

India's MoD: Year End Review – 2017

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Enhancing safety and security of the country, providing humanitarian assistance and disaster relief during natural and man-made disasters, modernisation of the Armed Forces and supporting indigenisation and manufacturing of defence equipment through the 'Make-in-India' initiative have been the main features of the Ministry of Defence during 2017. Prime Minister Shri Narendra Modi dedicated the naval submarine INS Kalvari to the nation in December describing it as a prime example of 'Make-in-India'.

Brahmos, the World's fastest supersonic cruise missile created history in November 2017 when it was successfully flight-tested first time from the Indian Air Force's frontline fighter aircraft Sukhoi-30MKI. The surface-to-air missile Akash was successfully launched. The first ever tri-services exercise INDIRA between India and Russia was conducted in October, 2017. The Ministry launched special campaign to celebrate Armed Forces Flag Day to honour the martyrs and the men in uniform. The week long campaign was a special initiative of the Raksha Mantri Smt. Nirmala Sitharaman to ensure full support to the welfare of the ex-servicemen and their families, a priority she enunciated immediately after taking over the charge of the Ministry.

Another flagship event of the year was the first ever Indian circumnavigation of the globe by all-women crew on Indian Navy sailing vessel INSV Tarini. The Tarini was flagged off on 10th September 2017 and is expected to return to Goa in April 2018. The expedition titled 'Navika Sagar Parikarma' is in consensus with the national policy to give women power to attain their full potential. The search and rescue operation 'Op Sahayam' continues to bring succour to the fishing community and seafarers affected by the Ockhi cyclone.

ARMY

1. **Internal Security Situation in J&K.** The security situation in J&K despite a lot of challenges has been brought under control. Relentless operations by the Army both, along the Line of Control (LC) and in the hinterland have thwarted the designs of giving a fillip to the proxy war being waged against India. Army along with CAPF and JKP continues to put in pressure to bring back normalcy to the Kashmir Valley.

2. **Internal Security Situation in NE.** Intelligence based operations have been launched along Indo-Myanmar border to maintain peace in the region and to effectively neutralise the terrorists. Indian Army has continued the people friendly operations to help the locals.

3. **Situation along LAC.** Army is poised all along the LAC and status quo is being ensured.

TRAINING EVENTS & MILITARY EXERCISES

4. **Indo - Oman Joint Military Exercise.** Second edition of 'AL NAGAH', the joint exercise between the Indian and Oman Armies was held at Bakloh, Himachal Pradesh from 06 – 19 March 17. Both armies shared valuable combat expertise on countering terrorist operations in an international environment.

5. **Indo - Nepal Joint Military Exercise.** 'SURYA KIRAN – XI' was held from 07–20 March 17 at Pithoragarh. An infantry battalion of Indian Army and Durga Bahsh Battalion of Nepalese Army participated. Eleventh such battalion level exercise between the two countries aimed at training of troops in counter insurgency operations in mountainous terrain. It formally incorporated issues related to humanitarian assistance and disaster Relief (HADR) and helped enhance defence co-operation and military relations between two countries.

6. **Indo - Mongolian Joint Military Exercise.** Twelfth edition of Indo - Mongolian Joint Military Exercise 'NOMADIC ELEPHANT' was held at Vairengte from 05 - 18 April 2017. Mongolian Army was represented by soldiers of the elite Special Forces Task Battalion while Indian Army was represented by a contingent of the Jammu & Kashmir Rifles. The exercise was aimed at training the troops in counter insurgency & counter terrorism operations under the United Nations mandate. The joint training laid emphasis on conducting operations by a joint subunit, comprising of troops from both the armies, in adverse operational conditions aimed at enhancing the interoperability between the two armies.

7. **Indo - Nepal Joint Military Exercise.** 'SURYA KIRAN – XII' was conducted in Rupandehi, Nepal from 03 – 17 September 17. The battalion level exercise focused on counter terrorism operations in mountainous terrain.

8. **Indo - US Joint Military Exercise.** As part of the ongoing Indo-US defence cooperation, a joint military training, Exercise 'YUDH ABHYAS – 2017' was conducted at Joint Base Lewis, McChord, Washington, USA from 14 - 27 September 17. The theme of the exercise was to build and develop military relations and inter-operability for conducting counter terrorism, regional security operations and peace keeping operations under UN Charter.

9. **Indo – Sri Lanka Joint Military Exercise.** The fifth Indo-Sri Lanka Joint Training Exercise 'MITRA SHAKTI 2017' was conducted at Aundh Military Station, Pune from 13- 26 October 2017. The exercise focused on counter terrorism operations in semi urban terrain.

10. **Indo – Russia Joint Tri Service Exercise.** First ever tri service exercise 'INDRA' between India & Russia was conducted in Vladivostok, Russia from 19 – 29 October 2017. The 11 day exercise was conducted in 249th Combined Army Range, Sergeevisky and in the Sea of Japan near Vladivostok.

11. **Indo – Kazakhstan Joint Military Exercise.** A fourteen day joint training exercise 'PRABAL DOSTYK – 2017' between the Indian Army and the Kazakhstan Army was conducted at Bakloh, Himachal Pradesh from 02 – 15 November 17. The training contingents comprised of platoon strength from the 11th Gorkha Rifles of the Indian Army and a similar strength of the Kazakhstan Army.

12. **Indo-Bangladesh Joint Military Exercise.** Indo-Bangladesh Exercise 'SAMPRITI' was conducted at CIJW School, Vairengte from 06-18 November 2017. It was aimed at carrying out operations against terrorists and insurgents on the lines of those in the J&K and NE.

13. **Indo – UK Joint Military Exercise.** Indo – UK Exercise 'AJEYA WARRIOR' was conducted at Mahajan Field Firing Rangesin Bikaner, Rajasthan from 01 – 14 December 2017. The training contingent comprised of one

company each from the Indian Army and British Army. The aim of the exercise was to build and promote bilateral relations and enhance interoperability while sharing experiences in counter terrorism and counter insurgency operations between the two countries.

14. **Exercise 'Pralay Sahavam'**. The exercise was conceptualised as (HADR) exercise based on an urban flooding scenario in the twin cities of Hyderabad & Secunderabad. It was conducted by the Bison Division under the aegis of Sudharshan Chakra Corps with assistance from Government of Telangana on 22 - 23 September 2017. The Exercise synergised the efforts of all stakeholders (Army/Navy/Air Forces / NDRF / civil administration / CAPFs / other civil agencies) to assess the effectiveness of the plans, organisational skills and decision support system at each stage of the flood relief effort.

15. **OTA Chennai Trains Afghan Lady Officers**. As part of first military training being imparted by Indian Army to women officers from abroad, women officers of Afghan Army and Airforce were trained on basic military aspects including physical, weapon training, tactics, communication skills and leadership at OTA, Chennai from 04 - 24 December 2017.

HUMANITARIAN ASSISTANCE AND DISASTER RELIEF

16. **Rajasthan & Gujarat Floods (July 17)**. Army columns were deployed for rescue and relief operations during flash flood in Barmer, Pali and Jalore districts of Rajasthan. Army columns were also deployed for rescue and relief operations during flash flood in North Gujarat. Army columns rescued more than 500 school girls and teachers from Ambedkar Girls Hostel, Baiswada, Gujarat. The Army personnel from Dhrangdhara Military Station carried out a daring rescue operation in aid to civil authorities in village Kuda and Thakur Jati, District Surendranagar, Gujarat and rescued the villagers who were stranded in water logged areas due to heavy rains.

17. **Bihar & UP Floods (Aug 17)**. Army columns were deployed for rescue and relief operations in the devastated flood affected areas of Bihar's Madhubani, Sitamarhi, Gopalganj and Muzzafarpur districts. Army columns were able to reach out to over 75 villages, rescued about 1000 people and distributed food, supplies, rescue and relief material in these areas. In UP, Army columns including Army helicopters were deployed for providing relief material in the eastern region.

18. **Flag March, Sirsa**. 18 Army columns were deployed for maintaining law & order during August 17.

SPORTS & ADVENTURE

19. **Gold Medal at the ISSF World Cup 2017**. Subedar Jitu Rai along with Heena Sidhu brought laurels to the Nation by winning Gold Medal in the mixed team 10 meter Air Pistol event at the ISSF World Cup 2017.

20. **Race Around Austria (RAA)**. Lieutenant Colonel Bharat Kumar made the country and Indian Army proud by becoming the first Indian to finish the Race Around Austria (RAA), the toughest endurance cycling race in

Europe in the month of August 2017. The officer is presently holding two titles of Super Randonneur. Randonneuring is a long-distance, unsupported, non-competitive cycling within prescribed time limits.

21. **Asian Gymnastics Championship.** The 10th Acrobatic Gymnastics Asian Championship was held at Almaty, Kazakhstan in September 2017. One coach and seven players of Army Node Gymnastic Team represented India in the championship and won Bronze medal for the first time of Indian gymnastic history.

22. **Cadet Asian Wrestling Championship.** The event was held at Bangkok, Thailand from 20 – 23 July 2017. A total of 19 Countries including India participated in this Championship. Two wrestlers (Free Style) of Boys Sports Company, Army Sports Institute, Pune formed a part of 10 wrestlers of Free Style and 10 wrestlers of Greco Roman in the contingent of India. Sports Cadet Aakash won Gold medal and Sports Cadet Praveen won Bronze medal in this championship. Indian contingent was placed second in this championship.

23. **Asian Athletics Championship 2017.** The Indian Army athletes brought laurels by winning four Gold, two Silver and two Bronze Medals in 22nd Asian Athletics Championship 2017 which was held at Bhubaneswar (Odisha) in July 2017. 13 Athletes from Mission Olympic Wing of Indian Army participated in the championship.

24. **Asian Grand Prix Series 1 at China.** Naib Subedar Neeraj Chopra and Naib Subedar Jinson Johnson added another feather to their cap by winning Silver Medals in their respective events of Javelin and 800 meters in Athletics during Asian Grand Prix Series in China on 24 April 17.

25. **Para Athletics Grand Prix.** Naib Subedar Anandan won Silver Medal in 9th Fazza World Para Athletics Grand Prix, Dubai held on 21 March 2017.

MISCELLANEOUS EVENTS

26. **National Integration Tours.** As part of the Indian Army's ongoing outreach programme to foster the spirit of National Integration across the entire swathe of the country various tours were organised. A tour for 20 school students from various schools of Imphal, Manipur in January 17, tour for 16 Girls from the remote town of Gingle, Uri, J&K in May 17, tour for 20 school students from Biamah in Leh in September 17 and tour for 20 students from Chirang district of Assam in October 17. The aim of tours was to provide an insight into the rich cultural heritage, developments in others parts of the country and also provide an opportunity to meet prominent personalities of our Nation.

27. **Army's Super - 40 Initiative (J&K).** Army's Super - 40 initiative for coaching the J&K youth for Engineering Entrance Exams broke all previous records when 26 boys and two girls from the state cracked the IIT-JEE Mains Exam 2017. Nine students successfully qualified the IIT Advanced Exam, the results of which were declared on 11 June 17.

28. **Colour Presentation to Armoured Corps Centre and School.** The Hon'ble President of India and Supreme Commander of the Armed Forces, Shri Pranab Mukherjee awarded the prestigious President's Standards to Armoured Corps Centre and School, during a grand Ceremonial Parade held at Ahmednagar on 15 April 2017. The rare honour has been bestowed upon Armoured Corps Centre and School in recognition of commendable service

rendered as a Flagship Mechanised Warfare Institution, providing excellent world class training to all ranks of Indian Army as also to all ranks from the friendly foreign countries.

29. **Colour Presentation to Armoured Regiments.** General Bipin Rawat, COAS, on behalf of the Hon'ble President of India, presented the 'President's Standard' to 87 Armoured Regiment, 41 Armoured Regiment and 10 Armoured Regiment at Suratgarh Military Station on 05 December 2017.

30. **Colour Presentation to Infantry Battalions.** General Bipin Rawat, COAS, presented the President's Colours to 23 MARATHA Light Infantry and 24 MARATHA Light Infantry at the MARATHA Light Infantry Regimental Centre, Belgaum on 03 Nov 17.

31. **Signing of MoU between Indian Army and Jamia Millia Islamia.** Indian Army and Jamia Millia Islamia (JMI), New Delhi recorded their mutual intent for academic collaboration, technical advancement and progression of Army Personnel, in a MoU signed on 28 Sep 2017. It would facilitate admission of defence personnel in second or third year Graduation/Post Graduation/Doctorate programme through the medium of distance learning. This would enable soldiers to enhance their academic qualification for a better future.

32. **Empowering the Soldier by Project Yash Vidya.** A MoU was signed between Indian Army and Yashwantrao Chavan Maharashtra Open University (YCMOU), Nasik on 21 Sep 2017 at New Delhi for a Bachelor's degree Programme designed for the Army Personnel, giving special recognition to the in-service training/Army courses completed by providing exemption from studying certain courses. The University will award Diploma in Self Empowerment and a Bachelors Degree in Arts or Commerce under Project Yash Vidya enabling them with academic qualifications for better future.

33. **Vijay Diwas celebrations.** In order to keep alive the spirit of War of Liberation of 1971 an arrangement of reciprocal visit by Muktiyodhas and War Veterans was institutionalised in 2005. A delegation of Muktiyodhas along with their spouses or companions is invited by the Govt of India to participate in the Vijay Diwas celebrations that are held at Fort Williams, Kolkata. Same was held under the aegis of Eastern Command. Government of Peoples Republic of Bangladesh also invites Indian war veterans along with their spouses or companions to participate in Victory day celebration. Twenty seven war veterans & four serving officers participated in the celebration in Bangladesh from 14 to 19 Dec 2017.

NAVY

Overseas Operations

1. **IDEX/ NAVDEX 17 at UAE.** INS Sunayna was deployed to Abu Dhabi, UAE from 10 Feb-12 Mar 17 to participate in the International Defence Expo 2017 (IDEX 17) and Naval Defence Maritime Security Expo 17 (NAVDEX 17).

2. **Langkawi International Maritime and Aerospace Exhibition (LIMA) – 2017.** LIMA is a biennial maritime exhibition organised by the Malaysian Navy. It is aimed at improving maritime cooperation and bringing together military and civil industrial partnership. *IN* has been participating regularly in LIMA. This year, *IN* ship *Kora* participated in LIMA 17 at Langkawi, Malaysia, from 20 – 26 Mar 17.

3. **Overseas Deployment of Eastern Fleet Ships.** Ships of the Eastern Fleet comprising *INS Sahyadri*, *Shivalik*, *Kamorta*, and *Jyoti* were deployed to the Southern Indian Ocean and Western Pacific in May-Jun 17. The ships made port calls at Singapore, Kuantan, Jakarta, Surabaya, Port Moresby and Fremantle.

4. **Eastern Fleet OSD for ASEAN and INDRA 17.** EF ships *Satpura* and *Kadmatt* were deployed for ASEAN International Fleet Review (IFR) and INDRA-17, an annual bilateral exercise with the Russian Navy.

5. **International Maritime Review (IMR).** The IMR was held by Singapore Navy on 15 May 17 to commemorate its 50 years. The Indian delegation for IMR was headed by Admiral Sunil Lanba, PVSM, AVSM, ADC, the Chief of Naval Staff. *IN* ships *Sahyadri* and *Kamorta* participated in the IMR.

6. **Seychelles National Day Celebrations.** *INS Sunayna* visited Seychelles from 26-30 Jun 17 to participate in Seychelles National Day celebrations. A march past was carried out by a naval contingent from the ship and chetak helicopter participated in the Fly Past activities.

7. **Overseas Deployment of Western Fleet Ships.** Four ships of the Western Fleet proceeded on Overseas Deployment to the Mediterranean Sea/ Atlantic Ocean. One of these ships also called on five ports in the West Coast of Africa. The ships visited Port Said and Alexandria (Egypt), Souda Bay (Greece), Toulon (France), Valencia (Spain), Haifa (Israel), Jeddah (Saudi Arabia), Plymouth(UK), London(UK), Lisbon(Portugal), Casablanca(Morocco), Lagos(Nigeria), Luanda(Angola), Port Walvis(Namibia), Cape Town(South Africa), Port Louis(Mauritius) and Valencia (Spain).

8. **First Training Squadron – Overseas Deployments.** The first Training Squadron comprising *IN* Ships *Tir*, *Sujata*, *Shardul*, *Tarangini*, *Sudarshini* and Indian Coast Guard Ship *Varuna* are responsible for Sea training of Executive branch officers after they complete their training at Indian Naval Academy. The ships undertake deployment across the Indian Ocean to teach the nuances of life at sea to trainee officers. The sail training ships, *Tarangini* and *Sudarshini* undertook oceanic voyages to nurture the art of sailing amongst young officers. The details of overseas deployment in 2017 are given below:-

<u>Ser</u>	<u>Ships</u>	<u>Date</u>	<u>Port</u>	<u>Remarks</u>
(a)	Tir Shardul Sujata Sarathi	March 02 - April 02, 2017	Port Louis, Port Victoria and Male	

(b)	Sudarshini	March 05 - April 04, 2017	Port Victoria	Spring term 2017
(c)	Tir Sujata Sarathi and Shardul	October 03 - November 06, 2017	Penang, Jakarta and Colombo	Autumn term 2017
(d)	Sudarshini	October 03 - November 07, 2017	Jakarta	

9. **INSailing Vessel (INSV) Mhadei.** INSV *Mhadei*, with all women crew (06 officers), departed Goa on 02 Nov 16 and arrived Cape Town on 23 Dec 16. Thereafter, the vessel participated in Cape to Rio Race 2017, with 06 officers onboard (including 02 lady officers). On successful completion of the race she entered Rio de Janeiro on 22 Jan 17 and departed on 01 Feb 17. Subsequently, the ship entered Cape Town, South Africa on 25 Feb 17 and arrived Goa on 22 May 17.

10. **Navika Sagar Parikarma.** Six naval women officers are undertaking Navika Sagar Parikrama on an Indian-built 56 feet long Sailing Vessel, **INSV Tarini.** This is first Indian all-women crew circumnavigation of the globe under sail. Expedition was flagged-off from Goa on 10 Sep 17 and is expected to return to Goa in Apr 18.

Major Exercises

11. **Ex Taiyaar-17.** Ex Taiyaar 17 was conducted in Jan 17. The exercise is an annual feature which allows the Naval Commands to fully prepare and exercise transition from a state of peace to one of hostilities and address any shortcomings that may be encountered. Various facets that were exercised included Op logistics, action stripping, Mine & War watching organisation, deployments by Fast Interceptor Crafts (FICs), acceleration of Refit etc.

12. **TROPEX-17.** A Theatre Level Operational Exercise - TROPEX 17, was conducted on the Western Seaboard in Jan-Feb 17. Extensive participation of Army, Air force and the Coast Guard, including Marine Commandos (MARCOS) and Para Special Force (SF) was the highlight of this year's exercise.

13. **Joint Amphibious Workup.** Joint amphibious workup by *IN* and Indian Army was conducted from 19 - 31 Mar 17 off Karwar. *IN* ships *Jalashwa* and *Gharial* along with over 1000 personnel of 91 Infantry Brigade of Army participated in the exercise.

14. **Exercise PARIKSHAN.** Western Naval Command conducted operational level Table Top Tri-Service wargame titled 'Exercise PARIKSHAN' from 07-09 Aug 17. Representatives from Naval Headquarters, and operational commands of the Army and Air Force in the region also participated in the wargame.

15. **DANX – 17.** The Joint Services Exercise ‘Defence of Andaman and Nicobar Exercise’ (DANX-17) was conducted in Andaman & Nicobar Command from 20-25 Nov 17. IN/ICG Ships, IN/IAF/ICG aircraft and Army troops from ANC and other Commands of IN, IA & IAF participated in the exercise. The successful conduct of the exercise proved unparalleled synergy achieved at ANC between the three services.

Exercises with Foreign Navies

16. **Exercise MALABAR 2017.** The 21st edition of Ex Malabar was conducted at/ off the port of the East Coast of India from 09-17 Jul 17. IN, US Navy and the Japan Maritime Self - Defence Force (JMSDF) participated in the exercise. The primary objective of the exercise was to enhance maritime cooperation and interoperability amongst the participating navies. A total of 16 ships, 02 submarines, 95 aircraft, Marine Commandos (MARCOs) and Special Forces (SFs) participated in the exercise.

17. **VARUNA 17.** The Western Fleet ships participated in bilateral exercise VARUNA 17 with French Navy in Apr 17 off Toulon, France. INS Trishul, Mumbai and Aditya along with integral helicopters, participated in the Exercise.

18. **KONKAN 17.** INS Tarkash participated in bilateral Exercise Konkan 17 with Royal Navy in May 17 off UK. Ship visited Plymouth and London during the exercise and also participated in HMS Tricomalee Bi-centenary year celebrations and cultural events at London as part of ‘India-UK Year of Culture’.

19. **Exercise SIMBEX.** Ex – SIMBEX, the annual bilateral exercise with Republic of Singapore Navy was conducted at Singapore from 12 - 21 May 17. IN ships *Shivalik*, *Sahyadri*, *Kamorta* and *Jyoti* participated in the exercise. The ships also participated in the International Maritime Defence Exhibition during the period.

20. **Exercise Indra 2017.** Indo-Russia Joint Tri-Services Exercise INDRA-17 was conducted off Vladivostok, Russian Federation from 19-29 Oct 17. This was the first ever Tri-Services bilateral military exercise between the two countries. The Naval Operations of exercise were conducted off Vladivostok in the Sea of Japan (Peter the Great Bay). The amphibious operations were conducted at Cape Klerk, about 30 nm SW of Vladivostok. The exercise was conducted in the following Phases:-

(a) Harbour Phase - 19-24 Oct 17 at Vladivostok

(b) Sea Phase - 25-28 Oct 17 off Vladivostok/ Cape Klerk

21. **AUSINDEX 2017.** The second edition of biennial Australia-India Maritime Bilateral Exercise (AUSINDEX) was conducted at/ off Fremantle, Australia. The exercise was conducted from 13-19 Jun 17. The Harbour Phase of AUSINDEX-17 was conducted at Fremantle (HMAS Stirling) from 13-16 Jun 17. The Sea Phase was conducted off West coast of Australia in the Western Australia Exercise Areas (WAXA) from 17-19 Jun 17.

22. **SLINEX 17.** The Eastern Naval Command hosted Sri Lanka-India Naval Exercise, SLINEX 17, from 07-14 Sep 17. Srilanka Naval Ships Sayura and Sagara and IN Ships Gharial and Kora participated in the exercise. Harbour phase included various training interactions. The Sea phase was conducted from 11-14 Sep 17.

Coastal Security and Anti-Piracy Operations

23. **Coastal Security.** IN and ICG ships and aircraft in coordination with each other are adequately deployed for Coastal and Offshore Development Areas security. In addition the following were undertaken by IN units:-

(a) **Coastal Security Exercise ‘SagarKavach’.** Coastal security exercises ‘SagarKavach’ were conducted throughout the year.

(b) **Op Avloka.** IN ships are being deployed for Op Avloka (off Gujarat and Maharashtra coast) for coastal surveillance during the monsoons since 2010, to undertake coastal surveillance.

(c) **Op Avardhan.** IN aircraft are deployed for Op Avardhan to maintain continuous aerial coastal surveillance of the West coast of India including L&M Islands. Similar sorties are also undertaken in the East coast and the A&N Islands to augment coastal surveillance along with IN ships.

24. **Anti-Piracy Patrol.** As part of its wider role of providing security to shipping in the Indian Ocean Region, the Indian Navy continues to deploy one ship for anti-piracy patrol in the Gulf of Aden. A total of 65 IN warships have been deployed till Dec 17, which have safely escorted more than 3788 (including 405 Indian flagged) ships with over 24,858 mariners embarked. Till date the IN has thwarted 44 piracy attempts and apprehended 120 pirates. The IN remains committed to ensuring Good Order at sea in the Indian maritime zones, and towards ensuring freedom of navigation in the high seas including off Somalia. **IN’s presence in this region is being maintained to ensure safety and security of Indian trade.**

25. There has been an increase in piracy activities in the Gulf of Aden/ off Somali coast in 2017, as compared to the last four years. IN ships have been instrumental in thwarting following piracy attempts in the Gulf of Aden. Details of IN contribution are given below:-

(a) **Indian Dhow Al - Kausar.** An Indian dhow, *AlKausar* was hijacked on 01 Apr 17. IN ship *Sharda*, deployed for anti – piracy patrol in the Gulf of Aden since 06 Apr 17, was diverted off Hoby, Somalia to monitor the situation and render necessary assistance to the dhow. On release after negotiations, *Al Kausar* was safely escorted by *Sharda* to Kismayo, Somalia. During the passage to Kismayo, the dhow was approached by two skiffs; however, *Sharda* prevented any further incident.

(b) **Bulk Carrier OS35.** In another incident of piracy attack, a Bulk Carrier, OS 35 (with 19 Filipino crew onboard) reported piracy attack on 08 Apr 17. IN ships *Mumbai*, *Tarkash*, *Trishul* and *Aditya* operating in the area were diverted to provide assistance. PLA (N) ship was also in the area. IN undertook continuous aerial surveillance to sanitise the upper decks of the merchant ship and one Prahar was made stand-by. Under the aerial surveillance of the IN helo and on receiving ‘all clear signal’ from the IN that no pirates were visible

on the upper decks, PLA(N) personnel boarded the ship. It was ascertained that pirates had abandoned/ fled the ship.

(c) **Suspicious Skiffs.** On 16 May 17, based on an alarm raised by Merchant Vessel *Lord Mountbatten, Sharda* apprehended two mother boats along with 7-8 skiffs. Ship undertook boarding and search operations, during which arms and ammunition were confiscated and thereafter boats were released in absence of any other piracy triggers.

(d) **MV JagAmar.** Whilst escorting Indian flagged vessel *MV JagAmar* (with 26 Indian crew onboard) in the Gulf of Aden on 06 Oct 17, *INTrishul* detected a pirate boat carrying out manoeuvres in the vicinity of the merchant vessel. *Trishul* closed the boat for investigation and launched her helicopter (with sniper embarked) towards the boat immediately. Under the surveillance of the helicopter, ship's boat with Prahar (Marine Commandos) boarded the pirate boat. All the piracy triggers including the AK 56 with rounds were confiscated by the ship's boarding team to prevent any piratical action by the boat crew. All Indian crew onboard *MV Jag Amar* was safe and the merchant vessel safely proceeded to her next port of call.

Foreign Cooperation

26. 36th Indian Scientific Expedition to Antarctica. Hydrographic survey team consisting of one Long Hydrography course qualified officer and one Hydrographic sailor participated in 36th Indian Scientific Expedition to Antarctica from Dec 16 to Mar 17 for surveying India Bay area.

27. Operational Sea Training – Foreign Ships. The maiden Staff Sea Checks (SSC) as part of Operational Sea training of Seychelles Coast Guard Ship *Topaz* (06-11 Feb 17) and Mauritius Coast Guard Ship *Valiant* (08-13 May 17) was undertaken which was tailor made to suit the respective ships and their equipment fit.

28. SAR Operations at Maldives. The Indian Navy was intimated by DA, Male about a SAR request from the Government of Maldives on 19 May 17, regarding a civilian Landing Craft *Maria 3* with six crew (including a lady) being missing. Immediately an Advanced Light Helicopter (ALH) of the Indian Navy which is deployed at Maldives was launched and *IN* ship *Kirch* which was deployed for EEZ surveillance of Maldives was diverted to the search area. Subsequently, on 20 May 17 an *IN* Dornier aircraft was deployed to augment the SAR operations. The Dornier detected *Maria 3* and directed *Kirch* to the Landing Craft. Despite inclement weather and rough seas, *Kirch* rescued all the crew members of *Maria 3* and safely handed over the crew members to the Government of Maldives.

29. 33rd Annual National Conference of the Marine Medicine and Allied Sciences. The 33rd Annual National Conference of the Marine Medicine and Allied Sciences was held at INHS Asvini, Mumbai from 31 Aug-01 Sep 17. The event served as a platform for multi-dimensional imbibing of ideas and concepts in the field of Naval medical services. 22 Delegates from 09 FFNs (Friendly Foreign Navies) (Indonesia, UAE, US, Bangladesh, Kenya, Oman, Sri Lanka, Myanmar, Vietnam) participated in the conference.

30. Foreign Service Attaches. A visit of Foreign Service Attaches (FSAs) was organised at Kochi on 21 Aug 17, and at Indian Naval Academy (INA) from 22-24 Aug 17.

31. Relief Material to Bangladesh by INS Gharial. As an aftermath of the Rohingya refugee crisis in Bangladesh, INS Gharial, an amphibious ship was loaded with 777 tons of relief material which was handed over to the Bangladesh Govt from 25-28 Sep 17.

32. Bangladesh Relief Operations. *IN* ship *Sumitra*, based on anticipation, was deployed in the Northern Bay of Bengal to provide immediate assistance in the aftermath of Cyclone 'Mora'. During this deployment, the ship rescued 33 Bangladeshis found stranded at sea and also recovered one body. On completion of search and rescue operation at sea, *Sumitra* entered Chittagong AM 01 Jun 17 for rendering HADR assistance. Govt of Bangladesh conveyed their gratitude to the Government of India and the crew members of *IN* ship *Sumitra* for rescuing Bangladeshi nationals at sea under difficult circumstances and for the relief supplies.

33. Relief Operations in Myanmar. After sailing from Chittagong, *IN* ship *Sumitra* proceeded to provide relief assistance to Myanmar, post cyclone 'Mora'. The ship visited Yangon from 06 – 08 Jun 17 during which she provided necessary assistance.

34. SAR Operations for Missing Crew of Mexican Ship Cuauhtemoc. A lady cadet had fallen overboard from Mexican Sail Training Ship *Cuauhtemoc*, on 11 Jun 17 in position 560 nm West of Goa. A total of four *P8I* aircraft sorties were undertaken from 11 – 13 Jun 17 for SAR. *IN* ships *Teg* and *Mysore* (with one *Chetak* and one *SK 42B*) were also deployed to undertake SAR operations. Unfortunately, the body of the lady Cadet was not sighted and the search was called off by the Mexican authorities on 16 Jun 17. Mexican Embassy conveyed its deep gratitude for the prompt and significant search effort mounted by the *IN*.

35. SAR Operations at Port Moresby. As part of the Eastern Fleet OSD, *IN* ship *Sahyadri* entered Port Moresby, Papua New Guinea (PNG) on 12 Jun 17. The Embassy of India, PNG requested the ship to undertake SAR operations to locate a PNG fishing vessel which was suspected to have sunk approximately 7nm from the coast off Port Moresby with four crew (two Fijians of Indian origin and two PNG nationals) onboard. *Chetak* helicopter (ex-*Sahyadri*) was launched and the capsized fishing vessel was detected. The ship informed the exact position of the capsized fishing vessel to the PNG authorities. Whereas one crew member swam ashore earlier, the three remaining crew members were not sighted by the helicopter.

36. Assistance to Iranian Boat. At 1215 h (IST) on 23 Nov 17, *INS Trikand* received a distress call from an Iranian Trawler 'Sheetab' in the Gulf of Oman. The trawler had 20 crew (all Iranian) onboard, including two minors, and was adrift for five days due to engine failure. Trawler was also short of water and rations. Technical crew of *INS Trikand* undertook repairs of the trawler. Requisite amount of Lub Oil, fresh water and provisions was also provided to the trawler after which it proceeded towards her destination. *INS Trikand's* assistance significantly helped stricken Iranian trawler crew and restored operational availability of the boat.

37. Goa Maritime Conclave (GMC). The maiden 'Goa Maritime Conclave' (GMC) was conducted at Naval War College, Goa from 01 to 02 Nov 17. Chiefs of Navy/ Heads of Maritime Agency/ representatives of

Bangladesh, Indonesia, Maldives, Malaysia, Mauritius, Myanmar, Seychelles, Singapore, Sri Lanka and Thailand attended the Conclave. The event was inaugurated by the Hon'ble Raksha Mantri Smt Nirmala Sitharaman at Naval War College, Goa on 01 November 2017. The Conclave was aimed at 'Addressing Regional Maritime Challenges' wherein the deliberations were focused on emerging maritime threats and force structuring, maritime domain awareness, maritime security architecture, and maritime security challenges in the Indian Ocean Region (IOR).

38. Hydrographic Assistance.

(i) **Survey of Tanzania.** INS Darshak was deployed for 33 days from 26 Oct 16, for the survey of Port Tanga. INS Sarvekshak has been deployed for 41 days from 14 Nov 17 to Tanzania for the conduct of hydrographic surveys based on requests received from Government of Tanzania. The deployment of IN surveying ships to East Africa and successful completion of surveys has once again proved Indian Navy's reach and capability and has contributed immensely towards strengthening the bilateral relations.

(ii) **Survey of Mauritius.** INS Darshak was deployed for 31 days from 03 Dec 16 to Mauritius for the conduct of hydrographic surveys based on requests received from Government of Mauritius.

(iii) **Survey of Sri Lanka.** INS Darshak was deployed for 56 days from 03 Mar 17 whilst INS Sutlej has been deployed for 59 days from 24 Oct 17 to Sri Lanka for the conduct of hydrographic surveys based on request received from Government of Sri Lanka.

39. Exclusive Economic Zone (EEZ) Surveillance. The IN regularly undertakes EEZ surveillance of Maldives, Mauritius and Seychelles.

(a) **EEZ Surveillance of Maldives.** During EEZ surveillance a special team from *Cankarso* consisting of IN divers carried out underwater hull welding onboard Maldives National Defence Force (MNDF) ship *Huravee*, thereby enabling the operational availability of the ship to the MNDF.

(b) **EEZ Surveillance of Seychelles and Mauritius.** IN ship *Tarkash* was deployed for EEZ surveillance and provided Outer Island Support to Seychelles and Mauritius from 21 Oct – 09 Nov 17. The ship undertook personnel and stores transfer from Port Louis to outer Island (which is about 600nm North of Port Louis) including transshipment of generator parts which were considered critical for providing electricity to the island.

40. Assistance to Merchant Vessel (MV) MSCDaniela. The High Commissioner of India, Colombo requested for Indian Navy's assistance to MV *MSC Daniela* (a Panama flagged container vessel) that had reported a fire onboard on 04 Apr 17, 24 nm West of Colombo. INships *Darshak* and *Gharial* along with Indian Coast Guard ship *Shoor* were deployed to undertake fire fighting operations. *Darshak's* helicopter was utilised for locating the seat of fire and directing fire fighting efforts which were undertaken by CGS *shoor*. The fire was brought under control on 06 Apr 17 and all crew were reported to be safe.

41. Supply of Water Jet Fast Patrol Vessels. India supplied two Water Jet Fast Patrol Vessels to Mauritius Coast Guard. The vessels named *Valiant* and *Victory* were constructed at M/s GSL under Indian Navy's supervision. Naval ships towed both the ships to Mauritius where they were commissioned into Mauritius Coast Guard on 10 Dec 16 and 16 Aug 17 respectively.

42. Commissioning of SLNS Sayurala. The first AOPV built by M/s Goa Shipyard Limited was handed over to Sri Lanka on 22 Jul 17. The AOPV was commissioned as *SLNS Sayurala* on 02 Aug 17 at Colombo by the Sri Lankan President. Vice Admiral AR Karve, FOC-in-C (South), attended the commissioning ceremony.

43. Medium Refit of Seychelles Patrol Ship Topaz. Seychelles Coast Guard ship Patrol Ship Topaz underwent Medium Refit at Naval Dockyard (Visakhapatnam) from Feb 16 to Jan 17. On completion of refit, the ship was ceremonially handed over to the Seychelles Coast Guard Commander on 16 Feb 17. The ship was thereafter towed back to Seychelles by INS Suvarna.

44. IN Dornier Detachment to Colombo, Sri Lanka. IN Dornier aircraft detachment was deployed to Colombo, Sri Lanka from 19 – 22 Jun 17. The Dornier detachment undertook training of eight Sri Lankan Navy personnel and five Sri Lankan Air Force personnel on operational capability of the Dornier including conduct of Search and Rescue operations.

Navy to Navy Interaction

45. Passing out Parade of INA, Reviewed by Commander of Sri Lankan Navy. VAdm Ravindra C Wijegunaratne, Commander of Sri Lankan Navy visited Indian Naval Academy (INA) from 26-27 May 17 for reviewing of the Passing Out Parade (POP). **This is the first occasion of a foreign dignitary reviewing the Passing Out Parade at INA.**

46. Exercises for IOR Littorals. In a significant step taken towards synergising our HADR efforts with that of our neighbours, the Indian Navy invited 'Observers' from Sri Lanka, Maldives, Bangladesh and Myanmar to participate in the '*Annual Tri-Service HADR Exercise*' conducted by the Indian Navy from 18 to 20 May 17 on the Western Coast. Further, to expose mid-level leaders of IOR littoral nations to Blue Water operations, the Indian Navy conducted 'Exercise **SAMBANDH**', from 25 to 25 Oct 17, wherein the Indian Navy's capabilities were showcased to 'Observers' from 18 Friendly Foreign Countries, which included, Sri Lanka, Bangladesh, Vietnam, Mauritius, Maldives, Seychelles, Mozambique, Oman, Myanmar, Thailand, Indonesia, Iran, Kenya, UAE, Malaysia, Qatar, Tanzania and Madagascar.

47. Refit of Mauritius Coast Guard Ship Guardian. IN is presently undertaking Service Life Extension Refit of MCGS Guardian at Naval Dockyard, Mumbai w.e.f. 01 Dec 17 for a duration of six months.

48. Repair Assistance to Sri Lanka Navy Ship Sagara. Based on a request from Sri Lanka, refilling of two Halon bottles of Fire Fighting System of SLNS Sagara was undertaken. The empty bottles were transported from Colombo by an IN Dornier, refilled by Naval Dockyard, Visakhapatnam and installed onboard during the Ship's port visit during SLINEX-17.

49. **Indian Ocean Naval Symposium (IONS)**. The IONS presently has 23 member countries with 09 countries being given observer status. Bangladesh is the current 'Chair' of IONS. The construct has become an important Maritime construct to promote maritime cooperation amongst the member countries. Accordingly, during the Conclave of Chiefs, held in Dhaka in Jan 16, among many important issues discussed, it was decided to conduct the IONS Multilateral Maritime Search and Rescue Exercise (IMMSAREX) in Bangladesh in Nov 2017. Also, IONS Working Group (IWG) Meetings on HADR and Information Sharing & Interoperability were conducted from 29 to 30 Jun at Mumbai and 25 to 26 Jul 17 at Islamabad respectively. The IONS Preparatory Workshop (IPW) to finalise the agenda for discussions during the next 'Conclave of Chiefs' was held at Pretoria, South Africa from 03 to 06 Oct 17. The IMMSAREX was conducted at Cox Bazar, Bangladesh from 26 to 29 Nov 17. CNS attended the Extraordinary Conclave of Chiefs (ECoC) conducted by Bangladesh on the side-lines of IMMSAREX on 28 Nov 17.

50. **Navy-to-Navy Staff Talks**. The Indian Navy held Staff Talks with the navies of a host of friendly countries during the year. Extensive discussions on maritime cooperation and bilateral issues were held with Bangladesh, France, Singapore, Maldives, Myanmar, Thailand, United Kingdom, UAE, Russia, Indonesia and Oman (inaugural), during the 'Staff Talks'. Operation interaction, cooperation in hydrography, training and sharing of White Shipping Information are a few common issues discussed during the 'Staff Talks'.

51. **Admiral's Cup**. 'Admiral's Cup' sailing regatta is being conducted annually by Indian Navy in Laser (Radial) class at Indian Naval Academy (INA) at Ezhimala, Kerala since 2010. The sailing teams comprising **Naval officer cadets/ midshipmen** and **one** Officer-in-Charge as team coordinator are invited from Friendly Foreign Countries (FFCs) to participate in the event. The event has also seen women participants from some of the Friendly Foreign Countries. The Admiral's Cup Sailing Regatta has gained popularity over the years and each consecutive edition has seen wider participation. During Admiral's Cup 2017 held at INA from 02-08 Dec 17, 27 foreign countries participated.

Commissioning and Decommissioning

52. **Commissioning of INS Kiltan**. INS Kiltan, the third ship of Project-28 Anti Submarine Warfare (ASW) Corvette was commissioned by the Hon'ble Raksha Mantri on 16 Oct 17. Commissioning of Kiltan is an affirmation of India's expertise in design and building of sophisticated warships and is a major step in pursuance of self-reliance through indigenisation. The ship has been designed by the Indian Navy's in house design organisation, Directorate of Naval Design, and built by M/s Garden Reach Ship Builders and Engineers Ltd Kolkata. INS Kiltan is the first major warship with entire superstructure made of carbon fiber reinforced composite material. Weapons and Sensors have been installed/ interfaced on a Composite Super Structure for the first time on a major warship like INS Kiltan.

53. **Commissioning of Landing Craft Utility (Mk IV)**. The first ship of the eight *INLCU* (Mark IV) Project, namely *INLCU L51*, was commissioned on 28 Mar 17 at Port Blair by Vice Admiral Bimal Kumar Verma, AVSM, Flag Officer Commanding-in-Chief, Andaman and Nicobar Command. The second ship, *INLCU L52*, was commissioned on 21 Aug 17 at Port Blair by Dr. Jagdish Mukhi, Lieutenant Governor, Andaman and Nicobar Islands.

54. **Commissioning of INS Tillanchang and INS Tarasa**. The third and fourth ships (Tillanchang and Tarasa) of the four Follow On Waterjet Fast Attack Craft Project were Commissioned on 09 Mar and 26 Sep 17 at Karwar and Mumbai respectively.

55. **Commissioning of INS Kalvari.** The first submarine of P-75, Kalvari, is scheduled for commissioning on 14 Dec 17.

56. **Decommissioning.** The Navy bid adieu to the aircraft carrier, INS Viraat, after an illustrious service of 30 years in the Indian Navy on 06 Mar 17. Indian Naval ships Agray, Matanga, Karwar, Kakinada and submarine Sindhurakshak were also de-commissioned in 2017.

57. **De-induction of TU 142 Long Range Maritime Aircraft.** The TU 142 M Long Range Maritime Aircraft of the Indian Navy were de-inducted on 29 Mar 17 at INS Rajali after rendering 29 years of yeoman service to the nation.

Launching of Ships

58. **NOPVs - Shachi and Shruti.** The first two ships of the series of five Naval Offshore Patrol Vessels, Shachi and Shruti, were launched in tandem on 25 Jul 17 by Smt Preeti Luthra, wife of the Flag Officer Commanding-in-Chief, Western Naval Command, Vice Admiral Girish Luthra, PVSM, AVSM, VSM, ADC at RNEL Shipyard, Pipavav, Gujarat.

59. **Yard 11876 (Khanderi).** The 2nd submarine of Project-75, namely Khanderi (Yard 11876), was launched on 12 Jan 17 at MDL by Mrs. Bina Bhamre, wife of RRM, Dr. Subash Bhamre.

60. **Floating Dock Navy -2.** FDN-2, being constructed at M/s L&T Shipyard at Kattupalli, was launched on 20 Jun 17 at Kattupalli near Chennai. The FDN-2 would be capable of docking ships with draft up to 7 metres and displacement up to 8000 tons.

61. **Start of Production - Project 17A.** Seven ships of Project 17A class of frigates are being indigenously constructed at M/s MDL, Mumbai (04 ships) and M/s GRSE, Kolkata (03 ships). Contract for these seven ships was signed on 20 Feb 15. These ships are being built using Integrated Construction methodology. P17A frigates would be fitted with advanced weapon and sensors suite and will have enhanced 'sleek and stealth' features. Steel cutting ceremony, commemorating the 'Start of Production' of First of Class (FOC) of P17A was held on 16 Feb 17.

Important Events of Interest

62. **MP/ MLA Day at Sea.** In pursuance of the Hon'ble PM's directives, a Day at Sea was conducted for MPs/ MLAs of Kerala State off Kochi on 10 Jan 17. The aim of this event was to provide an overview of the coastal security architecture of India and to assist the senior leadership of the state to appreciate the threats and challenges that can come from the sea.

63. **Operational Demonstration at Vijaywada.** Based on a request from the State Govt of AP, a mini naval demo was conducted at Vijaywada from 02-04 Feb 17. The demo showcased the good work being done by the

Navy through setting up professional and recruitment stalls and demonstrations of SAR , watermanship activities, and beating retreat by the naval band.

64. Award of President's Colours to Submarine Arm on the Occasion of Golden Jubilee of the Submarine Arm. The Hon'ble President awarded President's Colours to the submarine Arm of the Indian Navy on 08 Dec 17 at Visakhapatnam.

65. Coast to Coast Outreach Programme – Valsura. As part of the platinum Jubilee celebration of INS Valsura, the Indian Navy commemorated the event with a unique "Coast to Coast" social outreach programme to connect with the children and youth of the country along both coasts. A mega road trip in five cars covered a distance of 6000 kms touching all major naval establishments and places of Naval Maritime Heritage enroute. The Naval team interacted with local populace, war veterans and widows and visited schools and colleges to spread awareness about the Indian Navy.

66. Indian National Cartographic Association (INCA). The 37th International Congress of the Indian National Cartographic Association (INCA) was organised by the National Hydrographic Office, Dehradun from 01-03 Nov 17. The Hon'ble Governor of Uttarakhand Dr. KK Paul was the Chief Guest. The Congress was attended by over 300 prominent scientists, academia and cartographers from various government departments and universities. Over 60 professional paper on the theme "Geoinformatics for Carto diversity and its Management" was presented in the congress.

67. Safety Award by Govt of Kerala. A number of Safety initiatives have been taken by various units of the Navy. A notable achievement was Naval Aircraft Yard (Kochi) being assessed by the Dept of Factories and Boilers, Kerala State for implementation of various safety measures and was adjudged the winner.

68. International Military Music Festival "Spasskaya Tower". The International Military Music Festival "Spasskaya Tower" is the parade of the best military music bands of Russia and other countries that takes place every year at Red Square in Moscow. Every year about 1500 musicians, military men and other artists from around 40 countries perform at the "Spasskaya Tower". The Indian Tri- Services Band comprising of 07 Officers and 55 PBORs also participated in the event scheduled from 23 Aug - 04 Sep 17. The Naval Band component comprising of 01 officer and 09 musician sailors was led by Commander Satish K Champion, Command Musician Officer, Eastern Naval Command. The band undertook number of praiseworthy and enthralling musical performances during the event.

69. 'Dilli' Seminar. The Fourth Edition of the prestigious 'Dilli' Seminar at INA was conducted from 12-13 Oct 17. The theme of the seminar was '**India and Southeast Asia-Maritime Trade, Expeditions and Civilizational Linkages**'. The Dilli series Seminar is conducted once a year with a view to provide a common platform to luminaries and professionals in the field to share their knowledge and wisdom with officers, faculty members and cadets of INA.

70. Deputation of Indian Navy Mobile Training Teams(INMTT). To address the growing training load of international training,one of the important measure being undertaken is the conduct of customised training courses

overseas to meet country-specific requirements. The customised training courses are undertaken by **special**ly constituted Mobile Training Teams. So far, *IN* has deputed IN MTTs to Oman, Myanmar, Kenya, Vietnam, Mauritius, Bangladesh and Nigeria. Requests from certain other FFCs are under consideration. It will not only reduce burden on our own training infrastructure but also effectively increase our training footprint across the world. The courses conducted abroad in 2017 to date are highlighted below: -

- (a) **Training of MNDF.** An officer and four MARCOS were deputed to Maldives for conduct of Asymmetric warfare training for MNDF Marines from 27 Mar-19 Apr 17.
- (b) **Diving Refresher Course.** Personnel from Diving School were deputed for training MNDF personnel from March 26 – April 13, 2017.
- (c) **Short Term Training Team (STTT) To Oman.** 'Training Management' Course for the Officers and 'Training Technology' Course for the Sailors was conducted from 27 Feb – 25 Mar 17.
- (d) **IN Mobile Training Team – Myanmar (06 Mar – 26 May 17).** A Mobile Training Team comprising of three officers was deputed to Myanmar for three months to commence the Basic Submarine Familiarisation Training for trainees of the 1st Basic Submarine Course for Myanmar Navy. The training was imparted to 60 officers and sailors in two batches of 30 each.

Diving Assistance to Civil Authorities

- 71. **Diving Assistance for Rescue Ops.** Assistance was provided to Goa State Authority for removal of submerged remains of collapsed foot bridge on 18 May – 19 May 17. One dead body was also recovered by naval divers.
- 72. **Diving Operations to Recover Drowned Body of Foreign Tourist.** Diving assistance was provided to Goa State Government on 24 Sep 17 for recovery of mortal remains of a 29 year old Afghanistan national who had reportedly drowned at Sanquelim, Goa.
- 73. **HADR Exercise.** Based on the directives of Hon'ble PM during the CCC – 2016, a multi-agency HADR exercise has been coordinated by the Indian Navy on an annual basis. In 2017, two each observers from Sri Lanka, Maldives, Bangladesh and Myanmar were invited.
- 74. **Rescue of Crew Members of Tugboat Sonika.** On 17 Apr 17, *IN Seaking* helicopter, with divers onboard, successfully recovered four crew members of tugboat *Sonika*, which ran aground on the rocks in the waters off Raj Bhavan, Mumbai. The rescued crew members were provided necessary medical check-up and were found to be in good health.

75. Relief Operations in Gujarat. Gujarat received incessant and torrential rains commencing night of 14/15 Jul 17 which led to flood like situation leading to breakdown of road-connectivity, communications and electric supplies. To provide flood relief assistance, INbase Valsura immediately deployed two teams of divers and lifeguards in the district of Jamnagar, Dhrol and Morbi. The relief and rescue effort was augmented by nine Diving teams (Ex - Mumbai) which were deployed in the affected areas of Ahmedabad, Porbandar, BanasKantha, Patan, Deesa, Gochnad, Baragpur and Santhalpur from 26 Jul – 02 Aug 17. The teams successfully evacuated more than 600 villagers from these affected areas. IN Seaking helicopter (Ex Mumbai) which was operating from Ahmedabad airport undertook Search and Rescue operations, and recce along the Banas river to assess the extent of damage from 26 Jul – 01 Aug 17. In addition, IN ships *Gomati* and *Kochi* were deployed with HADR bricks to Porbandar. Ships provided about 250 bricks/packages towards relief ops.

76. Mumbai Flood Relief Operations. Mumbai received incessant and torrential rains on 29 Aug 17 which led to flood like situation leading to breakdown of road-connectivity, communications and electric supplies. A Crisis Management team under Flag Officer Maharashtra Area (Area Commander) assembled on 29 Aug 17 to assess the situation. Areas were allocated to various units with the instructions for distribution of food, medical aid (as required) and provision for night shelters (at Colaba, Ghatkopar, Malad and Worli) for the stranded individuals. Publicity on electronic and social media was undertaken regarding the shelters, including locations and phone numbers, so that stranded individuals could be guided to the shelters. Additionally, seven diving teams, nine rescue teams, one Seaking 42C helicopter and one ship (with relief material and helicopter) were kept standby to provide relief assistance, if required. An aerial recce of the affected low lying areas was also undertaken on AM 30 Aug 17 to determine the extent of flooding with a view to augment relief efforts.

77. Flood Relief at J&K. Two teams of Marcos were deployed for flood relief cum rescue operation in Behrampur and Ningli respectively in Apr 17. The team was able to rescue 25 women and children stranded in flooded houses and provide relief with respect to ration and supplies in conjunction with 22 RR and at the same time maintaining the safety of own personnel and equipment. The efforts of the team were greatly appreciated by the locals.

International Level Sports Championships

78. ISSF World Cup Shooting Competition. The following shooters represented the country in the event scheduled from 23 Feb - 04 Mar 17 at New Delhi:-

<u>Sl</u>	<u>Name</u>	<u>Rank</u>	<u>No.</u>	<u>Event</u>
(a)	Omkar Singh	MCPO I (QA)	133386-A	10 M Air Pistol 50 M Free Pistol
(b)	Rahul Poonia	CPO LOG (F & A)	404386-K	50 M Prone

79. **Mix Fencing Championship.** The under mentioned fencers of Navy Fencing team represented the country during the championship held from 17 - 19 Feb 17 at Kuwait:-

<u>Sl</u>	<u>Name</u>	<u>Rank</u>	<u>No.</u>
(a)	Satish Garnaik	PO COM (TEL)	235337-H
(b)	Vishal Thapar	NA (AH) II	244206-R

80. **2nd Indo Bhutan Shooting Championship (Big Bore).** Following shooters represented country during the above championship held from 06 – 13 Apr 17 at Kadarapur, Haryana:-

<u>Sl</u>	<u>Name</u>	<u>Event</u>	<u>Achievement</u>
(a)	Rahul Poonia, CPO LOG (F&A), 134588-H	300 M Three Position	Gold (Individual) Gold (Team) with new record
		300 M Prone	Silver (Individual) Gold (Team)
		300M Three Position Standing	Silver (Individual) Silver (Team)

81. **11th ISCH International Shooting Championship.** Pratik Borse, SSR/UT, No. N-10391 represented country in championship held from 05 - 15 May 17 at Hannover, Germany and won **Bronze Medal** in 10M Air Rifle events.

82. **7th Senior Asian Artistic Gymnastics Championship.** The following members of Navy Gymnastics team represented the country in the championship held from 16-21 May 17 at Bangkok (Thailand):-

<u>Sl</u>	<u>Name</u>	<u>Rank</u>	<u>No.</u>	<u>Remarks</u>
	Rakesh Patra	CPO PT	219218-B	Player

	Abhijeet Kumar	Ag PO PT	N-10383	Player
	Arik Dey	Ag PO PT	N-10365	Player
	AK Samantray	MCPO II (PT)	177157-F	Coach

83. **ISSF World Cup**. Omkar Singh, MCPO I (GW), 133386-A represented the country in ISSF World Cup held from 06-14 Jun 17 at Gabala, Azerbaijan.

84. **Jr Asian Wrestling Championship**. The following wrestlers represented the country in the championship held from 15-18 Jun 17 at Taichung, Chinese Taipei:-

<u>Sl</u>	<u>Name</u>	<u>Rank</u>	<u>No.</u>
	Praveen Kumar	STD II	404970-N
	Vijay Kumar	SSR/UT	245542-A
	Pushpender	SSR/UT	N-10416

85. **2017 Asian Junior Wrestling Championship**. The following members of the Navy Wrestling team represented the country in above championship held from 15 - 18 Jun 17 at Taichung, Chinese Taipei.

<u>Sl</u>	<u>Name</u>	<u>Rank</u>	<u>No.</u>	<u>Remarks</u>
(a)	Vijay	UT(SSR)	245542-A	Player
(b)	Praveen Kumar	LOG STD II	404970-N	Player
(c)	Pushpendra Singh	UT(SSR)	N10416	Bronze Medal

86. **XXVII International "G Kosanov Memorial"**. The following members of the Naval Athletics team represented the country in the competition held from 23-26 Jun 17 at Almaty, Kazakhstan:-

<u>Sl</u>	<u>Name</u>	<u>Rank</u>	<u>No.</u>	<u>Remarks</u>
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(a)	Tajender Pal Singh Toor	Ag PO (PT)	195225-W	Gold Medal
(b)	Bibu Mathew	MCPO II (PT)	136297-T	Coach

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National Level Championships

87. 65th Senior National Kayaking / Canoeing Championship. Indian Navy Kayaking / Canoeing Team participated in the 65th Senior National Kayaking/ Canoeing Championship held from 09 - 13 Jan 17 at Indore and won medals as follows:-

<u>Sl</u>	<u>Name</u>	<u>Rank</u>	<u>No.</u>	<u>Event</u>	<u>Achievement</u>
(a)	A Ching Ching Singh	CPOPT	195220-H	K4 1000 M	Gold Medal
(b)	S Arvind	SSR/QA	230319-B		
(c)	L Naocha Singh	HII	404390-W	K2 500 M	Gold Medal
				K2 200 M	Gold Medal
				K4 200 M	Gold Medal
(d)	Mohit Gahlawat	EMAR I	223138-H	C4 200 M	Gold Medal
(e)	Siva Sankar TB	Ag PO LOG (SC)	403860-R		
(f)	M Charan Singh	H II	404113-R	C4 500 M	Gold Medal

Mountaineering Adventure

88. Naval Mt Everest Mission - “Sagartal se Sagarmatha 2017”. Naval Mt Everest mission ‘Sagartal se Sagarmatha’ was flagged off by the Chief of the Naval Staff on 23 Mar 17. The team comprising of 18 climbing members and 06 Everest Base Camp(EBC) members commenced their expedition on 04 Apr 17 by undertaking a 16 days trek from Jiri (near Kathmandu), to the Everest Base Camp, thus gaining height gradually and acclimatizing in the process. The team could place the Naval Ensign on top of Mt Everest at 8848 mts on 21 May 17 and 27 May 17 and Mt Lhotse, its sister peak at 8516 mts, on 25 and 27 May 17. The team has performed well with eleven members having summited the two peaks on the 21st, 25th and 27th May 2017.

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THE INDIAN AIR FORCE

Acquisitions

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1. **Light Combat Aircraft (Tejas).**In consonance with the 'Make in India' campaign launched by the Prime Minister, the first Squadron of Tejas, an advanced multirole aircraft with state-of-art avionics was formed on 01 Jul 16. This year the aircraft participated in the Republic Day Flypast, Aero India and in the AF Day flypast.

2. **Su-30 MKI.**Induction of Su-30 MKI aircraft in the IAF is under progress. The current lot of Su-30 MKI aircraft are being manufactured in HAL through Transfer of Technology. Advanced indigenous weapons like 'BrahMos' supersonic cruise missile and 'Astra' Beyond Visual Range (BVR) missile has been indigenously integrated and fired from aircraft.

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3. **Rafale.**Inter Governmental Agreement (IGA) was signed with the Govt. of France for procurement of 36 Rafale aircraft on 23 Sep 16. The squadrons are expected to form by 2022.

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4. **Hercules C-130J-30.**IAF has inducted additional six C-130J all-weather transport aircraft which is designed for Special Operations. The aircraft has proven its worth in a number of HADR operations in Nepal, Bihar and J&K. The aircraft was instrumental in the operations against ANEs at AF Station Pathankot and deployment of para military troops in Srinagar. IAF is enhancing the operational capability of the ac by procuring Night Vision Goggles.

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5. **Mi-17 V5 Helicopters.**IAF has been operating Mi-17 V5 and case for procurement of additional helicopters is in progress. Mi-17 V5 helicopter is specially designed with full glass cockpit, advanced avionics, weather radar and powerful aero engines for high altitude operations. The helicopter is being exploited for various civil and military operations such as transportation, paratrooper induction, search & rescue, medical evacuation and fire fighting in all weather conditions. The Night Vision Goggles compatibility enables its unhindered operations even during low visibility and dark night conditions.

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6. **Sensor Fuzed Weapon.** IAF has procured Sensor Fuzed Weapons and associated equipment which can be utilised against concentration of tanks and other mechanized vehicles. Weapon integration has been completed in Sep 2017.

Upgrades

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7. **MiG-29 Upgrade.** The MiG-29 aircraft are being upgraded with state of the art avionics, an array of smart air to air and air to ground weapons. The addition of in-flight refuelling capability on MiG-29 upgrade has significantly increased its combat potential. The first phase of the project was Design & Development (D&D) in

Russia. The Series Upgrade in second phase of the remaining aircraft is being undertaken in India, at the Base Repair Depot, Nasik.

8. **Advanced Light Helicopter Mk-IV.** Advance Light Helicopter has been further developed into ALH Mk-IV version. It has been transformed into armed platform by integration of various modern weapons. ALH Mk-IV is armed with rockets, guns and air to air missiles for carrying out the armed role.

9. **MLH Upgrade.** Contract for upgrade of Medium Lift Helicopters was signed with M/s Elbit Systems Ltd on 30 Jan 17. The upgrade will improve the Electronic Warfare (EW) and night operations capability of the fleet.

10. **Restoration of Vintage Flight.** Vintage aircraft of World War-II era form an important part of Indian aviation and heritage of the IAF. One Tiger Moth and one Harvard aircraft, after restoration, are operating in IAF colours. Being an integral part of most air displays, both aircraft have enthralled audiences all over the country. They remind us of our rich aviation heritage besides motivating the young generation.

11. **Procurement and Upgradation of Aeromedical Simulators.** IAF is in the process of upgrading the existing aeromedical simulators and procuring new ones to enhance the operational training of aircrew using these simulators with the ultimate aim of achieving aerospace safety. Two Ejection Procedure Simulators have been installed at 1 and 2 Aero Medical Training Centres (AMTC) and are used for training aircrew in the correct procedure and posture to be adopted before ejection from a fighter aircraft. The Software and Hardware of the Spatial Disorientation (SD) Simulators installed at IAM and 1 & 2 AMTC have been upgraded in the month of Aug 2017. The state-of-the-art simulators are being operated by qualified aeromedical instructors of Indian Air Force who helps in enhancing aerospace safety and optimizing human performance.

12. **Software Defined Radio.** The contract for Software Defined Radio (SDR) was signed in Jul 2017. The SDR will be integrated on various IAF Airborne and Ground platforms, and will enhance Network Centric Warfare capability of the IAF.

13. **AEW&C (Indigenous) System.** The first DRDO designed and developed Airborne Early Warning & Control (AEW&C) system, aboard Embraer-145 aircraft, was inducted in the IAF in Feb 2017. The state of the art Active Electronically Scanned Array based Radar system can detect airborne objects from far off distances and provides early warning to the Air Defence Command and Control Centres. AEW&C is a huge leap by India towards achieving self-reliance in development of military capabilities.

14. **Pechora & OSA-AK.** Pechora missiles are being refurbished with a fresh lease of life for 10 years. The process involves extensive technical examinations of missiles frames/components, testing, repairs and replacement of propellants, indigenised by Ordnance factories. The equipment is planned to be digitised from the existing valve-based technology. The missiles of OSA-AK have been refurbished with the help of Bharat Dynamics Ltd, Hyderabad.

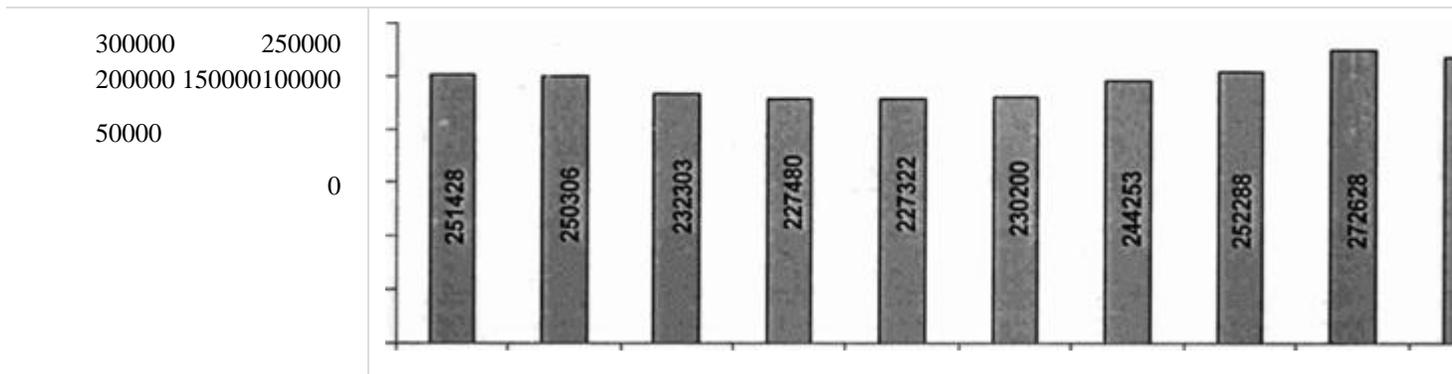
15. **SPYDER LLQRM System.** The SPYDER Low Level Quick Reaction Missile system, equipped with Python 5 and Derby missiles, has been inducted into the IAF. This system provides a comprehensive response to the saturation attacks with multiple target engagement, thus boosting the short range AD capability.

16. **MRSAM.** On completion of successful Verification Firing Tests of MRSAM system by DRDO, IAF is in the process of inducting these systems. MRSAM is capable of engaging targets from extreme low altitude to high altitude and very close range to medium ranges. This extremely capable Area Air Defence weapon networked in the modern IACCS system of IAF would defeat all types of hostile targets, including those with extremely low RCS, even in a dense jamming environment.

Operations

17. **Flying Efforts.** There has been a constant increase in the flying efforts by IAF.

Financial year wise flying efforts by IAF for the past ten financial years are depicted below:-



18.

2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
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Modernisation of Airfield Infrastructure (MAFI). IAF has modernised 25 bases out of planned 30 bases as on date with advanced navigational aids and Cat-II Airfield Lighting system under MAFI Project Phase-I. Work execution at remaining 5 bases is under progress.

19. **Joint Use of IAF Bases.** IAF has opened up 30 of its airfields and seven Advance Landing Grounds (ALGs) in North-East for joint use and extended watch hours of various airfields to accommodate more number of civil scheduled flights. Further, 20 Conditional Routes have been cleared within IAF restricted airspaces, for use of civil airlines, thereby reducing the time of travel and saving of fuel & reducing carbon footprint.

20. **Flight Trials.** The following flight trials were undertaken for the indigenously developed air launched weapons:

- (a) **500 Kg General Purpose (GP) Bomb.** Indigenously designed and developed by ARDE, partial flight trials were conducted from Su-30 MKI ac in the month of May 17.

(b) Thermobaric Bomb. Flight trials of indigenously developed thermobaric bomb, was undertaken during the same period on MiG-27 UPG aircraft.

(c) Precision Guidance Kit for 450 Kg HSLD Bomb (PGHSLD-500). Captive flight trials of PGHSLD-500 along with 450 Kg HSLD were conducted during the same period from Su-30 MKI aircraft.

(d) Flight Trials of SANT Missile. Captive flight trials of Stand-off Anti Tank (SANT) Missile, designed and developed by RCI Hyderabad in association with IAF, was undertaken on Mi-35 helicopter.

Security

21. In the aftermath of Pathankot incident, IAF re-assessed its Security Resources and training aspects of its personnel. It was therefore decided to raise Security Training Schools at Bhatinda (Punjab) and Naliya (Gujarat). The basic aim was to enhance physical fitness and combat efficiency air warriors. Composite Security Training Courses (CSTCs) are being conducted at Bhatinda and Naliya with effect from 01 Aug 16. A total of 5766 air warriors including 603 Officers and 5163 airmen have been trained so far at Security Training Schools.

Defence Co-operation with Foreign Countries

22. Ex SIAM BHARAT-2017. A Command Post Exercise (CPX) was held in Chiang Mai, Thailand from 22 - 26 May 17. 11 member IAF team participated in the exercise.

23. Russia: Tri Service Exercise INDRA-2017. Ex Indra-17 was held in Russia from 19-29 Oct 17. HQ IDS was the steering agency for Ex Indra-17. IAF participated with 1 x IL-76 along with 80 personnel chosen from various areas of core competencies. Additionally, one IL-76 was utilised for induction/de-induction of the contingent.

24. Ex Blue Flag-2017 (OUT). IAF participated in a multilateral exercise, Blue Flag-2017 at Uvda and Nevatim AFB, Israel from 05-16 Nov 17. The IAF contingent included 1 x C-130 ac and 45 personnel including Garuds. DG Air (Ops) attended the Distinguished Visitor's Day of the exercise at Uvda and Nevatim AFB, Israel on November 14, 2017.

25. Joint Military Training (JMT-17). Joint Military Training (JMT-17) with Republic of Singapore Air Force was held at AFStn Kalaikunda from 29 Oct 17 as part of Bilateral agreement with RSAF. RSAF inducted 6 x F-16 C/D on November 6, 2017 and de-inducted on 14 Dec 17. Bilateral phase of JMT-17 was held from 27 Nov 17 to 11 Dec 17.

HADR Operations

26. Airlift of Oil Tankers. Due to Manipur economic blockade, a total of **two** 20KL oil tankers and **twelve** 12KL oil tankers were airlifted from Guwahati to Imphal, between 22 Jan 17 and 22 Feb 17, employing the C-17 and IL-76 aircraft.

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27. **Srinagar Bi-Election**. In view of Srinagar Bi-Election, C-17 aircraft were tasked to airlift CRPF personnel from Imphal to Srinagar from 01-04 Apr 17. A total of 856 CRPF personnel and 60 tons of loads were airlifted.

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28. **Rajasthan Flood Relief (24 Jul 17 - 02 Aug 17)**. IAF helicopters were used during the flash floods in Rajasthan, where in 3.25 T of food packets were air dropped for in the areas affected by floods.

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29. **Flood relief in UP, Bihar and Assam (13 Aug 17 -24 Aug 17)** IAF deployed C-17 and AN-32 fleet to airlift NDRF and Army teams to undertake rescue missions in flood affected areas in Purnia due to heavy rainfall in Aug 2017. The aircraft was also used to move relief material to AF Stn Purnia to meet the demand of the flood affected region. Further IAF deployed Mi-17 V5 helicopters at Purnia to undertake distribution of relief materials. IAF undertook around 300 missions for evacuating more than 1500 personnel and distributing 570 T of relief materials.

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30. **Rescue of Foreign Nationals**. IAF helicopters rescued stranded foreigners from high peaks in Ladakh regions on various occasions. Air effort was provided for search and rescue of citizens of Switzerland in Jul 2017, Israel and Germany in Aug 2017, Italy, New Zealand, Sweden and USA in Sep 2017.

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31. **Relief Mission for Rohingya Refugees- Bangladesh**. Two C-17 aircraft airlifted 107 tons of relief material from Delhi to Dhaka, Bangladesh on 14-15 Sep 17 as an aid to the Rohingya refugees in Bangladesh.

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32. **Relief Mission for Rohingya Refugees — Myanmar**. One C-17 aircraft airlifted 42 tons of relief material from Delhi to Yangon (Myanmar) on 24 Nov 17 as an aid to the Rohingya refugees in Myanmar.

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33. **Anti-Naxal Ops**. 04 X Mi-17V5 MLHs, 02 x Mi-17 MLHs and 01 x ALH Mk-III helicopters are deployed since Oct 2009 in support of MHA for Anti-Naxal operations, code named 'Op Triveni'. The Mi-17V5s are deployed two each at Raipur and Jagdalpur and the Mi-17s operate ex-Ranchi. ALH Mk-III operate ex-Raipur/Jagdalpur. All operations are undertaken as per 'Joint SOP' and 'Rules of Engagement' for 'OP Triveni' approved by MHA and MoD.

34. **Op Sahayam (SAR for Missing Fishermen at Trivandrum)**. In the aftermath of cyclone 'Ockhi' the IAF unrelentingly pursued HADR missions, by employing its air assets, and rescued 17 fishermen from the sea. Additionally, one C-130J was kept ready at Hindan along with NDRF team and load to be flown directly to Agatti, Lakshadweep Islands, in case of any contingency.

Make In India

35. One of the main focus areas of the IAF is to support indigenisation and manufacturing of defence equipment, thus reducing dependency on import of defence equipment. Light Combat Aircraft, Akash Missile, Advance Light Helicopters (ALH) have already been inducted, thus giving impetus to indigenisation. Further, IAF

plans to induct more capable and potent LCA Mk-IA in the future. IAF is also actively supporting DoD of LCH, RPAs, Medium Power Radars, Low Level Tracking Radars and other systems. IAF is also closely coordinating with DRDO for development of various types of state of art weapons.

36. Modernisation plan is being pursued to beef up the defence manufacturing base and the eco system. IAF has already identified series of defence equipment that can be manufactured under 'Make' category. MoD has been striving to include the private sector in production of defence equipment. Various projects under 'Strategic Partner' model will give impetus to 'Make in India' initiative. This will not only generate employment, enhance skill level but also assist in harnessing key technologies for growth of aerospace sector in the country.

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Digital India Initiative

37. AFCEL Project. IAF has established pan IAF captive 3G WCDMA Mobile Network AFCEL. The network has been fully operational with voice call and data services. In-house initiatives have also seen development of the following apps:-

- (a) Instant Messaging App (AFCHAT)
- (b) IAF Directory Search App
- (c) Conference Scheduler App
- (d) Caller-ID App
- (e) Air Force Central Accounts Office (AFCAO) App and Website.
- (f) MedWatch App

Women Empowerment

38. Induction of Women Pilots in the Fighter Stream. On 18 Jun 16, three light Cadets - Avani Chaturvedi, Bhawana Kanth and Mohana Singh created history by becoming the first women pilots to be commissioned into the fighter stream. These women pilots, now Flying Officers, have been posted to MiG-21 Bison and Hawk units as Sqn Pilots on successful completion of their fighter flying training.³⁹ A second batch of women cadets also have been selected in Fighter stream in Jun 2017. Presently, they are completing Stage-II (Fighter) training at Air Force Station Hakimpet and are expected to be commissioned into the Fighter stream in Dec 2017 after successful completion of their training.

Honours and Awards

39. The Hon'ble President of India has conferred the following Gallantry Awards to the IAF personnel during the year 2017:-

(a) 26 Jan 17

(i) Vayu Sena Medal (Gallantry) – Four

(b) 15 Aug 17

(i) Vayu Sena Medal (Gallantry) – Two

(ii) Mention-in-Despatches – One

40. Award of President's Standards. The President's Standard was awarded to 125 (H) Squadron and Colours to MTI at Air Force Station Tambaram on 03 Mar 17. Further the President's Standard was awarded to 223 Squadron, AF and 117 HU, AF on 16 Nov 17 at Air Force Station Adampur.

41. Gold Medal in Commonwealth Shooting Championship. Sergeant Shahzar Rizvi won Gold medal in 10M Pistol at Commonwealth Shooting Championship held at Gold Coast, Australia from 28 Oct 17 to 08 Nov 17. In addition, Sergeant Deepak Kumar won Bronze medal in 10M Air Rifle.

42. Expedition to Mt Dhaulagiri. Three airwarriors from IAF, Squadron Leader Kevin Nishanth, Corporal JS Raina and Corporal Ravindar summited Mt Dhaulagiri peak and hoisted the IAF flag on top of the seventh highest peak in the world on 20 May 17. The team was flagged-in by the Chief of Air Staff, Air Chief Marshal BS Dhanoa PVSM AVSM YSM VM ADC, on 21 Jun 17.

43. Visit of IAF Skydiving Team to Sri Lanka (09 Jul to 14 Jul 17). IAF Skydiving team visited Sri Lanka from 09 Jul to 14 Jul 17. The team consisted of jumpers from Paratroopers' Training School Agra as well as from Dte of Adventure. IAF skydiving team consisting of a total of 18 Air Warriors.

44. Trekking Expedition to Tololing Heights. The Directorate of Adventure conducted a Commemorative Trek to Tololing Heights in 16-23 Aug 17 and 24-31 Aug 17. Two groups of total 56 serving and veteran Air Warriors participated in the trekking expedition. The trek rekindled the memories of participants who had taken part in Op Safed Sagar in 1999. Keeping the spirit of its motto 'Touch the Sky with Glory', besides remembering the sacrifice of military personnel during the operations, this expedition also aimed to promote adventure activities in IAF and gratitude to warriors who sacrificed their lives for the country.

45. Joint IAF — BSF Camel Expedition. Nine women Air Warriors of IAF took part in all women camel expedition in desert areas of Gujrat, Rajasthan and Punjab which was jointly executed with Border Security Force. The expedition was flagged off from Barmer, Rajasthan on 15 Aug 17 and was flagged in at Attari (Amritsar, Punjab) on 02 Oct 17.

46. Flag off ceremony: IAF Mountaineering Expedition to Mt Vinson. A team of IAF mountaineers has successfully scaled highest peaks of six continents and is now embarking on last of the culminating expedition to Mt Vinson in Antarctica to complete 'Mission Seven Summits'. A team of 05 IAF mountaineers led by Gp Capt RC Tripathi VM (Gallantry) have been embarked on the mountaineering expedition to Mt Vinson (4897 mtr) on 13 Dec 17. The expedition has been flagged off by Air Chief Marshal BS Dhanoa PVSM AVSM VSM VM ADC, Chief of the Air Staff on 08 Dec 17 in a befitting ceremony.

47. Tri Services Military Band Performance at Russia. One officer and 11 other ranks from IAF have participated in the Tri-Services Military Band which was invited by Russia to participate in the 10th International Military Music Festival-2017 held from 24 Aug to 03 Sep 17 at Red Square, Moscow, Russia.

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Miscellaneous

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48. President's Parchment Commission. Govt sanction has been accorded for issue of President's Parchment Commission Certificate to Master Warrant Officers/Warrant Officers granted Honorary Commission. Accordingly, all Master Warrant Officers/Warrant Officers granted Honorary Commission on 26 Jan 16 or thereafter are being issued with President's Parchment Commission Certificate akin to the sister services.

49. The e-Maintenance Management System (e-MMS). The e-MMS project has been implemented for centralised and web based e-maintenance solution for the IAF. The project is conceptualized on Digital India model and is one of the largest Maintain Repair Overhaul (MRO) IT implementation project in the World. This would help IAF to transform from paper based legacy maintenance system to an online system. The Project would be implemented at 170 sites of IAF covering the entire spectrum of assets. The solution was rolled out at Air Force Station Pune in May 2016. Subsequently, on 09 Jun 17, the application has also been rolled out at Air Force Station Gwalior. Various activities are in progress to complete the project by Dec 18 across all 170 bases.

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50. Inauguration of Online Examination Web Portal of Indian Air Force by Honble RRM Raksha Rajya Mantri Shri Subhash Bhamre inaugurated the online examination web portal of Indian Air Force on 11 Dec 17. **A MoU was signed by IAF and CDAC on 31 Oct 17.** For Scheduled Test planned in Mar 18, online registration will open from 05-29 Dec 17 and online test will be conducted on 10-11 Mar 18.

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51. E-----Training. In line with Govt's Digital India initiative, IAF has taken a lead to bring about a paradigm change in the present training methodology for ab-initio air warriors. Towards this, an **e-Training** project for 400 ab-initio trainees at AF Stn Jalahalli in Bengaluru has been successfully implemented. Actions have been initiated to replicate a similar model at other Training establishments of the IAF.

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52. Foreign Training. IAF undertakes training of trainees from Friendly Foreign Countries (FFCs) under the Indian Technical and Economical Cooperation (ITEC) scheme of Ministry of External Affairs. For the training year 2017-18 (01 Jul 17- 30 Jun 18), a total of 754 vacancies have been allotted by MEA to 22 countries in 125 various courses at 39 Training Establishments of the IAF. IAF officers are also being nominated to attend courses in various Friendly Foreign Countries (FFCs). IAF avails courses offered by USA, Bangladesh, UK, Japan, Australia, Indonesia, Thailand, Malaysia, Spain and various other countries.

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53. Centralised Disbursement System of Salary. The Centralized Disbursement System (CDS) of salary has been implemented in the Indian Air Force with its formal launch on 03 Apr 17. The erstwhile system of disbursement of salary had certain inherent limitations which caused delays in compilation of expenditure under the Head "Salary". Implementation of the Centralised System of Disbursement of Salary through AFCAO has weeded out the stated limitations and dispense acquaintance roll, revenue stamps and pay books.

National Cadet Corps

Achievements

1. The NCC conducts its assigned tasks through institutional training, which is carried out at schools and colleges, training camps at state and national level, social and community development programmes, Adventure training, Sports, and Youth Exchange Programmes (YEP).

2. A total of 1500 training camps are organized at the state and National level every year in which approximately 7.75 lakh cadets participate. There are other large number of adventure activities that NCC undertakes to develop the qualities of courage, camaraderie and team spirit. NCC also undertook expedition Microlight flying, sailing and rafting form the focus in the ensuing times.

3. **Adventure.** 20 girl cadets scaled technically challenging Mount Ladakhi 5343 m in Himachal Pradesh and 05 boy cadets scaled difficult Mount Jogin III 6116m in Utrakhand during the year. 10 cadets conducted a unique, one of its kind, Horse Riding Rally of 150 km covering 30 villages in Haryana. In addition to displaying riding prowess, the expedition also undertook activities to support “BetiBachao – BetiPadhao” along the route. Last year NCC also conducted 15 sailing expeditions in sea and rivers, conducted para jumping, scuba diving and slithering. In addition, 28 trekking camps were organized in which 14000 cadets took part.

4. **Sports.** Sports and Youth go hand in glove. During 2017, NCC won 14 medals in Mavlankar Shooting Championship and eight medals in National Shooting Championship. NCC Girls Team (U-17) played Bangladesh National Football team in Finals after defeating various State teams, while Boys Sub Junior team reached Quarter Finals of this tournament. In Jawaharlal lal Nehru Hockey Tournament, NCC Sub Junior team reached Semi Finals.

5. **Swachht Bharat Abhiyan.** NCC has participated in pan India campaign, in great numbers.

(a) **Swachhta Hi Sewa.** 11.54 lakh (90% of enrolled) cadets and staff participated from 15 Sep to 02 Oct 17. While focus of NCC has been in adopting villages/slums, many other activities like, Awareness Rallies, Poster/ Rangoli Making Competitions, Talks/Lectures/Debates in Institutions/Adopted Villages, NukkadNataks/ Plays & Pledge taking, etc. were also conducted.

(b) **Swachhta se Siddhi.** 5.55 lakh cadets wrote Essays & 1.95 lakh cadets produce digital films to elaborate how they have contribute towards the Swachhta in the country. Of these six cadets were felicitated by Hon’ble PM at New Delhi.

6. **International Day of Yoga.** A total of 7,52,392 cadets and staff participated in 5,833 venues including 8000 cadets at Lucknow where national mass Yoga Event was organized. A comprehensive Yoga Action Plan, drawn in April 17, much appreciated by all was shared with MoD, Min of AYUSH and all NCC State Directorates.

7. **Social Service & Community Development Programmes** : All social service activities are being conducted & monitored strictly as per the Action Plan issued to all in the beginning of training year.

(a) **Swachh Bharat Abhiyan.** This is one of the central themes of NCC activities this year. Two major event under this programme where in NCC made outstanding contribution are as under:-

(i) **Swachhta Sankalp Se Swachh Sidhi.** 5,55,238 cadets

participated in Essay Writing and 1,94,834 cadets took part in Film Making competitions organized by Ministry of Drinking Water & Sanitation. **Six NCC cadets were awarded by Hon'ble Prime Minister on 02 Oct 2017.**

(ii) **Swachhta Hi Sewa.** The event was inaugurated by Hon'ble President in Kanpur on 15 Sep 2017. A total of 11,53,750 cadets and staff (90% of enrolled strength) participated pan India in this event during the Swachhta Pakhwada from 15 Sep to 02 Oct 2017.

(b) **Miscellaneous.**

(i) **Youth Exchange Programme.** Four delegations consisting of 8 officers & 50 SD & SW cadets visited Russia, Vietnam and Kazakhstan.

(ii) **Induction of Microlite.** A total of 110 new microlites are being inducted to NCC. A total of 32 microlites have been operationalised as on date.

(iii) **Flood Relief Operations in Assam & Uttar Pradesh.** NCC cadets made outstanding contribution during flood relief operations by assisting civil administration in distributing relief material and safe evacuation of people.

(iii) **Participation in Awareness Run/ Rallies.** NCC has always been the forefront of spreading awareness on various social issues. Participation of cadets in all such events has always been overwhelming. During this period a large number of NCC cadets participated in events like Pinkathon, Mini/ Half Marathon organized by Territorial Army Directorate, Rally for Rivers etc.

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Indian Coast Guard

AVIATION:-

1. The details of Medical evacuation undertaken by ICG Madives Dhruv Flight for the duration from 01 Jan 17 to 01 Dec 17 are as follows:-

Month	No. of Mission	Lives Saved	Remarks
Jan 17	03	03	<p><u>14 Jan 17.</u> A 37 years old patient, diagnosed with decompression injury having drowsiness and difficulty in breathing was evacuated from Fiyolari health center to Gan.</p> <p><u>16 Jan 17.</u> A 70 yrs old patient diagnosed with dyspnoea, orthopnoea, uncontrolled diabetes mellitus, severe anaemia and acute respiratory failure with difficulty in breathing was evacuated Naifru Island to Male.</p> <p><u>27 Jan 17.</u> A patient with head injury and fractured 4th and 5th left metatarsal bones was evacuated from Villingili Island health center to Kaadedhdhoo.</p>
Feb 17	06	06	<p><u>03 Feb 17.</u> a 46 yrs Male patient, diagnosed with wedge fracture of lumber 3 vertebra, non-union fracture of left femur and open fracture of left 3 & 4 metatarsal was evacuated from Muli Island to Male`.</p> <p><u>11 Feb 17.</u>a 27 yrs male patient diagnosed with gross pelvic fracture with disruption of public symphysis resulting in bladder injury with haematuria was evacuated from Kadhdhoo to Male.</p> <p><u>13 Feb 17.</u> A 62 yrs Male French National (Tourist) patient suffering from multiple closed fractures of shaft and open fracture of lower end of tibia-fibula of left leg was evacuated from Gemanafushi Island to Male.</p> <p><u>17 Feb 17.</u> A 75 yrs patient suffering from severe haematuria, neuropathic syndrome and stricture urethra associated with severe pain was evacuated from Bandidhoo Island to Male.</p> <p><u>18 Feb 17.</u> A 79 yrs patient diagnosed with major fracture of humerous at the neck having pain and restricted movement of the left shoulder was evacuated from Nilandhoo Island to Male.</p> <p><u>25 Feb 17.</u> A 67 yrs Male patient diagnosed with LH stroke having weakness of upper/ lower left sided limbs, severe vomiting in semi-conscious state and no response to verbal command was evacuated from Fuvahmulah Island to Male.</p>
Mar 17	02	01	<p><u>02 Mar 17.</u> A 77 Yrs patient diagnosed with fracture of right leg</p>

			<p>femur bone evacuated from Kudahuvadhoo Island to Male`.</p> <p>26 Mar 17. The flight was launched for MEDEVAC From Gan – Fuvahmulah – Gan however, nil medical evacuation was undertaken.</p>
Apr 17	01	01	<p>13 Apr 17. A 18 yrs Male patient, diagnosed with Acute Pancreatitis was evacuated from Fuvahmulah Island to Gan.</p>
Jul 17	02	02	<p>21 Jul 17. A 52 yrs male patient suffering with Numbness, weakness of lower limb and urinary retention was evacuated from Thinadhoo Island to Gan.</p> <p>23 Jul 17. A 50yrs male patient suffering with Numbness, weakness of both lower limbs and urinary retention was evacuated from Thinadhoo Island to Gan.</p>
Aug 17	01	01	<p>22 Aug 17. A 28 yrs male patient suffering with Numbness, weakness of both legs and severe chest pain The patient was evacuated from Fiyori Island to Gan.</p>
Sep 17	03	05	<p>08 Sep 17. 02 patients, 38 year female and 56 year male patient diagnosed with vaginal bleeding and severe pain in right lower abdomen and Acute coronary syndrome / Unstable angina respectively was evacuated from Kudahuvadhoo and Faresmaathodaa Island to Male`.</p> <p>08 Sep 17. A patient diagnosed with was evacuated from and flown 08:30 hrs towards this mission.</p> <p>13 Sep 17. A 71 year male patient diagnosed with severe pain over right pelvic and suspected hip fracture was evacuated from Bandidhoo Island to Male`.</p> <p>14 Sep 17. A 97 year male patient brought in unconscious state after an episode of fainting while walking was evacuated from Naifaru Island to Male`.</p> <p>27 Sep 17. Three male patients (32, 38 & 24 years) diagnosed with decompression sickness and reportedly had numbness and pain in various part of body were evacuated from Thinadhoo Island Addu Atoll.</p>
Oct 17	05	05	<p>11 Oct 17. A 35 weeks pregnant lady suffering from severe back bone injury coupled with pregnancy complications was evacuated from Dhiyamigili to Kadhdhoo and a 02 days infant diagnosed with severe respiratory distress was evacuated from Thinadhoo Island to Male`.</p>

			<p><u>12 Oct 17.</u> A 76 yrs female patient suffering from right middle lobe pneumonia and hypocalcaemia was evacuated from Funadhoo Island to Male`.</p> <p><u>13 Oct 17.</u> A 34 Yrs male patient suffering from decompression sickness and urinary retention was evacuated from Faresmathadhoo Island to Gan.</p> <p><u>23 Oct 17.</u> A 29 Yrs male patient suffering from decompression sickness having fatigue and severe pain in left thigh muscles was evacuated Thinadhoo Island to Gan.</p>
Nov 17	02	02	<p><u>11 Nov 17.</u> A 77 Yrs Female patient diagnosed with upper GI bleeding (occult blood positive) was evacuated from Fuvahmulah to Male`.</p> <p><u>30 Nov 17.</u> A 62 Yrs old man patient diagnosed with inferior wall myocardial infarction having severe chest pain and breathlessness was evacuated from Dhiyamigili Island to Male`.</p>
Dec 17	01	01	<p><u>01 Dec 17.</u> A 74 Yrs old man patient in unconscious state was evacuated from Madifushi to Male`.</p>
Total (Upto 01 Dec 17)	28	29	

SHIP ACQUISITION

2. Contract for acquisition of 15 Work Boats for ICG at a total project cost of Rs.24,00,50,000 has been signed with M/s SHM Shipcare, Mumbai on 28 Nov 17. The first Work Boat will be delivered not later than 18 months from date of signing of contract and subsequent boats will be delivered at intervals of three months.

PLANS & BUDGET

3. 13 New surface platforms were inducted into service during the period augmenting the CG fleet strength to 134 ships.

Border Roads Organisation

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1. Landmark events/achievements pertaining to Border Roads Organisation are as under:-

(a) At present BRO is working on 852 roads (22803 Km), which include new construction, as well as improvement from single lane to double lane. BRO is also maintaining 322 roads of approximately 7315Km length and five Airfields besides now clearance of 138 roads (4,325 Km) to ensure connectivity of border regions with rest of the country.

(b) Achievements of Work Targets : BRO has achieved the following targets of road construction during the period from 01 Jan 2017 to 30 Nov 2017.

Item	A/U	Achievement 2017-18
Formation Works	Km Eqvt Cl-9	569.05
Surfacing Works	Km Eqvt Cl-9	1356.56
Resurfacing Work	Kms	759.79
Permanent Works	Lacs	73396.00
Major Bridges	Mtr	1711.10
Tunnel	Lacs	23562.00

2. Details of Important works undertaken during this FY are as under :-

(a) **Construction of Highest Motorable Road in Ladakh.** Project Himank has constructed the World's highest motorable road in Ladakh region of Jammu and Kashmir, passing **Umingla Top** at a height of 19,300 feet. This strategically important road of length 86 Km, connects border villages (Indo-China border) Chismle and Demchok to the mainland of Leh and will play important role in safe movement of troop to Indo-China border.

(b) **Inauguration of Bridge by Mrs Nirmala Sitharaman, Hon'ble Raksha Mantri Under Project Himank in J& K.** A pmt bridge SHYOK-I of 60 m span has been inaugurated by Hon'ble Raksha Mantri on Road D-S-DBO under Project Himank in J&K. on 30 Sep 2017.

(c) **Inauguration of Three Bridges in Assam by MoS Home.** Following bridges have been inaugurated by Shri Kiren Rijiju, MoS Home on road Orang- Kalaktang-Shergaon-Rupa-Tenga (OKSRT) on 14 Apr 2017:-

S/No	Name of Bridge	Location in Km	Span of Bridge in Mtr
(a)	Sher Bridge	38.500	35
(b)	Shikari Bridge	37.645	40
(c)	Balmu Bridge	48.510	60

(d) **Inauguration of Deopani and Injupani Bridge.** The construction of Major pmt Bridge of 300 m length on Deopani (Eze) river at km 2.00 on road Roing-Hunli and major pmt Bridge of 140.40 m length on Injupani river at Km 649.10 on road Roing-Koronu-Paya under Project Udayak in Arunachal Pradesh have been completed. These bridges are ready for inauguration.

(e) **Completion of Bridge on Manali-Sarchu Road at Koksar.** Two Pmt Bridges on Manali-Sarchu road at Koksar have been completed during Jun 2017 and opened for traffic on 03 Jul 2017.

S/No	Loc (Km)	Name of the Bridge	Span (M)	Class
(a)	71.200	Koksar-I	70	70R
(b)	71.900	Koksar-II (Multi Cell Box Culvert)	30.20	70R

(f) **Bhini Bridge.** The Construction of Pmt Bridge of 259 M (07x37 M) 70 R, PSC Box type Double lane bridge has been completed at Km 42.59 on road Dhar-Udhampur under Project Sampark in J&K State. This was inaugurated by **Dr Jitendra Singh, Hon'ble Minister of State, Ministry of Development of North Eastern Region (Independent Charge) & Minister of State in Prime Minister Office, Govt of India, on 18 Oct 2017.**

(g) **Longwinti Bridge.** The Pmt Bridge 60 m of Cl-70R has been completed at Km 14.52 on road Changwinti-Walong-Namti under Project Udayak in Arunachal Pradesh (District Anjaw). This shall facilitate the movement of troops towards Indo-Mayanmar Border in Arunachal Pradesh and also help locals for their day to day activities.

(h) **Important Bridges on Rd D-S-DBO.**

(i) Wks on three Bailey Bridges on rd D-S-DBO has been completed and opened for traffic during FY 2016-17.

(ii) **Progress of Permanent Br at Km 150 on Road DS-DBO.** Due to typical terrain/river bed conditions, sub structure of the permanent bridge of 1,400 ft at km 150 is based on micro pile technology. Results of test piles have been obtained and the design and drawing for Micro Pile foundation for all the nine piers and two abutments has been approved on 28 Apr 2017. The work on micro pile foundations for piers has already commenced on site and planned to be completed during the current FY.

(i) **Completion of Bridges on Gangtok Chungthang Road.** Two bridges at following loc have been completed and open for traffic.

(j) 42 m RCC bridge (B-III) at Km 10.80 inaugurated on 13 May 2017.

(k) 42 m RCC bridge (B-IX0 at Km 36.05 completed and inaugurated on 19 may 2017.

(l) **Theng Tunnel.** To avoid frequent landslides at Km 86.00 on roadGangtok-Chungthang a horse shoe shaped NHDL specification tunnel of length 578 m had been planned. As on dated 95 % construction has been completed. The work on tunnel is in full swing and is expected to be completed by end of Dec 2017.

(m) **Visit of Mrs Nirmala Sitharaman, Hon'ble Raksha Mantri to Rohtang Tunnel Under CE (P) Rohtang in Himachal Pradesh.** Ground breaking ceremony of Rohtang Tunnel under CE (P) Rohtang Tunnel in Himachal Pradesh was graced by Mrs Nirmala Sitharaman, Hon'ble Raksha Mantri and COAS along with DRDO Chairman Dr S Christopher on 15 Oct 2017.

(n) **ICBRs.** Out of 61 ICBRs entrusted to BRO, 27 roads of 962 Km are completed and works on the balance roads are under progress and are in different stages of completion. Also, connectivity to two ICBRs has been achieved during 2017-18 totalling to basic connectivity achieved in 23 ICBRs.

(o) **Connectivity of Road.**

(i) ICBR Road Hapoli-Sarli-Huri (278 Km) under project Aruanank in Arunachal Pradesh has been connected at Km 32.30 (toward Huri) on 31 Aug 2017. Thus, Hapoli-Sarli Huri road is no more Heli maintained and now it is expected to speed up the completion of the road.

(ii) Connectivity established between Km 20.00 to Km 71.00 on Ghatiabagarh-Lipulekh road an operationally priority Road.

(p) **Appreciation to 81 RCC / Project Vijayak for Launching of 100 ft DSBB on Jhankhar River.** Ladakh Autonomous Hill Development Council has appreciated to 81 RCC Project Vijayak for providing road connectivity to Niraq Village by launching of 100 ft DSBB (Jhankhar river) at Km 12.00 on road Yalchung- Niraq on 06 Nov 2017. This shall also boost the pace of construction activities of strategically important road Nimmu-Padam-Dharcha.

(q) **Disaster Management by BRO in North East Region.** In the recent calamity/disaster from 7th Aug 2017 onwards in North East Region, Bailey Bridge at Deopani had collapsed and road communication to Anini Roing region was cut off. 752 BRTF of Project Udayak has launched a bridge in a record time of 3 days, thereby providing great succour to the forces deployed in this region. Commitment of BRO pers in restoration of line of communication has been highly appreciated by Cdr 117 Mtn Bde through his DO letter.

(r) **OP Juniper.**

(i) **Physical Connectivity of Road Zodang-Donkyala-Kerang** Physical connectivity on road Zodang-Donkyala-Kerang to CI-9 specifications (19.25 Km length) connecting Lachen & Lachung axis in North Sikkim via Donkyala Pass (highest motorable Pass in NE region Alt-18024 ft) has been achieved.

(ii) All affected sinking area at Mile 5, Mile 8, Mile 10 & Mile 13 on J-N-M road have been addressed and will be black topped by end Nov 2017.

(iii) **Changu-Nakchok-Tamze.** The road Changu –Nakchok-Tamze in Sikkim under Project Swastik is 15.65 Km in length. The fmn cutting has been completed, 12.57Km surfacing work completed and connectivity has been achieved.

(iv) **Tamze-Chola.** The road Tamze-Chola in Sikkim under Project Swastik is 8.60 Km in length. The fmn cutting has been completed in all respects and 5 Km surfacing work has been completed.

(s) **Award of Surya Trophy by GOC-in-C Central Command.** 123 RCC of 21 BRTF/Project Shivalik has been declared as the best RCC by HQ Central Command and Surya Trophy shall be presented by GOC-in-C Central Command.

(t) **Unit Citation of Eastern Army command.** 23 BRTF of Project Arunank has been awarded the Unit Citation of Eastern Army commander. This is the first ever unit citation awarded by any Army Command to a BRO unit.

(u) **Promotion of Officers.** On approval of DPC for promotion from SE (Civ) to CE, order of promotion for seven officers has been issued on 30 Oct 2017.

3. Various initiatives taken by BRO and MoD to expedite infrastructure development works, especially on operationally/ strategically important roads are as under :-

(a) **Delinking of Pay and Allowances of BRO Pers from Works Estimates.** The case for delinking of pay and allowances of BRO personnel from works estimates has been with the Govt. since many years. With vigorous pursuance of the case and detailed reiterative deliberations with Ministry of Finance, MoD (Fin) and MoD (BR), the Govt. approval has been accorded by MoD (BR) vide their letter No.

BRDB/04/74/W&B/2012 dated 03 Apr 2017. This decision of the Govt. shall go a long way in better financial & administrative management in BRO with focus on works with greater efficiency and transparency. It shall assist in reducing the procedural complexities significantly and bring in clarity wrt the works budget demand from the Govt.

(b) **Revision of Fin and Administrative Powers in BRO.** Revision of financial and administrative powers wrt BRO has been received from MoD (BR) vide their letter No. F No. 04/696/2015/D&P (BR –I) dated 11 Aug 2017. The process was started in Dec 2015 and after protracted correspondence this has been achieved. It is a big step in empowering BRO executives.

(c) **Revision of criteria for down gradation of V/E/P.**

MJPS/NAO/NM/DK