

*Zee News  
19 Mar, 2016*

## **DRDO issues avalanche warning in next 48 hours in Jammu and Kashmir**

Chandigarh: An avalanche warning was on Saturday issued for higher areas of Jammu and Kashmir, advising people not to venture in these areas over the next 48 hours.

The advisory was issued by Chandigarh-based Snow and Avalanche Study Establishment (SASE), part of the Defence Research and Development Organisation (DRDO) here.

'Medium danger' avalanche warning exists for avalanche prone areas above 3,000 metres altitude in Baramula, Kupwara, Bandipur, Kargil, Rajouri, Gandarbal, Doda, Poonch, Riyasi, Ramban districts of Jammu and Kashmir, the advisory said.

Pharkian, Z-Gali, Banihal Top, Gulmarg, Haddan Taj and Neelam areas of Jammu and Kashmir witnessed fresh snowfall of 66 cm, 41 cm, 6 cm, 43 cm, 28 cm and 35 cm, respectively during last 24 hours.

In Himachal Pradesh, Dhundi and Patsio experienced fresh snowfall of 15 cm and 7 cm while Bahang and Solang Nala had witnessed rainfall of 20 mm and 15 mm, respectively, it said.

*DNA India  
19 Mar, 2016*

## **Iron Fist 2016: Indian Air Force's greatest show of air power**

The event was last held in 2013. Pokhran firing range in Rajasthan became famous after India's nuclear tests, code-named 'Smiling Buddha' in 1974 and the 'Shakti' series in 1998. Spread over 100s of square kilometres of thinly populated area, it is the largest practise and test firing range in India. On March 18, Indian Air Force (IAF) put up its greatest ever show of air power. The event was witnessed by the President Pranab Mukherjee, Prime Minister Narendra Modi, cabinet ministers and political leaders, and the entire military brass. Also present were the air attachés of various countries. The attachés of China and Pakistan were not invited as these countries do not invite their Indian counterparts for similar exercises. The event earlier called 'Vayu Shakti' got its current name 'Iron-Fist' when last held in 2013. The exercise logo shows an Iron Fist with a long arm to depict the long reach of the IAF. The Himalayan eagle perched on top with wings spread wide portrays IAF's readiness for flight.

Welcoming the guests, Air Chief Arup Raha said "IAF's glorious history was replete with saga of professional and boundless energy displayed by our Air warriors in the face of insurmountable odds. Exercise Iron Fist was aimed at showcasing the operational strength of a transforming IAF and assuring the nation that the safety of its sovereign skies lies in very capable hands." Earlier the Vice Chief Air Marshal BS Dhanoa, in a press conference, cited former US president Theodore Roosevelt's quote, "Speak softly and carry a big stick".

The event was a showcase of all facets of air power and was packaged into six themes covering IAF's transformation, net-centric operations, air-defence, combat support, night ops and soft power. All manned and unmanned aircraft, air-to-air and surface-to-air weapons, and Special Forces took part. This demonstration of accuracy and lethality was a time to show the business end of IAF and its capability to punish and to send deterrence signals to adversaries. 181 aircraft flew in 69

missions. The 103 fighters included the indigenous Tejas (LCA), Su-30 MKI, Mirage 2000, MiG-29, Jaguar, MiG-27 UPG, MiG-21 Bison and the Hawk advanced jet trainer. The 59 helicopters included the Mi-17 variants, Mi-35 attack helicopters, the indigenous Dhruv ALH and the Light Combat Helicopters. The aircraft took off from different IAF bases and in a continuous flow arrived over target in a synchronised manner. The range was prepared with a large number of realistic looking structures simulating a variety of targets. Two huge screens in front of stands gave crew details and also the IR/Optical picture from the 'Heron' UAV flying overhead. The events were spread over day, dusk and night. It began with three Mi-17s carrying the flags of India, IAF and South Western Air Command. A sonic-salute to the President meant a MiG 29 breaking the sound-barrier over the stands. A MiG-27 streamed the Exercise logo banner. The vintage Tiger Moth and Harvard aircraft flew as a reminder of IAF's past. Integrated Air Command and Control System (IACCS) coordinated arrivals at designated Time-over-Target (ToT). Joint-man-ship was displayed with the Army and National Security Guard (NSG) participating in specific exercise scenarios.

The unfolding Make in India success in military aviation was on showcase. A special feature was the swing role capability displayed by the Tejas which in the first pass dropped a laser-guided bomb on a ground target and then fired an air-to-air R-73 missile on a simulated air target. Tejas was fresh after its maiden foreign display at Bahrain air show. Tejas had recently successfully firing the BVR Derby Air-to-Air missile at Jamnagar and now awaits clearance to fire the Close Combat Missile Python-5 in the near future. The Su-30, in public for the first time, fired the DRDO designed Astra air-to-air Beyond Visual Range (BVR) missile. The DRDO's Akash surface-to-air missile was also demonstrated. The HAL LCH fired rockets on simulated tanks. There was also a simulated aerial combat demonstration. The spectators also got to witness the less seen A50 AWACS and DRDO AEW&C. A Short Landing and Take-off by C-130J Super Hercules was demonstrated on an unpaved runway. Mid-air fuel transfer from the IL-78 to Su-30s was showcased. Combined Ops by NSG and Garud dropped by a Mi-17 V5 in an urban scenario were greatly appreciated by the dignitaries.

The night event was a military version of Diwali. Night bombing run was performed by Mirage2000, Mig-27, Jaguar and Su-30 fighters and the Mi-17 and Mi-35 helicopters. Boeing C-17 and An-32 aircraft paradropped Army's Special Forces at night. All aircraft fired Infra-red flares at night to show themselves to the crowds. 128 rockets leaving a Mi-17 in three seconds can obliterate any target in the battle area. The ten thousand pounder bombs that the AN-32 dropped shook the visitors stand.

IAF's most enthralling soft power included an aerobatic display by the highly manoeuvrable Su-30 MKI, and synchronised aerial ballet by the Sarang and the Surya Kiran Aerobatic teams. The IAF Symphony orchestra and Drill Team engaged the spectators during the refreshment break. IAF once again showcased that it is not just the fourth largest air force in the world, but also a potent fighting machine with the all-weather capability to deliver lethal fire power. Presumably, the politicians and bureaucrats could see what the money invested would actually do and got the confidence that country was in safe hands. Hopefully, they will be more conscious when they push the files 'Up or down'. The foreign attachés would have got the signals of the strength from this emerging power. IAF's brethren in Army and Navy will feel more secure. IAF continues to give importance to the 'human behind the machine' and uphold its mission statements— "People First, Mission Always" and "More you sweat in peace, Less you bleed in war".

*Deccan Herald*  
*19 Mar, 2016*

## **Indigenous jets showcase fighting abilities**

Pokhran (Rajasthan): The indigenous Tejas fighter jets and light combat helicopter (LCH) on Friday showcased their war fighting capabilities in an air exercise involving 180 aircraft, where Astra and Aakash missiles were also fired.

Tejas dropped a laser guided bomb on a target whereas LCH fired 70 mm rockets, days after integration of these rockets were successfully demonstrated in a test in Jaisalmer.

The Army and Air Force (IAF) require 179 of these armed choppers that are being manufactured by the Hindustan Aeronautics Limited.

The weapon delivery of the homegrown fighter jet and armed chopper at the IAF Chandan range near the India-Pakistan border is probably an indication of Tejas and LCH getting ready for induction into the IAF, decades after they were conceptualised. The R-73 missile fired by Tejas, however, missed the simulated target, which was a flare attached to a parachute. IAF officials said in reality targets would be bigger with higher radar cross section. This is the first time indigenous Astra and Akash missiles were fired before a civilian audience.

Among the audience for the "Exercise Iron Fist 2016" were President Pranab Mukherjee, Prime Minister Narendra Modi and Defence Minister Manohar Parrikar, who are responsible to find out a solution for the IAF's depleting squadron strength because which the force admits its inability to take on China and Pakistan simultaneously.

Early induction of Tejas - developed at a cost of Rs 5,777.56 crore (\$ 930 million) was conceived as one of the solutions. But arming the homegrown jet remains one of the bottlenecks of using these fighter aircrafts in operational role.

In September 2015, Parrikar informed Parliament that the IAF indicated a requirement of 100 Tejas Mk-1A but no formal order was placed as yet. The plan is to complete the manufacturing between 2018 and 2022-23.

Development of the Tejas Mk-2, though it was sanctioned in 2009, the actual work could not begin before December 2013, because of the delay in finalising the engine contract.

The first flight of the first prototype of Tejas Mk-2 was scheduled by December 2009 and operational clearance is likely to be obtained in December 2022. The Mk-2 version will have active electrically scanned array radar, unified electronic warfare suite, on-board oxygen generation system and upgraded avionics in addition to a better engine.

## PACKING A PUNCH



- An IAF chopper displays firepower at an exercise in Pokhran on Friday. PM Modi witnessed the demonstration. >>P10 PTI



A Su-30MKI of the Indian Air Force fires a missile during an air strike exercise at Chandan firing range in Pokhran on Friday. Over 180 aircraft and air warriors took part in the IAF's scintillating display of might which left the audience, including President Pranab Mukherjee and PM Narendra Modi, spellbound. The demonstration of operational and firepower capabilities by fighter jets, choppers and transport aircraft during the day-night exercise, named Iron Fist 2016, showcased over 22 types of platforms and weapons systems

## IRON FIST: IAF'S SHOW OF FORCE

The Indian Air Force's Friday show at its biggest air-to-ground firing range in Pokhran had 'Make in India' written all over it. Here are the highlights of the exercise held once every three years.



■ IAF's firepower show – Exercise Iron Fist – in Pokhran. IAF demonstrated its combat and firepower, including the Akash Missile, for the first time, in the desert of Pokhran on Friday.

SONU MEHTA/HT

**181** aircraft, including 103 warplanes, were displayed at the Chandan firing range

■ The line-up included Akash surface-to-air missile; Sukhoi-30 fighters launching the beyond-visual-range missile Astra; a light combat aircraft dropping laser-guided bombs and a BVR missile; and a light combat helicopter firing rockets

■ The US-made C-17 heavy lifter dropped para-commandos. Fighters that took part in the display included Su-30s, Mirage 2000s, Jaguars, MIG-21s and upgraded variants of MIG-27 and MIG-29

■ The exercise comes at a time

when the fighter squadron count has shrunk to 33. The strength desired to fight a combined threat from Pakistan and China is 42

■ The President, the Prime Minister and the Union defence minister attended the exercise.

## दुनिया को कराया ताकत का अहसास

**जैसलमेर,** (विमल भाटिया): भारतीय वायुसेना ने दुनिया को अपनी ताकत का अहसास करवाते हुए जैसलमेर की पोकरण फील्ड फायरिंग रेंज के चांधण क्षेत्र में शुक्रवार को फायर पावर में अपनी मारक क्षमता का जोरदार प्रदर्शन किया। मेक इन इंडिया की तर्ज पर तेजस, आकाश, आवाक्स, लाइट हेलीकॉप्टर के साथ 181 विमानों ने अपनी काबिलियत दिखाई। वायुसेना के अब तक के सबसे बड़े युद्धाभ्यास आयरन फिस्ट को देखने के लिए राष्ट्रपति प्रणब मुखर्जी और प्रधानमंत्री नरेन्द्र मोदी सहित दुनिया भर के 40 से ज्यादा देश के प्रतिनिधि पोकरण पहुंचे। वायुसेना के जांबाजों

ने छद्म लक्ष्यों तथा दुश्मन के नकली रडार, सेना टुकड़ी, हथियारों का जखीरा, कंबाई, पेट्रोल पंप के रॉकेट्स, लेजर नियंत्रित बम, मिसाइल एवं फ्रंटगन को अचूक निशानों से ध्वस्त किया।

**नाइट फेज:** सबसे महत्वपूर्ण रहा रात का समय, जब लड़ाकू विमानों और हेलीकॉप्टर ने एक साथ काउंटर ऑपरेशन किया। इसमें टारगेट जैसे दुश्मनों के काल्पनिक रडार, टैंक, टैरिस्ट कैम्प, रनवे, यार्ड और बीएमपी जैसे ठिकानों को गाइडेड रॉकेट और मिसाइल से ध्वस्त किया। इस ऑपरेशन में कमांडो ने भी हिस्सा लिया। इस पूरे काम में ट्रांसपोर्ट एयरक्राफ्ट हरक्यूलस और एन-32

ने भी दुश्मनों को बर्बाद करने में अपनी सहायता का प्रदर्शन किया।

**फ्लाई पास्ट:** इस सोपान में पुराने विमानों से लेकर हाल में वायुसेना में शामिल आधुनिक विमानों ने एक साथ उड़ान भरते हुए भारतीय वायुसेना की 8 दशकों की ऐतिहासिक यात्रा को प्रदर्शित किया।

**वायु रक्षा ऑपरेशन :** अभ्यास में भारतीय वायु सेना के बहुस्तरीय वायु रक्षा ऑपरेशन में ईंधन भरने वाले विमान 'आई एन-78 की ओर से दो सू-30 विमानों को उड़ान के दौरान ईंधन भरते प्रदर्शित किया गया। इसी चरण में जमीन से आकाश में वार करने वाली मिसाइल जैसे कि कंधे पर रखकर दागी जाने

वाली इगला मिसाइल प्रणाली तथा ओ एस ए - ए के मिसाइल की ओर से आकाश में मौजूद लक्ष्य पर प्रहार किया। वायु सेना के बहुउद्देशीय हेलीकॉप्टर मी-35, मी-25 तथा मी-17 वी5 ने सामरिक खोज एवं बचाव ऑपरेशन का प्रदर्शन किया गया।

**उड़ान प्रदर्शन :** लाइव हथियारों के प्रदर्शन में सारंग, सूर्यकिरण तथा सू-30 एरोबेटिक दलों ने हैरतअंगेज हवाई करतब करते हुए इस आयोजन की संंध्या में चार चांद लगा दिया। एयरवॉरियर्स ड्रिल टीम के प्रदर्शन तथा वायु सेना सिम्फनी ऑर्केस्ट्रा संगीत ने दर्शकों को मंत्रमुग्ध कर दिया।



जैसलमेर के पोकरण फील्ड फायरिंग रेंज के चांधण क्षेत्र में शुक्रवार को स्वदेश निर्मित आकाश मिसाइल से भेदा गया लक्ष्य (नीचे) क्षमता का प्रदर्शन करते वायुसेना के लड़ाकू विमान।

**तेजस और आकाश मिसाइल ने साधे निशाने :** डे, डस्क और नाइट तीनों में ही एयरफोर्स ने अपनी अचूक मारक क्षमता का प्रदर्शन किया। इसमें मिग-21, बिसान, मिग-27, मिग-29, मिराज-2000, सुखोई एम.के.आई और जगुआर ने दुश्मनों के काल्पनिक ठिकानों को लेजर गाइडेड बम और मिसाल से ध्वस्त किया। भारत में निर्मित हल्का लड़ाकू विमान तेजस ने पहली बार युद्ध कौशल का प्रदर्शन किया। स्वदेशी तकनीक से बनी आकाश मिसाइल ने भी 27 किलोमीटर के लक्ष्य को सफलतापूर्वक नष्ट किया। तेजस को अभी वायुसेना में शामिल

नहीं किया है लेकिन इसकी क्लोयर्स की प्रक्रिया चल रही है। **ग्राउंड अटैक के जरिए मारक क्षमता :** पहली बार आवाक्स यानि एयर बॉन वारनिंग एवं कंट्रोल सिस्टम लड़ाकू विमानों को दुश्मनों की हलचल के बारे में पल-पल की जानकारी देता रहा, भारत में निर्मित लाइट कॉम्बैट एयरक्राफ्ट ने फायरिंग का प्रदर्शन किया। इससे पहले सूर्य किरण, सारंग और आकाश गंगा ने अपने एरोबेटिक प्रदर्शनों से लोगों का दिल मोहा। एम.आई-17 और एम.आई-35 ने भी अपने युद्ध कला का प्रदर्शन किया।