

समाचार पत्रों से चयित अंश Newspapers Clippings

दैनिक सामयिक अभिज्ञता सेवा

A Daily Current Awareness Service



रक्षा विज्ञान पुस्तकालय
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तेजस से मिसाइल का सफल परीक्षण



नई दिल्ली, (भाषा): हल्के लड़ाकू विमान तेजस से हवा से हवा में मार

करने वाली मिसाइल का सफलतापूर्वक परीक्षण किया गया। इससे मानव दृष्टि से परे अपने लक्ष्य पर सटीक निशाना लगाने वाली मिसाइल से तेजस को शक्तिसम्पन्न करने का मार्ग प्रशस्त हो गया। मिसाइल का परीक्षण ओडिशा के चांदीपुर परीक्षण केंद्र पर किया गया।

रक्षा मंत्रालय ने कहा कि इसका उद्देश्य तेजस के एवियोनिक्स, फायर कंट्रोल रडार, लॉन्चरों और मिसाइल शस्त्र प्रणाली के साथ डर्बी बीवीआर मिसाइल प्रणाली के एकीकरण के प्रदर्शन को आंकना था। मंत्रालय ने एक बयान में कहा कि यह परीक्षण अपने सभी मानकों पर खरा उतरा।



DFRL develops food warmer for soldiers

In a major initiative, the Mysuru-based Defence Food Research Laboratory (DFRL) has invented re-usable food warmer pouches and fresh curd maker that guarantees fresh and hygienic food for the soldiers.

DFRL comes under DRDO and the food warmer and curd maker would certainly help forces serving in the high altitudes of Siachen, Ladakh and other places.

According to senior scientist Ramakrishna who briefed the media in Mysuru, Army use ponies at present for food supply. The new inventions would help them keep their food warmer at their posts.

He said, "At present, the Army is dependent on ponies to supply food. It takes hours for the ponies to reach Army posts from the bottom and by that time the food will become solid due to the cold temperatures that reach upto minus 20 degrees Celsius."

Soldiers need to dip the food pouches in boiling water to consume the food, but lighting a fire will give away their position, he added.

According to scientists at DFRL, the re-usable food warmers, having encapsulated constant watt heaters as source of heating, provide pouch-to-product uniform and effective heat transfer without overcooking the product."

The warmers weigh around 2.5 kg and can be easily carried by armed personnel in their backpacks. Food packets can be warmed at sub-zero temperatures just by placing them inside the pouches for 15-20 minutes before eating," said S Naveen, Technical Officer.

Another product, the fresh curd maker works at high altitudes and at sub-zero temperatures. The new equipment is easy to carry and it can prepare 5-10 litres of fresh curd within four hours.

Ramakrishna said both the products have completed field trials in parts of North-East, J&K and Udhampur and soldiers are impressed with it.

The Defence Food Research Laboratory conducts research and development of technologies and products in the area of food science and technology to cater to the varied food challenges for the Indian Armed Forces.

Sat, 13 May, 2017

Former chief of DRDO new JNU chancellor

The HRD ministry has named scientist and former DRDO chief Vijay Kumar Saraswat as the next chancellor of JNU.

A full-time member of NITI Aayog, Saraswat will be replacing ISRO chief Krishnaswamy Kasturirangan whose five-year term ended on March 30. Though Saraswat is yet to receive official communication, his name has been finalised for the varsity's top position, according to sources in the ministry.



Sat, 13 May, 2017

Four naval ships to reach southeast Asia

Four Indian naval ships are on deployment to southeast Asia and southern Indian Ocean as part of the country's Act East policy. Indian naval ships Sahyadri, Shivalik, Jyoti and Kamorta are under the command of Rear Admiral Biswajit Dasgupta, the Flag Officer commanding Eastern Fleet.



Sat, 13 May, 2017

Defence Min, L&T Inks Rs 4,366 Cr Gun Manufacturing Deal

In one of the biggest orders to a private company, the Defence Ministry has inked a contract worth over Rs 4,366 crores with Larsen and Toubro(L&T) for 100 self-propelled tracked artillery guns for the army. The engineering conglomerate has tied up with a South Korean firm for manufacturing these guns in India. The Cabinet Committee on Security(CCS) had approved the deal in March.

As per the deal, the first batch of ten 155mm/52 calibre tracked self-propelled (SP) gun — K9 VAJRA-T — will be delivered within 18 months of inking the contract, the next 40 within 30 months and the balance 40 within 42 months, defence ministry sources said here on Friday. They said the contract was signed on Tuesday.

Larsen and Toubro, supported by its South Korean technology partner Hanwha Tech Win (HTW), had bid for the contract in 2011. It emerged as the sole qualified aspirant after a series of user trials and evaluations, based on the performance of the K9 VAJRA-T self-propelled howitzer.

The K9 VAJRA-T gun is an enhanced version of HTW's K9 Thunder - a self-propelled howitzer, customised and co-developed by L&T and HTW to suit the specific requirements of the Indian Army. The guns will have over 50 per cent indigenous content and will be delivered from L&T's manufacturing facilities including a unit in Hazira.

The guns will move on tank-type tracks to accompany tanks and mechanised regiments to battle and can hit targets at a distance of 45 km. The Army urgently needs new artillery guns as the modernisation plan came to a halt in the wake of Bofors gun controversy in 1987.

Given the urgency, the Government had earlier approved a deal for procuring 145 ultra-light howitzers of the 155mm caliber from US. The Army's artillery modernisation plan envisages procuring 2,800 guns by 2027.

The plan included procuring 1,580 towed guns, 814 truck-mounted guns, 100 tracked self-propelled guns, 180 wheeled self-propelled guns and 145 ultra-light howitzers.



Sat, 13 May, 2017

L&T bags howitzer deal

The government has inked a Rs 4,366 crore contract with engineering conglomerate Larsen and Toubro to supply, with the help of its South Korean technology partner Hanwha Tech Win, 100 selfpropelled howitzers to the Indian Army .

Under the biggest such deal inked with an Indian private sector company, L&T will supply the first 10 of the 155mm52-calibre tracked selfpropelled gun called K-9 Vajra-T to the Army within 18 months. “All the 100 howitzers will be supplied within 42 months,” said a defence ministry official.

As earlier reported by TOI, this is the second major howitzer deal for the Army , which has not inducted a single 155mm artillery gun in 30 years since the infamous Bofors scandal. Last year, India had inked the \$737 million deal with the US for 145 M-777 ultra-light howitzers.



Sat, 13 May, 2017

Army: No word from China on exercise

The Indian Army today said there was no communication from the Chinese side to indicate the meeting to plan for the annual hand-in-hand exercise between the two countries had been “put on freeze”. Reacting to a report in The Tribune published on May 12, Army spokesperson Col Aman Anand said: “There is nothing to suggest that the meeting to plan for military exercises between the two nations has been put on freeze.”

Though the meeting called the initial planning conference was scheduled this month, sources said there was no communication from China either on the dates of the meeting or its conduct. The final planning conference is slated for July and the exercise is to be hosted by China in October-November.



Sat, 13 May, 2017

After Lanka snub, China sub may head for Pak

By Rajat Pandit

India is keeping close tabs on the Chinese submarine currently prowling in the Indian Ocean Region (IOR), which may now head for Karachi after being refused permission to dock at Colombo, even as it has dispatched four warships on an overseas deployment to southeast Asia and southern Indian Ocean.

The Yuan-class conventional submarine was “picked up“ by Indian Navy's Poseidon-8I long-range maritime patrol aircraft as soon as it crossed the Malacca Strait on April 19-20 as part of the 26th anti-piracy taskforce of the People's Liberation Army-Navy (PLAN).

PLAN has been regularly sending nuclear and dieselelectric submarines to IOR since December 2013 to extend its strategic reach in the region. “The pretext is antipiracy patrols in the Gulf of Aden. But what role can submarines play against pirates and their dhows?“ said a defence ministry source.

The Navy has tracked seven Chinese submarines in IOR so far, the first being a Shang-class nuclear attack submarine (SSN) from December 2013 to February 2014. "Two Chinese submarines, a nuclear one alternating with a diesel-electric one, come to the IOR for three months each every year," he added.

They have included the Song and Yuan-class conventional submarines and the Shang and Han SSNs, with PLAN yet to deploy its new Jin-class advanced nuclear submarines to the region. India lags far behind China in the underwater combat arena, with just 13 old diesel-electric and two nuclear submarines. China, in contrast, has well over 50 submarines.

China has systematically forged extensive maritime links with several IOR nations, and is even establishing its first overseas naval facility at Djibouti. Though China's primary aim may be protection of its trade and energy sea routes, India has reason to be wary of PLAN's expeditionary forays.

India, on its part, is stepping up military ties with Asean countries besides naval deployments to the Far East to strategically counter all this. Stealth frigates INS Sahyadri and INS Shivalik, anti-submarine warfare corvette INS Kamorta and tanker Jyoti, for instance, are part of the ongoing deployment to south-east Asia in pursuance of the "Act East" policy.

The induction of eight P-8I aircraft, under a \$2.1 billion deal with the US in 2009, has helped the Navy keep an "intelligent hawk-eye" over the IOR. Another four P-8Is will join the force from July 2019 at a cost of \$1.1 billion.



Sat, 13 May, 2017

China gathers world for 'Silk Road' summit tomorrow

Indian worries: Beijing initiative stirs unease in New Delhi as 'Belt and Road' forum will cement China's dominance over Asia

India is likely to be represented by local embassy staff or academics this weekend at a major gathering of leaders and ministers on China's "Silk Road" initiative, reflecting deep unease in New Delhi about the far-reaching project. India's main objection to China's plan to build ports, railways and power links across Asia and on to Europe is that the \$57 billion China-Pakistan Economic Corridor (CPEC), a key part of the plan, runs through disputed Kashmir.

The broader worry for India is that the "Belt and Road" initiative involving hundreds of billions of dollars over the coming decades will cement China's dominance over Asia, including India's neighbourhood.

Leaders of 29 countries plus senior delegates from other nations gather in Beijing for a two-day summit starting on Sunday to map out a project that is seen as broad on ambition but short on specifics.

Even Vietnam, which has had rocky ties with China, will be represented by its President, while Japan, driving its own infrastructure push across Asia, is sending a deputy trade minister and the secretary-general of the ruling party. India, meanwhile, is expected to send representatives from its embassy in Beijing, two Indian officials said, speaking on condition of anonymity because of the sensitivity of the matter.

Chinese foreign ministry spokesman Geng Shuang said that, as far as he knew, Indian academics would be participating in "relevant activities" at the Belt and Road Forum. He gave no other details and offered no further comment. Indian foreign ministry spokesman Gopal Baglay said no decision had been taken on whether an Indian government delegation would attend the meeting.

"The matter is under consideration," he said, a position the government has maintained since March when China extended an invitation. Since then it has stepped up efforts to get India to attend. Baglay said India supported connectivity across the region, but there was a problem with the Pakistan end of "One Belt, One Road" (OBOR), a term widely used to describe the project.

“As far as OBOR is concerned, you know that our position is that since the so-called CPEC forms a part of OBOR, that is where our difficulty is. “It passes or proposes to pass through what is sovereign Indian territory and we have made our views in this regard very, very clear to the Chinese side.” — Reuters

China ropes in US, Japan

China has managed to rope in the US at the last minute for its Silk Road summit besides South Korea, the EU and Japan, leaving India to be the only major country yet to confirm its participation in the high-profile event

The Trump administration announced that Matt Pottinger, Special Assistant to the President and senior director for East Asia of National Security Council of the White House, will lead the US delegation to the attend the One Belt and One Road Forum.

The US participation came after the two sides clinched a lucrative trade agreement which will boost shipments of American liquefied natural gas, beef and other products to China. In turn, Chinese banks and poultry will get access to the US market

Downturn in Sino-India ties: NSG and Dalai lama top list

India’s indecision over China’s biggest summit of the year comes at a time of a sharp downturn in ties. New Delhi is smarting over China’s refusal to allow it entry into the Nuclear Suppliers Group and over Beijing blocking a request at the UN to sanction a Pakistan-based militant blamed for attacks on India

Beijing is angry at India’s increasingly public engagement of the Dalai Lama, including hosting the Tibetan spiritual leader in a territory controlled by India but claimed by China in April. It has also grown wary of India’s military cooperation with the United States, as well as with Japan in recent months

China’s ambassador to India, Luo Zhaohui, told an Indian military think-tank in Delhi last week that the Belt and Road initiative was good for both countries and fitted into India’s “Look East” policy of strengthening ties with southeast and northeast Asia

Expert warns India

China’s economy is nearly five times the size of India’s. So at this stage, it’s absurd for India to pick a confrontational path, they need to first grow their economy and then come up with all these strategies to confront China. — Kai Xue, Beijing-based lawyer

India yet to confirm participation

Indian has kept mum about attending the event and any minister or official showing up could be part of a last-minute decision. The \$46 billion China-Pakistan Economic Corridor (CPEC) could keep India away from the event. New Delhi firmly opposes the key corridor of Beijing’s One Belt One Road project because it passes through the Pakistan-administered Kashmir

The general view is that India attending the forum may amount to surrendering its claim over region



Sat, 13 May, 2017

China mum on vessel not permitted to dock

Beijing: China on Friday refused to comment on reports that Sri Lanka had turned down a request to allow a People’s Liberation Army Navy (PLAN) submarine to dock in Colombo.

A Reuters report from Colombo said Sri Lankan officials were “unlikely” to agree to China’s request to dock a submarine anytime soon “given India’s concerns”.

“It might happen later,” a second official told Reuters, adding China had requested approval “sometime back” to use the port around May 16.

When asked about the news reports on Friday, foreign ministry spokesperson Geng Shuang said the queries should be raised with the defence ministry. He added that China and Sri Lanka maintain “traditional friendship” and cooperate across bilateral spheres.

Colombo’s decision to make the refusal public comes at the time when Prime Minister Narendra Modi is visiting the nation to attend a Buddhist summit on the occasion of “Vesak”, celebrated to mark the birthday of Buddha. Sri Lanka twice allowed Chinese submarines to dock in Colombo in 2014, triggering alarm bells in India.

China and Sri Lanka have deepened cooperation in all sectors over the years, including in defence, but the Sirisena government has seemingly tried to address India’s concerns.



Sat, 13 May, 2017

NASA detects signs of water on distant ‘warm Neptune’

Located about 437 light years away, the exoplanet, HAT-P-26b, orbits a star roughly twice as old as our Sun.

Scientists using NASA telescopes have detected “a strong water signature” in the atmosphere of a distant Neptune-sized planet, which could help understand more about the birth and development of planetary systems.

The study, combining observations from NASA’s Hubble and Spitzer space telescopes, shows that the distant planet HAT-P-26b has a primitive atmosphere composed almost entirely of hydrogen and helium.

Located about 437 light years away, HAT-P-26b orbits a star roughly twice as old as our Sun.

The analysis is one of the most detailed studies to date of a “warm Neptune,” or a planet that is Neptune-sized and close to its star.

No, not a water world

The researchers determined that HAT-P-26b’s atmosphere is relatively clear of clouds and has a strong water signature, although the planet is not a water world. This is the best measurement of water to date on an exoplanet of this size.

Compared to Neptune and Uranus, the planets in our solar system with about the same mass, HAT-P-26b likely formed either closer to its host star or later in the development of its planetary system, or both.

“Astronomers have just begun to investigate the atmospheres of these distant Neptune-mass planets, and almost right away, we found an example that goes against the trend in our solar system,” said Hannah Wakeford, a post-doctoral researcher at NASA’s Goddard Space Flight Centre in the U.S.

To study HAT-P-26b’s atmosphere, the researchers used data from transits — occasions when the planet passed in front of its host star.

During a transit, a fraction of the starlight gets filtered through the planet’s atmosphere, which absorbs some wavelengths of light but not others.

By looking at how the signatures of the starlight change as a result of this filtering, researchers can work backward to figure out the chemical composition of the atmosphere.

Researchers pooled data from four transits measured by Hubble and two seen by Spitzer. Together, those observations covered a wide range of wavelengths from yellow light through the near-infrared region.

‘An achievement’

“To have so much information about a warm Neptune is still rare, so analysing these data sets simultaneously is an achievement in and of itself,” said Tiffany Kataria of NASA’s Jet Propulsion Laboratory in the U.S.

Researchers were also able to use the water signature to estimate HAT-P-26b's metallicity — an indication of how rich the planet is in all elements heavier than hydrogen and helium. It gives more clues about how a planet formed. They determined its metallicity is only about 4.8 times that of the Sun.

“This analysis shows that there is a lot more diversity in the atmospheres of these exoplanets than we were expecting, which is providing insight into how planets can form and evolve differently than in our solar system,” said David K. Sing of the University of Exeter in the U.K.

The research was published in the journal *Science*.