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समाचार पत्रों से चयित अंश
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जागरण

Thu, 03 March 2022

फायर सुरक्षा में नहीं रहेगी बाधा, वजन किया आधा

By राहुल चौहान

नई दिल्ली: आगजनी की भयावह घटना कई बार दमकल कर्मियों के लिए बेहद चुनौतीपूर्ण बन जाती हैं। ऐसे ही जोखिम को कम करने के लिए रक्षा अनुसंधान एवं विकास संगठन (डीआरडीओ) के दिल्ली स्थित सेंटर फार फायर एक्सप्लोसिव एंड एनवायरमेंट सेफ्टी (सीएफईईएस) के विज्ञानियों की टीम ने एक विशेष फायर सेफ्टी सूट तैयार किया है।

आगजनी में जोखिम को कम करने के लिए डीआरडीओ के दिल्ली स्थित सेंटर फार फायर एक्सप्लोसिव एंड एनवायरमेंट सेफ्टी (सीएफईईएस) के विज्ञानियों की टीम ने एक विशेष फायर सेफ्टी सूट तैयार किया है।

विज्ञानी डा. प्रसून कुमार राय ने बताया कि डीआरडीओ द्वारा हमें करीब डेढ़ साल पहले यह काम सौंपते हुए कहा गया था कि हमारी सेनाओं और राज्य दमकल विभाग में इस्तेमाल होने वाले फायर सेफ्टी सूट विदेश से आयात होते हैं। इसलिए आयातित सूट से हल्का और अधिक सुरक्षित फायर सेफ्टी सूट तैयार करके देना है, जिसका उत्पादन भी देश में ही हो सके। इसके बाद हमारी टीम ने काम शुरू किया। साथ ही सूट का वजन कम रखने के लिए इसकी सारी लेयर खुद ही अपनी तिमारपुर की प्रयोगशाला में तैयार की। इस सूट का वजन दो किलो 800 ग्राम है। अभी तक इस्तेमाल हो रहे फायर सेफ्टी सूट का वजन साढ़े तीन से चार किलो तक होता है। इस तरह मौजूदा सूट से यह सूट करीब डेढ़ किलो तक हल्का है। डा. राय ने बताया कि अभी दो स्वदेशी कंपनियां सिस्टम फाइव एस और विजय सावरे को इस सूट का उत्पादन शुरू करने के लिए टेक्नोलाजी हस्तातरित की जा रही है। इसके बाद उत्पादन शुरू होने पर अगले दो-तीन महीने में यह सूट बाजार में आ जाएगा। इसकी कीमत कंपनियों द्वारा तय की जाएगी। लेकिन, इसकी कीमत फिलहाल जो फायर सेफ्टी सूट उपलब्ध हैं उनसे अधिक नहीं होगी।

स्वदेशी निर्मित

आग लगने के दौरान इस सूट का इस्तेमाल कर दमकलकर्मी और सैन्यकर्मी प्रभावी ढंग से अपना बचाव कर सकेंगे और आग से निपट सकेंगे। सूट की बाहरी लेयर एंटी स्टैटिक फ्लेम रिटारडेंट मैटेरियल से बनी है जो आसानी से आग नहीं पकड़ता है। वहीं, दूसरी और तीसरी लेयर में इस्तेमाल किया गया फैब्रिक नमी व थर्मल बैरियर का काम करता है। डा. प्रसून ने बताया कि आगे हम पूरी तरह से स्वदेशी फायर सेफ्टी सूट तैयार करने पर काम कर रहे हैं। इस पर एक-डेढ़ साल में काम पूरा हो जाएगा। अभी जो सूट बन रहे हैं उनकी लेयर और लेयर बनाने के लिए इस्तेमाल होने वाला फाइबर विदेश से आयात होकर प्रोसेस करके तैयार किया जाता है।

बाक्स: सेफ्टी सूट तैयार करने वाली टीम :

सीएफईई के विज्ञानी डा. प्रसून कुमार राय के अलावा प्रवीन राजपूत, डा. महीपाल मीणा और राजू यादव के साथ मिलकर फायर ट्रेनिंग और प्रोटेक्टिव क्लोथिंग ग्रुप के प्रमुख डा. खेमचंद वाधवा के मार्गदर्शन में डेढ़ साल में सूट तैयार हुआ।

---------- आग बुझाने के लिए दमकलकर्मियों को तेजी के साथ भाग दौड़ करनी होती है। जहा लिफ्ट न होने पर तेजी के साथ सीढ़ियो भी चढ़नी होती हैं। ऐसे में हल्का सेफ्टी सूट काफी आरामदायक होगा। सूट जितना हल्का होगा उतना ही दमकलकर्मियों के शरीर पर वजन कम होगा और वे तत्परता से मिशन को अंजाम दे सकेंगे।

अतुल गर्ग, निदेशक, दिल्ली दमकल विभाग

https://www.jagran.com/haryana/gurgaon-fir-safety-new-dress-for-fire-team-22511930.html

PUNEKAR NEWS

Thu, 03 March 2022

Pune: Webinar on "Expedition towards self reliance in high explosive technologies" held at HEMRL

Bavdhan: 'Azadi ka Amrit Mahotsav' is an initiative of Govt. of India to celebrate and commemorate the 75 years of progressive India and the glorious history of its people, culture and achievements. On this occasion, High Energy Materials Research Laboratory (HEMRL), Sutarwadi, Pune, a DRDO establishment under the Ministry of Defence celebrated the Mahotsav by conducting various activities with a focus on the theme of "Atmanirbhar Bharat".

In this event, achievements of HEMRL in the field of high explosive technologies were presented, discussed and deliberated with an aim of creating further synergy for collaborations with academia and industry partners. National Science Day and webinar on "Expedition towards Self Reliance in High Explosive Technologies" were organised on 28 February 2022 at Dr APJ Abdul Kalam Auditorium, DRDO Complex, Pashan, Pune.

The function was inaugurated by Lt. Gen. (Dr.) Anjan Mukharjee PVSM, AVSM (Retd.) in presence of Pravin K Mehta, DS & DG (ACE), AVM SJ Nanodkar VM, VSM, AVSM (Retd.) and KPS Murthy, OS & Director HEMRL, Pune. The program comprised of invited lectures by eminent personalities from the Indian Army, Indian Air Force and DRDO. It was attended by the student community, industry and other research organisations both in online and offline mode from all over the country and abroad.

Shri KPS Murthy OS & Director called on young scientists, academia and industry partners to take interest in the pursuit of defence-related technologies/research to achieve 'Atma Nirbhar Bharat'.

PK Mehta stated that by way of research & development, HEMRL has achieved self-reliance in the areas of High Energy Materials Research/technologies. It is essential that these technologies must be absorbed by private partners to achieve self-reliance and become a developed country.

Lt. Gen. (Dr.) Anjan Mukharjee PVSM, AVSM (Retd.) emphasized the importance of thermobaric munitions and their futuristic requirements for the services. He clearly brought out that

research and development work on thermobaric composition by HEMRL, Pune, truly falls under "Make in India" (Atmanirbhar) concept. The development of thermobaric munitions by HEMRL, Pune has placed the country among the elite club of Nations.

AVM Nanodkar, VM, VSM, AVSM (Retd.) discussed the requirement of various types of bombs for the Indian Air force in the globally changing security scenario. He emphasized the need to adopt technology for the recovery, recycle and reuse (R3) of explosives extracted from the shelf life expired munitions. The webinar imparted rich experience to students, researchers and industry partners on recent trends in High Explosive Technologies and it ignited interest in young minds in the area of defence technologies.

https://www.punekarnews.in/pune-webinar-on-expedition-towards-self-reliance-in-high-explosive-technologies-held-at-hemrl/

The Sentinel
of this land, for its people

Thu, 03 March 2022

Defence Research Laboratory observes National Science Day

The National Science Day (NSD) was celebrated in the Defence Research Laboratory (DRL), Tezpur

Tezpur: The National Science Day (NSD) was celebrated in the Defence Research Laboratory (DRL), Tezpur to commemorate the discovery of Raman Effect on February 28, 1928 by the great Indian physicist, Bharat Ratna, Chandrashekhara Venkata Raman. For his ground-breaking research work on scattering of light, he was awarded the most prestigious Nobel Prize in physics in the year 1930.

DRL celebrated the NSD 2022 with great enthusiasm. The Superintendent of Police of Sonitpur district, Dr. Dhananjay Ghanwat graced the occasion as the chief guest. The programme started with the address of the Director, DRL, Dr. Dev Vrat Kamboj, who aptly described the significance of the day to students from various schools of Tezpur, who participated in this programme. This was followed by an oration by Daya Lama, scientist of DRL on the importance of dehumidification in the protection of defence-related materials. The programme culminated with a very inspiring and thought-provoking speech by the chief guest, Dr. Dhananjay Ghanwat. He encouraged the students to be inquisitive to seek scientific answers to problems encountered in everyday life. During the occasion, prizes were distributed to students of three schools of Tezpur and Rangapara by the chief guest to encourage their scientific aspirations. National Science Day was also observed by the B.Sc. final year students of Assam Agricultural University undergoing Rural Agricultural Work Experience Programmme (RAWEP, 2022) at Napam MV School, Sonitpur. Bipul Gogoi, Head Teacher of the school presided over the function. This event, organized on account of National Science Day for the students of Napam MV School was led by Lakhyadeep Chetia under the guidance of Krishi Vigyan Kendra, Sonitpur, Napam. The celebration included public speeches, quiz competition and a drawing competition among the students of the school in two categories.

SIVASAGAR: To commemorate the path-breaking discovery of the Raman Effect by Indian physicist, Sir CV Raman, Gargaon College Science Forum in collaboration with district administration, Nazira Sub-Division, Assam Science Society, Gargaon Branch and Environment and Climate Cell, Gargaon College celebrated National Science Day on Monday. On the occasion of National Science Day, the forum hoisted a series of events keeping in tune with the theme of the year-Integrated Approach in Science and Technology for a sustainable future.

Dr Chandraditya Gogoi, Assistant Professor of Geology Department and Vice President of Gargaon College Science Forum hoisted the flag on the occasion. Dr Kabita Phukon, Assistant Professor of Mathematics Department and Secretary of Gargaon College Science Forum outlined the purpose of the celebration. The formal meeting began with the welcome address delivered by Dr Sabyasachi Mahanta, Principal of Gargaon College wherein he emphasized the importance of basic sciences for the development of human civilization. He highlighted on the importance of scientific temperament and thinking for the overall development of mankind.

While talking about sustainable development, Dr Mahanta said that there must be a scientific approach to balance natural life and mechanical life style. Sabyasachi Kashyap, SDO Nazira Sub Division, who was also present amongst the guests spoke on the importance of science and technology for sustainable societies. He also highlighted the relevance of science and its application to human life.

The resource person, invited on the occasion was Dr Pranab Jyoti Chetia, Curator and I/C of Jorhat Science Centre and Planetarium, Department of Science, Technology and Climate Change, Govt. of Assam, Jorhat. Speaking on the occasion as Resource Person, Dr Pranab Jyoti Chetia talked about space lab in the heaven. While referring to space lab, he said that space laboratory is a product of science and technology. Dr Chetia illuminated on how science could be carried to the people. In his deliberation, he had thrown light on belief system and social consequences. Dr Chetia further stressed on popularizing scientific education and inculcating the scientific temperament among the people. Parag Jyoti Bora, Former Head of the Department of Geology, Gargaon College also delivered speech on the relevance of science in day to day life.

https://www.sentinelassam.com/north-east-india-news/assam-news/defence-research-laboratory-observes-national-science-day-580842

Defence News

Defence Strategic: National/International

INDIA TODAY

Thu, 03 March 2022

US sanctions on Russia won't affect Indian Air Force significantly, says IAF Vice Chief

Vice Chief Air Marshal Sandeep Singh on Wednesday said that the US sanctions against Russia will not significantly affect the Indian Air Force.

New Delhi: The Indian Air Force (IAF) will not be significantly impacted by the US sanctions on Russia and India's relations with both countries remain strong, Vice Chief Air Marshal Sandeep Singh said on Wednesday. However, the IAF will face difficulties for a month or two in getting spare parts for its defence equipment from Russia to India, he added.

About 70 per cent of Indian defence equipment is of Russian origin.

After Vladimir Putin started a military offensive against Ukraine on February 24, various western countries — including the US — have decided to block assets of four large Russian banks, impose export controls and sanction oligarchs close to the Russian president.

"We know the geopolitical situation is difficult [currently] Our relations with Russia will continue," Singh said at a press briefing here.

He said that things are still unfolding geopolitically.

“Our position is very strong and our relations with both the countries [Russia and the US] have remained (strong) and you have seen that,” he noted.

“We are evaluating the situation. There will be certain difficulties, there is no doubt about it. But I think it should not affect us too much. I am confident that it won’t affect us significantly,” he added.

On the issue of supply of spare parts from Russia to India, he replied there is no doubt there will be difficulties for a month or two.

Singh said, “There are sanctions but we have gone through similar issues earlier and maybe, this would be more serious than that I think it will not affect us critically and I hope for it also.” The IAF is aiming for 100 per cent indigenisation of the spare parts and components, he noted.

“It will take time to reach the 100 per cent mark,” he mentioned.

Singh said the defence ministry and the IAF itself have set a very aggressive timeline to reach the 100 per cent mark.

He said there is no doubt that in the coming years, the IAF will have majority of its systems indigenously designed and produced.

The final aim is that you have to be self-reliant, he added.

Three aircraft have departed to evacuate stranded citizens, the IAF vice chief said. “We can operate four aircraft per day to evacuate Indians,” he mentioned.

Singh stated the evacuation operations will run round the clock till all Indians are brought back.

Vice Chief Air Marshal Sandeep Singh stated that India's relations with both Russia and the United States have remained strong (File)

The IAF has experience of running various such evacuation programs — the most recent one was conducted in Afghanistan, he noted.

When asked how many military transport planes An-32 have been upgraded by Ukraine till now, Singh replied this aircraft fleet has been upgraded to a large extent.

“The upgrade of An-32 aircraft was affected before too when Ukraine was under pressure due to the Crimean issue in 2014 and 2015,” he noted. After that, the IAF has significantly indigenised many of the spare parts that needed to be upgraded by Ukraine, he added.

https://www.indiatoday.in/india/story/us-sanctions-on-russia-wont-affect-indian-air-force-significantly-says-iaf-vice-chief-1919946-2022-03-02

Thu, 03 March 2022

Russia sees no issue with S-400 Missile supply to India despite sanctions

"Those who fall out of US' line cease to become partners and become foes. It's like black and white. There's no in-between, no shades of grey. This is dictatorship in velvet gloves," said the Russian Ambassador-designate to India.

New Delhi: Russian Ambassador-designate to India Denis Alipov on Wednesday said that the US is a dictator in velvet gloves, adding that it only aspires for global prominence under the guise of democracy and freedom.

During a press briefing, Mr Alipov said, "The US only wants global prominence in the guise of democracy, freedom and rules-based international order-- the very rules it formulates under the pretence of consulting partners and allies."

"Those who fall out of US' line cease to become partners and become foes. It's like black and white. There's no in-between, no shades of grey. This is dictatorship in velvet gloves," he added.

Mr Alipov said that Russia is being accused of waging a war, while war has been going on in Ukraine for eight years now, alleging that there has been massive shelling of residential areas in Donbas by Ukrainian forces and Russia haters for years.

He also thanked India for its unbiased and neutral position concerning the whole conflict and assured Russia's support in the evacuation of Indian nationals stranded in Ukraine.

The Ambassador-designate spoke on the impact of sanctions on its defence deal with India.

"We are strategic allies with India. We are grateful to India for its balanced position displayed at the UN. India understands the depth of this crisis," he said.

Speaking on the impact of sanctions against Russia on its defence deal with India, primarily on the S-400 missile system supply, the Russian Ambassador-designate said, "Don't foresee any obstacles as far as S-400 supply to India is concerned, have routes to continue with this deal unobstructed. Sanctions - old or new, do not interfere in any way."

Meanwhile, Mr Alipov also consoled the demise of an Indian national in Kharkiv and assured to launch an investigation into the matter.

Notably, the US closed its airspace for Russian flights starting today. US President Joe Biden has also announced that the US, along with its partners, is working on imposing tougher sanctions on Russia, targeting its banks, financial institutions and key individuals.

https://www.ndtv.com/india-news/russian-ambassador-designate-to-india-says-us-is-dictator-in-velvet-gloves-2798726

THE ECONOMIC TIMES

Thu, 03 March 2022

Lt Gen RC Tiwari takes over as General Officer Commanding of Spear Corps

Synopsis

According to the press release from Defence Ministry, the General is an Infantry Officer and was commissioned in the Kumaon Regiment of the Indian Army in 1987.

Lieutenant General RC Tiwari, Ati Vishisht Seva Medal (AVSM) awardee and Sena Medal (SM) awardee took over as General Officer Commanding of Spear Corps from Lt. Gen. JP Mathew, who is also AVSM awardee as well as Uttam Yudh Seva Medal (UYSM) awardee and Vishisht Seva Medal (VSM) awardee on Wednesday.

Lt Gen RC Tiwari takes over as GOC from Lt Gen JP Mathew

According to the press release from Defence Ministry, the General is an Infantry Officer and was commissioned in the Kumaon Regiment of the Indian Army in 1987.

He is an alumnus of the National Defence Academy, the Defence Services Staff College, College of Defence Management and the National Defence College. "He held several prestigious command and staff assignments in conventional as well as Counter-Insurgency operations in India and abroad.

He commanded an infantry battalion in Counter-Insurgency operations, mountain Brigade in high altitude and Black Cat Division as General Officer Commanding," added the statement. Prior

to taking over this appointment, Lt. Gen. RC Tiwari was chief of staff in headquarters of the south-western command in Jaipur.

The new Corps Commander conveys his warm greetings to the people of the North East and wishes them peace, tranquillity and prosperity in the times ahead.

https://economictimes.indiatimes.com/news/defence/lt-gen-rc-tiwari-takes-over-as-general-officer-commanding-of-spear-corps/articleshow/89952827.cms

NEWS NATION

Thu, 03 March 2022

Exclusive: चीन-पाक को झटका, टू फ्रंट वॉल पर भारतीय वायु सेना का ब्लूप्रिंट तैयार

भारतीय वायु सेना ने एक ऐसा ब्लूप्रिंट बनाया है जिसके जरिए चीन के साथ पाकिस्तान के ऐसे तमाम टारगेट को युद्ध की स्थिति में पहले कुछ घंटों में ही प्रिसिजन गाइडेड बम के जरिए तबाह कर दिया जाएगा, जिसके बाद भारत की सुरक्षा को भेदना है बस असंभव रहेगा

By Rahul Dabas, Edited By Mohit Sharma

नई दिल्ली: भारतीय वायु सेना ने एक ऐसा ब्लूप्रिंट बनाया है जिसके जरिए चीन के साथ पाकिस्तान के ऐसे तमाम टारगेट को युद्ध की स्थिति में पहले कुछ घंटों में ही प्रिसिजन गाइडेड बम के जरिए तबाह कर दिया जाएगा, जिसके बाद भारत की सुरक्षा को भेदना है बस असंभव रहेगा. राजधानी दिल्ली के नजदीक न्यूज़ नेशन की टीम एक ऐसी ही अत्याधुनिक खुफिया ऑपरेशन सेंटर पहुंची जहां भारतीय वायु सेना ने पाकिस्तान और चीन के हजारों टारगेट को पहले से ही लॉक किया हुआ है। जिसमें बड़े बांध, पावर प्रोजेक्ट, पुल, हाईवे मिलिट्री इंस्टॉलेशन, रनवे और सैन्य ठिकानों के साथ ऐसे रेडार शामिल हैं। जिससे पहली कुछ घंटों की लड़ाई में दबा कर देने से शत्रु देश की कमर तोड़ी जा सकती है।

इलेक्ट्रॉनिक वार फेयर के लिए ऐसे कई सेंटर भारत में मौजूद है। जल्द ही इन्हें 60 मीटर जमीन के अंदर तहखाने में शिफ्ट कर दिया जाएगा। ऐसी किसी भी एक सेंटर से ना सिर्फ भारत की वायु सेना बल्कि देश के सभी नागरिक और सैनिक रेडार, हवा में उड़कर शत्रु देशों की स्थिति बताने वाले एवैक्स, सैनिक ड्रोन को कंट्रोल करके दुश्मन के लड़ाकू हवाई जहाजों और मिसाइलों की सटीक सूचना ली जा सकती है। इससे पहले कुछ घंटों में ही युद्ध का रुख बदलने के लिए ओफंसिव एयर स्ट्राइक भी संभव है।

IAF (Photo Credit: फाइल फोटो)

इस एयर स्ट्राइक में खास तौर पर दुश्मन देश की रडार सिस्टम, एयर डिफेंस बैटरी और परमाणु प्रक्षेपास्त्र को निशाना बनाया जाएगा। ऐसी ऑपरेशनल कमांड सेंटर से भारत की हवाई सुरक्षा को भी अवैध बनाया जा सकता है, जिसमें हाल ही में रूस से मिले s-400 एयर डिफेंस सिस्टम के साथ आकाश और पृथ्वी स्वदेशी एयर डिफेंस सिस्टम को भी एकरूपता दे दी गई है, यानी मिसाइल भले ही अमेरिका की हो युरोप की या इजरायल की ,एयर डिफेंस सिस्टम भारत का स्वदेशी हो या रूसी डिफेंस सिस्टम को इस तरह से एकरूपता दी गई है जिससे इसरो के स्वदेशी सेटेलाइट पोजिशनिंग सिस्टम अमेरिका की जीपीएस की सटीकता के साथ हमला और बचाव दोनों किया जा सके।

न्यूज़ नेशन की टीम को ऐसी ऑपरेशन सेंटर में जाने की विशेष अनुमति मिली थी, लेकिन राष्ट्रीय सुरक्षा को देखते हुए इसकी तमाम डिटेल नहीं बताई जा सकती ,लेकिन यह कमांड एंड कंट्रोल सेंटर किसी हॉलीवुड की फिल्म से भी ज्यादा टेक्नोलॉजिकल एडवांस है, जिसमें आर्टिफिशियल इंटेलिजेंस से हवा में उड़ रहे तमाम हवाई जहाज और हेलीकॉप्टर की कलर कोडिंग की जाती है। अगर कोई जहाज हरे रंग का है तो या तो सिविलियन एयरक्राफ्ट है या उसकी रूट की मंजूरी एयर ट्रेफिक कंट्रोलर के जरिए मिल चुकी है। अगर किसी हवाई जहाज के रेडार सिग्नेचर का रंग पिंक है, तो वह शत्रु देश का हो सकता है अंतर्राष्ट्रीय सीमा पार करने से पहले ही इस बात का अलर्ट भारतीय वायु सेना के पास पहुंच जाता है। जिसके बाद वायु सेना का एयर डिफेंस सिस्टम हाई अलर्ट पर एक्टिवेट हो जाता है और शत्रु मिसाइल या लड़ाकू हवाई जहाज को गिराने के लिए भारतीय लड़ाकू हवाई जहाज तैनात कर दिए जाते हैं। कुल मिलाकर स्टेट ऑफ द आर्ट यह फैसिलिटी 21वीं सदी के लिहाज से बनाई गई है, जिसमें अति आधुनिक तकनीक एल्गोरिदम, आर्टिफिशियल इंटेलिजेंस सभी तरह के रडार को एकरूपता देकर भारतीय हवाई सुरक्षा को अभैध बना दिया गया है।

https://www.newsnationtv.com/india/news/blueprint-of-indian-air-force-ready-on-two-front-wall-shock-to-china-pak-255074.html

Press Information Bureau
Government of India

Ministry of Defence

Wed, 02 March 2022 3:22PM

India & US hold 19th Military Cooperation meeting in Agra to strengthen defence cooperation

The 19th edition of India-US Military Cooperation Group (MCG) meeting was held in Agra, Uttar Pradesh on March 01-02, 2022. The meeting was co-chaired by Chief of Integrated Defence Staff to the Chairman Chiefs of Staff Committee (CISC) Air Marshal BR Krishna from the Indian side and Deputy Commander, US Indo-Pacific Command Lieutenant General Stephen D Sklenka from the US side. The discussions focussed on strengthening the ongoing defence engagements between the two sides and mulled on new initiatives under the ambit of existing cooperation mechanism.

The India-US MCG is a forum established to progress defence cooperation between the countries through regular talks at the strategic and operational levels between Headquarters, Integrated Defence Staff and the US Indo-Pacific Command.

https://pib.gov.in/PressReleasePage.aspx?PRID=1802310

पत्र सूचना कार्यालय
भारत सरकार

रक्षा मंत्रालय

Wed, 02 March 2022 3:22PM

भारत और अमेरिका ने आपसी रक्षा सहयोग को मजबूत करने के लिए आगरा में 19वीं सैन्य सहयोग बैठक की

भारत-अमेरिका सैन्य सहयोग समूह (एमसीजी) की 19वीं बैठक 01-02 मार्च, 2022 को उत्तर प्रदेश के आगरा में आयोजित की गई। भारत की ओर से चीफ ऑफ स्टाफ कमेटी (सीआईएससी) के अध्यक्ष के लिए एकीकृत रक्षा स्टाफ के प्रमुख एयर मार्शल बीआर कृष्णा और अमेरिका की ओर से यूएस इंडो-पैसिफिक कमान के डिप्टी कमांडर लेफ्टिनेंट जनरल स्टीफन डी स्क्लेंका ने इस बैठक की सह-अध्यक्षता की। इस बैठक में दोनों पक्षों के बीच हुई चर्चा रक्षा संबंधों को मजबूत करने पर केंद्रित थी। इसके अलावा मौजूदा सहयोग प्रणाली के दायरे में नई पहलों को शामिल करने पर भी विचार किया गया।

भारत-अमेरिका एमसीजी मुख्यालयों, एकीकृत रक्षा कर्मचारी और यूएस इंडो-पैसिफिक कमान के बीच रणनीतिक व परिचालन स्तरों पर नियमित बातचीत के जरिए दोनों देशों के बीच रक्षा सहयोग की प्रगति के लिए स्थापित एक मंच है।

https://pib.gov.in/PressReleasePage.aspx?PRID=1802386

Press Information Bureau
Government of India

Ministry of Defence

Wed, 02 March 2022 6:11PM

Sea Phase of Milan 22 commences 01 Mar 22

Sea Phase of MILAN 2022 commenced on 01 Mar 22. A total of 26 ships, 21 aircraft and one submarine are participating in the multilateral naval exercise being conducted in the Bay of Bengal. The Sea phase is scheduled till 04 Mar and includes advanced and complex exercises in all three dimensions of maritime operations.

The pre-sail Combined Briefing for the Sea Phase conducted prior departure was presided by the Rear Adm Sanjay Bhalla, Flag Officer Commanding Eastern Fleet and attended by Senior Officers, Commanding Officers and planning teams of all participating units from Friendly Foreign Countries.

The Sea Phase of MILAN aims to enhance interoperability and maritime cooperation, and share best practices amongst the participating navies. The schedule includes Weapon firings, Seamanship evolutions, advanced anti-submarine warfare exercises, cross deck helicopter landings, simulation of complex operational scenarios and tactical manoeuvres.


https://pib.gov.in/PressReleasePage.aspx?PRID=1802378

पत्र सूचना कार्यालय
भारत सरकार

रक्षा मंत्रालय

Wed, 02 March 2022 6:11PM

नौसैनिक अभ्यास मिलन-22 का समुद्री चरण 1 मार्च, 2022 से शुरू हुआ

मिलन-22 के समुद्री चरण की शुरुआत 1 मार्च, 2022 से हो गई है। बंगाल की खाड़ी में किए जा रहे इस बहु-पक्षीय नौसैनिक अभ्यास में कुल 26 पोत, 21 वायुयान और एक पनडुब्बी हिस्सा ले रहे हैं। यह समुद्री चरण 4 मार्च तक निर्धारित है और इसमें समुद्री ऑपरेशनों के सभी तीनों आयामों में उन्नत व जटिल अभ्यास शामिल हैं।

समुद्री चरण का अभ्यास शुरू करने से पहले प्री-सेल (समुद्री यात्रा से पूर्व) संयुक्त ब्रीफिंग की अध्यक्षता पूर्वी बेड़े के फ्लैग ऑफिसर कमांडिंग रियर एडमिरल संजय भल्ला ने की थी। इसमें मित्र देशों के सभी प्रतिभागी इकाइयों के वरिष्ठ अधिकारियों, कमांडिंग अधिकारियों और नियोजन टीमों ने भी हिस्सा लिया।

मिलन के समुद्री चरण का उद्देश्य पारस्परिकता और समुद्री सहयोग को बढ़ाना तथा इसमें हिस्सा लेने वाली नौसेनाओं के बीच सर्वश्रेष्ठ अभ्यासों को साझा करना है। इसकी कार्यसूची में हथियार फायरिंग, नौ-कौशल का विकास, उन्नत पनडुब्बी-रोधी युद्ध अभ्यास, क्रॉस डेक हेलीकॉप्टर लैंडिंग, जटिल परिचालन परिदृश्यों का सतत अनुकरण और सामरिक युद्धाभ्यास शामिल हैं।

https://pib.gov.in/PressReleasePage.aspx?PRID=1802415

Hindustan Times

Thu, 03 March 2022

148 aircraft to display IAF power at Vayu Shakti on March 7

Prime Minister Narendra Modi will be the chief guest for the event this time, officials familiar with the matter said. 'Vayu Shakti' is IAF's biggest exercise and is held every three years to showcase India's air power.

New Delhi: As many as 148 aircraft of the Indian Air Force will take part in the 2022 edition of 'Vayu Shakti' that will held at Rajasthan's Pokhran test facility on March 7, senior officials of the force said on Wednesday.

'Vayu Shakti', which is IAF's biggest exercise, is held every three years to showcase India's air power. Prime Minister Narendra Modi will be the chief guest for the event this time, officials familiar with the matter said.

The exercise is being held in the backdrop of IAF's high-tempo operations in the Ladakh sector where India and China have been locked in a border row since May 2020. A total of 109 fighter jets, 24 helicopters and seven transport planes are among the aircraft that will participate in the drill.

"The objective of the exercise is to showcase the capability of IAF to conduct full spectrum operations. It will also demonstrate IAF's capability to defend vital areas and points by employing surface-to-air guided weapons," an official said.

The last edition of the exercise was held on February 16, 2019, ten days before IAF bombed Jaish-e-Mohammed (JeM) targets in Pakistan's Balakot. Since then, IAF has strengthened its combat potential significantly with the induction of Rafale jets armed with potent beyond visual range (BVR) missiles, S-400 Triumf air defence missile systems, a medium range surface-to-air-missile (MRSAM) system and smart air-to-ground weapons, as previously reported by HT.

"The exercise allows countrymen to see for themselves how potent the nation's air force is. While all manoeuvres cannot obviously be demonstrated, the viewers present, and those watching on television, get a fair idea of the destruction that would be wrought on an adversary should he test India's resolve," said Air Vice Marshal Manmohan Bahadur (retd), former additional director general of the Centre for Air Power Studies.

Indian Air Force fighters performs during the Vayu Shakti 2019 in Pokhran, Rajasthan, on February 16, 2019. (HT photo)

The armament used is one that is earmarked for annual training and hence no depletion takes place in the war waging stocks, he added.

Several platforms that have operated in the Ladakh sector will be a part of the drills in the exercise. These include Rafale, MiG-29 and Sukhoi-30 fighter jets, C-17 heavy lifters, C-130J special operations aircraft, Apache AH-64E attack helicopters and CH-47F (I) Chinook multi-mission helicopters.

The platforms inducted after the Balakot raid include the Apaches and Chinooks. To be sure, these acquisitions were planned years before the airstrikes.

https://www.hindustantimes.com/india-news/148-aircraft-to-display-iaf-power-at-vayu-shakti-on-march-7-101646249286296.html

AVIACIONLINE english feed

Thu, 03 March 2022

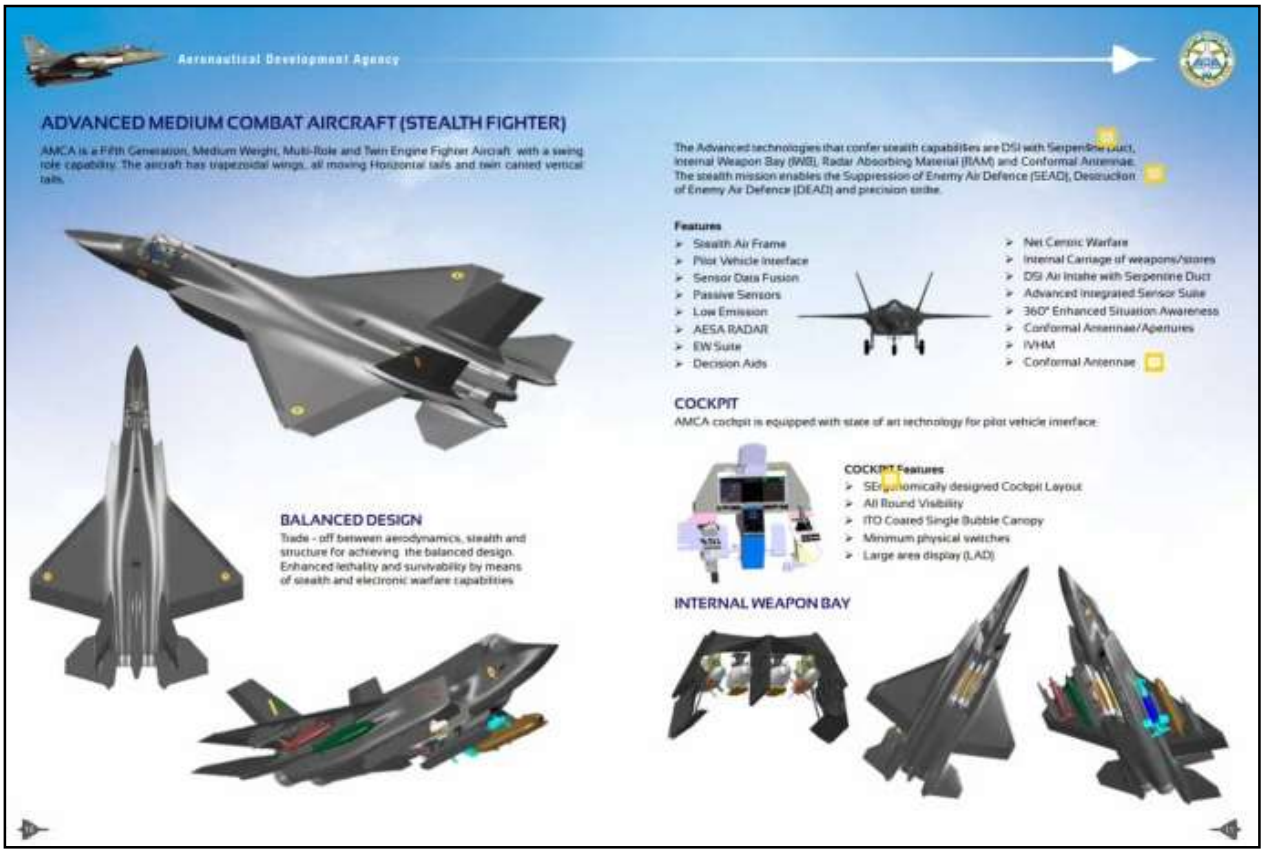
SAFRAN to help develop engine for AMCA, the future Indian 5 gen fighter

By Gastón Dubois

India and France are close to finalizing a deal, for the joint development of a 125Kn thrust engine, for India's fifth-generation fighter aircraft, the AMCA.

According to The Indu, the deal is likely to be initialed in the next two months, according to Defense Ministry officials consulted. The collaboration will be between the Defense Research and Development Organization (DRDO) and French engine manufacturer Safran.

«External Affairs Minister S. Jaishankar discussed this matter with French Defense Minister Florence Parly during her visit to Paris [last week]. We hope to have an agreement in a month or two,» said a defense official.



In December 2021, at an event following Parly's visit to India, Defense Minister Rajnath Singh said that a major French company would come to India and «manufacture the engine in strategic partnership with an Indian company.»

Last year, the government had informed Parliament that it intended to develop indigenous engines to power aircraft such as the Light Combat Aircraft (LCA) and AMCA variants, in partnership with an international engine house.

AMCA, the future Indian stealth fighter

The initial design of the AMCA began in 2009 and is planned to be a twin-engine stealth aircraft with internal weapons bay and Diverterless Supersonic Intake (DSI), which has been developed for the first time and whose design is complete.

It will be a 25-ton aircraft, capable of carrying about 1,500 kg of payload internally and another 5,500 kg of external payload, with 6,500 kg of internal fuel.

The AMCA will have stealth and non-stealth configurations, and will be developed in two phases: an AMCA MK1 with the current U.S. GE414 engine (but made in India), and an AMCA Mk2 with an advanced and more powerful engine that is planned to be jointly developed, Dr. Deodhare added.

Two fighters, one engine

The engine developed for the AMCA will likely have much in common with the future propulsion plant of the European sixth-generation FCAS fighter, for which SAFRAN is the tri-national (Spain, France and Germany) project leader of that development pillar.

The signing of the contract could mean that India would finance part of the engine project for the future FCAS, lowering the costs of the program for the Europeans partners, or at least for the French side.

https://www.aviacionline.com/2022/03/safran-to-help-develop-engine-for-amca-the-future-indian-5-gen-fighter/

IOL

Thu, 03 March 2022

South Africa deepens defence collaboration with India

By Jonisayi Maromo

Pretoria: South African defence conglomerate Sandock Austral, which operates in sectors including marine and aerospace, has committed to cooperate and collaborate with local and international partners in the global defence arena in line with its strategy to operate in a world where shared prosperity and equality leads to peace and stability.

The India-South Africa Business Summit has been held in a bid to promote cooperation in key sectors such as defence, mining and capital equipment. File Picture: Armand Hough/African News Agency (ANA)

Speaking at the second edition of India-South Africa Business Summit hosted by the Indian High Commission in South Africa and South Africa's High Commission in India, Sandock Austral chief executive Prasheen Maharaj said the company viewed its role in the defence sector as a player for good and its ability to create peace and stability.

The objective of the summit was to promote cooperation in key sectors such as defence, mining and capital equipment.

Maharaj told the delegates at the virtual summit that Sandock Austral prided itself on providing bespoke defence solutions for a variety of mission requirements in both the commercial and defence environment.

"We utilise cutting edge technologies by conducting research and development in niche technology projects, and therefore because we work in niche areas, we see ourselves as a cooperating collaborator rather than a competitor," he said.

Highlighting some of what Sandock Austral offers, Maharaj explained that the company specialised in technology in the era of the fourth industrial revolution and positioned itself as leaders in cyber security as this was a key requirement for clients locally and internationally.

"In terms of these solutions, they include both the capability for domination or renewal, as well as through life support solutions, and not only just within the acquisition environment. As a systems integrator of choice, we work with one to four entities as a strategic intermediary while concurrently building our technology base of unique integrated products and services through selected development projects," Maharaj said.

"We reiterate, we work in a very niche manner to be able to cooperate and collaborate and not necessarily compete. And in terms of input resources, we use knowledge nodes, talent pools, and our own capital funding, which are the primary components used by Sandock Austral to be able to provide the transformer technologies that our clients demand," he said.

Sandock Austral, the largest black-owned and managed defence company in South Africa, has a history spanning almost 50 years, during which it has built a reputation for developing and delivering integrated engineering and technology solutions for clients in the commercial and defence sectors.

Maharaj pointed out to delegated that Sandock Austral had been accredited with all the ISO accreditation, and the company was an award-winning business in South Africa that was currently building the world's largest hydrographic survey vessel for the SA Navy.

He said the opportunity to collaborate with India could be invaluable to both countries.

"When we talk about future collaboration, we're not only talking about opportunities in India and South Africa, we're talking about opportunities on the African continent as a whole and other spaces or other locations or territories where Sandock Austral also has a strong presence and because of our strong presence and our understanding of those markets. We are more than willing to work with Indian defence organisations for exports into other markets. So we talk about true and real partnerships," he said.

"We are able to do this because our globally benchmark operating model is supported by talented skills-based and a global partner network that ensures that we use world-class best practices know-how, and most importantly, coupled with our local knowledge of an operational perspective, and from a cultural perspective, where we have great insights on these matters that are so critical to joint business success."

The Summit was aimed at promoting Indian and South African companies already doing successful business or have potential interest for doing business in the two countries and allow them to network with stakeholders.

https://www.iol.co.za/news/south-africa-deepens-defence-collaboration-with-india-d8606cc4-dccc-42a8-af64-5dc98d3556cd

Science & Technology News

THE TIMES OF INDIA

Thu, 03 March 2022

Umamaheswaran is new Human Space Flight Centre Chief

Bengaluru: The Department of Space (DoS) has appointed Umamaheswaran R, the current Isro scientific secretary, as the new director of the Human Space Flight Centre (HSFC), which is responsible for implementation of Gaganyaan and also to pursue activities for sustained human space flight missions.

HSFC was headed by S Unnikrishnan Nair who was recently appointed director Vikram Sarabhai Space Centre (VSSC), Isro's main rocket development centre. HSFC's Gaganyaan responsibilities include end-to-end mission planning, development of engineering systems for crew survival in space and crew selection and training. The Centre is taking support from existing Isro centres to implement the first development flight of Gaganyan, whose project director is R Hutton. Umamaheswaran,

who is scheduled to take charge of HSFC on Thursday, joined Isro's VSSC in 1987. He completed Master of Science in Software System in 2007, and Master of Arts in Russian Language in 1996.

Over the years, he has made significant contributions to the development of launch vehicles. He played key roles in system integration, checkout and avionics of PSLV, GSLV & GSLV-Mk III. "He has been the chief designer (integration) of major subassemblies including the equipment bay of the launch vehicle. He was also the vehicle director for the remarkably successful GSLV D5/GSAT-14 mission with the indigenous cryo stage and served as project director, GSLV and mission director of the successful GSLV-D6, GSLV F05 & GSLV F09 missions, which is a hat-trick in GSLV programme," an official profile of Umamaheswaran reads. He also served as deputy director (avionics) at VSSC and led a team of young engineers for the development of miniaturised avionics, performing the crucial role in making key decisions to overcome various technical intricacies and mitigate developmental constraints in the realisation of these systems.

Before the government's approval for setting up of space regulator Indian National Space Promotion and Authorisation Centre (IN-SPACe), he led a high-level interim committee of IN-SPACe to implement space sector reforms aimed at enhancing participation of private sector in space activities.

https://timesofindia.indiatimes.com/city/bengaluru/umamaheswaran-is-new-human-space-flight-centre-chief/articleshow/89956483.cms

Thu, 03 March 2022

Using two different elements creates new possibilities in hybrid atomic quantum computers

Qubits, the building blocks of quantum computers, can be made from many different technologies. One way to make a qubit is to trap a single neutral atom in place using a focused laser, a technique that won the Nobel Prize in 2018.

But to make a quantum computer out of neutral atom qubits, many individual atoms must be trapped in place by many laser beams. So far, these arrays have only been constructed from atoms of a single element, out of concern that making an array out of two elements would be prohibitively complex.

But for the first time, University of Chicago researchers have created a hybrid array of neutral atoms from two different elements, significantly broadening the system's potential applications in quantum technology. The results were funded in part by the NSF Quantum Leap Challenge Institute Hybrid Quantum Architectures and Networks (HQAN), and published in *Physical Review X*.

"There have been many examples of quantum technology that have taken a hybrid approach," said Hannes Bernien, lead researcher of the project and assistant professor in University of Chicago's Pritzker School of Molecular Engineering. "But they have not been developed yet for these neutral atom platforms. We are very excited to see that our results have triggered a very positive response from the community, and that new protocols using our hybrid techniques are being developed."

Double the potential

While manmade qubits such as superconducting circuits require quality control to stay perfectly consistent, neutral atoms made from a single element all have exactly the same properties, making them ideal, consistent candidates for qubits.

But since every atom in the array has the same properties, it's extremely difficult to measure a single atom without disturbing its neighbors—they're all on the same frequency, so to speak.

"There have been quite a few milestone experiments over the last few years showing that atomic array platforms are extremely well suited for quantum simulation and also quantum computation," Bernien said. "But measurements on these systems tend to be destructive, since all the atoms have the same resonances. This new hybrid approach can be really useful in this case."

In a hybrid array made of atoms of two different elements, any atom's nearest neighbors can be atoms of the other element, with completely different frequencies. This makes it much easier for researchers to measure and manipulate a single atom without any interference from the atoms around it.

It also allows researchers to sidestep a standard complication of atomic arrays: it is very difficult to hold an atom in one place for very long.

"When you do these experiments with the single atoms, at some point, you lose the atoms," Bernien said. "And then you always have to re-initialize your system by first making a new, cold cloud of atoms and waiting for individual ones to get trapped by the lasers again. But because of this hybrid design, we can do experiments with these species separately. We can be doing an experiment with atoms of one element, while we refresh the other atoms, and then switch so we always have qubits available."

Making a bigger quantum computer

The hybrid array created by Bernien's group contains 512 lasers: 256 loaded with cesium atoms and 256 with rubidium atoms. As quantum computers go, this is a lot of qubits: Google and IBM, whose quantum computers are made of superconducting circuits rather than trapped atoms, have only gotten up to about 130 qubits. Though Bernien's device is not yet a quantum computer, quantum computers made from atomic arrays are much easier to scale up, which could lead to some important new insights.

"We actually don't know what happens when you scale up a very coherent system that you can isolate very well from the environment," Bernien said. "This trapped atom approach can be a wonderful tool to explore large-system quantum effects in unknown regimes."

The hybrid nature of this array also opens the door to many applications that wouldn't be possible with a single species of atom. Since the two species are independently controllable, the atoms of one element can be used as quantum memory while the other can be used to make quantum computations, taking on the respective roles of RAM and a CPU on a typical computer.

"Our work has already inspired theoreticians to think about new protocols for it, which is exactly what I hoped," Bernien said. "I hope it will inspire people to think about how these tools can be used for measurements and state control. We have already seen really cool protocols that that we are very interested in implementing on these arrays."

More information: Kevin Singh et al, Dual-Element, Two-Dimensional Atom Array with Continuous-Mode Operation, *Physical Review X* (2022). DOI: 10.1103/PhysRevX.12.011040

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