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Fri, 10 Aug 2018

India successfully tests local missile interceptor system

By Rahul Bedi

India's government-run Defence Research and Development Organisation (DRDO) has successfully test-fired its locally designed Advanced Area Defence (AAD) missile interceptor system off the country's east coast against a specific target concealed among multiple decoys. According to the government's Press Information Bureau (PIB), the endo-atmospheric AAD interceptor, which is stated to be capable of intercepting targets at altitudes between 15 and 25 km, was launched from Abdul Kalam Island in the Bay of Bengal on 2 August against "multiple simulated targets of 1,500 km-class [medium-range] ballistic missiles". The AAD's radar tracked and locked onto one target – selected on a real-time basis – and "intercepted it with a high degree of accuracy", the PIB stated, adding that all mission objectives were met.

<https://www.janes.com/article/82272/india-successfully-tests-local-missile-interceptor-system>.



Fri, 10 Aug 2018

CAG Blasts Defence PSUs for Delays and Defective Items

By Shaurya Gurung

New Delhi: From failing to meet the Army's UAVs requirements to defective and life threatening parachutes and critical quality problems in the Pinaka rocket systems, the Comptroller and Auditor General has come down heavily on India's state-run defence research and production sector. In a report tabled this week in Parliament, the CAG states that two types of Unmanned Aerial Vehicle (UAV) could not be inducted into the Army due to severe delay in their development by the DRDO. Among issues listed are problems with the airframe, engine and payload that have impacted the Army's aerial surveillance capability. In a particular model's case, all four trial unmanned planes were lost to crashes. The auditor has said that Ordnance Parachute Factory Kanpur met production targets for parachutes only in five instances out of 49 analysed and faced complaints from the forces. This led to a critical shortage that adversely affected the operational preparedness of the two forces such as grounding of aircraft and efficiency of paratroopers. The CAG also highlighted quality problems in Pinaka rockets for the Army such as excessive short ranging, bursting of rockets and burning chunks of propellants.

But two Failure Analysis Boards could not pinpoint the exact problem in the manufacture of the rockets. With this, the CAG stated that the production of the rockets has not fully stabilised. Detailing problems with the 'Nishant' UAVs, the CAG pointed out that they failed to meet any requirements of the Army and all four given for trials crashed within three years of receipt. "Army found it unsuitable due to its inadequacy in meeting the surveillance requirement of the Strike Corps, because of its poor mission reliability, long preparation time and defect prone quality.

All the four UAVs crashed within three years of their receipt. Only one UAV ordered was replaced by the DRDO, which also crashed in November 2015 due to failure of

parachute recovery system,” reads a CAG report. In regard to parachutes, the CAG found that as the ordnance factory

RISKY, BIG FAILURES

did not meet production targets, there were significant shortfalls in Pilot Parachute for Mirage 2000 aircraft, Pilot Parachute Chest Type, Paratrooper Tactical Assault (Main) and Brake Parachute for Sukhoi-30 aircraft. The CAG also said that 730 parachutes valued at ₹ 10.80 crore did not achieve specified quality parameters but were passed by state run units with deviations. “Though the users (army and air force) expressed serious concern on the nature of the defects having flight safety implication and high risk in man dropping activity, undue delays in rectification or replacement of defective items by the ordnance factory led to critical deficiencies at the user’s depot and field units,” said the report.

MAIL TODAY

Fri, 10 Aug 2018

ISI gives anti-thermal jackets to Pak terrorists

By **Jitendra Bahadur Singh**
in New Delhi

THE Inter-Services Intelligence (ISI) has reportedly provided terrorists with around 200 anti-thermal jackets that can dodge hand-held thermal imaging (HHTI) devices used by Indian security forces on the Line of Control (LoC) and the International Border (IB) to prevent infiltration.

According to an intelligence report sent to the ministry of home affairs, such jackets have also been provided to Pakistani Army personnel who provide cover fire to terrorists trying to sneak into Jammu and Kashmir.

Pakistan has developed the jackets itself instead of importing them, BSF sources told INDIA TODAY TV.

Security agencies are on high alert after the report

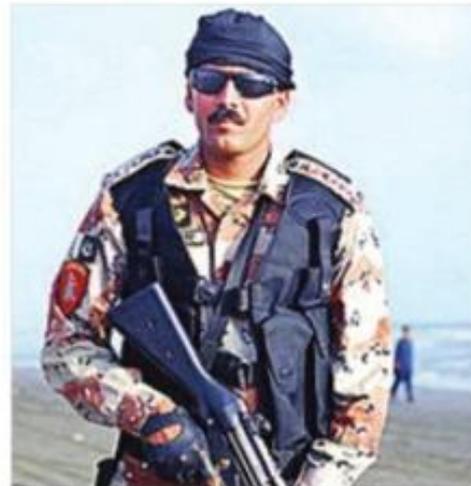
Security agencies are on high alert following the intelligence report.

HHTI devices form images by sensing the heat emitted by a human/animal allowing the user to see the object’s heat radiating off itself. The devices record the temperature of an object and assign each temperature a shade of a colour.

The use of anti-thermal jackets was recently discovered when Pakistani Rangers started firing at BSF personnel in Jababal area of Arnia sector, Jammu, though no movement was detected along the border.

Later, a video recording of the thermal imaging showed a peculiar object trying to sneak in.

Lieutenant General (retired) and defence



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expert Vinod Bhatia told INDIA TODAY TV that “in view of a very effective counter-infiltration grid with surveillance devices capable of detecting terrorists infiltrating from across the LoC, the ISI is planning to employ anti-thermal jackets”.

According to Major General (retired) and security expert PK Sehgal, Indian forces deployed along the LoC and the IB are on full alert.

“India forces used a five-tier detection system — laser walls (fences), aerostat balloons, night vision devices and cameras and drones. Therefore, terrorists cannot infiltrate easily,” he said.

India Today TV

Fri, 10 Aug 2018

Indian telescope spots distant radio galaxy

Astronomers have used an Indian telescope to discover the most distant radio galaxy ever known, located at a distance of 12 billion light-years. The galaxy, from a time when the universe was only 7% of its current age was found using the Giant Metre wave Radio Telescope (GMRT) in Pune. GMRT is an array of thirty fully steerable parabolic radio telescopes of 45-metre diameter. It is operated by the National Centre for Radio Astrophysics. The distance to this galaxy was determined using the Gemini North telescope in Hawaii and the Large Binocular Telescope in Arizona.

The galaxy is perceived as it looked when the universe was only a billion years old, according to the study appearing in the journal *Monthly Notices of the Royal Astronomical Society*. This also means that the light from this galaxy is almost 12 billion years old.

"It is very surprising how these galaxies have built up their mass in such a short period of time," said Aayush Saxena from Leiden Observatory in the Netherlands. "Bright radio galaxies harbour super massive black holes. It is amazing to find such objects as early in the history of the universe; the time for these super massive black holes to form and grow must have been very short," said Huub Rottgering, also from Leiden Observatory.

Black hole at the centre

Radio galaxies are very rare objects in the universe. They are colossal galaxies with a super massive black hole in their centre that actively accretes gas and dust from its surroundings. This activity initiates the launch of high-energy jet streams, which are capable of accelerating charged particles around the super massive black hole to almost the speed of light. The discovery of such galaxies at extremely large distances is important for our understanding of the formation and evolution of galaxies, researchers said.



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Indian telescope farthest reach

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at radio wavelengths. The fact that such galaxies exist in the distant universe has surprised astronomers. The discovery of such galaxies at extremely large distances is important for our understanding of the formation and evolution of galaxies, researchers said. Studying these radio galaxies in detail also sheds light on the formation of primordial black holes, which have driven and regulated the growth of galaxies, they said.



Fri, 10 Aug 2018

After CAG Fire, Def Min Looks into UPA's Naval Aircraft Deal

New Delhi: After the central auditor tore into a \$ 2.2-billion deal signed by the UPA to procure P-8I maritime reconnaissance aircraft by hinting at favouritism, the defence ministry is dusting through the files of the contract signed in 2009 as part of an internal inquiry into the matter. The matter also took political colour with a Twitter storm by senior government ministers who charged in a series of similar posts that the deal put national security at risk and that the UPA bought 'defective spy planes'.

The naval aircraft deal came under fire after the CAG said in a report that Boeing was favoured as the government 'enhanced' a financial bid by the only competitor EADS CASA, Spain during the selection process. The auditor alleged that if the proper price determination model was followed, the European offering of the A 319 plane would have turned out cheaper. The CAG has alleged that the American platform does not fully meet the requirements of the Indian Navy due to capability limitations of radars installed onboard and that critical ammunition for anti-submarine warfare has not been procured.

Sources said that contract files are being reviewed by the ministry after the audit report and some discrepancies have come to sight at the preliminary stage. If the government determines that the matter needs to be probed further, investigative agencies could also be brought into the picture at a later stage. While the UPA did sign the ₹ 2.2 billion deal in 2009 to meet urgent requirements of the Navy, the NDA government too ordered at least four additional planes given the positive feedback from the forces. This deal, valued at \$1 billion was inked in 2016 and the aircraft are expected to join the Navy soon.

Senior ministers including Piyush Goyal, Rajyavardhan Rathore and Uma Bharti took to twitter on Thursday to attack the UPA over the deal. The Twitter storm comes after a sustained attack on the government by the opposition as well as former BJP leaders Arun Shourie and Yashwant Sinha over the Rafale fighter jet controversy.



Fri, 10 Aug 2018

'Nasa solar probe's shot at discoveries off the charts'

newdelhi: The possibilities of discoveries by the Parker Solar Probe the first spacecraft to "touch" the sun are "off the charts" as it will visit a completely unexplored region of the solar system, according to Madhulika Guhathakurta, a Kolkata-born astrophysicist at Nasa. The Nasa spacecraft will blast off from Florida's Cape Canaveral on August 11 and will become the first mission ever to fly through the Sun's atmosphere, known as the corona. "This mission is extraordinary in its ability to overcome the technological challenges of this harsh environment... and send back data scientists have sought for decades," Madhulika told.