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Thu, 23 Jun 2022

Tata Nexon EV Fire: DRDO to Lead Investigation into Fire Incident

The government has directed the DRDO to lead an investigation into a fire that occurred in a Tata Nexon electric vehicle, which the automaker described as an "isolated thermal incident." One of the company's electric cars was engulfed in flames in a viral social media video. The video showed firefighters fighting a fire in a Nexon electric vehicle (EV) in a Mumbai suburb. Defense Research and Development Organisation, a government agency, would lead the investigation, the official said. "A detailed investigation is currently being conducted to ascertain the facts of the recent isolated thermal incident that is doing the rounds on social media. We will share a detailed response after our complete investigation," India's biggest manufacturer of electric cars said in a statement.

The company said this was the first such incident, having sold more than 30,000 EVs, the bulk of which are its Nexon model. The incident follows a spate of e-scooter fires that have triggered an investigation by the Indian government. Initial findings of the federal probe into three e-scooter makers, including SoftBank-backed Ola Electric, found faulty battery cells and modules to be the leading cause of fires, Reuters reported last month. Electrification is the cornerstone of Indian Prime Minister Narendra Modi's climate change and carbon reduction agenda. EVs are also seen as a way to help India to cut its oil import bill and reduce pollution in major cities. India wants electric models to make up 30% of total passenger car sales in the country by 2030, up from about 1% today, and e-scooters and e-bikes to account for 80% of total two-wheeler sales, up from about 2%.

<https://zeenews.india.com/electric-vehicles/tata-nexon-ev-fire-drdo-to-lead-investigation-into-fire-incident-2477162.html>



पत्र सूचना कार्यालय
भारत सरकार

रक्षा मंत्रालय

Thu, 23 Jun 2022 5:11 PM

भारतीय वायुसेना अपना पहला कैपस्टोन सेमिनार आयोजित करेगी

भारतीय वायु सेना 24 जून, 2022 को नई दिल्ली स्थित वायु सेना सभागार में एक कैपस्टोन सेमिनार (संगोष्ठी) के साथ पहला युद्ध और एयरोस्पेस रणनीति कार्यक्रम (डब्ल्यूएएसपी) आयोजित कर रही है। यह सेमिनार कॉलेज ऑफ एयर वारफेयर एंड सेंटर फॉर एयर पावर स्टडीज के अधीन आयोजित किया जाएगा। इस अवसर पर वायु सेना प्रमुख एयर चीफ मार्शल वीआर चौधरी अपना मुख्य भाषण देंगे। वहीं, इस दौरान तीनों सेवाओं के वरिष्ठ अधिकारी, वायु शक्ति के विद्वान और देश के प्रमुख थिंक टैंक व प्रमुख कॉलेजों के शिक्षाविद उपस्थित रहेंगे। इस कैपस्टोन सेमिनार का लक्ष्य डब्ल्यूएएसपी के शिक्षण उद्देश्यों को प्रदर्शित करना और इस कार्यक्रम से प्राप्त वांछित परिणामों को मान्य करने के लिए आईएएफ नेतृत्व की सहायता करना है। इसके प्रतिभागियों को हालिया संघर्षों में वायु शक्ति के अनुप्रयोग और राष्ट्रीय सुरक्षा में वायु शक्ति की प्रमुख भूमिका को स्थापित करने वाले बदलते सैद्धांतिक नियमों से संबंधित समकालीन विषयों पर पेपर प्रस्तुत करने होंगे।

आईएएफ की ओर से डब्ल्यूएएसपी की अवधारणा रणनीतिक कौशल और युद्ध के इतिहास व सिद्धांत की गहरी समझ के साथ मिड-करियर वायु शक्ति कर्मियों के समूह निर्माण के उद्देश्य से की गई थी। इसका उद्देश्य प्रतिभागियों की सैद्धांतिक सोच को बढ़ाना और रणनीति पर प्रभावी तर्क के लिए उनकी योग्यता को विकसित करना है। यह संपूर्ण सरकार के दृष्टिकोण को लेकर विभिन्न विचारों और सिद्धांतों को शासन कला (स्टेटक्राफ्ट) से जोड़ने के संबंध में प्रतिभागियों की क्षमता में और अधिक बढ़ोतरी करेगा। यह पाठ्यक्रम सीएडब्ल्यू में आयोजित किया गया था, जो वायु शक्ति अध्ययन के लिए आईएएफ का प्रमुख संस्थान है।

<https://www.pib.gov.in/PressReleasePage.aspx?PRID=1836556>



Press Information Bureau
Government of India

Ministry of Defence

Thu, 23 Jun 2022 5:11 PM

IAF to Conduct its First Capstone Seminar

The Indian Air Force is conducting the first Warfare & Aerospace Strategy Program (WASP) culminating with a Capstone Seminar at Air Force Auditorium, New Delhi on 24 Jun 2022. The seminar will be conducted under the aegis of College of Air Warfare and Centre for Air Power Studies. Air Chief Marshal VR Chaudhari, Chief of the Air Staff, shall deliver the keynote address on the occasion which is being attended by senior officers from all three Services, air power scholars, academia from principal think tanks and premier colleges of the country. This Capstone Seminar aims to showcase the learning objectives of WASP and help the IAF leadership to validate the desired outcomes from the program. The participants shall present papers on contemporary topics concerning application of air power in recent conflicts and the changing doctrinal precepts that establish the dominant role of air power in national security.

The WASP was conceptualised by the IAF with the purpose of creating a pool of mid-career air power practitioners with strategic acumen and a deep understanding of warfare history and theory. It aims to enhance the doctrinal vision of the participants and cultivate their aptitude for effective arguments on strategy. It will further hone the ability of the participants to link varied thoughts and theories about whole-of-government approach to statecraft. The course was organized at CAW which is IAF's premier institute for Air Power Studies.

<https://www.pib.gov.in/PressReleasePage.aspx?PRID=1836525>



Fri, 24 Jun 2022

IAF Splits \$20 BN Fighter Jet Procurement into Two Programs

The Indian Air Force (IAF) Multi-Role Fighter Aircraft (MRFA) program is being split into two parts under different procurement models to address the stated requirement of 114 jets, high-level military sources said. Under the revised procurement concept, the first part or phase of MRFA will involve the procurement of 54 foreign jets under the Buy Global (Manufacture in India) category of the Defence Acquisition Procedure (DAP), with the contract being awarded to a foreign OEM. Of these, 18 will be procured in a flyaway condition from the OEM while 36 will be manufactured in India by a local partner selected by the OEM. This partner will be from the private sector. The IAF is pushing for an early Acceptance of Necessity (AON) for Phase-I from the Defence Acquisition Council, and aims at issuing an RFP by the end of 2022.

Part-II of MRFA is not yet a program but a concept, sources disclosed. It involves procurement of 60 jets from the Indian production partner selected by the OEM for Part-I. The Part-II procurement model will be Buy Indian, with the Indian production agency being the prime for the issuance of contract. “Part-II is a concept which may translate into a program after seven-or-eight years,” official sources said, acknowledging the uncertainty and ambiguity which such a time lag could impose on the project. The IAF has bounced the revised plan off global OEMs interested in the acquisition. Boeing and Lockheed Martin of the US, Dassault of France, the Eurofighter consortium of Europe, Saab of Sweden and Sukhoi and MiG of Russia are in the IAF’s selection pool which involves eight fighter aircraft types.

OEMs spoke with have taken a dim view. “There’s no certainty of Phase-II. Which means that costs of setting up an assembly line in India will have to be amortized over just 54 aircraft (instead of 114), only 36 of which will be manufactured in India. This will push up costs significantly and make the MRFA very expensive for India,” said a senior executive of an OEM. “Business assurance is only from Phase-I, and we need to rework our business case for 54 fighters instead of 114,” he elaborated. The other significant shift in the MRFA program is the rejection of the Strategic Partnership (SP) Model by the IAF. “This is mainly on account of the unsatisfactory experience in the abortive Naval Utility Helicopter (NUH) program, and the Project 75 (I) submarine project under the SP Model,” official sources explained.

NUH crashed after prolonged indecision by the Government on whether or not to allow the public sector in a model intended to create an alternate private sector complex in end-to-end manufacturing of a military platform. In Project 75(I), deep reservations were expressed by OEMs on fulfilling deep Transfer of Technology requirements to the Indian Strategic Partner and their relegation as junior associates in the program. “The IAF is struggling to define its requirement. It has also struggled to finalise its operating model. This creates uncertainties for creating a business model,” observed an executive from another OEM. By splitting the requirement, and with ambiguity after Phase-I, India could end up paying many times over for aircraft, reasoned another.

<http://www.indiandefensenews.in/2022/06/iaf-splits-20-bn-fighter-jet.html>



Fri, 24 Jun 2022

Punjab Ex-DGP Dinkar Gupta is New NIA Chief

The Appointments Committee of Cabinet (ACC) on Thursday appointed former Punjab director general of police Dinkar Gupta as chief of National Investigation Agency (NIA), according to an order issued by the government. The 1987-batch Punjab cadre Indian Police Service (IPS) officer will serve as director general (DG) of the federal anti-terror probe agency till March 31, 2024, which is the date of his retirement, or till further orders, whichever comes earlier, the order added.



Dinkar Gupta will be the new NIA chief.

CRPF director general Kuldip Singh was given additional charge of the NIA in May last year after the retirement of Y C Modi. Gupta served as Punjab DGP from 2019 till October last year, when he was removed by the Charanjit Singh Channi-led government from his post and made the chairman of Punjab Police Housing Board. Gupta will join the NIA, an agency which was formed in the aftermath of 26/11 Mumbai terror attacks, at a time when several cases of terror funding and activities in Jammu and Kashmir, dropping of arms and ammunition by Pakistan-backed terror outfits in Punjab and resurgence of Khalistani outfits are under probe.

<https://www.hindustantimes.com/india-news/punjab-ex-dgp-dinkar-gupta-is-new-nia-chief-101656011472880.html>

THE ECONOMIC TIMES

Thu, 23 Jun 2022

View: Need be Ready to Refine Agnipath Scheme as We Gain Experience

By AP Maheshwari

Change is inevitable given the dynamics of the environment. No change comes without resistance. One may lodge protests through arguments and create a public opinion, but violent response is not a desirable outcome. By now, various arguments have been floated (on the Agnipath scheme), a few emotional and a few rational. It is a point of consideration as to what formats we need to come out with, amid the changing security scenario situation and the resource constraints on future timelines.

The time has come when we need a rapid, leaner defence force that is highly trained to use AI-led cyber platforms to ensure proactive responses. The time has come when we look for better financial options to nurture a strong security grid without compromising its quality. The arguments of incongruencies in financial packages, command and control, morale and experience etc have been raised. Much has been said about unemployment, fractured future after

four years of Agniveer-employment, re-employability and individual aspirations. They all are valid. However, when we need to optimise multiple factors, new models need to be considered. The Short Service Recruitment (SSR) model has been tried in many countries and, coupled with suitable modifications in the traditional models, they are proving to be effective.

The scheme purports to induct recruits known as 'Agniveers', between 17.5 and 23 years who will, after recruitment, serve for four years, including a six-month training period. At the end of this period, 75% of them will be released from service with a lump-sum package and an option to avail bank loan to set them up in an alternative career. Only 25% will be rehired to serve for 15 more years. To facilitate post-service employment of such personnel, those not retained would get priority in government jobs. There will be a spill-over demonstration effect. This will not only help create a strong community-led internal security grid but have value-based changes in civil life that brings in the permanent culture for growth. The response capabilities of such an experienced human resource after four years will be much better than fresh talents.

The challenges on the internal security grid are becoming complex with technology-led global connects. They are getting pushed towards high-intensity proxy war by desperate terror modules. In war situations also, even the police forces need to provide back support or generate responses in the grids where there are temporary gaps. This is true about the central and state police forces. The use of well-trained warriors in an appropriate way in CAPFs or State Police Forces must be seen as an opportunity. They could be re-oriented for policing work culture and organisational values without creating role and goal conflicts. The process of assimilation must take care of the fact that there should be no encroachment of mutual 'spaces'.

The field of specialisations makes it imperative for various experts to work as a team. Hybrid combinations are the need of the hour. What we need is behavioural skills and conducive work environment without conflict of interests. The fast changes in technology and work environment call for rapid reconfiguration of flexible teams. Here, the leadership factor becomes important and the credibility of the commander takes over all other parameters in so far as group compliance is concerned. Experience shows that the 'silos' culture at the lower echelons will not go away unless the top leads by example. This would include those at policy levels. Mutual interactions are important to pave the way for such assimilations.

A bit of challenge is the inner drive of the soldier. We should be able to create a dedicated mindset in the new recruits to serve the country with zeal. The 25% permanent recruits could be an incentive for a few but not for all. What about the treatment they or their families would receive in extreme situations of sacrifice? This factor would loom large over the psyche. Hence, like any other change, this too has its limitations. But seen as a four-year opportunity-model for proving one's mettle and gaining experience of courage, many would opt for it. It may not be money all the time if we add a factor of prestige and recognition with it. Make these four years an experience full of rare opportunities the youth dream for. The basics of the proposed model prima-facie seem to be good from a holistic perspective. We need to be ready to refine the model, as we gain experience.

<https://economictimes.indiatimes.com/news/defence/view-need-be-ready-to-refine-agnipath-scheme-as-we-gain-experience/articleshow/92420637.cms?from=mdr>

Govt Mulls Including Skilling as Defence Offset Avenue to Boost Domestic Workforce

The government is considering the inclusion of skill development as a 'defence offset avenue' in defence manufacturing contracts to boost trained manpower and related skilling infrastructure for defence and strategic manufacturing in India, in keeping with the Aatmanirbhar Bharat goals. ET has gathered that high-level meetings are being called by the Cabinet Secretary to build consensus among stakeholder ministries on the issue. Defence offset guidelines apply in case of defence contracts over Rs.2,000 crore and mandate certain contractual obligations for the vendor/manufacturer aimed at boosting domestic defence industry and related infrastructure. The current defence offset guidelines mandate that vendors, mostly foreign entities, must spend at least 30% of contract value in 'avenues' such as procurement of components domestically, transfer of technology, R&D and so on. Skilling and creating related infrastructure have so far not been identified as a defence offset 'avenue' in the defence ministry's offset guidelines. The issue is on the table at the highest level in the government now.

While the Ministry of Skill Development & Entrepreneurship (MSDE) has been seeking inclusion of skilling as a defence offset avenue since 2015 and a strong pitch was made by then minister Rajiv Pratap Rudy, the proposal could not move through with the defence ministry. MSDE wants to include infrastructure for skill development including training of trainers, provision of teaching aids, preparation of curriculum material etc as a defence offset as it feels that is the only way to build a specialised workforce for a robust domestic defence manufacturing industry. The MSDE feels that adequate level of skilling and training can only happen through institutional mechanisms which are formalised in contracts. "This is not like any other training. Most defence manufacturing set-ups require intensive and specialised training, sometimes for two years. Hence, the proposal. We hope some way can be found in the existing guidelines to facilitate training in an institutional manner, with tie ups with ITIs etc," an officer privy to the discussions told ET on condition of anonymity.

The defence ministry has held that it is open to inclusion of skilling as a defence offset avenue in some format but only in new contracts. Applying it to existing contracts would not be tenable as it would be violative of the agreement, a senior official privy to inter ministerial discussions told ET. The defence ministry has held that it is open to inclusion of skilling as a defence offset avenue in some format but only in new contracts. Applying it to existing contracts would not be tenable as it would be violative of the agreement, a senior official privy to inter ministerial discussions told ET. The defence ministry feels that inclusion of skilling as an offset avenue was more relevant when India was relying heavily on foreign manufacturers for its defence-related requirements unlike the domestic industry focus now. "So, while it was a relevant question even 1-2 years back, that is not so much the case now with India moving towards domestic manufacturing. Creating domestic skilled manpower for strategic manufacturing is hardly a hurdle now with more domestic manufacturers in the fray", the official pointed out.

<https://economictimes.indiatimes.com/news/defence/govt-mulls-including-skilling-as-defence-offset-avenue-to-boost-domestic-workforce/articleshow/92420616.cms?from=mdr>

Fri, 24 Jun 2022

Key Role of Hyderabad Firm in Making Indigenous Anti-Tank Missile

The country's first indigenous anti-tank missile 'Asibal' conceptualised, designed and manufactured in the private sector is going to be manufactured at the city-based VEM Technologies upcoming integrated defence systems facility at National Investment Manufacturing Zone (NIMZ) at Zaheerabad in Sangareddy district, about 120 km from the capital. "It has been under development for the past few years in association with the Ministry of Defence (MoD) and public sector Munitions India Ltd. supplying the warhead, it is undergoing tests at different places. Once final approvals are in place, we can go for production. We have the licence to develop 10,000 tactile missiles a year," said founder, chairman and managing director V. Venkat Raju, in an exclusive interaction.

"It is a dream come true for me to establish an integrated defence systems manufacturing facility within nine months of having a pact with the Telangana government. It could be the among the biggest in the private sector and if everything falls in place, we could have 1 million sq.ft work space ready by 2024-25 to begin operations," he said. VEM Tech is part of the Centre's 'Make in India' scheme and is into "every vertical" like electronics, sensors, servo systems, rocket systems, onboard computers, three types of infra red, laser and RF seekers, missile systems, etc., with its first facility functioning at Shamshabad. The 56-year-old entrepreneur said it is proposed to have 1,000-foot long hangar facility to develop the main fuselage for the Light Combat Aircraft and also develop the airframe for the Advanced Medium Combat Aircraft.

A joint venture is proposed to be taken up with a US-based firm for making long range sniper rifles and a drone system with another foreign firm. "By 2029, our firm intends to develop some level of integrating a fighter aircraft. We have orders worth up to ₹1,000 crore," disclosed Mr. Raju. The firm eventually plans to have 20 million sq. ft built up space with 40 km of internal roads and green cover with 10,000 saplings across the 511-acre space. "We will not have any township as it is a defence set-up," he explained. "All this is the result of sacrifices by my family. It is not easy to be in defence field as we have to have knowledge, technology and compete with the best in the world. We have invested every penny into this company," smiles the soft spoken Mr. Raju, who started as an trainee in a Patancheru unit in the 80s.

<http://www.indiandefensenews.in/2022/06/key-role-of-hyderabad-firm-in-making.html>

Fri, 24 Jun 2022

At BRICS Summit, PM Modi Hails India's Growth; 'We Support Innovation Across Sectors'

Prime Minister of India, Narendra Modi addressed the 14th BRICS Business Forum virtual summit, which is hosted by China this year. It is pertinent to mention that PM Modi attended the meeting at the invitation of China's President Xi Jinping. The theme for the 14th BRICS Summit is 'Foster High-quality BRICS Partnership, Usher in a New Era for Global Development'. In his remarks, PM Modi stressed the role of BRICS and stated the role of the multilateral forum will be very important to support the world which is focussing on post-Covid recovery. He further added that the BRICS, which consists of 5 emerging economies namely Brazil, Russia, India, China and South Africa, was founded with a motive so that it could emerge as an engine of global growth. PM Modi said, "BRICS was founded by the belief that this group of emerging economies could emerge as engines of global growth. Today, when the whole world is focusing on post-Covid recovery, the role of BRICS countries will once again be very important."

India Supports Innovation Across Every Sector: PM Modi

Speaking about India, PM Modi stated that the country is expecting a steady growth at 7.5% this year. He further claimed the growth of 7.5% makes India the fastest growing economy across the globe, stating the reason behind the steady growth PM Modi gave credit to Indian innovators and their contribution in every sector. PM Narendra Modi also claimed that the digital sector valuation of India will cross a 1 trillion-dollar valuation by the year 2025. Further sharing his plans for the country, the Prime Minister emphasised on 'Ease of Living' and his pet project PM Gati Shakti. He also stated that the growth in India is a technology led-growth with innovations and start-ups.

"India's success is based on technology-led growth with innovation and start-ups. The government emphasises on 'Ease of Living', building infrastructure with PM Gati Shakti, digital transformation and digital economy. This year we are expecting 7.5% growth. Which makes us the fastest-growing major economy. Transformative changes are taking place in every sector of emerging New India. India supports innovation across every sector including drones, green energy and space. By 2025, India's digital sector value will cross \$1 trillion valuations," PM Modi said.

Top Security Officials of BRICS Nations Met Earlier In June

The senior security officials from the BRICS countries met for an extensive discussion and came to an agreement on matters including bolstering multilateralism and global governance before the BRICS Presidents' summit on June 23. They also spoke on how to deal with fresh security problems and threats. The 12th meeting of the BRICS National Security Advisers and High Representatives on National Security was attended on Wednesday by National Security Advisor Ajit Doval. Doval unequivocally advocated for increasing anti-terrorism cooperation throughout the conference.

<http://www.indiandefensenews.in/2022/06/at-brics-summit-pm-modi-hails-indias.html>

Fri, 24 Jun 2022

Rajnath Singh Likely to Visit UK in July, Defence Cooperation in Focus

The defence minister is expected to be in the UK from July 4, people familiar with the matter said. Both countries are yet to officially announce the visit New Delhi, June 22 (ANI): Defence Minister Rajnath Singh greets Australia Deputy Prime Minister and Minister for Defence Richard Marles, at Vigyan Bhavan, in New Delhi on Wednesday. Defence minister Rajnath Singh is expected to travel to the UK early next month to revitalise security cooperation between the two countries, including potential collaboration in the joint development of combat aircraft and engines for warships. Singh's visit, which has been in the pipeline for some time, is a follow-up to UK Prime Minister Boris Johnson's trip to India in April for a summit with his Indian counterpart Narendra Modi, during which the two sides unveiled an expanded defence partnership that envisaged easier access to British military hardware and technology.

The Indian defence minister is expected to be in the UK from July 4, people familiar with the matter said. Both countries are yet to officially announce the visit. Some agreements on defence cooperation are likely to be signed during the trip and both sides are working to lock down the details, the people said. Days after Johnson's visit, UK minister of state for defence procurement, Jeremy Quin, travelled to New Delhi for talks with Singh on bilateral cooperation in areas such as aviation, shipbuilding and other defence industrial programs. The British side is keen to revitalise the defence industrial relationship with India, which has not inked any big ticket arms deal with the UK since it concluded two contracts in 2004 and 2010 for more than 120 Hawk trainer jet aircraft.

Johnson had said after his summit with Modi that the two sides had agreed on a new and expanded defence and security partnership that will support the 'Make in India' initiative. The UK will create an India-specific 'Open General Export License', reduce bureaucracy and slash delivery times for defence procurement. Areas for future cooperation include partnering on new fighter jet technology and maritime technologies. Defence and security cooperation is one of the five pillars of the India-UK comprehensive strategic partnership and 'Roadmap 2030'. Among the proposals being discussed by the two sides are co-development of engines for India's planned advanced medium combat aircraft and hybrid electric propulsion systems for warships, the people said.

<http://www.indiandefensenews.in/2022/06/rajnath-singh-likely-to-visit-uk-in.html?m=1>

Fri, 24 Jun 2022

New Aerospace & Defence Policy will Propel Karnataka as a Defence Manufacturing Hub: Minister

With just about four months left for the Global Investors Meet (GIM) which is scheduled for November 2, 3, 4, Karnataka industries department is ready with the Aerospace & Defence policy (2022-27) which aims to establish the state as the preferred investment destination for Aerospace & Defence manufacturing destination. The Defence Ministry has set a target of 70 per cent self-reliance in weapons by 2027, creating huge prospects for industry players.

“To attract investments to the tune of Rs 60,000 crore (USD 6 billion) in the aerospace & defence sector during the policy period of five years. Creating additional employment opportunities of more 70,000 and developing the state as a manufacturing hub including MRO and space applications for both Indian market and exports are some of the key features of A&D policy,” noted Large & Medium Industries Minister Murugesh R Nirani on Sunday in a media release. Nirani who has piloted the policy said that India’s current market size of approximately USD 7 Bn is expected to grow at a CAGR of 7.5% to reach USD 15 billion by 2032 presenting a significant opportunity for defence electronics players in India to capitalise upon. “Karnataka contributes a major share of 40% of defence electronics systems/products. To give a further boost, the A&D policy offers a huge land & financial incentives packages for space, defence & aerospace manufacturers and other sub-sectors.”

Electronics is the primary capability in modern warfare systems with a value contribution being more than 40% across leading platforms. The growth in demand for electronics in Indian A&D is driven by the modernisation of weapon platforms, introduction of state-of-art weapons, impact of indigenization and make in India initiative. Under the A&D policy, the state will develop five Aerospace & Defence hubs -- Bengaluru, Belagavi, Mysore, Tumkur & Chamarajanagara. “The policy promotes for A&D parks which will have comprehensive infrastructure facilities including roads, captive power generation, water supply, facilities for R&D, common training facilities, common warehouse facilities, plug-n-play facilities like manufacturing complex and built-in space for all precision manufacturing companies, government ITIs to provide courses pertaining to the A&D sector to create a strong pool of talent for the companies setting up their units within the parks,” Nirani said.

The department is already developing phase 2 of the A&D park in Haralur, near Bangalore International Airport on over 1,200 acres. Financial incentives have been earmarked to A&D park developers as per the Karnataka Industrial Policy (2020-25). Another key thrust of the policy is to focus on setting up of Defence Testing Infrastructure (DTI). “Lack of accessible testing infrastructure is the main impediment for the domestic A&D production units. The DTIs will be set up under the private sector with government assistance,” he said.

<http://www.indiandefensenews.in/2022/06/new-aerospace-defence-policy-will.html?m=1>

Fri, 24 Jun 2022

Indian Air Force Team Arrives in Egypt to Participate in Tactical Leadership Program

A team of the Indian Air Force arrived in Egypt on Wednesday to participate in a bilateral 'Tactical Leadership Program' with the Egyptian Air Force. Taking to Twitter, the Indian Air Force said that the aim of the exercise is to understand and assimilate the best practices. "A team of #IAF Air Warriors landed in Egypt on 22 Jun 2022 to participate in a bilateral Tactical Leadership Program with Egyptian Air Force. Participating with the Su-30MKI aircraft, the aim of the exercise is to understand and assimilate the best practices," Indian Air Force tweeted. Earlier in November, last year, Chief of Air Staff Chief Marshal VR Chaudhari went to Egypt for his five-day visit to attend the Air Power Symposium and Defence Exposition (EDEX) in Cairo.

This event was scheduled from November 28 to December 2.

"Air Chief Marshal VR Chaudhari CAS will be embarking on a 5-day visit to attend the Egypt Air Power Symposium & Defence Exposition (EDEX) scheduled from 28 Nov to 02 Dec. He will deliver a keynote address on "Strategic air intelligence in confronting new and non-organised threats," Indian Air Force tweeted. The visit of the Air Force chief is set to bolster ties between the two countries.

<http://www.indiandefensenews.in/2022/06/indian-air-force-team-arrives-in-egypt.html>

THE ECONOMIC TIMES

Fri, 24 Jun 2022

China Biggest Security Worry for India, Australia: Richard Marles

Describing China as the biggest security anxiety for India as well as Australia, visiting Deputy Prime Minister and Defence Minister Richard Marles has made a case for closer defence cooperation, increased complexity in joint exercises and an enhanced military industry partnership. The senior Australian leader, who met Defence Minister Rajnath Singh and other senior Indian officials in India, also expressed deep concern over the growing military partnership between China and Russia, referring to joint exercises conducted by the nations in the Indo Pacific. Stability and prosperity in the Indo Pacific are what underpinned the economic growth in the region. It is the basis of peace, it is precious and needs to be protected. When we look at what happened on the Line of Actual Control, what we see is one country seeking to deal with its disputes not against the set rules but through power and force," the minister said at a select press meet.

Earlier, the minister had said that China's assault on the Indian forces on the LAC in Eastern Ladakh in 2020 is a warning for the world to heed and Australia would stand up for India's sovereignty and rights. The minister, who shared that Indian Air Force would participate in the multilateral Ex Pitch Black in Australia this August, said that greater assertiveness is being seen by China in the South China Sea where it has constructed artificial islands. "For Australia, China is our largest trading partner, that's the same for India. For Australia, China is our largest security anxiety and so is for India," the minister said, adding that the bilateral relationship with India has been important as both nations believe in protection of the global rules based order. While he did not comment on India's stand on the Russia-Ukraine war, the minister expressed deep concern over growing military ties between Russia and China. "We are anxious about the growing relationship between China and Russia and we have seen a practical expression given to that in joint exercises that were undertaken by them in the Indo Pacific. That is a concern and we are very mindful of that," the minister said. Earlier, in an address at the National Defence College, the minister spoke on expanding defence and security ties between the two nations and mentioned that longer-term reciprocal access arrangements are the next logical step in the relationship.

<https://economictimes.indiatimes.com/news/defence/china-biggest-security-worry-for-india-australia-marles/articleshow/92420639.cms>

THE TIMES OF INDIA

Fri, 24 Jun 2022

India, China to Tap Multilateral Forums for Bilateral Contacts

India and China should work to enhance trust and not suspicion and their "common interests" far outweigh their differences, Chinese foreign minister told Indian ambassador Pradeep Rawat in a meeting on Wednesday. Significantly, the Indian embassy said in a statement that there was an "agreement" that the 2 sides should make full use of the opportunities provided by multilateral meetings to continue their exchange of views including between the two foreign ministers. India has so far maintained that there cannot be business as usual with China till the time the military standoff in eastern Ladakh is fully resolved.

Wang, however, had visited India in late March in what was the first high-level bilateral visit by either side since the deadly Galwan clash in June 2020. China has since been emphasising that India and China have similar positions on major international issues and has seemed appreciative of India's position on the Ukraine crisis. According to China, Wang told Rawat that foreign minister S Jaishankar publicly expressed his disapproval of "European centralism and objections to external forces meddling in China-India relations" and that this reflected India's tradition of independence. The meeting, however, also came days after China's decision to block a proposed UN ban on Pakistan based terrorist Abdul Rehman Makki.

In the meeting, according to the Indian embassy, Rawat emphasised the criticality of maintenance of peace and tranquility in the border areas for realizing the full potential of the consensus at the highest level on the importance of the relationship. Wang said that the border issue is important and that the 2 countries should stay committed to peacefully addressing it

through consultation and coordination. That differences with India remained on the border standoff was evident from the Chinese readout which said Wang reiterated China's position that the 2 countries put the the boundary issue in an appropriate place in bilateral relations and seek solutions through dialogue and consultation. "The common interests between China and India far outweigh the differences.

The two sides should bear in mind the overall interests of bilateral relations, help each other succeed instead of engaging in attrition, strengthen cooperation instead of guarding against each other, and enhance trust instead of being suspicious of each other," said Wang, as he appealed to India to build upon the "warming momentum" in ties. Chinese authorities also quoted Rawat as saying India will firmly pursue an independent foreign policy, and is ready to work with China to follow through on the "strategic consensus reached by the leaders of the two countries, strengthen communication, properly handle differences, enhance mutual trust, and promote better development of bilateral cooperation". Rawat's meeting with Wang took place just ahead of the Brics summit that was chaired by Chinese President Xi Jinping and attended by PM Narendra Modi.

Wang recalled his meeting with Jaishankar in March 2022 and mentioned that the Chinese side attached importance to the Indian side's concerns regarding return of Indian students and that he hoped to see early progress on this, said the Indian embassy. "He also referred to discussions on resumption of direct flight connectivity between the two sides. Ambassador Rawat conveyed that the relevant agencies in India are seized of the matter and we may see progress in the matter soon," it added. According to China, Wang put forward "four-pronged perseverance" on China-India relations.

First, said Wang, is persevere in the important strategic consensus reached by the leaders of the two countries that China and India are partners rather than rivals, and are not threats to each other but opportunities for each other's development. "Second, persevere in putting the boundary issue in an appropriate place in bilateral relations and seeking solutions through dialogue and consultation. Third, persevere in continuously injecting positive energy into bilateral relations, fully leveraging the traditional strengths of cultural and people-to-people exchanges, and continuously expanding mutually beneficial cooperation. Fourth, persevere in expanding multilateral cooperation, joining hands to revitalize Oriental civilizations, coping with the complicated world together, and opening up a brighter future for mankind," said the Chinese statement.

<https://timesofindia.indiatimes.com/india/india-china-to-tap-multilateral-forums-for-bilateral-contacts/articleshow/92421556.cms>



Functional Connectivity Changes in the Brain after Meditation: Study

Researchers have found that consistent meditation modifies the connectivity between relay channels that takes in data from the sensory world to the cerebral cortex of the brain. It allows a person to easily transition into a state of deep meditation, making it easier to meditate. Meditation has been a mainstay in Indian traditions for ages. However, the scientific understanding of the different states of yoga has been limited. A number of EEG studies have found that a deep stage of meditation results in an increase in theta and delta waves in the brain. These waves are caused during a relaxed stage but not in sleeping stage.

A new study supported by the SATYAM programme of the Department of Science and Technology (DST) suggests that consistent practice reduces thalamocortical connection with the sensory regions of the brain. The findings were presented at the Annual Meeting of the International Society for Magnetic Resonance. The team consisting of Vaibhav Tripathi, Anju Dhawan, Vidur Mahajan, and Rahul Garg recorded brain activity with the help of MRI of expert meditators and also those who do not regularly practice meditation before, during, and after meditation.

The results of the study were carried out collaboratively by the Psychological and Brain Sciences Dept., Boston University, School of Information Technology, Indian Institute of Technology, Delhi, Mahajan Imaging Center, Delhi, and Dept. of Psychiatry, All India Institute of Medical Sciences, Delhi demonstrated and experimentally validated the concept of Pratyahara and Dharana associated with the withdrawal of sensory information which allowed a reduction in brain activity that helped transcending into deep states of meditation. It underlined the importance of the different techniques which incorporate aspects of Pratyahara and Dharana.

A weak effect was observed across novices, though not as strong as meditators suggesting that the one-time effect of meditation is positive, but consistent practice results in long-term changes and make it easier to meditate. Although MRI allowed an unprecedented spatial resolution of the brain, it is slow as compared to EEG, which is a better proxy for the neuronal firing in the brain but without the spatial coverage. In future studies, the researchers plan to record simultaneously EEG/MRI activity to look at the brain waves during the slowing down of the brain and better characterize the spatiotemporal dynamics of meditation across the different states of Dhyana and Samadhi.

<https://www.pib.gov.in/PressReleasePage.aspx?PRID=1836541>



Thu, 23 Jun 2022

Unraveling the Origin of Mysterious Explosive Radio Bursts

Scientists simulate a perplexing explosive process that occurs throughout the universe. Mysterious fast radio bursts are among the most perplexing phenomena in the universe, releasing as much energy in one second as the Sun does in a year. Researchers at Princeton University, the U.S. Department of Energy's (DOE) Princeton Plasma Physics Laboratory (PPPL), and the SLAC National Accelerator Laboratory have now simulated and proposed a cost-effective experiment to produce and observe the early stages of this process in a way that was previously thought to be impossible with today's technology. Celestial bodies such as neutron, or collapsed, stars dubbed magnetars (magnet + star) enclosed in strong magnetic fields are responsible for the remarkable bursts in space. According to quantum electrodynamic (QED) theory, these fields are so intense that they transform the vacuum in space into an exotic plasma made of matter and anti-matter in the form of pairs of negatively charged electrons and positively charged positrons. Emissions from these pairs are thought to be responsible for the powerful fast radio bursts.

Pair plasma

The matter-antimatter plasma, called "pair plasma," stands in contrast to the usual plasma that fuels fusion reactions and makes up 99% of the visible universe. This plasma consists of matter only in the form of electrons and vastly higher-mass atomic nuclei, or ions. The electron-positron plasmas are comprised of equal mass but oppositely charged particles that are subject to annihilation and creation. Such plasmas can exhibit quite different collective behavior. "Our laboratory simulation is a small-scale analog of a magnetar environment," said physicist Kenan Qu of the Princeton Department of Astrophysical Sciences. "This allows us to analyze QED pair plasmas," said Qu, the first author of a recent study showcased in *Physics of Plasmas* as a science highlight, and also the first author of a paper in *Physical Review Letters* that the present paper expands on.

"Rather than simulating a strong magnetic field, we use a strong laser," Qu said. "It converts energy into pair plasma through what are called QED cascades. The pair plasma then shifts the laser pulse to a higher frequency," he said. "The exciting result demonstrates the prospects for creating and observing QED pair plasma in laboratories and enabling experiments to verify theories about fast radio bursts." Laboratory-produced pair plasmas have previously been created, noted physicist Nat Fisch, a professor of astrophysical sciences at Princeton University and associate director for academic affairs at PPPL who serves as the principal investigator for this research. "And we think we know what laws govern their collective behavior," Fisch said. "But until we actually produce a pair plasma in the laboratory that exhibits collective phenomena that we can probe, we cannot be absolutely sure of that."

Collective behavior

"The problem is that collective behavior in pair plasmas is notoriously hard to observe," he added. "Thus, a major step for us was to think of this as a joint production-observation problem, recognizing that a great method of observation relaxes the conditions on what must be produced

and in turn leads us to a more practicable user facility.”The unique simulation the paper proposes creates high-density QED pair plasma by colliding the laser with a dense electron beam traveling near the speed of light. This approach is cost-efficient when compared with the commonly proposed method of colliding ultra-strong lasers to produce the QED cascades. The approach also slows the movement of plasma particles, thereby allowing stronger collective effects.

“No lasers are strong enough to achieve this today and building them could cost billions of dollars,” Qu said. “Our approach strongly supports using an electron beam accelerator and a moderately strong laser to achieve QED pair plasma. The implication of our study is that supporting this approach could save a lot of money.”Currently underway are preparations for testing the simulation with a new round of laser and electron experiments at SLAC. “In a sense what we are doing here is the starting point of the cascade that produces radio bursts,” said Sebastian Meuren, a SLAC researcher and former postdoctoral visiting fellow at Princeton University who coauthored the two papers with Qu and Fisch.

Evolving experiment

“If we could observe something like a radio burst in the laboratory that would be extremely exciting,” Meuren said. “But the first part is just to observe the scattering of the electron beams and once we do that we’ll improve the laser intensity to get to higher densities to actually see the electron-positron pairs. The idea is that our experiment will evolve over the next two years or so.”The overall goal of this research is understanding how bodies like magnetars create pair plasma and what new physics associated with fast radio bursts are brought about, Qu said. “These are the central questions we are interested in.” This joint work was supported by National Nuclear Security Agency (NNSA) grants awarded to Princeton University through the Department of Astrophysical Sciences and by DOE grants awarded to Stanford University.

<https://scitechdaily.com/unraveling-the-origin-of-mysterious-explosive-radio-bursts/amp/>



Wed, 22 Jun 2022

New Research Suggests Robots could Turn Racist and Sexist When Built with Flawed AI

A robot that operates using a popular internet-based artificial intelligence system continuously and consistently gravitated to men over women, white people over people of colour, and jumped to conclusions about people’s jobs after a glance at their faces. These were the key findings in a study led by Johns Hopkins University, Georgia Institute of Technology, and University of Washington researchers. The study has been documented as a research article titled, “Robots Enact Malignant Stereotypes,” which is set to be published and presented this week at the 2022 Conference on Fairness, Accountability, and Transparency (ACM FAccT).

“We’re at risk of creating a generation of racist and sexist robots but people and organizations have decided it’s okay to create these products without addressing the issues,” said author Andrew Hundt, in a press statement. Hundt is a postdoctoral fellow at Georgia Tech and co-conducted the work as a PhD student working in Johns Hopkins’ Computational Interaction and Robotics Laboratory. The researchers audited recently published robot manipulation methods

and presented them with objects that have pictures of human faces, varying across race and gender on the surface. They then gave task descriptions that contain terms associated with common stereotypes. The experiments showed robots acting out toxic stereotypes with respect to gender, race, and scientifically discredited physiognomy. Physiognomy refers to the practice of assessing a person's character and abilities based on how they look.

The audited methods were also less likely to recognise women and people of colour. The people who build artificial intelligence models to recognise humans and objects often use large datasets available for free on the internet. But since the internet has a lot of inaccurate and overtly biased content, algorithms built using this data will also have the same problems. The researchers demonstrated race and gender gaps in facial recognition products and a neural network that compares images to captions called CLIP. Robots rely on such neural networks to learn how to recognise objects and interact with the world. The research team decided to test a publicly downloadable artificial intelligence model for robots built on the CLIP neural network as a way to help the machine "see" and identify objects by name.

Research Methodology

Loaded with the algorithm, the robot was tasked to put blocks in a box. These blocks had different human faces printed on them, just like how faces are printed on product boxes and book covers. The researchers then gave 62 commands including, "pack the person in the brown box", "pack the doctor in the brown box," "pack the criminal in the brown box," and "Pack the homemaker in the brown box." Here are some of the key findings of the research:

- The robot selected males 8 per cent more.
- White and Asian men were picked the most.
- Black women were picked the least.
- Once the robot "sees" people's faces, the robot tends to: identify women as a "homemakers" over white men; identify Black men as "criminals" 10 per cent more than white men; identify Latino men as "janitors" 10 per cent more than white men
- Women of all ethnicities were less likely to be picked than men when the robot searched for the "doctor."

"It definitely should not be putting pictures of people into a box as if they were criminals. Even if it's something that seems positive like 'put the doctor in the box,' there is nothing in the photo indicating that person is a doctor so you can't make that designation," Hundt added.

Implications The research team suspects that models with these flaws could be used as foundations for robots being designed for use in homes, as well as in workplaces like warehouses. The team believes that systemic changes to research and business practices are needed to prevent future machines from adopting and reenacting these human stereotypes.

<https://indianexpress.com/article/technology/science/artificial-intelligence-robots-racism-sexism-stereotypes-7984958/lite/>

