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**STANDING COMMITTEE ON DEFENCE
(2019-20)**

(SEVENTEENTH LOK SABHA)

MINISTRY OF DEFENCE

**DEMANDS FOR GRANTS
(2019-20)**

**ARMY, NAVY, AIR FORCE AND JOINT STAFF
(DEMAND NOS. 19 AND 20)**

SECOND REPORT



LOK SABHA SECRETARIAT

NEW DELHI

December, 2019 / Agrahayana, 1941 (Saka)

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(SEVENTEENTH LOK SABHA)

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(DEMAND NOS. 19 AND 20)

Presented to Hon'ble Speaker, Lok Sabha on 20.12.2019

Laid in Rajya Sabha on 13.12.2019



LOK SABHA SECRETARIAT

NEW DELHI

December, 2019 / Agrahayana, 1941 (Saka)

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COMPOSITION OF THE STANDING COMMITTEE ON DEFENCE (2019-20)

SHRI JUAL ORAM

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CHAIRPERSON

Lok Sabha

2. Shri Deepak Adhikari (Dev)
3. Shri Hanuman Beniwal
4. Shri Ajay Bhatt
5. Shri Devusinh J. Chauhan
6. Shri Nitesh Ganga Deb
7. Shri Rahul Gandhi
8. Shri Annasaheb Shankar Jolle
9. Prof (Dr.) Ram Shankar Katheria
10. Smt. (Dr.) Rajashree Mallick
11. Shri Pashupati Kumar Paras
12. Shri Kapil Moreshwar Patil
13. Shri Anumula Revanth Reddy
14. Shri Jugal Kishore Sharma
15. Dr. Shrikant Eknath Shinde
16. Shri Prathap Simha
17. Shri Brijendra Singh
18. Shri Mahabali Singh
19. Shri Kotagiri Sridhar
20. Shri Durga Das Uikey
21. Dr. Kalanidhi Veeraswamy

Rajya Sabha

22. Dr. Ashok Bajpai
23. Shri Prem Chand Gupta
24. Shri V. Lakshmikantha Rao
25. Shri Sanjay Raut
26. Dr. T. Subbarami Reddy
27. Smt. Vijila Sathyananth
28. Dr. Abhishek Manu Singhvi
29. Shri Kamakhya Prasad Tasa
30. Lt. Gen. Dr. D. P. Vats
31. Vacant

SECRETARIAT

- | | | | |
|---|------------------------|---|-----------------------------|
| 1 | Smt. Kalpana Sharma | - | Additional Secretary |
| 2 | Smt. Jyochnamayi Sinha | - | Director |
| 3 | Smt. Rekha Sinha | - | Assistant Committee Officer |

INTRODUCTION

I, the Chairperson of the Standing Committee on Defence (2019-20), having been authorised by the Committee, present this Second Report (Seventeenth Lok Sabha) on 'Demands for Grants of the Ministry of Defence for the year 2019-20 'Army, Navy, Air Force and Joint Staff(Demand Nos. 19 and 20)'.

2. The Demands for Grants of the Ministry of Defence were laid on 17 July, 2019 in Lok Sabha. The Committee took evidence of the representatives of the Ministry of Defence on 14, 15 and 18 November, 2019. The draft Report was considered and adopted by the Committee at their Sitting held on 09 December, 2019.

3. The Committee wish to express their thanks to the officers of the Ministry of Defence and representatives of the Services/Organisations 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
09 December, 2019
18, Agrahayana, 1941 (Saka)**

**JUAL ORAM
Chairperson
Standing Committee on Defence**

ABBREVIATIONS

Sl. No.	Abbreviations	Full form
1.	AON	Acceptance of Necessity
2.	AJTA	Advance Jet Trainer Aircraft
3.	AJT	Advanced Jet Trainer
4.	ALGs	Advanced Landing Grounds
5.	ADA	Aeronautical Development Agency
6.	AE	Aeronautical Engineer
7.	AFA	Air Force Academy
8.	AFS	Air Force Station
9.	ATMS	Air Traffic Management System
10.	AFLS	Airfield lighting system
11.	AAGL	Alcock Ashdown Gujarat
12.	ACC	Annual Acquisition Plan
13.	ADC	Army Dental Corps
14.	ALU	Army Logistics University
15.	AMC	Army Medical Corps
16.	APS	Army Postal Service
17.	AI	Artificial Intelligence
18.	AFC	Aviation Facilities Complex
19.	APTT	Avionics Part Task Trainer
20.	BFTS	Basic Flying Training School
21.	BTA	Basic Trainer Aircraft
22.	BTA	Big Data Analysis
23.	BS	Borne Strength
24.	BE	Budget Estimates
25.	BPJ	Bullet Proof Jackets
26.	CTS	Cadet Training Ships
27.	CA	Capital Acquisition
28.	CB	Capital Budget
29.	CH	Capital Head
30.	CAPF	Central Armed Police Force
31.	CRPF	Central Reserve Police Force
32.	CELBS	Centre for Excellence for Leadership and Behavioural Studies
33.	CSG	China Study Group
34.	CSN	Coastal Surveillance Network
35.	CPTs	Cockpit Procedure Trainers
36.	CDSE	Combined Defence Services Examination
37.	CL	Committed Liabilities
38.	CSC SPV	Common Services Centres Special Purpose Vehicle
39.	CNC	Contract Negotiation Committee
40.	CNS	Contract Negotiation Stage
41.	CTC	Conversion Training Center
42.	DAC	Defence Acquisition Council
43.	DPB	Defence Procurement Board
44.	DPP	Defence Procurement Procedure
45.	DRDO	Defence Research and Development Officer
46.	DSE	Defence Services Estimates
47.	DSSC	Defence Services Staff College

48.	D&D	Design and Development
49.	DGQA	Directorate General Quality Assurance
50.	DSV	Diving Support Vessels
51.	EPC	Empowered Project Committee
52.	ERP	Enterprise Resource Planning
53.	ECHS	Ex-Servicemen Contributory Health Scheme
54.	FICs	Fast Interceptor Crafts
55.	FTW	Fighter Training Wing
56.	FBFMS	Fixed Base Full mission Simulators
57.	FWTF	Fixed Wing Training Faculty
58.	FSSs	Fleet Support Ships
59.	FTD	Flight Training Display
60.	FAF	French Air Force
61.	GRSE	Garden Reach Shipbuilders and Engineers
62.	GSQR	General Staff Qualitative Requirement
63.	GSES	Graduate Cadet Special Entry Scheme
64.	HQIDS	Head Quarter Integrated Defence Staff
65.	HTS	Helicopter Training School
66.	HU	Helicopter Unit
67.	HALE	High Altitude Long Endurance
68.	HAL	Hindustan Aeronautics Limited
69.	HADR	Humanitarian Assistance and Disaster Relief
70.	IDDM	Indigenous Design, Development and Manufacturing
71.	IAF	Indian Air Force
72.	IA	Indian Army
73.	INA	Indian Naval Academy
74.	IN	Indian Navy
75.	INET	Indian Navy Entrance Test
76.	ISRO	Indian Space Research Organisation
77.	IPEV	Induction Publicity Exhibition Vehicle
78.	INM	INM
79.	IDS	Integrated Defence Staff
80.	IMC	Integrated Modular Construction
81.	IJT	Intermediate Jet Trainer
82.	IMBL	International Maritime Boundary Line
83.	JCO	Junior Commissioned Officers
84.	OR	Other Rank
85.	JCOs	Junior Commissioned Officers
86.	LPDs	Landing Platform Docks
87.	LCA	Light Combat Aircraft
88.	LTIPP	Long-Term Integrated Perspective Plan
89.	ML	Machine Learning
90.	MCPL	Maritime Capability Perspective Plan
91.	MCPP	Maritime Capability Perspective Plan
92.	MWC	Maritime Warfare Centre
93.	MDL	Mazagaon Dock Shipbuilders
94.	MRLC	Medium Refit Life Certification
95.	MF	Military Farms
96.	MIT	Military Institute of Technology
97.	MNS	Military Nursing Service
98.	MCMVs	Mine Counter Measure Vessels

99.	MAFLS	Mobile Airfield Lighting System
100.	MAFI	Modernisation of Airfield Infrastructure
101.	MA	Modified Appropriation
102.	MRH	Multi Range Helicopter
103.	MRH	Multi Role Helicopters
104.	NCC	National Cadet Corps
105.	NDC	National Defence College
106.	NAISS	Naval Airfield Integrated Security Systems
107.	NCW	Naval Constructor Wing
108.	NG	Naval Group
109.	INM	Naval Institute of Aeronautical Technology
110.	NIH	Naval Institute of Hydrography
111.	NP&RS	Naval Provost & Regulating School
112.	NSWTTTC	Naval Special Warfare Tactics and Training Centre
113.	NUH	Naval Utility Helicopter
114.	NWC	Naval War College
115.	NS	New Schemes
116.	OTA	Officers' Training Academy
117.	OR	Operational Research
118.	ORSA-MAC	Operations Research and Military Application Course
119.	OFs	Ordnance Factories
120.	PC(SL)	Permanent Commission (Special List)
121.	PSL	Pipavav Shipyard Limited
122.	QR	Quick Response
123.	RR	Rashtriya Rifles
124.	RNEL	Reliance Naval Engineering Limited
125.	RPAs	Remotely Piloted Aircraft
126.	RFP	Request for Proposal
127.	RB	Revenue Budget
128.	RH	Revenue Head
129.	RE	Revised Estimates
130.	RoR	Rules of Road
131.	SS	Sanctioned Strength
132.	SAUW	School of Advance Undersea Warfare
133.	SOMA	School of Medical Assistants
134.	SFNA	School of Naval Airmen
135.	SNOM	School of Naval Oceanography & Meteorology
136.	SCAPCC	Services Capital Acquisition Plan Categorisation Committee
137.	SCAPCHC	Services Capital Acquisition Plan Categorisation Higher Committee
138.	SSB	Services Selection Board
139.	SSC	Short Service Commission
140.	CCS	The Cabinet Committee on Security
141.	REoI	The Request for Expression of Interest
142.	SP	The Strategic Partnership
143.	TCL	Total Calendar Life
144.	TTL	Total Technical Life
145.	VCAS	Vice Chief of Army Staff
146.	WLMs	Working Level Meetings

REPORT
PART-I
CHAPTER - I
ARMY

The responsibilities of Indian Army include maintaining territorial integrity along the borders with boots on ground. While constantly reviewing its operational preparedness/postures to meet the perceived security challenges, the Indian Army (IA) is committed to the defence of the country from external and internal threat across the entire spectrum of warfare. Also, in times of disaster/natural calamities, the Indian Army is in the forefront, providing aid and succour to the affected people. Indian Army is expected to be prepared at all times to face conflict on the northern and western borders. Continuous training is indeed an essentiality to maintain high levels of readiness at all times. In addition to this, complementing foreign policy through defence diplomacy by participating in joint training and United Nation peace keeping missions is also a mandate of Indian Army. In order to meet the expectations, Army has to maintain a strong motivated and trained force duly equipped to fight a modern war along with regularly upgrade and replace armament along with retaining adequate war reserves. Continued development of infrastructure in peace stations is another vital work at the hands of Indian Army.

1.2 In order to achieve the aforesaid mandate, Army has to be provided with adequate budgetary support. In the Defence Services Estimates for the year 2019-20, the Demands for Grants of Army under Revenue segment is contained in Grant No. 19. The budget for capital infrastructure of Army is met through Grant No. 20. The Revenue allocations of Army include National Cadet Corps, Rashtriya Rifles and Directorate General Quality Assurance. A detailed note on budgetary provisions to Army as well as the operational requirements of the service is given in the succeeding paragraphs of the Report.

Budgetary Provisions 2019-20

1.3 Details of the budget allocation to Army in Budget Estimates 2019-20 is as tabulated below:

(₹ in crore)	
Projection	1,98,964
Allocation	1,68,277
Shortfall	30,687

1.4 Sixty-two per cent of the total budget i.e. ₹ 1,04,564 crore is dedicated for salary expenses which is an inevitable spending. The remaining thirty-eight per cent i.e. ₹ 63,713 crore is available for modernization, infrastructure, operations, and maintenance. The salary expenditure constitutes major part of Revenue Budget. Remaining Revenue budget which is Non-salary expenditure is also necessary for operations and maintenance.

Revenue Budget - Non Salary

(₹ in crore)	
Projection	45,843
Allocation	34,227
Shortfall	11,626

1.5 The shortfall in allocation is nearly twenty-five per cent of the projections made by Army. The mandatory outgo from the Non-salary revenue budget includes ration, livery items, transportation, store, compensation, field defences, building maintenance and other miscellaneous expenses.

Capital Budget

1.6 The capital budget has two components, one is capital acquisition budget and the other is non-acquisition capital budget. The details of the capital budget for acquisition are as given hereunder:

(₹ in crore)	
Projection	35,581
Allocation	23,001
Shortfall	12,580

1.7 The mandatory outgo from the above budget includes Committed Liabilities towards foreign/private suppliers and Ordnance Factories. The capital acquisition

includes guns, tanks, radars and Infantry weapons. Replacement of in-service armament and equipment, upgradation of obsolete equipment and also major repairs and overhauls are met through this budget.

Capital budget other than acquisition (₹ in crore)

Projection	8,525
Allocation	6,486
Shortfall	2,029

1.8 The above includes budget for Rohtang tunnel and China Study Group (CSG) roads, northern borders development, land and construction works, security related works and Married Accommodation Project.

Budget Review

1.9 Details regarding the projections and allocations in respect of Army during the last five years, separately for Capital and Revenue, are as follows:

REVENUE

(₹ in crore)

Year	BE		RE		Expenditure
	Projection	Allocation	Projection	Allocation	
2014-15	1,04,837.88	91,844.02	99,420.15	97,501.40	95,973.22
2015-16	1,09,758.22	1,03,315.91	1,04,408.45	1,00,106.78	1,02,847.18
2016-17#	1,15,561.78	1,12,764.62	1,21,686.11	1,17,925.22	1,16,901.93
2017-18\$	1,52,491.22	1,19,961.51	1,29,287.59	1,21,451.80	1,27,507.48
2018-19\$	1,51,814.73	1,27,059.51	1,41,456.91	1,29,812.34	1,34,241.38

(# - Includes National Cadet Corps, Military Farms, Rashtriya Rifles and Ex-Servicemen Contributory Health Scheme (ECHS) which were shifted to modified Grant No. 20-Ministry of Defence (Miscellaneous) in Financial Year 2016-17, but have been transferred back to Defence Services Estimates in Financial Year 2017-18, with exception of Military Farms and Ex-Servicemen Contributory Health Scheme, for the purpose of comparison with previous as well as future years.)

(\$ - Excludes Military Farms and Ex-Servicemen Contributory Health Scheme (ECHS))

CAPITAL

(₹ in crore)

Year	BE		RE		Expenditure
	Projection	Allocation	Projection	Allocation	
2014-15	41,936.15	26,533.60	23,832.67	21,933.54	18,586.73
2015-16	31,938.67	27,342.42	27,845.33	24,230.47	20,703.70
2016-17#	37,960.18	26,935.81	34,489.90	24,017.86	28,462.11
2017-18\$	42,485.93	25,205.71	40,791.43	25,205.71	27,148.26
2018-19\$	44,572.63	26,815.71	41,614.41	26,815.71	27,438.66

(# Includes National Cadet Corps, Military Farms, Rashtriya Rifles and Ex-Servicemen Contributory Health Scheme which were shifted to modified Grant No. 20-MoD(Miscellaneous) from Financial Year 2016-17, but have been transferred back to Defence Services Estimates in Financial Year 2017-18, with exception of Military Farms and Ex-Servicemen Contributory Health Scheme, for the purpose of comparison with previous as well as future years)

(\$ - Excludes Military Farms and Ex-Servicemen Contributory Health Scheme)

Percentage share of Army Budget

1.10 Percentage share of capital and revenue allocation for Army out of total defence budget for Eleventh Plan and Twelfth Plan as a whole and for each year of Eleventh and Twelfth Plans is given below:

(₹ in crore)

Year	BE(Defence Service Estimates%)	Army (Capital)	%age share	Army (Revenue)	%age share
<i>XIth Plan</i>					
2007-08	96,000.00	11,634.18	12.12	33,682.36	35.09
2008-09	1,05,600.00	13,331.48	12.62	35,896.75	33.99
2009-10	1,41,703.00	18,019.94	12.72	58,097.29	41.00
2010-11	1,47,344.00	17,250.84	11.71	56,769.11	38.53
2011-12	1,64,415.49	19,210.69	11.68	63,609.80	38.69
Total	6,55,062.49	79,447.13	12.13	2,48,055.31	37.87
<i>XIIth Plan</i>					
2012-13	1,93,407.29	19,237.80	9.95	77,327.03	39.98
2013-14	2,03,672.12	17,883.83	8.78	81,119.20	39.83
2014-15	2,29,000.00	26,533.60	11.59	91,844.02	40.11
2015-16	2,46,727.00	27,342.42	11.08	1,03,315.91	41.87
2016-17	2,49,099.00#	26,935.81\$	10.81	1,12,764.62\$	45.27
Total	11,21,905.41	1,17,933.46	10.51	4,66,370.78	41.57

(# Includes Director General of Ordnance Factories, Research & Development, National Cadet Corps, Military Farms, Rashtriya Rifles, Directorate General Quality Assurance and Ex-Servicemen Contributory Health Scheme which were shifted to modified Grant No. 20-Ministry of Defence (Miscellaneous) from Financial Year 2016-17, but have been transferred back to Defence Services Estimates in Financial Year 2017-18, with exception of Military Farms and Ex-Servicemen Contributory Health Scheme, for the purpose of comparison with previous as well as future years)

(\$ Includes National Cadet Corps, Military Farms, Rashtriya Rifles and Ex-Servicemen Contributory Health Scheme which were shifted to modified Grant No. 20- Ministry of Defence (Miscellaneous) from Financial Year 2016-17, but have been transferred back to Defence Services Estimates in Financial Year 2017-18, with exception of Military Farms and Ex-Servicemen Contributory Health Scheme, for the purpose of comparison with previous as well as future years)

(% Defence Services Estimates includes Army, Navy, Air Force, Joint Staff, Defence Research and Development Officer, Ordnance Factories, National Cadet Corps, & Directorate General Quality Assurance Budget)

Expenditure

1.11 Details regarding the projections, allocations and expenditure in respect of Army during the last five years, separately for capital and revenue, are as follows:-

REVENUE

(₹ in crore)

Year	Budget Estimates		Revised Estimates		Expenditure
	Projection	Allocation	Projection	Allocation	
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	95,973.22
2015-16	1,09,758.22	1,03,315.91	1,04,408.45	1,00,106.78	1,02,847.18
2016-17#	1,15,561.78	1,12,764.62	1,21,686.11	1,17,925.22	1,16,901.93
2017-18\$	1,52,491.22	1,19,961.51	1,29,287.59	1,21,451.80	1,27,507.48
2018-19\$	1,51,814.73	1,27,059.51	1,41,456.91	1,29,812.34	1,34,241.38

(# - Includes National Cadet Corps, Military Farms, Rashtriya Rifles and Ex-Servicemen Contributory Health Scheme which were shifted to modified Grant No. 20- Ministry of Defence (Miscellaneous) in Financial Year 2016-17, but have been transferred back to Defence Services Estimates in Financial Year 2017-18, with exception of Military Farms and Ex-Servicemen Contributory Health Scheme, for the purpose of comparison with previous as well as future years)

(\$ - Excludes Military Farms and Ex-Servicemen Contributory Health Scheme)

CAPITAL

(₹ in crores)

Year	Budget Estimates		Revised Estimates		Expenditure
	Projection	Allocation	Projection	Allocation	
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	18,586.73
2015-16	31,938.67	27,342.42	27,845.33	24,230.47	20,703.70
2016-17#	37,960.18	26,935.81	34,489.90	24,017.86	28,462.11
2017-18\$	42,485.93	25,205.71	40,791.43	25,205.71	27,148.26
2018-19\$	44,572.63	26,815.71	41,614.41	26,815.71	27,438.66

(# Includes National Cadet Corps, Military Farms, Rashtriya Rifles and Ex-Servicemen Contributory Health Scheme which were shifted to modified Grant No. 20- Ministry of Defence (Miscellaneous) from Financial Year 2016-17, but have been transferred back to Defence Services Estimates in Financial Year 2017-18, with exception of Military Farms and Ex-Servicemen Contributory Health Scheme, for the purpose of comparison with previous as well as future years)

(\$ - Excludes Military Farms and Ex-Servicemen Contributory Health Scheme)

1.12 It may be seen from the data provided above that there has been increase in the allocations/expenditure in respect of Army in both revenue as well as capital budget over and above the previous year.

1.13 Ratio of Revenue and Capital expenditure in respect of Army since 2013-14 is as tabulated below:

Year	Revenue	Capital
2013-14	85	15
2014-15	84	16
2015-16	83	17
2016-17	80	20
2017-18	82	18
2018-19	83	17
2019-20 (BE)	83	17

1.14 From the above table it is seen that the capital expenditure for Army has remained constant for Army between sixteen to twenty percent. When the Ministry is taking action for modernization, it has to rationalize the member of personnel so that the revenue – capital ratio will be reflected towards modernization side. During oral deposition before the Committee, a representative of Army Headquarter submitted as under:

“Firstly, the point that needs to be understood is that our borders are live borders and, like it was brought out, boots on ground is an absolute essential requirement for the security all along the borders. The army is a manpower intensive organization and, therefore, the revenue portion of the budgetary requirement is always going to be on a higher side as compared to the other two services also. A lot of effort is being put in to reorganize. In fact, there is continuous work in progress in terms of looking at optimization of manpower to ensure that the revenue expenditure is reduced to the absolute essential. There are currently certain studies that are on. As and when they materialize, there would be certain reductions that will take place and that, like I said, is a continuous process which is on, thereby releasing more funds towards modernization.”

BUDGET MODERNIZATION

1.15 Details of additional requirements projected by Army under modernization (Capital Acquisition) at Revised Estimates stage and the allocation made during the year 2018-19 is as under:-

(₹ in crore)

BE 2018-19 Allocation	RE 2018-19 Projection	Additional projection at RE over BE	RE 2018-19 Allocation
21,338.21	34,738.29	13,400.08	21,168.21

1.16 Under Modernisation (Capital Acquisition) Head, Army had sought additional allocation of ₹ 16,293.19 crore and ₹ 13,400.08 crore at first and second Supplementary stages respectively. However, the Ministry did not receive any additional allocations at the Supplementary stages. It was further submitted by the Ministry of Defence that the allocated funds are optimally and fully utilized towards operational activities. If required, the schemes are reprioritized to ensure that urgent and critical capabilities are acquired without any compromise to operational preparedness of the Army.

1.17 In the Defence Services Estimates (DSE), there is no separate allocation of funds for Committed Liabilities (CL) and New Schemes (NS). However, in the Financial Year 2018-19, amount of ₹ 21,338.21 crore at Budget Estimates stage and ₹ 21,168.21 crore at Revised Estimates stage were allocated to Army under Modernisation (Capital Acquisition) Head (which includes Committed Liabilities and New Schemes) and against these allocations, an expenditure of ₹ 21,879.80 crore has been incurred in Financial Year 2018-19.

1.18 Details of additional funds sought by the Army for modernisation (Capital Acquisition) during Eleventh Plan and Twelfth Plan at Revised Estimates stage are given below:

(₹ in crore)

Year	BE Allocation	RE projection	Additional projection	RE Allocation
<u>XI Plan</u>				
2007-08	6,937.20	6,365.20	-572.00	6,224.20
2008-09	7,607.67	7,655.67	48.00	5,740.03
2009-10	9,821.07	9,821.16	0.09	6,254.35
2010-11	8,876.88	8,876.89	0.01	7,433.23
2011-12	10,740.02	8,982.91	-1,757.11	4,950.02
<u>XII Plan</u>				
2012-13	13,724.14	13,515.90	-208.24	11568.76
2013-14	13,327.04	13,922.00	594.96	10801.46
2014-15	20,935.41	18,585.48	-2,349.93	16927.35
2015-16	22,054.50	20,466.79	-1,587.71	17997.59
2016-17	21,535.26	27,476.22	5,940.96	17,966.46

1.19 The representatives of Ministry of Defence stated that the Ministry proposes requirements projected by Services to Ministry of Finance for favourable consideration. While allocating funds, Ministry of Finance analyses past absorption capacity of the Services and the pace of expenditure in the current Financial Year.

1.20 During oral evidence, the representatives of the Ministry of Defence further stated as given below:

“In consonance with the threat perception, to modernize the Army and enhance its capabilities, the budgetary allocations during the Financial year 2018-19 was increased to ₹ 21880 with 100 percent utilization of funds without any surrenders. Army supported to enhance indigenous production of military equipment to reduce import dependency. In the Financial Year 2018-19, 7 contracts (54 percent) were accorded to Indian vendors against the total of 13 concluded contracts. Suitable enhancements of financial powers have been delegated to Vice Chief of Army Staff which was further revise in February 2019. In toto, the Policies of the Ministry of Defence are in consonance with the needs of Army. However these need to be supported with appropriate budgetary accretions and larger participation of private sector through ‘Make in India’.”

Surveillance in border areas

1.21 During the recent study visit of the Committee to Eastern Sector from 4 to 9 November, 2019, they came across a request for high-tech state-of-the-art cameras for surveillance purposes. A requirement of fifteen to sixteen such cameras for the posts over there was placed before the Committee. The approximate cost of the said cameras was anticipated to be around ₹ 80 lakh. During the examination of Demands for Grants 2019-20, the Committee wished to be apprised on whether the said request has reached the Ministry of Defence and the cameras been provided. In this connection the Ministry of Defence submitted as follows:

“As far as the issue of the surveillance equipment is concerned, we have received those requests. It is not only at Nathu La or Eastern Command but all across our northern borders. We are undertaking this procurement in two ways. One is a central procurement which takes a little longer but which will meet the overall requirement. But to meet the immediate operational requirement, we have something called the Army Commanders’ Special Financial Powers Fund under which the Army Commanders are empowered by such operationally necessary equipment to fill in the gap between what is available today and till such time that the central procurement materialises.”

Allowances in difficult terrains

1.22 During the above mentioned study visit of the Committee, they came to know about discrepancies in the allowances paid to the personnel of Central and state Governments, such as the local police in the Gangtok region. The alleged discrepancy ranged up to the level of four or five times in the allowances. In this context, the representatives of Army deposed before the Committee as furnished hereunder:

“Regarding the various anomalies in allowances which have been there, they have been taken up. We will furnish the exact figures subsequently. The endeavour is that all our jawans who are facing hardship must get their due allowance. There is parity between them and the troops which are deployed at other similar areas. This issue is being looked into in consultation with the Ministry Of Defence.”

Bullet Proof Jackets(Bullet Proof Jackets)

1.23 The Committee desired to be apprised about the current status of authorised and held strength of Bullet Proof Jackets in Army along with the progress with regard to procurement of Bullet Proof Jackets including status of induction of Bullet Proof Jackets

of General Staff Qualitative Requirements (GSQR 1438) which is an improved version over Bullet Proof Jackets of General Staff Qualitative Requirements (GSQR 768). In this regard, the Ministry of Defence furnished the following information:

“As part of drive towards modernization of Infantry, improvement in individual protective gear has been given the highest priority in order to ensure better survivability of the soldier against the enemy and terrorists. An immediate requirement of quantity fifty thousand Bullet Proof Jackets, based upon earlier General Staff Qualitative Requirements (GSQR 878), had been met through Revenue route in March 2016. The contract for procurement of quantity one lakh eighty-six thousand one hundred thirty-eight Bullet Proof Jackets as per revised General Staff Qualitative Requirements (GSQR 1438) had been concluded in April 2018. Forty thousand of these have already been delivered.”

1.24 The Committee were also keen to be informed about the funds directed towards procurement of Bullet Proof Jackets during the year 2018-19 and allocated for procurement of Bullet Proof Jackets in the budget for 2019-20 was sought. In this connection, the Ministry submitted as follows:

“₹85.58 crore was the financial outgo on procurement of Bullet Proof Jackets during 2018-19. The projection (Revised Estimate) for Financial Year 2019-20 is ₹ 320.91 crore.”

1.25 Further on the issue of safety of soldiers, the Committee enquired about feasibility of full body suits. The Ministry of Defence through written reply apprised the Committee that as per the analysis of open source information available, fully body suits are currently under development in some countries. The procurement of fully body suits may be carried out in future based on requirement and further development in the field.

Force Level of Army

1.26 The Committee wished to be updated on the present authorised and held strength of equipment i.e. guns, missiles, aircraft, tanks, ammunition, etc. with Army. In case of insufficiencies, how the Ministry planned to plug the gaps and the progress made thereon. On this point, the Ministry of Defence supplied the information as given hereunder:

“Equipment holding (Authorization and holdings of equipment etc.) keeps on changing based on obsolescence, de-induction and new inductions. Acquisition of equipment is an ongoing process. The deficiencies of equipment, wherever existing, are being made up through Capital and Revenue procurements. A focused approach has been adopted to make up

the deficiencies. Weapons/equipment/ammunition items urgently required to meet the operational requirements are being procured through the delegated financial and emergency procurement powers of the Indian Army.”

Shortage of Manpower

1.27 Data with regard to the required and existing manpower of Army and proposed plan to bridge the gaps in case of shortages are given as under:

“The state of Officers {Excluding Army Medical Corps (AMC), Army Dental Corps (ADC) & Military Nursing Service (MNS)} of the Indian Army as on 01 Jan 2019 is as under:-

(a) Authorised Strength	-	50,312
(b) Held Strength	-	42,913

A Proposal to make Short Service Commission (SSC) Entry more attractive is under consideration. It is envisaged that in due course, the existing shortage would be mitigated at a faster rate.

The state of Junior Commissioned Officers (JCOs)/ Other Rank (OR) of Indian Army as on 01 Jan 2019 is as under:-

(a) Authorised Strength	-	12,23,381
(b) Held Strength	-	11,85,146*

* Excluding 1,718 Army Postal Service (APS) Non-Regular Junior Commissioned Officers (JCOs)/Other Rank (OR).

The deficiency of Junior Commissioned Officers (JCOs)/Other Rank (OR) is normal and the same will be met by recruits under training.”

1.28 With regard to manpower it was further informed that shortage of Officers in the Indian Army is mainly in the Support Cadre consisting of Officers inducted through Short Service Commission in In-service entries. However, due to consistent efforts, there has been a continuous decrease in deficiency of Officers. As on 01 January 2019, deficiency in the Officers cadre has reduced from twenty-six per cent (in 2010) to approximately fourteen per cent. In order to enhance intake through the Short Service Commission Entry (SSC), a proposal to make Service Commission Entry more attractive is under consideration. A Young Leaders Training Wing has also been commissioned at the Officers’ Training Academy (OTA), Chennai to prepare prospective in-service candidates for becoming Officers through the Army Cadet College (ACC) Entry. A proposal for restructuring Permanent Commission (Special List) [PC (SL)] entry is also under examination. In view of the above, it is envisaged that the existing shortage would be mitigated at a faster rate.

Chapter II

Air Force

The wide-ranging tasks of Air Force include air defence, counter air operations, intelligence, strategic operations, space operations, surveillance and reconnaissance, training, air maintenance, support to civil administration and humanitarian assistance and disaster relief. The latest aids to civil power include movement of Central Armed Police Force post Pulwama and airlifting of mortal remains of Central Reserve Police Force on 15 February 2019. Humanitarian assistance included flood and cyclone relief operations to controlling forest fire and much more. Undoubtedly, Air Force needs adequate budgetary support to retain current operational capability and maintain credible deterrence along with continuing advancements on the modernization trajectory. In the Defence Services Estimates for the year 2019-20, the demands for grants of Air Force are under Revenue segment is contained in grant no. 19. The budget for capital infrastructure of Air Force is met through grant no. 20. A detail on the budgetary provisions to Air Force is specified in the succeeding paragraphs.

Budgetary Provisions 2019-20

2.2 Details of the projections and budget allocation to Air force in Budget Estimates 2019-20 is as tabulated below:

	(₹ in crore)
Projection	1,22,984
Allocation	69,949
Shortfall	53,035

Against the Projection of ₹ 1,22,984 crore the allocation is ₹ 69,949 crore. Therefore, the shortfall is ₹53,035 crore. Out of the total allocations of ₹ 69,949 crore, the allocation of Revenue Section is ₹ 30,602 crore and for capital segment it is ₹ 39,347 crore.

2.3 ₹18,172 crore was sought for salary expenses against which ₹17,116 crore was finally allocated. The details of projections and allocations against under Revenue section is as given below:-

Revenue Budget

(₹ in crore)

	Total	Salary	Non-salary
Projection	41,682	18,172	23,510
Allocation	30,602	17,116	13,486
Shortfall	11,080	1,056	10,024

There is shortfall of ₹ 1,056 crore under salary head. Against the Projections of ₹ 23,510 crore for Non-salary expenses, ₹ 13,486 crore has been allocated. Therefore, there is a shortfall of ₹ 10,024 crore.

2.4 The representatives of Air Force submitted that the impact of shortfall in Revenue Budget can be felt in Aircraft maintenance, serviceability and training. It was also cited that the older systems require more maintenance. The details of Projections & allocations under capital Section is as under:-

Capital Budget

(₹ in crore)

	Total	Acquisition+ 10(i)	Other Capital works
Projection	81,302	76,413	4,889
Allocation	39,347	36,410	2,937
Shortfall	41,955	40,003	1,952

Against the projections of ₹ 76,413 crore for Acquisition + 10(i) The allocation is ₹ 36,410 crore. There is a shortfall of ₹ 40,003 crore.

2.5 According to presentation demonstrated by Air Force, shortfall in capital budget would hit pace of modernization and New Schemes becomes a challenge. Against the Projections of ₹ 4,889 crore for other Capital work. The allocation is ₹ 2,937 crore. Therefore, there is shortfall of ₹ 1,952 crore.

Budget Review

2.6 Details regarding the projections and allocations in respect of Air Force during the last five years, separately for Revenue and Capital, are as follows:-

REVENUE

(₹ in crore)

Year	BE		RE		Expenditure
	Projection	Allocation	Projection	Allocation	
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	21,020.95
2016-17	25,728.60	23,655.83	23,817.22	23,817.52	22,856.44
2017-18	29,147.29	24,802.33	29,746.42	27,209.61	27,393.20
2018-19	35,260.79	28,821.27	32,407.37	28,105.43	28,291.25

The allocations in Revised Estimates are usually lesser than the allocations in Budget Estimates.

CAPITAL

(₹ in crore)

Year	BE		RE		Expenditure
	Projection	Allocation	Projection	Allocation	
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	31,198.32
2016-17	41,266.41	29,795.42	36,512.95	28,239.86	30,414.79
2017-18	62,048.85	33,570.17	52,548.50	33,570.17	34,917.59
2018-19	77,694.74	35,770.17	68,579.46	35,770.17	36,451.74

The expenditure is usually higher than the Revised Estimates allocations.

2.7 Percentage share of revenue and capital allocation for Air Force out of total defence budget for the last five years is given below:

(₹ in crore)

Year	BE (Defence Service Estimates*)	Air Force (Revenue)	%age share	Air Force (Capital)	%age share	Air Force (Revenue + Capital)	%age share
2014-15	2,29,000.00	20,506.84	8.95	33,710.68	14.72	54,217.52	23.68
2015-16	2,46,727.00	23,000.09	9.32	33,686.75	13.65	56,686.84	22.98
2016-17	2,49,099.00	23,655.83	9.50	29,795.42	11.96	53,451.25	21.46
2017-18	2,59,261.90	24,802.33	9.57	33,570.17	12.95	58,372.50	22.51
2018-19	2,79,305.32	28,821.27	10.32	35,770.17	12.81	64,591.44	23.13

2.8 Percentage share of capital and revenue allocation for Air Force out of total defence budget for Eleventh Plan and Twelfth Plan as a whole and for each year of Eleventh and Twelfth Plans is given below:

(₹ in crore)

Year	BE(Defence Service Estimates*)	Air Force (Capital)	%age share	Air Force (Revenue)	%age share
<i>XIth Plan</i>					
2007-08	96,000.00	16828.73	17.53	10193.01	10.62
2008-09	1,05,600.00	19271.42	18.25	10855.56	10.28
2009-10	1,41,703.00	20114.08	14.19	14318.18	10.10
2010-11	1,47,344.00	25251.72	17.14	15210.73	10.32
2011-12	1,64,415.49	30282.03	18.42	15927.95	9.69
Total	6,55,062.49	111747.98	17.06	66505.4	10.15
<i>XIIth Plan</i>					
2012-13	1,93,407.29	30514.45	15.78	17705.81	9.15
2013-14	2,03,672.12	39208.84	19.25	18295.10	8.98
2014-15	2,29,000.00	33710.68	14.72	20506.84	8.95
2015-16	2,46,727.00	33686.75	13.65	23000.09	9.32
2016-17	2,49,099.00	29795.42	11.96	23655.83	9.50
Total	1121905.41	166916.14	14.88	103163.7	9.20

(*Defence Services Estimates includes Air Force, Navy, Air Force, Joint Staff, Defence Research and Development Organisation, Ordnance Factories, National Cadets Corps, & Directorate General Quality Assurance Budget)

The allocated funds were optimally utilized to ensure operational preparedness.

BUDGET MODERNIZATION

2.9 Details of Budget Estimates, Revised Estimates Projections, RE Allocation, Modified Appropriation(MA) and Actuals of Air Force (Revenue + Capital) for the Eleventh Plan and Twelfth Plan are as under:-

(₹ in crore)

Year	BE Allocation	RE Projection	RE Allocation	MA/ Final Grant	Actuals
<u>XI Plan</u>					
2007-08	15,908.86	15,675.86	13,333.62	12,633.62	12,641.26
2008-09	18,281.42	18,281.42	16,108.83	15,626.22	15,660.99
2009-10	18,814.64	23,931.89	17,506.19	17,506.19	17,437.61
2010-11	23,482.43	23,487.36	22,567.50	22,127.16	22,181.56
2011-12	28,412.74	28,287.49	26,033.92	26,640.53	27,164.08
<u>XII Plan</u>					
2012-13	28,533.00	34,433.00	28,575.99	30,896.38	31,053.00
2013-14	37,049.06	63,380.68	36,045.64	37,043.62	36,917.99
2014-15	31,818.39	36,855.91	31,818.39	24,704.93	30,809.39
2015-16	31,510.62	33,254.35	28,643.10	28,643.10	29,045.66
2016-17	27,556.02	36,253.03	26,245.15	26,895.15	28,255.35

2.10 The modernization budget mainly comes from capital component. The Capital Procurement is undertaken as per the guidelines laid down in the Defence Procurement Procedure (DPP). The DPP lays down the detailed timelines for various stages in the procurement process and all out efforts are made to adhere to these timelines. During Eleventh Plan a total of 104 projects were taken up at a cost of ₹ 138401.63 crores. During the Twelfth Plan a total of 56 projects were taken up at a total cost of ₹ 136779.21 crores.

Make in India

2.11 The process for providing the desired impetus to the domestic defence manufacturing industry through 'Make in India' has been initiated. IAF has identified 06 potential 'Make' Projects as per Chapter III of Defence Procurement Procedure 2016. These projects are envisaged for execution through private industries of the country. In an effort to strengthen the indigenous defence production base, as part of indigenization and drive to obtain key technologies, the Ministry of Defence has been striving to include the private sector in production of defence equipment. However, considering the high end technology involved and the long gestation periods of

defence projects, the tangible changes on ground will take some time in becoming evident.

2.12 An estimate of indigenisation achieved by HAL in various projects of IAF are given below:-

ESTIMATED INDIGENISATION DATA

S No	Fleet	Status
1.	Su-30MKI	15-20% of TTGE has been indigenised by HAL.
2.	MiG-21	20-25% of TTGE has been indigenised by HAL.
3.	MiG-23/27	30-35% of TTGE has been indigenised by HAL.
4.	MiG-29	100% of ARS has been indigenised and 80% of GHE/GSE has been indigenised.
5.	An-32	98% of ARS items are indigenised and 99% of mandatory items of OH of ac are indigenised. Presently total approx 8500 (Earlier it was 5000) lines of An-32 spares are indigenised.
6.	IL-76/78	80% of TTGE are indigenised.
		65% of ARS items are indigenised in IL76 fleet
		55% of ARS items are indigenised in IL-78 fleet
7.	Jaguar	52 % (Earlier 40-45%) of ARS items are indigenised.
8.	LCA	LCA Tejas aircraft is indigenously developed by Aeronautical Development Agency and Hindustan Aeronautics Limited. The aircraft per se is indigenously developed, however, major components like aeroengine, radar, ejection seat etc have been sourced from foreign vendors. Most of the TTGE is indigenised.
9.	CTK/CTH/ CTL,	80-85% TTGE are indigenized by HAL.
10.	Dornier	60-65% TTGE are indigenized.
11.	AVRO	80-85% TTGE are indigenized by HAL.

Fighter Aircraft

2.13 The Committee were informed by the Ministry of Defence that the Indian Air Force (IAF) should be well equipped to face any security challenges. For this, they should have adequate number of squadron strength. It was submitted by the representatives of Air Force during oral evidence that the said induction were obviously subject to available budgetary resources.

2.14 In this connection, the Committee were also apprised that procurement of weapons and spares to maintain high asset availability is needed. Additional assets are also required to maintain credible deterrence.

Aircraft shelter

2.15 The Committee expressed concern over the paucity in number of aircraft shelters in Air Force. In this connection, the representatives of Air Force apprised the Committee during oral evidence, as given hereunder:

“As far as aircraft shelters are concerned, एक सिस्टेमटिक तरीके से हम ऐरक्राफ्ट शेल्टेर्स बना रहे ह। पहले हमारा फोकस वेटन बॉर्डर पर यादा था। आप देखगे कि वहाँ ऐरक्राफ्ट शेल्टेर्स उपलब्ध है। अभी नॉथ-ईस्ट साइड में फोकस बढ़ रहा है। उसके लिए ऑलरेडी हमारा लान एमओडी के पास है। एक सिस्टेमटिक तरीके से, एक चरणबद्ध तरीके से हम ये शेल्टेर्स बना रहे ह। हम दो तरह के शेल्टेर्स बना रहे ह। एक new generation hardened aircraft shelter बना रहे ह, अगर बम आदि वहाँ गिरे तो वह उससे ऐरक्राफ्ट को प्रोटेक्ट करेगा। दूसरा, सन शेल्टेर्स है, इसका मतलब यह है कि वार टाइम म वह बेशक बचा न सके, लेकिन वह पीस टाइम म ऐरक्राफ्ट को बारश और अय मौसम संबंधी एटिवटीज से बचाता है। तेजपुर और चबुआ म ये बने हए ह और उह हम यूज भी कर रहे ह। यू जनरेशन शेल्टेर्स की कॉस्ट ज़्यादा है और उह बनाने म समय लगता है। एक चरणब तरीके से हर जगह पर, जहाँ पर हमारे लड़ाकू विमान िडलॉय हगे, वहाँ पर हम उह बना रहे ह।”

Trainer Aircraft

2.16 With regard to the trainer Aircraft held by IAF it was intimated that currently include Basic Trainer Aircraft (BTA), Intermediate Jet Trainer (IJT), Advanced Jet Trainer (AJT). The existing strength of trainer aircraft is 260 as against the sanctioned strength of 388. The current strength is given below: -

- (i) Basic trainer (PC-7): 75 aircraft
- (ii) Intermediate trainer (Kiran Mk-I) : 86 aircraft
- (iii) Advanced Jet trainer (Hawk) : 99 aircraft
- (iv) Kiran Mk II : 42 aircraft (not being used as training aircraft)

Presently, IAF has 75 BTA. Case for procurement of 38 additional BTA aircraft under the 'Option Clause' was being processed. However, the same has been deferred for one year. A case for procurement of 20 additional AJT aircraft from HAL is currently at the Contract Negotiation Stage. Design and Development (D&D) of HTT-40 aircraft is under progress at HAL, Bangalore. HAL has indicated that the development of HTT-40 is expected to be completed by Dec 2019. The procurement of HTT-40 will be initiated after successful development of aircraft.

2.17 Simulators have also been acquired for the Basic Trainer Aircraft and Advance Jet Trainer aircraft. Presently, IAF has two Fixed Base Full mission Simulators (FBFMS), three Cockpit Procedure Trainers (CPTs) and one Avionics

Part Task Trainer (APTT) along with associated equipment and infrastructure for the BTA. Similarly for AJT, three CPTs, three APTTs and two FTDs (Flight Training Display) are installed for providing simulator training. The procurement of simulators is built into the contracts of all aircraft that the IAF is now procuring.

2.18 When enquired about the plan to cover the paucity in trainer aircraft, the Ministry of Defence supplied the following details:

“Case for procurement of 38 additional Basic Trainer Aircraft under the ‘Option Clause’ was being processed. However, the same has been deferred for one year. A case for procurement of 20 additional Advance Jet Trainer aircraft from HAL is currently at the Contract Negotiation Stage. Design and Development (D&D) of HTT-40 aircraft is under progress at HAL, Bangalore. HAL has indicated that the development of HTT-40 is expected to be completed by Dec 2019. The procurement of HTT-40 will be initiated after successful development of aircraft.”

2.19 The Committee categorically desired to be updated on the present status of critical stall and spin trials of HTT 40 which was slated to commence as given in para 21 & 22, Report 47th of Standing Committee on Defence (16th Lok Sabha) and also the certification of the aircraft which was planned in Dec 2018. To this pointed query of the Committee, the Ministry of Defence furnished the following statement:

- “(a) **Current status of HTT – 40.** On 01 Feb 10, while seeking **Acceptance of Necessity**(AON) from the **Defence Acquisition Council**(DAC) for 106 Basic Trainer Aircraft as a Make by HAL project, the timeline projected by HAL for the development of HTT-40 was three years (February 2013) for the first flight and five years (February 2015) for the certification. HAL achieved the milestone of first flight in May 2016 with a delay of over three years.
- (b) **Flight trial status.** Rotary balance wind tunnel test for spin has been completed by ONERA, France. Spin gantry fitment for undertaking spin flight has been completed. The Sea level trials have been completed in December 2018 and spin flight tests are under progress.
- (c) **Aero Engine Status** Engine electronic control (EEC) has become obsolete. For the production versions of the aero-engine for HTT-40 ac a new EEC/twin channel FADEC needs to be developed. M/s Honeywell has quoted a time frame of 24 months from T₀ for this task. Presently the flight testing is being done with Cat ‘B’ EEC.
- (d) **Project Timeline** As per Hindustan Aeronautics Limited initial project report on HTT-40, a total of 350 test flights were envisaged. As on 24 September 2019, 325 test flights have been completed on two prototype aircraft. The critical phase of proving the spin characteristics of the aircraft has started. The aircraft is modified with a spin gantry for deploying spin parachute in case of emergencies. HAL has conveyed

that six turn spin to the right was carried out towards spin testing. The spin testing for six turn spin to the left is currently under progress. HAL would need to not only demonstrate the full six turn spin, using conventional (in-spin for entry and anti-spin for recovery) inputs for entry and recovery but also demonstrate the same on a production standard aircraft without instrumentation, telemetry and gantry (for spin recovery chute). Any unforeseen challenges in this phase could delay or even derail the HTT-40 program as experienced in the IJT program.

- (e) A review of the programme was conducted on 07 August 2019. In the meeting it was decided that HAL will complete spin trials and obtain certification of HTT-40 and IAF will initiate a case for revalidation of /approval of Acceptance of Necessity as per para 72 (Buy-IDDM) of DPP-2016. The planned date for completion of certification is April 2020. IAF would progress the case after successful completion of spin trials and certification of HTT-40.”

2.20 On the policy for upgradation/ phasing out of aircraft in Air Force, the Committee were apprised as follows:

“All the aircraft in the IAF are utilised till completion of their Total Technical Life (TTL)/ Total Calendar Life (TCL) and are phased out on completion of their TTL/ TCL. Upgradation of aircraft and equipment in the IAF is carried out in order to ensure that the aircraft remain contemporary and operationally relevant with changing environment. Residual life of aircraft and extent of Upgradation required forms the contours of any upgrade programme.”

Transport Aircraft and Helicopters

2.21 It was brought to the knowledge of the Committee that presently, there are some shortages with regard to Transport Aircraft and Helicopters. The life span of helicopters is based on condition. Generally, it varies from 5000 to 12000 hours and the period from 15 to 35 years. As regards the transport fixed wing aircraft, the life span ranges from 20000 to 150000 hours. 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 life span of the air craft extended. No aircraft which has completed its operational life is in use with the Indian Air Force.

Air Force Bases

2.22 The Committee wished to be informed in detail regarding the status of Air Force Bases. In this regard, the information was furnished as documented hereunder:

“Indian Air Force has 53 Air Force bases, out of which 46 have night landing facilities. Provision of night landing facilities at any base depends on feasibility of conducting regular night operations from that base. Presently there is no plan to conduct regular night operations from few bases. Night landing facilities is planned to be provided at some Air Force Stations under MAFI project Phase II. Post completion, all IAF airfields except Leh, Thoise, Kargil and Barrackpore would have night operations capability. However, limited night operations can be conducted at these airfields as well, using Mobile Airfield Lighting System (MAFLS).

2.23 Further on the matter of modernization of Airfields, the Ministry, through a written reply submitted as follows:

“The IAF is in the process of upgrading the navigational facilities at all its airfields under the Modernisation of Airfield Infrastructure (MAFI) project to improve the operational environment and enhance aerospace safety in two phases. Contract for Phase-I of turnkey was signed with M/s TATA Power (SED) on 16 March 2011 for modernisation of 30 airfields in five batches of six airfields each. The contract deliverables are expected to be completed by December, 2019. The implementation of MAFI Phase-II that involves 37 airfields of IAF, Navy and Ministry of Home Affairs has also been approved under Option Clause. Contract Negotiation Committee (CNC) has already submitted its recommendations. The case is at Committee on Financial Approval stage.”

2.24 The Committee also wished to be apprised on the manner in which modernization is being carried out. On this account the following information was furnished:

“Under Project MAFI, IAF airfields are being provided with CAT II ILS coupled with CAT II Airfield lighting system (AFLS), improved navigational equipment such as VOR & TACAN and Air Traffic Management System (ATMS). The infrastructure provided under Project MAFI has enhanced operational capability of IAF including capability to undertake night as well as poor weather operations.

2.25 The modernization is also being done in the existing Air Force bases by executing the following works:-

- (a) Resurfacing and extension of runways and modernization of airfield lighting systems.
- (b) Creation and up-gradation of weapon storage areas.
- (c) Enhancement of security infrastructures.
- (d) Creation of Operation, Maintenance and Administrative infrastructure.
- (e) Construction of married accommodation.
- (f) Creation of infrastructure for induction of new equipment.

- (g) Provisioning of basic amenities, sports & recreations facilities, rainwater harvesting and external services.
- (h) Land acquisition for various projects.
- (j) Upgradation of **Advanced Landing Grounds(ALGs)** in Arunachal Pradesh and infrastructure in the North East.
- (k) Activation of Panagarh and creation of 31 Wg in support of Mountain Division at Panagarh.

2.26 The details of allocation and expenditure are given below:-

(₹ in Lakhs)

FY	Allotment	Expenditure	% Expenditure
11th FY Plan			
2007-08	0.00	0.00	0.00%
2008-09	0.40	0.05	12.50%
2009-10	2300.00	2296.63	99.85%
2010-11	11971.72	11701.68	97.74%
2011-12	29014.03	29668.24	102.25%
12th FY Plan			
2012-13	32135.03	32905.37	102.40%
2013-14	15178.46	15032.84	99.04%
2014-15	23531.67	22534.24	95.76%
2015-16	17548.97	17187.71	97.94%
2016-17	14554.00	13925.55	95.68%
Subsequent years			
2017-18	62522.43	61452.83	98.29%
2018-19	73184.77	71996.58	98.38%
2019-20	70829.00	32279.01 (As on 30.09.2019)	46.99% (As on 30.09.2019)

2.27 The data includes allotment/ expenditure details pertaining to resurfacing/ strengthening of Runways at Air Bases of IAF (Code Head 918/50 under Sub-Head (c) –IAF Special Projects under Minor Head 206 under Capital Works).

Accidents

2.28 The Ministry of Defence has informed through written replies, that the number of accidents occurring in Indian Air Force has reduced from an average of 13 accidents per year in 11th plan period to an average of 08 accidents per year during 12th plan period.

2.29 During examination of Demands for Grants of Air Force, the Committee wished to be educated about the findings of the Court of Inquiry on June 3 2019, AN-32 aircraft crash in Arunachal Pradesh. The Committee were intimated that the

court of inquiry team has completed investigation in AN-32 aircraft crash that took place on 03 Jun 2019. The reasons for aircraft accident as given to the Committee are appended below:-

- (a) Aircraft entered in the wrong valley due to Navigational Error in bad weather.
- (b) The crew were unable to fly the aircraft safely out of the blind valley due to poor visibility and clouding.

2.30 Obsolescence is also a critical issue concerning safety of pilots and aircraft. During the study visit of the Committee from 4 to 9 November, 2019, it was brought to their notice that majority of the aircraft available with Indian Air Force are getting old. This also leads to accidents and pilots are lost. Most of the accidents are due to technical error.

Manpower

2.31 The Government sanctioned Establishment and Strength of officers and airmen (except Medical & Dental branch) in Indian Air Force, as on 01 October 2019, is as follows:-

	Establishment	Strength	Shortage
Officers	12628	12159	469
Airmen	142917	129447	13474*

* Additionally, 12,739 trainees are undergoing training at various training institutes.

- (b) Shortage of 469 officers is a variable figure which keeps fluctuating depending on Commissioning cycle, premature separation of officers etc. The induction plans have been revamped so as to gradually bring the strength at par with the sanctioned establishment. In addition, due to robust cadre management planning and implementation, there is likely to be no shortage of officers in the Indian Air Force in due course.
- (c) In case of airmen, manpower review is undertaken on annual basis. To reduce the deficiency, improvements in training infrastructure have been carried out to accommodate increased number of trainees and available resources (infrastructure and manpower) are being utilised efficiently to support enhanced induction. Induction in airmen cadre was 5000 per annum till 2015. This has been gradually increased to 6800 from January 2018. The induction has been further increased to 7600 airmen each year from July 2019 onwards. In view of this, it is

expected that Indian Air Force will be able to bring up the strength at par with the authorized establishment in about 5-6 years. Shortages are being addressed in a staggered manner to ensure a favourable Human Resource environment in the long run and to streamline wastages on account of discharge/ superannuation.

- (d) To bridge this gap and for encouraging the people to join the Air Force, the Indian Air Force undertakes various induction publicity measures including:-
- (i) Interactions/ motivation sessions at various educational institutions. During this, a motivational lecture is given by select officers wherein the scope of choosing Indian Air Force as a career is covered in terms of prospects, facilities, work profile, benefits etc.
 - (ii) Conduct of Induction Publicity Exhibition Vehicle (IPEV) drives annually covering various parts of the country, wherein a customized Volvo bus having latest technological avenues like Virtual Reality, Augmented Reality, simulator, career information etc. are optimally used to attract the tech savvy young generation of the present day to join the IAF.
 - (iii) Development of aircraft mobile game app "IAF: A cut above".
 - (iv) Publicity through publicity pavilions, set up at critical locations where footfall of the target group is high.
 - (v) Publicity through hoardings, print and digital media.
 - (vi) Interaction/ publicity measures through Command Headquarter and units of IAF.
 - (vii) Distribution of publicity material to fascinate the mind of the target youth.

Training

2.32 The details of training institutes for pilots in the Indian Air Force are as follows:

Sl. No.	Stage	Name
(a)	<u>Stage-I.</u> Ab-initio training for all pilot streams.	Air Force Academy (AFA), Dundigal, Hyderabad
(b)	<u>Stage-II</u>	
	(i) Fighter	Fighter Training Wing (FTW), Air Force Station, Hakimpet
	(ii) Helicopter	Helicopter Training School (HTS), Air Force Station, Hakimpet
	(iii) Transport	Fixed Wing Training Faculty (FWTF), Air Force Station, Yelahanka
(c)	<u>Stage-III</u>	

	(i) Fighter	2 Sqns at Air Force Station, Bidar and 2 Sqns at Air Force Station Kalaikunda
	(ii) Helicopter	(aa) Helicopter Training School (HTS), Air Force Station, Hakimpet; and (ab) 112 Helicopter Unit (HU), Air Force Station, Yelahanka.
	(iii) Transport	Fixed Wing Training Faculty (FWTF), Air Force Station, Yelahanka
(d)	Army Pilot Course - Basic flying training on helicopter for Army.	Basic Flying Training School (BFTS), AFS Bamrauli (Allahabad)

2.33 The Committee wished to be informed about the training pattern for pilots. The Ministry of Defence informed as follows:

“Presently three aircraft type training pattern is being followed. The two aircraft training pattern started w.e.f. July 2015 as a pilot project. The performance of trainees who have undergone this training pattern has been good. The same is planned to be implemented after the phasing out of Kiran aircraft.”

2.34 With regard to the timeline of the training programme of first batch of Officers and technicians which is underway with the French Air Force on Rafale the Committee were submitted as given:

“Advanced training of IAF personnel was conducted by the French Air Force (FAF) and commenced from September 2018 for one Indian Air Force pilot, one AE officer and six technicians. Pilot Training was at FAF Base, Saint Dizier and Ground crew training was completed at FAF Base, Mont de Marsan. Two additional pilots joined the advanced training in France from March 19. This team has completed the advanced training phase and commenced training on Indian Rafale aircraft at Conversion Training Center (CTC) at M/s Dassault facilities, Merignac from 30 September 2019.”

CHAPTER III

NAVY

The Indian Navy is prime element of India's maritime power and it plays pivotal role in safeguarding national maritime interests. India has 7516 km long coastlines and 1382 islands. The Exclusive economic zone expands in 2.02 million square kilometer. Major international shipping lanes pass through Indian ocean region and also 1,20,000 ships transit each year through this region. 33 percent of world's bulk cargo and 66 per cent of world's oil transit through this area. The significance of Indian maritime perspective lies in the fact that this region is home of global terrorism and also centre of gravity of piracy and trans-national crimes. Besides this, this is also locus of 70 per cent of world's natural disasters. In light of these aspects, the role and responsibilities of Indian navy turn out to be enormous.

3.2 Along with national security, sea is also critical for national prosperity. 95 per cent of the country's trade by volume and 68 per cent by value are transacted by sea. Present of 36 littoral nations with varied interests further complicate the challenges of Indian Navy. These include operational deployment to insulate external interference and maintain high degree of maritime domain awareness. Moreover, securing maritime environment for economic growth and developmental activities is another facet of functional obligation of Navy. In order to accomplish the defined mandate and meet unidentified threats Indian Navy has to maintain a credible deterrence in the arena. Adequate budgetary provision is the essence for desired performance of the Navy. In the Defence Services Estimates for the year 2019-20, the demands for grants of Navy are under Revenue segment is contained in grant no. 19. The budget for capital infrastructure of Navy is met through grant no. 20. A detail on the budgetary provisions to Navy is denoted in the following paragraphs.

Budgetary Analysis for Navy during the last Five Years

3.3 Percentage share of Navy budget (including Joint Staff) out of total defence budget from 2012-13 up to the current year is given below:

<u>Financial Year</u>	<u>Defence Budget</u>	<u>Naval Budget (BE)</u>	<u>Navy's Share of Defence Budget</u>
2012-13	1,93,406	35,044	18.12%
2013-14	2,03,762	34,212	16.79%
2014-15	2,29,000	35,191	15.37%
2015-16	2,46,727	37,807	15.32%
2016-17	2,49,099	36,239	14.55%
2017-18	2,59,262	34,703	13.39%
2018-19	2,79,305	36,623	13.11%
2019-20 (BE)	3,01,866	41,259	13.66%

The figures shown in the above table depicts that although the allocations to Indian Navy has increased during the years 2018-19 and 2019-20, it's share in the overall defence budget has steadily declining since the financial year 2012-13 till date. The representatives of the Indian Navy has submitted that there is a need to enhance Navy's share of Defence Budget in keeping with operational commitments and to enhance the capabilities.

3.4 Percentage share of capital and revenue allocation Navy (including Joint Staff) out of total defence budget for Eleventh Plan and Twelfth Plan as a whole and for each year of Eleventh and Twelfth Plans is given below:

(₹ in crore)

Year	BE(Defence Service Estimates*)	Navy (Revenue)	%age share	Navy (Capital)	%age share
<i>Xlth Plan</i>					
2007-08	96,000.00	6968.25	7.26	10561.19	11.00
2008-09	1,05,600.00	7421.19	7.03	12085.58	11.44
2009-10	1,41,703.00	8322.11	5.87	12281.91	8.67
2010-11	1,47,344.00	9329.57	6.33	12137.84	8.24
2011-12	1,64,415.49	10589.06	6.44	14657.83	8.92
Total	6,55,062.49	42630.18	6.51	61724.35	9.42

XIIth Plan					
2012-13	1,93,407.29	12548.02	6.49	24766.42	12.81
2013-14	2,03,672.12	12194.43	5.99	24149.03	11.86
2014-15	2,29,000.00	13975.79	6.10	23832.67	10.41
2015-16	2,46,727.00	15525.64	6.29	25003.24	10.13
2016-17	2,49,099.00	17424.79	7.00	22000.09	8.83
Total	11,21,905.41	71668.67	6.39	119751.45	10.67

(# Includes DGOF, R&D, NCC, Military Farms, Rashtriya Rifles, DGQA and ECHS which were shifted to modified Grant No. 20-MoD(Miscellaneous) from FY 2016-17, but have been transferred back to Defence Services Estimates in FY 2017-18, with exception of Military Farms and ECHS, for the purpose of comparison with previous as well as future years)

(* DSE includes Army, Navy, Air Force, Joint Staff, DRDO, Ordnance Factories, NCC, & DGQA Budget)

3.5 Details regarding the projections and allocations in respect of Navy (including Joint Staff) during the last five years, separately for capital and revenue, are as follows:-

REVENUE

(₹ in crore)

Year	BE		RE		Expenditure
	Projection	Allocation	Projection	Allocation	
2014-15	19570.57	13975.79	15753.51	13935.79	13678.87
2015-16	18546.58	15525.64	15838.30	14635.18	14992.04
2016-17	18502.56	17424.79	19348.23	17813.99	17136.77
2017-18	22473.64	18493.82	20545.47	18878.93	18715.05
2018-19	23747.75	19571.37	24420.58	20795.04	20856.23

CAPITAL

(₹ in crore)

Year	BE		RE		Expenditure
	Projection	Allocation	Projection	Allocation	
2014-15	28253.21	23832.67	22903.31	18507.07	22269.66
2015-16	26268.13	25003.24	25152.20	19740.06	19874.69
2016-17	30223.31	22000.09	22530.04	19596.28	19996.88
2017-18	28591.56	19348.16	27717.41	19348.16	20118.58
2018-19	35695.41	20848.16	30735.65	20890.87	21509.60

3.6 From the above tables it can be seen that there has been a gap between projections and allocations at both Budget Estimates and Revised Estimates stage. During the Years 2017-18 and 2018-19. The allocations have been slightly increased at Revised Estimates stage contrary to the trend of budgetary cuts in the previous

years. The Ministry could spent more than their allocated amount The Ministry has informed that the allocated funds were optimally and fully utilized toward operational activities. It was ensured that urgent and critical capabilities are acquired without any compromise to operational preparedness of the Indian Navy.

Budgetary Provisions 2019-20

3.7 Against the projected amount of ₹64,307.27 by Indian Navy, they were allocated ₹ 41,259 crore in Budget Estimates 2019-29. The Budget has two components Revenue and Capital. In Budget Estimates 2019-20, the Revenue allocation is ₹ 19032.47 crore and the capital allocation is ₹ 22227.53 crore. A major portion of the revenue budget is dedicated to salary expenditure and the remaining for Non-salary revenue expenditure which include other operational and maintenance needs. Details of Non-salary part is given below:

Revenue Budget - Non Salary

	(₹ in crore)
Projection	13550.34
Allocation	9871.20
Shortfall	3679.14

3.8 The data of above Table shows that the allocation is only 72 per cent of the projections. The mandatory outgo from the non-salary revenue budget includes ration, livery items, transportation, store, compensation, field defences, building maintenance and other miscellaneous expenses. Maintenance and serviceability of ships, submarines, aircraft and upkeep of ageing infrastructure becomes difficult. As pre the Ministry's submission, additional burden of 10(i), emergency procurements, customs duties, GST, fuel prices and inflationary pressures not factored. There is a requirement of additional funds under non-salary segment to progress operations, maintenance and training activities.

Capital Budget

3.9 Detailed information on Capital Budget for the Financial Year 2019-20 is tabulated hereunder:

Scheme	BE 19-20 Projections	BE 19-20 Allocations
Modernisation	32243.37	21177.00
Committed Liabilities	25461.64	18177.00
New Schemes	6781.73	3000.00
Land & Works	3470.47	1050.53
Total Capital Budget	35713.84	22227.53

3.10 Impact of Low Allocations as stated by the representatives of Indian Navy are enumerated below:

(i) As pre the Ministry's submission, additional burden of 10 (i), emergency procurements, customs duties, GST, fuel prices and inflationary pressures not factored. There is a requirement of additional funds under non-salary segment to progress operations, maintenance and training activities.

3.11 During oral evidence, the representatives of the Indian Navy stated that over 120 Extra Regional warships and submarines are operating in the Indian Ocean Region, which includes Red Sea and Persian Gulf. This requires additional responsibility of Indian Navy in the maritime environment. They further submitted:

"..... I would like to highlight that efforts are underway to modernise and develop maritime capabilities as per long term perspective plans approved by the Government. There is, therefore, a need for early approvals of key capability and infrastructure cases. Further, sustained budgetary support under Capital and Revenue, and enhancing the Navy's share to 18% of the overall defence budget, as it was during the First year of XIIth Plan, is recommended. And, as brought out earlier, the critical capability voids need to be addressed urgently."

3.12 The Government of India has sanctioned 300 plus projects for the Sagar Mala project for the minor and major ports to be set up across the coast of India spanning about 7,000 odd km. On being asked whether any study has been conducted to know the impact of the project on the Navy for protection or for patrolling and how it is going to impact the Budget, the representative of Indian Navy submitted :

“...We have got over 1,20,000 ships in the ISLs of the Indian Ocean region. With Sagar Mala kicking in and our ports’ capacity to handle more traffic when it goes up, obviously the number of ships that would call on at our ports is bound to increase. That would automatically enhance security concerns as well. So, our MCPP, the Maritime Capability Perspective Plan, which forms the part of the LTIPP, the Long-Term Integrated Perspective Plan, which is approved by the Ministry, caters for the capability that we want to have in order to address all these threats. So, we, by and large, do not go on a threat-based formulation. It is based on a capability-based formulation. So, that would ensure that we take care of the threat that would also come along with this enhancement of traffic because of the Sagar Mala project.

In fact, the Budget calculation also forms part of this Long-Term Integrated Perspective Plan as to how we are going to manage our Budget. That is why there is an urgent need for us to hike our Naval Budget. We certainly need more money, both for capital, for asset induction to pay up our committed liabilities and also in the revenue because like it was brought out yesterday by Secretary (Defence Finance), every capital acquisition has got a revenue effect as well. So, there is a need for us to enhance both of these in order to address these issues.”

BUDGET MODERNIZATION

3.13 Details of Budget Estimates Allocation additional funds sought at Revised Estimates stage, Revised Estimates Allocation and Actual Expenditure incurred by the Navy (including Joint Staff) for modernisation (Capital Acquisition) during Eleventh Plan and Twelfth Plan are given below:

(₹ in crore)

Year	BE Allocation	RE Projection	Additional Projection	RE Allocation	Actuals
XI Plan					
2007-08	9980.74	9980.74	0.00	8552.19	8566.63
2008-09	11593.68	9497.32	-2096.36	8765.78	8959.53
2009-10	11732.01	11627.24	-104.77	11386.34	12829.51
2010-11	11439.90	17007.00	5567.10	14439.90	16287.42
2011-12	13845.26	20280.80	6435.54	16425.51	18251.87
XII Plan					
2012-13	23775.10	23855.24	80.14	17250.71	16844.07
2013-14	23068.49	26201.21	3132.72	19559.31	19505.82
2014-15	22394.23	21802.23	-592.00	17405.99	21185.59
2015-16	23841.57	23895.30	53.73	18759.31	18701.04
2016-17	20908.72	21069.03	160.31	18507.75	18737.01

3.14 The Modernisation of Indian Navy is an ongoing process, which is undertaken in accordance with the Maritime Capability Perspective Plan (MCP) and Long Term Integrated Perspective Plan (LTTIP). LTTIP was approved by Defence Acquisition Council on 02 April 2012. To ensure that Indian Navy units are ready to meet any emergent operational requirement, review is undertaken regularly to equip forces

with the latest weapons, sensors and equipment. These inductions are at various stages of procurement.

3.15 The status of planned inductions during the first five years of the period (2012-17) in accordance with Long-Term Integrated Perspective Plan (2012-27) mainly included 45 MiG 29K/ KUB aircraft, 8 LRMR aircraft, 17 Advanced Jet Trainers, one carrier, one Submarines, three Destroyers, five Frigates, three Corvettes (P-28), three Landing Crafts and four Waterjet Fast Attack Craft.

3.16 Modernisation and technology upgradation is a continuous process for which adequate budgetary allocation is made. There has not been any shortfall of funds. However, Shipbuilding projects are time-intensive and spread over years and the entire process from design to commissioning entails various stakeholders, with lengthy deliberations. The major reasons for delay are infrastructural constraints of the Shipyards, delay in receipt of material/ equipment, design finalization/ change of equipment (vendor specific), Financial constraints and design expertise limitations of the Private Shipyards etc.

3.17 Details of Budget Estimates / Revised Estimates / Modified Allocation and Actual Expenditure for Committed Liabilities (CL) and New Schemes under Modernisation budget for Indian Navy for the Eleventh and Twelfth Plan is tabulated below:-

(₹ in crore)

<u>FY</u>		<u>BE</u>	<u>RE</u>	<u>MA</u>	<u>Actual Exp</u>
<u>XI Plan Period</u>					
2007-08	CL	7805.52	7642.12	7873.25	7585.59
	New Schemes	1958.48	725.73	466.52	818.18
	Total	9764	8367.85	8339.77	8403.77
2008-09	CL	7979.59	6796.31	8192.44	8089.56
	New Schemes	3349	2083.21	358.65	739.09
	Total	11328.59	8879.52	8551.09	8828.65
2009-10	CL	9696.36	8680.45	10409.18	10412.73
	New Schemes	1742.52	2527.76	2248.03	2250.03
	Total	11438.88	11208.21	12657.21	12662.76
2010-11	CL	8200.67	11570.67	11570.67	10753.01
	New Schemes	2663	2663	2663	5355.00
	Total	10863.67	14233.67	14233.67	16108.01
2011-12	CL	11314.02	14205.27	14776.70	16739.40
	New Schemes	1835.00	1835.00	1835.00	1160.00
	Total	13149.02	16040.27	16611.70	17899.40

XII Plan Period					
2012-13	CL	22531.89	16031.89	15015.23	15685.56
	New Schemes	720.82	720.82	720.82	616.43
	Total	23252.71	16752.71	15736.05	16301.99
2013-14	CL	22295.84	19194.54	18206.85	19114.95
	New Schemes	442.86	50.50	50.50	50.50
	Total	22738.70	19245.04	18257.35	19165.04
2014-15	CL	21248.07	16411.32	16441.6	16102.46
	New Schemes	663.92	663.92	4405.64	4803.08
	Total	21911.99	17075.24	20847.24	20905.54
2015-16	CL	22248.12	17200.00	17110.00	17788.39
	New Schemes	1112.78	1193.38	1193.38	591.34
	Total	23360.90	18393.38	18303.38	18379.73
2016-17	CL	18763.77	14712.75	15538.94	15774.50
	New Schemes	1600.00	3426	2638.75	2664.50
	Total	20363.77	18138.75	18177.69	18439.00

3.18 On account of the steps being taken to ensure that modernisation process, the Ministry of Defence in its written replies submitted:

- “(a) Keeping security and other relevant aspects in view, appropriate publicity is also given to the proposed procurement, with a view to generate maximum competition. Further, approvals of capital acquisition cases are progressed through collegiate bodies such as SCAPCC / SCAPCHC / DPB / DAC to achieve transparency & faster decision making in procurement process.
- (b) The highest degree of probity, public accountability and transparency is ensured whilst undertaking procurements in the Indian Navy, which are aligned in accordance with DPP-16 for Capital procurements.
- (c) All clauses of the standard contract document promulgated in DPP-16 are universally applicable to all vendors. Broad time frames have been promulgated in the DPP-16 for all the government agencies involved in defence procurements to follow, and process the capital acquisition cases.
- (d) An Indigenous Defence industry would aid in the modernisation of the Defence Forces. Towards this, the Government has taken a number of steps to encourage creating indigenous defence manufacturing infrastructure.

Indigenisation

3.19 Warship building has matured in the country and Indian Navy has transformed from a ‘Buyers Navy’ into a ‘Builders Navy’, with indigenous aircraft carrier, destroyers, stealth frigates, corvettes, submarines and other minor war vessels being produced in the country. The equipment and machinery fitted onboard ships in the

three categories of Float, Move and Fight has been indigenised to the extent of 90%, 60% and 50% respectively. 70% of the Modernisation Budget utilised for procurements from indigenous sources in last four years and More than 3000 items have been indigenized. The Government has taken several measures to make the country self-reliant and promote indigenous development of modern defence hardware. These are:-

- a. The 'Make in India' initiative was announced by the Gol on 25 Sep 14. Subsequently, on the recommendations of the 'Committee of Experts' to evolve a policy framework to align the DPP with 'Make in India', the revised DPP was uploaded on MoD website on 28 Mar 16. DPP-16 focuses on institutionalising, streamlining, and simplifying procedure to give a boost to 'Make in India' initiative of Gol through indigenous design, development and manufacturing of defence equipment, platforms and systems. Accordingly, a new category of procurement viz. 'Buy {Indian – Indigenous Design, Development and Manufacturing (IDDM)}', has been included. The decreasing order of priority for defence procurements in DPP-16 is as follows:-

- i. Buy {Indian – (IDDM)}
- ii. Buy (Indian)
- iii. Buy and Make (Indian)
- iv. Buy and Make
- v. Buy (Global)

- b. In order to promote the '**Make in India**' Policy of the Government, measures have been instituted for identification of Technology/ Product requirements, which could be progressed under 'Make' categorisation, under the aegis of MoD/ DDP.
- c. **SP Model.** The Strategic Partnership (SP) Model was notified by MoD on 31 May 17. The overall aim of this model is to progressively build indigenous capabilities in the private sector to Design, Develop and Manufacture complex weapon systems for the future needs of the Armed Forces. This is an important step towards meeting broader national objectives, encouraging self-reliance and aligning the defence sector with the 'Make in India' initiative of the Government for the future needs of the Armed Forces. The SP (Indian Industry) is expected to play the role of a System Integrator by building an extensive eco-system comprising development partners, specialised vendors and suppliers, in particular, those from the MSME sector. Two *IN* cases are currently being progressed under SP Model viz. six Submarines under Project 75(I) and 111 Naval Utility Helicopters.
- d. The summary of cases contracted from indigenous sources, under Buy (Indian) categorization during the Xith and XIIth Plan is as follows:-

<u>Plans Periods</u>	<u>FY</u>	<u>Buy (Indian)/ Indian Vendors</u>
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		<u>No of Cases</u>	<u>Cost (₹ in Crs)</u>
XIth Plan	07-08	34	1380.47
	08-09	12	61.75
	09-10	18	586.70
	10-11	25	3952.00
	11-12	16	4643.82
XIIth Plan	12-13	15	1627.33
	13-14	05	709.43
	14-15	08	45534.80
	15-16	16	1799.93
	16-17	13	5,700.31

- e. The status of outlay spent on indigenous acquisitions during the XIth and XIIth Plan is as follows:-

<u>Plans</u> <u>Periods</u>	<u>FY</u>	<u>Expenditure incurred on indigenous</u> <u>acquisitions (₹ in Crs)</u>
XIth Plan	07-08	6302.83
	08-09	6180.03
	09-10	8085.92
	10-11	11361.13
	11-12	11367.03
	Total XIth Plan	43296.94
XIIth Plan	12-13	10333.19
	13-14	6,587.64
	14-15	14,021.54
	15-16	11439.29
	16-17	11,807.56
	Total XIIth Plan	54,540.93

3.20 With regard to the state of indigenization in Indian Navy the following submission was made by officials of Indian Navy:

“..... it is not savings. We do not save as compared to others. For example, Garden Reach Shipbuilders and Engineers are making ships for us like MDL, CSL and HSL. The Chairman, GRSE has reported that there is something like 2000 MSMEs are dependent on the project 17-A which they are making. So, the money which are being paid to the Indian shipyard actually ploughs back into the Indian economy. That is the advantage, whereas, if we get this from Russia or USA or somebody else, that money goes away completely. So, the indigenisation is helping us with three things – the ploughing back effect, the skilling effect and the employment generation.”

Naval Airfields

3.21 The Navy is progressing a comprehensive case for upgradation of security infrastructure of its Naval Airfields. This Project will leverage technology to provide

seamless 24X7 surveillance, physical barriers, real time incident alerting and swift response through a robust and secure Command and Control System. Six Naval Air Stations are being addressed in Naval Airfield Integrated Security Systems (NAISS) at a projected cost of procurement of ₹ 500 crore. The case has been taken up with MoD to progress the case under the Revenue to Capital route.

Force Level

3.22 The Indian Navy acquisitions are planned in accordance with the Maritime Capability Perspective Plan (MCP 2012-27). Further, this has been subsumed in the Long Term Integrated Perspective Plan (LTIPP 2012-27) of the Services and the XIIth Plan.

Ships

3.23 Shortfalls are there in Aircraft Carriers, Mine Counter Measure Vessels (MCMVs), Landing Platform Docks (LPDs), Fleet Support Ships (FSSs). Cases for induction are being progressed to meet capability shortfall. Currently, Acceptance of Necessity is given for 41 ships and six submarines as shown, the cases for which are at various stages of acquisition. There is a need to accord impetus for replacement of ageing ships. This is being done by induction of modern surface ships like Indigenous aircraft carrier, four Destroyers of Project 15B and seven Frigates of Project 17A. There is a severe capability gap of Mine Counter Measure Vessels, LPDs for expeditionary operations, survey ships and Diving Support Vessels. Induction of 12 new MCMVs, four LPDs, four survey vessels and two Diving support ships are being progressed to meet these capability shortfalls.

Submarines

3.24 18 (Conventional) + 6 (SSN) submarines are planned but the existing strength is 15 and 1 is available on lease. In this connection, the following information was presented:

18 (Conventional) + 6 (SSN)

- Existing : 15 + 1 (On Lease)
- Vintage Submarines (Age : 17 - 32 yrs)

Six Scorpene submarines under P-75 contracted with Mazagaon Dock Shipbuilders(MDL)

- Two submarines (Kalvari and Khanderi) commissioned
- Case for Six P 75(I) being progressed

Medium Refit Life Certification (MRLC) of six Submarines approved.

3.25 It was further informed that the existing 13 conventional submarines are between 17 to 31 years old. The delayed construction of Six Project 75 submarines at Mazagaon Docks, Mumbai is being closely monitored and the first is undergoing sea trials. Due to delays in the submarine projects, the Defence Ministry has approved Medium Refit cum Life Certification or MRLC of six older submarines, so that the force levels do not decline drastically. The first MRLC has already commenced in Russia in Jul 16 and is on schedule. Contract conclusion for MRLC of second submarine, Sindhuraj, is held up since the Russian Side has not been able to submit requisite Bank Guarantees and Integrity Pact as a result of the sanctions imposed by the US Govt on them. It has been recommended to the MoD that Corporate Guarantee of the JSC USC, a 100% Federal owned Enterprise firm backed by FSMTC could be accepted and Fast Track approval of the Competent Authority accorded for Contract conclusion. This would facilitate departure of the submarine to Russia by Jun 17. The Russian Side indicated M/s L&T as their preferred partner for undertaking MRLC of the third Submarine Sindhuratna in India. While the Navy also recommended issuance of **Request for Proposal**(RFP) to L&T, approval of Ministry of Defence is awaited. An early decision in this regard is essential since the Submarine's refit is scheduled to commence from end 2017.

Aircraft

3.26 During PPT, the Committee were present the following details regarding aircraft and helicopters:

- a. Surveillance Aircraft - P8I and RPAs
- b. Integral Helicopters – **Multi Range Helicopter**(MRH) and **Naval Utility Helicopter**(NUH)
- c. 24 Multi-role Helicopters from US Government
- d. 111 Naval Utility Helicopters through Strategic Partnership model in India
- e. 10 Airborne Early Warning helicopters from Russia
- f. 10 P8I aircraft from US Government
- g. 30 Sea Guardian **High Altitude Long Endurance**(HALE) **Remotely Piloted Aircraft**(RPAs) from US Government (Tri-Services)

3.27 Integral helicopters onboard ships at sea are critical for conduct of maritime operations, as they provide surveillance and stand-off targeting capability against enemy ships and submarines. The last multi-role helicopters in the IN were inducted between 1986 and 1989. The Navy is presently short of 61 MRH. A case for 16

Multi Role Helicopters being progressed since 2005 is critical to partially mitigate the capability void. The case has been reinitiated for 24 MRH to meet the current critical requirement with the vendors previously selected. Previously FET cleared vendors and a techno commercial RFP to NIPO Depot. The case for 111 Naval Utility Helicopters to be progressed as per the Strategic Partnership model and needs to be accorded high priority.

3.28 Acquisition of defence equipment is undertaken in accordance with the Defence Procurement Procedure(DPP). The guidelines enunciated in the DPP aim to ensure highest level of transparency and probity, whilst achieving timely induction of planned capability. The acquisition cases are progressed as per the targeted schemes of the Annual Acquisition Plan (AAP), and funds allocated for New Schemes in a given financial year, under the Capital Acquisition (Modernisation) Budget. Normally DPP governs the timeline for processing acquisition cases, however, certain cases have been delayed due to peculiar reasons of the case. While all efforts are made to ensure that procurement is undertaken on time without cost overruns, there are some projects which have been delayed. The reasons for the delays are as follows:-

- a. Limited indigenous capacity and defence industrial base in the country/ limited capability of private shipyards.
- b. Delays in Research and Developmental projects.
- c. Delays in acquisition procedures.
- d. Slippages in delivery schedule by Ordnance Factories.
- e. Vigilance ban on defence companies by Ministry of Defence.

3.29 Details of major acquisition projects which have been delayed are highlighted in the succeeding paragraphs.

1. **P 15A (M/s MDL, Mumbai)**. The initial delivery of the yards 12701, 12702 and 12703 were Mar 08, Mar 09 and Mar 10 respectively. The delivery of yards 12701, 12702 and 12703 was subsequently revised to May 10, May 11 and May 12 respectively. All three P15A ships, INS Kolkata, INS Kochi and INS Chennai have been commissioned in Aug 14, Sep 15 and Nov 16 respectively. The time overrun is attributable to infrastructural constraints at the shipyard, and delay in supply of steel from Russia. Cost overrun has been mainly due to the increase in equipment cost and Yard material, increase in cost of Labour and Labour overheads and realistic assessment of cost of weapons and sensors.
2. **P 28 (M/s GRSE, Kolkata)**. The initial delivery of Yards 3017, 3018, 3019 and 3020 were 2008, 2009, 2011 and 2012. The delivery of Yard 3017, 3018, 3019 and 3020 was subsequently revised to Oct 12, Jul 13, Jul 14 and Apr 15 respectively. The first three ships, INS Kamorta,

- INS Kadmatt and INS Kiltan have been commissioned in Aug 14, Jan 16 and Oct 17 respectively. The fourth ship is likely to be delivered in end 2019. The time overrun was attributed to delay in development of steel, delay in development of indigenised weapons and sensors and delay in completion of trials for critical equipment like Diesel Generators, AC Plants etc. Cost overrun is attributable to the increase in costs of developmental Projects, and introduction of new/ state of the art equipment/ systems.
3. **IAC (M/s CSL, Kochi)**. The delivery schedule of IAC has been revised from Dec 18 to Feb 21. The main reasons for time overrun are due to non-availability of Russian equipment for the Aviation Facilities Complex (AFC). With the experience of 'Vikramaditya', the 'form & fit' of the vessel has been finalised and many emerging technological advances/ new generation equipment has been incorporated in the IAC.
 4. **NOPV Project (M/s Pipavav Shipyard Limited)**. The contract for construction of five NOPVs was concluded with M/s Reliance Naval Engineering Limited (then M/s Pipavav Shipyard Limited) on 27 May 11. The delivery of the first ship was scheduled in Nov 14 followed by delivery of remaining ships every six months. The project was delayed initially view change in design partner and subsequently view design issues. The shipyard has been plagued with financial constraint and eventually was taken over by Reliance Group in Jan 16. However, the finances have further deteriorated and therefore lead lending bank - M/s IDBI- has approached NCLT for financial resolution in Aug 18. The case is still pending at NCLT with next hearing scheduled on 20 Nov 19. Post changeover of management, the Shipyard has changed the delivery timelines on seven occasions. It is pertinent to mention that at present pace of work and with ongoing financial constraints, the latest committed timelines are not likely to be met. Being a fixed cost project, there has been no cost overrun.
 5. **Project P-75**. The Cabinet Committee on Security (CCS) on 06 Sep 05 approved construction of six Scorpene class submarines at MDL, under Project 75 with M/s Armaris, France (later M/s DCNS and now M/s Naval Group (NG)) as the main collaborator. The first submarine of the Project was commissioned in Dec 17 and the second in Sep 19. The balance submarines of the Project are under various stages of construction and planned to be inducted by 2022.
 6. **Project 17A**. P-17A ships are the follow-on ships of P-17 class. The seven P-17A ships will have enhanced stealth features and advanced indigenous weapons and sensors. The Acceptance of Necessity for the project was accorded in June 09 for construction of seven ships at MDL & GRSE. Subsequently in Sep 11, Defence Acquisition Council had decided that MDL would be the lead yard and four/ three ships would be built at MDL/ GRSE respectively. The Cabinet Committee on Security sanction of P17A was accorded on 10 February 15 and contract was signed with MDL and GRSE on 20 February 15. The ships are planned to be delivered from 2021-24.
 7. **Fast Interceptor Crafts (M/s Solas Marine Lanka, Sri Lanka)** The contract for acquisition of 80 FICs was signed with M/s Solas Marine Lanka Pvt. Ltd, Sri Lanka with delivery schedule ranging from Jul 12 to Apr 17. The FICs were delivered in batches, with each batch consisting of 04 FICs. All 20 batches have been delivered by the Shipyard with

- the last batch's delivery on 28 Mar 17 against original schedule of 02 Apr 17. The project has been delivered within contracted schedule. Being a fixed cost project, there has been no cost overrun.
8. **LCU MK IV Project (M/s GRSE, Kolkata)**. The contract for eight LCU MK IV ships was concluded with M/s GRSE on 29 Sep 11. The delivery of the first ship was scheduled in Aug 14 followed by delivery of one ship every three month. The first vessel was delivered on 30 Sep 16 after a delay of 25 months. The delays are particularly attributed to insufficient resource allocation by the shipyard. Being a fixed cost project, there has been no cost overrun.
 9. **FO-WJFACs (M/s GRSE, Kolkata)**. The contract for four FO-WJFACs was concluded with M/s GRSE on 01 Mar 13. The delivery of the first ship was scheduled in Mar 15 followed by delivery of one ship every three month. First three vessels of the project have been delivered. The first ship was delivered on 16 Apr 16 and the third ship in Apr 17. The delays are particularly attributed to insufficient resource allocation by the shipyard. Being a fixed cost project, there has been no cost overrun.
 10. **Cadet Training Ships (M/s ABG Shipyard)**. The contract for construction of three CTS, two under Main Contract and one under Option Clause, was signed with M/s ABG Shipyard, Dahej on 27 Jun 11 and 30 November 2012 respectively. The vessels were to be delivered to the Indian Navy by December 2014, June 2015 and May 2016 at Kochi. The project progressed satisfactorily till about Sep 14 for all the three ships and thereafter the progress slowed down due to financial constraints of the shipyard. An overall progress of 20.22 %, 12.27 % and 6.7 % was achieved for the three vessels and the Shipyard was subsequently shutdown in Jun 15. As no progress was made on CTS Project since June 15 the contract with M/s ABG Shipyard Limited was terminated on 22 Sep 17 post approval of the Competent Authority The concerned banks i.e. IDBI and Andhra Bank have been requested for invocation of BGs.
 11. **Survey Vessel Project (M/s AAGL)**. Contract for construction of six Survey Vessels was signed with M/s Alcock Ashdown Gujarat (AAGL), a Gujarat Govt PSU, on 28 Dec 06. The delivery of the first ship was scheduled in Mar 09 followed by delivery of one ship every three months. The first ship, INS Makar was delivered in Sep 12 after a delay of almost 44 months. Post delivery of the first ship, the project has been at an impasse due to cash flow issues and financial constraints of the shipyard. The shipyard has been unable to renew and revalidate Bank Guarantees. Delivery of only one vessel (worth ₹ 109 Cr) has taken place. **Being a fixed cost project, there has been no cost overrun.** A case for foreclosure of contract is under progress.

Aircraft

3.30 The contracts for acquisition of Aircraft signed during the eleventh and Twelfth Plan period are KM 31 helicopters, P-8I Aircraft, MiG 29K, Hawk AJT Aircraft, Heron RPA, Microlight, Kamov 28 MLU, Dornier Aircraft and Chetak.

3.31 The Long Term Integrated Perspective Plan 2012-27 (LTIPP 2012-27) for the three Services was formulated by Head Quarter Integrated Defence Staff (HQIDS), and approved by the Defence Acquisition Council in April, 2012. The purpose of this plan is to bridge the voids and build force levels to achieve the desired combat potential vis-à-vis our adversaries, and consolidated our defence potential. During the last two plan periods, various shortfalls and voids of the Indian Navy have been progressively mitigated/ addressed.

3.32 The following steps have been taken to reduce delays in the ship building project:

- (a) All projects are now “fixed cost” projects. Variable cost option is available only where cost of equipment is uncertain.
- (b) Construction of follow on ship is now based on same design to reduce build time.
- (c) Provision for nomination of equipment for follow-on Ships incorporated to reduce procurement time.
- (d) Timely reviews of project by way of Working Level Meetings (WLMs), PDND & DGND reviews, Pre-CPRMs & CPRMs are being carried out.
- (e) In addition, reviews by an Apex Steering Committee under the chairmanship of Secretary (DP) as notified by Ministry of Defence are also being carried out.
- (f) Integrated Modular Construction for new projects and shift from Telescopic Design to Frozen Design.
- (g) Capacity building through Modernisation of Yards.
- (h) Enterprise Resource Planning through information Technology management tools.

3.33 With regard to detailed information regarding induction and de-induction of submarines taken place during last fifteen years and also, plans envisaged for induction of submarines in 12th Plan and LTIPP 2012-27, the Ministry in its written replies submitted:

“Induction of two Project 75 submarines has taken place in the last fifteen years viz. INS Kalvari (delivered to IN 21 Sep 17 and Commissioned 14 Dec 17) and INS Khanderi (Delivered to IN 19 Sep 19 and Commissioned 28 Sep 19).

2. Presently, there are 15 conventional submarines and two Nuclear Submarines in the Indian Navy (IN). Majority of the conventional submarines are over 25 years old.

- a. **Induction/De-induction of Submarines in Last 15 Years.** Two conventional submarines have been inducted in the last 15 years (INS

Kalvari in Dec 2017 and Khanderi in Sept 19). Further, three submarines have been de-inducted in the last 15 years (INS Vela in June 10 and INS Vagli in December 10, INS Sindhurakshak in Jun 17).

- b. **Induction Plan.** CCS in June, 1999 had approved 30 years long term submarine Building Plan for indigenous construction of 24 conventional submarines by 2030. The programme comprises of two phases and the plan for induction of submarines in 12th plan and LTIPP 2012-27 is as follows:-

i. **Phase I.**

(aa) **P-75.** Six submarines of Scorpene class (P 75) are to be constructed at Mazagon Dock Limited, Mumbai. Two Submarines of the project namely INS Kalvari and Khandari have been commissioned in Dec 2017 and Sept 19 respectively. The balance submarines are likely to be inducted every nine months. The last submarine is likely to be delivered in June 2022.

(ab) **P-75 (I).** Six submarines are to be constructed under P-75(I) under the Strategic Partnership model promulgated by the DAC on 31 May 17. AoN for the case has been accorded by DAC on 27 Feb 19. A multidisciplinary Empowered Project Committee (EPC) has been constituted by MoD on 15 Feb 19 to steer the project from 'EoI issuance' to 'Contract Conclusion'. The Request for Expression of Interest (REoI) for shortlisting of SPs and Foreign OEMs was issued on 20 Jun 19 and 02 Jul 19 respectively. The response of SPs have been received on 11 Sep 19. The response of Foreign OEMs have been received on 24 Sep 19.

- ii. **Phase II.** Twelve submarines of an indigenous design are envisaged to be constructed in India in this phase with the experience gained and technology absorbed from construction of submarines under Phase I.”

Safety measures in Indian Navy

3.34 The Committee expressed concern over the accidents that had taken place in Indian Navy. The officials of Navy apprised about the various measures taken to mitigate occurrence of accidents.

3.35 The policy of the Government with regard to phasing out of vessels, planes and helicopters:

1. **Ships/ Submarines.** The policy for 'Disposal of Ships and Submarines' has been promulgated by MoD on 10 Aug 10. The policy lays down the guidelines for decommissioning of ships/ submarines, types of disposal, the disposal process, calculation of reserve price, and manpower which can be retained on board after decommissioning, till final disposal of the ship. The procedure has been further amplified through promulgation of a

Navy Order within the *IN*. In addition, the following Check off List/ Guidelines been promulgated in the Navy Order:

- a. Check-Off List for Decommissioning and Disposal Procedure for Ships/ Submarines. Considering 'D' as the date of decommissioning of the vessel, the Check-off list lays down the procedures to be followed from D-30 till D+12 months (final disposal of the ship). The Check-off list lays down the actions to be taken, both at IHQ MoD (N) and the Command to ensure timely decommissioning and disposal of ships/ submarines.
 - b. Guidelines for De-equipping and Disposal of B&D Spares. The detailed guidelines for de-equipping/ de-storing of the ship are listed, as follows:
 - i. Removal/ merger of stock.
 - ii. Removal/ disposal of stores in the best interest of Service.
 - iii. Unserviceable equipment/ stores to be retained for disposal with ship/ submarine.
 - iv. Retention of serviceable equipment/ stores onboard for final disposal.
 - v. Serviceable stores.
 - c. Guidelines for Safety Precautions on Ships/ Submarines Awaiting Decommissioning/ Disposal. Considering that safety is of paramount importance in a ship/ submarines awaiting decommissioning/ disposal, the guidelines incorporate the procedure of hull inspection, maintaining of watertight integrity, berthing arrangements, monitoring of draught and fire safety, etc. A minimal crew is retained on the ship/ submarine for safety purposes.
2. Aircraft. The policy for de-induction (phasing out) of aircraft of *IN* has been promulgated vide Government of India letter P1/Policy/NHQ/379 ID (N-IV)/ 2016 dated 09 Dec 16. A detailed step by step procedure including stopping of flying, study by a Board for De-induction, analysis of Board recommendation followed by approval of Board proceeding and finally approval for disposal. The whole activity takes upto three years and all important stages are approved by Ministry of Defence.

Coastal Security

3.36 With regard to the state of coastal security, the Ministry of Defence informed about the numerous measures being taken to strengthen the coastal security network.

Safety of fishermen

3.37 The Committee wished to know about the measures being taken by Indian Navy for protection of fishermen in distress in Indian waters. The Committee also categorically enquired about the instances where vessels are traced but men are lost. The Naval officials stated as below:

“Coming to the fishing issue in the Tamil Nadu coast, as I mentioned, there is AIS in all boats which are above 20 metres. However, the naughty ones which cross the IMLB are invariably the ones which are less than this 20 metres. In our country today, there are about 2,46,000 boats which are less than 20 metres. So, the Indian Navy along with ISRO has taken up an initiative. The ISRO has now come out with a module, with a transponder, that not only permits us to track their position but also enables us to put out messages to them. So, we can put out weather messages. If there is a cyclone which is coming, they can be cautioned. So, in that there is also a facility for us to monitor whether he is crossing the IMLB or not. If he is crossing, then there is a facility to send out a message to him. I must also highlight to you that because we have got International Maritime Boundary Line with Sri Lanka and with Pakistan, in Gujarat and Tamil Nadu, the trials for 500 boats were actually done on the fishing boats of Tamil Nadu and Gujarat. That has been a success. Now, the rest of them will all be covered. Once they are completely in place, we will be able to do the business better. There is also a hotline available between the local Coast Guard Commander at Chennai and the Northern Naval Commander in Sri Lanka. So, they also exchange information between them as well.”

3.38 The Committee also wished to know the work Indian Navy is undertaking to educate the coastal and fishermen community. In this regard, the representatives of Navy submitted as given hereunder:

“.....the coastal community, for the fishermen, under a programme called Community Interaction Programme where almost all the fishermen in the fishing villages have been congregated for the help of State authorities, State Fisheries Department, Coastal Police, etc. With that we educate them for their safety, security and also to be the eyes and ears of the Coast Guard. Now, while we do that Community Interaction Programme, we educate them that this is the area where you are not supposed to cross. As it was brought out by the Vice Chief, the GPS also has got a programme where when you are going to cross the International Maritime Boundary Line, it can always give an alert. All provisions and procedures have been incorporated, but sometimes they cross either inadvertently or deliberately. This is a case which is known as traditional aspect. Coming to the aspects of monitoring them, the Coastal Surveillance Network, as it has been brought out, we have a communication with all the fishermen to keep monitoring when they try to cross the border. We try to catch them. We get the documents. We give it to the Fisheries Department. The Fisheries Department deals with the case. With the revision in the Maritime Fisheries Act, which is likely to be tabled, all

these issues are getting addressed. We are coming up with more stringent measures so that fishermen do not cross. Indian Navy as well as the Indian Coast Guard continue to maintain patrolling on all these IMBL, with Sri Lanka, with Pakistan, with Bangladesh, etc. in order to prevent our fishermen crossing across. But in the hours of darkness they do it deliberately. But our counterparts, since the Coast Guard has got an MoU with the littoral countries across the globe, we do share information. Hotlines are there between the Coast Guard of Pakistan, Bangladesh and Sri Lanka. Even if they enter, they immediately communicate to us that fisherman has entered and that he has been apprehended. But as we all know, anyone who is crossing into other area has to be checked for various requirements and thereafter if they find him innocent, he is always released. This measure is always in place. That is going on quite frequently. There has not been much of an untoward incident in this regard.”

Manpower

3.39 The status of Officers and sailors (PBO₹) manpower as on 30 Jun 19 is as follows:-

- a. **Officers.** The shortage of Officers as on 30 Jun 2019 has been reduced to 11.2% from 21.46% in 2011 despite an increase in the Sanctioned Strength from 10405 to 12368 (18.86%). The details are tabulated as under:-

Year	Sanctioned Strength (SS)	Borne Strength (BS)	Shortage	% Short
2011	10405	8172	2233	21.46
2018	12180	10651	1529	12.60
2019/Jun	12368	10979	1389	11.20

- (b) **Sailors.** The shortage of sailors has been **nearly maintained despite an increase in the Sanctioned Strength** from 63130 to 74272 (17.64% i.e. 11142) since 2011. However, with increased training capacity at INS Chilka, from earlier 1633 to 2800 and subsequent increase to 3000 by 2021, the shortages are expected to reduce at a faster rate and are likely to be mitigated in few years period. The details of Sailors’ (PBO₹) manpower as on 30 Jun 19 is as follows:-

Year	Sanctioned Strength (SS)	Borne Strength (BS)	Shortage	% Short
2011	63130	48833	14297	22.65
2019/Jun	74272	58073	16199	21.89

- c. The results indicate that the **measures undertaken are effective and are being continued.**

3.40 The details of the training institutes for officers/sailors in the Navy are enumerated in the succeeding paragraphs.

1. **Officers’ Training.**

Ser	Designation	Location
(a)	Indian Naval Academy (INA), Ezhimala	Kerala
(b)	Naval War College (NWC) Goa	Goa
(c)	Maritime Warfare Centre (MWC) Kochi	Kerala
(d)	Centre for Excellence for Leadership and Behavioural Studies, Kochi	Kerala
(e)	Naval Constructor Wing (Kochi)	Kerala

2. **Sailors' Training**

Ser	Designation	Location
(a)	INS Agrani	Tamil Nadu
(b)	INS Chilka	Orissa
(c)	School of Medical Assistants (SOMA)	Maharashtra

3. **Officers' & Sailors' Training.**

Ser	Designation	Location
(a)	ASW School	Kerala
(b)	Diving School	Kerala
(c)	INS Dronacharya	Kerala
(d)	INS Hamla	Maharashtra
(e)	Institute of Naval Medicine (INM)	Maharashtra
(f)	Naval Institute of Aeronautical Technology (INM)	Kerala
(g)	Naval Institute of Hydrography (NIH)	Goa
(h)	Naval Special Warfare Tactics and Training Centre (NSWTTC)	Goa
(j)	NBCD School	Maharashtra
(k)	ND School	Kerala
(l)	Observer School	Kerala
(m)	INS Satavahana (Submarine School and Escape Training School)	Andhra Pradesh
(n)	School of Advance Undersea Warfare (SAUW)	Andhra Pradesh
(p)	School of Naval Airmen (SFNA)	Kerala
(q)	INS Shivaji	Maharashtra
(r)	Signal School	Kerala
(s)	INS Valsura	Gujarat
(t)	INPT School	Goa
(u)	INS Vishwakarma	Andhra Pradesh
(v)	Naval Provost & Regulating School (NP&RS)	Goa
(w)	Naval School of Music (INS Kunjali)	Maharashtra
(x)	NIETT	Kerala
(y)	School of Naval Oceanography & Meteorology (SNOM)	Kerala
(z)	Seamanship School	Kerala

4. Periodic review of training, based on induction of new weapon/sensor systems is being undertaken regularly. The details are follows:-

- (a) **Technicalisation of the Indian Navy.** Indian Navy has pursued the objective of 'Every-officer-a-B Tech' over the last decade. This is to enable Technicalisation of Indian Navy to meet requirement of modern

technology. B Tech as basic educational qualification for all officers in the Indian Navy was a major initiative. B Tech at Indian Naval Academy was started in 2009 and B Tech at NDA has commenced in 2016.

- (b) **Simulator Based Training.** In keeping with the advancements in technology, modern and sophisticated training aids including working models of the real equipment are being induced into the Navy. Additionally, modern simulators/ emulators for ships, submarine and aviation system have also been installed. For example, Damage Control Simulator is being used extensively for imparting training on simulated damage control on flooding exercises at Lonavala and Kochi; a Fire Fighting Simulator is being utilised at Lonavala; high end Ship Handling and International Regulations for Prevention of Collisions at Sea {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 Naval Commands. Aircraft simulators for Sea King helicopter, 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.
- (c) **Revision of Training Curriculum.** Indian Navy has a robust mechanism for upgradation of training curriculum to meet requirements of modern warfare. The system is based on 360⁰ feedback from trainees, trainers and the ships/units. With the advancement in technology and the modern techniques, manpower in Indian Navy is trained at par with the best Navies in the world.
- (d) **Training on Niche Technologies.** In consonance with the Govt. of India focus on capacity enhancement in the field of Artificial Intelligence (AI), *IN* has taken steady steps towards leadership in AI in the defence sector. Other technologies like Big Data Analysis (BDA), Machine Learning (ML), Operational Research (OR), etc. are also being given due impetus. Personnel are being trained in the subject in collaboration with industry and academia. Towards this, *IN* is subscribing to the Operations Research and Military Application Course (ORSA-MAC) at the Army Logistics University, USA. IITs and other reputed institutes are being engaged for the specialised training to equip *IN* personnel with skills and expertise in military decision making with respect to allocation of scarce resources, selection of new equipment and processes, optimal deployment of given resources to achieve required missions.

3.41 The number of officers inducted and sailors recruited during 2014-15, 2015-16, 2016-17, 2017 -18 and 2018 -19 are as follows:-

Year	Officers	Sailors
2014	806	4694
2015	537	4633
2016	543	4352

2017	556	5720
2018	466	5948
2019	456	5495(in progress)

3.42 The Committee were told that numerous steps have been taken by the *IN* to mitigate the deficiencies of manpower with enhanced emphasis on improved image projection/publicity in audio, visual, print, internet, social media and holding career fairs, exhibitions, advertisements, motivational lectures in schools and colleges, etc. The major initiatives taken to mitigate the shortages are as follows:-

- (a) **Enhancing the Infrastructure Capabilities of the Indian Naval Academy.** The current capacity of Indian Naval Academy (INA) is 750 trainees. The interim expansion of the capacity to accommodate 1200 officer trainees is likely to be completed by 2020. The enhanced training capacity would enable larger inductions, thereby reducing shortages at a faster rate.
- (b) **Additional Services Selection Board (SSB).** To augment the interviewing capacity provided by existing SSBs, a SSB at Diamond Harbour, Kolkata, has been commissioned in May 19. In addition, CCS approval has been accorded for setting up of one more Selection Centre comprising three SSBs for the Navy. Against this approval, one SSB is already operational at a temporary location at Visakhapatnam since 28 Jul 14. The construction of the Selection Centre is being progressed on priority. Once operational, more number of candidates could be sent for SSB interviews, thereby further facilitating large inductions.
- (c) **Augmentation of INS Chilka Capacity for Sailors.** The training capacity of INS Chilka has been enhanced from 1633 to 2800 trainees per six months and is planned for further enhancement to 3000 trainees by 2020/21. The inductions of larger numbers in synchronisation with the augmented training capacity are being undertaken to mitigate the shortages and thereafter the endeavour would be to maintain the borne strength at the optimal levels.
- (d) **Incentives to NCC Cadets.** In order to make the naval career attractive to the country's youth, the *IN* offers the following incentives to NCC Cadets opting to join the Navy as Officers and Sailors:-
 - (i) **Officers Induction.** 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 conducted by UPSC.
 - (ii) **Sailors Recruitment.** The NCC candidates are given additional credit points which are added to the marks obtained in the written examination for preparation of merit list. Additional credit of 6, 4 and 2 points are given to NCC 'C', NCC 'B' and NCC 'A' Certificate holders respectively.

- (e) **Indian Navy Entrance Test (INET)**. Introduction of computer based online examination-Indian Navy Entrance Test (INET) has facilitated deep penetration and selection of candidates from a larger pool, thus enhancing quality. Also with the introduction of the INET, more number of eligible youth are able to apply for appearing in the exam at enhanced number of locations. The first test was conducted on 25 Feb 18 for Artificer Apprentice entry with overwhelming participation of nearly 43000 candidates for 415 vacancies. The response has increased exponentially in all entry schemes. In Feb 19, 6.33 lac candidates appeared for 2900 vacancies in sailor entry schemes. Since Sep 2019, the INET has been extended to all sailor entries and also to non-UPSC Direct Entry Graduate officer entries with overwhelming response (11765 candidates appeared in INET (Officers) held in mid Sep 19 for 200 vacancies and 6,66,008 candidates appeared for sailor's entry for 3000 vacancies).
- (f) **Recruitment Publicity**. Following publicity actions are being undertaken to increase awareness about various entries and jobs in the Indian Navy:-
- i. Printing of recruitment publicity material like calendar, diaries, pamphlets, posters blow-ups etc. This publicity material will be distributed to students of various Schools/Colleges.
 - ii. Special stalls/help desks are set up at various Exhibitions and Job Fairs.
 - iii. Advertisements are also being placed in popular magazines/papers with Quick Response (QR) codes.
 - iv. Visits to schools and colleges, including talks by alumni.
 - v. Naval officers posted at Sainik/Military Schools and RIMC to motivate students.
- (g) **Films on the Indian Navy**.
- (i) A movie on Navy titled 'Mission Navy' hosted on 'You Tube' and screened on National Geographic and also on Rajya Sabha Channel for popularising the Service amongst youth.
 - (ii) A movie on National Geographic title "Inside Naval Academy" has been produced to motivate youth to join the Indian Navy.
- (h) **Candidate Friendly Recruitment Process**. A candidate friendly recruitment process has been implemented, incorporating the following:-
- (i) Online applications.
 - (ii) Automated alerts and status updates.
 - (iii) MoU signed with Common Services Centres Special Purpose Vehicle (CSC SPV) to increase the reach of the Indian Navy's Recruitment efforts, especially in the rural areas. By virtue of the MoU, youth can visit any of more than 1.45 lakh CSCs across the country and take their assistance, for filling up applications to join the Indian Navy at a very nominal fee.

- (i) **Navy Week Activities.** The following activities are conducted during Navy Week every year, to increase awareness about the Indian Navy:-
- (i) Ships and establishments are opened to general public.
 - (ii) Visits by Naval ships are organised to small and medium ports of the country.
 - (iii) Medical Camps are organised at remote locations to make the Navy conspicuous and also render social service.
 - (iv) Navy Melas are organised to increase popularity of the Service.

3.43 Pertaining to the initiatives being taken by Navy to enhance interest in youth for joining Indian Navy especially in the north eastern region where there is still less awareness about the same, the Ministry of Defence has submitted the following information:

“... we will collate what exactly we are doing and submit before the Committee. Having said this, for NCC, there are lot of camps which are conducted even by Naval authorities. For induction, there are teams which go out from the Directorate of manpower Planning and Recruitment which organise various camps in various States. We will give you the details regarding this.”

International Cooperation

3.44 The Committee expressed concern for the increasing challenges in neighbourhood waters and desired to be updated on the efforts being made by Indian side to tackle this. They also wished to be updated the progress being made in quadrilateral treaties like ‘quad’. The representatives of Navy informed as under:

“... Quad, as on today, does not have a security angle. Although the heads of the four countries, Australia, USA, Japan and India, have met. But as on today, it does not have a security angle. The Malabar series of exercises that we do, is still restricted to Navies USA, Japan and India. Australia is not yet a part of Malabar exercises. However, there are a number of initiatives that we take. As you mentioned, South China Sea is very much critical to us because more than 30 per cent of our trade goes through the South China Sea. We also have investments by the ONGC Videsh Limited both in Vietnam and Sakhalin oilfield, Russia. That also flows through the South China Sea. There is a considerable amount of foreign cooperation that we do. But, as on today, Quad does not have a security angle.”

CHAPTER IV

JOINT STAFF

Integrated Defence Staff act as co-ordinating organization for jointness in Ministry of Defence to integrate policy, doctrine, war fighting and procurement by three services and coast guard. The Role & Charter of joint staff include Net assessment on likely intentions and risk assessment of potential adversaries, formulating policy on joint employment and joint training for the three Services, formulation of LTTIPP, five year plans, annual roll-on plans and Defence Acquisitions Council functions. Co-ordination of aspects related to Defence intelligence, budget planning, allocation and monitoring for the Joint Staff Organisations under Head Quarter Integrated Defence Staff. Cyber security and Electromagnetic spectrum management for Defence Services are also important responsibilities of Integrated Defence Staff.

4.2 The Ministry of Defence had informed that the allocated funds were optimally and fully utilized towards operational activities. It was ensured that urgent and critical capabilities are acquired without any compromise to operational preparedness.

4.3 The Operational impact of lower allocations are said to be Repairs and Refit of ships at ANC. Procurement of Stores by material Organisation at Port Blair. Annual Maintenance Contract Payment of Equipment. Non Upgradation / Creation of operational Infrastructure. Maintenance of Military Equipment. Administrative Impact include maintenance & Repair Works, Tariffs, Military Roads, Furnitures, Special Repairs. Projects stalled, adverse effect on Training Activities of Training Establishments. Impact of Future FYs Carryover Liabilities would increase. Delay effect on impending projects/ Works. Raisings of Newly Raised Organisations Adversely Affected.

4.4 The representatives of Joint Staff submitted before the Committee with regard to the expansion of their work profile as given hereunder:

“As far as the strategic intelligence of the tri Services, the Army, Navy and Air Force, are concerned, we provide that through satellite imagery and communication intelligence. As far as operations are concerned, the IDS

steps from the Raksha Mantri's directive, the war book and Humanitarian Assistance and Disaster Relief (HADR), as you have seen in recent times. You are aware of our joint staff training institutions like the National **Defence** Academy where the cadets come and then we supply them to the individual service academies and then they become officers. Thereafter, we have the Defence Services Staff College and its counterpart is the Military Institute of Technology. This is about 10 years' service. Finally, the College of Defence Management and, a little higher level, the National Defence College, along with the war colleges, finish the product of senior level. The Integrated Defence Staff has done the National War Memorial early this year in February. Other than this, you have heard that the Chief of Defence Staff has been appointed. He will actually be the person under whom the Integrated Defence Staff will be working. As we are all aware, we are now progressing on the three new agencies, Cyber, Space and Special Forces, which are integrated for all the three Services, over the next three to four years."

4.5 The Committee wished to know the progress made in Defence University. The Ministry of Defence submitted as under:

"The present progress is like this. The land had been identified. We have put a boundary wall. This is already there as far as physical space is concerned. The approval of the Indian Defence University is with the Prime Minister Office at the moment. It has already reached there. Once it gets approved, we will be able to start the integration process."

4.6 The Committee also wished to know the status of Defence museum. The Ministry replied as under:

"सर, मेमोरियल बन गया है। म्यूज़ियम के लिए हिं थोड़ा परिश्रम और करना पड़ेगा। अभी उस पर कार्य जारी है।"

OBSERVATIONS/RECOMMENDATIONS

ARMY

Budget 2019-20

1. In the budget estimates of 2019-20, the total projections made by Army was ₹ 1,98,964 crore while the allocation was ₹1,68,277 crore. The shortfall amounted to ₹ 30,687 crore. Further, sixty-two per cent of total allocated budget, i.e. ₹ 1,04,564 crore being dedicated for salary expenses. The remaining thirty-eight per cent only i.e. ₹ 63,713 crore was available for modernisation, infrastructure, operations and maintenance. The role and responsibilities of Indian Army are enormous which include maintaining territorial integrity along the borders, constantly reviewing its operational preparedness/postures to meet the perceived security challenges, defending the country from external and internal threat, and also providing aid and succour to the affected people in times of disaster/natural calamities. It is also expected that the Army is prepared at all times for any conflict on the northern and western borders. In order to achieve the above mentioned assignments it is indeed essential to continuously train the manpower so as to maintain high levels of readiness. In addition to all this, complementing foreign policy through defence diplomacy by participating in joint training and United Nation peace keeping missions is also one of the mandates of Indian Army. The Committee have been apprised by the Ministry that the policies of the Ministry of Defence are inconsonance with the needs of Army.

2. In order to meet the above expectations, Army has to maintain a strong motivated and trained force duly equipped to meet the present day challenging security scenario. At the same time they have to regularly upgrade and replace armament along with retaining adequate war reserves. Continued development of infrastructure in peace stations is another vital work at the hands of Indian Army. While keeping in mind the huge mandate and the massive workforce that Army has to sustain, the Committee opine that provision of adequate budgetary support to them is an utmost necessity. Therefore, the shortfalls in budgetary allocation at Budget Estimates stage must be looked into at the Revised Estimates stage. A detailed examination of budgetary provisions to Army along with the requirements is discussed in the succeeding paragraphs.

Revenue Budget - Non Salary

3. As already mentioned in the above paragraph, a major portion of revenue allocation goes to salary component which amounts to ₹ 1,04,564 crore for the year 2019-20, leaving a meager amount for other Revenue expenses. In the BE 2019-20, the projection for Non-salary Revenue budget was ₹ 45,843 crore whereas the allocation ₹ 34,227 crore. The shortfall summed to ₹ 11,626 crore which accounts to nearly twenty-five per cent of the projection. The Committee came to know that the Non-salary revenue budget was necessary for operations and maintenance. Some of the mandatory outgo against this Head includes ration, livery items, transportation, store, compensation, field defences, building maintenance and other miscellaneous expenses. Infrastructure development in peace stations also constitutes part of this outlay. The Committee wish to note that in a situation where our country is facing two front conflict challenges, all time operational preparedness of Army is a binding requisite. Therefore, the Committee recommend that at RE stage, the essential demands of Army under Revenue head which is channelized towards operation and maintenance work shall be given in consonance with the perceived threat to the nation.

Budget Review

4. While going through the detailed information on the projections and allocations in respect of Army during the previous years, the Committee found that the expenditure incurred by Army had usually exceeded the allocation. In case of the Revenue segment, in the year 2017-18, the Revised Estimates allocation was ₹ 1,21,451.80 crore while the expenditure incurred was ₹ 1,27,507.48 crore. In the year 2018-19, the expenditure amounted to ₹ 1,34,241.38 crore while the Revised Estimates allocation for the same year was ₹ 1,29,812.34 crore. This depicts that the Army had been able to completely spend the amount allocated to them under revenue head during the past years.

5. In respect of capital segment of Army budget, the amount of allocation and expenditure for the year 2016-17 was ₹ 25,205.71 crore and ₹ 27,148.26 crore respectively. In the year 2018-19, the allocation was ₹ 26,815.71 crore

while the expenditure ₹ 27,438.66 crore. This again showcases that the allocations were completely exhausted without any surrender during a fiscal. During the examination of demands for grants 2019-20, the Committee were apprised that while allocating funds, Ministry of Finance analyses past absorption capacity of the Services and the pace of expenditure in the current Financial Year. Hence, the Ministry of Defence allocate funds to the Services on the basis of expenditure pattern. In this perspective, while noting Army's trend of increased spending, the Committee desire to allocate justified provision for Army during the financial year 2019-20 both against Revenue and Capital Heads.

Percentage share of Army Budget

6. During the examination of the Demands for Grants (2019-20), the Committee found that the percentage share of Army to total Defence budget, in Revenue segment during the Eleventh Plan Period was 37.87 per cent. This increased to 41.57 per cent during the Twelfth Plan Period. Meanwhile, the share of Capital budget to total defence budget which was 12.13 per cent plummeted to 10.51 per cent during the Twelfth Plan Period. Further, since 2013-14 to 2019-20, the ratio of Capital budget for Army remained constantly between sixteen to twenty per cent. The Committee are in full agreement with the Ministry that boots on ground is an absolute requirement for maintaining high degree of security all along the border. At the same time, they desire that thrust should also be given to modernization aspect of Indian Army. The Committee are apprised by the Ministry that currently certain studies are in the process to rationalize the manpower. Therefore, they, further desire the Ministry to complete the examination expeditiously in order to ensure that the revenue expenditure is reduced to the absolute essential. Capital budget caters mainly for modernization expenses which include capital acquisitions such as guns, tanks, radars and Infantry weapons. It also provides for replacement of in-service armament and equipment, upgradation of obsolete equipment as well as major repairs and overhauls. In order to fight a modern day war, it is pertinent for Army to maintain a duly equipped motivated and trained force. A decline in the percentage share of capital budget showcases unwholesome approach towards modernization of Army. In this regard, the Committee recommend for maintaining a qualified balance between revenue

and capital allocations displaying dedication for modernization drive for a well equipped and robust Indian Army.

Modernization Budget

7. It has already been stated above that modernization must be given due attention and impetus during budgeting processes of the Ministry of Defence. However, the same spirit is not inclined in the budgetary provisions. During the year 2018-19, Budget Estimates allocation against modernization was ₹ 21,338.21 crore, Revised Estimates projection was ₹ 34,738.29 crore. Though the amount allocated in Revised Estimates was ₹ 21,168.21 crore. From the above information it can be figured that ₹ 13,400.08 crore was additionally projected in Revised Estimates over Budget Estimates allocation. Conversely, the allocations made at Revised Estimates were even less than the Budget Estimates allocation made to Army under Modernisation (Capital Acquisition) Head (which includes Committed Liabilities and New Schemes). Furthermore, the Committee found that against these allocations, an expenditure of ₹ 21,879.80 crore had been incurred in FY 2018-19. In regard thereto, the Committee were apprised that under Modernisation (Capital Acquisition) Head, Army had sought additional allocation of ₹ 16,293.19 crore and ₹ 13,400.08 crore at first and second supplementary stages respectively, although the Ministry did not receive any additional allocations at the Supplementary stages. The Committee were further informed that when required, the schemes are reprioritized to ensure that urgent and critical capabilities were acquired without any compromise to operational preparedness of the Army.

8. On going through the documents furnished by the Ministry of Defence, it was found that during each year of Eleventh and Twelfth Plan Periods, the allocations made at Revised Estimates stage were even lesser from that of Budget Estimates stage let go the actual projections made by Army. The data is as given here under:

(₹ in crore)				
Year	BE Allocation	RE projection	Additional projection	RE Allocation
<u>XI Plan</u>				
2007-08	6,937.20	6,365.20	-572.00	6,224.20
2008-09	7,607.67	7,655.67	48.00	5,740.03
2009-10	9,821.07	9,821.16	0.09	6,254.35
2010-11	8,876.88	8,876.89	0.01	7,433.23

2011-12	10,740.02	8,982.91	-1,757.11	4,950.02
XII Plan				
2012-13	13,724.14	13,515.90	-208.24	11568.76
2013-14	13,327.04	13,922.00	594.96	10801.46
2014-15	20,935.41	18,585.48	-2,349.93	16927.35
2015-16	22,054.50	20,466.79	-1,587.71	17997.59
2016-17	21,535.26	27,476.22	5,940.96	17,966.46

9. The Committee regret the budgeting trend towards modernization of Army. The Ministry of defence apprised that they propose requirements projected by Services to Ministry of Finance for favourable consideration. In the opinion of the Committee, modernization and technological advancement of Army is an imperative area. Uniqueness of Army lies in life threatening/hostile situations faced by soldiers on the borders and in counter insurgency/counter terrorist operations on a daily basis. This also involves varying terrain profile and variety in equipment profiling of units. In light of all this, the Committee observe that the Government of the day demonstrates absolute attention towards modernization expenditure which was evidently lacking in the previous time so that the already cropped up deficiencies and scarcities in Army's arsenal is plugged. This again must be reflected in the budget distribution pattern.

10. In the Budget Estimates 2019-20, against a projection of ₹ 35,581 crore, an amount of ₹ 23,001 crore was allocated to Army for capital acquisitions. It has already been established in the preceding stanza of the report that capital inductions for Army merit due attention. Therefore, it is desirable that the Ministry channelizes the requisite money to Army in Revised Estimates grant.

11. Another area of capital budget comprises of non induction Capital budget. This amount goes for Rohtang tunnel and China Study Group (CSG) roads, northern borders development, land and construction works, security related works and Married Accommodation Project. In this regard, the allocations at Budget Estimates were ₹ 6,486 crore against a projection of ₹ 8,525 crore. The Committee again desire for allocation of necessary funds to Army at Revised Estimates allocations under intimation to this Committee.

Surveillance in border areas

12. During the recent study visit of the Standing Committee on Defence to Eastern Sector from 4 to 9 November, 2019, they came across a request for high-tech state-of-the-art cameras for surveillance purposes. The Committee were intimated that fifteen to sixteen such cameras were required for the posts over there. During oral evidence, the Committee were apprised by the representatives of Ministry of Defence that they have received request for surveillance equipment. It was also found that the said requirement is not only at Eastern Command but all across the northern borders. The request is being undertaken in two ways. One is a central procurement which takes a little longer but meets the overall requirement. To meet the immediate operational requirement, there is Army Commanders' Special Financial Powers Fund under which the Army Commanders are empowered by such operationally necessary equipment to fill in the gap till such time that the central procurement materializes. The Committee note that despite special powers bestowed upon Army Commanders, surveillance equipments are not installed at the required places. It is desired that the immediate requirement for surveillance equipment at Eastern Command and northern borders including Nathu la Post must be fulfilled at the earliest. Also, complete requirement of the surveillance equipment must be attended to through central procurement as the border areas are sensitive in nature. The Committee emphasize that no stones shall be left unturned in order to develop a fool proof border line.

Allowances in difficult terrains

13. In course of the above mentioned study visit of the Committee, they were updated about discrepancies in the allowances paid to the personnel of Central and state Governments, such as the local police in the Gangtok region. The alleged discrepancy ranged up to the level of four or five times in the allowances. The Committee took serious note of the matter. During oral evidence, the representatives of Army deposed before the Committee that various anomalies in allowances have been taken up and the endeavour is to deliver due allowances to all jawans facing hardship. Parity is tried to be maintained between troops which are deployed at similar areas. In this regard,

further the Committee were assured that the matter will be looked into in consultation with Ministry of Defence and the exact figures on the allowances would be furnished. However, the Committee were not furnished the exact figures on the allowances till the time of drafting of this Report. The Committee recommend that Ministry and Army shall resolve the matter at the earliest and befitting allowances shall be paid to the soldiers in parity with other departments so that the morale of the deployed personnel is not dented.

Bullet Proof Jackets(Bullet Proof Jackets)

14. In their earlier report, the Committee had categorically observed that considering new threats, highest priority should be given to procurement of Bullet Proof Jackets in order to ensure better survivability of the soldier against enemy and terrorists. It was informed by the representatives of Ministry of Defence that procurement of 50,000 Bullet Proof Jackets based upon earlier General Staff Qualitative Requirement (GSQR) (GSQR 878) had already been done through revenue route. Afterwards, the contract for procurement of 1,86,138 Bullet Proof Jackets as per revised GSQR No. 1438 had been concluded in April 2018 and a quantity of 40,000 of those had already been delivered. While appreciating the efforts made by the Government in this regard, the Committee desire that rest of the Bullet Proof Jackets may also be procured within the stipulated timeframe.

15. With regard to the financial outlay directed towards procurement and availability of Bullet Proof Jackets, the Committee discovered that ₹ 85.58 crore was the financial outgo on procurement of Bullet Proof Jackets during 2018-19. The projection (Revised Estimate) for the Financial Year 2019-20 was ₹ 320.91 crore. The Committee wish to specify that the requisite budget for Bullet Proof Jackets may be sanctioned without any compromise.

16. The information regarding authorization of quantity of Bullet Proof Jackets was slated as secret and therefore, not furnished to the Committee. Nonetheless, the Committee opine a consistent and periodic revision in authorization of Bullet Proof Jackets shall be taken up in view of the ever changing threat scenario so that any point of time no casualties of brave soldiers take place due to paucity of Bullet Proof Jackets.

17. Further on the issue of safety of soldiers, the Committee enquired about feasibility of using full body suits for Army. In this regard, the Committee were

updated that as per the analysis of open source information available, fully body suits are currently under development in some countries. The procurement of full body suits may be carried out in future based on requirement and further development in the field. The Committee wish that Ministry of Defence may keep themselves abreast with latest development in the field and optimally endeavour for availing state-of-the-art body coverage for Indian Army.

Force Level

18. One of the aspects of defining operational capabilities and deterrence that the Army possesses is force level at their command including state-of-the-art machine and also the trained man behind the machine. Bearing this in mind, the Committee were keen to be updated on the presently authorised and held strength of equipment such as guns, missiles, aircraft, tanks, ammunition, etc. with Army along with Governments plan to plug the gaps wherever called for. On this account, the Ministry of Defence educated the Committee that equipment holding (Authorization and holdings of equipment etc.) keep on changing based on obsolescence, de-induction and new inductions. Acquisition of equipment is an ongoing process. The deficiencies of equipment, wherever existing, are being made up through Capital and Revenue procurements. A focused approach has been adopted to make up the deficiencies. Weapons/equipment/ammunition items urgently required to meet the operational requirements are being procured through the delegated financial and emergency procurement powers of the Indian Army. The Committee while appreciating the Government's focused approach to make up the deficiencies, recommend that all out efforts shall be made to bridge the gaps at the earliest.

19. In future, Army shall endeavour to develop a balance between induction and de-induction timelines as the progression to de-induction is a milestone which can well be estimated in advance.

Manpower

20. The authorised strength of Officers in Army excluding Army Medical Corps (AMC), Army Dental Corps (ADC) & Military Nursing Service (MNS)} of the Indian Army as on 01 Jan 2019 is 50,312 while the held strength is 42,913.

With regard to manpower it was further apprised that Shortage of Officers in the Indian Army is mainly in the Support Cadre consisting of Officers inducted through Short Service Commission in In-service entries. However, due to consistent efforts, there has been a continuous decrease in deficiency of Officers. As on 01 January 2019, deficiency in the Officers cadre has reduced from twenty-six per cent (in 2010) to approximately fourteen per cent. In order to enhance intake through the Short Service Commission Entry (SSC), a proposal to make Short Service Commission Entry more attractive is under consideration. A Young Leaders Training Wing has also been commissioned at the Officers' Training Academy (OTA), Chennai to prepare prospective in-service candidates for becoming Officers through the Army Cadet College (ACC) Entry. A proposal for restructuring Permanent Commission (Special List) [PC(SL)] entry is also under examination. In view of the above, it is envisaged that the existing shortage would be mitigated at a faster rate. While appreciating the measures being undertaken by the Government, the Committee urge them to expedite the process so that the gap is bridged at a faster rate.

21. The authorised strength of Junior Commissioned Officers/Other Rank of Indian Army as on 01 Jan 2019 is 12,23,381 personnel and the held strength is 11,85,146 personnel. This excludes 1,718 Army Postal Service (APS) Non-Regular Junior Commissioned Officers/Other Rank. The Committee were given to understand that the deficiency of Junior Commissioned Officers/Other Rank is normal and the same will be met by recruits under training. In this regard, the Committee wish to urge the Government to take concerted efforts to mitigate the deficiency in manpower so that the soldiers are not faced with additional burden.

AIR FORCE

Budgetary Provisions 2019-20

22. During the year 2019-20, the projection of Air Force was ₹1,22,984 crore. Against this, the allocation is only ₹ 69,949 crore accounting to a shortfall of ₹ 53,035 crore which is a considerable amount. The Committee note that contrary to the expenditure trend of the years 2014-15 & 2015-16, the Indian Air Force's expenditure capabilities has been increasing since 2016-17 onwards. In the opinion of the Committee, quantum of deficit budgeting of this extent

would certainly hamper the modernization and operational preparedness of Air force. The Indian Air Force is pursuing a focussed modernization plan to transform into a strategic aerospace power with full spectrum capability. Continuous upgradation of the existing equipment and induction of new weapon platforms and systems is needed. Then there are future inductions of Rafale aircraft, SU30 MK1, indigenous Light Combat Aircraft (LCA), Attack helicopters, heavy lift helicopters, combat support elements, surface-to air guided weapon and air defence radars required to bolster operational capability and capacity. The representatives of Air Force state that the Procurement of LCA MK1A, Request for Proposal for more 110 fighter aircraft will be subject to availability of resources. Adequacies in budgetary provisions are quintessential to ensure that Indian Air Force continues to progress on the desired trajectory of modernisation. Keeping in view the absorption capacity of IAF to spend the money and induction plan of many squadrons as mentioned above, the Committee wish to emphasize upon availability of adequate budgetary allocations lest the present and future plan to enhance the capabilities of IAF will be jeopardised.

23. The budget has two components viz. Revenue and Capital. The Revenue budget caters mainly for salary expenses. During the year 2019-20, the total projection under revenue head made by Air Force was ₹ 41,682 crore whilst the allocation ₹ 30,602 crore creating a shortfall of ₹ 11,080 crore. Air Force had sought ₹18,172 crore for salary expenses against which ₹17,116 crore was allocated. Besides salary expenditure, the Revenue budget also comprises of Non-salary revenue expenditure which goes for operational and maintenance work. In this segment ₹ 23,510 crore was projected and ₹ 13,486 crore actually allocated accounting to a shortfall of ₹ 10,024 crore. The representatives of Air Force candidly submitted before the Committee that the impact of shortfall in Revenue Budget can be felt in aircraft maintenance, serviceability and training. It was also cited that the older systems require more maintenance. Providing support to civil administration and humanitarian assistance during disasters is also a vital task that Air Force takes up time and again. Taking note of the demand made by Air Force, the Committee recommend for allocating adequate budgetary provision in non-salary revenue budget. The Committee may be apprised of the steps taken in this regard.

24. In case of the Capital segment, the Budget projection during the year 2019-20 was ₹ 81,302 crore, however the allocation is a mere ₹ 39,347 crore. There is a deficit of ₹ 41,955 crore. The Capital budget is required for acquisitions and also 10(i) which is a special power to Vice-Chief. For the purpose of acquisition and 10 (i), ₹ 76,413 crore was sought, whereas the allocation was ₹ 36,410 crore. The shortfall of ₹ 40,003 crore is more than 50 per cent of the requirement. According to the presentation demonstrated by representatives of Air Force enormous shortfall in Capital budget would hit pace of modernization and new schemes become a challenge.

25. At the time of evidence, the Committee learnt that the allocations are made to Services on the basis of their past record of consumption levels. Air Force had been able to expend the funds allocated to them both under Revenue and Capital heads during the previous years. In 2018-19, the allocation under revenue head at Revised Estimates stage was ₹ 28,105.43 crore while the eventual expenditure incurred was ₹ 28,291.25 crore. Under capital head the allocation at RE stage was ₹ 35,770.17 crore and the final expenditure incurred by Air Force was ₹ 36,451.74 crore. The Committee were assured by the representatives of Air Force that the allocated funds were optimally utilized to ensure operational preparedness. Based on the available budgetary resources, IAF prioritize their expenditure. From this, one can clearly conclude that lack of adequate budget resources affect the pace of modernisation and the capabilities of IAF are being compromised. Therefore, the Committee opine that Air Force certainly needs adequate budgetary support to retain current operational capability and maintain credible deterrence along with continuing advancements on the modernization trajectory. Induction of fighter aircraft and other aviation capabilities are capital intensive areas. These are critical requirements of Air force required to fill the massive paucity in authorization and availability of platforms which has resulted from ignorance during many past decades. The Committee do appreciate the recent efforts of the Government made towards bridging gaps in depleting squadron strength of Indian Air force. The spirited intentions has to be supported with adequate funding. Therefore, the Committee desire the

Ministry of Defence to judiciously enhance the budgetary allocation at RE stage and in their future budget too.

26. The percentage share of Air Force budget to total defence budget has also plummeted from 11th Plan period to 12th Plan period. The percentage of capital share during 11th plan period was 17.06 percent which declined to 14.88 per cent in the 12th plan period. The percentage share of revenue budget was 10.15 per cent and 9.20 per cent in 11th and 12th plan periods respectively. The Committee are perplexed at the state of affairs concerning the budgetary provisions to Air Force. The role and responsibility of Air Force is enormous even during peace time. Instances like movement of Central Armed Police Force post Pulwama and airlifting of mortal remains of Central Armed Police Force on 15 February 2019 are some of the examples where Air Force has to extend their responsibility. The kitty of Air force is depleting as most of the currently held aircraft including transport and trainer are surviving on extensions such as 'Kiran' Intermediate Jet Trainer. In such a scenario, reduction in budget share of Air force to total defence budget is indicative of passable approach of Ministry of Defence. The Committee reiterate their recommendation for adequate and judicial budget grant to Air force enabling them to accomplish their assignments professionally.

Budget modernization

27. Gleaning through the documents furnished by the Ministry of Defence, the Committee explored that in the year 2011-12 which was the last year of 11th plan period, the final allocation for modernization as a modified appropriation was ₹ 26,640.53 crore. Further, at the end of the 12th plan period in the year 2016-17, the final appropriation for modernization was ₹ 26,895.15 crore. The Committee are baffled to find the same. During examination of Demands for Grants 2019-20, the Committee were educated that the Indian Air Force is pursuing a focussed modernization plan to transform into a strategic aerospace power with full spectrum capability. However, the growth in modernization budget is negligible from the end of the 11th plan towards the end of the 12th plan. This budgetary allocation should be surmised taking into consideration the rate of inflation also. The Committee observe that

modernization budget must be in consonance with the envisaged strength of Indian Air Force so that the vision does not remain mere ink on paper.

Make in India

28. The Committee were educated on the initiation of process for providing the desired impetus to the domestic defence manufacturing industry through 'Make in India'. Indian Air Force had identified 06 potential 'Make' Projects as per Chapter III of Defence Procurement Procedure 2016. These projects are envisaged for execution through private industries of the country. In an effort to strengthen the indigenous defence production base, as part of indigenisation and drive to obtain key technologies, the Ministry of Defence has been striving to include the private sector in production of defence equipment. However, further it was intimated by the representatives of Air Force that considering the high end technology involved and the long gestation periods of defence projects, the tangible changes on ground will take some time. The Committee are pleased with the above developments and wish to soon witness progress in technologies which are critical for self sufficiency in national defence such as aero-engine etc.

Fighter Aircraft

29. The Committee found that presently the Indian Air Force (IAF) should be well equipped to face any security challenges. For this, they should have adequate number of squadron strength and the Government should examine all suitable options in this direction. It was submitted by the representatives of Air Force during oral evidence that the said induction were obviously subject to available budgetary resources. The Committee in the preceding stanzas have already pointed out the inadequacies in budget for modernization. It is needless to state that the Air Force must get their dues to keep themselves equipped with latest state-of-the-art fighter aircraft and modern day weaponry to meet any eventualities. Accordingly, necessary funds must be channelized for the same.

Aircraft shelter

30. The Committee took note of the requirement of adequate number of aircraft shelters in Air Force. The aircraft are damaged by various means which include birds, dust etc. The deposition of waste in adjacent areas of aircraft parking results into hovering of scavengers which also harm the parked fleet. The Committee recommend for appropriate waste management in close proximity so that parked planes are not subject to such destruction.

31. As regards paucity in quantity of aircraft shelters is concerned, the representatives of Air Force during oral evidence, submitted that they are taking up the task in a systemic manner. Earlier the focus was on western border where more number of shelters is visible though recently the focus has shifted towards north eastern side also. The plan for making of shelters is lying with Ministry of Defence. The Committee recommend for expediting the plan for construction of Aircraft shelters so that avoidable damage to planes is taken care of. Necessary funds and tendering for the same may be accelerated. The Committee may be apprised about the steps taken in this regard.

Trainer Aircraft

32. With regard to the trainer Aircraft held by IAF, the Committee were intimated that the existing strength of trainer aircraft is 260 as against the sanctioned strength of 388. Out of 260, 42 Kiran Mk II are not in use anymore. So they are left with only 218 trainer aircraft. Currently the trainer aircraft held in kitty of Air Force include Basic Trainer Aircraft (BTA), Intermediate Jet Trainer (IJT), Advanced Jet Trainer (AJT). Simulators have also been acquired for the Basic Trainer Aircraft and Advance Jet Trainer aircraft. Presently, IAF has two Fixed Base Full mission Simulators (FBFMS), three Cockpit Procedure Trainers (CPTs) and one Avionics Part Task Trainer (APTT) along with associated equipment and infrastructure for the BTA. Similarly for AJT, three CPTs, three APTTs and two FTDs (Flight Training Display) are installed for providing simulator training. The procurement of simulators is built into the contracts of all aircraft that the Indian Air Force is now procuring. The Committee are further updated on the plan to reduce the paucity in number of trainer aircraft. Case for procurement of 38 additional Basic Trainer Aircraft

under the 'Option Clause' was being processed. However, the same has been deferred for one year. A case for procurement of 20 additional Advanced Jet Trainer aircraft from Hindustan Aeronautics Limited is currently at the Contract Negotiation Stage. Design and Development (D&D) of HTT-40 aircraft is under progress at HAL, Bangalore. HAL has indicated that the development of HTT-40 is expected to be completed by Dec 2019. The procurement of HTT-40 will be initiated after successful development of aircraft.

33. The Committee categorically desired to be updated on the present status of critical stall and spin trials of HTT 40 which was slated to commence as given in para 21 & 22 of 47th Report of Standing Committee on Defence (16th Lok Sabha) and also the certification of the aircraft which was planned in Dec 2018. On this issue, it was informed that on 01 February 2010, while seeking Acceptance of Necessity(AON) from the Defence Acquisition Council(DAC) for 106 BTA as a Make by HAL project, the initially projected timeline by HAL for the development of HTT-40 was three years (Feb 2013) for the first flight and five years (Feb 2015) for the certification. HAL achieved the milestone of first flight in May 2016 with a delay of over three years. As per HAL initial project report on HTT-40, a total of 350 test flights were envisaged. As on 24 Sep 19, 325 test flights have been completed on two prototype aircraft. A review of the programme was conducted on 07 Aug 19. In the meeting it was decided that HAL will complete spin trials and obtain certification of HTT-40 and IAF will initiate a case for revalidation of /approval of Acceptance Of Necessity as per paragraph 72 (Buy-Indian Design & Development Manufacturing) of Defence Procurement Procedure 2016. The planned date for completion of certification is April 2020. IAF would progress the case after successful completion of spin trials and certification of HTT-40. As per submission through written replies of Air Force any unforeseen challenges in this phase could delay or even derail the HTT-40 program as experienced in the Intermediate Jet Trainer (IJT) program. The Committee are in agreement with the concern of Air Force and recommend the Ministry of Defence to strictly monitor the deadlines of each miles stones of the project and apprise them in the progress made therein.

34. The Committee observe that trainer aircraft is extremely critical from the point of view of safety of Indian Air Force pilots. Therefore, there should be no tolerance of any compromise in training module and unavailability of trainer

aircraft must be taken seriously. The Government should work towards filling the requirement of trainer aircraft at the earliest.

Transport Planes and Helicopters

35. With regard to Transport Planes and Helicopters, it was brought to the knowledge of the Committee that presently, there are some shortages. In some cases, depending on the condition and utilisation of the fleet, intensive life extension studies are conducted and the life span of the air craft extended. No aircraft which has completed its operational life is in use with the IAF. The Committee note that there is no remarkable dearth of transport planes and helicopters as per the sanctioned strength. The Ministry shall endeavour to fill the small gaps that exist. The Committee also desire that a periodic revision of sanctioned strength should be taken up in pursuance with the ever-increasing role and responsibilities of Air Force.

Modernization of Military Airfields

36. The IAF is in the process of upgrading the navigational facilities at all its airfields under the Modernisation of Airfield Infrastructure (MAFI) project to improve the operational environment and enhance aerospace safety in two phases. Contract for Phase-I of turnkey was signed with M/s TATA Power on 16 March 2011 for modernisation of 30 airfields in five batches of six airfields each. The contract deliverables are expected to be completed by December, 2019. The implementation of MAFI Phase-II that involves 37 airfields of IAF, Navy and Ministry of Home Affairs has also been approved under Option Clause. Contract Negotiation Committee (CNC) has already submitted its recommendations. The case is at Committee on Financial Approval stage. The Committee recommend for expediting the approval process so the work is initiated.

37. The Committee also take note of the quantum jump in expenditure under MAFI-I from 2016-17 to 2017-18 onwards where the expended amount hiked from ₹ 13925.55 crore to ₹ 61452.83 crore. The completion of all the contractual

obligation is scheduled for December 2019. The Committee desire that the stipulated contract targets are attained within the scheduled timeline.

Accident

38. Accident of aircraft is a matter of concern for the Committee. Although there has been some reduction in occurrence of accidents owing to various measures taken over years, yet the Committee desire that none of pilot or aircraft is lost in any accident. The number of accidents has reduced from an average of 13 accidents per year in 11th plan to an average of 08 accidents per year in 12th plan. During the study visit of the Committee from 4 to 9 November, 2019, to North-eastern Command, it was brought to their notice that majority of the aircraft available with Indian Air Force are getting old. This also leads to accidents and pilots are lost. The Committee observe that proper training to aircrew is utmost necessary.

39. During examination of Demands for Grants of Indian Air Force, the Committee found that the court of inquiry team has completed investigation in AN-32 aircraft crash on 03 Jun 2019. The accident had lead to loss of many lives. The reasons for the said accident were cited as Aircraft entering in the wrong valley due to Navigational Error in bad weather and the crew was unable to fly the aircraft safely out of the blind valley due to poor visibility and clouding. The Committee recommend that weather updates shall be taken into due consideration before flying an aircraft.

Manpower

40. The Committee were informed that the Government sanctioned Establishment and Strength of officers and airmen (except Medical & Dental branch) in Indian Air Force, as on 01 October 2019. In case of officers, the sanctioning is for 12,628 while the held strength is 12,159. There is a shortage of 469 officers. The Ministry of Defence intimated that shortage of 469 officers is a variable figure which keeps fluctuating depending on

Commissioning cycle, premature separation of officers etc. The induction plans have been revamped so as to gradually bring the strength at par with the sanctioned establishment. In addition, due to robust cadre management planning and implementation, there is likely to be no shortage of officers in the Indian Air Force in due course. The Committee are happy to note the efforts being made to mitigate the deficiency in officer cadre of Air force and wish that the shortfall is minimised to the maximum extent in near future. The Committee may be apprised about the progress made in this regard.

41. In respect of Airmen, the sanctioning is for 142917 posts while the existing strength is 129447, hence a shortfall of 13474. In this connection, the Committee were apprised that 12,739 trainees are undergoing training at various training institutes. In case of airmen, manpower review is undertaken on annual basis. To reduce the deficiency, improvements in training infrastructure have been carried out to accommodate increased number of trainees and available resources (infrastructure and manpower) are being utilised efficiently to support enhanced induction. Induction in airmen cadre was 5000 per annum till 2015. This has been gradually increased to 6,800 from January 2018. The induction has been further increased to 7,600 airmen each year from July 2019 onwards. In view of this, it is expected that Indian Air Force will be able to bring up the strength at par with the authorized establishment in about 5-6 years. Shortages are being addressed in a staggered manner to ensure a favourable HR environment in the long run and to streamline wastages on account of discharge/ superannuation. The Committee take note of various measures being taken by Air Force and desire that induction is carried out in a time bound manner under intimation to them.

Training

42. With regard to training of pilots the Committee found that Air force had been following three aircraft type training pattern. However, due to non-induction of intermediate jet trainer which was being developed by HAL, the two aircraft training pattern started with effect from July 2015 as a pilot project. The Ministry of Defence apprised that the performance of trainees who have undergone this training pattern has been good. The same is planned to be implemented after the phasing out of Kiran aircraft which is the Intermediate Jet Trainer (IJT) available with Air Force. The Committee opines

that adequate training of the manpower is inevitable need. This becomes even more crucial in view of the safety of lives of pilots and aircrew involved. There should be no compromise in training of our pilots so that a healthy pilot cockpit ratio is maintained by Indian Air Force.

43. The Committee were keen to be apprised on timeline of the training programme of first batch of Officers and technicians which is underway with the French Air Force on Rafale. It was brought their knowledge that advanced training of IAF personnel was conducted by the French Air Force (FAF) and commenced from Sep 2018 for one IAF pilot, one Aeronautical Engineer (AE) officer and six technicians. Two additional pilots joined the advanced training in France from March 19. This team has completed the advanced training phase and commenced training on Indian Rafale aircraft from 30 September 2019. The Committee congratulate the Indian Air force for achieving this feat and desire that all the training and induction programme of Rafale progresses as per stipulated timelines. The Committee hopes to soon witness Rafale flying in Indian skies by Indian Air Force.

NAVY

Budgetary Provisions for the Year 2019-20

44. The Committee note that Indian Navy is prime element of India's maritime power. It plays pivotal role in shaping maritime domain and safeguarding national maritime interests. The sea frontiers are turning out to be a preferred spot for operation by terrorists. Ocean region is also submerged with importunate danger from pirates. The ever-growing maritime challenges complicate the task at hand of Indian Navy which include serving national interest not only from security point of view but also on trade angle.

On this account, Navy was allocated ₹ 41,259 crore against the projection of ₹ 64,307.27 crore in Budget Estimates 2019-20. This accounts to a shortfall of ₹ 13,048 crore. The Committee view the huge shortage in the allocation to Navy seriously. The Committee strongly feel that the deterrence capabilities of Indian Navy has to be strengthened further to establish a strong control in Maritime Domain. Therefore, the Committee wish to emphasize that the ministry should take concerted efforts to impress upon the Ministry of

Finance to enhance the allocation as per the needs of Navy to augment the modernization efforts at the earliest to address the critical capabilities void. The Committee may be apprised of the steps taken in this regard.

Percentage share of Navy's Budget

45. The Committee also note that the percentage share of naval budget to total defence budget has also witnessed downfall during the current decade. In 2012-13 the share was 18.12 per cent and In the year 2014-15, it was 16.51 per cent which plummeted to 14.47 per cent in the year 2018-19. The reduction is prominent in capital segment which declined from 10.41 percent in 2014-15 to 7.46 per cent in 2018-19. In BE 2019-20 this has been reduced further to 13.66 per cent. As stated earlier, capital budget defines seriousness of Government with regard to modernization of Navy, though the lower allocations reflect otherwise. The Committee were intimated that the allocated funds were optimally and fully utilized toward operational activities. The Committee wish that the Ministry of Defence take measure to ensure that urgent and critical capabilities are acquired without any compromise to operational preparedness of the Indian Navy. The allocations to the Indian Navy as percentage share of the defence budget needs attention as the share in the defence budget has seen a steady decline from 18 % in Financial Year 12-13 to 13 % in Current Financial Year. The Committee opine that there is a need to enhance the share of Indian Navy Budget keeping in view the increasing operational commitments.

Revenue Budget

46. The Navy's Budget has two components viz. Revenue and Capital. In Budget Estimates 2019-20, the Revenue allocation is ₹ 19032.47 crore and the Capital allocation is ₹ 22227.53 crore. A major portion of the revenue budget is dedicated to Salary expenditure which is a mandatory outgo and the remaining for Non-salary revenue expenditure which include other operational and maintenance needs. The Revenue projection of Navy under the head Non-salary was ₹ 13550.34 crore and the allocation ₹ 9871.20 crore. The shortfall amount is ₹ 3679.14 crore. The allocation is only 72 per cent of the projections. The obligatory expense from the non-salary revenue budget

includes ration, livery items, transportation, store, compensation, field defences, building maintenance and other miscellaneous expenses. According to the representatives of Navy, even maintenance and serviceability of ships, submarines, aircraft and upkeep of ageing infrastructure becomes difficult. The Committee noted that additional burden of 10 (i), emergency procurements, customs duties, Goods Services Tax(GST), fuel prices and inflationary pressures have not been factored. Therefore, there is a requirement of additional funds under non-salary segment to progress operations, maintenance and training activities. The Committee recommend that requisite funds are provided to Navy under non-salary revenue head so as to ensure all time operational preparedness as national security is paramount and no compromise shall be made in this regard.

47. As regards the budget for ten days intensive war is concerned, the representatives of Navy explained that all the Forces have to keep themselves prepared. Under this directive given by the honourable Raksha Mantri additional financial powers were given to vice-chief to plug the gap that was required for 10 days of intensive battle. The Committee opine that the arms, ammunition and other equipments need continuous replacement and up gradation. Therefore, the budget provided against 10(i) must be exclusive. The Committee opine that any concession in this regard will dilute the intent of the directive.

Capital Budget

48. The Capital budget includes budget for modernization, land and works. The Committee found that in the year 2014-15 the capital expenditure was ₹22269.66 crore. This amount declined in the year 2018-19 to ₹ 21509.60 crore Total projection for capita budget of Navy was ₹ 35713.84 crore whereas the allocation ₹ 22227.53 crore. Against land and works, the allocation is ₹ 1050.53 crore against the projection ₹ 3470.47 crore. In case of modernization, the projection in BE 2019-20 of Navy was ₹ 32243.37 crore and allocation is ₹ 21177.00 crore. There are two components to this head viz. committed liabilities and new schemes. The projected requirement in committed liabilities is ₹ 25461.64 crore and the allocation ₹ 18177.00 crore. The Committee are perplexed at the fact that committed liabilities are obligatory payments for

acquisitions etc. and how a shortage of ₹ 7284.64 crore will be adjusted. The Committee were given to understand that likely default of payment is liable to consequent action by vendors.

49. The projection of budget for new schemes is ₹ 6781.73 crore while the allocation ₹ 3000.00 crore. This is not even 50 per cent of the requirement projected. The Committee are apprised that the capital budget is likely to be utilized by the end of December 2019. To add on to owe of Indian Navy, adequate allocations is required for maintenance and serviceability of ships, submarines, aircraft and upkeep of ageing infrastructure. The Committee are distressed at the state of affairs with regard to budget being provided to Naval modernization schemes. Therefore, the Committee strongly recommend that allocation of additional funds under Capital Budget should be provided to mitigate critical capability gaps and sustain pace of modernization.

50. The Committee were apprised by the representatives of Navy that the Capital budget is likely to be fully utilised by end of December 2019. The Committee take note of conspicuous shortfalls and recommend adequate budgetary provisions to Navy enabling continuation on the modernization trajectory. The Committee acknowledge that efforts are underway to modernise and develop maritime capabilities as per long term perspective plans approved by the Government. There is, therefore, a need for early approvals of key capability and infrastructure cases. Further, sustained budgetary support under Capital and Revenue head should be provided. Keeping in view the declining trend of navy's budget over the years and growth of responsibilities the Committee strongly desire that the Navy's budget share should be enhanced to 18% of the overall defence budget, as it was during the First year of XIIth Plan.

51. The Committee were concerned to know about the adequacy of the budget for the Sagar Mala project wherein the Government of India has sanctioned 300 plus projects for the Sagar Mala project for the minor and major ports to be set up across the coast of India spanning about 7,000 odd Kilometre. The Committee were apprised that with Sagar Mala kicking in along with ports' capacity to handle more traffic obviously the number of ships

calling on Indian ports is bound to increase. That would automatically enhance security concerns as well. The Committee were assured that the Maritime Capability Perspective Plan, which forms the part of the Long-Term Integrated Perspective Plan (LTIPP), which is approved by the Ministry, caters for the capability required in order to address all such threats. It was further added that there is an urgent need to hike Naval Budget. The Committee opine that certainly Navy needs more money, both for capital segment for asset induction and to pay up committed liabilities and also in the revenue segment because every capital acquisition has got a revenue effect as well. In light of above facts, the Committee recommend that the allocations for Navy should be suitably enhanced to meet the above requirements. The Committee may be apprised about the steps taken in this direction.

Budget Modernization

52. The Committee were given to understand that the Modernisation of Indian Navy(IN) is an ongoing process, which is undertaken in accordance with the Maritime Capability Perspective Plan (MCPP) and Long Term Integrated Perspective Plan (LTTIP). LTTIP was approved by Defence Acquisition Council on 02 April 2012. To ensure that Indian Navy units are ready to meet any emergent operational requirement. Review is undertaken regularly to equip forces with the latest weapons, sensors and equipment. These inductions are at various stages of procurement. After gleaning through the papers submitted by the Ministry, the Committee found that in 2011-12 which was last year of 11th plan the actual expenditure incurred by Navy including Joint Staff for modernization was ₹ 18251.87 crore. In the year 2016-17, at the end of the Twelfth Plan the ₹ 18737.01 crore was actually expended for modernization needs of Navy. The Committee take note of the marginal increase in modernization spending after five years which become negligible considering inflationary effect. The Shortfall of funds sometimes also lead to systemic delay in acquisition of critical capabilities. The Committee would like to comment that modernisation and technology up gradation is a continuous process for which adequate budgetary allocation should be made. The Committee may be apprised of the steps taken in this regard.

53. Committee also took note of the corrective steps taken to ensure that modernisation process is not hampered. These include approvals of capital acquisition cases being progressed through collegiate bodies such as Services Capital Acquisition Plan Categorisation Committee (SCAPCC)/ Services Capital Acquisition Plan Categorisation Higher Committee (SCAPCHC)/ Defence Procurement Board (DPB) /Defence Acquisition Council(DAC) to achieve transparency & faster decision making in procurement process. It was further informed that an indigenous Defence industry would aid in the modernisation of the Defence Forces. Towards this, the Government has taken a number of steps to encourage creating indigenous defence manufacturing infrastructure. While appreciating the efforts being made in speeding up the modernization processes, the Committee wish to state that adequate attention should be given for infusion of requisite funds by the Ministry of Defence and also efficient disposal of budget by Naval Headquarters.

Indigenisation

54. The Committee were enlightened that warship building has matured in the country and Indian Navy has transformed from a 'Buyers Navy' into a 'Builders Navy', with indigenous aircraft carrier, destroyers, stealth frigates, corvettes, submarines and other minor war vessels being produced in the country. The equipment and machinery fitted onboard ships in the three categories of Float, Move and Fight has been indigenised to the extent of ninety per cent, sixty per cent and fifty per cent respectively. The Committee are delighted to find that the Government has taken several measures to make the country self-reliant and promote indigenous development of modern defence hardware. Subsequent to the announcement of 'Make in India' initiative by the Government of India in September 2014 a policy framework was evolved to align the Defence Procurement Procedure with 'Make in India'. It focuses on institutionalising, streamlining and simplifying procedure to give a boost to 'Make in India' initiative of Government of India through indigenous design, development and manufacturing of defence equipment, platforms and systems. Accordingly, a new category of procurement viz. 'Buy {Indian – Indigenous Design, Development and Manufacturing (IDDM)}', has been

included which is given the highest priority in procurements. The Committee took note of the fact that the number of cases of buying from Indian vendors has reduced from thirty-four in 2007-08 to thirteen in 2016-17. Although, the cost expended for the same has grown up. During Eleventh Plan Period a sum of ₹ 43296.94 crore was expended on indigenisation and in the Twelfth Plan Period it was ₹ 54,540.93 crore. Further the Committee were updated that seventy per cent of the Modernisation Budget utilised for procurements from indigenous sources in last four years and till now more than 3000 items have been indigenized.

55. The Committee also realized that some cases of naval procurements had been delayed due to limited indigenous capacity and defence industrial base in the country and also limited capability of private shipyards. The Committee while commending the effort being made towards indigenization, wish to urge upon the Ministry of Defence to look into such matter and resolve the hurdles in indigenisation process as this benefits the country in many ways. It generates employment in the country, and check outflow of national resources and also significantly enhances skill base within the country.

Naval Airfields

56. The Committee came to know that the Navy is progressing a comprehensive case for upgradation of security infrastructure of its Naval Airfields. This Project will leverage technology to provide seamless 24X7 surveillance, physical barriers, real time incident alerting and swift response through a robust and secure Command and Control System. Six Naval Air Stations are being addressed at a projected cost of procurement of ₹ 500 crore. The case has been taken up with Ministry of Defence to progress the case under the Revenue to Capital route. The Committee recommend that the project of up gradation of naval airfields is critical from surveillance and intelligence point of view and therefore, necessary action should be taken towards this at the earliest. The Committee may be apprised of the details of the steps taken in this regard.

Force Level

57. The Committee are apprised that Indian Navy acquisitions are planned in accordance with the Maritime Capability Perspective Plan (MCP 2012-27). Further, this has been subsumed in the Long Term Integrated Perspective Plan (LTIPP 2012-27) of the Services and the XIIth Plan. Acquisition of defence equipment is undertaken in accordance with the Defence Procurement Procedure (DPP). Shortfalls are there in Aircraft Carriers, Mine Counter Measure Vessels (MCMVs), Landing Platform Docks (LPDs), Fleet Support Ships (FSSs), submarines, aircraft and helicopters. Cases for induction are being progressed to meet capability shortfall. Currently, Acceptance of Necessity is given for 41 ships and six submarines, the cases for which are at various stages of acquisition. There is a need to accord impetus for replacement of ageing ships submarines, planes and helicopters. This is being done by induction of modern surface ships like Indigenous aircraft carrier, four Destroyers of Project 15B and seven Frigates of Project 17A. There is a severe capability gap of Mine Counter Measure Vessels, Landing Platform Docks (LPDs) for expeditionary operations, survey ships and Diving Support Vessels. Induction of 12 new Mine Counter Measure Vessels, four Landing Platform Docks, four survey vessels and two Diving support ships are being progressed to meet these capability shortfalls. The Committee would like to have a detailed updation note on the progress made in acquisition of ships, submarines, planes and helicopters in the Action Taken Replies.

58. It was also found that certain delays had been witnessed in key acquisitions such as vessels and aircraft. Various reasons including delays in Research & Development projects, slippages by Ordnance Factories and vigilance ban on defence companies were cited for the said delays. The Committee urge the Ministry of Defence to look into such slippages and ensure highest level of transparency and probity, whilst achieving timely induction of planned capability. Time and cost overruns deprive Navy from achieving critical capabilities. This also puts extra burden on the exchequer.

59. The Committee expressed concern and regret over the accidents that had taken place in Indian Navy. The officials of Navy apprised the Committee about various measures taken to mitigate occurrence of accidents. The Committee want that more measures should be taken up to make Navy accident free zone as this incurs great loss to Navy and the country. There is a need to upgrade the safety standards onboard ships and also in the shipyards. Adequate training, and proper deployments must be given due care.

Coastal Security

60. The Committee expressed concern for the state of coastal security and desired that breach of coastal security as happened in case of terrorist attacks on 26.11.2008 do not recur. In this regard the Ministry of Defence updated the Committee about numerous measures being undertaken to strengthen the coastal security network. The Committee reinstate their concern for coastal security as this is a vulnerable area prone to terrorist incursion and therefore desire that more concerted efforts should be taken in this direction.

Safety of fishermen

61. In course of deliberation on Demand for Grants of Navy, the Committee highlights the issue of safety of fishermen in Indian waters. The representatives of Navy stated that various measures are being taken to locate the boats etc. in case of mishap. The Committee would like to recommend that Navy shall pay attention towards development of wearable and water-proof devices as in many cases the vessels are located however, the men onboard are not traceable and marooned in sea waters.

62. The Committee learnt that there are cases where fishermen are crossing the International Maritime Boundary Line. Therefore, they desired that, Navy shall endeavour to bring in measures for educating the fishing community restricting them from crossing International Maritime Boundary Line and necessary steps should be taken to provide them with state-of-the-art Global Positioning System.

Manpower

63. The sanctioned strength of officers in Indian Navy is 12368 while the borne strength is 10979. The Committee were apprised that the shortage of Officers as on 30 June 2019 has been reduced to 11.2 per cent from 21.46 per cent in 2011 despite an increase in the Sanctioned Strength from 10405 to 12368 (18.86 per cent).

64. In case of sailors, the sanctioning is for 74272 posts while the held strength is 58073. The shortage of sailors has been nearly maintained despite an increase in the Sanctioned Strength from 63130 to 74272 (17.64 per cent i.e. 11142) since 2011. However, with increased training capacity at INS Chilka, from earlier 1633 personnel to 2800 personnel and subsequent increase to 3000 personnel by 2021, the shortages are expected to reduce at a faster rate and are likely to be mitigated in few years period. The Committee took note of the measures being undertaken and emphasize that Navy should endeavour to generate interest in youth for joining Indian Navy which is not so evident in rural and North-eastern region.

International Cooperation

65. The Committee expressed concern for the increasing challenges in neighbouring waters and desired to be updated on the efforts being made by Indian side to tackle this. Taking note of the progress of exercise like 'quad' which include Navies of USA, Japan and India and Australia, the Committee recommend for more such collaborations and foreign cooperation as the country have considerable investments in the region.

Joint Staff

66. Considering the enhancement in role and responsibilities of Joint Staff which include Cyber security and Electromagnetic spectrum management, Defence museum and memorial as well as ever increasing domain of military intelligence, the Committee opine that Joint Staff shall be provided the

requisite funds for carrying out their operational responsibilities. Even during the oral evidence, the Defence Secretary concurred on the additional requirement of funds for Joint Staff. The Committee found that lower allocations would adversely impact the operational as well as administrative functioning of Joint Staff. The Operational impact of lower allocations would affect the Repairs and Refit of ships at Acquisition Negotiations Committee and Procurement of Stores by material Organisation at Port Blair. Annual Maintenance Contract Payment of equipment will be affected and also the upgradation/creation of operational Infrastructure will be hampered. Maintenance of other Military Equipment will also be impaired. Administrative Impact includes maintenance & Repair Works, Tariffs, Military Roads, Furniture's, Special Repairs. This would in turn obstruct training activities of Training Establishments. Also, in future Financial Years Carryover Liabilities would increase. In addition to all this, the modernization activities will also get derailed as funds deficit would certainly delay the impending projects/ Works and raisings of newly Raised Organisations.

67. The Committee observe that Joint Staff is a growing organisation and its role is critical, particularly from the point of view of intelligence gathering and dissemination. Therefore, it is recommended that necessary funds are provided to them at the stage of supplementary grants.

Defence University

68. The Committee found that the project for defence university is under consideration. With regard to the physical progress, it was updated by the representatives of Ministry of Defence that the land had been identified and boundary wall erected. The approval of the Indian Defence University is under consideration at highest level and after its approval the integration process will be started. The Committee appreciate the efforts in this regard and wish to be updated on the progress in Action Taken Replies.

Defence Museum

69. Subsequent to successful implementation of the project for war memorial, the Committee desired to be updated on the status of defence museum. In this regard, representatives of Joint Staff intimated the Committee that the plan for defence museum is in progress. The Committee hail the idea of defence museum and wish that it soon sees the light of the day.

**New Delhi
09 December, 2019
18, Agrahayana 1941 (Saka)**

**JUAL ORAM
Chairperson,
Standing Committee on Defence**

STANDING COMMITTEE ON DEFENCE (2019-20)

MINUTES OF THE SECOND SITTING OF THE STANDING COMMITTEE ON DEFENCE (2019-20)

The Committee sat on Thursday, the 14th November, 2019 from 1100 hrs. to 1730 hrs. in Committee Room 'B', Ground Floor, Parliament House Annexe, New Delhi.

PRESENT

Shri Jual Oram

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Chairperson

MEMBERS

LOK SABHA

2. Shri Nitesh Ganga Deb
3. Shri Annasaheb Shankar Jolle
4. Prof. (Dr.) Ram Shankar Katheria
5. Shri Pashupati Kumar Paras
6. Shri Kapil Moreshwar Patil
7. Dr. Shrikant Eknath Shinde
8. Shri Brijendra Singh
9. Shri Mahabali Singh
10. Shri Durga Das Uikey
11. Dr. Kalanidhi Veeraswamy

RAJYA SABHA

12. Dr. Ashok Bajpai
13. Shri Prem Chand Gupta

SECRETARIAT

1. Smt. Kalpana Sharma - Additional Secretary
2. Dr. Sanjeev Sharma - Director
3. Smt. Jyochnamayi Sinha - Additional Director
4. Shri Rahul Singh - Deputy Secretary

LIST OF WITNESSES

MINISTRY OF DEFENCE

S. No.	Name of Officer	Designation
1.	Dr. Ajay Kumar	Defence Secretary
2.	Ms. Gargi Kaul	Secretary (Defence Finance)
3.	Shri Barun Mitra	Special Secretary
4.	Shri Jiwesh Nandan	Additional Secretary
5.	Dr. Chitra Rajagopal	Director General-Resource & Management (R&M)
6.	Lt. Gen. MM Naravane	Vice Chief of Army Staff (VCOAS)
7.	Vice Admiral G Ashok Kumar	Vice Chief of the Naval Staff (VCNS)
8.	Lt. Gen. SK Upadhaya	Master-General of the Ordnance (MGO)
9.	Air Mshl Sandeep Singh	Deputy Chief of the Air Staff (DCAS)
10.	Air Mshl HS Arora	Vice Chief of the Air Staff (VCAS)
11.	Lt. Gen. Arvind Dutta	Adjutant General
12.	Lt. Gen. Rajeev Chopra	Director General of National Cadet Corps (DGNCC)
13.	Lt. Gen. Paramjit Singh Sangha	Director General of Military Operations (DGMO)
14.	Shri Apurva Chandra	Director General (Acquisition) DG(Acq)
15.	Lt. Gen. Sanjay Chauhan	Director General (DG)
16.	Ms Mala Dutt	Additional Secretary & Financial Adviser (Acquisition), AS&FA(Acq)
17.	Lt. Gen. Gopal R	Quarter Master General (QMG)
18.	Shri Subir Mallick	Additional Financial Adviser & Joint Secretary, (Addl. FA & JS)
19.	Rear Admiral Sanjay Vatsayan	Assistant chief of Naval Staff (ACNS)
20.	Smt. Nidhi Chhibber	Joint Secretary
21.	Lt. Gen. Sanjay Chauhan	Director General
22.	Maj Gen. RK Malhotra	Additional Director General (ADG)
23.	Shri Puneet Agarwal	Joint Secretary
24.	Shri Rajeev Singh Thakur	JS(Army)
25.	Shri Ashwani Kumar	Additional Financial Adviser & Joint Secretary (Addl. FA & JS)
26.	Shri Rajesh Sharma	Addl. FA & JS
27.	Shri Shantanu	Joint Secretary
28.	Dr. Md. Nazmuddin	Economic Adviser & Joint Secretary
29.	Shri Sanjai Singh	Joint Secretary & Acquisition Manager (Air), JS&AM(Air)
30.	Lt. Gen. Sudarshan Srikant Hasabnis	Deputy Chief of Army Staff (DCOAS)
31.	Smt Dipti Mohil Chawla	Joint Secretary & Acquisition Manager (Maritime Systems), JS&AM (MS)
32.	Shri A N Das	Additional Financial Adviser (AN) Addl. FA(AN)
33.	Maj. Gen. HS Shanbhag	Technical Manager (Land Systems), TM(LS)
34.	Air Vice Mshl Jeetendra Mishra	Assistant Chief of Air Staff, Projects (ACAS)
35.	R Adm Alok Bhatnagar	Additional Director General ADG(A)
36.	Shri Shantanu	Joint Secretary
37.	Shri Vedveer Arya	Finance Manager (MS), FM (MS)
38.	Shri Ghayas Uddin Ahmad	Finance Manager (Land System)
39.	Shri Puneet Agarwal	Finance Manager (Air)
40.	Lt Gen Sanjay Verma	Director General (DG)
41.	Dr. Ravindra Singh	Director
42.	Sh. Vipul Gupta	Associate Director

2. At the outset, the Chairperson welcomed the Members of the Committee and informed them that the Union Budget for the year 2019-20 had already been passed, however, examination of Demands for Grants for the year 2019-20 was a mandatory exercise consequent to the observation by the Hon'ble Speaker on 11th July, 2019 that the Demands stand referred to the concerned Departmentally related Standing Committees, after they have been constituted, for examination and report to the House. He further informed them of the agenda for the Sitting i.e. deliberation on the subjects 'General Defence Budget, Procurement Policy and Capital Outlay on Defence Services, Army, Directorate General of Quality Assurance (DGQA), National Cadet Corps (NCC), Sainik Schools and Air Force'. The Committee then welcomed the representatives of the Ministry of Defence and the Services/Organisations to the second Sitting of the Standing Committee on Defence and drew their attention to Direction 55(1) of the Directions by the Speaker, Lok Sabha.

3. 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. The Defence Secretary initiated the discussion by briefly touching upon Defence Services Estimates and other Demands for Grants of the Ministry of Defence. He also apprised the Committee about healthy expenditure pattern of Ministry of Defence.

4. A Power Point Presentation on General Defence Budget was then made before the Committee. This was followed by detailed deliberations on the following issues:

- i. Mismatch between projection and allocation of funds leading to gap of ₹ 33,000 crore in committed expenditure;
- ii. Delegation of financial power and allocation of budget to National Cadet Corps (NCC);
- iii. Increase in Defence Budget in proportion of percentage of GDP of the country;

- iv. Projection and allocation of budget in regard to Air Force;
- v. Utilisation of total Defence budget till date;
- vi. Compromises made or likely to be made due to reduced budgetary allocations;
- vii. Commercial use of Defence Lands without compromising the security of the area;
- viii. Rationalisation of budget to avoid overspending;
- ix. Revenue generation by Defence Research and Development Organisation (DRDO) and Ordnance Factories Board (OFB);
- x. Creation of post of Chief of Defence Staff;
- xi. Improvement in quality of products of OFB, especially cloth/material used in parachute;
- xii. Penalty provisions in offset obligations;
- xiii. Special equipment like garment and footwear for Army personnel posted in high altitude and harsh weather conditions;
- xiv. Special Allowance for personnel posted in high altitude areas;
- xv. Defence Production Corridor; and
- xvi. Timely supply of equipment to the Forces.

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

- i. Ensuring quality of products manufacture under 'Make in india'
- ii. Servicing of equipment provided by new indigenous companies and their sustainability;
- iii. Efforts to encourage indigenization in Defence Sector to reduce dependence on imports;
- iv. Greater value of contracts in terms of amount being awarded to foreign vendors;
- v. Steps taken to achieve timely, effective and efficient procurement;
- vi. Benchmark pricing in Acquisition; and
- vii. Transfer of Technology in Rafale aircraft.

The Committee took break for lunch and resumed the Sitting at 1430 hrs.

6. Thereafter, the Chairperson invited the representatives of Army for briefing. The Vice Chief of Army Staff commenced the briefing by giving an overview on Army to the Committee and thereafter, a Power Point presentation was made. This was followed by detailed deliberations on following issues:

- i. Mismatch between projection and allocation of funds to Army;
- ii. Requirement of surveillance equipment;
- iii. Anomalies in allowance to personnel posted in North-Eastern parts;
- iv. Rationalization of manpower in Army; and
- v. Modernisation.

7. Thereafter, the Chairperson invited representatives of Directorate General of Quality Assurance (DGQA). The representatives of DGQA commenced their briefing through a Power Point presentation which was followed by discussion on following issues:

- i. Involvement of users in DGQA;
- ii. Number of engineers in DGQA;
- iii. Updation of training given to DGQA personnel; and
- iv. Corrective measures taken to avoid supply of faulty equipment provided to the Services.

8. Thereafter, the Chairperson invited representatives of Sainik Schools. The representatives of the Sainik School also commenced their briefing through a Power Point presentation. This was followed by discussion on following issues:

- i. Budgetary provisions for Sainik Schools;
- ii. Meeting of the Board of Governors;
- iii. Expansion of Sainik Schools;
- iv. Intake of girl students in Sainik Schools; and
- v. Measures to increase intake of Sainik School Students into NDA.

9. The Vice Chief of the Air Staff briefed the Committee regarding overview on modernisation plan of Indian Air Force (IAF) and thereafter, a Power Point presentation was made. This was followed by detailed deliberations on following issues:

- i. Delay in supply of aircraft by Hindustan Aeronautics Limited (HAL);
- ii. Transfer of Technology in procurement of Rafale aircraft;
- iii. Measures taken to nullify accidents in IAF due to old aircraft/technical defects/human error;
- iv. Need for increase in number of Aircraft shelters;
- v. Solid waste management to avoid accidents due to bird hits;
- vi. Need to amend the Air Force Act of 1937;
- vii. Unauthorized construction around the air strips;
- viii. Squadron strength; and
- ix. Mismatch between projection and allocation of funds and effect on Air defence preparedness.

10. Thereafter, the Chairperson invited the representatives of National Cadet Corps (NCC). They made a Power Point presentation before the Committee which was followed by discussion on following issues:

- i. Efforts made by the Ministry to expedite processing of applications of institutions waiting to be attached with NCC and liaise with the State Governments in this regard;
- ii. Skill development of NCC Cadets, especially in the field of Defence Production;
- iii. Linking of NCC with employment generation to increase interest in NCC;
- iv. Recruitment of Ex-Servicemen in NCC;
- v. Expansion of NCC in private institutions;
- vi. Review of institutes attached with NCC where appropriate infrastructure is not available; and
- vii. Increase in budget of NCC.

11. The Chairperson directed the representatives of the Ministry to furnish written replies/information on the points raised by the Members at the earliest.

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

The Committee then adjourned.

LIST OF WITNESSES

MINISTRY OF DEFENCE

S. No.	Name of Officer	Designation
1.	Dr. Ajay Kumar	Defence Secretary
2.	Dr. G Satheesh Reddy	Secretary DR&D
3.	Ms. Gargi Kaul	Secretary Defence Finance
4.	DG K Natrajan,	DG, ICG
5.	Vice Admiral G Ashok Kumar	VCNS
6.	Shri Jiweesh Nandan	AS(JN)
7.	Shri Barun Mitra	Special Secretary
8.	Lt Gen Harpal Singh	DGBR
9.	Smt. Deepa Bajwa	DGDE
10.	Lt Gen R K Anand	DG LW&E
11.	Ms. Mala Dutt	AS & FA
12.	Lt. Gen SK Upadhya	MGO
13.	Lt Gen Manoj M Naravane	VCOAS
14.	Lt Gen Sudarshan Srikant Hasabnis	DCOAS
15.	Lt Gen Raj Shukla	DG PP
16.	Lt Gen Gopal R	QMG
17.	Lt Gen TK Chawla	DG
18.	Lt. Gen Paramjit Singh	DGMO
19.	Lt Gen PS Rajeshwar	CISC (Chairman Chief of Staff Committee)
20.	Lt Gen Harpal Singh	DGBR
21.	Lt Gen SK Shrivastava	Engineer-in-Chief
22.	Lt Gen Arvind Dutta	Adjutant General
23.	Lt Gen Surinder Singh Mahal	DG MP&PS
24.	Lt Gen Shantanu Dayal	DG DC&W
25.	Dr. MSR Prasad	DG (MSS)
26.	Dr. Sudhir Kumar Mishra	DG
27.	Dr. Guru Prasad	DG
28.	Dr. Chitra Rajagopal	DG(R&M)
29.	Dr Samir V Kamat	DG
30.	Shri Pravin K Mehta	DG
31.	Sh. Sudhir Gupta	DG
32.	Sh. KS Varaprasad	DG
33.	Dr. AK Singh	DG(LS) & DS
34.	Dr. Sudhir Kamath	DG(MED & CoS)
35.	Ms. J. Manjula	DG

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 fifth sitting of the Standing Committee on Defence and requested the representatives of the Ministry of Defence to brief the Committee on various issues included in the agenda for the day. and drew their attention to Direction 55(1) of the Directions by the Speaker, Lok Sabha.

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

- (i) allocation of adequate funds to meet estimated expenditure for DRDO,
- (ii) requirement of additional funds to take up futuristic projects,
- (iii) efforts towards 'Make in India',
- (iv) development of aircraft technology,
- (v) research in propulsion, material and chip technology within the country,
- (vi) manpower requirements in DRDO,
- (vii) modernization of research infrastructure, etc.

4. Thereafter, a power point presentation was given on Navy which was followed by discussion on following points:

- (i) shortfall between required and allocated budget for Navy,
- (ii) huge inadequacies in capital budget,
- (iii) shortage of manpower,
- (iv) depletion in fleet strength,
- (v) obsolescence,
- (vi) delay in delivery of vessels by Shipyards,
- (vii) modernization of naval airfields,
- (viii) international maritime cooperation,
- (ix) safety of fishermen,
- (x) Operational preparedness of Navy, etc.

5. Thereafter, a Power Point presentation on Joint Staff was made by the representatives of the Ministry of Defence which was followed by discussion on following points:

- (i) expanding role and responsibilities of Joint Staff,
- (ii) Chief of Integrated Defence Staff
- (iii) construction of Defence Museum,
- (iv) intelligence gathering and dissemination,
- (v) plan for Defence University, etc.

6. Thereafter, a presentation on Coast Guard Organization was made before the Committee by the representatives of Coast Guard. This was followed by deliberations on the issues as under:

- (i) requirement of adequate budgetary support,
- (ii) construction of Indian Coast Guard Academy, Mangalore,
- (iii) safety of fishermen, etc.

(The Committee took break for lunch and resumed the Sitting at 1430 hrs.)

7. Then a Power Point presentation was made on Directorate General Defence Estate (DGDE) by the representatives of DGDE which was followed with deliberations on the following points:

- (i) financial issues of Cantonment boards,
- (ii) encroachment of Defence Lands by civilians,
- (iii) ammunition dumps in Cantonment areas,
- (iv) non-implementation of Central Government Schemes,
- (v) inconvenience to Civilian population,
- (vi) issues relating to building bye-laws in Cantonment, etc.

8. Thereafter, the representatives of the Ministry of Defence gave Power Point presentation on Military Engineer Services (MES). This was followed by detailed discussions on the following issues:

- (i) prioritisation of available resources,
- (ii) achievement of construction targets by MES
- (iii) adoption of state-of-the-art technology,
- (iv) pending cases in the Ministry of Defence, etc.

9. Then the representatives of Ministry of Defence made Power Point presentation on Married Accommodation Project (MAP). This was followed by detailed discussions on the following issues:

- (i) budgetary allocations for MAP,
- (ii) review of satisfaction level of Forces,
- (iii) early completion of MAP,
- (iv) use of latest technologies in construction of MAP,

10. Thereafter, a Power Point presentation was made by the representatives of Ministry of Defence on Canteen Stores Department (CSD) which was followed by discussion on the following points:

- (i) irregularities in CSD,
- (ii) quality of items supplied by CSD,
- (iii) online presence of CSD, etc.

11. Thereafter, a Power Point presentation was made by the representatives of BRO on Border Roads Organization (BRO) which was followed by discussion on the following points:

- (i) status of fund availability in BRO,
- (ii) required and existing number of equipment with BRO,
- (iii) reasons for delays in execution of road projects,
- (iv) single window clearance system,
- (v) construction of underwater tunnel in Brahmaputra river,
- (vi) shortage of manpower, etc.
- (vii) priority to be assigned for construction of roads in difficult areas.

12. The Chairperson directed the representatives of the Ministry of Defence and other organisations 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 (2019-20)

**MINUTES OF THE FOURTH SITTING OF THE STANDING COMMITTEE ON
DEFENCE (2019-20)**

The Committee sat on Monday, the 18th November, 2019 from 1500 hrs. to 1830 hrs. in Committee Room No. C, Parliament House Annexe, New Delhi.

PRESENT

Shri Jual Oram

-

Chairperson

MEMBERS

LOK SABHA

Shri Hanuman Beniwal
Shri Ajay Bhatt
Shri Nitesh Ganga Deb
Smt. (Dr.) Rajashree Mallick
Shri Kapil Moreshwar Patil
Shri Anumula Revanth Reddy
Shri Jugal Kishore Sharma
Dr. Shrikant Eknath Shinde
Shri Brijendra Singh
Shri Durga Das Uikey

RAJYA SABHA

12. Dr. Ashok Bajpai
13. Shri V. Lakshmikantha Rao
14. Shri Sanjay Raut
15. Smt. Vijila Sathyananth
16. Shri Kamakhya Prasad Tasa
17. Lt. Gen. Dr. D. P. Vats

SECRETARIAT

1. Smt. Kalpana Sharma - Additional Secretary
2. Dr. Sanjeev Sharma - Director
3. Smt. Jyochnamayi Sinha - Additional Director
4. Shri Rahul Singh - Deputy Secretary

LIST OF WITNESSES

MINISTRY OF DEFENCE

S. No.	Name of Officer	Designation
1.	Dr. Ajay Kumar	Defence Secretary
2.	Sh. Subhash Chandra	Secretary(DP)
3.	Ms. Gargi Kaul	Secretary (Defence Finance)
4.	Dr. G Satheesh Reddy	Secretary DR&D & Chairman
5.	Smt. Sanjeevane Kuty	Secretary(ESW)/I.A.S
6.	Shri Barun Mitra	Special Secretary(DP)
7.	Shri Jiwesh Nandan	Additional Secretary(JN)
8.	Dr. Chitra Rajagopal	DG(R&M)
9.	Shri Saurabh Kumar	DGOF & Chairman/OFB
10.	Lt Gen Sanjay Verma	DGWE
11.	Lt Gen Manoj M Naravane	VCOAS
12.	Lt Gen Sudarshan Srikant Hasabnis	DCOAS (P&S)
13.	Lt Gen SK Upadhaya	MGO
14.	Lt Gen Raj Shukla	DGPP
15.	Lt Gen TK Chawla	DGFP
16.	Lt Gen Arvind Dutta	Adjutant General
17.	Lt Gen Surinder Singh Mahal	DG MP&PS
18.	Lt Gen Shantanu Dayal	DG DC&W
19.	Maj Gen J V Prasad	MDECHS
20.	Maj Gen MK Sagoch	DGR
21.	Maj Gen Mukesh Kumar	ADG MP
22.	Brig Mrigendra Kumar	Secretary(KSB)
23.	Major General Sanjeev Sengar	CEO IRRPI
24.	Shri Subir Mallick	Addl FA & JS
25.	Dr. Amit Sahai	JS(P&C)
26.	Sh. Rajesh Sharma	Addl. FA & JS
27.	Sh. Ashwani Kumar	Addl. FA & JS
28.	Sh. R.K. Karna	Addl. FA & JS

29.	Sh. A.N Das	Addl. FA & JS
30.	Sh Pudi Hari Prasad	JS(ESW)
31.	Shri Shantanu	JS(LS)
32.	Shri Chandraker Bharti	JS(Aero)
33.	Shri Sanjay Jaju	JS(DIP)
34.	Shri Vinay Mohan Chamola	Offg. CMD (HAL)
35.	Radm(Retd) L V Sarat Babu	CMD (HSL)
36.	Shri D.K. Hota	CMD(BEML)
37.	Cmde B.B. Nagpal, NM	CMD(GSL)
38.	RADM V K Saxena (Retd)	CMD (GRSE)
39.	Dr. D.K. Likhi	CMD(MIDHANI)
40.	Shri M.V. Gowtama	CMD, BEL
41.	Cdr Jasbir Singh	Dir(S&HE) (MDL)
42.	Shri Vivek C Verma	Secretary, OFB
43.	Sh. Ambarish Barman	Director (Budget)

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 fourth sitting of the Standing Committee on Defence and requested them to brief the Committee on various issues included in the agenda for the day. He also drew their attention to Direction 55(1) of the Directions by the Speaker, Lok Sabha.

3. The representatives of the Ministry of Defence commenced their briefing through a Power Point presentation on Defence Public Sector Undertakings. This was followed by detailed deliberations on the following issues:

- 1) Inadequate capacity utilization due to low order book
- 2) Low cash resume due to delayed payments in DPSUs
- 3) Creating assets in Blue Water economy

- 4) Giving priority of payments to SMEs
- 5) Upgradation of Aircraft produced by HAL
- 6) International Competition
- 7) Decline in production of DPSUs
- 8) Measures to be taken to increase Defence Exports by DPSUs
- 9) Disinvestment of DPSUs

Thereafter, a Power Point presentation was given on the Ordnance Factory Board (OFB) which was followed by discussion on the following points:

- 1) Quality of mountaineering wear supplied to forces
- 2) Shortage of budget
- 3) Late receipt of indents from Army
- 4) Exporting of Ordnance Factories' products to other countries
- 5) Reduction in targets by Army after finalization
- 6) Upgradation and quality of tank and guns
- 7) Plans for filling the technological gaps for producing systems for higher altitudes
- 8) Delay in civil works done by Military Engineering Services (MES) leading to delay in capacity augmentation projects like T-72, T-90 etc.
- 9) Issues related to R&D by Ordnance Factories.
- 10) Issue regarding corporatisation of Ordnance Factories.

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

- 1) Resettlement of Ex-Servicemen
- 2) Issues related to One Rank One Pension (OROP)
- 3) Problems faced by Ex-servicemen in the states and appointment of a Brigadier level officer to liaison with Government on the issues
- 4) Complaints about non-availability of medicines in ECHS
- 5) Non-payment of medical bills to the hospitals
- 6) Delay of construction of buildings due to paucity of funds
- 7) Appoint of specialized doctors under ECHS

5. The Chairperson then directed the representatives of the Ministry of Defence to furnish written replies to all the queries which remain unanswered at the earliest.

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

The Committee then adjourned.

STANDING COMMITTEE ON DEFENCE

MINUTES OF THE FIFTH SITTING OF THE STANDING COMMITTEE ON DEFENCE (2019-20)

The Committee sat on Monday, the 9 December, 2019 from 1500 hrs. to 1530 hrs. in Committee Room No. 1, Block-A, Parliament House Annexe Extension Building, New Delhi.

PRESENT

Shri Jual Oram

-

Chairperson

Members

Lok Sabha

- | | |
|---|------------------------------|
| 2 | Shri Devusinh J. Chauhan |
| 3 | Shri Nitesh Ganga Deb |
| 4 | Shri Annasaheb Shankar Jolle |
| 5 | Shri Kapil Moreshwar Patil |
| 6 | Shri Jugal Kishore Sharma |
| 7 | Shri Brijendra Singh |
| 8 | Shri Kotagiri Sridhar |
| 9 | Shri Durga Das Uikey |

Rajya Sabha

- | | |
|----|---------------------------|
| 10 | Dr. Ashok Bajpai |
| 11 | Shri V. Lakshmikantha Rao |
| 12 | Shri Sanjay Raut |
| 13 | Smt. Vijila Sathyananth |
| 14 | Shri Kamakhya Prasad Tasa |
| 15 | Lt. Gen. Dr. D. P. Vats |

SECRETARIAT

- | | | | |
|----|-----------------------|---|----------------------|
| 1. | Smt Kalpana Sharma | - | Additional Secretary |
| 2. | Dr. Sanjeev Sharma | - | Director |
| 3. | Smt Jyochnamayi Sinha | - | Director |

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:-

1. First Report of the Standing Committee on Defence (17th Lok Sabha) on 'Demands for Grants of the Ministry of Defence for the year 2019-20 on General Defence Budget, Border Roads Organisation, Indian Coast Guard, Military Engineer Services, Directorate General Defence Estates, Defence Public Sector Undertakings, Canteen Stores Department, Welfare of Ex-Servicemen, Ex-Servicemen Contributory Health Scheme, Defence Pensions and Sainik Schools (Demand Nos. 18 and 21)';
2. Second Report of the Standing Committee on Defence (17th Lok Sabha) on 'Demands for Grants of the Ministry of Defence for the year 2019-20 on Army, Navy, Air Force and Joint Staff (Demand Nos.19 and 20)';
3. Third Report of the Standing Committee on Defence(17th Lok Sabha) on `Demands for Grants of the Ministry of Defence for the year 2019-20 on Capital Outlay on Defence Services, Procurement Policy, Defence Planning and Married Accommodations Project (Demand No. 20)'; and
4. Fourth Report of the Standing Committee on Defence(17th Lok Sabha) on 'Demands for Grants of the Ministry of Defence for the year 2019-20 pertaining to Ordnance Factories, Defence Research and Development Organisation, Directorate General of Quality Assurance, and National Cadet Corps (Demand Nos. 19 and 20)'.

3. After some deliberations, the Committee adopted the above reports without any modifications. Hon'ble Chairperson also informed the Members that in case they have any suggestion to make in the draft reports, they may do so by giving it writing to Hon'ble Chairperson by 12 noon of Tuesday, 10th December, 2019.

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.
