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STANDING COMMITTEE ON DEFENCE
(2015-2016)

(SIXTEENTH LOK SABHA)

MINISTRY OF DEFENCE

DEMANDS FOR GRANTS (2016-17)

ARMY, NAVY & AIR FORCE
(DEMAND NO. 22)

TWENTIETH REPORT



LOK SABHA SECRETARIAT
NEW DELHI

May, 2016/ Vaisakha, 1938 (Saka)

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MINISTRY OF DEFENCE

DEMANDS FOR GRANTS (2016-2017)

ARMY, NAVY & AIR FORCE

(DEMAND NO. 22)

Presented to Lok Sabha on 03.05.2016

Laid in Rajya Sabha on 03.05.2016



LOK SABHA SECRETARIAT

NEW DELHI

May, 2016/ Vaisakha, 1938 (Saka)

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and 29.04.2016.....

COMPOSITION OF THE STANDING COMMITTEE ON DEFENCE (2015-16)

Maj Gen B C Khanduri, AVSM (Retd)

-

Chairperson

Members

Lok Sabha

2. Shri Suresh C. Angadi
3. Shri Shrirang Appa Barne
4. Shri Dharambir
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21. Smt. Pratyusha Rajeshwari Singh

Rajya Sabha

22. Shri K. R. Arjunan
23. *Shri Anand Sharma
24. Shri Rajeev Chandrasekhar
25. Shri A.U. Singh Deo
26. Shri Harivansh
27. Shri Vinay Katiyar
28. Shri Hishey Lachungpa
29. Shri Madhusudan Mistry
30. Smt. Ambika Soni
31. Shri Tarun Vijay

* Shri Anand Sharma resigned *vide* Notification No. RS 10/2016 - T dt. 07.03.2016.

SECRETARIAT

- | | | | |
|----|-------------------------|---|----------------------------|
| 1. | Smt. Kalpana Sharma | - | Joint Secretary |
| 2. | Shri T.G. Chandrasekhar | - | Director |
| 3. | Smt. Jyochanmayi Sinha | - | Additional Director |
| 4. | Smt. Rekha Sinha | - | Senior Executive Assistant |
| 5. | Smt. Preeti Negi | - | Executive Assistant |

INTRODUCTION

I, the Chairperson of the Standing Committee on Defence (2015-16), having been authorised by the Committee to submit the report on their behalf, present this Twentieth Report on 'Demands for Grants of the Ministry of Defence for the year 2016-17 on Army, Navy and Air Force(Demand No. 22)'.

2. The Demands for Grants of the Ministry of Defence were laid on 16 March 2016 in Lok Sabha. The Committee took evidence of the representatives of the Ministry of Defence on 4, 5 & 6 April 2016. The draft Report was considered and adopted by the Committee at their Sitting held on 29 April 2016.

3.The Committee wish to express their thanks to the officers of the Ministry of Defence and representatives of the three Services for appearing before the Committee and furnishing the material and information which the Committee desired in connection with examination of the Demands for Grants.

4. For facility of reference and convenience, Observations/Recommendations of the Committee have been printed in bold letters in Part II of the Report.

**New Delhi;
29 April, 2016
09 Vaisakha, 1938 (Saka)**

**Maj Gen B C Khanduri, AVSM (Retd),
Chairperson,
Standing Committee on Defence**

REPORT
PART - I
CHAPTER I - ARMY

Introductory

The global geo-political dynamics presents the Nation with multiple security challenges. While constantly reviewing its Operational preparedness to meet the perceived security challenges, the Indian Army is committed to the defence of the country from external and internal threats and aggression. The Indian Army is also at the forefront in times of natural and manmade calamities/disasters, providing aid and succor to the affected people.

1.2 Keeping in view the 'Threat Perception' as worked out by the Government, Indian Army needs to be an optimally equipped, weaponised and responsive force, with the capability to operate effectively in a Joint Services environment across the entire spectrum of warfare.

Budget of Army

1.3 The Revenue Budget for Army is now a part of Grant no. 22. The total allocated budget for Army under this head is Rs. 1, 02,788.84 crore. The Capital Budget of all the three Forces has been examined separately but for convenience and reference, Capital Budget of Rs. 26,791.17 crore specific to Army has also been examined in this Report.

1.4 Details regarding the projections made by the Army, allocations made at Budget Estimate (BE) and Revised Estimate (RE) stage and the expenditure incurred during the last five years, separately for Capital and Revenue, are as follows:

REVENUE

(Rs. in crores)

Year	BE		RE		Expenditure
	Projected	Allocated	Projected	Allocated	
2011-12	77,350.49	63,609.80	74,252.98	70,810.98	69,133.47
2012-13	83,861.62	77,327.03	83,120.33	75,520.20	76,689.82
2013-14	93,355.38	81,119.20	91,294.13	85,516.45	85,030.92
2014-15	1,04,837.88	91,844.02	99,420.15	97,501.40	88661.45
2015-16	1,09,758.22	1,03,315.91	1,04,408.45	1,00,106.78	85,458.16*
2016-17	1,15,561.78	1,12,764.62#			

* Expenditure upto end of January 2016

[# Includes BE of NCC, Military Farms, Rashtriya Rifles and ECHS which are shifted to modified Grant No. 20 - MoD(Miscellaneous) from FY 2016-17]

CAPITAL

(Rs. in crores)

Year	BE		RE		Expenditure
	Projected	Allocated	Projected	Allocated	
2011-12	25,611.68	19,210.69	20,641.69	16,005.69	14,947.82
2012-13	28,234.60	19,237.80	18,971.09	15,749.30	14,760.69
2013-14	25,528.08	17,883.83	19,271.59	14,967.25	14,433.29
2014-15	41,936.15	26,533.60	23,832.67	21,933.54	14,843.37
2015-16	31,938.67	27,342.42	27,845.33	24,230.47	14,693.82*
2016-17	37,960.18	26,935.81#			

* Expenditure upto end of January 2016

{# Includes BE of NCC, Military Farms, Rashtriya Rifles and ECHS which are shifted to modified Grant No. 20 - MoD(Miscellaneous) from FY 2016-17}

1.5 The Ministry submitted the following data with regard to percentage share of capital and revenue allocation for Army out of total Defence budget for the last five years:

(Rs. in crores)

Year	BE (Total Defence Service Estimates)	Army (Revenue)	%age share	Army (Capital)	%age share
2011-12	1,64,415.49	63,609.80	38.69%	19,210.69	11.68%
2012-13	1,93,407.29	77,372.03	39.98%	19,237.80	9.95%
2013-14	2,03,672.12	81,119.20	39.83%	17,883.83	8.78%
2014-15	2,29,000.00	91,844.02	40.11%	26,533.60	11.59%
2015-16	2,46,727.00	1,03,315.91	41.87%	27,342.42	11.08%
2016-17	2,49,099.00#	1,12,764.62\$	45.27%	26,935.81\$	10.81%

(# Includes BE of DGOF, R&D, NCC, DGQA, Military Farms, Rashtriya Rifles and ECHS which are shifted to modified Grant No. 20-MoD(Miscellaneous) from FY 2016-17)

(\$ Includes BE of NCC, Military Farms, Rashtriya Rifles and ECHS which are shifted to modified Grant No. 20-MoD(Miscellaneous) from FY 2016-17)

1.7 Under the Revenue segment, provision is first made for salary and other obligatory expenses. The balance allocation available is distributed to meet the requirement of stores (including ordnance), transportation (of personnel and stores), revenue works and maintenance, etc. As submitted by the Ministry, these following areas are likely to be impacted when allocation is lower than projection:

- (a) Impact on New Raisings & Accretions: Replenishment of deficiencies due to wastages and new raisings will be affected.
- (b) Maintenance of existing weapons & equipment and replenishment of War Wastage Reserve Ammunition.
- (c) Maintenance and repair of infrastructure as allocation is short by Rs 1,300 crore.
- (d) Contingency allocation for Humanitarian Assistance and Disaster Relief.

1.8 In so far as the Capital segment is concerned, funds are first set aside to meet the projected Committed Liabilities likely to materialize during the year. The remaining allocation is distributed to meet the projected requirement for other items. Reduced allocation is likely to delay initiation of new projects.

1.9 During the year 2016-17, Army has been provided Rs 1,38,511.05 crore (Revenue and Capital), which is Rs 15,258.17 crore more than the last year's RE of Rs 1,23,252.88 crore.

The Committee wished to be informed as to how the Army proposed to spend the increased amount. The Ministry submitted as under:

Sl. No.	Head	RE 2015-16	BE 2016-17	Diff. b/w BE & RE
1	Salary	71,896.78	82,495.52	10,598.74
2	Revenue-Non Salary	30,000.61	32,184.64	2,184.03
3	Capital Acquisition (CA)	17,997.59	21,535.26	3,537.67
4	Other than CA	6,231.78	5,399.40	- 832.38
5	R&R	-2,873.88	-3,103.77	-229.89
	Total (Army)	1,23,252.88	1,38,511.05	15,258.17

The allocation to Army is lesser than the projection made by it, keeping in line with the overall ceiling provided by the Ministry of Finance.

1.10 The Ministry submitted following data related to non-revenue salary allocation to Army:

Financial Year	Allocation (Rs in crore)	Year to Year % Variation
2011-12	21892	14.9
2012-13	23953	9.4
2013-14	25331	5.8
2014-15	27462	8.4
2015-16	31835	15.9
2016-17	32185	1.1

1.11 The Ministry submitted the following data with regard to percentage share of Capital and Revenue allocation for Army out of total Defence budget for Eleventh and Twelfth Plans:

Year	BE(Total Defence Service Estimates)	Army (Capital)	%age share
<i>XIth Plan</i>			
2007-08	96,000.00	11,634.18	12.12%
2008-09	1,05,600.00	13,331.48	12.62%
2009-10	1,41,703.00	18,019.94	12.72%
2010-11	1,47,344.00	17,250.84	11.71%
2011-12	1,64,415.49	19,210.69	11.68%
Total	6,55,062.49	79,447.13	12.13%
<i>XIIth Plan</i>			
2012-13	1,93,407.29	19,237.80	9.95%
2013-14	2,03,672.12	17,883.83	8.78%
2014-15	2,29,000.00	26,533.60	11.59%
2015-16	2,46,727.00	27,342.42	11.08%
2016-17	2,49,099.00#	26,935.81\$	10.81%

(# Includes BE of DGOF, R&D, NCC, DGQA, Military Farms, Rashtriya Rifles and ECHS which are shifted to modified Grant No. 20-MoD(Miscellaneous) from FY 2016-17)

(\$ Includes BE of NCC, Military Farms, Rashtriya Rifles and ECHS which are shifted to modified Grant No. 20-MoD(Miscellaneous) from FY 2016-17)

(\$ Includes BE of NCC, Military Farms, Rashtriya Rifles and ECHS which are shifted to modified Grant No. 20-MoD(Miscellaneous) from FY 2016-17)

1.12 The Committee have learnt that against the Capital Budget of Rs. 26,935.81 crore, the allocation for Committed Liabilities for BE 2016-17 is Rs. 19,449.26 crore against the projection of Rs, 21,921.38 crore. The allocation for Committed Liabilities for 2015-16 was Rs. 20,513.44 crore. For New Schemes, the allocation at BE 2015-16 was Rs. 1,541 crore. Against the requirement of Army i.e. Rs. 7,749 crore, the allocation at BE 2016-17 is Rs. 2,086 crore.

Bullet Proof Jackets

1.13 The Committee during the course of examination of Demands for Grants had noted that there was serious deficiency of Bullet Proof Jackets. Even when the approval of

Defence Acquisition Council was obtained on 19.10.2009 for purchase of desired BPJs, it was fraught with various complications. During examination of earlier DFGs, the Committee reiterated their recommendation for speedy procurement.

1.14 Intimating further progress in procurement of BPJs, the Ministry submitted as under:

'The details are as under:

- a) Acceptance of Necessity (AoN) for procurement of Qty. 1, 86,138 Bullet Proof Jackets (BPJs) was earlier accorded by Defence Acquisition Council (DAC) and the RFP was issued on 07 December, 2012.
- b) The said RFP was retracted on 5 Oct 2015 as all the three vendors who participated in the 'Trial Evaluation' of BPJs from March-June 2015 had failed.
- c) A fresh RFP is under preparation and will be issued shortly.
- d) In the meanwhile, Quantity 50,000 Bullet Proof Jackets are under procurement through the Revenue route. The case is presently at CNC Stage and the Supply Order is expected to be placed by end of Mar 2016.'

1.15 Considering the new recruitment and increasing threats, the Committee sought details regarding the total requirement of Bullet Proof Jackets (BPJs) in Army including total authorized strength of BPJs and current BPJs held. The Ministry replied that Quantity 3,53,765 had been authorized to the Indian Army. Against this, Army was holding Qty. 1,22,624 Nos. of BPJs. **(Set No. 3, Replies to Preliminary LOP, Army, Pg 1)**

1.16 The Committee further sought a comparative analysis regarding weight, protection to cover lethality, coverage area on body, price etc. of BPJs available with Army, to be procured and available with Armies of developed countries and open market. The Ministry responded as under:

'Bullet Proof Jackets (BPJs) currently held by Indian Army are based on GSQR No. 878. This GSQR has since been revised and further procurement of BPJs in the Army is being undertaken as per revised GSQR, i.e. GSQR No. 1438. The new GSQR No. 1438 is at par with the world standards being followed and allows addition/removal of external attachments to / from the BPJ as per operational requirement.'

1.17 DRDO, in connection with the issue of BPJs, submitted as under :

" Defence Materials and Stores Research & Development Establishment (DMSRDE), a Kanpur based R&D establishment of DRDO does not have installed capacity for manufacturing Bullet Proof Jackets (BPJs) in-house. DMSRDE has designed Bullet Proof Jacket based on GSQR No. 1438, which is the latest GSQR, DMSRDE has developed

production partners under Memorandum of Understanding (MoU) and as per current estimates, the production partners can produce 3000-4000 BPJs per month.

1.18 When asked whether the Ministry of Defence had even contracted DMSRDE for procurement of Bullet Proof Jackets, the Ministry responded as under:

'Defence Materials and Stores Research and Development Establishment (DMSRDE), Kanpur based laboratory of Defence Research and Development Organisation (DRDO) is involved in design and development of Bullet Proof Jackets and not in procurement. DRDO has informed that the DMSRDE has designed and developed BPJs as per GSQR No. 1438. Thus, their production partners can participate in the RFP scheduled to be issued shortly. '

1.19 In reply to a query regarding reason for non-availability of technology for manufacturing of BPJs with DPSUs, the Ministry stated:

'HAL: Nil

BEL: Nil

BEML: Not applicable.

BDL: Not applicable.

GRSE: Not applicable

GSL: Nil

HSL: Not applicable

MDL: Nil

MIDHANI: MIDHANI has manufactured and supplied Bullet proof Jackets to various state police. But these are very heavy to carry or wear.

However, developments are going on in association with DMRL and OFB for further improvement.'

Shortage of arms and ammunition

1.20 The Committee, in their course of examination, noted that the Army is grappling with shortages in several areas ranging from modern assault rifles, bullet-proof jackets and night-fighting capabilities to howitzers, missiles and helicopters.

1.21 To a pointed query of the Committee that whether it was a fact that the Army is facing acute shortage of arms, gear and ammunition, the Ministry submitted as under:

'Government constantly reviews the security scenario and accordingly decides to induct appropriate defence equipment to keep the armed forces in a state of readiness and remaining equipped with modern weapon systems. Mismatches between requirements and

availability can sometimes occur which are continually addressed by the on-going procurement process.

The long term capital acquisition requirements of services are reflected in the Long Term Integrated Perspective Plan (LTIPP), which is for 15 years. The present LTIPP covers the period 2012-27. Deriving from LTIPP, a five year Services Capital Acquisition Plan (SCAP) is prepared, which is further translated into a two year Roll-on plan known as the Annual Acquisition Plan (AAP). Cases included in the AAP are progressed as per Defence Procurement Procedure (DPP).'

1.22 During oral evidence, a representative of the Ministry deposed regarding shortage of ammunition with the Army:

"... the OFB itself is falling short what the requirements are. The ammunition shortage is huge because the capacities are not there. There is a need to diversify beyond what we have."

1.23 The Defence Secretary also deposed on the issue of shortage of ammunition:

"..regarding the gap in ammunition, our situation is given. We have to depend on OFB or import the materials. Import also takes its own time. The OFB are not able to fulfill the targets that are given to them. We are concerned about this situation. The only other option is to find a good alternate source of production in the country. For key ammunitions, sometimes we need technology for that. So, technology issues are also involved. In order to make good the deficiencies, it has now been decided that we would selectively go in for private participation for production of ammunition."

1.24 Further elaborating on the role of private sector, he submitted as under:

" I am glad to say that seven items have been identified. After taking into account the production capacities existing and the capability to deliver and the gaps that are existing, it has been decided that, at least, to begin with, seven items would be put up for private participation. This is something which we can achieve without much delay because there are a number of companies which are willing to enter the field. I am sure, once that is done, the situation will improve drastically."

1.25 When asked whether the Army had unrealistic technical parameters and whether these parameters were in line with the best practices worldwide, the Ministry responded as under:

'Technical parameters are realistic and based on operating conditions prevalent in the context of the Army. They are generally aligned to international standards. For example, the GSQR of Bullet Proof Jackets confirms to the National Institute of Justice Standards (NIJS), which are internationally accepted.'

Procurement of Rifles

1.26 The Ministry was asked to provide a brief on the problems faced by the Army in handling Indian Small Arms System (INSAS) and other existing weapon. The following information was furnished:

'Two categories of weapon viz 5.56 mm INSAS Rifle & 5.56 mm INSAS LMG are available in INSAS family of weapons. The weapons were designed by DRDO and have evolved over a period of time with upgraded versions coming in to take care of shortcomings.

Indian Small Arms System (INSAS) Rifle 5.56 mm: This weapon was designed by Armament Research & Development Establishment (ARDE), a concern under the aegis of Defence Research & Development Organization (DRDO). Based on result of extensive field trial by the User and developer, the weapon design has been finalized and General Staff Qualitative Requirement (GSQR) No. 429 has been formulated by Indian Army. OFB started production of this weapon in early 90s according to this GSQR to meet the requirement of Indian Army. Till date about 16.5 lacs Rifle 5.56 mm INSAS have been supplied to Indian Armed Forces (Indian Army, Navy, Air Force, MHA). On the basis of customer feedback, this weapon has been upgraded periodically from introductory version of INSAS 1A to INSAS 1A1 to INSAS 1B to INSAS 1B1 (current version being issued to consignees).

Indian Small Arms System (INSAS) Light Machine Gun (LMG) 5.56 mm: This weapon was also designed by ARDE. Based on result of extensive field trial by the User, the weapon design was finalized and General Staff Qualitative Requirement (GSQR) No. 429 has been formulated by Indian Army. Mass production was commenced from 1997-98 and about 48,000 nos has been supplied to Army & about 70,000 nos to MHA so far. Last Indent for qty 14,232 nos received in 2010-11. Based on user feedback, an AUCRT (Accelerated Usage Cum Reliability Test) was commenced during from August, 2004 to October, 2004. The trial team had representatives from User, DRDO, DGQA, EME and OFB. Based on recommendation of the trial, to increase the reliability of the weapon, 21 design modifications were proposed and the same were incorporated in subsequent supplies.'

1.27 When asked if Defence Research and Development Organization (DRDO) has been involved in improvement of INSAS Rifles, the Ministry replied in positive and submitted as under:

'...the INSAS Rifles is improved subsequent to Operation Vijay in the year 1999 based on the observations/feedback received from the User. The improved Rifle (Rifle 1B1) after thorough User evaluation was introduced in to Service in the year 2001. Further, improved version of INSAS Rifle is under development with participation of DRDO, OFB, DGQA and User. Limited prototypes have undergone User Parameters. User & DGQA trials planned in Mar 2016 before accepting it as Rifle 1C version.'

1.28 The Committee also sought details of the cost of development and improvement of INSAS Rifle and for a new weapon if there is any in the pipeline. The Ministry responded as under:

'DRDO has developed the INSAS weapon system at a cost of Rs. 3.5 Cr. The development cost of the improved INSAS Rifle 1B1 (in Service) was born by OFB. Cost of further improvement in version Rifle 1B1 (Rifle 1C) is also being born by OFB. The New Rifle i.e. Multi Caliber Rifle is being developed under TD mode at project cost of Rs. 13.95 Cr. The prototypes are presently undergoing technical evaluation.'

1.29 When asked to provide the reason of failure of DRDO in living upto the expectations of the Forces, the Ministry submitted the following:

'The INSAS Rifle developed against the Army's GSQR (GSQR 429) has fully met the QR and thus inducted in to the Service.'

1.30 In response to the query that whether any plan had been made by the Army in procurement of new Rifles and provision in the Budget for the same, the Ministry stated as under:

'A case for Capital procurement of Assault Rifles is under process and a Request for Information (RFI) is being formulated by Army HQrs (AHQ) for the same. Simultaneously, DRDO and OFB are undertaking development of a 5.56 mm Assault Rifle wherein AHQ, as user, is also involved.'

1.31 The Committee also desired to know whether the Ordnance Factory Board was asked to develop and produce an alternate Rifle on its own and the present status in this regard. The Ministry submitted as under:

'No, OFB was not asked to develop alternate Rifle. But being the pioneer agency in this field, OFB proactively developed Ex-Calibur Rifle, a modified and improved version of INSAS Rifle. Series of successful trials were held at Inf School, Mhow, but the weapon was not inducted into Army.'

As the RFP of Army could not materialize they associated with OFB for developing a new generation Rifle. OFB started with the gained experience of Excalibur Rifle along with user, DRDO and DGQA. The Rifle has performed very well in user-assisted trials at various locations including Infantry School Mhow. The alteration committee has also recommended to incorporate the modifications in the proposed INSAS 1C version. User cum MET trial will be carried out in 1st week of March, 2016. DGQA trial for 10 nos. (5 Machined Body + 5 Riveted Body) has also been scheduled in 2nd week of March, 2016.'

Modernization of Army

1.32 As submitted by the Ministry, budget allocation for modernization (Capital Acquisition of Army) in BE 2016-17 is Rs. 21,535.26 crore.

1.33 When asked whether the budgetary allocation during 2015-16 had been fully utilized, the Ministry responded:-

'The final status of utilization of budgetary allocation will be known after the financial year 2015-16 is over. However, upto the 3rd week of March 2016, an amount of Rs. 12,144.67 crore has been spent against MA 2015-16 allocation of Rs. 14,473.87 crore.'

1.34 As apprised by the Ministry, the acquisitions planned for the year 2016-17 are included in Draft Annual Acquisition Plan (AAP) 2016-18. Out of the 276 procurement schemes forming a part of the Draft AAP: 2016-18 for the Army, 124 schemes have been granted AoN. Major schemes in the draft AAP include Missiles, Artillery Guns, Assault Rifles, Bullet Proof Jackets, Helicopters and Tanks.

1.35 The allocations for Capital acquisition and actual expenditure for Army during 11th and 12th Plan period have been as follows:-

11th Plan

Year	BE	RE	Expenditure
2007-08	8521.10	8,676.80	9,128.81
2008-09	10,194.07	8,032.57	7,739.80
2009-10	13,153.95	9,486.64	11,694.52
2010-11	12,383.36	10,841.36	11,724.88
2011-12	14,252.49	10,832.87	10,865.93

12th Plan

2012-13	13,864.14	11,568.76	10,871.79
2013-14	13,327.04	10,401.46	10,426.49
2014-15	20,935.41	14,803.29	13,867.41

1.36 Details of additional funds sought by the Army for modernisation during Eleventh Plan and Twelfth Plan are given below:

(Rs. in crores)			
Year	BE Allocation	RE projection	Additional projection
2007-08	8,521.10	8,539.57	18.47
2008-09	10,176.07	10,078.30	-97.77
2009-10	13,153.95	13,179.90	25.95
2010-11	12,383.36	13,352.80	969.44
2011-12	14,252.49	14,907.20	654.71
2012-13	13,724.14	13,515.90	-208.24
2013-14	13,327.04	13,922.00	594.96
2014-15	20,935.41	18,585.48	-2,349.93
2015-16	22,054.50	20,466.79	-1,587.71

1.37 The Ministry was asked about the proposed acquisition, delay in various acquisitions of Army, time and cost overrun during the Eleventh and Twelfth Plan. The Ministry was also asked to give details of each acquisition in terms of initially scheduled timeline, revised timeline (if any), initial cost and revised cost (if any) during the same period. The Ministry informed as below:

'The acquisition of Weapon Systems and equipment for the Armed Forces flows from the Long Term Integrated Perspective Plan (LTIPP). The current LTIPP spells out the capability desired to be achieved by the Armed Forces over the 15 years duration from 2012 to 2027. The LTIPP is translated into specific assets to be acquired, in the form of Services Capital Acquisition Plan (SCAP 2012-17), covering a five year period.

From the Services Capital Acquisition Plan (SCAP), a list of equipment and weapon systems required to be procured immediately is listed in the form of the Annual Acquisition Plan (AAP) The AAP is a 2 year roll on plan. Presently AAP 2015-17 is in vogue and contains 147 schemes which are at various stages of procurement.

During the 11th Plan period, 180 numbers of contracts have been signed with cumulative value of Rs. 63172.80 crore and in the 12th Plan period 90 numbers of contracts have been signed so far with cumulative value of Rs.37875.33crore for Capital Acquisitions of Army. There are no cost increases after the commercial bids are opened and post signing of the contracts except on account of exchange rate variation or variation in taxes, if provisions for such variations are included in the contracts. Pendencies occur in procurement cases due to several reasons, such as insufficient and limited vendor base, non-conformity of the offers to the Request for Proposal (RFP) conditions, long field trials, complexities in contract negotiations, stakeholder consultations and long lead time for indigenization, design and development projects etc. MoD and Army Headquarters are working in unison to ensure timely and unhindered procurement as per the DPP.'

1.38 The Committee further desired to be apprised of the concrete steps taken/proposed to be taken by the Ministry of Defence to address each cause of pendency enumerated in its above reply. The Ministry responded as under:

'The DPP 2016 has been approved and uploaded on the Ministry of Defence (MoD) website on 28/03/2016. It will be effective from 01/04/2016. The Preamble introduced in this DPP recognises that Defence acquisition has certain unique features including supplier constraints. The DPP favours swift decision making, provides for suitable timelines and delegates powers to the appropriate authorities to ensure an efficient and effective implementation of the procurement process, by all stakeholders concerned.

The private sector industry in Defence is at nascent stage. The DPP 2016, with focus on 'Make in India' and self reliance aims to improve capability and maturity in the domestic defence industrial base. This would address, inter-alia, the issues such as insufficient and limited vendor base as well as non-conformity to the RFP conditions/stipulations.

The measures introduced in DPP 2016 to address the issues of pendency /delays include:

- (i) Provision for Change of Name of Vendor /Entity has been incorporated.
- (ii) Provision under the 'Buy (Indian-IDDM)' category of acquisition that the onus of providing that the equipment design is indigenous, rests with the vendor, and such vendor claims will be verified by a committee comprising scientists from DRDO and representatives from SHQs, based on documents issued by authorised agencies and presented by the vendors. This is a definitive step towards self-certification and involves simplification of the capital procurement process.
- (iii) Provision that FET will be conducted by the user, only pertaining to conditions where the equipment is most likely to be deployed. In other conditions where the probability of deployment is not high, appropriate certifications confirming the functional effectiveness under such conditions may be obtained; in cases where applicable, simulations based testing may be resorted to. This is again a significant step towards self-certification and involves simplification and speeding up of the capital procurement process.
- (iv) Provides for extensive interactions with the vendors by the HQIDS / SHQ, after uploading the broad details of the scheme on MoD and SHQ websites. Based on general information that is obtained from the vendors, the 'Competency Map' of the participating Indian industry should be updated by DDP.
- (v) Validity of AoN reduced to 6 months (from 1 year) for 'Buy' cases and to 1 year (from 2 years) for 'Buy & Make (Indian) cases. Moreover, draft RFP has to be prepared and submitted alongwith the proposal seeking AoN.

(vi) Single vendor cases at the bid submission stage, TEC stage and Evaluation stage will not be automatically retracted and could proceed with due justification.

(vii) Moreover, guidelines for Handling of Complaints have already been notified. The guidelines on 'Agents' and 'Debarment' are under final approval stage and would be notified shortly.'

1.39 The Committee further desired to know whether there was a need for taking corrective steps to ensure that modernisation process was not hampered. The Ministry responded as under:

'The modernisation of the Armed Forces is a continuous process based on threat perception, operational necessity, technological changes and available resources. The Capital acquisitions flow from the 15 years Long Term Integrated Perspective Plan (LTIPP), Five year Services Capital Acquisition Plan (SCAP) and Annual Acquisition Plan (AAP).

Initiatives taken to further streamline the process include collegiate decision making, identification of priority schemes and expediting of trials. Further, amendments to the DPP are undertaken as and when required etc to streamline the process.

The Ministry of Defence had constituted a Committee of Experts headed by Shri Dhirendra Singh for amendments to DPP-2013 including Formulation of Policy Framework to facilitate 'Make in India', debottlenecking the procurement process and also simplifying/rationalising various aspects of the Defence Procurement. The Committee has submitted its report in July 2015. Several of its recommendations have been considered in the finalisation of the new DPP which is expected to be notified shortly.'

1.40 Army's inventory consists of a mix of modern, current and equipments approaching obsolescence. The Ministry failed to submit information regarding current percentage of equipments approaching obsolescence in Army.

1.41 When queried about the steps being taken by the Ministry to replace the old and ageing equipments with the new ones, the Ministry submitted as under:

'Modernisation plans of the Army are in place in the form of Long Term Integrated Perspective Plan, Five Year Service Capital Acquisition Plan and Annual Acquisition Plan. Capital acquisition proposals for replacement of vintage equipment as listed in the above mentioned Plans are being progressed under the provisions of Defence Procurement Procedure (DPP).'

1.42 The Committee learnt that from the Services Capital Acquisition Plan(SCAP), a list of equipment and weapon systems required to be procured immediately is listed in the form of

the Annual Acquisition Plan(AAP), which is a 2 year roll on plan. Presently AAP 2015-17 is in vogue and contains 147 schemes which are at various stage of procurement. The Committee desired to know about the measures taken by the Ministry to ensure that these 147 schemes, which are at various stages of procurement, are timely fructified. The Ministry responded as under:

'The 147 schemes listed in AAP 2015-17 are being progressed as per provision of DPP 2013 which contains timelines for completion of various stages of Acquisition process. After accord of AoN, the acquisition process involves solicitation of offers; evaluation of technical offer; field and staff evaluation; oversight by Technical Oversight Committee (TOC); commercial negotiation by Contract Negotiation Committee (CNC); Approval of CFA and award of contract/supply order. Defence Procurement Procedure (DPP) provides a timeline of 87-137 weeks for completion of the Acquisition process. The progress of cases is regularly reviewed in the Acquisition Wing.

20 contracts with value of Rs.8377.01 crore have been signed during 2015-16 for capital procurement of defence equipment for Indian Army such as Radars, Missiles, Rockets, Vehicles and Ammunition.

The remaining schemes are at various stage of procurement and are guided by the provisions of DPP-2013 including the timelines given therein. Status updates are provided to the DAC for review of progress.

The DPP 2016 has made some changes in the procedure for faster completion of the procurement procedure.'

Acquisition from indigenous sources

The Committee sought details of the acquisitions made from indigenous sources and the outlay spent on indigenous acquisitions during the Eleventh Plan. The Ministry stated as under:

'The expenditure on Capital Acquisition for Army for orders placed on Indian vendors during the 11th Plan period was Rs. 43271.36 crore, out of the total expenditure of Rs 51153.94 crore. During the last three years viz. 2012-13, 2013-14 & 2014-15, 50 numbers of contracts for Capital Acquisitions of Army were signed with Indian vendors with total contract value of Rs 16,793 crore. In 2015-16, 14 no. of contracts have been signed so far with Indian Vendors for total contract value of Rs. 4255.36 crore. The items contracted include Radars, Tanks, missiles, UAVs and Rockets.'

1.44 When queried regarding the present percentage of indigenous equipment held by Army, the Ministry replied as under :

'During last three financial years, 50 Contracts have been signed with Indian vendors for capital procurement of Defence equipment for Army such as Tanks, Rockets, Missiles, Gun upgrade and simulators etc. The expenditure on capital acquisition in respect of orders placed on Indian vendors from 2011-12 to 2014-15 was Rs. 138630.82 Crore (56.02%).'

1.45 When asked if the Army envisaged any improvement in percentage of indigenous equipment held by Army after the end of Twelfth Plan, the Ministry replied as under: :

'The Defence Procurement Procedure 2013 mandates higher preference to the 'Buy (Indian)', 'Buy & Make (Indian)' and 'Make' categorisations in Capital Procurement. Consequently, cases have been processed under DPP-2013 as per the above hierarchy of preference to give the desired boost to the indigenous defence industry and to enhance domestic procurement. The new DPP is also likely to have provision to further promote induction of indigenously designed, developed and manufactured defence equipment.'

1.46 On the issue of acquisition from indigenous sources, a representative of the Ministry of Defence, during oral evidence, submitted as under:

"..the Buy IDDM category which has been introduced is now the highest priority which means that any case which is initiated after this 2016, the first category will be Buy IDDM. That means, you either have to go in for an IDDM category or you have to justify why you are not going for it before you can go on to a lower category. So, the Buy IDDM category, it is there in subsequent slides, is that it mandates that the design, development and manufacturing is all Indian. That means it is an Indian design and the Indian firm can develop and manufacture the product. And in such a situation it has to have in addition to having the design, development and manufacturing capability, a 40 per cent indigenous content. This is the highest category. But there is also a secondary aspect to it that in case someone does not have the IDDM, even then he can come into this highest category if he has indigenous content of 60 per cent or above. So, this is pro indigenization and pro indigenous design and development. So, that is now the highest category. This is the major change which has been made in the direction of promoting indigenization and indigenous design."

Main Battle Tank

1.47 The Committee, in their Seventh Report on Demands for Grants 2015-16, had noted that Defence Research and Development Organisation (DRDO) had been developing Arjun Main Battle Tank (MBT) Mark-II, which has about 75 tank fittable improvements over and above Arjun MBT Mark-I. These improvements had been arrived in mutual consultation with all the stakeholders.

1.48 As per the Ministry, Defence Acquisition Council approval was accorded for 118 Nos. of Arjun MBT Mk-II. The validity expired on 28th Aug 2015 and needs extension. With increase in weight, apprehensions have arisen as to its seamless application in semi-developed and developed sectors of the Western Front. In a review meeting on 20 April, 2015, the Hon'ble RM directed for a QR review committee *"Regarding improvements in the Mk-II & the increase in weight, it was decided that DRDO and User should mutually form a QR and based on that DRDO should provide configuration giving weight budget. Thereafter action plan would be made"*. The various aspects like Trafficability, Transportability, Agility, Mobility and other operational/ functional problems caused by 6 tonne of additional weight have been deliberated by the QR committee and the report is under finalisation at Directorate General of Mechanised Forces (DGMF) office.

1.49 Armament Research & Development Establishment (ARDE), Pune is developing a laser homing anti-tank guided missile which will be launched from 120mm rifled gun of MBT Arjun Mk-II. DEATH-K is the abbreviation for operational characteristic of this missile: **D**etect, **E**valuate, **A**cquire, **T**rack and **H**ome to **K**ill. A time line of 4 years has been projected to complete the development of this totally indigenous missile. On successful development, this missile is expected to be commissioned by Mechanised Forces of Indian Army.

Mountain Strike Corps

1.50 During oral evidence, a representative of the Ministry submitted regarding the problems faced in raising Mountain Strike Corps, sanctioned by the Government in 2013:

"The only issue with Mountain Strike Corps is of release of funds for the infrastructure development. The CCS Note is there. That is yet to be cleared. Once that happens, it will further take care of the hollowness which is developing because we are using our own reserves to raise the formations as of now. But physically on ground, we are on track."

1.51 When enquired about the budgetary aspects of the corps, the representative deposed further:

"It has been raised in two parts. One was purely for the issue of manpower which was there. That has already been there. That was about Rs.64000 crore. Then, there was another part of Rs.28000 crore for infrastructure development. It has to be cleared as of now."

Shortage of Officers

1.52 The Ministry furnished the following information in respect of required and existing manpower of Army:

'Officers: In the Army (excluding Army Medical Corps/Army Dental Corps/Military Nursing Service), as on 01.07.2015, authorized and held strength of officers is as under:-

Authorised Strength -	49631
Held Strength -	40525
Shortage -	9106 (18.35%)

Junior Commissioned Officers(JCOs)/Other Ranks(ORs):

As on 01.10.2015, authorized and held strength of JCOs/ORs in Army (excluding Army Medical Corps/Army Dental Corps/Military Nursing Service), is as under:

Authorised strength -	11, 84,096
Held strength -	11, 53,108
Deficiency -	30988 (2.62%)*

* 82480 recruits are already under training and would be sufficient to make up the deficiencies.'

1.53 When asked how the Ministry proposed to fill these gaps during the Twelfth Plan, the Ministry apprised the Committee as under :

'The Government has been constantly taking measures to reduce shortage of officers in Army. These include making service more attractive by way of reduction in time required for promotions, introduction of Colonel (Time Scale) rank, enhancing promotional avenues by way of upgradation of posts in Select Ranks, additional family accommodation through Married Accommodation Project etc.

Army has undertaken sustained image projection campaign to create awareness among the youth on the advantages of taking up a challenging a satisfying career. Awareness campaigns, participation in career fairs and exhibitions, advertisements in print and electronic media, motivational lectures in schools, colleges are some of the measures in this direction.'

1.54 The Committee, in their Seventh report on Demands for Grants 2015-16, had noted that the Defence Institute of Psychological Research (DIPR) under Defence Research and Development Organisation (DRDO) carried out a study to identify the job trajectory of Indian youth, their propensity to join Armed Forces and to explore the perceived apprehensions in

joining Armed Forces. In their findings, DIPR had inter alia, observed that the inherent problems perceived by the students include separation from family, frequent transfers, transfer to remote areas, lesser number of holidays, hard training/physical labour etc.

1.55 The Committee desired to know whether Defence Institute of Psychological Research (DIPR) also studied the trends regarding inclination of youth towards joining Armed Forces, recruitment methods, facilities given to armed forces etc. in other countries. The Ministry replied that DIPR had studied the trends in India only.

1.56 The Committee, in their Seventh report on Demands for Grants 2015-16, had recommended providing five years compulsory military service to those aspirants who want to directly join Gazetted Central and State Government service in order to overcome the shortage of officers in Armed Forces. The Ministry, in this regard, replied that since this would need a major policy decision the matter would need careful examination and deliberation in consultation with all concerned. However, when further queried about the issue, the Ministry simply stated that the issue is under examination in the Ministry.

Sainik Schools

1.57 The scheme to establish Sainik Schools was introduced in the year 1961. Sainik Schools were established as a joint venture of the Central and State Governments. These schools are under the overall governance of Sainik School Society. The objectives of Sainik School are to prepare boys academically, physically and mentally for entry into the National Defence Academy and remove regional imbalance in the officer cadre of the Defence Services. As per the information furnished by the Ministry Sainik Schools have shown an upward trend in the number of cadets joining the National Defence Academy (NDA). Out of 25 Sainik Schools in the country, 154 students gained admission in NDA, which has a course strength of 591, in 2015.

1.58 On the issue of admission of girls in Sainik Schools, a representative of the Ministry of Defence deposed before the Committee as under:-

“.....There is no proposal to admit them in Sainik Schools because we are going to feed all the boys and probably girls to National Defence Academy. Till the time NDA sets up the facility, there is no plan in Sainik Schools.”

1.59 As regards the funding pattern of multiple stakeholders in Sainik Schools, the Ministry have submitted following information:

<u>State Government</u>	
Land	40-50 acres
Building	Approx 75 crore for new schools
Maintenance & Scholarships	Varies from State to State
<u>Central Government</u>	
Defence Scholarships	
NDA incentive	
Fee and Dietary Subsidy	
VI th Central Pay Commission	
IT & Training Grant etc	
Grant-in-aid for Infrastructure Development	
<u>Parents: Approx charges Rs. 80,000 per annum</u>	
Tuition Fee	
Dietary Charges	
Pocket Money and Miscellaneous	

Terror Attack

1.60 In wake of the recent Pathankot terror attack, the Committee desired to be apprised of the measures taken by the Ministry to augment security of various military establishments in the country the Ministry replies as under:

'Security arrangements in military establishments are dynamic in nature and are periodically reviewed. The observations and recommendations of these reviews are progressively implemented to maintain a robust and strong response mechanism to emerging threats.

The Government has constituted a committee under the chairmanship of a former Vice Chief of Army /Staff to inter alia suggest measures to strengthen security of various military establishments across the country. The Committee is expected to submit its report by 31st March, 2016.

As directed by government, the three Services have carried out security audit of all their military establishments.'

CHAPTER -II

NAVY

The Indian Navy (IN) is the naval branch of the Indian Armed Forces. The primary objective of Navy is to secure the nation's maritime borders, India also uses its navy to enhance its international relations through joint exercises, port visits and humanitarian missions, including disaster relief. In recent years, the Indian Navy has undergone rapid modernisation to replace its ageing equipment currently in service. In the past, the Indian Navy has played an important role in maintaining peace for India on the maritime domain. It has been deployed for humanitarian relief in times of natural disasters and crises across the globe, as well as to keep India's maritime trade routes free and open navy. 80% of national crude oil requirement is met by the seas, another 11% is met from the offshore energy sources within Indian exclusive Economic Zone. Protection of mercantile marine an important charter and security of maritime infrastructure vital for economic development. There is presence of Extra Regional Forces in IOR such as over 120 warships and submarines operating in IOR which includes Red sea perian gulf. 56 Indian Navy deployed since 2008, Total of 3240 ships escorted till Mar 16 with over 23715 Indian seafarers onboard.

2.2 Data on projections and allocations of BE and RE in respect of the Navy for the last five years including 2014-15 is as follows:

(Rs. in crore.)

Year	BE		RE	
	Projection	Allocation	Projection	Allocation
2011-12	40,541.07	25,246.89	35,932.66	29,606.01
2012-13	44,478.90	37,314.44	40,768.63	29,668.33
2013-14	52,940.22	36,343.46	42,349.79	33,582.92
2014-15	47,823.78	37,808.46	38,656.82	32,442.86
2015-16	44,814.71	40,528.88	40,990.50	34,375.24
2016-17	48,725.87	39,424.88		

2.3 The Committee desired to know the bifurcation of budget for Revenue and Capital heads. Details regarding the projections made by the service, allocations made at BE and RE stage and the expenditure incurred during the last two years of the Eleventh Plan, the first

two years of the Twelfth Plan, and the projected outlay and BE allocation for 2014-15, separately for capital and revenue, are as follows:-

REVENUE

(Rs. in Crore)

Year	BE		RE		Expenditure
	Projected	Allocated	Projected	Allocated	
2010-11	10,723.76	9,329.67	11,147.73	9,833.52	9,979.02
2011-12	13,658.47	10,589.06	14,450.48	12,146.93	11,903.80
2012-13	15,835.71	12,548.02	15,765.78	11,401.91	11,833.65
2013-14	19,164.69	12,194.43	15,059.73	13,163.94	13,034.36
2014-15	19,570.57	13,975.79	15,753.51	13,935.79	13,678.87
2015-16	18,546.58	15,525.64	15,838.30	14,635.18	12,035.49*
2016-17 (BE)	18,502.56	17,424.79			

* Expenditure upto end of January 2016

CAPITAL

(Rs. in Crore)

Year	BE		RE		Expenditure
	Projected	Allocated	Projected	Allocated	
2010-11	15,221.78	12,137.85	17,890.87	15,323.77	17,140.18
2011-12	26,882.60	14,657.83	21,482.18	17,459.08	19,211.52
2012-13	28,643.19	24,766.42	25,002.85	18,266.42	17,759.88
2013-14	33,775.53	24,149.03	27,290.06	20,418.98	20,358.85
2014-15	28,253.21	23,832.67	22,903.31	18,507.07	22,269.66
2015-16	26,268.13	25,003.24	25,152.20	19,740.06	15,275.55*
2016-17	30,223.31	22,000.09			

* Expenditure upto end of January 2016

2.4 Data with regard to the overall trend of Naval Budget during the Twelfth Plan Period is as tabulated below:

Naval Budget - XIIth Plan

Fiscal Year	% share of Defence Budget (BE stage)
2012-2013	18.12%
2013-2014	16.79%

2014-2015	15.37%
2015-2016	15.32%
2015-2017	14.55.%

Budget Review 2015-16

2.5 Budget analysis separately for Capital and Revenue Budget for the FY 2015-16 is as follows:

Capital Budget: FY 15-16		(Rs. In Crs.)
Modernisation	BE	RE/MA
Committed Liabilities	22248.12	17200.00
New Schemes	1112.78	1193.38
Land & Works	720.00	638.87
Total Capital	24080.90	19032.25

Revenue Budget: FY 15-16		(Rs. In Crs.)
Scheme	BE	RE/MA
P&A	6442.74	6442.74
Other than P&A	7882.94	6042.48
Total Revenue	14325.68	13385.22

2.6 With regard to the capital and revenue budget of 2016-17, the information is tabulated below:

Capital Budget: FY 16-17		(Rs. In Crs.)
Scheme	BE Projections	BE Allocations
Modernisation	28057.00	20363.77
Committed Liabilities	23276.00	18763.77
New Schemes	4781.00	1600.00
Land & Works	750.00	677.45
Total Capital	2807.00	21041.22

Revenue Budget: FY 16-17		(Rs. In Crs.)	
Scheme	BE Projections	BE Allocations	Allocation wrt Projection
P&A	7293.41	7686.81	105.39%
Other than P&A	9097.89	7910.88	86.95%
Total Revenue	16391.30	15597.69	95.16%

2.7 The projection is much higher than the allocation. Even the expenditure is fairly more than the final allocation. In the Financial Year (FY) 2015-16, the net capital allocation for Navy was Rs. 25,003.24 crore at BE stage while in the FY 2016-17, the allocation at BE

stage is Rs. 22,000.09 crore. In this regard, the Committee were informed that Ministry allocates funds based on the ceiling provided by Ministry of Finance, which were lower than the requirements projected by this Ministry. Based on ceilings conveyed by Ministry of Finance wherein there is an overall decrease of Rs.8,248.00 crore from BE 2015-16 to BE 2016-17, reduction was made in BE 16-17 for Navy also.

2.8 In the BE 2015-16, the net capital allocation for Navy was Rs 25,003.24 crore while in the RE 2015-16, the allocation was Rs 19,740.06 crore. Asked about the reasons for lesser allocation in RE from BE and about the projects that were curtailed / affected due to reduced allocation, in a written reply, the Ministry submitted as under:

'This Ministry allocates funds based on the ceiling provided by Ministry of Finance, which were lower than the requirements projected by this Ministry at RE stage. Based on ceilings conveyed by Ministry of Finance wherein there is an overall decrease of Rs.13,188.00crore from BE 2015-16 to RE 2016-17, reduction was made in RE 15-16 for Navy also. Moreover, there has been downward revision in Committed Liabilities by around Rs. 5048 crores. This is on account of reduced outgo in respect of a number of ship-building schemes like P 71, P 15A, P 15B, Naval Offshore Petrol Vessel (NOPV), Cadet Training Ship (CTS), P 17A etc, wherein slippage in the progress of work resulted in reduced milestone payments.'

2.9 Details of the over-spending in case of Navy during the year 2012-13, 2013-14 and 2014-15, with reference to final grant are as follows:

(Rs. in crore)			
Year	Final Grant (Net)	Expenditure	Over-spending
2012-13	17066.42	17759.88	693.46
2013-14	19385.62	20358.85	973.23
2014-15	21806.83	22269.66	462.83

Reduction in budget for 'Fleet'

2.10 The Committee wished to know the reasons for reduced allocation against sub-head 'Fleet' to Rs 10,681.00 crore in RE 2015-16 which was Rs 16,049.87 crore in BE 2015-16. The Committee were informed that the downward revision of Rs. 5368.87 crore i.e. from Rs. 16049.87 crore at the BE 15-16 stage to Rs.10681.00 crore at RE 15-16 stage is primarily on account of reduced fund outgo in respect of certain ship-building schemes of the

Indian Navy, due to slippages in contractual milestones, slow progress of work and delay in milestone payments (P 71, P 15A, P 15B, NOPV, CTS, P 17A etc.).

Reduction in budget for 'Land'

2.11 With regard to the reasons for decline in allocation under sub-head 'Land' from Rs.115 crore in BE 2015-16 to Rs. 38.87 crore in RE 2015-16, the Committee were given to understand that the downward revision of Rs. 76.13 crore i.e. from Rs. 115 crore at the BE 15-16 stage to Rs. 38.87 crore at RE 15-16 stage is primarily on account of reduced fund outgo in respect of compensation payment to ex-land owners of Project Seabird, Karwar under Charged Head of Minor Head 'Land'. This is due to slow progress of court cases, resulting in delay in payments. The underspent amount was reduced from the allocations at RE stage. This amount was enhanced by Rs 10 crore to Rs 48.87 crore at MA stage.

Budget For 'Transportation'

2.12 The BE 2015-16 allocation against the head 'transportation' was Rs. 410.00 crore, while the RE 2015-16 allocation was only Rs. 354.99 crore. The budget has been increased to Rs 454 crore in BE 2016-17. In this regard the Ministry furnished information as under:

'This Ministry allocates funds based on the ceiling provided by Ministry of Finance, which were lower than the requirements projected by this Ministry at RE stage. Based on ceilings conveyed by Ministry of Finance, wherein there is an overall decrease, allocations were made to the Services. It may, however, be added that additional amount of Rs. 40 crores was made available to Navy under 'Transportation' head at MA 2015-16 stage. Till the 3rd week of March 2016 an amount of Rs 352.75 crore has been spent. Under spending, if any, will be known only at the end of the Financial Year.

Against projection of Rs 419.5 crore at RE stage, due to reduced allocation ceiling by MoF, the RE was reduced to Rs 355 crore. At MA stage, the allocation under 'Transportation' has been increased to Rs. 395.00 crore. The BE 2016-17 was projected by Navy as Rs 454 crore and the same has been provided. The projections were based on anticipated increase in prices of rail/ air travel, and increased cost of hired transport.'

2.13 With regard to the 'Tour expenses of Naval and Civilian Officers within India', the RE 2015-16 was Rs. 107.359 crore while the BE 2016-17 is Rs. 145.49 crore, the Committee were apprised that the increased allocations are based on anticipated increase in prices of

rail / air travel, and increased cost of hired transport. However, the expenditure will be monitored on a regular basis, and revisions, if any, will be effected at RE and Supplementary stages.

The Status Of Modernisation Of Existing Naval Bases.

2.14 The details of the allocation made and the expenditure incurred along with the physical targets and achievements made during the XIth Plan and first three years of XIIth Plan in this regard is given in the following paras:

Naval Base, Karwar (Phase I). The setting up of a Major Naval Base at Karwar, as Project Seabird, was approved by the Gol in 1985, at a cost of Rs 350 Crs. All major works envisaged as part of Phase I of the Project have been completed. Phase I caters for infrastructure for 10 ships/ submarines and 10 yard craft. The existing infrastructure includes the following:-

- (a) A Naval Ship Repair Yard.
- (b) Berthing facility for 10 ships/ submarines.
- (c) Shiplift of 10,000 T capacity.
- (d) Armament facility.
- (e) 141 bed hospital.
- (f) Armament facility.
- (g) Residential Accommodation.
- (g) Logistics complex encompassing Material Organisation, Base Victualling Yard and Weapon Equipment Depot.
- (h) Sports and recreational facilities.

2. **Naval Base, Karwar (Phase II A).** The AIP for Phase II A of Project Seabird was accorded in Dec 12, and caters for basing of 32 ships/submarines, 12 FICs, and 23 yardcraft along with all associated facilities and infrastructure. The operationalisation of Phase II A facilities is planned by 2021. The Project Management Consultant (PMC) was appointed in Nov 14, to undertake overall Project Management, undertake detailed design of marine works, covered dry berth, other works, and security and communication packages. The major scope of work will be executed in 13 Work packages and includes the following:-

- (a) 10 Operational Piers (additional 3605 m of berthing space).
- (b) Dockyard & Fleet Base Buildings.
- (c) Naval Air Station.
- (d) Augmentation of Naval Armament Facilities.
- (e) Augmentation of Residential facilities.

- (f) Augmentation of Security & Communication facilities.
- (g) Augmentation of Naval Hospital to 400 bedded capacity.
- (h) Other Works (Water, Power, Sewage, Fire water, Roads & Bridges, Hill Slope stability and Flood study, Environment park).

3. **Envisaged Contracts in Phase IIA.** The essential survey, investigation and studies as part of early Works are in progress. The following contracts for critical packages

are planned to be concluded in 2016:

- (a) Marine Works Consultancy package 1 (MWC 1), which includes Dredging, Reclamation, Revetment and Quarrying.
- (b) Design and Build package 1(DB 1), which includes residential package at Site A.
- (c) Marine Works Consultancy package 2 (MWC 2), which includes construction of Northern piers and support services.
- (d) Appointment of a Design Consultant for Naval Air Station.

4. **Funds Allocated and Disbursed.** The details of funds allocated and disbursed so far for development of Naval Base Karwar are as follows:

(Rs. in Crore)

Sl.	Project		Total Cost	Payment made upto XI th Plan	FY 12-13	FY 13-14	FY 14-15	FY 15-16	FY 16-17
(a)	Phase I	Allocated	2628.82	2522.25	50.00	29.32	22.07	20.00	20.00
		Expended			20.61	9.97	4.56	3.37	--
(b)	Phase II	Allocated	19603.00 (with escalation)	-	-	-	0.25	50.00	210
		Expended			-	-	0.07	44.24	--

2.15 In addition to Naval Base Karwar, *IN* is progressing modernisation of the following Forward Operating Bases (FOB), Operational Turn Round (OTR) bases, Naval Detachments (NAVDETs) :

- (a) FOB at Tuticorin.
- (b) OTR Base at Paradip.
- (c) OTR Bases at Kamorta and Campbell Bay.
- (d) OTR Base at Diglipur.
- (e) NAVDET in L&M Islands.
- (f) NAVDET at Androth
- (g) NAVDET at Bitra.

Coastal Security

2.16 The coastal security require multi agency co-ordination Multi Agency Coordination. Various agencies working in the marine domain include Indian Navy, 18/R&AW, Min of Agriculture/Fisheries, DG/Ministry of Shipping, Port and Customs Authorities, Ministry of P&NG, Ministry of Home Affairs and Coast Guard. Indian Navy as Lead Agency. In this regard, the Committee were further apprised as following:

'Indian Navy ICG standard operating procedures for Coastal Security revised in 2015, Establishment of Joint Operation Centres, Conduct of Coastal Security Exercises, establishment of Sagar Prahari Bal and Induction of 57 fast track for crafts, Training of CISF, BSF and Marine police personnel, creation of National Maritime Authority and National Command Control Communication and Intelligence Network & Information Mgt & Analysis Centre (IMAC).'

Force Level Structure

2.17 The Ministry of Defence informed that Emergency Cabinet Committee report of 1964 approved Force Level of 138 ships and submarines. Meanwhile maritime security environment has undergone considerable changes, present force level -123 ships, 15 submarines and 235 aircraft and in 2012, DAC approved 198 ships and submarines by 2027.

Major Projects in Progress

There are presently 46 Ships and Submarines under construction in India.

Focus Areas - Ships

Impetus to replace ageing platforms, Induction of Indigenous Aircraft Carrier, P 15B and P 17A Ships, Induction of Mine counter Measure Vessels (MCMVs) and Current six MCMVs over 26 years old.

Focus Areas -Submarines

Force Level Planned 18(Conventional), Existing Force Level 14+1, 16-30 years old submarines, six P-75 submarines under construction at MDL, Mumbai, Medium Refit Life Certification (MRLC) of submarines and case for six P-75 submarines being progressed as per directives of Ministry of Defence, under strategic partnership model.

Focus Areas- Aircraft/ Helicopters

Critical for surveillance and Stand-off Targeting at Sea, deficiency of 61, integral helicopters on existing ships, Mid Life Upgrade of Kamov - 28 helicopters, case for Multi Role Helicopter being progressed, case for P81 Boeing aircraft at advanced stage of acquisition and cases for 12 Dornier aircraft and Nine Medium Range Maritime Reconnaissance Aircraft also in progress.

Accident data of Navy

2.18 The details are as follows:

SI	Date	Incident	Cause of Accident	Outcome of Investigation
(a)	07 Jan 07	Incident of KM 569 of Kunjali II	Material Malfunction (Intermittent)	One officer was found culpable and disciplinary action has been taken.
(b)	11 Jan 07	Accident of UAV Searcher (US-901) at NAS (R)	Crew Resource Management Failure	One officer was found culpable and disciplinary action has been taken.
(c)	25 Jan 07	Incident of Heron UAV 921 of INS Garuda	Inadequate operational support	One officer was found culpable and disciplinary action has been taken.
(d)	28 Feb 07	Accident of SK 521 of Kunjali II	Material Failure	Four officers and two sailors were found culpable and disciplinary action has been taken.
(e)	05 Apr 07	Accident of Sea Harrier– 651 of INS Hansa	Undetermined	No individual or organisation was held blameworthy for the incident.
(f)	19 Jun 07	Touching bottom of LCU L – 33 at Nan Cowry Harbour	Error of Judgment by Crew	Two officers were found culpable and disciplinary action has been taken.
(g)	20 Jun 07	Grounding of INS Sindhuraj while entering Harbour	Error of Judgment by Crew	One officer was found culpable and disciplinary action has been taken.
(h)	02 Aug 07	Damage to propellers of INS Pralaya	Presence of sandbars not known to the ship at the time of incident and later established through survey	No individual or organisation was held blameworthy for the incident.
(j)	08 Sep 07	Accident of SH 608 of INS Viraat	Non – adherence of laid down norms of training for the aircrew	One officer was found culpable and disciplinary action has been taken.
(k)	23 Oct 07	Incident on SU 535 of INS Dega	Material Failure	Two officers were found culpable and disciplinary action has been taken.
(l)	24 Dec 07	Accident of SH 613 of INS Hansa	Support Lapse (Maintenance)	No individual or organisation was held blameworthy for the incident.
(m)	12 Jan 08	Propellers touching	Error of Judgment	Two officers were found

SI	Date	Incident	Cause of Accident	Outcome of Investigation
		the bottom and consequential damages of FAC - 84	by Crew	culpable and disciplinary action has been taken.
(n)	20 Jan 08	Collision of INS Sindhughosh with MV Leeds Castle	Crew error	Two officers were found culpable and disciplinary action has been taken.
(p)	01 Feb 08	Accidental venting of H2S Gas Compartment and loss of lives onboard INS Jalashwa	Failure to establish safe working practices, non-compliance of org procedures/routines, and not sensitizing/training crew adequately	Four officers and three sailors were found culpable and disciplinary action has been taken.
(q)	09 May 08	Touching of bottom by INS Mahish	Error of Judgment by Crew	Two officers were found culpable and disciplinary action has been taken.
(r)	04 Jun 08	Touching in sand bank by INS Vindhyagiri leaving Kochi Harbour	Organisational failure on the bridge of the ship	Four officers were found culpable and disciplinary action has been taken.
(s)	14 Aug 08	Ground accident of KM 562 of INS Hansa	Human error	Two officers were found culpable and disciplinary action has been taken.
(t)	27 Aug 08	Belly fire on SH 616 of INS Hansa	Material Failure (premature)	No individual or organisation was held blameworthy for the incident.
(u)	28 Aug 08	Parting of under carriage on CH 478 of INS Rajali	Material Failure (Fatigue)	No individual or organisation was held blameworthy for the incident.
(v)	15 Sep 08	Bending and cracking of port upper attachment point on CH 438	Operational hazard (Training Hazard)	No individual or organisation was held blameworthy for the incident.
(w)	13 Oct 08	Accidental bursting of detonator during demonstration session onboard INS Sindhuvijay	Procedural lapses by crew	Two officers and one sailor were found culpable and disciplinary action against officers has been taken. No disciplinary action was initiated against the sailor as the sailor was released from service on 31 Jan 09.
(x)	17 Oct 08	Ground accident of KM 566 of INS Hansa	Maintenance error (neglect)	Two officers and five sailors were found culpable and disciplinary action has been

SI	Date	Incident	Cause of Accident	Outcome of Investigation
				taken.
(y)	23 Jan 09	Damage of both propellers of INS Godavari.	Crew Error	Six officers were found culpable and disciplinary action has been taken.
(z)	17 Jul 09	Incident of fire on board INS Agray.	Systems failure	Four officers and four sailors were found culpable and disciplinary action has been taken.
(aa)	04 Aug 09	Collision between Ranvir and Kuthar	Material Failure of steering gear onboard ship	Two officers were found culpable and disciplinary action has been taken.
(ab)	04 Jan 10	Damage to the ships multi beam Sonar while docking INS Sarvekshak	Error by Docking Crew.	Three officers and two civilians were found culpable and disciplinary action has been taken.
(ac)	26 Feb 10	Battery pit explosion onboard INS Sindhurakshak	Crew Error	Four officers and one sailor were found culpable and disciplinary action has been taken. Death of sailor was considered as attributable to service.
(ad)	26 Nov 10	Fire onboard INS Delhi in Officer's Galley	Electrical Short Circuit in hot plate	Four officers were found culpable and disciplinary action has been taken.
(ae)	20 Jan 11	Collision of sailing boat with Kalpeni	Crew error	Two officers were found culpable and disciplinary action has been taken.
(af)	30 Jan 11	Collision between MV Nordlake and INS Vindhyagiri	Matter sub-judice.	10 officers and seven sailors were found culpable and disciplinary action has been taken. The disciplinary action against one officer is being processed.
(ag)	30 May 11	Fire in Galley on INS Deepak	Electrical fire in deep fat fryer.	Five officers and Two sailors were found culpable and disciplinary action has been taken.
(ah)	11 Mar 12	Fire onboard LCU L 38	Heat from weld surface owing to continuous hot work onboard	One officer and two sailors were found culpable for incident and disciplinary action has been completed against them.
(aj)	08 Aug 12	Fire in engine room on INFAC 83	Material failure (dislodging of air	No individual was held blameworthy for the incident.

SI	Date	Incident	Cause of Accident	Outcome of Investigation
			plug)	
(ak)	15 Oct 12	Crash of CH 405 (Chetak Helicopter)	Material failure of servo units in air leading to sudden un-commanded pitch up and roll to right.	No individual was held blameworthy for the incident.
(al)	19 Dec 12	Fire in aft battery pit of INS Shankush	Material Failure (Spark in battery pit)	No individual was held responsible for the cause of fire, and the incident was treated as an accident.
(am)	05 Mar 13	Crash of CH 440 (Chetak Helicopter)	Material Failure	No individual or organisation was held responsible for the incident.
(an)	14 Jul 13	Fire onboard INS Tarasa.	Crew Error	Three officers and four sailors were found culpable and disciplinary action has been taken.
(ap)	26 Jul 13	Damage to helo hangar/ other fittings on INS Delhi by Yard 12701 (Kolkata)	Error of judgment by Crew	Two officers were found culpable and disciplinary action has been taken.
(aq)	14 Aug 13	Explosion in INS Sindhurakshak.	Organisational and individual lapses	Two officers were found culpable and disciplinary action is being processed.
(ar)	22 Sep 13	Fire onboard INS Viraat.	Material failure (internal short circuit inside split AC onboard)	Five officers and one sailor were found culpable and disciplinary action has been taken.
(as)	14 Dec 13	Fire onboard Konkan.	Non compliance of extant orders	Four officers and two sailors were found culpable and disciplinary action has been taken.
(at)	19 Dec 13	Scraping of INS Tarkash on SBW Knuckle.	Error of Judgment by crew.	Two officers were found culpable and disciplinary action has been taken.
(au)	23 Dec 13	Collision of INS Talwar with unlit fishing boat.	Failure of bridge AIO Ops Room organisation onboard.	Four officers and two sailors were found culpable and disciplinary action has been taken.
(av)	08 Jan 14	Crack in Sonar Dome of INS Betwa.	Error of judgment by crew.	Three officers were found culpable. Disciplinary action against two officers has been taken and against one

SI	Date	Incident	Cause of Accident	Outcome of Investigation
				officer is being processed by HQWNC.
(aw)	17 Jan 14	Suspended movement of INS Sindhughosh while securing alongside.	Incorrect tidal predictions promulgated in Indian Tide Tables 2014	One officer was found culpable and disciplinary action has been taken.
(ax)	23 Jan 14	Sea water ingress through a crack/hole in the ship side of INS Vipul.	Unethical work practices by sub-contractors and poor quality control on workmanship	Five officers were found culpable and disciplinary action has been taken.
(ay)	30 Jan 14	Damage to Propeller of INS Airavat, whilst entering harbour.	Crew Error	Two officers were found culpable and disciplinary action has been taken.
(az)	26 Feb 14	Fire onboard INS Sindhuratna.	Electrical short circuit in cables.	Seven officers were found culpable and disciplinary action is being processed at HQWNC.
(ba)	07 Mar 14	Accident during trials of engine room fire fighting system onboard Yard 12701 (Kolkata) under construction at MDL.	Material Failure.	No individual or organisation was held responsible for the cause of incident, and the incident was treated as an accident. The death of the officer is considered as 'attributable to Service'.
(bb)	06 Apr 14	Incident of smoldering and thick smoke during hot work on INS Matanga.	Lack of preparation, poor refit management and contravention of laid down SOPs by dockyard staff/contractors	Two officers were found culpable and disciplinary action is being processed.
(bc)	28 Jun 14	Damage to port propeller of INS Kuthar while coming alongside at Port Blair.	Non-adherence of laid down SOPs in pilotage waters	Seven officers and one sailor were found culpable and disciplinary action has been taken.
(bd)	02 Jul 14	Touching bottom of INS Cheetah while entering Kochi	Lack of cohesion between the Bridge SSD/	Four officers were found culpable and disciplinary action has been taken

SI	Date	Incident	Cause of Accident	Outcome of Investigation
		Harbour.	pilotage organisation	against two officers. Disciplinary action against two officers is being processed.
(be)	31 Oct 14	Collision of INS Kora with Merchant ship at Sea.	Error of judgment by crew	Two officers were found culpable and disciplinary action has been taken.
(bf)	06 Nov 14	Sinking of TRV-72.	Bol under process	Board proceedings being examined at IHQ MoD(N) for causative analysis.
(bg)	25 Mar 15	Ditching of IN Dornier aircraft (INDO 24) at sea	Bol under process	Board proceedings being examined at IHQ MoD(N) for causative analysis.

The recommendations of the Boards of Inquiry (Bsol) have identified the causes of the incident, and recommended disciplinary action against the culpable, where applicable. Further, the Bsol has also recommended measures for mitigating the recurrence of these accidents in the future.'

2.19 In addition, following measures have been instituted for augmentation of Safety Organisation in the *IN*:

(a) **Safety Class Authorities (SCA).** The adoption of safe working practices has been given due impetus. This is particularly relevant, where men operate in a potentially hazardous and demanding equipment intensive environment. The *IN* has put in place a robust mechanism to ensure implementation of safe practices for creating a safe working environment. The concept of '**Class Authorities**' for dealing with intricacies, in respective domains already existed in the *IN*. In Oct 12, the existing class authorities have been designated as '**Safety Class Authorities**' for the respective specialist domain at the Apex level, for a wider coverage of Professional activities.

(b) **Conduct of Safety Audit.** In Feb 14, IHQ MoD (N) has promulgated directives for conduct of safety audits of the field formations/ units by the designated Audit teams of respective Command/Operational Headquarters. The feedback from President of the Audit Boards and Command/Operational Headquarters is being monitored at IHQ MoD(N) for suitably addressing mitigation measures.

(c) **Setting Up of Incident Study and Analysis Cells (ISACs).** ISACs have been set up in the professional schools, which are entrusted with the task of formulating case studies out of the various incidents/accidents. These case studies are disseminated to all trainees undergoing training at the schools and to the officers prior to assuming Command so as to derive meaningful lessons.

2.20 The following additional measures have been implemented to inculcate a 'Safety Culture' in the Navy:

- (a) All units have incorporated measures to sensitise personnel on safety aspects. These include displaying safety posters, dissemination of safety instructions etc.
- (b) Industrial units in the Commands have undertaken awareness programs for civilian workers and employees on safe working practices.
- (c) The audit of Fire Fighting/ Damage Control equipment and organisation onboard ships and establishments of the Commands is revalidated through snap audits by the Command Headquarters staff.
- (d) Safety Stand Down drills have been institutionalised.
- (e) Safety aspects are also checked during the Sea Training undertaken by the Flag Officer Sea Training (FOST) and during various Inspections by the Operational Authorities such as Fleet Commanders, Flag Officer Submarines (FOSM) and Flag Officer Naval Aviation (FONA).
- (f) Lessons learnt from Boards of Inquiry are being implemented in letter and spirit.
- (g) Safety procedures and professional checks to counter risks inherent to working onboard, are being re-emphasised periodically at all levels of training in the Navy.

2.21 Regular advisories from IHQ MoD(N) are being issued for adherence to Standard Operating Procedures. The advisories inter-alia focus on the following:

- (a) Concerted efforts required to be put in at all levels towards ensuring that a 'safety culture' is created and nurtured onboard all units.
- (b) Maintenance of high standards of proficiency of equipment operators.
- (c) Professional training in training establishments to further reinforce the basic skills of individuals in watch-keeping, bridge work and navigation.
- (d) Examination of crew knowledge and drill relating to safety aspects in equipment/ machinery operations along with materiel preparedness.
- (e) Audit of safety practices and review of orders at regular intervals to make them contemporary.

2.22 The above remedial measures have resulted in ensuring a safe working environment and a safety culture without curbing the traditional naval ethos of initiative and boldness. This has resulted in minimising the number of accidents/ incidents in the IN.

2.23 With regard to the decommissioning of INS Viraat, the Committee were informed that it is planned to be decommissioned by end of 2016. All coastal State Governments have been requested to convey their firm commitment for preserving Aircraft Carrier INS Viraat and converting into “Aircraft Carrier Museum” post decommissioning. Some of these States have responded and requested for further information/clarification.

INS Sindhukirti

2.24 The MR cum Upgradation of Sindhukirti was offloaded to Hindustan Shipyard Ltd. (HSL) in 2005. The refit commenced on 16 Jan 06 and was completed on 26 June 2015. Thereafter, Submarine was shifted to Naval Dockyard (Vizag) and is presently operational. The major activities undertaken during the refit are as follows: -

- (a) Installation of indigenous Sonar USHUS, AC Plants, Compressor etc.
- (b) Torpedo Tubes modification for Club S.
- (c) Upgradation of Appassionata.
- (d) Upgradation of Steering (Pirit) & Ship (Pallady) Control Systems.
- (e) Upgradation of Fire Control System (AICS EKM-1).
- (f) Renewal of Main Line Cables (12.27 Kms).
- (j) Renewal of Local Cables (65.5 Kms).
- (k) Renewal of Hydraulic & HPA system (3500 pipes spools).

Manpower

2.25 The data regarding Manpower status of the Indian Navy is tabulated below:

(a) **Officers.**

Year (as on 31 Dec)	Sanction Strength	Borne Strength	Shortage	%
2007	8913	7420	1493	16.75
2008	9065	7502	1563	17.24
2009	9263	7690	1573	16.98
2010	9732	7899	1833	18.83
2011	10405	8172	2233	21.46
2012	10452	8392	2060	19.70
2013	10690	8850	1807	16.90
2014	10848	9237	1578	14.50

2015	11215	9689	1493	13.31
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(b) **Sailors.**

Year (as on 31 Dec)	Sanction Strength	Borne Strength	Shortage	%
2007	51313	48036	3277	6.39
2008	52021	48225	3796	7.30
2009	53931	47659	6272	11.63
2010	58267	47961	19306	17.69
2011	63130	48833	14297	22.65
2012	64214	49702	14512	22.60
2013	64217	52264	11953	18.61
2014	65468	54358	11110	16.97
2015	67659	57151	10508	15.53

2.26 The shortage of officers and sailors has been reduced through initiation of various measures, aimed to mitigate the gap between the sanctioned strength and the borne strength. The initiatives taken during the XIth Plan (2007-12) and ongoing XIIth Plan (2013-17) Plan Period have resulted in reduction in shortages. The manpower shortages, as on 31 Dec 15 has reduced to **13.31%** and **15.53%**, from **21.46%** and **22.65%** in 2011 for officers and sailors respectively, despite an increase in the sanctioned strength of officers from 10405 to 11215 and for sailors from 63130 to 67659.

2.27 The presently existing strength in various cadres of Indian Navy are as given :

	Sanctioned Strength	Existing Strength	Shortage	% Shortage
Officer	11,215	9,689	1,493	13,31%
Sailors	67,659	57,151	10,508	15.53%
Civilians	46,826	37888	8938	19.03%

Both service and civilian personnel, lead time of six years for officers and two years for sailors required, trained manpower deployed for enhanced requirements of Coastal Security post 26/11, ban by MoF on creation of posts since 2011. Austerity measures, severely impacting recruitment, training and employment, Need for Review of MoF bas, especially for Indian Navy and Focus on Training Infrastructure.'

Training

2.28 The details of the Training Institutes are as follows:

SI	Designation	Location	Officers/ Sailors (O/S)
(a)	INS Dronacharya	Kochi	O/S
(b)	ASW School	Kochi	O/S
(c)	ND School	Kochi	O/S
(d)	Maritime Warfare Centre, Kochi	Kochi	O
(e)	Signal School	Kochi	O/S
(f)	Diving School	Kochi	O/S
(g)	Naval Institute of Aeronautical Technology (NIAT)	Kochi	O/S
(h)	Observer School	Kochi	O/S
(j)	Indian Naval Academy	Ezhimala	O
(k)	School of Medical Assistants (SOMA)	Mumbai	S
(l)	National Institute of Hydrography	Goa	O/S
(m)	Naval War College	Goa	O
(n)	INS Hamla	Mumbai	O/S
(p)	INS Shivaji	Lonavala	O/S
(q)	INS Valsura	Jamnagar	O/S
(r)	INS Satavahana (Submarine School and Escape Training School)	Visakhapatnam	O/S
(s)	School of Advance Undersea Warfare (SAUW)	Visakhapatnam	O/S
(t)	Institute of Naval Medicine(INM)	Mumbai	O/S
(u)	Naval Special Warfare Tactics and Training Centre (NSWTTC)	Goa	O/S
(v)	INS Chilka	Chilka	S
(w)	School for Naval Airmen (SFNA)	Kochi	O/S
(x)	Nuclear Biological Chemical Defence (NBCD) School	Lonavala	O/S

(y)	INS Agrani	Coimbatore	S
(z)	Seamanship School	Kochi	O/S
(aa)	INPT School	Goa	O/S
(ab)	Centre of Excellence in Leadership and Behavioural Studies (CELABS)	Kochi	O
(ac)	School of Naval Oceanography & Meteorology (SNOM)	Kochi	O/S
(ad)	INS Vishwakarma	Visakhapatnam	O/S
(ae)	Naval Institute of Education in Training Technology (NIETT)	Kochi	O/S
(af)	Naval Provost & Regulating School (NPRS)	Goa	O/S
(ag)	Naval School of Music (INS Kunjali)	Mumbai	S
(ah)	Naval Constructor Wing (K)	Kochi	O

2.29 Training in the Indian Navy is a dynamic and ongoing process, and is a predominant peace time activity. Training is aimed to achieve and retain the skill sets and meet the desired combat standards for operating modern platforms in Service. The review of the training content and processes is regularly undertaken by Headquarters, Southern Naval Command (HQSNC) which is the *IN's* Training Command, in consultation with IHQ MoD(N). The following are relevant to training in the Navy:

'Periodic Reviews. Periodic review of training in terms of changes in the training pattern/ procedures due to decommissioning/ discontinuation of platforms/ equipment are carried out regularly, whilst concurrently introducing new training content to train *IN* personnel on newly inducted weapon platforms/ equipment/ technology. It is pertinent to mention that the training content and procedures for both officers and sailors, are also being reviewed periodically, commensurate with the changes in technology and technical upgradations by the Headquarters, Southern Naval Command (HQSNC) (*IN's* Training Command) and this is being closely monitored by IHQ MoD(N). A major review of the Sailor's training pattern and curricula was undertaken in Feb 14. A review of officers' courses has also been undertaken in 2015. Review of training curricula is undertaken through various fora:-

- (i) Annual Training Conference (ATC). Issues requiring policy changes at the highest level are decided during the Annual Training Conference (ATC) held annually. The ATC is chaired by FOC-in-C (South) and attended by Chief of Personnel (COP) along with all other stakeholders including the CTOs of all Commands, COs/ OsIC of training units and HQSNC staff. All the emergent changes in training are discussed to keep the training relevant and

contemporary, especially issues which have long term implications. The ATC for 2015 was conducted on 01 May 15.

(ii) **Annual Training Meeting (ATM).** The ATM is chaired by FOC-in-C (South) and is conducted every year to review training policies, methodologies and content with participation from representatives of IHQ MoD(N). The training issues that are not discussed in ATM but require deliberations are discussed in ATM. **The ATM for 2015 was conducted on 01 May 15.**

(iii) **New Induction Training Committee (NITC).** The NITC formulates a comprehensive plan for the training curriculum for planned new inductions/ acquisitions and ensures timely availability of training aids to ensure that training remains contemporary and relevant. The committee is chaired by the Principal Director Naval Training and meets twice a year. **The last NITC was conducted on 11 Dec 15.**

(iv) **Review of Job Specifications.** In addition to the periodic reviews, the job specification of *IN* personnel, ie, the desired proficiency at the end of training period which an officer/ sailor is expected to attain, is also periodically reviewed (every five years/ on change of job profile).

(b) **Training Infrastructure Upgradation.** Effective training in the *IN* is also dependent on availability of requisite training infrastructure to impart contemporary training to naval personnel. To mitigate the infrastructure shortage at various training establishments, the Training Infrastructure Perspective Plan (TIPP) 2013-27, has been formulated by IHQ MoD(N) and is being executed through the Army Major Works Programme (AMWP)/ Project route. The plan comprehensively caters for the envisaged works for all future training infrastructure requirements of the Indian Navy including those required for Indian Coast Guard and foreign trainees upto the year 2027. The creation of training infrastructure at INA was envisaged in three phases based on CCS approval in 1995. Phase I of the project, catering to a strength of 750 trainees, was sanctioned for an amount of Rs. 721.88 Crs. The Phase II was sanctioned by the CCS in Dec 2011 to cater for increase in training capacity from 750 to 1200 trainees, at a cost of Rs. 340.72 Crs. A case for infrastructure augmentation of INS Chilka at an approximate cost of Rs. 226 Crs has been approved by Hon'ble RM in Aug 15.

(c) **Upgradation to BTech.** Modern naval warfare hinges on exploitation of complex technology in all three dimensions. Therefore, *IN* personnel today are required to be trained to effectively and efficiently operate modern naval platforms/ assets, which employ a wide array of high technology systems and equipment. To ensure that the officers are better equipped to operate and maintain these technology intensive equipment, B Tech curriculum (instead of only BSc as hitherto) has been introduced as the basic qualification for officers in the *IN* wef 2009. The first batch of B Tech officers following the revised training pattern has graduated from the Indian Naval Academy (INA) in May 13.

(d) **Training Aids/ Simulators.** In keeping with the advancements in technology, modern and sophisticated training aids which are actual working models of the real equipment are being inducted into the Navy. Additionally, modern simulators for ships, submarine and aviation systems have also been installed. For example, Damage Control Simulator is being extensively used for imparting training on simulated damage control and flooding exercises at Lonavala and Kochi; a Fire Fighting Simulator is being utilised at Lonavala; high end Ship Handling and Rules of Road (ROR) simulators for simulated training to hone navigational and ship-handling skills are

being effectively utilised at INA, ND School and in the fleet etc. Aircraft simulators for Sea King helicopter, Sea Harrier fighters and Mig-29K fighters, etc are also being extensively used. Likewise, two axis motion submarine simulators are also installed and being used. In addition, computer-based training packages, are being extensively exploited for imparting training in all professional schools for both, officers and sailors across the Navy.'

2.30 The details of personnel recruited (Officers and Sailors) during the years 2013-14, 2014-15 and 2015-16 are as follows:-

SI	Year	Officers	Sailors
(a)	2013-14	800	4466
(b)	2014-15	806	4694
(c)	2015-16	537	4633

2.31 The measures undertaken by *IN* to bridge the gap between authorised and existing strength are as follows:

(a) **Image Projection Campaign.** The Indian Navy has been undertaking Image Projection Campaigns which are reviewed and refined every alternate year.

(b) **Recruitment Publicity.** Following publicity actions are being undertaken to increase awareness about various entries and jobs in the Indian Navy:-

- (i) Advertisements in print and electronic media.
- (ii) Special stalls/helpdesks are being set up at various Exhibitions and Job Fairs.
- (iii) Hoardings are being placed at key locations.
- (iv) Advertisements are also being placed in popular magazines/papers with Quick Response Codes.
- (v) Advertisements on job portals on the internet.

(c) **Visits to Schools/ Colleges.** Indian Navy visits a large number of Schools and Colleges across the country to spread awareness. University Entry Scheme is specifically designed to induct candidates who are still in colleges.

(d) **Sainik Schools.** Naval Officers are appointed to various Sainik Schools and RIMC to motivate the young students to choose Navy as a preferred career option.

(e) **Induction of NCC Cadets.** In order to make the naval career attractive to the country's youth, the IN offers incentives to NCC Cadets opting to join the Navy as Officers and Sailors.

(i) **Officers' Entry.** A total of 12 vacancies out of the 90 annual vacancies of the Graduate Cadet Special Entry Scheme (GSES) are reserved for NCC 'C' certificate candidates. These candidates are exempted from appearing the Combined Defence Services Examination.

(ii) **Sailors' Entry.** The following incentives are being given to NCC cadets:-

(aa) **Additional Marks for Consideration in Merit.** The NCC candidates are given additional credit points which are added to the marks obtained in the written examination for preparation of merit. Additional credit of 6, 4 and 2 points are given to NCC 'C', NCC 'B' and NCC 'A' Certificate Holders respectively.

(ab) **Vacancies Reserved for Naval NCC 'C' Certificate Holders.** In addition to the above, 25 vacancies are earmarked for candidates holding naval NCC 'C' certificate in the SSR Entry scheme.

(f) **Candidate Friendly Recruitment Process.** In order to connect with the young tech savvy generation, the Indian Navy's recruitment website has been provided with the facility for filing online applications, forwarding of call up letters on email. Online access to admit cards, results and merit list has also been introduced. The facility has greatly reduced time lines and enhanced satisfaction, while projecting the Naval recruitment process as transparent and candidate friendly.

(g) **Introduction of New Entry Schemes for Specific Induction of Officers.** Today the youth aspires to join the specialisation of their choice. To facilitate this, the Navy has introduced dedicated and specific entries in the specialised fields of Naval Architecture, Aviation and Submarines.

(h) In order to overcome the shortage of junior officers for various staff duties at seniority levels of 10-14 years, the Govt, in Nov 14, approved a policy to change the initial engagement period of Short Service Commissioned Officers from 10 years to 12/14 years as follows:

Ser	Branch/ Cadre/ Specialisation	Duration of Commission (in years)		
		Initial Engagement	Extension permitted	Total Duration
(i)	Executive [Pilot/ Observer/ Submarine/ Hydro, Engineering (Submarine) Electrical (Submarine)]	14	--	14

(ii)	Executive [GS/IT/NAI/ Logistics, Engineering (GS/Aviation/ NA) Electrical (GS/ Aviation) Education]	12	02	14
(iii)	Executive (Sports/ATC/Law)	10	2+2	14

(i) **Miscellaneous Actions.** Miscellaneous actions being undertaken with regard to recruitment publicity are as follows:

- (aa) The Navy celebrates the first week of December every year as the Navy Week. This opportunity is taken to connect with the population of our country. As part of the celebrations, the following activities are undertaken:-
 - (aa) Ships and establishments are thrown open to general public to give them an insight of the life on Naval ships and units.
 - (ab) Visits of school/college students are organised onboard Naval Ships to educate them on career opportunities.
 - (ac) Visits by Naval ships are organised to small and medium ports of the country to facilitate visit by the local population who would otherwise not get this opportunity.
 - (ad) Medical Camps are organised at remote locations to make the Navy conspicuous and popular.
 - (ae) Navy Melas are organised to increase popularity of the service.
- (ii) Publicity material like calendar, diaries, pamphlets, posters and blowupsetc, are being distributed to approximately 11000 Schools/Colleges, Sainik Schools, local institutions by respective Commands and NCC units.
- (iii) A movie on Navy, 'Mission Navy' hosted on 'You Tube' and screened on National Geographic and also on Rajya Sabha Channel for popularising the service amongst youth.
- (iv) A multimedia 'CD' on career opportunities in the Indian Navy has been distributed to 2000 schools/ colleges/NCC units all over India.

- (j) Steps have been taken by the Govt to reduce attrition rate, incentivise work and improve service conditions include:-
- (i) AVSC recommendations have been implemented for improving promotion prospects of middle level officers.
 - (ii) **Review of Career Profile of Sailors (RECAPS).** The Govt has approved upgradation of 1417 vacancies from Leading to Petty Officer. The scheme has been implemented wef 01 Jan 11. The scheme has enabled better promotion prospects for sailors of all trades to the rank of Petty Officer.
 - (iii) **Modified Assured Career Progression Scheme (MACPS).** The Govt has approved the implementation of MACPS for sailors wef 01 Sep 08. Under the scheme, sailors are entitled for three financial upgradations, counted from the Direct Grade, on completion of 8, 16, 24 years of service respectively. Financial upgradation is also admissible whenever a sailor has spent eight years continuously in the same Grade Pay.
 - (iv) The career prospects of sailors have been improved through grant of Honorary rank of Chief Petty Officer to Petty Officer.
 - (v) A policy was promulgated wherein the maximum service limits in each rank for sailors was increased by two years. This resulted in re-engagement of more than 800 sailors who otherwise would have retired from the service.
 - (vi) Policy on revoking of unwillingness has been brought into force, wherein, the sailors who have rendered unwillingness for further service can revoke it, albeit with certain conditions. This will also help in retaining sailors.
 - (vii) The norms for transfer of officers and sailors having special/ differently abled children/ adults or paraplegic children/ adults have also been liberalized.

CHAPTER - III

AIR FORCE

Indian Air Force (IAF) is the air arm of the Indian Armed Forces. It is one of the World's largest Air Force. IAF has the primary objective of safeguarding Indian territory and national interests from all threats in conjunction with other branches of the Armed Forces by defending Indian airspace. IAF provides close air support to the Indian Armed Force troops in the battlefield and also provides strategic and tactical airlift capabilities. Apart from conflicts, the IAF has been an active participant in United Nations peacekeeping missions. Another prime area of operation for Air Force is humanitarian assistance and disaster relief whenever challenge arises.

Budgetary Provisions

3.2 Data on projections and allocations of BE and RE in respect of Air Force for the last five years including 2016-17 is as follows:

(Rs. in Crore)

Year	BE		RE	
	Projection	Allocation	Projection	Allocation
2011-12	56,201.56	46,209.98	46,405.19	43,872.16
2012-13	56,838.25	48,220.26	57,941.98	47,621.67
2013-14	90,530.48	57,503.94	88,331.20	57,033.71
2014-15	89,481.74	54,217.52	61,316.75	53,896.54
2015-16	75,824.24	56,686.24	58,780.87	50,819.24
2016-17	66,995.01	53,451.25		

3.3 There are huge variations in the projection and allocation of budgetary resources at the RE stage vis-à-vis the projection/allocation at the stage of BE (the allocation for 2015-16 at the stage of RE has been Rs. 50,819.24 crore as compared to the BE projection of Rs. 75,824.24 crore i.e., a difference of over Rs. 25,000 crore.

3.4 The Committee desired to have details of the bifurcation of budget for Revenue and Capital heads. Details regarding the projections made by the service, allocations made at BE and RE stage and the expenditure incurred during the last two years of the Eleventh Plan, the

first two years of the Twelfth Plan, and the projected outlay and BE allocation for 2014-15, separately for capital and revenue accounts, are as follows:-

Revenue					(Rs. in Crore)
Year	BE		RE		Expenditure
	Projected	Allocated	Projected	Allocated	
2010-11	17,483.60	15,210.73	15,249.01	15,003.55	14,551.07
2011-12	20,015.46	15,927.95	16,123.16	16,137.38	16,772.83
2012-13	19,887.73	17,705.81	20,942.36	17,103.72	17,529.02
2013-14	25,922.64	18,295.10	22,505.98	19,283.27	19,093.70
2014-15	27,073.41	20,506.84	22,368.56	20,185.86	19,741.06
2015-16	29,632.28	23,000.09	23,000.09	20,377.09	16,546.43*
2016-17 (BE)	25,728.60	23,655.83			

* Expenditure upto end of January 2016

3.5 With regard to the reduction in Revenue Budget, the Committee were informed that in view of decrease of Rs 7402.08 cr on BE for Non-Salary segment by Ministry of Finance, reduction was effected in the RE allocation to Services. In the case of Air Force, an amount of Rs. 2,623.00 crore was deducted which included Rs. 2,223 crore, as advised by Air Force, due to steep reduction in Crude Oil prices in International market.

Capital					(Rs. in Crore)
Year	BE		RE		Expenditure
	Projected	Allocated	Projected	Allocated	
2010-11	31,667.56	25,251.72	25,271.72	24,266.79	23,625.42
2011-12	36,186.10	30,282.03	30,282.03	27,734.78	28,841.18
2012-13	36,950.52	30,514.45	36,999.62	30,517.95	32,980.11
2013-14	64,607.84	39,208.84	65,825.22	37,750.44	38,614.93
2014-15	62,408.33	33,710.68	38,948.19	33,710.68	32,796.42
2015-16	46,191.96	33,686.75	35,780.78	30,442.15	26,363.84*
2016-17	41,266.41	29,795.42			

* Expenditure upto end of January 2016

3.6 Bifurcation of Capital and Revenue Budget for the FY 2016-17 including projection and allocation data is as follows :

Capital Budget			
	Projection	Allocation	Shortfall
CL+ Works	27,606	26,545	1,061
New Schemes	9,937	3,250	6,687
Revenue Budget			
	Projection	Allocation	Shortfall
Salary	13,211	13,907	-696
Non Salary	13,817	11,049	2,769
Major contract likely to be signed in FY 2016-17		Cash outgo	
Rs. In cr.			
1.	2xADDL AWACS	613.50	
2.	Spice -2000 NGPGM	93.96	
3.	Software Defined Radios	109.21	
4.	6+ EO/IR + SAR Recce PODS for SU- 30	178.42	
5.	MLH Upgrade	30.91	
6.	14xFUs of Akash MK-I	719.09	
7.	Additional -130 j 30	80.45	
8.	ARMT for ALH WSI	213.9	
Contracts likely to roll over to next FY due to shortfall in new schemes		Cash outgo	
Rs. in cr.			
1.	6xFlight Refuelling Aircraft	1292.24	
2.	Jaguar Re-Enginning	580.00	
3.	Avionics UPG for IL-76/78/AWACS	612.17	
4.	38xPC & MK-II	264.90	
5.	D-26EW System for MIG-29	365.45	
6.	48 X MLH	1005.76	
7.	20X Additioan Hawk	549.99	
8.	56 x AVRO Replacement	1789.40	
9.	65 x Ka 226-T RSH	268	
10.	LR SAM	-	

Short Fall Revenue Budget - 2016- 17

Critical Area (Rs.2769 Cr.), Stores (Rs.2356 Cr.), Works (Rs.199 Cr.),Transportation (Rs.130Cr.) and Others (Rs.84 Cr.)

(Rs. in Cr.)

IAF BUDGET : 2016-17 ADDITIONAL REQUIREMENT		
Capital Budget		Revenue Budget
Works	New Schemes	2769
1061	6687	

Impact of Shortfall in Capital Budget

Slowdown of modernisation, Delay in induction of important capabilities, Erosion of IAF's superiority over our adversaries, Resultant asymmetry in capability with respect to envisaged threat perception and Flight Safety Concerns due to obsolescence issues.

Impact Of Shortfall In Revenue Budget

Inability to procure spares & Fuel, shortfall in training, affecting serviceability - older systems require more maintenance, resulting in compromise of operational preparedness and expenditure for HADR Missions (Uttarakhand, J&K Floods) and General Elections adding further pressure on already stretched resources.

3.7 The representatives of Indian Air Force informed the Committee as under:

"Our capital committed liabilities have been catered more or less fully. In order to cater for the committed liabilities, whatever increase they have given over the previous year, that is not sufficient to cater for all the new schemes. For new schemes, we have very little, that is, Rs. 1,600 crore. We have represented that we need to have it much higher to improve our pace of modernisation. Somewhere in the middle of the year, this will get revised. That is the understanding that has been given to us."

3.8 IAF had been on the modernisation trajectory in the 11th Plan. Need to sustain this momentum in 12th & 13th Plans, Important projects are at critical stages (CNC/CFA approval), slow pace of modernisation will have a cascading effect and adequate budgetary support is requested to ensure fructification of these projects.

3.9 There are huge variation/shortfall in the allocation/expenditure vis-à-vis the projection made at the stage of BE (the actual expenditure has been to the extent of Rs. 30,809.39 crore vis-à-vis the BE projection of Rs. 41,568.47 crore).

3.10 Total capital allocation for Air Force in BE 2015-16 was Rs. 33,686.75 crore, while for the year 2016-17 BE is Rs. 29,795.42 crore. In this connection, the Committee desired to know the reasons for decline in allocation and how will it affect the preparedness of the Force. In this context, the Ministry of Defence vide written reply furnished the following information:

'In view of decrease of Rs 8248.00 cr from BE 15-16 in BE 16-17 under Capital segment by Ministry of Finance, reduction was effected in the BE allocation to Services. The details of IAF Capital Allocation for BE 2015-16 and BE 2016-17 are as follows:

(Rs. In crore)

Sl.No	Head	BE 2015-16	BE 2016-17
1	Committed Liability (CL)	28246.53	24306.02
2	New Schemes (NS)	3264.09	3250.00
Total Capital Acquisition allocation		31510.62	27556.02
3	Capital Works	2176.13	2239.83
Total Capital allocation		33686.75	29795.85

The capital allocation consists of CL, NS and Capital Works. From the above table, it is evident that the allocations in BE 2016-17 under CL has been reduced in comparison to BE 2015-16, while allocations in the other heads has been maintained near the level of BE 2015-16. The CL for FY 2016-17 includes payments in respect of contracts signed upto 31 Mar 2016. The CL is based on the milestones likely to fructify in the financial year. The expected cash outgo in respect of CL during 2016-17 is Rs 24306.02 crore which has been fully allocated by the MoD.'

3.11 Details of the over-spending in case of Air Force during the year 2012-13, 2013-14 and 2014-15, with reference to final grant are as follows:

(Rs. in crore)

Year	Final Grant (Net)	Expenditure	Over-spending
2012-13	32735.34	32980.11	244.77
2013-14	19385.62	20358.85	973.23
2014-15	26536.22	32796.42	6260.20

Humanitarian Assistance Disaster Relief (HADR)

3.12 Resources are stretched because along with our operational commitments and training, we are also doing HADR. There are obsolescence issues also. We raised the SFR with the State Governments and the State Governments do pay the money back. It is not that we are not being paid. It takes two to three years for getting the money back.

Modernization Budget for Air Force

3.13 The Committee enquired about the budget outlay provided exclusively for modernisation of Indian Air Force. in this regard, the Ministry of Defence furnished the information as given in the following tables.

(Rs. in Crore)

Year	Projected BE	Allocated BE	Allocated RE	Allocated MA	Actual Expenditure
2012-13	34164.76	28533.00	30792.85	30896.38	31053.00
2013-14	47038.62	37049.06	36645.64	37043.62	36917.99
2014-15	41568.47	31818.39	31627.39	30805.39	30809.39
2015-16	40246.53	31510.62	-	--	24734.94*
2016-17	37966.41	-	--	--	--
* Expenditure of 2015-16 is as on 31 Jan 2016.					

3.14 The huge variation/shortfall in the allocation/expenditure vis-à-vis the projection made at the stage of BE (the actual expenditure has been to the extent of Rs. 30,809.39 crore vis-à-vis the BE projection of Rs. 41,568.47 crore).

3.15 The list of acquisitions / procurements with value above Rs. 50 crore during the 12th Plan period, along with the status of each is as mentioned below:-

Contracts signed during 2012-13	Status
Procurement of PC-7 MK II aircraft and associated equipment.	Ongoing
Supply of MI-17 V5 helicopters	Ongoing
Procurement of SU 30 MKI	Ongoing

Procurement of SPICE 2000 New Generation Precision Guided Munition and associated support equipment.	Ongoing
Doppler Weather Radar with Transfer of Technology	Ongoing
Creation of Infrastructure facilities for additional Sqn of Akash Missile System	Ongoing
Development of D-Jag system, Internal Radar Warning Jammer system for Jaguar DARIN - III upgrade aircraft.	Ongoing
For Aircraft Integration, supply and commissioning of Brahmos Missiles systems group support and test equipment for use on SU-30 MKI Aircraft.	Ongoing
e-Maintenance Management System for IAF (eMMS)	Ongoing
Establishment of Defence Communication Network (DCN) for the Armed Forces.	Ongoing
Procurement of Addl C-130 J 30 aircraft	Ongoing
Infrastructure for Addl C-130 J 30 aircraft	Ongoing
Procurement of New Generation Laser Guided Bomb Kits with associated equipment under Option Clause	Ongoing
Supplementary contract for additional Reccelite Pods	Completed
Supply of Autopilots for the Jaguar Aircraft & setting up of intermediate level maintenance & depot level maintenance facilities	Ongoing
New Generation Close Combat Missiles (ASRAAM) Helmet Mounted Display (DASH V)for Jaguar (MBDA)	Ongoing
Integrated Field Shelter (Army lead service)	Ongoing
Dornier (HAL)	Ongoing
Contracts signed during 2015-16	Ongoing
EO/IR Payload for MI-17 V5	Ongoing
Ground Based Mobile Elint Systems (GBMES)	Ongoing
Additional Cheetal Helicopters	Ongoing
Thermal acquisition binocular for Garud	Ongoing
Attack Helicopters	Ongoing
Heavy Lift Helicopters (HLH)	Ongoing
Additional IACCS Nodes and Associated System	Ongoing
Microlight	Ongoing
Light Weight Portable Laser Target Designator	Ongoing
Full Mission Simulator for Su-30	Ongoing

3.16 As many as 29 contracts, each of a value in excess of Rs. 50 crore have been entered into during the period 2012-13 to 2015-16 for procuring Aircraft etc. (including PC-7 MK II Aircraft, MI-17 V 5 Helicopters etc.).

3.17 Utilization status of the funds allocated to Indian Air Force during the aforesaid period and the details are given below:

(Rs. In Crore)

Air Force Capital Budget			
Year	BE	RE	Actual Expenditure
2010-11	25251.72	24266.79	23625.41
2011-12	30282.03	27734.78	28841.18
2012-13	30514.45	32734.81	32980.10
2013-14	39208.84	38350.44	38614.92
2014-15	33710.68	33710.68	32797.90
2015-16	33686.75	--	26363.85*
*Expenditure as on 31.03.2016			

3.18 The budgetary provision towards modernization of Air Force in the FY 2015-16 is as follows:-

Year	Projected BE	Allocated BE	Allocated RE	Allocated MA	Actual Expenditure
2015-16	40246.53	31510.62	--	--	24734.94*
* Expenditure of 2015-16 is as on 31 Jan 2016.					

3.19 The major Capital contracts that are planned to be signed during FY 16-17 are tabulated below:-

Sl. No.	Scheme
1.	Rafale fighter aircraft
2.	Medium Lift Helicopter Upgrade
3.	Transport Aircraft along with Associated Eqpt as Avro Replacement
4.	Addl Mi-17 V5

5.	Manoeuvrable Expendable Aerial Targets (MEAT)
6.	Additional Akash missile system
7.	New Generation Precision Guided Munitions
8.	Reccee Pods for Su-30 MKI
9.	Weapons for Advance Light Helicopter

3.20 The Committee desired to know the reasons for inordinate delays in capital procurements. In this regard, the Ministry of Defence submitted that the Capital Procurement of the IAF is undertaken in accordance with the Defence Procurement Procedure (DPP), which lays down timelines for various stages of the procurement process. All efforts are made to adhere to these laid down timelines. Slippages in timelines sometimes occur in procurement cases due to several reasons, such as insufficient and limited vendor base, non-conformity of the offers to the Request of Proposal (RFP) conditions, long field trials, complexities in contract negotiations, stakeholder consultations and long lead time for indigenization, design and development projects etc. MoD and Air Hqrs. are working in unison to ensure timely and unhindered procurement as per the Defence Procurement Procedure (DPP). However, there have been both time and cost overruns in some cases which pertain mainly to indigenous 'Make' and 'Design & Development' (D&D) projects. To counter systemic and institutional delays, procedures are continuously reviewed and refined on the basis of the experience gained from the environment during the procurement process. Periodic reviews are carried out at all levels in Air HQ as well as at MoD to ensure that the procurement schemes progress as per the laid down time lines and the final product is operationally capable while being technologically relevant.

Indigenization

3.21 Indigenization in Defence procurements and research is one of the major thrust. Status Of Capital Contracts Signed With Indian Vendor In Last Three Years are given the following tabulated information:

SI No.	Name of the scheme	Date of Contract	Delivery Status	
Contracts signed during 2013-14				

1.	Telemetry system for ASTE	11-Apr-13	Completed
2.	Diesel Smoke Meter & Petrol Engine Gas Analyser	30-Dec-13	Completed
Contracts signed during 2014-15			
1.	Procurement of 14 Dornier 228 Aircraft for IAF	04 Feb 15	Under progress
2.	Supply & installation of one automatic fire detection & alarm system at Ambala (AFDAS)	11 Feb 15	Completed
3.	Micro UAV for IAF & IN	23-Jan-15	Under Progress
4.	Procurement of Integrated Field Shelter (IFS)	25 Sep 14	Inputs may be obtained from IA
5.	MRSAM Interface with IACCS	11 Feb 15	Under Progress
Contracts signed during 2015-16			
1.	10 EOIR payload for MI-17 V5 Helicopters alongwith 20 Mod Kits and associated equipments	27 Apr 15	Deliveries to commence in May 16
2.	Ground Based Mobile Elint System (GBMES)	31-Jul-15	Delivery to commence in Feb 17
3.	Addl IACCS Nodes and its Associated System	01 Oct 15	Works to be completed by Oct 19
4.	AddlCheetalHetprs	11 Sep 15	Deliveries to commence in Sept 18
5.	Thermal Acquisition Binoculars for Garud	22 Sep 15	Deliveries in Sept 18
6.	LWPLTD	02 Dec 15	Deliveries in Dec 17
7.	Dornier with FIS	03 Feb 16	Deliveries to commence in Feb 19
8.	Aircraft Recognition Trainer (Army Lead Service)	22-Mar-16	Inputs may be obtained from IA

3.22 No separate allocation is made for procurement from Indian vendors. Procurement from foreign vendors is resorted to, only when the Indian industry is not in a position to provide the desired equipment or supply the required equipment in the allotted time frame. The amount of money spent on procurement from Indian vendors during the 11th Plan period is appended below:-

Rs. in Crore	
FY	Actual Expenditure on Account of Indian Vendors
2007-08	7319.59
2008-09	11390.75
1009-10	13211.34
2010-11	17811.23
2011-12	11905.98

Planning

3.23 The LTIPP for 2012-2027 which was approved by the Defence Acquisition Council (DAC) on 02 April 2012 lays down the roadmap for the capability buildup of the IAF. The 5 year Services Capital Acquisition Plan (SCAP) and Annual Acquisition Plan (AAP), which is a two year roll over plan are prepared in accordance with the objectives laid down in LTIPP 2012-2027 and progressed as per the desired timelines.

3.24 The long term capability requirements of the IAF have been projected as part of the Long Term Perspective Plan (LTPP) of the IAF for the period 2012-2027. The Capital procurement to achieve these capabilities is undertaken in accordance with the guidelines contained in the Defence Procurement Procedure (DPP). The DPP was introduced in 2002 and its scope has been refined through six revisions (in 2003, 2005, 2006, 2008, 2009 and 2011) before the present DPP 2013 was issued. The DPP is periodically reviewed to ensure that it is relevant and enables faster processing of procurements. Further budgetary allocations will assist in developing necessary capabilities in a given time frame. The important tangible targets envisaged in the LTIPP and the targets planned to be achieved during the 12th Plan period are enumerated in the table below:-

Strategic Objectives	Plan for achievement during the 12th plan
Deterrence against adversaries along with an Offensive Defensive posture	The capability with respect to the western adversary has been bolstered with the induction of Su-30 MKI aircraft and latest radar systems. The continued induction of Su-30 MKI aircraft, Akash Surface-to-Air missiles and the latest radar systems into the North-East region is part of the process to provide IAF with deterrent as well as offensive/defensive capability in the North-East as well. Procurement of Rafale and Tejas Aircraft is being progressed to arrest the draw down and maintain credible deterrence.
Enhanced Presence	The induction of strategic airlift aircraft (C-17) and Special Operations aircraft (C-130 J-30) during the 12 th Plan has enabled the IAF to respond to National requirements with the least response time and with the maximum effect. The planned induction of additional AWACS will greatly enhance the reach of the fighter fleet and enable quick and decisive response across the length and breadth of the country including the island territories.
Enhanced Air Defence Capability	The 12 th Plan will see the induction of various missile systems which coupled with the Medium and High Powered Radars, will boost the Air Defence Capability of the IAF.
Enhance Combat Force Levels	The induction of the LCA will be a step in achieving the desired combat force levels as far as the fighter aircraft are concerned. Procurement of Rafale Aircraft is also being progressed in this regard. The 12 th Plan would also see the induction of additional Medium Lift Helicopters. During this period, induction of the upgraded MiG-29, and Mirage-2000 aircraft would commence and add to the combat capability of the IAF.
Increased Surveillance and automation of Air Defence	The induction of AWACS and the AEW&C in conjunction with additional IACCS nodes would take the IAF closer to the desired end state of enhanced surveillance and automation of the Air defence network. Medium Power Radars, Low Level Tracking Radars (LLTR), Low Level Light Weight Radars (LLLWR) inducted in 12 th plan have added to Air Defence capabilities of IAF. Ground Based Mobile Elint System (GBMES) will be deployed for passive electronic surveillance.

3.25 With regard to the Planning, the Ministry further informed that the Services Capital Acquisition Plan is prepared in accordance with the roadmap laid down in the LTIPP. The Acceptance of Necessity (AoN) for all Capital procurements is granted by the SCAPCHC/DPB /DAC. Subsequently, the procurement is undertaken as per the guidelines laid down in the Defence Procurement Procedure (DPP). Further, depending on the availability of the

budget for modernisation, schemes are periodically re-prioritised and processed as per the annual acquisition plan which is two years roll on Plan. Therefore, it is not possible to finalise a target date for scheme while preparing the five year Defence Plan. However once contract is signed, the delivery schedule is ascertained from date of signing of contract. There are no Annual targets laid down in LTIPP, however 12th Plan of LTIPP envisaged induction of MMRCAs, LCA, Vhetac, FRA, AWACS, Attack Helicopter, Heavy Lift Helicopter, MLH, Upgrade of Mirage -2000, Jaguar, MiG-29, IL-76/78, Mi-17, Induction of Basic/intermediate/Advance Jet Trainer, series of Air Defence system like Radars and Surface to Air Guided Weapons etc. Many Schemes have fructified with deliveries of certain viz Attack Helicopter, Heavy Lift Helicopter, C-130 etc slated for 13th Plan. Status of delivery schedules of contracts signed during 12th Defence Plan with likely date of completion is placed as in the table below:

SI No.	Name of the scheme	Date Contract	of	Delivery Status	Remarks
Contracts signed during 2012-13					
1.	Procurement of Qty 75 PC-7 MK II aircraft and associated equipment	24 May 12		Completed	-
2.	Supply of 59 X MI-17 V5 helicopters	24-Dec-12		Completed	-
3.	Proc of 42 SU 30 MKI	24-Dec-12		Under progress	To be completed by Mar 2020
4.	Procurement of Qty 266 of SPICE 2000 NGPGM and associated support equipment	27 Apr 12		Completed	-
5.	Doppler Weather Radar and Transfer of Technology	26-Sep-12		Not Started	Contract amendment for change of name of vendor pending with MoD
6.	Creation of Infrastructure facilities for additional 06 Sqn of Akash Missile System	23 Nov 12		Under Progress	Likely to be completed by June 17.

7.	Development of D-Jag system, Internal RWJ system for Jaguar DARIN - III upgrade aircraft	16-Jan-13	Design and Development Under Progress	-
8.	For Aircraft Integration, supply and commissioning of Brahmos Missiles systems group support and test equipment for use on SU-30 MKI Aircraft.	7-Nov-12	Under Progress	Integration to be completed by Oct 2016
9.	e-Maintenance Management System for IAF (eMMS)	04 Feb 13	Under Progress	To be completed by Feb 18
10.	Establishment of Defence Communication Network (DCN) for the Armed Forces.	25 Mar 13	Under Progress	To be completed by July 17
Contracts signed during 2013-14				
1.	Procurement of Addl C-130 J 30 aircraft	27-Dec-13	Deliveries to commence in Apr 17	-
2.	Infrastructure for Addl C-130 J 30 aircraft	31-Jan-14	Under Progress	To be completed by May 16
3.	Procurement of 391 NGLGB Kits with associated eqpt under Option Clause	25-Jun-13	Completed	-
4.	Supplementary contract for additional Reccelite Pods	5-Sep-13	Completed	-
5.	Supply of 95 Autopilots for the Jaguar Aircraft & setting up of intermediate level maintenance & depot level maintenance facilities	23-Dec-13	Under Progress	Deliveries to be completed by Mar 2020
Contracts signed during 2014-15				
1.	Procurement of 14 Dornier 228 Aircraft for IAF	04 Feb 15	Under Progress	Deliveries to be completed by Aug 18

2.	Procurement of 384 close combat missiles, 130 Helmet mounted display, 226 launchers and associated equipment for jaguar aircraft	04 Jul 14	Deliveries to commence in Jan 17	
3.	Procurement of Integrated Field Shelter (IFS)	25 Sep 14	-	Inputs may be obtained from IA
Contracts signed during 2015-16				
1.	Heavy Lift Helicopters	28 Sep 15	Deliveries to commence in Mar 19	-
2.	10 EOIR payload for MI-17 V5 Helicopters along with 20 Mod Kits and associated equipments	27 Apr 15	Deliveries to commence in May 16	-
3.	Ground Based Mobile Elint System (GBMES)	31-Jul-15	Deliveries to commence in Feb 17	-
4.	Addl IACCS Nodes and its Associated System	01 Oct 15	Work under progress	To be completed by Oct 19
5.	AddlCheetalHetprs	11 Sep 15	Deliveries to commence in Sept 18	-
6.	Apache Attack Heptrs	28-Sep-15	Deliveries to commence in July 19	-
7.	LWPLTD	02 Dec 15	To be delivered in Dec 17	-
8.	Full Mission Sim for Su-30	12-Jan-16	Deliveries to commence in June 18	-
9.	Dornier with FIS	03 Feb 16	Deliveries to commence in Feb 18	-
10.	LDP (Litening 4i)	7-Mar-16	Deliveries to commence in Nov 16	-

3.26 There were 291 schemes planned under 12th plan. 60 schemes were added during the review (recast) of 12th plan. Out of the total 351 schemes, 36 have been contracted, 124 have been deleted and 191 schemes are ongoing/under progress. Out of these 191 schemes, Acceptance of Necessity (AoN) have been granted to 78 schemes and status of these schemes are given below:

SI No	Scheme	Qty	Present Status
1	Software Defined Radios	473 Sets	CFA Approval Stage
2	Recce Pods (SAR+EO/IR Pods for Su-30)	EO-6 + IR-6	CNC Stage
3	MLH Upgrade	90	CFA Approval Stage
4	NVG for C-130 J-30	58 Sets	FET Stage
5	Setting up of Adour Engine Test Bed and Module Change Workshop at Jamnagar	ETB-1 MCW-1	CNC Stage
6	Power Ascender for Garuds (Navy Lead Service)	80	CNC Stage
7	Aircraft Recognition Trainers for SAGW Units (Army Lead Service)	19	Contracted
8	Steer Skid Loaders(Army Lead Service)	40	CNC Stage
9	Armament 20mm Gun Ammo for ALH	Lot	CNC Stage
10	70mm Rocket for ALH	Lot	CNC Stage
11	Search and Rescue (SAR) Equipment	Lot	FET Stage
12	ALG Communication Terminals System	19	TEC Stage
13	Explosive Decompression Chamber (EDC)and Rapid Recompression Chamber (RRC)	2	TEC Stage
14	SRE (Repeat)	4	TCEC Stage
15	SRSAM (Akash-I)	14 FUs	RFP Response Stage
16	Indigenous AWACS (India)	2	D & D
17	Addl AWACS (IL-76) (Repeat)	2	CFA Approval Stage
18	SOMR (SPICE-2000)	250	CFA Approval Stage
19	Maneuverable Expendable Aerial Target	225	CFA Approval Stage
20	Basic Flying Trainer (PC-7 Mk-II {BTA})	38	RFP Response Stage
21	Additional Mirage 2000 Aircraft	2	RFP Formulation Stage
22	Avionics Upgrade of IL-76, IL-78 and AWACS & Re-engining of IL-78 Aircraft	20+6	RFP Response Stage
23	Additional Hawk Mk-132 aircraft	20	Recommendation made in CNC under process
24	Additional FRA	6	Recommendation made

SI No	Scheme	Qty	Present Status
			in CNC under process
25	Addl Mi-17 V5 (Repeat)	48	TEC Stage
26	Jaguar Re-Engining	275	Recommendation made in CNC under process
27	Project Cheetah	10	RFP Formulation Stage
28	Addl C-130 J-30 ac	1	RFP Formulation Stage
29	Simulator for Mirage 2000 Upgrade Aircraft	1	TEC Stage
30	MAFI Project Phase-II	Lot	RFP Response Stage
31	7.62 Mm Light Machine Gun (LMG) (Army Lead Service)	842	FET Stage
32	5.56 Mm TAVOR Rifles for GRTC (Repeat)	676	RFP Formulation Stage
33	5.56 mm LMG NAGEV along with Ammunition (Repeat)	96	RFP Formulation Stage
34	7.62 mm Sniper Galil Rifles along with Ammunition (Repeat)	48	RFP Formulation Stage
35	LRSAM	5 FUs	RFP Formulation Stage
36	Water Purification System for FBSUs + SUs(Army Lead Service)	08+40	FET Stage
37	Flexible Surveillance Devices(FSD) (Army Lead Service)	17	RFP Formulation Stage
38	Chemical Biological Radiological Nuclear (CBRN) Eqpt (Army Lead Service)	8 Lines	RFP Response Stage
39	Caravan Cum Containers for TACs(Army Lead Service)	14	FET Stage
40	Digitisation of Pechora	16 FUs	RFP Stage
41	Mistral Air to Air Missile for ALH (WSI) {HLCCM}	192	TEC Stage
42	Modernisation of EDs and BRDs	Lot	RFP Stage
43	Assault Rifles to replace 5.56 mm INSAS Rifles	32,201	AoN Stage
44	Mountain Radars	8	RFP Formulation Stage
45	PAR Phase-II (Navy Lead Service)	6	FET Stage
46	Smart Aircraft Arresting Gear System (6-40 Ton)	12	AoN Stage
47	Modern CQB Carbine to replace 9mm Sten MC	34,897	SoC Stage

SI No	Scheme	Qty	Present Status
48	CQB Carbine with Holographic Sights, Night Sight and Silencer for Garud	1,778	SEPC Stage
49	Armoured Vehicle for Garud (Light Strike Vehicle)	54	RFI Stage
50	HPR	12	AoN Stage
51	Mobile Disaster Relief Equipment {MDRE}(Navy Lead Service)	2	RFP Stage
52	MPR (Make- Arudhra)	8	D & D
53	Recee and Surveillance Heptr (RSH) {200 Ka-226T} {Army Lead Service}	65	RFP Formulation Stage
54	Transport Aircraft along with TTGE, GSE, GHE and Associated Equipment as a replacement of Avro Aircraft	56	FET Stage
55	V-SHORADS (Army Lead Service)	336 LM + 1,980 Msl	FET Stage
56	D-29 EW System for Mig-29	75	D & D
57	Survey, Target Towing, Communication Jamming and Signal Intelligence Role along with Associated Equipment	7+2	RFP Stage
58	Air to Ground Missile for Heptrs	476	RFP Stage
59	NBC Protection Projects for 15 Greenfield and 02 ongoing Airfields	17	RFP Formulation Stage
60	CIWS	61 Flt	RFP Formulation Stage
61	IFATS	103	SoC Stage
62	LLTRs II (MAKE) Ashwini	18	D & D
63	RWJ for Darin-III Jaguar Upgrade (D-Jag)	77	D & D
64	2 x FMS Jaguar DARIN III + 1 x FMS for Jaguar DARIN II	2+1	AoN Stage
65	Composite Scheme for K-Loader, Forklifters and Scissor Lift Trucks	Lot	AoN Stage
66	Satphones	190	AoN Stage
67	Additional Heron RPA	16	AoN Stage

SI No	Scheme	Qty	Present Status
68	Full Motion Full Mission (FMFM) Simulators for AN-32 Upgrade	2	AoN Stage
69	ACMI	165	D & D
70	SAGW Range Upgrade (At Suryalanka)	Lot	AoN Stage
71	VHETAC (C-17) (Repeat)	3	RFP Stage
72	D Level for Uncommon Aggregates for Mi-17 1V Helicopter and TV-3-117 VM Engine	Lot	AoN Stage
73	D Level for Mi-17 V5 Helicopter and SAFIR-5k14 APU	Lot	AoN Stage
74	NVG for MLH	230	SoC Stage
75	Night Vision Devices (Binoculars) along with accessories for Garud	113	AoN Stage
76	LCA (Tejas)	100	FET Stage
77	Su-30 MKI Enhancement	268	AoN Stage
78	Vertical Wind Tunnel (Free Fall Training Simulator)	1	RFP Formulation Stage

Force Level

3.27 The Indian Air Force (IAF) has projected a requirement of at least 45 fighter squadrons to counter a two front collusive threat. However, the IAF today has 33 active fighter squadrons as against Government authorised strength of 42 squadrons. According to the information by the Ministry of Defence, there is a gap in the force level since the rate at which fighter aircraft are retiring after completion of their total technical life exceeds the rate at which their replacements are being inducted into the IAF.

MIG 21-27 SQN IN NEXT 10 YEARS

	Squadrons Strength
Current	33
2017	32
2022	25
2027	19

Critical Areas

Fighter AC

- Production Shortfall, Low serviceability due to inadequate spare support, obsolescence and rate of Phase out higher than induction leading to drawdown.

Transport AC

- **Force Multipliers**

- AWACS : 02 Additional AWACS by 2020-21, AEW&C:02 Aircraft by December, 2016 FRA: Induction of 06 FRAs by 2019-20 (Delayed).
- Critical Areas : SAGW
- MR SAM System not yet inducted (Delayed by 48 Months). Verification Flight Trials Planned at Chandipur in May- June 2016.
- Spyder System not yet inducted, contract Amendment signed on 03 August, 2015, Delivery will commence in Feb 17 and all four FUs would be delivered by Aug. 18.
- Inferences: Air Defence
- Force Level of SAGW below MIN Acceptable Level, Delay in procurement process for MR SAM, SR SAM, and VSHORADS has increased the vulnerability of our vital areas and vital points.
- Special project
- NGHAS (108) (5400 crores), CCS note being forwarded to Ministry of Defence, planned in three Phases, first Phase-32 EAC, 04 CAC, second Phase -30 WAC, 06 CAC, AFA - enhancement of Trg. capacity (1634 crores).
- Major OP Constraints
- Two fronts operations- difficult, need to get back to higher combat potential wrt. Pakistan on TOP Priority, Large part of combat fleet is facing obsolescence as well as poor serviceability, surface to air missiles that have outlived total technical life, inadequate infrastructure and cockpit to pilot ratio.
- Way Ahead
- Essential to induct adequate number fighter Aircraft to maintain Force Levels, Replacements for ageing transport & Helicopter fleet, Increased AC availability through efficient spares procurement, Increase number of Trainer AC, Weapons Procurement- Particularly Guided Weapons and Expeditious Induction of Surface to Air Missiles for effective Air Defence.
- Way Ahead
- Enhancement of infrastructure in North & Northeast, New Generation Hardened Aircraft Shelters, Fast Tracking of Nyoma and Kargil Projects and ALGs other infrastructure in NE.
- DPSU
- Improve productivity and quality control of DPSU (HAL, BEL and OFB), DRDO to expedite IAF Related projects.

3.28 IAF has contracted 272 Su-30 MKI fighter aircraft out of which 213 Su-30 MKI have been delivered till date and the balance are likely to be delivered by 2020. Further induction of Light Combat Aircraft (LCA) and Medium Multi Role Combat Aircraft (MMRCA) is envisaged. The MMRCA project is at Contract Negotiation Committee (CNC) stage. IAF has accepted the first series production LCA on 17 January 2015. In view of the critical operational necessity for Multirole Combat Aircraft for Indian Air Force, the Government of India decided to procure 36 'Rafale' aircraft in flyaway condition from Government of France through an Inter-Governmental Agreement. Negotiations to finalise the Research and Development Phase contract for Fifth Generation Fighter Aircraft (FGFA) are progressing with the Russian side. If all procurements fructify as planned, the IAF is likely to achieve the Government authorized strength of 42 Squadrons.

Rafale Aircraft (MMRCA)

3.29 The Ministry of Defence has informed that the RFP for 126 MMRC was issued on 28th August 2007. The Contract negotiations in the procurement case could not be concluded because M/s Dassault Aviation did not confirm compliance to certain terms of the RFP and its bid. The RFP for procurement of 126 MMRCA was formally withdrawn on 24th June 2015. During the Prime Minister's visit to France in April 2015, Government of India conveyed to the Government of France that in view of the critical operational necessity for Multirole combat Aircraft for Indian Air Force (IAF). Government of India would like to acquire 36 Rafale jets in fly-away condition as quickly as possible. The two leaders agreed to conclude an Inter-Governmental Agreement for supply of the aircraft on terms that would be better than conveyed by Dassault Aviation as part of a separate process underway, the delivery would be in time-frame that would be compatible with the operational requirement of IAF; and that the aircraft and associated systems and weapons would be delivered in the same configuration as had been tested and approved by IAF, and with a longer maintenance responsibility by France. Subsequently, the negotiations between the Indian and the French side on price and all terms and conditions of purchase have begun since May 2015. A Memorandum of Understanding (MoU) between Indian and French Government has been signed on January 21, 2016 in this regard. Negotiations with the French side are currently on. A separate proposal will be moved for additional funds in FY 2016-17 to procure the 36 Rafale aircraft after details regarding cost and delivery timelines are finalized.

3.30 The Committee wished to be intimated whether any alternative has been under consideration of the Ministry of Defence in case the deal for Rafale is not through. In this context, the Ministry of Defence apprised the Committee as given:

Light Combat Aircraft (LCA)

3.31 The induction of new fighters is being planned through the delivery of remaining Su-30 aircraft, delivery of LCA Mk-1 and Mk-1A aircraft, Rafale aircraft and other suitable fighters. Government is preparing the road map for induction of fighter aircraft in the IAF and all future induction will be as per this road map. IAF is likely to build up its fighter aircraft fleet to the required strength by the end of 15th Plan Period.

3.32 Present status of Series Production (SP) of Tejas Light Combat Aircraft is as follows:

1. Tejas SP1 is under Customer Flying Acceptance Test.
2. Tejas SP2 Engine Ground Run (EGR) has been completed.
3. Tejas SP3 is likely to be available by June/July 2016.

Fifth Generation Fighter Aircraft (FGFA)

3.33 An Inter-Governmental Agreement was signed in October 2007 between the Governments of the Republic of India and the Russian Federation for Design, Development, Production, joint marketing and product support of the Fifth Generation Fighter Aircraft (FGFA). The project is being executed in two phases, Preliminary Design (PD) Phase and Detailed Design and Development Phase (called R&D Phase). The PD Phase commenced in February 2011 and was completed in June 2013. The Contract for R&D Phase of the aircraft is under negotiation between the Indian and Russian sides. The issue of fund allocation to Indian Air Force in the budget of the FY 2016-17 could be commented upon by Air Headquarters.

3.34 With regard to depleting squadron strength, the Ministry of Defence intimated the Committee as follows:

"Actually, nobody is dispute the need for enhancement of the number of squadrons. It has to be done. We have currently 33 squadrons and there is a dire need to replace the MIG 21 aircraft which is nearly obsolete and there is going to be depletion. It is not that we are not alive to this problem. Long term thinking has already started on this

and some actions have already been taken. In order to replace the MIG 21 depletion problem, we have already given additional orders for LCA. This is something which has already been done. Earlier, only 40 aircrafts were to be manufactured in the initial operational clearance and FOC format. Now we have decided that on a fast track, another 80 aircrafts will also be produced by HAL. A commitment has already been given. This is a huge change from what we were doing earlier."

Trainer Aircraft

3.35 Trainer Aircraft held by IAF currently include Basic Trainer Aircraft (BTA), Intermediate Jet Trainer (IJT) and Advanced Jet Trainer (AJT). The existing trainer aircraft strength is 234 as against the sanctioned strength of 388. Simulators have also been provided for each type of aircraft. IAF has a requirement of 183 Basic Trainer Aircraft (BTA). At present IAF have 75 x PC-7 Mk-II BTA. Acceptance of Necessity has been granted for procurement of additional 38 PC-7 MK II aircraft. The contract is likely to be concluded in the next financial year (2016-17). Additionally, HAL has been tasked to make 70 BTAs (HTT-40) for the balance requirement.

3.36 The Kiran (IJT) aircraft have already started retiring and were planned to be replaced by the HAL built IJT. However, the IJT has been under development since 1999. In view of the above, the IAF is looking for other available options for Intermediate Flying Training. This could include use of the BTA to also undertake the Intermediate stage training syllabus (Stage-II Flying). HAL in conjunction with Regional Centre for Military Airworthiness (RCMA) (A/C) has carried out life extension studies on Kiran aircraft. The phase out will now commence from end of 2019. In this regard, the representatives of IAF, deposed before the Committee as given:

"Yes, it is true. There is a plan of doing three-stage training with two aircrafts. It means that Pilatus will cater for advanced-stage training. Sir, we will extend it till 2019, as of now. Except for the spin test, all other tests have been completed on IGT. In June, more clarity will come about the spin test also. So far as Kiran is concerned, I have been told that in 2019 they will start getting phased out. Their life has been extended. Sir, our team is still working with HAL on this particular project, and in June we will take a final view. Sir, spin test is the only thing, which is left. The stall test is completed, but spin test is the only thing left."

3.37 The IAF has contracted a total of 106 Hawk Mk-132 AJT aircraft. The deliveries are likely to be completed by 2016.

3.38 The procurement of simulators is built into the contracts of all aircraft that the IAF is now procuring. This includes Fixed Base Full Mission Simulators, Cockpit Procedure Trainers, Avionics Part Task Trainer, Flight Training Devices (FTD) and Computer Aided Learning Systems.

3.39 The Hawk Mk-132 Advance Jet Trainer (AJT) aircraft has a lifespan of 30 years/ 6000 hrs and the Pilatus PC-7 Mk-II Basic Trainer Aircraft (BTA) has a lifespan of 10000 hrs/ 30000 landings. The Kiran Mk-I on the other hand have a life of 8000 hrs. Hawk aircraft is planned for upgrade. HAL in conjunction with RCMA (A/C) has carried out life extension studies on Kiran aircraft. The phase out of these aircraft will now commence from year end 2019.

3.40 With regard to the air to air re-fuelling capacity, the representatives of the IAF, deposited before the Committee as under

"Sir, we have IL-78 currently operational. Apart from that, we have taken up for six more advanced air-to-air refuelling aircraft. That is in the process and at CNC stage."

The existing and sanctioned strength of transport planes and helicopters

3.41 The IAF has in its inventory, helicopters viz Mi-8, Mi-17, Mi-17 1V, Mi-17 V5, Mi 25, Mi 35, Mi 26, ALH MK-I, ALH MK-III, Chetak, Cheetah, Cheetal. The life span of some of these helicopters is based 'on condition'. Generally it varies from 5000 to 18000 hours and the period from 15 to 35 years. As regards the transport fixed wing aircraft, IAF has AVRO, BBJ, Boeing 737-200, Embraer, Dornier, IL-76, IL-78, An-32, C-130J and C-17. The life span of these aircraft ranges from about 20000 to 100000 hours.

Replacing the aging helicopters

3.42 The Defence Acquisition Council (DAC) on 29.08.2014 had directed that in order to balance the important issues of urgency and the country's strategic interest, the tender for 197 R&S Helicopter be retracted and a fresh proposal under 'Buy and Make Indian' to include the option of buying the immediate requirement and domestically manufacturing the balance be issued. Hence, the Request for Proposal (RFP) for procurement of 197 Reconnaissance and Surveillance Helicopters was retracted on 28.10.2014 and the case for 197 Reconnaissance and Surveillance Helicopters did not reach the contract stage. The case for

procurement of helicopters to replace the ageing Chetak/Cheetah fleet has been foreclosed thrice. In May, 2015, the DAC approved the procurement of Qty 200 Ka-226T helicopters from Russia. Out of these 200 helicopters, 60 were to be procured in fly away condition and 140 were to be produced in India. An Inter-Governmental Agreement on Ka-226T helicopters has been signed during the Annual Summit between India and Russia in December, 2015. Under the IGA, both India and Russia, through their authorised agencies namely HAL along with other registered Indian companies and Russian Helicopter and Rosoboronexport respectively will form a joint venture company to supply/manufacture the KA-226T helicopters in India. The phasing out of all the transport planes and helicopters is undertaken as per their stipulated life spans. In some cases, depending on the condition and utilisation of the fleet, intensive life extension studies are conducted and the lifespan of the aircraft extended. No aircraft which has completed its operational life is in use with the IAF.

PROCUREMENT OF HELICOPTERS

- a. **Attack Helicopters.** The SoC for Attack Helicopters was moved in SCAPCC on 05 April 07 and AoN was granted on 23 May 07. The Indian Air Force (IAF) utilises the Attack Helicopters for and to undertake Counter Insurgency operations, Unmanned Aerial Vehicle neutralization operations, Combat Search and Rescue operations and Urban Warfare. Attack Helicopters will also be utilised for providing support to the Army in Anti-Tank Guided Missile role. The IAF presently has only two Squadrons of Attack helicopters which are planned for phase out over next few years. In order to meet these varied operational requirements, procurement of 22 more Attack Helicopter was processed through a global competitive bid.
- b. **Heavy Lift Helicopters.** The SoC for Heavy Lift Helicopters was moved in SCAPCC on 25 July 07 and AoN was granted on 21 January 08. The IAF employs Heavy Lift Helicopters to conduct strategic and tactical airlift missions in support of the armed forces and civil authorities as part of Humanitarian Assistance and Disaster Relief operations. This class of helicopters is the only resource available to induct heavy equipment like artillery guns, bull dozers, fuel bowzers etc as well as troops and armament into remote areas, especially mountainous regions that are not connected by motorable roads and need these resources in the least possible time. To meet these tasks, IAF inducted four Mi-26 HLH starting in the year 1985. At present, only one of these helicopters is operational and approaching the end of its technical life. In order to meet these operational requirements and augment the strategic and tactical operational capability, the IAF is procuring 15 Heavy Lift Helicopters.

3.43 As far as indigenous development of these helicopters is concerned, the Committee were informed that only USA and Russia have developed and are manufacturing this class of helicopters. HAL does not have any plan to produce these helicopters. Further, it was informed as under:

"For the FY 2016-17, required funds have been earmarked for Apache Attack Helicopter and Chinook Heavy Lift Helicopter respectively, as per the contract. The contract for 22 x AH-64D Apache Attack helicopter and 15 x CH-47 F(I) Chinook Heavy Lift Helicopters was signed on 28 September 2015. IAF has procured 139 x Mi-17 V5 helicopters from Joint Stock Company Rosoboron Export (ROE) Russia under the following contracts:-

(a) 80 x Mi-17 V5 helicopters and associated equipment, signed on 05 Dec 2008, at cost 1.345 billion USD (appx` 6416 crore).

(b) 59 x Mi-17 V5 helicopters and associated equipment signed on 24 Dec 2012, at cost 1.077 billion USD (appx` 5912 crores).

(c) Induction of all 139 helicopters has been completed during Sep 2011 to Sep 2015.

(d) On 24 Sep 2015, DAC accorded Acceptance of Necessity (AoN) approval for procurement of 48 x Mi-17 V5 helicopters from ROE Russia under repeat purchase at an estimated cost of ` 6705.12 crore. The RFP was issued on 30 Oct 2015 and ROE has submitted their bids on 19 Feb 2016. Presently, evaluation of ROE's bid for RFP is under progress."

3.44 A contract for procurement of 22 x AH-64E Apache Attack Helicopter with M/s Boeing and Letter of Offer and Acceptance (LOA) with US Govt has been signed on 28 September 2015. The Advance payment has been made to USG and Boeing. The deliveries of the AH-64E Apache aircraft will commence July 2019 onwards. Funds have been allocated in the budget of 2015-16 and 2016-17 to meet the contractual payments for the contract.

3.45 A contract for procurement of 15 x CH-47 F (I) Chinook Heavy Lift Helicopters was signed with M/s Boeing on 28 September 2015. The deliveries of the aircraft will commence March 2019 onwards. Funds have been allocated in the budget of 2015-16 and 2016-17 to meet the contractual payments for the contract.

Modernisation of existing Air Force bases

3.46 The IAF is in the process of upgrading the navigational facilities at all its airfields under the Modernisation of Airfield Infrastructure (MAFI) project. Project MAFI involves installation

of modern navigational aids at all the IAF airfields to improve the operational environment and enhance aerospace safety. This turnkey project is being executed in two phases. The contract for Phase-I was signed on 16 March 2011 for the modernisation of 30 IAF airfields. Till now under MAFI Project, six airfields have been completed and the works at six airfields are in progress with PDC as 30 March 2016. The modernisation of the rest of the airfields under Phase-I is scheduled to be completed on a time-bound basis. The implementation of MAFI Phase-II that involves 37 airfields of IAF, Navy and Ministry of Home Affairs has also been approved and procurement process has been initiated. The cash outgo towards MAFI depends on the milestone based payments as spelt out in the contract. The contract for MAFI Phase-I was signed on 16 March 2011. Since then, the annual cash outgo towards this project is tabulated below:-

FY	Cash Outgo towards MAFI (Rs. In Crore)
2010-11	182.44
2011-12	67.08
2012-13	121.63
2013-14	Nil
2014-15	103.16
2015-16	97.70

3.47 Under MAFI Project, modernisation of 30 IAF airfields is undertaken in Phase-I and 37 airfields - inclusive of the left over IAF airfields and airfields of Navy, Coast Guard and MHA are in Phase-II. Phase-I of MAFI project comprises of installation, integration, calibration and commissioning of following equipment/facilities at each airfields:-

- (a) Air Traffic Management (ATM) System
- (b) ILS Cat-II with low power DME
- (c) DVOR and high power DME
- (d) TACAN and RVR equipment
- (e) Air Field Lighting System Cat-II
- (f) Power rings
- (g) Data ring

- (h) Two each LMVs, Light Trucks and Bush Cutters
- (j) Fifty personal communicators

3.48 Modernisation of 52 IAF airfields (excluding Kargil) is planned under Project MAFI to be executed in two phases. Pilot Project at model base 'Bhatinda' and modernisation of 05 more airfields have been completed till Dec 15. Another 24 airfields are planned for modernisation in Phase-I. The remaining 22 airfields will be modernized in Phase-II, for which AoN has been accorded by DAC.

3.49 The current status of airfields is appended below: -

SI No.	Location	Modernisation Status
AIRFIELDS IN WESTERN AIR COMMAND		
1.	Adampur	Airfield Modernisation completed
2.	Ambala	Modernisation planned in phase-I
3.	Awantipur	Modernisation planned in phase-II
4.	Bhatinda	Airfield Modernisation completed
5.	Chandigarh	Modernisation planned in phase-I
6.	Halwara	Modernisation project in progress in phase-I
7.	Hindan	Modernisation project in progress in phase-I
8.	Jammu	Modernization planned in phase-II
9.	Kargil	Not included in MAFI project
10.	Leh	Modernisation planned in phase-II
11.	Nal (Bikaner)	Modernisation Planned in Phase-II
12.	Pathankot	Modernisation Planned in Phase-I
13.	Sarsawa	Modernisation Planned in Phase-II
14.	Sirsa	Modernisation Planned in Phase-I
15.	Srinagar	Modernisation Planned in Phase-II
16.	Suratgarh	Modernisation Planned in Phase-I
17.	Thoise	Modernisation planned in phase-II
18.	Udhampur	Modernisation planned in phase-II
AIRFIELDS IN EASTERN AIR COMMAND		

19.	Bagdogra	Modernisation Planned in Phase-I
20.	Barrackpore	Modernisation Planned in Phase-II
21.	Chabua	Modernisation Planned in Phase-I
22.	Hashimara	Modernisation Planned in Phase-I
23.	Jorhat	Airfield Modernisation completed
24.	Kalaikunda	Airfield Modernisation completed
25.	Panagarh	Modernisation Planned in Phase-II
26.	Purnea	Modernisation Planned in Phase-II
27.	Kumbhigram	Modernisation Planned in Phase-II
28.	Tezpur	Modernisation project in progress in phase-I
AIRFIELDS IN CENTRAL AIR COMMAND		
29.	Agra	Modernisation Planned in Phase-I
30.	Allahabad	Modernisation Planned in Phase-II
31.	BKT	Modernisation Planned in Phase-II
32.	Barielly	Airfield Modernisation completed
33.	Bihta	Modernisation Planned in Phase-II
34.	Dharbanga	Modernisation Planned in Phase-II
35.	Gorakhpur	Modernisation Planned in Phase-I
36.	Gwalior	Modernisation project in progress in phase-I
AIRFIELDS IN SOUTH-WESTERN AIR COMMAND		
37.	Bhuj	Modernisation Planned in Phase-I
38.	Jaisalmer	Modernisation Planned in Phase-I
39.	Jamnagar	Modernisation Planned in Phase-I
40.	Jodhpur	Modernisation Planned in Phase-I
41.	Naliya	Modernisation project in progress in phase-I
42.	Phalodi	Modernisation Planned in Phase-II
43.	Pune	Airfield Modernisation completed
44.	Uttarlai	Modernisation planned in phase-I
AIRFIELDS IN SOUTHERN AIR COMMAND		
45.	Sulur	Modernisation Planned in Phase-I
46.	Thanjavur	Modernisation Planned in Phase-II
AIRFIELDS IN TRAINING COMMAND		
47.	Bidar	Modernisation project in progress in phase-I

48.	Hakimpet	Modernisation Planned in Phase-II
49.	Dundigal (AFA)	Modernisation Planned in Phase-I
50.	Tambaram	Modernisation Planned in Phase-II
51.	Yelahanka	Modernisation Planned in Phase-I
AIRFIELDS IN MAINTENANCE COMMAND		
52.	Kanpur	Modernisation Planned in Phase-II
AIRFIELDS IN ANDAMAN NICOBAR COMMAND		
53.	Carnicobar	Modernisation Planned in Phase-II

Airfields in the North-Eastern part of India

3.50 In addition to the regular operational airfields of NE region as given in para 24(c), certain ALGs are under constructions as part of North East Project. The details and progress of these ALGs is as follows:-

Name of the ALG	Physical Progress	PDC
Ziro	97%	31 March 16
Passighat	74%	30 Apr 16
Mechuka	87%	30 Apr 16
Walong	Completed	
Along	76%	31 Mar 16
Tuting	56%	30 Jun 16
Tawang	24%	30 Sep 16

3.51 The State Govt of Arunachal Pradesh had agreed to transfer the maintenance of operations of Tuting, Mechuka, Along, Vijayanagar and Ziro ALGs to MoD vide a MoU signed on 09 Jun 2009. The ALGs of Tawang and Walong were already under the operational control of Army. The modernisation / upgradation programme of the the said ALGs is underway and has been enumerated in reply to point number 24 (d) above.

Alternate Landing Ground

3.52 The Ministry of Defence intimated the Committee that they have explored alternate landing grounds for small aircraft . In this regard, the representatives of the Indian Air Force deposed as follows :

"We have moved quite a bit in the last one year. If you remember, in the news it had come that on Yamuna Express Highway Mirage 2000 aircraft had landed and we tried it out. Similarly, what has happened is that in each Command AOR we have identified existing road stretches, which can be converted into alternate air fields. In addition, we have communicated with the Road Transport Ministry and we have also got the plan for future road constructions and we have shared it with each Command. We have again identified the roads, which are coming up in the future, which can be utilized for these alternate runway purposes. The third thing that we have done is that we have had a lot of discussions, in-house, on these issues and we have finalized the basic structure, which is required. It means what sort of stretch is required, straight stretch; what sort of alternate road is required; what additional minimum infrastructure is required; what portable infrastructure is required; and we have shared this with all the Commands as well as with all the relevant Ministries."

Abandoned Airfields

3.53 There are 39 disused airfields with the IAF. Out of these, 24 airfields have been identified for utilisation by IAF. These airfields are planned for operational utilisation like deployment of long range vectors, radars, Weapon Storage Areas (WSAs), as also emergency recovery strips for helicopters and fixed wing aircraft.

3.54 In connection with Airfield in Northern area, the Ministry of Defence informed the Committee that there is no specific survey that has been carried out in Zaskar for an air field because the requirement of landing and take-off.

The budgetary provision for airfields in the current year

3.55 In the current financial year, budget allocation of Rs.1330 Cr has been made for strengthening / re-surfacing of runways at the IAF airfields. Over and above this, Rs.48.71 Cr has been allocated for the repairs of the facilities at the airfields. For the development of

defence infrastructure in the North-East, IAF separately had allocated total of Rs.355 Cr for development of seven Advance Landing Grounds in Arunachal Pradesh.

Night Landing Facilities

3.56 There are a total 53 IAF airfields of which permanent airfield lighting system is available at 42 airfields. Limited night operations are being conducted at airfields not having permanent airfield lighting and the requirement is met using alternate/ portable/mobile airfield lighting system. Installation of permanent AFLS is planned under Project MAFI (Modernisation of Airfield Infrastructure).

Accident Data of Indian Air Force

3.57 Details regarding accidents occurred, aircraft wise, in the Indian Air Force, during each year of the Eleventh Plan and first three years of 12th Plan alongwith the reasons identified for such accidents:

Eleventh Plan

(1st April 2007 – 31st March 2012)

Sl. No.	FY	Date	AC Type	Cause Factor for the accident
1.	2007-08	8 May 07	MIG 29	TD
2.	2007-08	22 May 07	MIG 21 BIS	HE (A)
3.	2007-08	9 Sep 07	MI171V	HE (SS)
4.	2007-08	11 Sep 07	KIRAN MK I	HE (A)
5.	2007-08	26 Oct 07	JAGUAR	BS
6.	2007-08	18 Nov 07	KIRAN MK I	HE (A)
7.	2007-08	22 Dec 07	KIRAN MK II	TD
8.	2007-08	9 Jan 08	MI 8	HE (A)
9.	2007-08	31 Jan 08	MIG 27 ML	TD
10.	2007-08	7 Feb 08	MI 8	TD
11.	2007-08	15 Feb 08	MIG 21 M	BS
12.	2007-08	24 Mar 08	MIG 21 BISON	BS
13.	2008-09	29 Apr 08	HAWK MK 132	HE (A)
14.	2008-09	5 May 08	MIG 21 FL	TD
15.	2008-09	12 May 08	HPT 32	TD
16.	2008-09	23 May 08	MIG 21 FL	HE (A)
17.	2008-09	1 Sep 08	MIG 29	TD + HE(A)
18.	2008-09	15 Sep 08	MI 8	HE (A)
19.	2008-09	16 Sep 08	MIG 21 BISON	TD + HE(A)
20.	2008-09	12 Nov 08	MIG 21 T 69	TD
21.	2008-09	17 Nov 08	MIG 23 UB	HE (A)
22.	2008-09	24 Nov 08	MIG 21 T 69	TD
23.	2008-09	27 Nov 08	MI 17	HE (S)

24.	2008-09	21 Jan 09	KIRAN MK II	HE (A)
25.	2008-09	7 Mar 09	MIG 27 ML	TD + HE(A)
26.	2009-10	30 Apr 09	SU 30 MK I	TD + HE(A)
27.	2009-10	1 May 09	MI 8	HE (A)
28.	2009-10	15 May 09	MIG 27 UPG	HE (HAL)
29.	2009-10	27 May 09	MIG 21 BISON	TD
30.	2009-10	9 Jun 09	AN 32	HE (A)
31.	2009-10	18 Jun 09	MIG 21 FL	BS
32.	2009-10	31 Jul 09	HPT 32	TD
33.	2009-10	10 Sep 09	MIG 21 M	HE (A)
34.	2009-10	23 Oct 09	MIG 27 ML	OF
35.	2009-10	30 Oct 09	MI 17 IV	HE (A)
36.	2009-10	30Nov 09	SU 30 MK I	TD
37.	2009-10	20 Jan 10	MIG 27 ML	UR
38.	2009-10	16 Feb 10	MIG 27 ML	HE (HAL)
39.	2009-10	19 Feb 10	MIG 21 FL	TD
40.	2010-11	18 May 10	Chetak	TD
41.	2010-11	15 Jun 10	MIG 21 M	TD + HE(A)
42.	2010-11	24 Jul 10	MIG 27 ML	TD
43.	2010-11	6 Sep 10	MI 8	TD
44.	2010-11	11 Sep 10	CHETAK	TD
45.	2010-11	11 Sep 10	CHETAK	HE (A)
46.	2010-11	13 Sep 10	CHETAK	HE (S)
47.	2010-11	24 Sep 10	MIG 27	TD
48.	2010-11	10 Nov 10	MIG 27 UPG	TD
49.	2010-11	19 Nov 10	MI 17	UR
50.	2010-11	14 Dec 10	MI 26	HE (A)
51.	2010-11	4 Feb 11	MIG 21 BISON	TD
52.	2010-11	1 Mar 11	MIG 21 M	HE (A)
53.	2011-12	30 May 11	HAWK MK 132	HE (A)
54.	2011-12	2 Aug 11	MIG 21 M	HE (A)
55.	2011-12	4 Aug 11	JAGUAR	HE (A)
56.	2011-12	22 Aug 11	Kiran MKI	HE (A)
57.	2011-12	6 Sep 11	MIG 21 BISON	TD
58.	2011-12	7 Oct 11	MIG 21 M	HE (A)
59.	2011-12	15 Oct 11	ALH	HE (A)
60.	2011-12	18 Oct 11	MIG 29	HE (A)
61.	2011-12	2 Dec 11	MIG 21 BISON	TD
62.	2011-12	13 Dec 11	SU 30 MK I	HE (S)
63.	2011-12	31 Jan 12	KIRAN MK II	TD
64.	2011-12	24 Feb 12	M-2000	TD
65.	2011-12	5 Mar 12	M-2000	TD

Twelfth Plan (1st April 2012 – 31st March 2015)

S. No.	FY	Date	AC Type	Cause Factor for the accident
1.	2012-13	30 Aug 12	2 X MI 17	HE (A)
2.	2012-13	24 Nov 12	MIG 21 BISON	TD
3.	2012-13	30 Nov 12	Jaguar	HE (A)
4.	2012-13	12 Feb 13	MIG 27 ML	TD
5.	2012-13	19 Feb 13	SU 30 MK I	TD
6.	2013-14	7 Jun 13	MIG 21 BISON	TD
7.	2013-14	24 Jun 13	MiG 29	HE (A)
8.	2013-14	15 Jul 13	MiG 21	HE (A)
9.	2013-14	8 Nov 13	MiG 29	TD
10.	2013-14	20 Jan 14	MiG-21 T-69	IOD
11.	2013-14	22 Jan 14	Jaguar	HE (S)
12.	2013-14	28 Mar 14	C-130 J	HE (A)
13.	2014-15	27 May 14	MIG 21	TD+BS
14.	2014-15	03 Jul 14	MIG 21	HE(A)
15.	2014-15	25 Jul 14	ALH	TD
16.	2014-15	21 Aug 14	Kiran Mk I	HE(A)
17.	2014-15	1 Aug 14	Jaguar	UI
18.	2014-15	20 Sep 14	AN 32	HE (A)
19.	2014-15	14 Oct 14	SU 30 MK I	UR
20.	2014-15	27 Jan 15	MIG 27 UPG	UI
21.	2014-15	31 Jan 15	MIG 21 Bison	UI
22.	2014-15	05 Mar 15	Jaguar	UI

Legend :UI-Under Investigation; TD-Technical Defect, **HE(A)**-Human Error (Aircrew), **HE (S)**-Human Error (Servicing), **HE (SS)**-Human Error (Support Services), **HE (HAL)**-Human Error (Hindustan Aeronautics Ltd), **BS**-Bird Strike, **OF** – Organizational Factor **MISC**-Miscellaneous, **UR**- Unresolved.

3.58 Of the 65 accidents involving Indian Airforce Aircraft that occurred during the period, 2007-08 to 2011-12 (11th Plan period), 28 have been reported to be owing to Technical

Defects (TD). Further, of the 22 accidents that happened during the period, 01st April 2012 to 31st March, 2015, 6 are reported to be owing to technical defects.

3.59 Details of fatalities that took place as well as the financial loss occurred in the accidents mentioned in the table given:

Eleventh Plan (1st April 2007 – 31st March 2012)

S No.	FY	Date	AC Type	Cause	Pilot Killed	Aircrew Killed	Service Personnel Killed	Civilian Killed	Service Loss (Aircraft & Service Property) (Rs.)
1.	2007-08	8 May 07	MIG 29	TD	0	0	0	0	37,74,22,938
2.	2007-08	22 May 07	MIG 21 BIS	HE (A)	1	0	0	0	2,44,00,000
3.	2007-08	9 Sep 07	MI 17 IV	HE(SS	0	0	0	0	16,23,13,595
4.	2007-08	11 Sep 07	KIRAN MK I	HE (A)	2	0	0	0	50,38,994
5.	2007-08	26 Oct 07	JAGUAR	BS	0	0	0	0	75,69,36,339
6.	2007-08	18 Nov 07	KIRAN MK I	HE (A)	0	0	0	0	50,31,771
7.	2007-08	22 Dec 07	KIRAN MK II	TD	0	0	0	0	1,64,91,200
8.	2007-08	9 Jan 08	MI 8	HE (A)	0	0	0	0	94,68,067
9.	2007-08	31 Jan 08	MIG 27 ML	TD	0	0	0	0	22,25,39,730
10.	2007-08	7 Feb 08	MI 8	TD	0	0	0	0	10,63,11,780
11.	2007-08	15 Feb 08	MIG 21 M	BS	0	0	0	0	1,18,21,622

12.	2007-08	24 Mar 08	MIG 21 BISON	BS	0	0	0	0	4,38,48,800
13.	2008-09	29 Apr 08	HAWK MK 132	HE (A)	0	0	0	0	68,97,43,863
14.	2008-09	5 May 08	MIG 21 FL	TD	0	0	0	0	72,87,211
15.	2008-09	12 May 08	HPT 32	TD	1	0	0	0	1,46,76,273
16.	2008-09	23 May 08	MIG 21 FL	HE (A)	0	0	0	0	91,96,721
17.	2008-09	1 Sep 08	MIG 29	TD + HE(A)	0	0	0	0	57,57,33,589
18.	2008-09	15 Sep 08	MI 8	HE (A)	0	0	0	0	2,57,81,147
19.	2008-09	16 Sep 08	MIG 21 BISON	TD + HE(A)	0	0	0	0	28,90,345
20.	2008-09	12 Nov 08	MIG 21 T 69	TD	0	0	0	0	1,09,700
21.	2008-09	17 Nov 08	MIG 23 UB	HE (A)	0	0	0	0	22,26,69,830
22.	2008-09	24 Nov 08	MIG 21 T 69	TD	1	0	0	0	66,24,002
23.	2008-09	27 Nov 08	MI 17	HE (S)	0	0	0	0	3,29,22,864
24.	2008-09	21 Jan 09	KIRAN MK II	HE (A)	1	0	0	0	1,63,77,712
25.	2008-09	7 Mar 09	MIG 27 ML	TD + HE(A)	0	0	0	0	22,26,23,359
26.	2009-10	30 Apr 09	SU 30 MK I	TD + HE(A)	1	0	0	0	1,42,32,67,76 6
27.	2009-10	1 May 09	MI 8	HE (A)	0	0	0	0	1,38,40,721
28.	2009-10	15 May 09	MIG 27 UPG	HE (HAL)	0	0	0	1	19,50,82,407
29.	2009-10	27 May 09	MIG 21 BISON	TD	0	0	0	0	2,64,36,456
30.	2009-10	9 Jun 09	AN 32	HE (A)	2	2	9	0	2,75,21,181
31.	2009-10	18 Jun 09	MIG 21 FL	BS	0	0	0	0	97,09,600

32.	2009-10	31 Jul 09	HPT 32	TD	2	0	0	0	73,47,676
33.	2009-10	10 Sep 09	MIG 21 M	HE (A)	1	0	0	0	1,84,74,956
34.	2009-10	23 Oct 09	MIG 27 ML	OF	0	0	0	0	18,37,15,622
35.	2009-10	30 Oct 09	MI 17 IV	HE (A)	2	2	0	0	16,23,13,595
36.	2009-10	30 Nov 09	SU 30 MK I	TD	0	0	0	0	1,58,71,78,897
37.	2009-10	20 Jan 10	MIG 27 ML	TD	0	0	0	0	18,38,10,377
38.	2009-10	16 Feb 10	MIG 27 ML	HE (HAL)	1	0	0	0	18,36,18,400
39.	2009-10	19 Feb 10	MIG 21 FL	TD	0	0	0	0	3,80,66,859
40.	2010-11	18 May 10	Chetak	TD	0	0	0	0	4,67,261
41.	2010-11	15 Jun 10	MIG 21 M	TD + HE(A)	0	0	0	0	1,37,22,478
42.	2010-11	24 Jul 10	MIG 27 ML	TD	0	0	0	4	22,26,02,035
43.	2010-11	6 Sep 10	MI 8	TD	0	0	0	0	4,49,79,672
44.	2010-11	11 Sep 10	CHETAK	TD	0	0	0	0	68,04,262
45.	2010-11	11 Sep 10	CHETAK	HE (A)	2	0	1	0	68,04,262
46.	2010-11	13 Sep 10	CHETAK	HE (S)	0	0	0	0	20,76,000
47.	2010-11	24 Sep 10	MIG 27	TD	0	0	0	0	2,35,53,738
48.	2010-11	10 Nov 10	MIG 27 UPG	TD	0	0	0	0	14,44,46,554
49.	2010-11	19 Nov 10	MI 17	UR	2	2	8	0	23,90,56,697
50.	2010-11	14 Dec 10	MI 26	HE (A)	0	0	0	0	Yet to be finalized
51.	2010-11	4 Feb 11	MIG 21 BISON	TD	0	0	0	0	6,11,27,200
52.	2010-11	1 Mar 11	MIG 21 M	HE (A)	0	0	0	0	66,81,746

53.	2011-12	30 May 11	HAWK MK 132	HE (A)	0	0	0	0	68,97,43,900
54.	2011-12	2 Aug 11	MIG 21 M	HE (A)	1	0	0	0	5,29,82,567
55.	2011-12	4 Aug 11	JAGUAR	HE (A)	1	0	0	1	12,74,95,284
56.	2011-12	22 Aug 11	KiranMKI	HE (A)	0	0	0	0	2,75,99,984
57.	2011-12	6 Sep 11	MIG 21 BISON	TD	0	0	0	0	6,11,27,200
58.	2011-12	7 Oct 11	MIG 21 M	HE (A)	0	0	0	0	66,07,968
59.	2011-12	15 Oct 11	ALH	HE (A)	0	0	0	0	3,56,45,296
60.	2011-12	18 Oct 11	MIG 29	HE (A)	1	0	0	0	81,15,10,859
61.	2011-12	2 Dec 11	MIG 21 BISON	TD	0	0	0	0	72,90,000
62.	2011-12	13 Dec 11	SU 30 MK I	HE (S)	0	0	0	0	1,61,52,71,399
63.	2011-12	31 Jan 12	KIRAN MK II	TD	0	0	0	0	2,18,85,079
64.	2011-12	24 Feb 12	M-2000	TD	0	0	0	0	69,80,05,630
65.	2011-12	5 Mar 12	M-2000	TD	0	0	0	0	96,14,08,756

Twelfth Plan (1st April 2012 – 31st March 2015)

SI No.	FY	Date	AC Type	Cause	Pilot Killed	Aircrew Killed	Service Personnel Killed	Civilian Killed	Service Loss & Aircraft Service Property (Rs.)
1	2012-13	30 Aug 12	2 X MI 17	HE (A)	4	4	1	0	47,59,80,497
2	2012-13	24 Nov 12	MIG 21 BISON	TD	0	0	0	0	1,73,98,477
3	2012-13	30 Nov 12	Jaguar	HE (A)	0	0	0	0	50,62,72,954
4	2012-13	12 Feb 13	MIG 27 ML	TD	0	0	0	0	5,10,40,408

5	2012-13	19 Feb 13	SU 30 MK I	TD	0	0	0	0	1,82,64,09,487
6	2013-14	7 Jun 13	MIG 21 BISON	TD	0	0	0	0	9,75,23,126
7	2013-14	24 Jun 13	MiG 29	HE (A)	0	0	0	0	45,16,88,330
8	2013-14	15 Jul 13	MiG 21	HE (A)	1	0	0	0	9,74,02,080
9	2013-14	8 Nov 13	MiG 29	TD	0	0	0	0	36,33,52,536
10	2013-14	20 Jan 14	MIG-21 T-69	IOD	0	0	0	0	20,42,02,595
11	2013-14	22 Jan 14	Jaguar	HE (S)	0	0	0	0	16,63,76,813
12	2013-14	28 Mar 14	C-130 J	HE (A)	3	2	0	0	3,24,70,53,924
13	2014-15	27 May 14	MIG 21	TD+BS	1	0	0	0	4,95,73,540
14	2014-15	3 Jul 14	MiG-21 T-75	HE (A)	0	0	0	0	2,42,40,086
15	2014-15	25 Jul 14	ALH	TD	2	1	4	0	38,68,79,742
16	2014-15	1 Aug 14	Jaguar	UI	0	0	0	0	being finalised
17	2014-15	21 Aug 14	Kiran	HE (A)	0	0	0	0	2,75,99,984
18	2014-15	20 Sep 14	AN 32	HE (A)	0	0	0	0	11,79,31,224
19	2014-15	14 Oct 14	SU 30 MK I	UR	0	0	0	0	1,62,43,11,534
20	2014-15	27 Jan 15	MIG 27 UPG	UI	0	0	0	0	being finalised
21	2014-15	31 Jan 15	MIG 21 Bison	TD/ARM	0	0	0	0	96,72,916
22	2014-15	5 Mar 15	Jaguar	UI	0	0	0	0	being finalised

3.60 The major recommendations on operations and maintenance made by the enquiry committees and action taken thereon are as follows:-

"Operations

- (i) Case for suitable replacement of Cheetah has been initiated.
- (ii) Detailed brief is being carried out 3-4 days prior to commencement of a new phase of training for better assimilation.
- (iii) All Standard Operation Procedures (SOP), Orders and Instructions are regularly audited and updated.
- (iv) Ensure regular practice on handling and recovery of aircraft under emergency conditions.
- (v) Critical phase and abort procedure of each manoeuvre have been defined and disseminated to all operators.
- (vi) Ensure seamless flow of information between support services and the operators. Provision of online real time weather picture be ensured.
- (vii) All Advanced Landing Ground clearance have been made a part of the syllabus.
- (viii) Review policy of sending Ex-Hawk pilots to MiG-21 variants.

- (ix) Ground Control Approach radar near all air to ground ranges to be kept on to provide assistance to aircraft.
- (x) During training flying, priority of flight safety over mission accomplishment must be reiterated. All operating units are to be equipped with latest updated maps since they were using old vintage maps.
- (xi) Clear cut instructions are to be issued to all operators on requirement of enroute weather and destination to all aircrew. Chief Operations Officers of launching bases to be involved in destination clearance.
- (xii) Shortage of supervisors in the unit to be made good.
- (xiii) Captain and Co-pilot to carry out external checks independently. They will not enter the cockpit till they have done so.

Maintenance

- (i) Introduction of relevant modifications on aircraft and their parts to arrest the premature failure and exploit the full life of the component.
- (ii) Improvement in quality of flying clothing and rubberized items of aircraft.
- (iii) Introduction of additional checks like dye penetration test, ultrasonic test etc. at different intervals to arrest the premature failure of aircraft and aero engine components due to cyclic stress/fatigue at field units.
- (iv) Additional checks on aviation fuel, oil and gases at field unit to preclude adulteration.
- (v) CPCP (Corrosion prevention control program) introduced in all fleets and monitored regularly.
- (vi) Additional checks at HAL and unit level to timely arrest the premature failure of compressor and turbine blades of aero engine.
- (vii) Revision and addition of Servicing Schedules."

3.61 The number of accidents has reduced from an average of 13 accidents per year in 11th plan to an average of 07 accidents per year in 12th plan (till 13 Feb 16). The number of accidents from FY 2007-08 to FY 2015-16(till 13 Feb 16) is appended below: -

Sl. No.	FY	No. of Accidents
1.	2007-08	12
2.	2008-09	13
3.	2009-10	14
4.	2010-11	13
5.	2011-12	13
6.	2012-13	05
7.	2013-14	07
8.	2014-15	10
9.	2015-16 (till 13.02.2016)	06

Manpower and Training

3.62 Data with regard to the gap between the required and the existing manpower [officers and Personnel Below Officer Rank) PBOR] in Air Force. How far the initiatives taken during 11th Plan were able to bridge this gap:

"(a) **Officers.** Presently, there is no shortage between the required and the existing manpower of officers (excluding Medical and Dental branch) in the IAF. There was a deficiency of 1445 officers in the beginning of the 11th Plan. Concerted efforts are made and various initiatives have been taken from time to time to reduce the shortages which include proactive steps like publicity measures and simplification of selection process. .

(b) **Airmen.**

i) The required and the existing manpower of Airmen as on 01 Feb 16 is appended below:-

Manpower	Details
Establishment	137097
Strength	129081
Shortfall	8016

As regards airmen, a total number of 8888 trainees are undergoing training thereby fulfilling the current requirement of airmen.

3.63 The details of the Training Institutes for pilots in the Air Force are as follows:-

SI No	Stage	Name
(a)	Stage - I	Air Force Academy (AFA) (Dundigal, Hyderabad)
(b)	Stage-II (F) Stage-II (H)	Fighter Training Wing (FTW) and Helicopter Training School(HTS) at AF StnHakimpet
(c)	Stage- III (F)	AF StnBidar
(d)	Stage -II (T) & III (T)	Fixed Wing Training Flight (FWTF), AF StnYelahanka

(e)	Stage – III(H)	112 Helicopter Unit (HU), AF StnYelahanka
(f)	Army Pilot Course	Basic Flying Training School (BFTS), Allahabad
(g)	Qualified Flying Instructors Course	Flying Instructors School (FIS), AF StnTambaram, Chennai
(h)	Stage-III (F)	Operational Conversion Unit 'A' and Unit 'B' at Air Force Station, Kalaikunda

3.64 There is no shortage between the required and the existing manpower of officers (excluding Medical and Dental branch) in the IAF. Induction in airmen cadre has been planned for 5000 per annum till the year 2016, with provision to gradually increase it to 6000 per annum from the year 2018, by which IAF will be able to bring the strength at par with the authorized establishment.

PART-II
OBSERVATIONS/RECOMMENDATIONS
ARMY

Revenue Budget

1. The Committee note that during the year 2016-17, Army has been allocated Rs. 1,12,764.62 crore, against the projection of Rs. 1,15,561.78 crore under the Revenue Head. The BE for 2015-16 was Rs. 1,03,315.91 crore. The percentage variation of BE 2015-16 *vis-à-vis* BE 2016-17 is 9.1 percent. Under the revenue segment, provision is first made for pay and allowances and other obligatory expenses and the balance allocation is distributed to meet the requirement of stores (including ordnance), transportation (of personnel and stores), revenue works and maintenance, etc. These areas are likely to be impacted when allocation is lower than projection. As the revenue segment of the expenditure caters to welfare of the human resource and carrying out critical works related to stores and transportation etc., the Committee desire that adequate allocation of funds should be made after considering the total requirements of Army at the Revised Estimate or Supplementary Demands stage. While supporting the Army's need for more funds, the Committee would also like the Ministry to observe utmost financial discipline and keep a continuous watch on wasteful expenditure.

2. The Committee are baffled to note that the allocation under Non salary revenue for BE 2016-17 is Rs. 32,186 crore, which amounts to only 1.1 percent increase over last year's BE of Rs. 31,835 crore. As per the Ministry's own admission, areas of new raisings and accretions, maintenance of existing weapons and equipment and replenishment of War Wastage Reserve Ammunition, maintenance and repair of infrastructure, contingency allocation for humanitarian assistance and disaster relief etc. are going to be affected due to such meager increase in allocations during the year. Therefore, the Committee strongly recommend that the Ministry of Defence should enhance the allocation sufficiently at the time of Revised estimate stage under Non-salary revenue Head so as to enable the Army in meeting the requirements of operational preparedness.

Capital Budget

3. Under the Capital Head for 2016-17, the Army is allocated only Rs. 26,935.81 crore, which is Rs. 11024.37 crore less than the projected amount of Rs. 37,960.18 crore. The allocation at BE for 2015-16 was Rs. 27,342.42 crore. The difference between BE 2015-16 and 2016-17 is Rs. 406.61 crore. The percentage variation between BE 2015-16 and BE 2016-17 is (-) 1.5 percent. The percentage differences between the projected amount and allocation is (-) 30 percent. Against the Capital Budget of Rs. 26,935.81 crore, the allocation for Committed Liabilities for BE 2016-17 is Rs. 19,449.26 crore against the projection of Rs. 21,921.38 crore. The allocation for Committed Liabilities for 2015-16 was Rs. 20,513.44 crore. Hence, there is a reduction of Rs. 1,064.18 crore vis-à-vis the amount made available in the previous year. In so far as the Capital segment is concerned, funds are first set aside to meet the projected Committed Liabilities likely to materialize during the year. The remaining allocation is distributed to meet the projected requirement for other items. This does not include price escalation.

3A. For New Schemes, the allocation at BE 2015-16 was Rs. 1,541 crore. Against the requirement of Army i.e. Rs. 7,749 crore, the allocation at BE 2016-17 is Rs. 2,086 crore i.e. 35 percent more in comparison to BE 2015-16 but (-) 73 percent less in comparison to the projected amount. The Committee are concerned to note that the Army is operating with large scale vintage equipment. Furthermore, there is shortage in the number of vehicles, small arms/infantry specialist weapons, sight and surveillance equipment, signal/communication equipment, Radars & power equipment and generators etc. Although there is a plan for modernizing the equipments, this is likely to take a considerable time to get fructified. The Committee are concerned to note that the Army's plans for capacity enhancement and heightened operational preparedness would suffer deeply due to reduced allocation of funds in the Capital head and this is an ominous foreboding for the National Security.

4. The Committee also note that for Capital Expenditure for Army, from 2011-12 to 2015-16, against the BE allocations of Rs. 19,210.69, Rs. 19,237.80, Rs. 17,883.83, Rs. 26,533.60 and Rs. 27,342.42, the actual expenditure has been Rs. 14,947.82,

Rs. 14,760.69, Rs. 14,433.29, Rs. 14,843.37 and Rs. 14,693.82 (upto end of January 2016), respectively. The Committee are highly disappointed to note the persistent trend of underutilization of funds meant for capital expenditure for Army even though the amount allocated under this head is always lesser than the projected one. This trend which is prevalent since long highlights the flaws in the planning and budgetary exercise undertaken by the Ministry. Therefore, the Committee desire that the Ministry should sincerely introspect on these lapses, and overhaul their planning and budgeting mechanism to ensure greater financial discipline and optimum utilisation of funds.

Bullet Proof Jackets (BPJs)

5. The Committee are aghast to note that 1,86,138 Bullet Proof Jackets(BPJs), for which the approval of Defence Acquisition Council was obtained on 19 October, 2009 and a Request For Proposal (RFP) through Capital route was issued on 7 December, 2012, are still not available with the Army. And this, in spite of the Committee highlighting this again and again during the last eighteen months. The reason submitted by the Ministry was that the said RFP was retracted on 5 October, 2015 as all the three vendors who had participated in the 'Trial Evaluation' of BPJs from March-June 2015 had failed. The Committee fervently deplore that the procurement of these protective gears meant for our soldiers has been inordinately delayed due to the loopholes and deficiencies existing in the procurement system. While taking a serious view of such amazing laxity on the part of the Ministry of Defence, the Committee had in their earlier report recommended that the Ministry should fix responsibility at the appropriate level for this glaring lapse.

6. The Committee further note that a fresh Request For Proposal (RFP) for procurement of 1,86,138 Bullet Proof Jackets(BPJs) is under preparation and will be issued shortly. In the meanwhile, 50,000 Bullet Proof Jackets are under procurement through the Revenue route. The case is presently at Contract Negotiation Committee (CNC) Stage and the Supply Order is expected to be placed by end of March 2016 which is already over. The Committee are dismayed to note that despite repeated

recommendations made in their earlier Reports too on this issue, the procurement process is moving at a snail's pace and is effecting the operational efficiency of the troops. Therefore, the Committee, once again, strongly impress upon the Ministry to be on a mission mode for procuring the Bullet Proof Jackets.

7. The Committee have also learnt that the Bullet Proof Jackets (BPJs) currently held by Indian Army are based on General Staff Qualitative Requirements (GSQR) No. 878. This GSQR has since been revised and further procurement of BPJs in the Army is being undertaken as per revised GSQR, i.e. GSQR No. 1438. As per the Ministry, the new GSQR No. 1438 is at par with the world standards being followed and allows addition/removal of external attachments to / from the BPJs as per operational requirement. The Committee sincerely hope that the Ministry's admission regarding the quality of BPJs is correct and our Army is equipped with State-of-the-Art armour. The Committee would like the Ministry to strictly monitor the quality of the BPJs being procured and leave no room for compromise in this aspect. The Committee wish to have a separate report on the subject, from the Ministry of Defence, within a month of the presentation of this Report.

8. It is unpleasant information for the Committee that Mishra Dhatu Nigam Limited (MIDHANI) has manufactured and supplied Bullet Proof Jackets to various State police but these are very heavy to carry or wear. However, as per the Ministry, developments are going on in association with Defence Metallurgical Research Laboratory (DMRL) and Ordnance Factory Board (OFB) for further improvement. It is further informed that Defence Materials and Stores Research and Development Establishment (DMSRDE), Kanpur based laboratory of Defence Research and Development Organisation (DRDO) is involved in design and development of Bullet Proof Jackets. DMSRDE has designed and developed BPJs as per latest GSQR No. 1438. Thus, their production partners can participate in the RFP for procurement of BPJs scheduled to be issued shortly.

The Committee are disappointed to note that while on one hand the 'Make in India' Program envisages to transform India into a global design and manufacturing

hub, on the other, no Defence Public Sector Undertaking is in a state to offer cutting-edge protective gear for our soldiers! Therefore, the Committee are of the considered opinion that the Ministry alongwith the Defence Public Sector Undertakings review the measures already initiated, besides innovating such world class technologies so as to make India self-reliant in Defence production.

Shortage of Ammunition

9. The Committee have been informed about the shortages with Army in several areas ranging from modern assault rifles, bullet-proof jackets and night-fighting capabilities to howitzers, missiles and helicopters. The Ministry, in its written reply, submitted that the Government constantly reviews the security scenario and accordingly decides to induct appropriate Defence equipment to keep the Armed Forces in a state of readiness and remaining equipped with modern weapon systems. Mismatches between requirements and availability can sometimes occur which are continually addressed by the on-going procurement process. However, during oral deposition, the representatives of the Ministry admitted to the shortage and attributed it to the incapability of Ordnance Factory Board (OFB) and delay in procurement process especially import. The Committee are deeply pained to hear the oft-repeated plea of the Ministry regarding such critical issue of shortage of arms and ammunition. Therefore, the Committee recommend that the Ministry should now adopt the policy of zero tolerance for any factor causing this critical failure in operational preparedness of the armed forces.

10. The oral deposition of the representatives of the Ministry of Defence highlighted the need for diversification of sources and selective private sector participation to address the shortage of arms and ammunition. The Committee, however, would recommend the Ministry to tread with caution in this regard and not expect any miraculous turn of events just by involving private sector selectively in production of ammunition. Considering the fact that the OFB, supposedly a broad and versatile production base with multi-technology capabilities evolved over the years, is not able to deliver the required volume of defence equipments, the Committee cannot help being sceptical on how the newly emerged Private Sector would be a panacea for the

problem of shortage of arms and ammunition. The Committee, while consenting with the need for diversification of sources, recommend that the Defence Public Sector Undertakings and the OFB take this onus on themselves for providing State-of-the-Art equipments to our Defence personnel within a fixed time framework and take concerted and urgent steps in this direction.

Procurement of Rifles

11. The Committee note that two categories of weapon i.e. 5.56 mm INSAS Rifle & 5.56 mm INSAS LMG are available in Indian Small Arms System (INSAS) family of weapons. The weapons were designed by DRDO and have evolved over a period of time with upgraded versions coming in to take care of shortcomings. As per the written reply of the Ministry, the INSAS Rifle developed against the Army's GSQR (GSQR 429) has fully met the QR and thus inducted into the Service. The Committee note that the Ministry seems satisfied with the currently induced INSAS rifle and hope that these rifles would add to the capability enhancement and war preparedness of the Army.

The Committee have learnt that a case for Capital procurement of Assault Rifles is under process and a Request for Information is being formulated by Army HQrs (AHQ) for the same. Simultaneously, DRDO and OFB are undertaking development of a 5.56 mm Assault Rifle wherein AHQ, as user, is also involved. The Committee desire that all requisite trials and processes for induction of Assault rifles in Army are completed in a targeted time frame and cost implications. The Committee would require to be updated regarding procurement of Assault rifles and budgetary provision for the same.

Modernization of Army

12. The modernisation of the Armed Forces is a continuous process based on threat perception, operational necessity, technological changes and available resources. The Capital acquisitions flow from the 15 years Long Term Integrated Perspective Plan (LTIPP), Five year Services Capital Acquisition Plan (SCAP) and Annual Acquisition Plan (AAP). The current LTIPP spells out the capability desired to be achieved by the Armed Forces over the 15 years' duration from 2012 to 2027. The LTIPP is translated into specific assets to be acquired, in the form of Services Capital Acquisition Plan

(SCAP 2012-17), covering a five year period. From the Services Capital Acquisition Plan (SCAP), a list of equipment and weapon systems required to be procured immediately is listed in the form of the Annual Acquisition Plan (AAP) which is a two year roll-on-plan. Presently AAP 2015-17 is in vogue and contains 147 schemes which are at various stages of procurement. As submitted by the Ministry, budget allocation for modernization (Capital Acquisition) of Army in BE 2015-16 was Rs. 21,535.26 crore and upto the 3rd week of March 2016, an amount of Rs. 12,144.67 crore had been spent against Modified Appropriation (MA) 2015-16 allocation of Rs. 14,473.87 crore.

13. During the 11th Plan period, 180 contracts had been signed with cumulative value of Rs. 63,172.80 crore and in the 12th Plan period 90 contracts had been signed so far with cumulative value of Rs.37,875.33 crore for Capital Acquisitions for the Army. The Committee are given to understand that pendencies occur in procurement cases due to several reasons, such as insufficient and limited vendor base, non-conformity of the offers to the Request for Proposal (RFP) conditions, long field trials, complexities in contract negotiations, stakeholder consultations and long lead time for indigenization, design and development projects etc. As per the Ministry, the measures such as provisions for change of name of vendor/entity, self-certification by the vendor under the Buy Indian Designed, Developed and Manufactured (IDDM) category, conducting of Field evaluation test by the user where equipment is most likely to be deployed, extensive interactions with the vendors by the Headquarters Integrated Defence Staff (HQ IDS) and Service Headquarters (SHQ), reduction of validity of Acceptance of Necessity, proceeding of single vendor cases at various stages with due justification and guidelines for handling of complaints are introduced in DPP 2016 to address the issue of pendency and delays. The Committee are concerned that due to delay in procurement process, by the time defence equipments would be procured their technology would have probably become obsolete. The Committee, therefore, desire that the Ministry, now armed with Defence Procurement Policy 2016, would leave no stone unturned in addressing the procurement delays and fast track the long due modernization process of the Army.

14. The Committee are further given to understand that there are no cost increases after the commercial bids are opened and post signing of the contracts except on

account of exchange rate variation or variation in taxes, if provisions for such variations are included in the contracts. The Committee feel that given the complexities in contract negotiations, due diligence and caution should be exercised by the Ministry to avoid lopsided agreements or contracts that lead to cost overruns.

15. Army's inventory consists of a mix of modern, current and equipments approaching obsolescence. Though the Ministry failed to submit information regarding current percentage of equipments approaching obsolescence in Army, the Committee note that Capital acquisition proposals for replacement of vintage equipment are being progressed under the provisions of Defence Procurement Procedure (DPP). The Committee would like the Ministry to give utmost priority to replacement of ageing equipments and modernise the Army with cutting-edge technology.

Acquisition from indigenous sources

16. The Committee are surprised to note that the expenditure on Capital Acquisition for Army for orders placed on Indian vendors during the 11th Plan period was Rs. 43,271.36 crore, out of the total expenditure of Rs 51,153.94 crore. During last three financial years, 50 Contracts have been signed with Indian vendors for capital procurement of Defence equipment for Army such as Tanks, Rockets, Missiles, Gun upgrades and simulators etc. The expenditure on Capital acquisition in respect of orders placed on Indian vendors from 2011-12 to 2014-15 was Rs. 1,38,630.82 crore (56.02%). The new Defence Procurement Policy is also likely to have provision to further promote induction of indigenously designed, developed and manufactured defence equipment. The Committee further note that a feature of the DPP 2016 is the introduction of a new procurement category of 'Buy Indian Designed, Developed and Manufactured (IDDM)'. This category refers to products to be procured from Indian vendors that are indigenously designed, developed and manufactured and have at least 40 percent indigenous content. If the product is not designed and developed indigenously, it should have 60 per cent indigenous content.

The Committee appreciate that efforts are being taken in the direction of promoting indigenization in Defence production. Though it presents a huge

opportunity to our country for being self-reliant and even a capable exporter in defence sector, the Committee realize that in the present scenario where majority of defence requirements are met by imports, to set up a competitive and state-of-the-art domestic defence industrial base is going to be a gargantuan task. Therefore, they desire that the Ministry of Defence to create, support and implement time-bound policies with unprecedented zeal and synergy for creating indigenous and globally acclaimed defence industrial base.

Main Battle Tank

17. The Committee note that Defence Acquisition Council approval was accorded for 118 Nos. of Arjun Main Battle Tank Mark-II. However, the validity has expired on 28 August, 2015 and needs extension. With increase in weight, apprehensions have arisen in regard to its seamless application in semi-developed and developed sectors of the Western Front. The various aspects like trafficability, transportability, agility, mobility and other operational/ functional problems caused by 6 tonne of additional weight have been deliberated by the QR committee and the report is under finalisation at Directorate General of Mechanised Forces (DGMF) office. The Committee are disappointed to note that even the improved version of Arjun MBT Mk-I has raised apprehensions about its serviceability in the field. They desire that issues such as trafficability, transportability, agility, mobility and other operational/ functional problems encountered in usage of Arjun MBT Mk-II should be resolved at the earliest and the Army be equipped with a world class product.

Mountain Strike Corps

18. The Committee note that in regard to the proposal for raising the Mountain Strike Corps, sanctioned by the Government in 2013, the Army is grappling with the problem of non-release of funds for infrastructure development. During the oral evidence, the representatives of the Ministry submitted that the process was being hampered because the Army is using its own Reserves to raise the formations. However, it was stated that the process of raising of the Corps was on track. The Committee feel that raising the Mountain Strike Corps is in the interest of security of the Nation and recommend that necessary funds for infrastructure development be

released for the Corps. Milking existing resources, which in some cases are not fully upto the authorisation, is suicidal. The Committee suggest that this issue be critically examined. Action taken in this regard may be intimated to the Committee within two months of the presentation of this report.

Shortage of officers

19. The Committee have learnt that, as on 01.07.2015, there is shortage of 9,106 officers and 30,988 Junior Commissioned Officers(JCOs)/Other Ranks(ORs) in the Army (excluding Army Medical Corps/Army Dental Corps/Military Nursing Service). The Committee note the various measures initiated for reducing shortage of officers in Army, which include, making the Service more attractive by way of reduction in time required for promotions, introduction of Colonel (Time Scale) rank, enhancing promotional avenues by way of upgradation of posts in Select Ranks, providing additional family accommodation through Married Accommodation Project etc. Further, Army has undertaken a sustained image projection campaign to create awareness among the youth on the advantages of taking up a challenging and satisfying career. Awareness campaigns, participation in career fairs and exhibitions, advertisements in print and electronic media, motivational lectures in schools, colleges are some of the measures in this direction.

The Committee are of the view that the long term shortage of manpower is an extremely serious matter which, if not addressed promptly, will ultimately cripple the country's security. All well-intended plans for modernisation and acquisition for the Army are fruitless if there is dearth of personnel. Taking serious note of the current situation, the Committee opine that it is high time the Ministry's efforts for inducting strengthening the human resource base in the Armed forces were materialised and the problem of inadequacy of manpower was resolved.

20. The Committee, in their Seventh report on Demands for Grants 2015-16, had noted that the Defence Institute of Psychological Research (DIPR), under Defence Research and Development Organisation (DRDO), carried out a study to identify the job trajectory of Indian youth, their propensity to join Armed Forces and to explore the perceived apprehensions in joining Armed Forces. In their findings, DIPR had *inter alia*

observed that the inherent problems perceived by the students include separation from family, frequent transfers, transfer to remote areas, lesser number of holidays, hard training/physical labour etc.

The Committee desired to know whether Defence Institute of Psychological Research (DIPR) also studied the trends regarding inclination of youth towards joining Armed Forces, recruitment methods, facilities given to armed forces etc. in other countries. The Ministry replied that DIPR had studied the trends in India only. The Committee recommend that the Ministry should initiate a study of the best international practices regarding recruitment of youth in Armed Forces, their working environment, motivation provided to them etc. and incorporate the findings suitably to our Army.

Sainik Schools

21. The scheme to establish Sainik Schools was introduced in the year 1961. The objectives of Sainik School are to prepare boys academically, physically and mentally for entry into the National Defence Academy (NDA) and remove regional imbalance in the officer cadre of the Defence Services. Regarding the issue of admission of girls in Sainik Schools, a representative of the Ministry submitted that since Sainik Schools act as feeder institutions for NDA, until NDA sets up facility for entry of girls there is no proposal for admission of girls in Sainik Schools. In view of the shortages of Officers in Armed forces and willingness of girls to join the Forces, the Committee desire that NDA should create infrastructure and admit girl cadets. The Committee also desire the Ministry to seriously look into the matter and initiate the process of creating infrastructure for admission of girls into Sainik Schools.

22. The Committee note that Central Government, State Government and Parents are the stakeholders in funding of the Sainik Schools. While the Central Government provides for defence scholarships, NDA incentive, fee and dietary subsidy, IT & training grant and grant-in-aid for infrastructure development, the State Government provides for land, building, maintenance and scholarships. The Committee are of the considered view that since Sainik Schools were conceived as dedicated feeder to the

Defence Services and their establishment and maintenance do not amount to major expenditure, the Sainik Schools should be completely funded by the Central Government.

Terror Attack

23. The Committee note that security arrangements in military establishments are dynamic in nature and are periodically reviewed. The observations and recommendations of these reviews are progressively implemented to maintain a robust and strong response mechanism to emerging threats. In view of the recent Pathankot terror attack, the Government has constituted a Committee under the Chairmanship of a former Vice Chief of Army /Staff to *inter alia* suggest measures to strengthen security of various military establishments across the country and the Committee is expected to submit its report shortly. As directed by Government, the three Services have carried out security audit of all their military establishments. The Committee desire that heightened security measures post Pathankot terror attack need to be sustained to face any eventuality. The recommendations of the Committee constituted by the Government in view of the attack need to be studied carefully and suitably implemented.

INDIAN NAVY

Budget Review

24. Against the projected amount of Rs. 48,725.87 crore as required by Indian Navy, the allocation at BE 2016-17 is Rs. 39,424.88 crore. This amounts to a shortfall or gap of Rs. 9,300.99 crore. The Committee note that there is a remarkable difference in the amount projected by the Service and the allocation made during the last five years. During the previous year 2015-16, the BE was Rs. 40,528.88 crore, against which an allocation of Rs. 34,375.24 crore was made at RE. In this regard, the Committee feel that deficit budgeting at the stage of RE 2015-16 is already present, and a further shortfall of Rs. 9,300.99 crore at BE 2016-17 as compared to the projected amount will put more pressure on the already stretched Naval Budget. The Committee are also concerned to note that the percentage share of Naval Budget out of the total Defence

Budget has declined from 18.12 percent in the year 2012-13 to 14.55 percent in the year 2016 -17. Also, Navy has the lowest share of Defence Budget. During the deliberations on the Demands for Grants (2016-17), the Defence Secretary admitted that the `Money' that is allocated for Capital acquisition is not in accordance with the requirements. As submitted by the Defence Secretary, although the projections are made, the Ministry only gets whatever is allocated by the Ministry of Finance. This `procedure' needs to be critically examined.

In this backdrop of reduced allocations, it is pertinent to mention that at the sea frontiers, India has an edge over her adversaries in comparison to all other domains. The adversaries have their vulnerabilities in the form of sea lines of communications which are passing close to our coast. In Military parlance, Indian Navy operates in their internal line and the adversaries operate at the external lines. Therefore, there is a need to exploit this advantage and there is a need for strong and capable Navy. The Committee, in this regard are of the view that there is a huge requirement of capital induction in the Navy as it is short of vessels, aircraft and helicopters. Additionally, shortage of manpower and presently prevalent inadequacies in training can also not to be ignored. Therefore, reduction in the share of Naval Budget is not desirable, especially in view of the fact that India's larger chunk of trade takes place through sea routes. Besides this, the new challenges for the Navy are enormous, as instances of hostility in the seas by the neighboring countries have been on the increase over the years. Hence, equipping our Navy with high level of tactical proficiency would indeed require ample budgetary support. Considering the requirements of training and modernization drive of the Navy as envisaged in accordance with the Maritime Capability Perspective Plan (MCP) 2012-27, the plummeting budgetary trend appears to be misplaced. Therefore, in order to achieve the targeted outcome, the Ministry of Defence must ensure essential budget to the Navy and additional grants need to be provided at the RE stage. Or else, the "targets" envisaged need to be revised and re-formulated.

Revenue Budget of Indian Navy

25. The Committee note that during the FY year 2015-16 the gross Budget at BE stage was Rs. 13,385.22 crore with the reduction *vis-à-vis* the projection being to the

extent of Rs. 940.46 crore. During the year 2016-17, against the projected amount of Rs. 16,391.30 crore the allocation at BE is Rs. 15,597.69 crore. Thus, the gap *vis-à-vis* the projection is Rs.793.61 crore. This reduction will definitely have a negative impact, particularly on certain Heads of Account *viz.*, transportation, repairs and refits, stores and works, which directly impact the operational preparedness. The Committee deplore following this pattern of 'deficit' funding, *ad-hocism* in approach and distributing the already constrained resources, which have the effect of compromising the priorities. Therefore, additional allocations need to be provided to the Indian Navy so that no compromise is made on operational preparedness.

Capital Budget for Indian Navy

26. During the year 2015-16, the allocation for Capital Budget for Indian Navy was Rs. 24,080.90 crore, which was, later on reduced to Rs. 19,032.25 crore. Hence, the reduction was to the extent of Rs.5048.65 crore. The allocation at BE 2016-17 is Rs. 21,041.22 crore against the projection of Rs. 28, 807 crore. Thus, there is a difference of Rs. 7765.78 crore between the projected amount and the allocation made at BE 2016-17. The difference between BE 2015-16 (Rs. 24,080.90 crore) and BE 2016-17 (Rs. 21,041.22 crore) is to the extent of Rs. 3,039.68 crore. During the year, 2015-16 the allocations for Committed Liabilities at BE stage was Rs. 22,248.12 crore. The modified allocation was Rs. 17,200 crore. During the FY 2016-17, the allocation for new schemes, is Rs. 18763.77 core. Therefore, there is reduction of Rs. 3484.35 crore during BE 2016-17. For new schemes during the years 2015-16, the allocation was Rs. 1,112.78 crore and the modified allocation was Rs. 1193.38 crore. The allocations during BE 2016-17 is Rs. 1,600 crore.

27. The Committee opine that such reduction in budgetary allocation will have a negative impact on the modernisation trajectory of the Indian Navy. During the deliberations on the Demands for Grants (2016-17), the Committee were apprised that the Maritime Security Environment has undergone considerable changes. Against the approved force level of the year 1964, which envisaged 138 ships and submarines and 198 ships and submarines by 2027, the present force level is composed of only 123 ships, 15 submarines and 235 Aircraft. There are 46 ships and submarines under construction. So far as ships are concerned, there is a strong need to replace the

ageing platforms, induction of Indigenous Aircraft Carrier P-15B and P-17A ships and induction of Mine Counter Measures Vessels. The Committee are dismayed over the fact that the Navy is already short of critical force level and infrastructure up-gradation. The representatives of the Ministry too admitted before the Committee that the allocation for Capital Acquisition was not in accordance with the requirement and the Ministry of Defence merely accepts the whatever amount is allocated by the Ministry of Finance!

27. The Committee are dismayed to note that there is a mismatch between projections and allocations at BE and RE stage each year. The Committee have also expressed their anguish over the fact that the reduction of allocations is not only ad-hoc but also results in the modernization programme getting postponed from year to year. *This has become a routine feature.* Mere planning for the acquisitions/procurements will not be able to do any service to the Navy unless and until the plans are supported with adequate budget and measures taken for timely execution. Therefore, the Committee strongly desire that the Ministry should take up this matter with the Ministry of Finance with due seriousness for allocating the amount desired for at the stage of revised estimates. This would help in fully equipping the Indian Navy to meet the requirements of Operational Preparedness. Since a financial crunch is always present, the Committee also desire that the Ministry of Defence to explore other alternatives of raising of resources for the Navy by way of leasing out ships etc. within the country during peace time and for extending bilateral assistance to friendly countries. The Action Taken in this regard may be apprised to the Committee.

Naval Base at Karwar

28. The proposal for setting up of a major Naval Base at Karwar, named as project 'Seabird' was approved by the Government of India in the year 1985 at a cost of Rs. 350 crore. The total amount allocated for Phase-I is Rs. 2628.82 crore. All major works of Phase-I have reportedly been completed. For Phase II, the amount allocated is Rs. 19603.00 crore. Although, approval for Phase II, which is planned to be completed by the year 2021 and was accorded in December, 2012, the Project Management Consultant (PMC) was appointed in November, 2014

only. In view of the competitive milieu in the Indian Ocean Region, the Committee had, in their earlier Report desired that setting up of the Naval Base at Karwar be accomplished as per plan and within the stipulated time frame. However, the Committee are pained to note the fact that following the accordence of the approval for Phase II in 2012, the Project Management Consultant was appointed only two years later i.e., in Nov. 2014! As the project is planned to be completed within five years from now, the Committee desire that the Ministry make concerted efforts for completing the work in a time bound manner. The Committee wish to be kept apprised of the progress made in this regard.

Critical requirement of Force Level

29. The Committee were informed that the emergency Cabinet Committee report of 1964 had approved a Force Level of 138 ships and submarines for Indian Navy. Since then the Maritime Security Environment of the country has undergone a sea-change. The present day Maritime Challenges include, Coastal Security in the light of terrorism emanating through sea route, increased threats of Piracy and amplified hostilities in Indian ocean Region by our neighbouring nations. Maritime infrastructure is a vital component of economic development. The Committee have been informed that keeping in view the new challenges, a requirement of 212 vessels and 458 aircraft have been contemplated for Indian Navy in MCPP 2012-27. In 2012, DAC had approved 198 ships and submarines by 2027. However, the present force level is only 123 ships, 15 submarines and 235 aircraft. The Committee were also apprised that due to slippages in contractual milestones, slow progress of work and delay in milestone payments (P 71, P 15A, P 15B, NOPV, CTS, P 17A etc.). The Committee are baffled to note that Indian Navy is struggling with low force level and still there are huge slippages being noticed in various acquisitions/procurements. It should be dealt with stringently by the Ministry of Defence and the Committee be informed accordingly.

30. Furthermore, the Committee are constrained to observe that there is impetus to replace the aging platforms as these would be de-commissioned in the next 10-12 years. The Committee are concerned to note that the current six Mine Counter Measure Vessels are over 25 years old. It is imperative to induct Indian Aircraft Carrier (IAC) which is being built in Cochin Shipyard as INS Virrat is set to be decommissioned.

Now, Indian Navy is completely dependent on the recently acquired INS Vikramaditya. Therefore, the Committee strongly reiterate the recommendation made in their earlier report for extending the life span of INS Virrat. At the same time, the Committee strongly, desire that IN should have an additional Aircraft carrier. The Committee also desire that the present force level be increased and the ageing platform be replaced without loss of time so as to enable in facing the challenges of present day's maritime security needs. Presently, 46 ships and submarines are under construction in various shipyards in the country. Considering the fact that slippages have become a common feature of our acquisitions etc., the Committee cannot help expressing apprehension on the timely completion of these projects. Therefore, the Committee desire that the Ministry of Defence take every possible measure to ensure that these vessels are constructed in the stipulated time frame and the quality is not compromised at any level. The Committee may be kept apprised of the developments in this regard.

31. There is a plan to have 18 submarines in all. However, the existing strength of sub-marines is 15 and these too are 16-30 years old. Six P-75 submarines are under construction at MDL, Mumbai. Also, serviceability is enhanced by Medium Refit Life Certification (MRLC) of submarines. The Committee are dissatisfied with the state of affairs with regard to the submarines. Ministry of Defence needs to look into the aspect of obsolescence of the submarines. The Committee also desire that a cost benefit analysis should also be done in regard to of procurement *vis-a-vis* refit for extending the life-span and they be intimated of the outcome of the exercise.

32. The Committee note that the Navy requires Aircraft and Helicopters as these are critical for surveillance and Stand-off targeting at sea. Further, the Committee have been informed by the representatives of Indian Navy that the Force is short of 61 integral helicopters on existing ships. In order to maintain the surveillance level, Mid-Life Upgrade of Kamog-28 helicopter is being carried out. As far as procurement is concerned, case for acquiring Multi Role Helicopter is being progressed, case for P-81 Bowing Aircraft is in an advanced stage, and the case for acquiring 12 Dornier aircraft and Nine Medium range Maritime Reconnaissance aircraft is also in progress. The Committee are unable to understand as to how, with an insufficient or meagre allocation for New Schemes, the Navy would be in a position to take care of the crucial

acquisitions and refit plans., The Committee, therefore, wish to be kept apprised about the progress made with regard to each case of acquisition of helicopters and aircraft for the Indian Navy.

Manpower

33. The Committee had been intimated that the shortage of officers and sailors has been reduced through initiation of various measures, aimed to mitigate the gap between the sanctioned strength and the borne strength. The initiatives taken during the XIth Plan (2007-12) and ongoing XIIth Plan (2013-17) Plan Period have resulted in reduction in shortages. The manpower shortages, as on 31 Dec 15 has reduced to 13.31 per cent and 15.53 per cent, from 21.46 per cent and 22.65 per cent in 2011 for officers and sailors respectively, despite an increase in the sanctioned strength of officers from 10,405 to 11,215 and for sailors from 63,130 to 67,659. In this regard, the Committee recommend that the recruitment should be followed in a time bound manner and essential training up gradation should be done so that our manpower is well trained to handle modern state of the art equipments.

Delay in Refitting

34. In case of Sindhukirti, the Committee came to know that the work related to maintenance, repairing and Upgradation of Sindhukirti was offloaded to Hindustan Shipyard Ltd. (HSL) in 2005. The refit commenced on 16 January, 2006 and was completed on 26 June 2015. It took 10 years to complete the refit exercise on INS Sindhukirti. The Committee are not happy with the extremely slow pace of execution of work pertaining to the vessel. Such delays lead to huge loss of money for the Service and therefore, necessary monitoring needs to be done by the Ministry of Defence to ensure that the targets stipulated are met and the works completed within the time schedules.

Accidents

35. The Committee have learnt that the Indian Navy had witnessed as many as 60 accidents during the period from 2007-08 to 2014-15. The recurrence of accidents could not be controlled even after issuance of Standard Operating Procedures (SOPs)

in the year 2011-12. In view of this the Committee desire that efforts should be taken towards making our Navy a 'safe zone' and in this regard all out efforts be made and the Committee intimated of the details of the same.

AIR FORCE

Budgetary Provisions for 2016-17

36. The amount projected as required by Indian Air Force in Budget Estimates (BE) for the Financial Year (FY) 2016-17 was Rs. 66,995.01 crore while the allocated amount is Rs. 53,451.25 crore. This amounts to a gap or shortfall of Rs. 13,544.76 crore as compared to the projected amount. The Committee note that the amount allocated to the Service is short of the amount projected by near about 20 per cent. On gleaning through the Budgetary data for the past years, the Committee found that the allocated amount, is almost always, much less than the projected amount. This is indicative of either the projections made by the Service being unrealistic and impractical or arbitrary cut in the Demands, which needs to be remedied. Also, there is a need on the part of the Ministry of Defence in ensuring that there is an element of consonance of the allocation *vis-à-vis* the projected amount. This sort of deficit budgeting in terms of Projection vs Allocation, which is being witnessed as an annual feature should be minimized to bring in better coordinated, disciplined and stringent budget regime.

Budget Review for the year 2015-16

Revenue Budget

37. During the year 2015-16, as against the projection of Rs. 29,632.28 crore on account of Revenue Budget, the allocation at Budget Estimate (BE) was Rs. 23,000.09 crore. Thus, the difference between the projection and allocation was to the tune of Rs. 6,632.29 crore; this amounts to allocation of nearly 70% of the projection! The allocation at the stage of Revised Estimate(RE) was further lesser at Rs. 21,827 crore. Thus, the difference between the BE and RE allocations was Rs.

1,173.00 crore. In their Eighth Report on Demands for Grants (2015-16) of the Ministry of Defence, the Committee had recommended that additional grant of Rs. 6,000 crore be given to Air Force at RE stage during the year, so that no compromises are made in training and in maintenance of existing systems. The Committee are concerned to note that instead of providing the additional grant as recommended, there has been a REDUCTION of Rs. 1,173 crore in the allocation at RE stage *vis-à-vis* the BE allocation!! Once again, during the year 2016-17, as against the projection of Rs. 27,629 crore, the BE allocation is Rs. 24,956 crore with the difference in the projection and allocation being to the extent of Rs. 2,673.00 crore. While tendering evidence, the Committee were apprised by the representatives of the Ministry that there was an additional requirement of Rs. 279 crore for critical areas, *viz.*, Rs. 2,359 crore for stores, Rs. 199 crore for Works, Rs. 130 crore for Transportation and Rs. 84 crore for other items. Thus, the gap or shortfall in the allocation for the Revenue Budget would impact the spares, fuel, training, maintenance of old systems, etc. As per the submission of representatives of Air Force, inability to procure spares & Fuel, shortfall in training, affecting serviceability - older systems require more maintenance, *results into compromise of operational preparedness This is a grave and unacceptable situation.*

37A. Besides this, the expenditure on Humanitarian Assistance and Disaster Relief (HADR) Missions, (Uttarakhand, J&K Floods, etc.) and work pertaining to General elections adds further pressure on the already stretched resources of the Air Force. The Committee are of the strong view that in order to keep Air Force ever readily geared up for any challenge, it is of paramount importance that no compromises are made in regard to training and maintenance of existing systems for which fuel and spares are a necessary requirement. Therefore, there is an imminent need to ensure that the projections of the Air Force under the Revenue Head of Account are given due importance and adequacy of funds ensured.

Revenue Budget - Humanitarian Assistance and Disaster Relief

38. Air Force, provides humanitarian assistance and disaster relief. During the year 2015-16, the Air Force played a significant role in providing assistance during the floods in Tamil Nadu; in Fiji and rendered help and during the Nepal Earthquake. The

Indian Air Force undertook 11 trips for evacuating 2096 Indian nationals in Yemen under operation 'Rahat'. The Air Force also distributed relief material and supplied drinking water in Maldives, on a sustained basis till normalcy resumed. The Air Force also deployed helicopters to tackle Naxal issues in Chhattisgarh and Jharkhand. On being asked about the Heads of Account from where the expenditure was being incurred on such measures, the Committee were apprised that this was being done from the Revenue Budget!! Reimbursement of the expenses is obtained by the Air Force in 2 – 3 years time. This type of expenditure puts further pressure on the already stretched revenue resources. In view of this backdrop, the Committee strongly feel that there is a need to develop a systemic institutional solution for this by making a separate allocation for such measures or ensuring that the reimbursement is made in that particular year itself, so that other expenditures planned during annual budgeting do not get compromised.

Capital Budget

39. There have been wide gaps between the projections made by Air Force and the actual allocation in the Budget Estimates stage and Revised Estimates stage. During the year 2015-16 against the projected requirement of Rs. 45,191.96 crore, the allocation of Rs. 33,686.75 crore was made at BE stage. At RE stage, the projection was Rs. 35,780.78 crore and the actual allocation was Rs. 30,442.15 crore. There was a reduction of Rs. 3,244.60 crore. The actual expenditure upto January 2016 was Rs. 26,363.84 crore.

39A. During the examination of Demands for Grants (2015-16), the Committee were apprised that the mismatch in the projections and allocations will lead to slowing down of modernization, delaying induction of important capabilities, erosion of IAF's superiority over our adversaries, resultant asymmetry in capability with respect to envisaged 'Threat Perception' and flight safety concerns due to obsolescence. Keeping in view need to sustain the momentum of modernization trajectory planned in the 12th and 13th Plan period and to clear important projects which were at critical stages, the Committee had, in their Eighth Report on Demands for Grants (2015-16), recommended allocating an additional amount of Rs. 9,000 crore at RE stage. The Committee is amazed and feel concerned to note in this regard that instead of

allocating the required amount, the Ministry of Finance has reduced the funds further to Rs. 3,244.60 crore at RE stage! The Committee strongly feel that this is an alarming situation. The reduced budgetary allocation will definitely have a cascading effect on the projects which are at critical stages. Therefore, the Committee stress the need for ensuring adequate budgetary support for fructification of these projects. Therefore, the funds required should be made available to the Service under intimation to the Committee.

Reduction in Capital Budget for 2016-17

40. Total Capital allocation for Air Force in BE 2015-16 was Rs. 33,686.75 crore, while for the year 2016-17, BE allocation is Rs.29,795.42 crore. Thus, there is a DECREASE of Rs. 3891.33 crore from the previous Financial Year. This amount is allocated against a projection of Rs. 41,266.41 crore by the Indian Air Force. Considering the fact that Indian Air Force is on the modernization trajectory as envisaged in LTIPP 2012-27, with a view to mitigate huge shortfalls in defence preparedness and deterrence capabilities, the Committee are dismayed to find that the vision and plans are not being supported by the budget. As informed by the Ministry of Defence, there are a lot of projects lined up for contract during the FY 2016-17. These include, Rafale fighter aircraft, Medium Lift Helicopter Upgrade, Transport Aircraft along with Associated Equipment as Avro Replacement, Addl Mi-17 V5, Manoeuvrable Expendable Aerial Targets (MEAT), Additional Akash Missile Systems, New Generation Precision Guided Munitions, Reccee Pods for Su-30 MKI, Weapons for Advance Light Helicopters for Advance Light Helicopter etc. While, on one hand, the LTIPP is finalized with intricate participation of the Service and the Ministry of Defence, on the other, the Ministry does not appear to be realistic in allocating the Budget. Evidently, there is lacuna in planning and budgeting which needs to be rectified.

Modernization Budget for Air Force

41. While going through the data on modernization budget during the Twelfth Plan Period, the Committee found that there is lesser allocation than Projection. In the year 2012-13, the projection was Rs. 34,164.76 while the allocation was Rs. 28,533.00 crore. In the year 2013-14, the projection was Rs. 47,038.62 crore while

the allocation was Rs. 37049.06 crore. Similarly, for the entire Twelfth Plan Period, which is the First Five Year component of the fifteen years LTIPP 2012-27, there is noticeable reduction in budget allocation for modernization from what has been demanded.

42. In the Budget for 2016-17, the provision against Committed Liabilities has been reduced in comparison to BE 2015-16. For the FY 2015-16, the allocation made against Committed Liabilities was Rs. 28,246.53 crore while for the FY 2016-17, it is Rs. 24,306.02. The Committed Liabilities for the FY 2016-17 includes payments in respect of contracts signed upto 31 March 2016. This shows that owing to Budget constraints, lesser number of contracts were signed during the FY 2015-16 and therefore, the Committed Liabilities have declined for the FY 2016-17, which is definitely not in consonance with the modernization plans of the Service.

43. The Budget for New Schemes in the FY 2016-17 is much less than what was projected by the Air Force. Against a projected requirement of Rs. 9,937 crore, the allocation made is to the extent of Rs. 3,250 crore which amounts to one-third of the projected requirement ! The representatives of Air Force had informed the Committee that due to immense shortfall in the budget for New Schemes, many contracts are likely to roll over to the next Financial Year which include 6 Flight Refuelling Aircraft, Jaguar Re-Enginering, Avionics UPG for IL-76/78/AWACS, 38 PC & MK-II, D-26EW System for MIG-29, 48 MLH, 20X Additioan Hawk, 56 x AVRO Replacement, 65 x Ka 226-T RSH and LR SAM. Rolling over of projects to the following years appears to have become a common phenomena in the Ministry of Defence. Such a scenario, the Committee observe, will not be helpful in arresting the draw-down that Air Force is presently facing.

Over spending

44. The overspending made by the Service on certain accounts evidently brings to the fore the aspect of deficiency of funds being assigned to the Air Force, year after year. In the year 2012-13, Air Force was provided a final grant of Rs. 32,735.34 crore while the expenditure was Rs. 32,980.11 crore, thus amounting to over spending of Rs. 244.77 crore. In the FY 2014-15, the final grant was Rs. 26,536.22 crore while the

final expenditure was Rs. 32,796.42 crore, thus amounting to an over spending of Rs. 6,260.20 crore. The data shows that the Service is not being supplied the requisite funds in time and a trend of last minute funding appears to be in vogue. In such a case, it is obvious that annual plans are not being met with adequate budget support and there is ad-hocism and indiscipline in funding pattern which is required to be addressed urgently. In this regard, the Committee desire that appropriate action be taken under intimation to the Committee.

Slow pace of Acquisitions / Procurements

45. The Committee came to know that there were 291 schemes planned under 12th plan. 60 schemes were added during the review (recast) of 12th plan, thus taking the total number of schemes to 351. Of the 351 schemes, 124 have been dropped, and 191 schemes are ongoing/under progress. Out of these 191 schemes, Acceptance of Necessity (AoN) could be granted for merely 78 schemes. As four years of the 12th Plan have already elapsed, the Committee observe with concern, that procurements/acquisitions are moving at very slow pace. Thus, there is an earnest need for expediting the procedure. Besides, necessary budgetary assistance needs to be provided for taking care of the procurements/acquisitions.

46. In all, 29 contracts signed with value above Rs. 50 crore were signed during the 12th Plan period. Of these, only one could be completed and the remaining are ongoing. Some of these projects are very crucial for development of the Air Force. These include, procurement of PC-7 MK II aircraft and associated equipment, procurement of SU 30 MKI, procurement and infrastructure development of Addl C-130 & J 30 aircraft, attack helicopters etc. Such delays are likely to have the negative implication of derailing the course of development of Air Force. The Committee take note of the alarmingly slow pace of progress of the acquisition/procurement projects and desire that decision making and execution needs to be more proactive and precise.

47. Besides the provisioning of adequate budgetary resources, it is also equally important that the Air Force is able to utilize the allocated budget completely and timely. Some discrepancies were noted in the expenditure pattern of Air Force during

the last five years. For the year, 2010-11, Rs. 25,251.72 crore was allocated in BE, whereas the actual expenditure was Rs. 23,625.41 crore. Similarly for the year, 2011-12, BE allocation was Rs. 30,282.03 crore and final expenditure incurred was Rs. 28,841.18 crore. Even for the FY 2013-14, the BE grant was Rs. 39,208.84 crore while the expended amount was Rs. 38,614.92 crore. Such deviations in allocation and expenditure is a matter to be looked into. The Committee opine that Air Force should vindicate the justification of their demands by utilizing their budget optimally and also ascertain that the project milestones are completed well in stipulated time frame.

Indigenization

48. The Ministry of Defence had submitted that there have been both time and cost overruns in some cases which pertain mainly to indigenous 'Make' and 'Design & Development' (D&D) projects. Procurement from foreign vendors is resorted to, only when the Indian industry is not in a position to provide the desired equipment or supply the required equipment in the allotted time frame. Out of 15 contracts signed since 2013, only three have been completed till date. In this regard, the Committee recommend that appropriate penalty should be imposed whenever delays and lacunae are witnessed and this should be a part of the contract.

Planning

49. The LTIPP for 2012-2027 which was approved by the Defence Acquisition Council (DAC) on 02 April 2012 lays down the roadmap for the capability buildup of the IAF. The 5 year Services Capital Acquisition Plan (SCAP) and Annual Acquisition Plan (AAP), which is a two year roll over plan are prepared in accordance with the objectives laid down in LTIPP 2012-2027 and progressed as per the desired timelines. The LTIPP consists of three-five year plans namely twelfth plan 2012-17, thirteenth plan 2018-22 and fourteenth plan 2023-28. The targets under LTIPP for the twelfth plan period envisaged induction of MMRCA, LCA, Vhetac, FRA, AWACS, Attack Helicopter, Heavy Lift Helicopter, MLH, Upgrade of Mirage -2000, Jaguar, MiG-29, IL-76/78, Mi-17, Induction of Basic/ intermediate/Advance Jet Trainer, series of Air Defence system like Radars and Surface to Air Guided Weapons, etc. However, even after a lapse of four years of the twelfth five year plan, most of these targets could not

be achieved. The Ministry had informed that the long term capability requirements of the IAF have been projected as part of the Long Term Perspective Plan (LTPP) of the IAF for the period 2012-2027. The Capital procurement to achieve these capabilities is undertaken in accordance with the guidelines contained in the Defence Procurement Procedure (DPP). The slippages as highlighted here certainly suggest that there is enormous digression in achieving the planned targets. Therefore, it is necessary that the planning should be based on actuality and not just on ideals.

50. The facts pertaining to the formulation of DPP by itself is an indicator of the lethargy evident in the process of planning itself. The DPP was, at first introduced in 2002 and its scope has been refined through six revisions (in 2003, 2005, 2006, 2008, 2009 and 2011) before the issuance of DPP 2013! The DPP 2013 has been further revised and finalized, in part, only in 2016. This is indicative of very slow pace of decision making in Defence Forces. The unduly long time taken in refining and finalising the DPP, in turn, affects the procurements for Air Force too. Nevertheless, with the new DPP is now in place, the Committee hope that procurements will no more move at a snail's pace and envisaged targets are accomplished in stipulated time frame.

Force Level

51. The Indian Air Force (IAF) has projected a requirement of at least 45 fighter squadrons to counter a two front collusive threat. However, the IAF presently is working with only 33 active fighter squadrons as against Government authorised strength of 42 Squadrons and requirement of 45. The Ministry of Defence had informed that there is a gap in the Force Level since the rate at which fighter aircraft are retiring after completion of their total technical life exceeds the rate at which their replacements are being inducted into the IAF. The Committee are, further concerned to find that many squadrons consisting of MIG planes are due for retirement and in such a dismal scenario it becomes very challenging for IAF to upgrade its squadron. In this regard, the Ministry informed that IAF has contracted 272 Su-30 MKI fighter aircraft out of which 213 Su-30 MKI have been delivered till date and the balance are likely to be delivered by 2020. Further induction of Light Combat Aircraft (LCA) and Medium Multi Role Combat Aircraft (MMRCA) is envisaged. The MMRCA project is at Contract

Negotiation Committee (CNC) stage. IAF has accepted the first series of LCA production on 17 January 2015. Negotiations to finalise the Research and Development Phase contract for Fifth Generation Fighter Aircraft (FGFA) are progressing with the Russian side. In this regard, the Committee desire that measures be taken to ensure that all planned procurements fructify in stipulated time frame and the IAF achieves the Government authorised strength of 42 Squadrons. The Ministry of Defence should also pay heed to the IAF's demand for 45 squadrons which IAF require to counter two front war.

Rafale Aircraft (MMRCA)

52. The Ministry of Defence has informed that the RFP for 126 MMRCA was issued on 28th August 2007. The Contract negotiations in the procurement case could not be concluded because M/s Dassault Aviation did not confirm agreement with certain terms of the Request for Proposal (RFP) and its bid. In view of the critical operational necessity for Multirole Combat Aircraft for Indian Air Force, the Government of India decided to procure 36 'Rafale' aircraft in flyaway condition from Government of France through an Inter-Governmental Agreement. The RFP for procurement of 126 MMRCA was formally withdrawn on 24th June 2015. As per Ministry's submission, Government of India would like to acquire 36 Rafale jets in fly-away condition as quickly as possible. The two countries agreed to conclude an Inter-Governmental Agreement for supply of the aircraft on terms that would be better than conveyed by Dassault Aviation as part of a separate process underway, the delivery would be in a time-frame that would be compatible with the operational requirement of IAF; the aircraft and associated systems and weapons would be delivered in the same configuration as had been tested and approved by IAF, and with a longer maintenance responsibility by France. Subsequently, the negotiations between the Indian and the French side on price and all terms and conditions of purchase have begun in May 2015. A Memorandum of Understanding (MoU) between Indian and French Government was signed on January 21, 2016 in this regard. Negotiations with the French side are currently on. As far as budget for 'Rafale' is concerned, the Committee were intimated that a separate proposal will be moved for additional funds in FY 2016-17 to procure the 36 Rafale aircraft after details regarding cost and delivery timelines are

finalized. The Committee are unhappy to note that although a considerable time has elapsed, negotiations with France on 'Rafale' could not be taken to a logical end.

Light Combat Aircraft (LCA)

53. With regard to the present status of induction of LCA, the Ministry informed the Committee that presently Series Production1(SP1) of Tejas Light Combat Aircraft (Tejas SP1) is under Customer Flying Acceptance Test. Tejas SP2 Engine Ground Run (EGR) has been completed and Tejas SP3 is likely to be available by June/July 2016. In this connection, the Committee note that the project LCA is going on with HAL for a very long time. The Committee had been repeatedly and consistently raising the issue of delay in induction of LCAs. It is desired that the induction of LCAs is completed within the currently targeted time schedules. The Committee may be kept apprised of the progress made with regard thereto.

Fifth Generation Fighter Aircraft (FGFA)

54. An Inter-Governmental Agreement was signed in October 2007 between the Governments of the Republic of India and the Russian Federation for Design, Development, Production, joint marketing and product support of the Fifth Generation Fighter Aircraft (FGFA). The project is being executed in two phases, Preliminary Design (PD) Phase and Detailed Design and Development Phase (called R&D Phase). The PD Phase commenced in February 2011 and was completed in June 2013. The Contract for R&D Phase of the aircraft is under negotiation between the Indian and Russian sides. The Committee desire that negotiations to finalise the Research and Development Phase contract for Fifth Generation Fighter Aircraft (FGFA) progress speedily with the Russian side. Necessary fund allocation to Indian Air Force in the Budget for the FY 2016-17 be made by the Ministry of Defence.

55. The Ministry of Defence apprised the Committee that induction of new fighters is being planned through the delivery of remaining Su-30 aircraft, delivery of LCA Mk-1 and Mk-1A aircraft, Rafale aircraft and other suitable fighters. Government is preparing the road map for induction of fighter aircraft in the IAF and all future induction will be

as per this road map. IAF is likely to build up its fighter aircraft fleet to the required strength by the end of 15th Plan Period. In this connection, the Committee cannot help expressing apprehension with regard to the early/timely induction of planned platforms for Air Force. The plan for procuring LCA is under progress for very long time, MMRCA was approved in 2007 and is still underway, FGFA is continuing to be negotiated. Moreover, the funding support is also not very encouraging. In such a dismal scenario, the Committee are worried and wish that procurement of Rafale and Tejas Aircraft should be progressed to arrest the draw down and maintain credible deterrence. The Committee wish that no stone be left unturned towards mitigating the gap in the squadron strength of the Air Force. The progress made during the upcoming FY 2016-17 should be brought to the notice of the Committee when the Action Taken Replies are furnished to the Committee on this Report.

Trainer Aircraft

56. Trainer Aircraft held by IAF currently include Basic Trainer Aircraft (BTA), Intermediate Jet Trainer (IJT) and Advanced Jet Trainer (AJT). The strength of existing trainer aircraft is 234 as against the sanctioned strength of 388. Simulators have also been provided for each type of aircraft. IAF has a requirement of 183 Basic Trainer Aircraft (BTA). At present, IAF have 75 x PC-7 Mk-II BTA. Acceptance of Necessity has been granted for procurement of additional 38 PC-7 MK II aircraft. The contract is likely to be concluded in the next financial year (2016-17). Additionally, HAL has been tasked to make 70 BTAs (HTT-40) for the balance requirement. The Committee wish that requirement of basic trainer aircraft for Air Force be met without any further delay.

Intermediate Jet Trainer (IJT) Aircraft

57. The Committee found that the Kiran (IJT) aircraft were scheduled for retirement in 2016 and some of these have already started retiring. These were planned to be replaced by the HAL built IJT. However, the IJT which has been under development since 1999 is yet to materialise. In view of the above, the IAF is looking for other available options for Intermediate Flying Training. This could include use of the BTA to also undertake the Intermediate stage training syllabus (Stage-II Flying). The Committee are dismayed to know that basic trainers will be undertaking stage-II

training also. Besides this, HAL in conjunction with Regional Centre for Military Airworthiness (RCMA) (A/C) has carried out life extension studies on Kiran aircraft. The phase out will now commence from end of 2019. It is also disturbing that HAL had not been able to develop a stage-II trainer aircraft in 17 years time period and therefore, the life span of Kiran aircraft is being extended for use till 2019, which otherwise were scheduled for phasing out in 2016 itself. Air Force had been making payments to HAL for last 16 years for development of an IJT and at the same time Air Force will now have to pay for carrying out life extension exercises on Kiran Aircraft. The Committee are anguished with this state of affairs in regard to IJT. At one place, the Defence Service is facing budget constraints and meanwhile money is being spent since last 16 years without giving the desired results. In any case, the Committee would like that the Ministry of Defence find some concrete solution to for induction of IJTs as accidents are recurrent in the Air Force and therefore, any sort of insufficiencies in training must be looked into and addressed.

Hawk Mk-132

58. The IAF has contracted a total of 106 Hawk Mk-132 AJT aircraft. The deliveries are likely to be completed by 2016. The representatives of Air Force intimated the Committee that induction of Hawk aircraft may hit the roadblock due to inadequate allocations in this year's budget. Such a case is not desirable and in this regard, the Committee wish that essential funding be provided for procurement of Hawk AJT. The allocation made in this regard be intimated to the Committee.

Replacement of Aging Helicopters

59. While examining the Demands for Grants 2016-17 of the Ministry of Defence, the Committee came to know that the Defence Acquisition Council (DAC) had, on 29.08.2014, directed that in order to balance the important issues of urgency and the country's strategic interest, the tender for 197 R&S Helicopter be retracted and a fresh proposal under 'Buy and Make Indian' to include the option of buying the immediate requirement and domestically manufacturing the balance be issued. Hence, the Request for Proposal (RFP) for procurement of 197 Reconnaissance and Surveillance Helicopters was retracted on 28.10.2014 and the case for 197 Reconnaissance and

Surveillance Helicopters did not reach the contract stage. The case for procurement of helicopters to replace the ageing Chetak/Cheetah fleet has been foreclosed thrice. In May, 2015, the DAC approved the procurement of Qty 200 Ka-226T helicopters from Russia. Out of these 200 helicopters, 60 were to be procured in fly away condition and 140 were to be produced in India. An Inter-Governmental Agreement on Ka-226T helicopters has been signed during the Annual Summit between India and Russia in December, 2015. Under the IGA, both India and Russia, through their authorised agencies namely HAL along with other registered Indian companies and Russian Helicopter and Rosoboronexport respectively will form a joint venture company to supply/manufacture the KA-226T helicopters in India. The Committee feel that the phasing out of all the transport planes and helicopters is undertaken as per their stipulated life spans. In some cases, depending on the condition and utilisation of the fleet, intensive life extension studies are conducted and the lifespan of the aircraft extended. It is strongly recommend that no aircraft which has completed its operational life is in use with the IAF, otherwise such lapses would lead to accidents .

Modernisation of existing Air Force bases

60. During the course of examination of Demands for Grants (2016-17), the Committee were apprised that IAF is in the process of upgrading the navigational facilities at all its airfields under the Modernisation of Airfield Infrastructure (MAFI) project. Project MAFI involves installation of modern navigational aids at all the IAF airfields to improve the operational environment and enhance aerospace safety. Modernisation of 52 IAF airfields (excluding Kargil) is planned under Project MAFI to be executed in two phases. Pilot Project at model base 'Bhatinda' and modernisation of 05 more airfields have been completed till Dec 15. Another 24 airfields are planned for modernisation in Phase-I. The remaining 22 airfields will be modernized in Phase-II, for which AoN has been accorded by DAC.

The contract for Phase-I was signed on 16 March 2011 for the modernisation of 30 IAF airfields. Phase-I of MAFI project comprises of installation, integration, calibration and commissioning of following equipment/facilities at each airfields. These facilities include Air Traffic Management (ATM) System, ILS Cat-II with low power DME, DVOR and high power DME, TACAN and RVR equipment, Air Field

Lighting System Cat-II, Power rings, Data ring, Two each LMVs, Light Trucks and Bush Cutters, Fifty personal communicators, etc. The Committee are dissatisfied with the pace of progress of the work as till now only six airfields could be completed. Such delays should not become a regular and acceptable feature of the process and callousness in approach should be shed. The implementation of MAFI Phase-II that involves 37 airfields of IAF, Navy and Ministry of Home Affairs has also been approved and procurement process has been initiated. In the current financial year, budget allocation of Rs.1330 Cr has been made for strengthening / re-surfacing of runways at the IAF airfields. Over and above this, Rs. 48.71 Cr has been allocated for the repairs of the facilities at the airfields. Requirement of repair for newly constructed airfields is also a matter of concern. Therefore, utmost importance should be given to quality of work.

Night Landing Facilities

61. There are a total of 53 IAF airfields of which permanent airfield lighting system is available at 42 airfields. Limited night operations are being conducted at airfields not having permanent airfield lighting and the requirement is met using alternate/portable/mobile airfield lighting system. The Committee desire that night landing facilities should be a part of all the airfields as in present era of technological advancement, this is not a far stretched requirement.

62. In the context of the northern air stations, the Committee want that Air Force should take action regarding fast-tracking of Nyoma and Kargil projects. The Committee also desire that Zaskar Air Station in Northern region should be considered for development as this is strategically very important location. The representatives of Air Force informed the Committee that no specific survey has been yet conducted with regard to Zaskar. Therefore, the Committee recommend that this should be done at the earliest, under intimation to this Committee.

Airfields in the North-Eastern part of India

63. In addition to the regular operational airfields of NE region, certain ALGs are under construction as part of North East Project. The State Govt of Arunachal Pradesh

had agreed to transfer the maintenance of operations of Tuting, Mechuka, Along, Vijayanagar and Ziro ALGs to MoD vide a MoU signed on 09 Jun 2009. The ALGs of Tawang and Walong were already under the operational control of Army. For the development of defence infrastructure in the North-East, IAF separately had allocated total of Rs.355 Cr for development of seven Advance Landing Grounds in Arunachal Pradesh. The modernisation / upgradation programme of the said ALGs is underway. However, the Committee are not satisfied with the rate of progress. Out of seven, only one of these i.e. Walong, could be completed. Therefore, the Committee wish that the execution of work be expedited.

Abandoned Airfields

64. It came to the knowledge of the Committee that there are 39 disused airfields with the IAF. Out of these, 24 airfields have been identified for utilisation by IAF. These airfields are planned for operational utilisation like deployment of long range vectors, radars, Weapon Storage Areas (WSAs), as also emergency recovery strips for helicopters and fixed wing aircraft. The Committee wish that work on these airfields should be started without further delay and also remaining 15 airfields be assessed for being used. The Committee be apprised about the action taken in this connection.

65. During the deliberations on the subject, the Committee were informed that during the FY 2015-16, a milestone was achieved in relation to Aircraft landing when IAF Aircraft Mirage 2000 Aircraft had landed on Yamuna Express Highway. It was further informed that more roads, stretches are being identified for the purpose in line with the experience of Myanmar, Air Force is in touch with the State Governments and the matter is being pursued. In the view of the Committee, availability of higher number of options for emergency landing will definitely enhance the capability of IAF. In this regard, while appreciating the initiative and congratulating the Air Force for their accomplishment, the Committee feel that when compared to international developments our Service has been a little late in reaching this landmark. The Committee would like to see that our Air Force excels the Global standards of growth and recommend that more road stretches be explored and identified for this purpose during the coming year. The Committee wish to be intimated of the progress in this direction.

Accident Data of Indian Air Force

66. While examining the data on accidents that took place in Indian Air Force during the last eight years, the Committee were baffled to find that as many as 87 accidents had taken place, which works out to be more than 10 per year. In these accidents as many as 75 lives were lost. The Committee regret the irreparable loss of human lives in such accidents. In addition to this, loss of huge money was incurred in those accidents. It was found that huge amount of money was lost owing to these accidents. The Committee also observed that even after promulgation of Standard Operating Procedures (SOP), the accidents are consistently recurrent. In the year 2014-15 itself, 10 accidents took place. The Committee are immensely distressed at the statistics and regret that, on one hand our service is short of trained manpower and on the other hand, we are losing manpower by such accidents. It was further found that in most of the cases of accidents, the reason was established to be either material failure, technical defect or human error. In all cases, the onus culminates at the high level management. The enquiry should not culminate at merely putting blame on the persons onboard, who lost their lives in the accidents and are not available to put forth their case. Even in case of human error, the erring instructors who failed to give adequate training should also come into the loop of enquiry and charged with appropriate liability, be it procurement of equipments that may not be of standard or inadequacies in impartment of training. The Committee desire that any form of lackadaisical attitude towards accidents should be got rid off and efforts be taken towards making our 'Air Force an Accident Free Zone'. Befitting punishment should be awarded in accordance with the established fault.

Manpower

67. The Committee were given to understand that presently, there is no shortage between the required and the existing manpower of officers (excluding Medical and Dental branch) in the IAF. There was a deficiency of 1445 officers in the beginning of the 11th Plan. Concerted efforts were made and various initiatives have been taken from time to time to reduce the shortages which include proactive steps like publicity

measures and simplification of selection process. The Committee opine that pilot-to-cockpit ratio should be maintained at par with sanctioned levels.

67A. In case of Airmen, the sanctioned strength is 137097 while the actual strength is 129081, thus a shortfall is 8016. However, a total number of 8888 trainees are undergoing training thereby fulfilling the current requirement of airmen. With regard to Medical and Dental Branch necessary recruitments should be made during the upcoming year.

New Delhi;
29 April, 2016
09 Vaisakha, 1938 (Saka)

Maj Gen B C Khanduri, AVSM (Retd),
Chairperson,
Standing Committee on Defence

STANDING COMMITTEE ON DEFENCE (2015-16)
MINUTES OF THE NINTH SITTING OF THE STANDING COMMITTEE ON
DEFENCE (2015-16)

The Committee sat on Monday, the 4 April, 2016 from 1100 hrs. to 1650 hrs. in Main Committee Room, Parliament House Annexe, New Delhi.

PRESENT

Maj Gen B C Khanduri, AVSM (Retd)

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Chairperson

Lok Sabha

2. Shri Suresh C Angadi
3. Shri Thupstan Chhewang
4. Col Sonaram Choudhary(Retd)
5. Shri G Hari
6. Shri Ramesh Jigajinagi
7. Shri Tapas Paul
8. Shri Ch Malla Reddy
9. Smt Mala Rajya Lakshmi Shah
- 10 Shri A P Jithender Reddy
- 11 Smt Pratyusha Rajeshwari Singh

.

Rajya Sabha

- 12 Shri Rajeev Chandrasekhar
- .
- 13 Shri A U Singh Deo
- .
- 14 Shri Harivansh
- .
- 15 Shri Vinay Katiyar
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- 16 Shri Hishey Lachungpa
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- 17 Shri Madhusudan Mistry
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- 18 Smt Ambika Soni
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- 19 Shri Tarun Vijay
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SECRETARIAT

- | | | | |
|----|-----------------------|---|---------------------|
| 1. | Smt Kalpana Sharma | - | Joint Secretary |
| 2. | Shri TG Chandrasekhar | - | Director |
| 3. | Smt J.M. Sinha | - | Additional Director |
| 4. | Shri Rahul Singh | - | Under Secretary |

WITNESSES

REPRESENTATIVES OF THE MINISTRY OF DEFENCE

<u>S.No.</u>	<u>Name</u>	<u>Designation</u>
1.	Shri G Mohan Kumar	Defence Secretary
2.	Shri AK Gupta	Secy (DP)
3.	Shri Prabhu Dayal Meena	Secy (ESW)
4.	Dr S Christopher	Secy DR&D
5.	Lt Gen MMS Rai	VCOAS
6.	VAdm P Murugesan	VCNS
7.	Air Mshl BS Dhanoa	VCAS
8.	Air Mshl A S Bhonsle	CISC
9.	Shri SS Mohanty	FA(DS)
10.	Ms. Surina Rajan	Addl Secy (DP)
11.	Shri J R K Rao	Addl Secy(J)
12.	Smt Anuradha Mitra	FA (Acq)
13.	Lt Gen PK Srivastava	DGFP
14.	Lt Gen Sanjay Kumar Jha	DGPP
15.	Lt Gen Vishwambhar Singh	DGWE
16.	Lt Gen A K Ahuja	DCIDS
17.	Lt Gen R K Sharma	DG OL&SM
18.	Air Mshl RKS Bhadauria	DCAS
19.	Air Mshl Anil Khosla	DG Air (Ops)
20.	Lt Gen Subrata Saha	DCOAS (P&S)
21.	Shri GS Malik	CCR&D (R&M & Imp)
22.	Shri RG Vishwanathan	Addl FA & JS
23.	Shri J Janardhan	Spl DG QA
24.	Shri Ashok Dongre	JS(Trg) & CAO
25.	Shri Rajnish Kumar	FA & JS
26.	Shri A N Das	Addl. FA & JS
27.	Shri Ravi Kant	Addl. Secy, (R)
28.	Shri Sanjay Prasad	JS(LS)
29.	Shri AKK Meena	JS & AM (MS)
30.	Shri Subir Mallik	JS & AM (LS)
31.	Shri Jiresh Nandan	JS (G)

32.	Shri Rajeev Verma	JS & AM (Air)
33.	Maj Gen Manoj Pande	ADG MO(B)
34.	Maj Gen BK Pande	ADG FP
35.	Maj Gen SS Hasabnis	TM (LS)
36.	Maj Gen SK Upadhya	ADG (Proc)
37.	Maj Gen J. S. Sandhu	ADG(B)
38.	Shri K Chandrasekhar	ADG (Adm)
39.	RAdm Dinesh K Tripathi	ACNS (P&P)
40.	AVM Sandeep Singh	ACAS (Plans)
41.	AVM SM Subhani	ACAS Fin P
42.	AVM BR Krishna	ACAS Proj
43.	AVM H J Walia	ADG(A)
44.	AVM M Baladitya	ACAS Procurement
45.	AVM OEM Menon	ACAS (Org & Cer)
46.	Dr JP Singh	Director, Parliamentary Affairs
47.	Shri Praveen Kumar	Dir (Acq)
48.	Shri S.K. Pandey	Dir(Fin)
49.	Ms Maulshri Pande	Director (Fin/Budget)
50.	Col Pratap Malik	Director A
51.	Brig C Bansi Ponnappa	Dy TM (LS)
52.	Brig Sanjay Puri	DDG PP (Plans)
53.	Brig Anil Puri	DDG FP(A)
54.	Brig C P Sangra	DDG(Lgs)
55.	Brig R R Sharma	DDG (Trg)
56.	Brig AK Chanma	DDG P&M Cell
57.	Air Cmdr DK Awasthi	PD AS
58.	Cmde P K Banerjee	DDG (P&C)
59.	Cmde Sanjay Vatsayan	PNDP

2. At the outset, the Chairperson welcomed the Members of the Committee and informed them of the agenda for the Sitting. The Committee then invited the representatives of the Ministry of Defence and the Defence Services. The Chairperson welcomed the representatives to the Sitting of the Committee and drew their attention to Direction 55(1) of Directions by the Speaker, Lok Sabha.

3. The Chairperson initiated the discussion and directed the Ministry of Defence to intimate the Committee about their scheduled programmes atleast 2 months in advance so that Committee's schedule of Sittings is not disturbed. Thereafter, the Chairperson requested the representatives of the Ministry of Defence to brief the Committee on various issues included in the agenda for the day.

4. The representatives of the Ministry commenced their briefing through a Power Point Presentation on General Defence Budget. This was followed by detailed deliberations on the following issues:

- (i) Inadequate budgetary provision to Defence in this year's Budget Estimates.
- (ii) Reasons for clubbing demands under various services,

- (iii) Making Capital Budget as a roll on and non-lapsable,
- (iv) Slow pace of decision making,
- (v) Effect of underspending, and
- (vi) Amount of Defence Pension allocated for arrear of OROP in the Budget for 2016-17.

5. Thereafter, a Power Point Presentation on Defence Procurement Policy was made. This was followed by extensive discussion on the following points:

- (i) The newly-formulated Defence Procurement Procedure (DPP 2016).
- (ii) Delayed timelines,
- (iii) Indecisiveness and hierarchical hurdles,
- (iv) Roadmap for 'Make in India',
- (v) Enhancing core critical capability of Defence under 'Make in India'.

The Committee took break for lunch and resumed the Sitting at 2:30 P.M.

6. Afterwards, a Presentation was made on Army. The Presentation was found to be short of relevant information and therefore, the Committee decided to call for Presentation on Army on any other day.

7. Thereafter, Presentation on Air force was made, which was followed by discussion on the following points:

- (i) Inadequate Budgetary Provisions,
- (ii) Shortage of Squadrons,
- (iii) Need to replace MiG 21 Aircraft,
- (iv) Delay in Making of Intermediate Jet Trainer Craft (Kiran).
- (v) Depleting Pilot to Cockpit Ratio,
- (vi) Need to have a separate fund for Air force to attend to work related to unforeseen natural calamities,
- (vii) Need for utilizing highways for landing of smaller Aircraft, and
- (viii) Need for having a Air Force Station at Zaskar etc.

8. The Ministry gave a Presentation on Directorate General of Quality Assurance (DGQA), National Cadet Corps (NCC) and Sainik Schools in that order. This was followed by detailed discussions on the subjects and Members raised queries on the following issues:

- (i) Expansion of NCC by raising more NCC units;
- (ii) Having NCC units in all schools increase in number of Sainik Schools and similarity in their infrastructure; and
- (iii) Opening Sainik Schools for girls, etc.

9. The representatives of the Ministry of Defence replied to various queries/observations of Members. The information not readily available was desired to be furnished later on. The Chairperson directed the representatives of the Ministry of Defence to furnish written replies to all the queries at the earliest.

A copy of verbatim record of the proceedings has been kept.

The Committee then adjourned.

STANDING COMMITTEE ON DEFENCE (2015-16)

**MINUTES OF THE TENTH SITTING OF THE STANDING COMMITTEE ON
DEFENCE (2015-16)**

The Committee sat on Tuesday, the 5th April, 2016 from 1100 hrs. to 1700 hrs. in Main Committee Room, Parliament House Annexe, New Delhi.

PRESENT

Maj Gen B C Khanduri, AVSM (Retd)

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Chairperson

Lok Sabha

2. Shri Suresh C Angadi
3. Shri Shrirang Appa Barne
4. Shri Dharambir
5. Shri Thupstan Chhewang
6. Col Sonaram Choudhary(Retd)
7. Shri H DDevegowda
8. Shri Sher Singh Ghubaya
9. Shri Ramesh Jigajinagi
10. Shri Vinod Khanna
11. Shri Tapas Paul
12. Shri Malla Reddy
13. Smt Mala Rajya Lakshmi Shah
14. Shri A P Jithender Reddy
15. Smt Pratyusha Rajeshwari Singh

Rajya Sabha

16. Shri Rajeev Chandrasekhar
17. Shri A U Singh Deo
18. Shri Harivansh
19. Shri Vinay Katiyar
20. Shri Hishey Lachungpa
21. Shri Madhusudan Mistry
22. Smt Ambika Soni
23. Shri Tarun Vijay

SECRETARIAT

- | | | | |
|----|-----------------------|---|---------------------|
| 1. | Smt Kalpana Sharma | - | Joint Secretary |
| 2. | Shri TG Chandrasekhar | - | Director |
| 3. | Smt JM Sinha | - | Additional Director |
| 4. | Shri Rahul Singh | - | Under Secretary |

WITNESSES

REPRESENTATIVES OF THE MINISTRY OF DEFENCE

<u>Sl. No.</u>	<u>Name</u>	<u>Designation</u>
1.	Shri G Mohan Kumar	Defence Secretary
2.	Shri SS Mohanty	FA(DS)
3.	Shri Ravi Kant	Addl. Secy. (R)
4.	Shri AN Das	Addl. FA & JS
5.	Shri Jiresh Nandan	JS (G)
6.	Dr S Christopher	Secy(DR&D)
7.	Dr K Tamilmani	DG(Aero)
8.	Dr Satish Kumar	DG (MSS)
9.	Dr S C Sati	DG(NS & M)
10.	Ms J Manjula	DG(ECS)
12.	Dr KD Nayak	DG (MED &CoS)
11.	Dr Manas K Mandal	DG(LS)
12.	Dr CP Ramanarayanan	DG(ACE) & CC R&D(HR)
13.	Shri GS Malik	CCR&D (R&M & Imp)
14.	Dr Guru Prasad	CCR&D (PC & SI)
15.	Shri M Hafizur Rahaman	CCR&D (TM)
16.	Dr G Athithan	CCR&D (SAM)
17.	Shri Sudhir Mishra	CCR&D (BrahMos)
18.	Shri RG Vishwanathan	Addl FA & JS
19.	Lt Gen A K Ahuja	DCIDS (PP&FD)
20.	Maj Gen SK Upadhyaya	ADG (Proc)

21.	VAdm P Murugesan	VCNS
22.	RAdm Dinesh K Tripathi	ACNS (P&P)
23.	RAdm Kapil Mohan Dhir	ACDIS(WSOI)
24.	Cmde Sanjay Vatsayan	PDNP
25.	Cmde A K Sharma	DACIDS (Budget)
26.	Shri Rajendra Singh	DG ICG
27.	Shri V D Chafekar	DDG (P&P)
28.	Comdt MM Mark	JD (Plans)
29.	Air Mshl A S Bhonsle	CISC
30.	AVM SC Chafekar	ACIDS(FP)
31.	Shri J.R.K. Rao	Addl. Secy.(J)
32.	Shri Deepak Anurag	JS (C&W)
35.	Shri Ajay Kumar Sharma	Addl DG(Lands/IT)
36.	Shri PrachurGoel	Addl DG (C&Crd)
37.	Shri P Daniel	Addl DG(Adm)
38.	Shri G VijayaBhaskar	DDG (C&Crd)
39.	Shri Ajay Singh	CE CW&E
40.	Shri Ashwini Kumar	Addl FA & JS
41.	Shri Suresh Kumar	JS(BR)
42.	Lt Gen. MMS Rai	VCOAS
43.	Lt Gen Ranbir Singh	DGMO
44.	Lt Gen Sanjiv Talwar	E-in-C
45.	Lt Gen BS Sahrawat	DG LW&E
46.	Lt Gen Suresh Sharma	DGBR
47.	Lt Gen RV Kanitkar	QMG
48.	Maj Gen Michael Mathew	ADG LW&E
49.	Maj Gen Ajay Anand	DG Works
50.	Maj Gen SPS Kohli	ADGW(Army)
51.	Maj Gen Manoj Pande	ADG MO(B)
52.	Maj Gen Gurdip Singh	DG MAP
53.	Brig SK Vidyathi	DDG MO (C)
54.	Brig K K Repswal	DDGW (PPC &Est)

58.	Brig RK Sharma	DDG (TP)
59.	Brig Sanjay Gupta	DDG CS
60.	V Adm P Murugesan	VCNS
61.	Air Mshl BS Dhanoa	VCAS
62.	Air Mshl BBP Sinha	AOA
63.	Cmde Ravi Malhotra	PDW

2. At the outset, the Chairperson welcomed the Members of the Committee and informed them about the agenda for the Sitting. The Committee then invited representatives of the Ministry of Defence, Navy and other organizations. The Chairperson welcomed the representatives to the Sitting of the Committee and drew their attention to Direction 55(1) of Directions by the Speaker, Lok Sabha.

3. The Chairperson initiated the discussion and requested the representatives of the Ministry of Defence to brief the Committee on various issues included in the agenda for the day.

4. The representatives of the Ministry commenced their briefing through a Power Point presentation on Defence Research and Development. This was followed by detailed deliberations on following issues:

- (i) Gap between allotted funds and expenditure,
- (ii) Contractual appointment of scientists,
- (iii) 'Make in India' initiative,
- (iv) Export of DRDO developed equipments,
- (v) Mechanism to address user grievance and feedback,
- (vi) Involvement of private sector etc.

5. Thereafter, a presentation was given on Navy and Joint Staff which was followed by discussion on following points:

- (i) Depleting fleet strength of Navy,
- (ii) Inadequacies in capital budget,
- (iii) Shortage of manpower,

- (iv) Delayed procurement process,
- (v) Replacement of ageing equipment,
- (vi) Operational preparedness etc.

The representatives of the Ministry of Defence submitted their replies to queries/observations of members.

6. Thereafter, a presentation on Coast Guard Organization was given before the Committee. Subsequent queries from Members included wide gap in projection of funds and allocation and coordination of Indian Coast Guard with Navy.

7. The Committee took break for lunch and resumed the Sitting at 1440 hrs.

8. A presentation was made on Directorate General Defence Estate (DGDE) and pursued with deliberations on the subject. Members posed various queries on the following points:

- (i) Blocking of roads used by ordinary citizens by DGDE,
- (ii) Encroachment of Defence Lands by civilians,
- (iii) Digitisation of records in DGDE,
- (iv) Financial problems of cantonment boards,
- (v) Recoveries of dues from Army and Navy etc.

9. The Ministry gave presentation on Military Engineer Services and Married Accommodation Project in that order. This was followed by detailed discussions on the subjects and Members asked questions on the following issues:

- (i) Delay in completion of projects,
- (ii) Adoption of state-of-the-art technology etc.

10. Thereafter, a presentation was given on Border Roads Organization (BRO) which was followed by discussion on the following points:

- (i) Status of Border connectivity,

- (ii) Financial crunch faced by BRO,
- (iii) Non-availability of adequate number of quarries,
- (iv) Obsolescence of equipment, shortage of manpower,
- (v) Modernisation plan etc.

The representatives of the Ministry of Defence submitted their replies to queries/observations of Members.

11. The Chairperson directed the representatives of the Ministry of Defence to furnish written replies to all the queries at the earliest.

A copy of verbatim record of the proceedings has been kept.

The Committee then adjourned.

STANDING COMMITTEE ON DEFENCE (2015-16)

**MINUTES OF THE ELEVENTH SITTING OF THE STANDING COMMITTEE ON
DEFENCE (2015-16)**

The Committee sat on Wednesday, the 06 April, 2016 from 1030 hrs. to 1450 hrs. in Main Committee Room, Parliament House Annexe, New Delhi.

PRESENT

Maj Gen B C Khanduri, AVSM (Retd)

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Chairperson

Lok Sabha

2. Shri Shrirang Appa Barne
3. Shri Dharambir
4. Shri Thupstan Chhewang
5. Col Sonaram Choudhary(Retd)
6. Shri H D Devegowda
7. Shri Sher Singh Ghubaya
8. Shri Vinod Khanna
9. Shri Tapas Paul
10. Shri Ch. Malla Reddy
11. Shri Rajeev Satav
12. Shri A.P. Jithender Reddy
13. Smt. Pratyusha Rajeshwari Singh

Rajya Sabha

14. Shri Rajeev Chandrasekhar
15. Shri Harivansh
16. Shri Vinay Katiyar
17. Shri Madhusudan Mistry
18. Smt. Ambika Soni

SECRETARIAT

1. Smt Kalpana Sharma - Joint Secretary
2. Shri T G Chandrasekhar - Director
3. Smt J M Sinha - Additional Director
4. Shri Rahul Singh - Under Secretary

WITNESSES
REPRESENTATIVES OF THE MINISTRY OF DEFENCE

<u>Sl. No.</u>	<u>Name & Designation</u>	<u>Designation</u>
1.	Shri G Mohan Kumar	Defence Secretary
2.	Shri SS Mohanty	FA(DS)
3.	Shri Ravi Kant	Addl. Secy. (R)
4.	Shri Subir Mallik	JS & AM (LS)
5.	Shri Jiresh Nandan	JS (G)
6.	Lt Gen. MMS Rai	VCOAS
7.	Lt Gen Subrata Saha	DCOAS (P&S)
8.	Lt Gen PK Srivastava	DGFP
9.	Lt Gen Sanjay Kumar Jha	DGPP
10.	Lt Gen Vishwambhar Singh	DGWE
11.	Lt Gen RK Sharma	DG OL & SM
12.	Maj Gen BK Pande	ADG FP
13.	Maj Gen SK Upadhyay	ADG (Proc)
14.	Maj Gen Manoj Pande	ADG MO(B)
15.	Brig. AK Channan	DDG P&M Cell
16.	Brig Sanjay Puri	DDG PP (Plans)
17.	Brig Anil Puri	DDG FP(A)
18.	Brig Rohit Gupta	DDGWE-1
19.	Shri AK Gupta	Secy (DP)
20.	Ms. Surina Rajan	Addl. Secy. (DP)
21.	Shri AK Prabhakar	DGOF & Chairman/OFB
22.	Shri Bharat Khera	JS(NS)
23.	Shri RJ Bhattacharya	DDG/Budget
24.	Shri Sanjay Garg	JS(DIP)
25.	Smt Kusum Singh	JS (P&C)
26.	Shri KK Pant	JS(Aero)
27.	Shri Sanjay Prasad	JS(LS)
28.	Shri DK Mahapatra	Secy/OFB
29.	Shri V Udaya Bhaskar	CMD(BDL)
30.	Shri T Suvana Raju	CMD(HAL)
31.	Shri S K Sharma	CMD(BEL)
32.	Maj Gen SK Upadhyay	ADG (Proc)

33. RAdm (Retd) L V Sarat Babu	CMD(Hindustan Shipyard Ltd)
34. Shri P Dwarakanath	CMD(BEML)
35. RAdm (Retd) Shekhar Mital	CMD (Goa Shipyard Ltd)
36. RAdm (Retd) AK Verma	CMD(GRSE)
37. Dr DK Likhi	CMD(MIDHANI)
38. RAdm (Retd) RK Shrawat	CMD(MDL)
39. Shri M Mazhar Ali	GM (Planning)
40. Dr CP Ramanarayanan	DG(ACE) & CC R&D(HR)
41. Dr Guru Prasad	CCR&D (PC&PI)
42. Shri J Janardhan	DGQA
43. R Adm AK Saxena	DGND(SSG)
44. R Adm OPS Rana	DGNAI
45. Shri S Chatterjeem	DGONA
46. AVM BR Krishna	ACS(Project)
47. AVM Sandeep Singh	ACAS(Plans)
48. AVM SJ Nanodkar	ACAS(Ops)
49. Shri AN Das	Addl. FA
50. Shri Prabhu Dayal Meena	Secy, (ESW)
51. Shri Sudhansu Mohanty	FA DS
52. Lt Gen Rakesh Sharma	AG
53. Lt Gen Ashwani Kumar	DG(DC&W)
54. Smt K Damayanthi	JS(ESW)
55. Ms. Devika Raghuvanshi	Addl FA & JS
56. Ms. Santosh	JS (Res-II)
57. Shri RozyAgarwal,	Joint CGDA
58. Maj Gen AP Bam	MD ECHS
59. Maj Gen Jagatbir Singh	DGR
60. Maj Gen Rakhi Singh	Addl DG, AGMS
61. Brig Harinder Singh	DDG DIAV
62. Brig HS Kahlon	DDG DIAV(Designate)
63. Brig Sadhan Sawhnay	Dy DGAFMS (PIg)
64. Cmde Rohtas Singh	Secy, KSB
65. Col SS Pundir	SO to AG

2. At the outset, the Chairperson welcomed the Members of the Committee and informed them about the agenda for the Sitting. The Committee then invited representatives of the Ministry of Defence and Defence Public Sector Undertakings. The Chairperson welcomed the representatives to the Sitting of the Committee and drew their attention to Direction 55(1) of Directions by the Speaker, Lok Sabha.

3. The Chairperson initiated the discussion and requested the representatives of the Ministry of Defence to brief the Committee on various issues included in the agenda for the day.

4. The representatives of the Ministry of Defence commenced their briefing through a PowerPoint presentation on the status of availability of ammunition. This was followed by detailed deliberations on the state of ammunition and related issues which included the following:

- (i) inadequacy of ammunition,
- (ii) inability of Ordnance Factory Board to fulfill the targets given to them,
- (iii) alternate source of production,
- (iv) private sector participation in defence production and
- (v) import of ammunition etc.

5. Thereafter, a PowerPoint presentation on Defence Public Sector Undertaking was made. This was followed by extensive discussion on the subject which included the following:

- (i) capacity ,efficiency and innovation of/by PSUs,
- (ii) non-realization of targets and
- (i) non-availability of funds etc.

6. Thereafter, a PowerPoint presentation on Indian Ordnance Factories was made. This was followed by detailed discussion on the subject which included the following:

- (i) self reliance in production,
- (ii) salient features of Ordnance Factory Board Budget and

(iii) modernization of OFs etc.

7. The Committee took break for lunch and resumed the Sitting at 1335 hrs.

8. Thereafter, a presentation was made on Ex-Servicemen Welfare and Ex-Servicemen Contributory Health Scheme and pursued with deliberations on the subject which included issues such as the following:

(i) constraints faced by the Department of Ex-Servicemen Welfare in the welfare activities, resettlement and rehabilitation of Ex-Servicemen, war-widows and their dependents,

(ii) non-availability of suitable jobs as per qualifications in case of appointment on compassionate ground,

(iii) OROP-problems and grey areas,

(iv) financial assistance to Ex-Servicemen,

(v) status of Second World War pensioners and widows and

(v) empanelment of hospitals, non-payment of bills, inadequacy of funds for 2016-17 etc.

9. The Chairperson directed the representatives of the Ministry of Defence, Defence Public Sector Undertakings, Ex-Servicemen Welfare, Ex-Servicemen Contributory Health Scheme to furnish written replies to all the queries in a week's time.

A copy of verbatim record of the proceedings has been kept.

The Committee then adjourned.

STANDING COMMITTEE ON DEFENCE

**MINUTES OF THE TWELFTH SITTING OF THE STANDING COMMITTEE ON
DEFENCE (2015-16)**

The Committee sat on Friday , the 29 April, 2016 from 1000 hrs. to 1030 hrs. in Committee Room`62', Parliament House, New Delhi.

PRESENT

Maj Gen B C Khanduri, AVSM (Retd)

-

Chairperson

Lok Sabha

- | | |
|----|-----------------------------|
| 2 | Shri Suresh C Angadi |
| 3 | Shri Shrirang Appa Barne |
| 4 | Shri Dharambir |
| 5 | Col Sonaram Choudhary(Retd) |
| 6 | Shri Sher Singh Ghubaya |
| 7 | Shri Ramesh Jigajinagi |
| 8 | Km Shobha Karandlaje |
| 9 | Dr Mriganka Mahato |
| 10 | Shri Ch Malla Reddy |
| 11 | Smt Mala Rajya Lakshmi Shah |
| 12 | Shri A P Jithender Reddy |

Rajya Sabha

- | | |
|----|-----------------------|
| 13 | Shri A U Singh Deo |
| 14 | Shri Harivansh |
| 15 | Shri Hishey Lachungpa |
| 16 | Shri Tarun Vijay |

SECRETARIAT

- | | | | |
|----|-------------------------|---|---------------------|
| 1. | Smt. Kalpana Sharma | - | Joint Secretary |
| 2. | Shri T.G. Chandrasekhar | - | Director |
| 3. | Smt. Jyochanmayi Sinha | - | Additional Director |
| 4. | Shri Rahul Singh | - | Under Secretary |

2. At the outset, the Chairperson welcomed the Members of the Committee and informed them about the agenda for the sitting. The Committee then took up for consideration the following draft Reports:-

- (i) Report on Action Taken by the Government on the recommendations/observations contained in the seventh report (16th Lok Sabha) on Demands for Grants (2015-16) of the Ministry of Defence on Army (Demand No. 23).
- (ii) Demands for Grants of the Ministry of Defence (2016-17) on General Defence Budget, Civil Expenditure of Ministry of Defence (Demand No. 20) and Defence Pension(Demand No. 21).
- (iii) Demands for Grants of the Ministry of Defence (2016-17) on Army, Navy and Air Force (Demand No. 22).
- (iv) Demands for Grants of the Ministry of Defence (2016-17) on Ministry of Defence (Miscellaneous) (Demand No. 20).
- (v) Demands for Grants of the Ministry of Defence (2016-17) on Capital Outlay on Defence Services, Procurement Policy and Defence Planning (Demand No. 23).

3. After deliberations the Committee adopted the above reports with slight modifications in respect of recommendations.

4. The Committee, then, authorized the Chairperson to finalise the above draft Reports and present the same to the House on a date convenient to him.

The Committee then adjourned.

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