to initiate Statement of Case (SOC) for regularisation of the work as a special item of work. Remedial action to avoid recurrence of such cases, including the need to fix responsibility for sanctioning the unauthorised work, would be taken by the Ministry when the regularisation SOC/proposal is submitted by Air HQ for approval of Ministry of Defence.

Thus, by sanctioning the provision of examination hall in excess of the permissible area, an avoidable expenditure of ₹ 1.54 crore had to be borne by the exchequer.

Case III

Based on the recommendation of a Board of Officers held in June 2006, HQ South Western Air Command (SWAC) accepted the necessity and accorded Administrative Approval in December 2006 for provision of additional sports facilities (including viewers gallery, 400 meters running track etc.) at Air Force Station (AFS), Bhuj at an estimated cost of ₹ 0.63 crore. Commander Works Engineer (CWE) AF Station, Bhuj, in July 2007, concluded a contract at a cost of ₹ 0.64 crore with M/s Bombay Novelty Stores, Kutch for execution of the works services.

As per SOA for Defence Services-1983, a sports stadium, alongwith Athletic Track, Changing room, Sports ground, Equipment stores, Toilet facility etc. is authorised for stations having a troop strength of 3,000 or more. The scales do not authorise a viewer's gallery to any unit. Since, the troop strength of Air Force Station Bhuj was only 2,496, as such the construction of facilities along with viewer's gallery was unauthorised.

Air Force authorities stated, in October 2009, that in the name of Viewers Gallery only a raised platform was constructed to cater for Instructors /Coaches. The scales, however, do not authorise these works also.

Accepting the facts, Ministry stated, in March 2011, that since the work is not authorised as per SOA 1983 and HQ SWAC has been advised by Air HQ to initiate Statement of Case (SOC) for regularisation of the work as a special item of work. Remedial action to avoid recurrence of such cases, including the need to fix responsibility for sanctioning the unauthorised work, would be taken by the Ministry when the regularisation SOC/proposal is submitted by Air HQ for approval of Ministry of Defence.

Thus, by sanctioning unauthorised works, an avoidable expenditure of ₹ 0.64 crore had to be borne by the exchequer.

Case IV (a)

Reappropriation is the use of a group of buildings, a building or a portion thereof, for any purpose other than for which it was constructed. Reappropriation can be temporary or permanent and may be intended either for an authorised or for a special purpose. Defence Works Procedure 2007 *inter alia,* stipulates that reappropriation involving increase in scales or introducing a new practice requires the sanction of the Government of India.

Audit noticed that the Indian Air Force sanctioned ₹ 1.47 crore at two Air Force Stations, in violation of these orders for the creation of assets of permanent nature, which were not authorised as per Scales of Accommodation (Scales) for Defence Services-1983, in temporarily reappropriated hangars. Incidentally, both stations already possessed sports facilities as per the scales and the reappropriations were over and above that authorised. The details are discussed below:

Air Force Station, Bamrauli has eight hangars, which were constructed in 1958, as special use type property for parking of aircraft. Of these, one hangar had not been in use for the intended purpose for a long period. The Station Commander in August 2008 issued a reappropriation sanction for use of the hangar for indoor sports activities for a period of one year without entailing any alteration or cost.

Despite this condition a Board of Officers (June 2008) recommended works services costing ₹ 1.20 crore at the hangar for creating International Level sports facilities. Based on the recommendations of the Board, AOC-in-C HQ Central Air Command IAF, in January 2009, accepted the necessity and accorded administrative approval for works services at a cost of ₹ 1.20 crore. The Administrative Approval, *inter alia,* also included provision of special items of works worth ₹ 46.80 lakh. The work has since been completed.

Audit noted that the Air Force Station is not authorised International level sports facilities as per the Scales. Thus, even though these works services involved increase in scales/introduction of a new practice, HQ Central Air Command, IAF did not project the case to Government in violation of the Defence Works Procedure. On being pointed out by Audit, Chief Administrative Officer, Air Force Station, in July 2010, stated that the case for permanent reappropriation is now being initiated.

Accepting the facts, Ministry stated in May 2011 that the work is not authorised as per SOA 1983, HQ CAC has been advised by Air HQ to initiate Statement of Case (SOC) for regularisation of the work as a special item of work. Remedial action to avoid recurrence of such cases, including the need to fix responsibility for sanctioning the unauthorised work would be taken up by the Ministry when the regularisation SOC/proposal is submitted by Air HQ for approval of Ministry of Defence.

Case IV (b)

A hangar at Air Force Station Adampur was constructed in 1952 as special use property for parking of aircraft. The hangar was in use till February 1997. Thereafter, the hangar was being utilised for mass gatherings/welfare meetings of the personnel. The Station Commander in March 2009, accorded sanction for reappropriation of the hangar entailing no additions/alterations for a period of three years for use as an Indoor Basketball and Badminton Court. However, HQ Western Air Command IAF in March 2009 sanctioned ₹ 0.28 crore for provisioning of a Combi Synthetic Court for the Indoor Basketball and Badminton Court. The Combi Synthetic Court is not an authorised item of work and its sanction introduced a new practice which resulted in an irregular expenditure of ₹ 0.28 crore.

Accepting the facts, Ministry stated in May 2011 that the work is not authorised and Air HQ has been advised to initiate Statement of Case (SOC) for regularisation of the work. Remedial action to avoid recurrence of such cases, including the need to fix responsibility for sanctioning the unauthorised work would be taken up by the Ministry when the regularisation SOC/proposal is submitted by Air HQ for approval of Ministry of Defence.

3.6 Recovery/Adjustment at the instance of Audit

Recovery/saving to the tune of ₹ 31.56 crore were effected at the instance of Audit.

During the course of audit, lapses on the part of Defence Accounts Department/AFCAO were noticed at the time of releasing the payment against financial regulations and contractual conditions. Acting upon the advice of audit, the auditee initiated necessary action resulting in the recovery of ₹ 31.56 crore to the exchequer in three cases. Each case is discussed below:-

Case I: Recovery of unadjusted advance from HAL

Air HQ, in June 2007, placed a firm task on Hindustan Aeronautic Limited, Nasik Division {HAL(ND)} for MiG 21 Bis upgrade rotable repair for the financial year 2007-08 at an estimated cost of ₹ 54.48 crore. HAL (ND) was entitled to draw ₹ 35.41 crore as first stage payment. Accordingly, in July 2007, AO (DAD) HAL (ND) released the amount to HAL (ND). Subsequently, in September 2008, AO (DAD) HAL (ND) released another advance totalling ₹ 44.19 crore to HAL (ND) against the firm task for the year 2008-09.

Government orders clearly state that in case of shortfall in deliveries as against the task for the year, the stage payment drawn would be adjusted against the first stage payment for firm tasks/ other dues of the subsequent year. Audit, however, noted that the second advance payment of ₹ 44.19 crore was made in September 2008 even though a sum of ₹ 29.52 crore out of the advance payment of ₹ 35.41 crore made to HAL (ND) in July 2007 remained outstanding. Thus, the payment of the second advance without adjusting the unspent amount of first advance was irregular.

On this being pointed out in Audit, in July 2009, AO (DAD) HAL (ND) recovered the unadjusted advance totalling ₹ 29.52 crore in September 2009 from HAL (ND). Additionally, the delay in adjustment of advance led to non-recovery of interest on overpayment to HAL worth ₹ 2.36 crore to IAF on the amount blocked with HAL (ND).
The matter was referred to the Ministry in August 2010; their reply was awaited as of July 2011.

Case II: Recovery of liquidated damages from HAL

The Ministry of Defence (Ministry) concluded a contract at a cost of ₹ 20.95 crore with Hindustan Aeronautics Limited (HAL), in March 2005, for development and supply of five Avionics Part Task Trainers (APTT) for the MiG Bis upgrade project. The APTT were to be delivered between March 2005 and March 2007.

HAL was paid an initial advance of ₹ 3.14 crore in March 2005 and a second advance of ₹ 8.38 crore in October 2005. The delivery of APTTs was, however, completed between October and December 2008. The Ministry, in February 2009 issued an amendment to the contract for extending the delivery date with levy of Liquidated Damages (LD). Consequent upon delivery and commissioning of APTT, Deputy Controller of Defence Accounts (Defence Accounts Department) HAL in February 2009 released the balance payment, after deduction of LD on the 3rd and 4th stage payments, amounting to ₹ 8.95 crore to HAL.

Audit scrutiny revealed that DCDA (DAD) HAL failed to levy LD on the 1st and 2nd stage payments made to HAL. On this being pointed out by Audit in August 2009, DCDA (DAD) HAL recovered the amount of ₹ 0.58 crore from HAL in December 2009.

Ministry accepted the facts in February 2011.

Case III: Irregular payment of allowances

As per extant orders, Compensatory City Allowance (CCA)/Composite Hill Compensatory Allowance (HCA) and Special Compensatory Allowance like Field Area Allowance are mutually exclusive. At places where all these allowances are admissible, an employee is allowed to draw only one of these allowance which is more beneficial to him.

In July 1995, Ministry of Defence issued orders which, *inter alia,* provided the details of newly defined Field Areas (FA) and Modified Field Areas (MFA). Indian Air Force (IAF) personnel serving in FA/MFA were eligible for the grant of Compensatory Field Area Allowance (CFAA) and Compensatory Modified Field Area Allowance (CMFAA). In December 2001, Ministry also granted CFAA/CMFAA to Armed Forces Officers, Personnel Below Officer Rank (PBOR) and Non-Combatants Enrolled (NCs(E)) deployed/mobilized in "Operation Prakaram".

During the audit of Air Force Central Accounts Office (AFCAO), it was, however, noticed that the payment of CCA/HCA and other Special Compensatory Allowance i.e. CFAA/CMFAA had been made concurrently to IAF personnel deployed/mobilized on "Operation Prakaram" in disregard of extant orders. This resulted in an irregular payment of ₹ 98.57 lakh on account of CCA and HCA during 2001-04 with reference to the IRLAs[10] checked by audit.

On this being pointed out in Audit, AFCAO requested Air HQ in March 2008 for issuing direction for auto debit of the overpayment in the Individual Running Ledger Accounts (IRLAs). Air HQ directed the AFCAO in September 2010 to recover the overpayment made under intimation to Audit. Air HQ also directed AFCAO to incorporate suitable checks and balances on this count in the software and report compliance to them.

Accepting the facts, Ministry stated in November 2010 that a sum of ₹ 1.46 crore had been recovered from the affected air warrior's IRLA's by AFCAO in the month of November 2010.

[10] IRLAs - Individual Running Ledger Account

CHAPTER IV: NAVY

Procurement

4.1 Avoidable expenditure in procurement of spares for a helicopter

Abnormal delay in processing the case for procurement of spares for KA-31 helicopters coupled with failure of Navy to get the validity of the quote of a firm extended resulted in an avoidable expenditure of ₹ 10.71 crore.

Against a contract of August 1999 and supplementary agreement of February 2001, Indian Navy had procured nine KA-31 helicopters from Russia. Navy, during their exploitation, experienced that the spares procured with the helicopters were inadequate to meet the operational requirements. In July 2004, Integrated Headquarters Ministry of Defence (Navy) approached M/s Rosboronexport, Russia (ROE) to forward their commercial offer for 145 items of spares. In response to the enquiry, the firm, in May 2005, forwarded their commercial offer for 171 items of spares at a total cost of USD 19.38 million[1] (₹ 84.26 crore) with validity of offer up till 1 December 2005. After analysing the stocks available, repairables held, consumption pattern and the cost of the item(s), the professional directorate, Directorate of Naval Air Material (DNAM), in November 2005, finalised the requirement at 150 items of spares.

The commercial offer of ROE was utilised by DNAM to arrive at an estimated cost. Thereafter, DNAM, initiated the case for procurement of 150 items of spares at a cost of USD 12.55 million[2] (₹ 54.57 crore), for which Acceptance in Principle was accorded in November 2005. At this stage, despite knowing that signing the contract within the validity period of offer would be a challenging task, DNAM did not request the firm for extension of the validity of their commercial quote beyond December 2005 as no formal Request for

[1] 1 USD = ₹43.48
[2] 1 USD = ₹43.48

Proposal (RFP) could be issued to the vendor during receipt of offer in May 2005 and expiry of offer in December 2005 i.e seven months. Subsequently, the offer lapsed. The formal approval of Raksha Mantri was obtained on 27 March 2006 and the approval to issue RFP was accorded in June 2006 only and a formal RFP was floated to the firm in the same month.

Audit noticed delays at each stage of procurement till conclusion of contract which witnessed lapsing of two offers made in September 2006 and June 2007 with a validity of six months each from the opening of quotes, increase in rates by M/s ROE in each subsequent offers and delay in holding of CNC meetings due to administrative reasons. The procurement of spares from Russian Federation was to be undertaken by Integrated Headquarters Ministry of Defence (Navy) as per Defence Procurement Manual (DPM) 2005. The Ministry of Defence, however, in November 2005 promulgated standard clauses of contract for procurement on single vendor basis from M/s Rosoboronexport, Russia, whereby, a time period of three months was approved for the Russian agencies to respond to the RFP due to peculiarities of the Russian system. As per the DPM, a case of revenue procurement on single commercial bid is to be finalised within a timeframe of 19 - 22 weeks. Even after providing for due allowance for procurements ex-Russia, in terms of Ministry's guidelines of November 2005, this time frame works out 27 weeks. In this case, the time taken, however, was 144 weeks. Significant delays are indicated below:

EVENT	PRESCRIBED TIMELINE	ACTUAL TIME TAKEN
Time allowed for submission of offers	12 Weeks	13 weeks
Opening of Commercial offers, preparation of Comparative Statement of Tender, Technical Vetting, etc.	2 Weeks	11 weeks
Scheduling of Price Negotiation Committee (PNC), Brief for PNC, notice for PNC and PNC Meetings, PNC minutes and signature	7 Weeks	62 weeks
Internal Financial Advisor concurrence and competent financial authority Approval of Purchase Proposal	2 Weeks	4 weeks

Notwithstanding the DPM instructions and the guidelines of the Ministry of Defence on Russian procurements, the contract with ROE was ultimately concluded after more than 28 months of the Acceptance in Principle in March 2008. By this time, in the intervening period, the firm had increased its rates and against the originally quoted rate of USD 12.55 million for supply of 150 items, the contract was concluded at a total cost of USD 15 million (₹ 65.58 crore[3]) for the 150 items of spares. Inordinate delay at each stage of procurement led to an extra expenditure of USD 2.45 million (₹ 10.71 crore).

Accepting the facts, the Ministry stated, in February 2011, that :

- the procurement of spares from OEM's in Russian Federation is monopolistic and the spares are available only with them, therefore, the customer has very little scope for negotiations;
- the delay in procurement is attributed to the time taken in processing the case in Ministry of Defence (Finance) and in Ministry of Defence itself ; and
- the delay was also attributed to delayed submission of quote by ROE, transfer of Chairman of CNC, postponement of CNC meetings due to inability of ROE to depute representatives and increase in cost by the firm twice necessitating approval on each occasion at the level of Raksha Mantri.

The reply confirms the inordinate delay at stage of procurement which led to avoidable expenditure of ₹ 10.71 crore, besides delayed availability of spares to operating units in Navy.

4.2 Avoidable expenditure in procurement of Winch Reel Hydraulic

Lack of due diligence by Indian Navy in processing the case for procurement of Winch Reel Hydraulic led to an avoidable expenditure of ₹ 9.73 crore, besides which the procurement was also delayed.

The Directorate of Procurement (DPRO), Integrated Headquarters Ministry of Defence (Navy) in May 2005 issued a Request for Proposal (RFP) on limited tender basis to nine firms for three items[4] which, *inter alia*, included supply of

3 USD = ₹ 43.72

4 Three items: Crank shaft, Pump 3B-40/25-2-21/4(B)2 and Winch Reel Hydraulic

six Winch Reel Hydraulic to meet the ABER[5] requirement of six SNM class of ships based at Visakhapatnam. The Schedule of Requirement annexed to the RFP clearly specified the Part Number, equipment name, description of item and quantity required in respect of all the three items. Further, as per the RFP[6], in case the equipment offered was different, an interchangeability certificate was necessary. Offers not accompanied by such a certificate were liable to be rejected.

In response, three out of the nine firms submitted their commercial bids for all the items. One of the firms, M/s Rosoboronexport, Russia (M/s ROE) had quoted for two items exactly as per RFP but offered for a third item 'Ray of Counterweight' instead of 'Winch Reel Hydraulic'. The other two firms quoted for all three items exactly in accordance with the RFP. Even though M/s ROE did not offer for 'Winch Reel Hydraulic', the Procurement Directorate exhibited the offered item, i.e. 'Ray of Counterweight' as the tendered item in the comparative statement of tender. Comparative statement on Winch Reel Hydraulic as presented to the CNC[7], was as under:

Sl.No.	Name of the firm	Quoted Value(per unit)
1.	M/s Rosoboronexport, Russia	US$ 388.62
2.	M/s Ukrspetexport, Ukraine	US$ 35,154
3.	M/s Cenzin, Poland	US$ 82,100

Audit noticed that despite the difference in nomenclature and Part Number, the firm did not furnish an inter-changeability certificate along with their offer as required. Nevertheless, the firm was considered L-1 by the tender opening committee. Further, the Procurement Directorate approached the Professional Directorate in October 2005, more than a month after the bids had been opened, to obtain clarification on whether the quoted item was likely to be a substitute for the 'Winch Reel Hydraulic'. The Professional Directorate *i.e.* the Directorate of Naval Architecture held in October 2005 that the item

5 ABER: Anticipated Beyond Economical Repair

6 The provision to RFP, *inter alia,* stipulates that the manufacturer may enclose a statement of deviations/interchangeable exceptions *vis-a -vis* Schedule of Requirement (SOR) of the equipment with their offers and only those offers shall be evaluated which are found to be fulfilling all the eligibility and qualifying requirements, both technically and commercially

7 CNC = Contract Negotiating Committee

offered by M/s ROE was not likely to be a substitute for the Winch Reel Hydraulic. In the meantime, although Navy (Directorate of Procurement) approached M/s ROE three times[8] during October-November 2005 with a request to provide an interchangeability certificate, it made no attempt to get the offer of the other two firms re-validated. In spite of the numerous references, M/s ROE did not provide requisite certificate. Instead, the firm asked for (15 November 2005) additional clarification like Project number, Vessel number, construction year of ship and drawing number etc. of the required items. This information was provided to M/s ROE in January 2006. By this time, the offers of M/s Cenzin and M/s Ukrspetexport, Ukraine, who had correctly quoted for the part, expired on 7 and 8 November 2005 respectively. Clearly, as the offer of M/s ROE was not as per the RFP it should have been rejected *ab initio* and only valid offers should have been considered for acceptance.

In the meantime, the competent financial authority also approved re-tendering and an RFP was issued to ten firms in February 2006 with tender opening date as 30 March 2006. On 16 March 2006, M/s ROE again sought for certain additional information like operating instructions, technical description and technical drawings of Winch Reel. Even after issue of second RFP; these details were provided to the firm on 23 March 2006. Audit observed that this information was not sent to all listed vendors as per provision of DPM-2005, giving undue advantage to M/s ROE.

In response to the RFP issued in February 2006, two firms[9] submitted their quote and the quote of M/s Rosoboronservice (ROS), India Ltd., who quoted ₹ 5.13 crore per unit was found to be L-1. Considering the high prices and potential indigenisation of the item, the required quantity was reduced from six to two and, in October 2007, the Ministry concluded a contract with M/s ROS (India) for supply of two Winch Reel Hydraulic at a total cost of ₹ 9.75 crore plus taxes. The firm supplied the items in July 2009.

8 On 10 October 2005, 17 October 2005 and 7 November 2005

9 Two firms - M/s Rosoboronservice (India) and M/s Rosoboronexport, Russia (ROE). M/s Rosoboronservice (India) is an independent vendor registered with the Indian Navy as an Indian firm. It is a joint venture between an Indian Company formerly M/s Kasny Marine Services, seven Russian firms and Rosoboronexport.

Accepting the facts, Ministry opined in December 2010 that the procurement was undertaken with utmost prudence and at a reasonable price. It added that the offer of M/s ROE was not rejected outright on the ground of non-furnishing of interchangeability certificate as the quoted price was minimal as compared to other bids. Ministry further stated that the firms responded to the RFP without ascertaining the actual technical requirement/details. Ministry also contended that the item was specialised and when full technical details were made available during second case of tender M/s Ukrspetexport did not respond. The reply of the Ministry is not acceptable since in response to the first RFP issued in May 2005, M/s ROE was accepted as L-1 even though it had quoted for an item 'Ray of Counterweight' instead of Winch Reel Hydraulic' as specified in the RFP. Incidentally, the quote of M/s Ukrspetsexport and M/s Cenzin was exactly in accordance with the schedule of requirement with M/s Cenzin even correctly identifying the original project number of the ship class.

Thus, lack of due diligence by the Tender Evaluation Committee at the initial stage in October 2005 led to delay in procurement and avoidable expenditure of ₹ 9.73 crore.

4.3 Extra expenditure in procurement of Gas Turbines

Non-clubbing of the requirement resulted in an extra expenditure of ₹ 2.49 crore in procurement of five numbers Gas Turbines.

Indian Navy operates various types/classes of ships. Five classes of Indian Naval ships are powered by Gas Turbines (GTs). Different types of GTs are fitted on various ships based on the requirement and role of the ship. Five SNF Class ships of Indian Navy are fitted with four DE59 type GTs each. DE59 GTs, either newly procured or overhauled is stocked at INS Eksila.

In order to meet the ABER[10] requirement of INS Rana, Material Organisation, Vizag [MO (V)], in December 2004, raised an indent for procurement of four DE59 type GTs on PAC[11] basis from M/s Zorya Mashproekt, Ukraine. Subsequently, in August 2005, [MO(V)] raised another indent for procurement of five DE 59 type GTs to meet the ABER requirements of two other ships,

10 Anticipated Beyond Economic Repair
11 Proprietary Article Certificate

namely, INS Ranjit and INS Rajput. After deciding to club these requirements (September 2005), Integrated Headquarters Ministry of Defence (Navy) submitted a consolidated case for procurement of nine DE59 type GTs to the Ministry of Defence in October 2005. However, within two months, in December 2005, the Directorate of Marine Engineering (DME) held that four DE59 type GTs must be procured at an early date to meet the refit schedule of INS Rana. Due to urgency and for faster procurement, the quantities were reduced from nine GTs to four GTs and concurrence of the CFA was obtained in March 2006. It was observed that there were delays and the contract for supply of four GTs for INS Rana could be concluded only after 15 months, in June 2007, with M/s Zorya Mashproekt Ukraine at a total cost of USD 6,450,000 (₹ 29.86 crore[12]). The firm completed the supplies in September 2007. Meanwhile, the urgent requirement of GTs for INS Rana was, in June 2005, met through the reserve stock of GTs held at INS Eksila.

DME in December 2006 confirmed the requirement to Integrated Headquarters Ministry of Defence (Navy) of additional five GTs for Medium Refit of INS Rajput scheduled to commence from February 2008. In May 2009, contract for procurement of five GTs for INS Rajput was concluded with M/s Zorya Mashproekt at a total cost of USD 8,600,000 (₹ 39.80 crore)[13]. The firm supplied the GTs in June 2009.

Since the requirement of GTs for INS Rana was met through the GTs held in stock, de-linking of the procurement of GTs for INS Rana from those for INS Ranjit and INS Rajput was not warranted. The separate conclusion of contract for five GTs in May 2009, resulted in an extra expenditure of USD 537,500 (₹ 2.49 crore[14]) due to the difference in unit cost of GTs *vis à vis* the procurement made in June 2007 (USD 107,500 per GT).

Thus in breaking up the procurement order of nine gas turbines by Indian Navy an extra expenditure of ₹ 2.49 crore incurred as the subsequent procurement was at a higher cost.

The matter was referred to Ministry in October 2010; their reply was awaited as of July 2011.

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[12] Unit cost of USD 1,612,500 per GT
[13] Unit cost of USD 1,720,00 per GT
[14] 1 USD = ₹ 46.29

Contract Management

4.4 Inordinate delay in installation of SPL Plotting Tables on submarines

Inordinate delay in installation of Plotting Tables onboard four submarines has resulted in a blockage of ₹ 6.05 crore for about four years. The plotting tables have since lost their warranty cover.

SPL Plotting Table is a navigation and tactical plotting system which can plot the ships own position as well as it can plot the data received from the unit sensors.

Indian Navy commissioned four SSK submarines between 1986 and 1994. In March 2004, Vice Chief of Naval Staff, approved upgradation of six equipments on board these submarines which, *inter alia,* included SPL Plotting Tables. In June 2006, Directorate of Procurement(DPRO) concluded a contract with M/s MSI – Defence Systems Ltd., England for supply of four SPL AIO Plotting Tables along with deliverables at a total cost of PDS 791,020 (₹ 6.37 crore[15]), inclusive of PDS 40,000 (₹ 0.32 crore) for STW[16], HATs[17] and SATs[18] for the four submarines with delivery schedule of October 2007. The firm supplied the equipment by September 2007 and the firm was paid PDS 751,020 (₹ 6.05 crore) for the supplies made.

Thereafter, the firm, in October 2007, requested Integrated Headquarters Ministry of Defence (Navy) to intimate the schedule for undertaking the STW/HATs/SATs for the Plotting Tables. The concerned directorate *i.e.* the Directorate of Submarines Acquisition (DSMAQ) gave a response only in April 2010 and informed the firm that all the pre-requisites for fitment and connectorisation of the Plotting Tables on board one of the submarines (Submarine 1) has been completed and requested the firm to depute a specialist in April 2010 for STW/HAT work on the submarine.

Audit noticed that the installation of the Plotting Tables was initially scheduled to be undertaken during the planned refits of the submarines 1 to 4 commencing from June 2006, September 2007, October 2007 and

15 Pound Sterling = ₹ 80.54
16 STW = Setting to Work
17 HAT = Harbour Acceptance Trials
18 SAT = Sea Acceptance Trials

September 2007 respectively. However, the changes to the refit schedules of the submarines resulted in a revised schedule for installation of Plotting Tables onboard the submarines. The details are tabulated below:

Sl No.	Submarine	Original Refit Schedule	Refit Status
1.	Submarine 1	MR-cum-MLU June 2006 – June 2008	MR[19]-cum-MLU[20] March 2007 – July 2010
2.	Submarine 2	MR-cum-MLU September 2007 – April 2010	MR-cum-MLU February 2008 – October 2011
3.	Submarine 3	NR-cum-Modernisation October 2007 – September 2008	MR-cum-Modernisation March 2010 – March 2011
4.	Submarine 4	SR September 2007 – January 2008	SR[21] March 2009 – June 2009 September 2010 – December 2010

Meanwhile, after receipt of SPL AIO Tables in September 2007, refits on two submarines (Submarine 1 & 4) were completed in 2009-2010. However, during STW/HATs of Plotting Table fitted onboard Submarine 1 held in July 2010, some modules were found defective. The deficiency was made good by utilising the modules of Submarine 2, thereby, affecting the operational capability of Submarine 2. The installation of Plotting Tables on other two submarines (Submarine 2 & 3) is in progress. The SATs for Submarine 1, 2 and 3 are now scheduled for May 2011. The Plotter has not been installed on Submarine 4 (till February 2011).

Thus, four SPL AIO Plotting Tables procured at a cost of PDS 751,020 (₹ 6.05 crore) in September 2007 could not be gainfully exploited so far (February 2011). As a consequence, these submarines were operating with the life expired Plotting Tables, thereby, affecting their operational capabilities.

[19] MR – Medium Refit
[20] MLU – Mid Life Upgradation
[21] SR – Short Refit

The SPL Plotting Tables carried a warranty for 12 months from the date of delivery (12 September 2007) against defects arising from faulty materials or workmanship under proper use subject to fair wear and tear. Continued disuse meant that, these Plotting Tables lost their warranty cover on 11 September 2008 without these being utilised. The defects, if any, arising from faulty materials or workmanship in these Plotting Tables, also could not be ascertained.

Accepting the facts, the Ministry stated, in January 2011, that the Plotting Tables could not be commissioned onboard the submarines in the year 2008-09 due to delays in commencing / completion of the refits of the submarines. Ministry admitted that the submarines were operating with life expired Plotting Tables. Ministry also informed that discussions are in progress with the Original Equipment Manufacturer for extending the warranty of the systems on completion of SATs.

4.5 Avoidable expenditure on procurement of cables with incorrect specification

Procurement of cables with incorrect specification for the construction of warships led to an avoidable expenditure of ₹ 1.36 crore.

Ministry of Defence accorded a sanction in January 1998 for the acquisition of three indigenously designed Frigates of Project-17 for the Indian Navy (IN) through M/s Mazagon Dock Ltd. (MDL the Shipyard). As per procedure, the procurement of all yard materials, equipment and associated fittings as well as machinery are to be in terms of approved guidelines of Department of Defence Production. The Professional Directorates of Navy issue Statement of Technical Requirements (SOTRs) along with the names of vendors to the Production Directorates who in turn issue Ordering Instruction (OI) to the Shipyard to initiate the procurement action.

Based on specifications approved by Directorate of Quality Assurance (Naval) in April 2004, M/s MDL issued a technical specification for the procurement of Russian cables required for the construction of two ships for IN under Project-17. In May 2004, tenders were issued to six DQA(N)[22] approved

[22] Directorate of Quality Assurance

firms and M/s Radiant Cables Pvt Ltd. emerged L-1 in respect of 50 types of cables out of 107 types of cables tendered for. Consequent upon the approval of technical data and satisfactory completion of type testing in April 2005 by DQA (N), shipyard in July 2005 placed two purchase orders on the firm at a cost of ₹ 3.44 crore for the supply of 50 types of cables measuring 84,270 meters. The firm supplied cables between November 2005 and January 2006.

Audit scrutiny of the case revealed the following:-

Of the 84,270 meters of cables supplied by M/s Radiant Cables Pvt. Ltd., 34,920 meters of cables worth ₹ 1.44 crore was found to be not conforming to the specifications and were found unfit for use. As per specification, these cables were to have 'screen over individual cores and an overall screen' whereas, the cables supplied by the vendor as per Technical Parameters(TP) given in the purchase order were having 'common screen over all the cores followed by sheath and an overall screen' DQA (N), in July 2007, admitted that the specification of these cables were inadvertently defined by them and as a result, these cables were manufactured and inspected with 'screen overall the core' instead of 'screen over each core'. DQA (N) also admitted that these cables will not be suitable to meet the specific purpose and a fresh set of cables with correct specification is needed to meet the requirement. Though DQA requested shipyard to analyse the feasibility of utilising the wrongly supplied cables, the shipyard informed that these cables are not usable in any of ongoing and future warship at the shipyard. Thereafter the shipyard placed two more purchase orders for 33,420 meters of cables at a total cost of ₹ 1.36 crore on the firm for meeting their requirement.

In sum, a result of incorrect definition in the technical particulars prepared by DQA (N) for cables, Navy had to incur an avoidable expenditure of ₹ 1.36 crore on procurement of cables.

The matter was referred to Ministry in October 2010; their reply was awaited as of July 2011.

Miscellaneous

4.6 Tardy progress in execution of a Water Supply Scheme

Flawed planning by MES delayed the execution/commissioning of a Water Supply Scheme at Visakhapatnam for over seven years. Despite an expenditure of ₹ 4.53 crore, the objective of providing adequate and clean water to Defence Personnel has not been met due to a failure to coordinate with other entities on the project needs.

Military Engineer Services (MES) Regulation stipulates that when the necessity for a project has been accepted, a sitting board will be convened to draw up a detailed lay out plan and prepare an approximate estimate of the cost. If the proposed site encroaches or in any way affects the civil or railway department's roads, lands or interests, the sanctioning authority should obtain the consent of the authority concerned. In contravention of these provisions a Command HQ sanctioned a work without obtaining necessary consent from railway/civil authorities that led to severe delay in the progress of the project sanctioned in March 2004 as discussed below.

In August 2003, a Board of Officers (Board) recommended the construction of an under ground sump at Megadripeta Colony, Visakhapatnam to meet the technical requirement of transient storage for pumping of fresh water to Naval Base, Visakhapatnam as the existing pipelines were passing along open drains carrying waste effluents through submerged areas of stagnant drainage water and were thus vulnerable to contamination due to leakages/damages. It also recommended the re-routing of existing water pipelines for providing hygienic supply of water. Based on the recommendations of the Board, HQ Eastern Naval Command, Visakhapatnam (HQ ENC) in March 2004 accepted the necessity and accorded Administrative Approval (A/A) for the work at a cost of ₹ 2.94 crore.

Although the work envisaged the laying of a proposed pipeline underneath a culvert in the Main Howrah – Chennai railway track through RCC hume pipe casing, HQ ENC sanctioned the work without obtaining the concurrence of the Indian Railways for the pipes crossing the railway lines. Audit further observed that a part of the new pipeline was also to be laid in 645 Square Meter of land owned by Visakhapatnam Port Trust (VPT). No efforts were made in obtaining the concurrence of VPT prior to according approval at the planning stage. Subsequent to according the A/A, when Chief Engineer (Navy) approached the Railways for obtaining their concurrence, the Railway authorities (November 2004) intimated that the technical work involved could be done only by the Railways as a 'deposit work'[23]. Interestingly, while processing the case for obtaining sanction in December 2004 for the work to be undertaken by the Railways, HQ ENC obtained assurance from the CE (N) that there were no other liabilities and permissions required for the scheme. The authorities even then failed to approach VPT for necessary approvals.

In the mean time, the project was beset by other procedural delays and even though approximate cost estimates were re-submitted in March 2005 and January 2007, the case could not be approved. Ultimately, in August 2007, HQ ENC accorded a revised A/A at a cost of ₹ 4.38 crore. The work was required to be completed within 96 weeks from date of release. Subsequently, CE(W), in January 2008, concluded a contract at a cost of ₹ 3.64 crore with M/s VTC Engineering Pvt. Ltd., Visakhapatnam for execution of the works services. These works services were to be completed by February 2009. Further, an amount of ₹ 0.64 crore was advanced to Indian Railways by January 2009 for laying of the pipeline underneath the culvert as a deposit work.

As of September 2010, the complete physical progress of the job was 95 *per cent* with a booked expenditure of ₹ 4.53 crore. While the Indian Railway completed the works underneath the railway track in May 2010 at a cost of ₹ 0.64 crore, however, part of the project running through the VPT has run into problems. The Garrison Engineer executing the works approached Chief Engineer Port Trust only in February 2009 for according formal permission for laying of pipelines in the VPT area. The Chief Engineer Port Trust, however, advised the GE to approach them through the Defence Estate Office (DEO). DEO Visakhapatnam, in July 2010, worked out a lease rent of ₹ 0.31 crore for the land use for 30 years provided the amount is paid upfront. A Board of Officers for hiring of the subject land was yet to be convened, as of July 2010, for initiating the proposal for obtaining sanction of the Ministry of Defence.

Accepting the facts, Ministry in January 2011, stated that:

- Concurrence of the Railways was obtained verbally before the issue of the A/A since the work was non-technical. It further stated that the

[23] Deposit work - Works carried out by outside agency on behalf of the Ministry of Defence.

change in schematics had to be effected for routing the pipeline during detailed planning stage as the lower reaches of culverts were getting inundated with the contaminated water. Ministry's reply is not acceptable as relying only on the verbal permission from the other Ministry is not in accordance with the established Government procedure. Further, the Board should have built in the works, the fact of inundation of the lower reaches, before making recommendation. Thus, the very purpose of constituting the board for recommendation of re-routing the pipe-line for the safe and hygienic water for naval base was defeated and delayed the completion of project.

- As regards permission from VPT, Ministry stated that the fact that the land on which the pipeline was passing through belonged to the VPT was discovered only when the work was in progress. This confirms audit point that a proper survey of the land was not carried out before sanctioning of the work.

Although the need to provide a new pipe to provide fresh clean water to the Naval Base was felt as early as August 2003, failure to coordinate timely with other entities for the project needs has led to delay in fruition of a water supply scheme till date (December 2010). Besides, despite an expenditure of ₹ 4.53 crore, avoidable delay in planning, execution and commissioning of the water supply scheme has defeated the objective of providing adequate supply of water which is free from contamination to the Naval Base for the last seven years.

4.7 Avoidable payment of penalty surcharge to Kerala Water Authority

Delay in replacement of defective water meters by MES at Kochi resulted into avoidable payment of ₹ 2.40 crore to Kerala Water Authority on account of penalty surcharge.

The water requirement of Naval Base, Kochi is met by Garrison Engineer (GE) Electrical and Mechanical (E/M) Kochi through the supplies received from Kerala Water Authority (KWA). The water supply from the KWA is taken by Military Engineer Services (MES) in bulk from their Main Pump House, Kataribagh, which has three consumer numbers/ water meters. Audit examination of the paid bills and other records in August 2009 revealed an unusual increase in expenditure on payment of tariff bills for water supply *vis à vis* the previous year by the GE (E/M) Kochi.

Audit noted that two water meters for metering the bulk supplies of water received from KWA had become defective in July 2008. KWA, in August 2008, issued a notice to the GE that if both the meters were not replaced within 30 days, as per its regulations, surcharge to the extent of 25 *per cent* in the first month, 50 *per cent* in the next two months and thereafter 100 *per cent* would be levied. As the meters were not replaced, KWA started levying penalty surcharges from September 2008 onwards resulting in avoidable payment of ₹ 2.40 crore.

Though the defective meters were replaced by MES in April 2009, KWA did not accept the meters in the absence of the inspection certificate from the approved agency. Ultimately, KWA accepted the meters in July 2009 and the payment of surcharges ceased from August 2009.

The fact of the levy of penalty surcharge by KWA was accepted by Integrated Headquarters Ministry of Defence (Navy) in July 2010. It also stated that by coincidence during the same period the tariff of water charges were also substantially enhanced and hence the levy of surcharge could not be detected.

After Audit pointed out the avoidable payment, Chief Engineer (NW) Kochi informed audit in December 2010, that KWA Thiruvananthapuram has agreed to set off the surcharge collected by them against 50 *per cent* of the future water charge bills from Naval Base Kochi. The set off of surcharge has started from the bills of October 2010.

The matter was referred to the Ministry in September 2010; their reply was awaited as of July 2011.

4.8 Loss due to delay in revision of handling charges for explosives

Delay in revision of handling charges for explosives resulted in a revenue loss of ₹ 2.03 crore to the public exchequer.

Naval Armament Depot (NAD), Mumbai undertakes handling of all explosives on behalf of Indian Navy at ports at the time of their import or export out of India and recovers charges on account of such services from private firms, public sector undertakings, Government Departments at the rates fixed by the Ministry from time to time.

Mention was made in paragraph No. 51 of the Report of the C&AG of India, Union Govt., Defence Services for the year 1982-83 and paragraph No.3 of the Report of the C&AG of India, No.11 of 1990, regarding loss of revenue due to delay in the revision of handling charges of explosives. The Ministry in 1990 had committed that the review of explosive handling charges would henceforth be undertaken once in every three years. On the basis of assurance given by Ministry to the C&AG of India in 1990, Naval HQ, in, March 1996, made it mandatory to review the explosive handling charges once in three years even if the annual increase is not more than 10 per cent. Accordingly, the last revision of rates was undertaken in April 2007 and the rates notified were operative for a period of three years. These rates were to be escalated @ 10 *per cent* on 1 April of subsequent years till the next revision. The latest revision of rates was due from April 2010.

NAD, Mumbai, in November 2009, forwarded a proposal to HQ Western Naval Command (WNC), Mumbai for revision of rates for handling of explosives by Indian Navy. The proposal, *inter alia,* included the revision of all nature of charges such as handling, loading/unloading, barge detention, supervision charges and the security deposits etc. In December 2009, Director General of Naval Armament requested HQ WNC to expedite the proposal for revision. The matter was referred to Principal Controller of Defence Account (PCDA), Navy in the same month and the concurrence was obtained in March 2010 and the revised rates for supervision charges were notified by Ministry in August 2010 @ ₹ 7,969 per ton and these were made applicable with effect from 12 August 2010. Meanwhile, Navy continued to levy supervision charges @ ₹ 4,072[24] per ton.

NAD Mumbai handled 4,713.701 ton of explosives between 1 April 2010 and 12 August 2010 for private parties, Public Sector Undertakings and other Government Departments. Owing to the non-revision of charges in time, the exchequer suffered a revenue loss of ₹ 2.03 crore during this period.

Navy stated, in August 2010, that there was no time frame laid down for initiating the case for the revision of explosive handling charges. The reply is not as per Naval HQ instructions of March 1996 according to which the rates were due for revision from 1 April 2010.

24 The supervision charges notified in April 2007 were escalated @ of 10 *per cent per annum* in April 2008, April 2009 and April 2010 progressively to determine the supervision charges.

Accepting the facts, Ministry in January 2011, stated that delay cannot be attributed to any single agency as there were several agencies involved in the process of rate revision. It also added that a policy letter is being promulgated by Integrated Headquarters Ministry of Defence (Navy) laying down the time frame to facilitate early revision of rates from next cycle onward. It further stated that a proposal had been forwarded to Ministry to amend the date of applicability of the revised rates promulgated from 12 August 2010 to 1 April 2010 and the difference would be recovered by NAD, Mumbai after amendment of Government letter.

The Ministry needs to lay down a timeframe as also streamline the procedure to ensure timely revision of rates.

4.9 Non-revision of Payment Issue Rates for Kerosene Oil

Non-observance of the prescribed policy on payment issue of Kerosene Oil resulted in a loss of ₹ 49.46 lakh to the public exchequer at two Naval Stations.

Consequent upon dismantling of the Administered Price Mechanism in March 2002, Ministry of Defence (Finance) in April 2002 notified the Free Issue Rates (FIR[25]) and Payment Issue Rates (PIR[26]) for Kerosene Oil @ ₹ 8.91 per litre and ₹ 9.00 per litre respectively. These rates were made applicable uniformly across the country. The Ministry of Defence, in September 2003, evolved a revised procedure for working out FIR and PIR for POL[27] products which, *inter alia*, stipulate that the FIR has to be fixed by adding 2 *per cent agency charges* to the procurement rate, whereas, the PIR was to be fixed by adding 7 *per cent* departmental charges to FIR. The PIR so arrived should not be less than the prevailing market rates. Owing to variation in the procurement rates, such FIR and PIR of POL products were not be made uniformly applicable throughout the country. The FIR and PIR rates were, therefore, required to be fixed at Supply Depot/FOL Depot Level in consultation with the Deputy Controller of Defence Accounts/ Local Audit Officer. Besides, these rates were subject to revision as and when the Oil Public Sector Undertakings revised their rates.

25 Free Issue Rates are applicable where stores/kerosene oil etc is issued for bonafide use of the units/formations etc

26 Payment Issues Rates are applicable where civilians paid from Defence Services Estimates, Service Personnel etc purchase stores/kerosene oil etc for their personal use.

27 Petroleum, Oil & Lubricants.

Audit noticed that Indian Navy did not revise PIR of Kerosene Oil, as per revised procedure at two Naval Stations, which resulted in a loss of ₹ 49.46 lakh to the exchequer. The details are discussed below:

Case I

Based on the PIR notified by Ministry of Defence (Finance) in April 2002, units under HQ Andaman and Nicobar Command, between September 2003 and February 2009, issued 1,81,750 litres of Kerosene Oil to entitled persons on payment basis. As per the formula for fixation of PIR, enshrined in the revised procedure promulgated in September 2003, the PIR for Kerosene Oil at Andaman and Nicobar Islands for the period from September 2003 to February 2009 ranged between ₹ 8.78 per litre and ₹ 62.83 per litre. However, it was observed in audit in November 2008 that units under HQ Andaman and Nicobar Command did not revise the PIR and continued to make the payment issues of Kerosene Oil @ ₹ 9.00 per litre. Non-revision of PIR for Kerosene Oil during the period led to a loss of ₹ 28.90 lakh.

Integrated Headquarters Ministry of Defence (Navy) in September 2009 accepted the loss. Integrated Headquarters Ministry of Defence (Navy) added that the Government policy letter for fixing of free/payment issue rates of POL was not received by HQ Andaman and Nicobar Command and was subsequently forwarded to them only in August 2007. Thereafter, new PIR fixed in October 2007 by a Board of Officers was not implemented as HQ Andaman and Nicobar Command interpreted that the Kerosene Oil is to be issued on payment at Public Distribution System rates to Government servants who fall in Below Poverty Line category.

The contention of Integrated Headquarters Ministry of Defence (Navy) is not tenable as Naval authorities ought to have taken appropriate action for immediate and correct dissemination of Government orders.

Case II

Based on PIR notified in April 2002, INS Dronacharya, between September 2003 and April 2010, issued 1,04,534 litres of Kerosene Oil to entitled persons on payment basis. However, based on the formula for fixation of PIR enshrined in the revised procedure the PIR for Kerosene Oil during the period from September 2003 and April 2010 ranges from ₹ 9.52 to ₹ 43.86 per litre. However, the unit did not revise the PIR and continued to make payment issues of Kerosene Oil @ ₹ 9.00 per litre which resulted in a loss of ₹ 20.56 lakh.

On being pointed out in Audit, in April 2010, the unit authorities stated in May 2010 that the Government letter of September 2003 has not been received by them till date.

The matter was referred to the Ministry in September 2010; their reply was awaited as of July 2011.

4.10 Savings at the instance of Audit

A saving of ₹ 1.31 crore was effected after audit pointed out significant variations in procurement cost of 17 items of aviation spares contracted for by Naval Headquarters as well as the incorrect assessment of requirement in respect of two items by Material Organisation, Kochi.

Audit scrutiny of documents at Integrated Headquarters Ministry of Defence (Navy) and MO Kochi relating to procurement of Naval aviation spares and items of spares for meeting the refit requirements of a ship respectively resulted in a saving of ₹ 1.31 crore in two cases. Details are discussed below:

Case I

Against the annual review of demand for the years 2008-09 and 2009-10, Director of Naval Air Material raised two indents in December 2008 and August 2009 respectively for procurement of spares for KA-28 helicopters. Based on these two indents, Integrated Headquarters Ministry of Defence (Navy) Directorate of Naval Air Material placed the following supply orders/concluded contract:

Sl. No.	Name of the firm	ARD/Mode of procurement	Date of placement of supply order/ conclusion of contract	No. of items	Total value
1.	M/s. Rosboron Service (India) Ltd.	2008-09/ PAC basis	18 January 2010	114	₹ 3.61 crore
2.	M/s. LLC 'Techno Pilot Group', Latvia	2009-10/ LTE basis	23 March 2010	13	₹ 0.43 *crore
3.	M/s. Aerodex Aviation, India	2009-10/ LTE basis	23 March 2010	57	₹ 1.34 crore
4.	M/s. Spets Techno Export, Ukraine	2009-10/ LTE basis	08 April 2010	32	₹ 1.49 * crore

Audit noticed significant variations in rates in respect of 19 identical items ordered for procurement through supply orders at Sl No.1 to 4 above, even though the contracts were concluded within a period of less than three months. The variation ranged from 37 *per cent* to 3,680 *per cent*[28]. Audit, therefore, pointed out in May 2010 that acceptance of higher rates would lead to extra expenditure in the procurement of spares. Integrated Headquarters Ministry of Defence (Navy) accepted the facts in May 2010 and deleted 17 items valuing ₹ 0.86 crore from the contract/ supply orders.

Accepting the facts, the Ministry stated, in January 2011, that the procurement against annual review of demand for 2008-09 was taken up on Proprietary Article Certificate (PAC) basis as there had been severe constraints in sourcing Russian origin spares in view of their obsolescence and the small quantity requirements of Navy's limited fleet. Notwithstanding the PAC status, M/s Rosboron Service (India) Ltd., delayed the submission of their quotes. Therefore, the next annual review of demand for 2009-10 was processed on limited tender enquiry basis. These ARD cases were considered and negotiated as a package rather than taking up line-by-line items, as there were a large number of items and there was no fixed trend in the pricing policy of these spares. As of February 2011, Indian Navy is likely to purchase these 17 items, either through repeat orders or through invoking option clause, at the offered lowest rates in near future.

The reply of the Ministry is not tenable as procurement of spares in a package deal did not absolve Integrated Headquarters Ministry of Defence (Navy) from

* 1 USD = ₹ 45.56

[28] Details given in Annexure II

verifying the unit cost of each item with a view to ascertaining the reasonability of their rates. Besides, the procurement of 17 items in near future under option clause/repeat orders at the lower price was at the behest of audit which led to cancelling of contracts for these items at higher rates.

Case II

Based on the indent raised by Material Organisation Kochi (MOK) in April 2008 for 157 items of spares for meeting the refit requirements of INS Sutlej, a Naval Logistic Committee (NLC) in May 2009 approved the procurement of 132 items at a total cost of ₹ 1.64 crore from M/s Geeta Engineering Works Pvt. Ltd., Mumbai.

Audit scrutiny of the procurement in May 2009 revealed that MOK was already holding adequate stock to meet the demands in respect of two items out of 132 items, cleared for procurement by the NLC. Since these two items were high value stores costing ₹ 0.45 crore, audit requested MOK to conduct a *de novo* review of their requirement. MOK initially stated that these were long lead time items and their procurement was essential. However, in June 2009 MOK agreed to undertake the review. Based on the review carried out at the instance of audit, MOK in July 2009 cancelled the orders of these two items, costing ₹ 0.45 crore, thus resulting in savings to that extent.

Accepting the facts, Ministry stated, in January 2011, that the query and suggestion of audit to re-look at the requirement did finally lead to review of provisioning parameters and cancellation of order, thereby, resulting in avoiding of over provisioning to the tune of ₹ 0.45 crore.

CHAPTER V: RESEARCH AND DEVELOPMENT ORGANISATION

5.1 Loss of stores in transit

Stores worth ₹ 10.63 crore meant for LCA programme were lost in transit. No insurance claim for these stores could be preferred as the stores were not insured by ADE.

Aeronautical Development Establishment (ADE)[1] concluded a contract with M/s BAE Systems Overseas Inc (USA) in September 2004 for supply of 15 ship sets of LCA- Integrated Flight Control System (IFCS) Line Replaceable Units (LRUs) at a total cost of USD 30.60 million (₹ 140.70 crore[2]). The firm was required to deliver all the units by December 2008.

As per extant orders, stores costing ₹ 2.50 crore or more are required to be insured against loss or damage in transit and the insurance cover is invariably required to be obtained before despatch of the consignment by the firm/supplier. Insurance of items against loss/damage in transit in this contract were all the more critical since contract provided for delivery at supplier's factory after which all risks were to be borne by ADE. The General Financial Rules provide that an officer shall be held responsible for any loss sustained by the Government through fraud or negligence on his part.

In the course of audit it was observed that while ADE received 14 ship sets by February 2008, the consignment containing the 15 ship sets, containing Actuators, costing USD 2.13 million (₹ 10.63[3] crore) has not been received by them till date (October 2010) even though the firm had despatched the

[1] Aeronautical Development Establishment is a laboratory of India's Defence Research & Development Organisation under the Ministry of Defence

[2] 1 USD = ₹ 49.97

[3] 1 USD = ₹ 46.00

consignment through British Airways on 22 December 2008. Efforts were made to locate the missing consignment worldwide by ADE through British Airways, Embassy of India and M/s Balmer Lawrie & Co. (Air Consolidation Agency). However, all such efforts remained unfruitful. Meanwhile, complete payment was released to the firm by October 2009.

DRDO[4] HQ indicated in March 2010, that such transactions of the laboratory were governed by the Air Consolidation Contract entered into with M/s Balmer Lawrie & Co. Since the contract did not have an insurance clause, therefore, the consignment was not insured by ADE. The explanation offered by DRDO HQ is unacceptable as the Air Consolidation Contract makes it amply clear that either (i) in terms of extant orders, a consignment valued more than ₹ 2.50 crore is to be insured by the Laboratories /Establishments. Directors of Laboratories /Establishments will use their discretion to insure a particular consignment on their own irrespective of their value depending on the nature of goods, or (ii) Air Consolidation Agency (ACA[5]) i.e M/s Balmer Lawrie & Co. will offer insurance coverage through New India Insurance Company Ltd. provided they are informed before the despatch of the item preferably at the time of sending supply order copy.

Accepting the facts, Ministry, in October 2010, sought to place onus on the ACA by stating that the ACA was fully responsible for the loss to the Government as ADE did not get the pre-alert of consignment before it was shipped. It was further added that ACA also made a huge violation by shipping it *via* Heathrow, whereas, the shipping notice clearly states that the shipment should not be transferred, transshipped on a non-continuous voyage. Ministry's reply is not acceptable as the onus on the need for insurance in all general purchase valued more than ₹ 2.50 crore rests with ADE as per the provision of contract of June 2007 concluded with ACA. It is also immaterial whether ADE gets any pre-alert of the consignment or not as no such conditions were laid down in the contract concluded with the supplier.

4 Defence Research & Development Organisation
5 Air Consolidation Agent

In sum, failure of ADE to comply with the extant orders resulted in a transit loss of stores worth ₹ 10.63 crore for which no insurance claim could be raised. The matter needs to be investigated by the Ministry to fix the responsibility for not insuring the stores and thus causing a loss to Government, due to negligence on part of the official(s).

(C.M.SANE)
Principal Director of Audit
Air Force and Navy

New Delhi
Dated: 25 August 2011

Countersigned

(VINOD RAI)
Comptroller and Auditor General of India

New Delhi
Dated: 25 August 2011

Annexures ▶▶▶

ANNEXURE-I

(Refers to Para No.1.11.2)

List of Action Taken Notes not received as of 31 July 2011

Sl. No.	Report No. and Year	Para No.	Pertains to	Brief Subject
1.	CA 18 of 2008-09	2.8	MOD	Inept execution of 'D" Level repair facilities
2.	CA 16 of 2010-11	2.3	MOD	Irregular commercial exploitation of Santushti Shopping Complex
3.	CA 16 of 2010-11	2.8	MOD	Financial irregularities in organizing Military World Games 2007
4.	CA 16 of 2010-11	3.2	MOD	Irregularities in the procurement of Micro light Aircraft
5.	CA 16 of 2010-11	3.5	MOD	Foregoing of revenue due to non-revision of licence fee rates for residential accommodation
6.	CA 16 of 2010-11	4.3	MOD	Injudicious procurement of pumps
7.	CA 16 of 2010-11	4.7	MOD	Lack of due care in passing claims of vendors
8.	PA 7 of 2010-11	Ch-I	MOD	Operation and Maintenance of Mi Series Helicopters in IAF
9.	PA 7 of 2010-11	Ch-II	MOD	Functioning of the Aviation Arm of the Indian Navy
10.	PA 32 of 2010-11		MOD	Indigenous construction of Indian Naval Warships

ANNEXURE-II

Savings at the instance of Audit

(Refers to Para No. 4.10)

(Amount in ₹)

Sl. No.	Description of items with Part No.	Rate as per Contract dated 18 January 2010	Rate as per Contracts dated 23.3.10 and 08.04 2010	Difference in Rate	Variation in percentage
1	2	3	4	5	6
1.	Integrated Circuite 133 LA8	412.00	1586.00	1174.00	285
2.	Micro Circuite 140 UDIB	647.00	1133.00	486.00	75
3.	Micro Circuite 152 UD 1	294.00	1133.00	839.00	285
4.	Wind Shielf 500-0212-0095-002	1049521.00	761208.00	288313.00	37
5.	Bolt 500-4103-0001-000	7056.00	113275.00	106219.00	1505
6	+20V Power Supply Card GK 3-059-839	505739.00	171327.00	334412.00	194
7.	Receiver Temp Bulb P-1 TR	6997.00	27639.00	20642.00	295
8.	Integrated Circuite 136L A 3	470.00	1881.00	1411.00	300
9.	Micro Circuite 302 NR 2	6115.00	2871.00	3244.00	112
10.	Waster 500-6460-0003-000	2058.00	4167.70	2109.70	102
11.	KNOB 500-7217-0360-000	11878.00	32664.06	20786.00	174
12.	Relay RES-49	28930.00	2079.00	26851.00	1291
13.	Relay RES-9	9467.00	881.10	8586.10	974
14.	Socket SN051-40/71x9R-2-B	2881.00	34946.57	32065.57	1112
15.	Sturt 500-6460-0120-001	620105.00	16404.06	603700.00	3680
16.	Relay TKE-21 PODG	14935.00	6741.30	8197.70	121
17.	Relay TKE-22-P1GB	56913.00	9522.00	47391.00	497

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