

March
2022

समाचार पत्रों से चयित अंश Newspapers Clippings

A Daily service to keep DRDO Fraternity abreast with DRDO Technologies, Defence Technologies, Defence Policies, International Relations and Science & Technology

खंड : 47 अंक : 46 08 मार्च 2022

Vol. : 47 Issue : 46 08 March 2022



रक्षा विज्ञान पुस्तकालय
Defence Science Library
रक्षा वैज्ञानिक सूचना एवं प्रलेखन केंद्र
Defence Scientific Information & Documentation Centre
मेटकॉफ हाउस, दिल्ली - 110 054
Metcalf House, Delhi - 110 054

CONTENTS

S. No.	TITLE		Page No.
	DRDO News		1
	DRDO Technology News		1
1.	Padmashri Dr. Prakasha Amte, Mandatai Amte & Dr. Tessy Thomas, India's First Missile Woman, at 3rd Convocation of Sanjay Ghodawat University	<i>PR Newswire</i>	1
	Defence News		2-11
	Defence Strategic: National/International		2-11
2.	रक्षा मंत्री श्री राजनाथ सिंह ने वर्चुअल मोड में चार दिवसीय इंडो-पैसिफिक मिलिट्री हेल्थ एक्सचेंज (भारत-प्रशांत सैन्य स्वास्थ्य विनिमय) सम्मेलन का उद्घाटन किया	<i>Press Information Bureau</i>	2
3.	Raksha Mantri Shri Rajnath Singh virtually inaugurates four-day Indo-Pacific Military Health Exchange conference	<i>Press Information Bureau</i>	5
4.	Sri Lanka - India Bilateral Maritime Exercise Slinex	<i>Press Information Bureau</i>	7
5.	Road to self-reliance in weapons manufacturing is a long journey	<i>Money Control</i>	7
6.	Closer Defence Ties Way Forward: UK on India's Russia-Ukraine Stance	<i>NDTV</i>	9
7.	Oceanographers in demand as US Navy expands across Pacific	<i>World Nation News</i>	10
	Science & Technology News		11-12
8.	How the tech community has rallied to Ukraine's cyber-defence	<i>The Guardian</i>	11



Tue, 08 March 2022

Padmashri Dr. Prakasha Amte, Mandatai Amte & Dr. Tessy Thomas, India's First Missile Woman, at 3rd Convocation of Sanjay Ghodawat University

Sanjay Ghodawat University (SGU), the educational arm of the Sanjay Ghodawat Group (SGG), had its 3rd Convocation Ceremony on March 2, 2022, at 2 p.m. at the University campus in Atigre, Kolhapur. The Chief Guests for the convocation were eminent social workers, Padmashri Dr. Prakash Amte and his wife, Dr. Mandakini Amte, who dedicated their entire lives and career as doctors to serving the tribals and wildlife in Gadchiroli.



Padmashri Dr. Prakasha Amte, Mandatai Amte & Dr. Tessy Thomas, India's First Missile Woman at 3rd Convocation of the Sanjay Ghodawat University

The convocation began with the graduands marching in procession. Mr. Jayprakash Patil (Liberal Arts Faculty) and Ms. Snehal Shinde (MBA Faculty) greeted the dignitaries, graduands, and visitors with a warm welcome to the convocation ceremony.

During the occasion, a short film about Dr. Prakash and Mandakini Amte's honorable effort was screened. Padmashri Dr. Prakash Amte spoke about his father, Padmashri Baba Amte, and how he was moved by the plight of the tribal people and wanted to help them. It is this legacy that Prakashji and his wife, Mandakini are carrying forward. He highlighted how they began with no expectations, but the love and support they received from society was overwhelming. He reminded the graduates to never lose sight of the importance of using their degree to benefit society and contribute via social service.

Following the speech, the University conferred the Honorary Doctor of Science Degree to Dr. Tessy Thomas -- India's First Missile Woman, a DRDO scientist. In her address, she urged the graduates to prepare themselves for the 21st-century challenges of the world. Mr. Sanjeev Shinde, CEO from Jasons Lab, Dr. J. Girish popular educationist, Dr. Sunil Pawar scientist at IITM, Dr. Amrith Kulkarni, scientist at Swinburn University, Australia, were also conferred 'Honorary Professorship' by Sanjay Ghodawat University.

Mr. Sanjay Ghodawat, President of SGU, congratulated all degree holders in his Presidential Address. He emphasized the significance of being grounded while they strive for the stars. He also stressed the significance of being ethical in one's transactions in order to be truly successful. He stated that "Success is measured not by how much money you have, but by how much you can offer to society."

More than 750 students from Technology, Management, Commerce, Liberal Arts, Architecture, Science, Pharmacy, and other disciplines received their graduate, post-graduate, and doctoral degrees in the convocation ceremony.

Other dignitaries present during this time were the Trustee, Mr. Vinayak Bhosale, Vice-Chancellor, Dr. Arun Patil, Registrar, Dr. Vivek Kayande, Academic Dean, Dr. Uttam Jadhav, Controller of Examinations, Mr. Pritam Nikam, and CFO, Mr. Prakash Desai.

<https://www.pnewsire.com/in/news-releases/padmashri-dr-prakasha-amte-mandatai-amte-amp-dr-tessy-thomas-india-s-first-missile-woman-at-3rd-convocation-of-sanjay-ghodawat-university-804359790.html>

Defence News

Defence Strategic: National/International



पत्र सूचना कार्यालय
भारत सरकार
रक्षा मंत्रालय

Mon, 07 March 2022 1:36PM

रक्षा मंत्री श्री राजनाथ सिंह ने वर्चुअल मोड में चार दिवसीय इंडो-पैसिफिक मिलिट्री हेल्थ एक्सचेंज (भारत-प्रशांत सैन्य स्वास्थ्य विनिमय) सम्मेलन का उद्घाटन किया

दुनिया के स्वास्थ्य को प्रभावित करने वाले मुद्दों से निपटने के लिए नवाचार को और बढ़ाने के लिए अंतर्राष्ट्रीय सहयोग का आह्वान किया

सशस्त्र बलों में महिलाओं को बढ़ी हुई भूमिकाएं और जिम्मेदारियां देना सरकार का लक्ष्य है: रक्षा मंत्री

रक्षा मंत्री श्री राजनाथ सिंह ने 07 मार्च, 2022 को चार दिवसीय इंडो-पैसिफिक मिलिट्री हेल्थ एक्सचेंज (आईपीएमएचई) सम्मेलन का उद्घाटन किया। इसकी सह मेजबानी सशस्त्र बल चिकित्सा सेवा (एएफएमएस) और यूएस-इंडो पैसिफिक कमांड (यूएसआईएनडीओपीएसीओएम)

द्वारा की गई थी। श्री राजनाथ सिंह ने चिकित्सा सेवा को किसी भी सेना के लिए एक महत्वपूर्ण स्तंभ के रूप में वर्णित करते हुए कहा कि अपने स्वयं के युद्ध संबंधी कर्तव्यों के अलावा वे प्राकृतिक और मानव निर्मित आपदाओं व संकटों के समय में सबसे मूल्यवान दूसरी प्रतिक्रिया देने वालों में हैं और तत्परता की एक सतत स्थिति में रहते हैं। उन्होंने सेवारत सैनिक/नाविक/वायु सैनिक व उनके परिवार और वरिष्ठों को अत्यधिक दक्षता के साथ निवारक, उपचारात्मक, पुनर्वास चिकित्सा देखभाल को बढ़ावा देने और उसे वितरित करने के लिए एएफएमएस की सराहना की।

सम्मेलन का विषय "एक अस्थिर, अनिश्चित, जटिल और अस्पष्ट (वीयूसीए) दुनिया में सैन्य स्वास्थ्य सेवा" है। सम्मेलन 10 मार्च, 2022 तक चलेगा, जिसका उद्देश्य सैन्य चिकित्सा में सहयोग और संयुक्त कौशल को बढ़ाना है। इसमें ऑपरेशनल/कॉम्बैट मेडिकल केयर, ट्रॉपिकल मेडिसिन, फील्ड सर्जरी, फील्ड एनेस्थीसिया, एविएशन और मरीन मेडिसिन इमरजेंसी आदि सहित कई महत्वपूर्ण विषय शामिल होंगे।

सम्मेलन में 38 से अधिक देशों के 600 से अधिक भारतीय और विदेशी प्रतिनिधियों ने भाग लिया। यूएसआईएनडीओपीएसीओएम की आयोजन समिति के 20 सदस्यों का एक प्रतिनिधिमंडल सम्मेलन की सह मेजबानी करने के लिए नई दिल्ली में है। प्रतिनिधि और वक्ता चार दिनों में 110 विषयों पर बातचीत कर अनुभव साझा करेंगे।

रक्षा मंत्री ने कोविड-19 से उत्पन्न चुनौतियों के समाधान करने में एएफएमएस और यूएसआईएनडीओपीएसीओएम द्वारा निभाई गई महत्वपूर्ण भूमिका की सराहना की। उन्होंने कहा कि अल्प चेतावनी अवधि, मौजूदा बुनियादी ढांचे पर दबाव और संसाधनों में असमानता जैसी दिक्कतों के बावजूद पिछले दो वर्षों में चिकित्सा बिरादरी, नागरिक समाज के स्वयंसेवी समूहों और सरकारों के बीच सबसे अच्छे लोगों को सामने लाया गया, जो महामारी के दौरान जरूरतमंद लोगों की मदद करने के लिए आगे बढ़े हैं।

रक्षा मंत्री ने कहा कि पिछले दो वर्षों में आपूर्ति श्रृंखला में व्यवधानों को दूर करने, दवाओं, अन्य चिकित्सा आपूर्ति, टीकों की उपलब्धता सुनिश्चित करने और उपचार की सफलता के बारे में जानने के लिए सर्वोत्तम कार्य प्रणाली को विकसित किया गया। हमने देखा कि आपदा के समय सशस्त्र बलों ने जरूरतमंद लोगों तक पहुंचने के लिए समुद्र और आसमान को पार किया। फ्रंटलाइन इयूटी करने वालों की सुरक्षा के लिए प्रोटोकॉल तैयार कर उसे कार्यान्वित किया गया। यह सब इसलिए संभव हुआ क्योंकि हमने पूरे विश्व को अपना घर मानते हुए सामूहिक जीवन, साझा करने और स्वयं के सामने खुद से ज्यादा दूसरे लोगों को अच्छे से रखने के पारंपरिक गुणों को बरकरार रखा। उन्होंने कहा कि यह साझा सीखने, साझा ज्ञान और साझा संचार के आधुनिक दिनों के विकास के साथ था। उन्होंने कहा कि भविष्य में इसी तरह की चुनौतियों का सामना करने के लिए इस सामूहिक अनुभव ने विभिन्न अनमोल उदाहरणों पर प्रकाश डाला है।

रक्षा मंत्री ने कहा कि इंडो-पैसिफिक का विचार "वसुधैव कुटुम्बकम्" (दुनिया एक परिवार है) की भावना को दर्शाता है। उन्होंने 2018 में सिंगापुर में शांगरी ला डायलॉग में प्रधानमंत्री श्री नरेन्द्र मोदी के संबोधन को याद किया। वहां उन्होंने कहा था कि इंडो-पैसिफिक एक स्वतंत्र, खुले, समावेशी क्षेत्र के लिए खड़ा है, जो प्रगति और समृद्धि की एक साझा खोज में सभी को शामिल करता है। इसमें इस भूगोल के सभी राष्ट्रों के साथ-साथ अन्य भी शामिल हैं, जिनकी इसमें

हिस्सेदारी है। इस मनोभाव पर श्री राजनाथ सिंह ने कहा कि चिकित्सा पेशे का योगदान सबसे अच्छा उदाहरण है, जिसे सार्वभौमिक रूप से महान माना जाता है।

श्री राजनाथ सिंह ने डॉक्टरों, नर्सों, दंत चिकित्सकों और चिकित्सा प्रशासकों के बीच निरंतर पेशेवर सहयोग के माध्यम से दुनिया भर में सैन्य चिकित्सा के क्षेत्र में आईपीएमएचई के सार्थक प्रभाव की प्रशंसा की। सबसे कठिन परिस्थितियों में आईपीएमएचई ने स्वास्थ्य देखभाल की क्षमता को स्पष्ट रूप से साबित किया है। यह कई वर्षों में कठिन प्रशिक्षण, दृढ़ता और प्रेरणा के माध्यम से प्राप्त किया गया है, जो हमारे स्वास्थ्य देखभाल करने वाले पेशेवरों में प्रचुर मात्रा में है। विभिन्न देशों के सशस्त्र बलों और यूएसआईएनडीओपीएसीओएम ने सैन्य चिकित्सा के प्रभाव को और अधिक सार्थक बनाने के लिए अनुभवों को साझा करने व लाभकारी शिक्षा देने के उद्देश्य से इस सम्मेलन के रूप में एक महत्वपूर्ण मंच का निर्माण किया है। रक्षा मंत्री ने इस तथ्य की सराहना की कि आईपीएमएचई सैन्य चिकित्सा, मानवीय सहायता, आपदा राहत, संक्रामक रोग, मेडिकल लॉजिस्टिक और संबंधित मुद्दों से जुड़े समकालीन, वास्तविक समय पर और प्रासंगिक मामले को हल कर रहा है।

रक्षा मंत्री ने सैन्य चिकित्सा के महत्व और दुनिया के स्वास्थ्य को प्रभावित करने वाले मुद्दों पर देशों के बीच सहयोग बढ़ाने की आवश्यकता पर जोर दिया। उन्होंने वर्तमान परिदृश्य को ध्यान में रखते हुए चिकित्सा अनुसंधान और चिकित्सा प्रशिक्षण में निरंतर सुधार का आह्वान करते हुए कहा कि सम्मेलन के दौरान इन पर विचार-विमर्श सभी के लिए फायदेमंद होगा। उन्होंने कहा कि यदि आप कुछ नया चाहते हैं तो आपको कुछ पुराना करना बंद करना होगा। इसलिए किसी भी क्षेत्र में उन्नति के लिए नया सृजन और नवाचार आवश्यक हैं। मुझे यह जानकर खुशी हुई कि नवाचार सत्र में हमारे युवा और सक्षम चिकित्सा अधिकारियों द्वारा इन-हाउस नवाचारों को प्रदर्शित किया जाएगा।

दुनिया भर में सशस्त्र बलों में महिलाओं द्वारा निभाई गई महत्वपूर्ण भूमिका पर अपने विचार रखते हुए श्री राजनाथ सिंह ने कहा कि सरकार महिलाओं को उनके पुरुष समकक्षों के समान अधिक जिम्मेदारियां देने में विश्वास करती है। विभिन्न देशों में सेना में कार्यरत महिलाओं की नियुक्ति और रोजगार के लिए अलग-अलग शर्तें हैं। भारत में महिलाओं ने न केवल स्वास्थ्य देखभाल करने के रूप में बल्कि पेशे के उच्चतम स्तर पर अपने नेतृत्व के माध्यम से स्वास्थ्य संबंधी देखभाल का सामना कर खुद को प्रतिष्ठित किया है।

अपने स्वागत भाषण में एएफएमएस के डीजी सर्जन वाइस एडमिरल रजत दत्ता ने अप्रत्याशित दुनिया में सैन्य स्वास्थ्य देखभाल की भूमिका पर प्रकाश डाला। उन्होंने बताया कि सम्मेलन का उद्देश्य जानकारियों को साझा करना और राष्ट्रों के बीच एक गतिशील नेटवर्किंग बनाना है। एएफएमएस के डीजी ने अपनी बातचीत में वीयूसीए दुनिया में जैविक आपदा के दौरान चिकित्सा प्रतिक्रिया की योजना बनाने में पर्यावरण को भी संवेदनशील बनाया।

यूएस नेवी की कमांड सर्जन रियर एडमिरल पामेला सी मिलर ने तेजी से बदलते परिदृश्यों में चिकित्सा चुनौतियों का सामना करने के लिए साझा कार्य प्रणाली और एक साथ काम करने के महत्व पर प्रकाश डाला। उन्होंने पिछले दो वर्षों में अनिश्चितताओं के बावजूद सम्मेलन की मेजबानी करने के लिए भारत को धन्यवाद दिया। डब्ल्यूएचओ की मुख्य वैज्ञानिक डॉ. सौम्या

स्वामीनाथन ने मुख्य भाषण दिया। उन्होंने 'वैश्विक स्वास्थ्य चुनौतियां और एक वीयूसीए दुनिया में नेतृत्व की भूमिका' पर बात की। इस अवसर पर एएफएमएस के डीजी और यूएसआईएनडीओपीएसीओएम की कमांड सर्जन द्वारा संयुक्त रूप से एक ई-स्मारिका का विमोचन किया गया।

Link : <https://pib.gov.in/PressReleasePage.aspx?PRID=1803646>



Press Information Bureau
Government of India

Ministry of Defence

Mon, 07 March 2022 1:36PM

Raksha Mantri Shri Rajnath Singh virtually inaugurates four-day Indo-Pacific Military Health Exchange conference

- **Calls for innovation & increased international co-operation to deal with issues that affect the health of the world**
- **Government aims to provide enhanced roles & responsibilities to women in Armed Forces: RM**

Raksha Mantri Shri Rajnath Singh virtually inaugurated, on March 07, 2022, the four-day Indo-Pacific Military Health Exchange (IPMHE) conference co-hosted by Armed Forces Medical Services (AFMS) and US Indo-Pacific Command (USINDOPACOM). Shri Rajnath Singh described medical service as an important pillar for any military, saying that in addition to their own combat-related duties, they are the most valuable second responders in times of natural and man-made calamities & crises and are in a perpetual state of readiness. He lauded the AFMS for promoting and delivering preventive, curative, rehabilitative medical care to the serving soldier/sailor/airman and their families and the veterans with utmost professionalism.

The theme of the conference is 'Military Healthcare in a Volatile, Uncertain, Complex and Ambiguous (VUCA) World'. The conference, which will continue till March 10, 2022, aims to enhance cooperation and jointmanship in military medicine. It will cover many important topics including operational/combat medical care, tropical medicine, field surgery, field anaesthesia, aviation & marine medicine emergencies etc.

The conference is attended by more than 600 Indian and foreign delegates from over 38 countries. A delegation of 20 members from the organising committee of the USINDOPACOM is in New Delhi to co-host the conference. The delegates and speakers will interact and share experiences over the four days on 110 topics.

The Raksha Mantri commended the significant role played by AFMS and USINDOPACOM in addressing the challenges posed by COVID-19. He said, despite limitations such as short warning period, pressure on existing infrastructure and disparity in resources, the last two years have brought out the very best amongst the medical fraternity, civil society volunteer groups and governments which went out of the way to help those in need during the pandemic.

"The last two years have witnessed best practices being developed to overcome disruptions in supply chain, ensure availability of drugs, other medical supplies, vaccines and the knowhow of treatment breakthroughs. We witnessed the Armed Forces criss-cross the seas and skies to reach those who needed assistance in times of calamity. Protocols were designed and implemented to safeguard those who remained in frontline duties. All this became possible because our global village upheld the traditional virtues of community living, sharing and placing the larger good before self. And it was accompanied by modern day advances of shared learning, shared

knowledge and shared communication,” the Raksha Mantri said. He added that this collective experience has highlighted various invaluable lessons for facing similar challenges in the future.

The Raksha Mantri stated that the idea of Indo-Pacific reflects the sentiment of ‘Vasudhaiva Kutumbakam’ (the world is one family). He recalled Prime Minister Shri Narendra Modi’s address at the Shangri La Dialogue in Singapore in 2018 where he had said “The Indo-Pacific stands for a free, open, inclusive region, which embraces all in a common pursuit of progress and prosperity. It includes all nations in this geography as also others beyond who have a stake in it.” This sentiment, Shri Rajnath Singh said, is best exemplified by the contribution of the medical profession that has universally been considered noble.

Shri Rajnath Singh praised the meaningful impact of the IPMHE in the field of military medicine across the world through a sustained professional collaboration between doctors, nurses, dentists and medical administrators. “The IPMHE has clearly proved their ability to deliver health care under the most trying circumstances. This has been achieved through hard training, perseverance and motivation over many years, which our health care professionals in uniform have in abundance. To make the impact of military medicine more meaningful, Armed Forces of various countries and the USINDOPACOM have created an important platform in the form of this conference for sharing experiences and facilitate gainful learning,” he said. The Raksha Mantri appreciated the fact that the IPMHE is addressing contemporary, real-time and relevant issues pertaining to military medicine, humanitarian assistance, disaster relief, infectious diseases, medical logistics and related issues.

The Raksha Mantri stressed on the importance of military medicine and the need for increased cooperation among countries in issues that affect the health of the world. He called for continued improvement in medical research and medical training, keeping with the present scenario, saying that the deliberations on these during the conference will be beneficial to all. “If you want something new, you have to stop doing something old. Therefore, new creations and innovations are necessary for the advancement in any field. I am glad to know that the innovation session will showcase in-house innovations by our young and able medical officers,” he added.

Sharing his views on the important role played by women in the Armed Forces across the world, Shri Rajnath Singh said, the Government believes in providing enhanced responsibilities to women at par with their male counterparts. “Different countries have different terms of engagement and employment for women in uniform. In India, women have distinguished themselves in the field of Combat Medical Care, not only as health care providers but also through their leadership at the highest level of the profession,” he said.

In his welcome address, DG AFMS Surgeon Vice Admiral Rajat Datta highlighted the role of military healthcare in an unpredictable world. He brought out that the purpose of the conference is to share knowledge and create a dynamic networking among nations. The DGAFMS also sensitised the environment about planning medical response during biological disaster in a VUCA world in his talk.

Command Surgeon, US Navy Rear Admiral Pamela C Miller highlighted the importance of shared practices and team work to meet medical challenges in rapidly changing scenarios. She also thanked India for hosting the conference despite the uncertainties in the past two years. The keynote address was delivered by Chief Scientist, WHO Dr Soumya Swaminathan, who spoke on ‘Global Health Challenges and the role of leadership in a VUCA world’. On the occasion, an e-souvenir was jointly released by DGAFMS and Command Surgeon, USINDOPACOM

Link : <https://pib.gov.in/PressReleasePage.aspx?PRID=1803525>



**Press Information Bureau
Government of India
Ministry of Defence**

Sri Lanka - India Bilateral Maritime Exercise Slinex

Mon, 07 Mar 2022 4:43PM

The Ninth Edition of India - Sri Lanka Bilateral Maritime Exercise SLINEX (Sri Lanka–India Naval Exercise) is scheduled at Visakhapatnam from 07 Mar to 10 Mar 2022. The exercise is being conducted in two phases; the Harbour Phase at Visakhapatnam on 07-08 Mar 22 followed by the Sea Phase on 09-10 Mar 22 in the Bay of Bengal.

Sri Lanka Navy will be represented by SLNS Sayurala, an advanced offshore patrol vessel and the Indian Navy by INS Kirch, a guided missile corvette. Other participants from the Indian Navy include INS Jyoti, a Fleet support tanker, Advanced Light Helicopter (ALH), Seaking and Chetak Helicopters and Dornier Maritime Patrol Aircraft. The previous edition of SLINEX was conducted off Trincomalee in October 2020.

SLINEX aims to enhance inter-operability, improve mutual understanding and exchange best practices and procedures for multi-faceted maritime operations between both navies. The Harbour Phase would include professional, cultural, sporting and social exchanges. Exercises during Sea Phase will include surface and anti-air weapon firing exercises, seamanship evolutions, aviation operations including cross deck flying, advanced tactical manoeuvres and special forces operations at sea. These will further enhance the high degree of inter-operability already existing between the two navies.

SLINEX exemplifies the deep maritime engagement between India and Sri Lanka and has grown in scope over the years to strengthen mutual cooperation, in consonance with India's policy of 'Neighbourhood First' and Hon'ble PMs vision of 'Security and Growth for All in the Region (SAGAR)

Link: <https://pib.gov.in/PressReleaseIframePage.aspx?PRID=1803604>



Mon, 07 Mar 2022

Road to self-reliance in weapons manufacturing is a long journey

By Bhartendu Kumar Singh

If the great power club were to be judged by military power, and the resilience and expanse of its domestic military industrial complex, India would remain out of the club for foreseeable future.

Domestic weapons-production and great power claims have economic, philosophical, and teleological linkages. All great powers and aspiring powers are supposed to be self-reliant in weapons-production.

Unfortunately, India remains one of the largest arms importers (hovering between first and second position), thereby, remaining vulnerable in competitive great power politics. However, signalling some good days for India's weapons-production capacity, its domestic military industrial complex (MIC) is slowly metamorphosing into a success story. This is evident in India's declining arms

imports and, concurrently, increased booking for domestic manufacturers. The larger challenge, however, is to sustain, and proliferate this paradigmatic change.

Several statistical statements allude to the new reality. The SIPRI figures claim that India's arms import during 2016-2020 decreased by 33 percent compared to 2011-15. India's share in global arms import came down from 14 to 9.5 percent. During the same period, India also slipped down from being the largest arms importer to the second-largest after remaining at the helm for embarrassing years. The SIPRI figures also hint, albeit indirectly, of India being the culprit for decline in global arms trade during the same period by 0.5 percent.

But the most pleasing statements are coming from our own defence budget figures. While an upward trend in domestic procurement has been visible for last couple of years, the armed forces already spent 64 percent of capital budget funds of the Ministry of Defence (MoD) for fiscal year 2021-22 on India-made equipment.

While the actual figures may vary after the final accounts are available for 2021-22, this is a revolutionary turn-around. Only few years back, we were perpetually importing 70 percent arms from foreign suppliers. How did this turn-around take place?

SIPRI, unfortunately, would like us to believe that India's imports decline was largely due to 'its complex and lengthy procurement processes'. This is at best, a hilarious proposition, since the MoD has really worked hard to streamline and simplify procurement procedures in recent times. Also, such casual diagnosis does not adequately explain India's higher imports in earlier periods.

The actual reasons for the imports decline are, in fact, attributable to national resolve and public policy initiatives in recent times. This space is too short to elaborate the measures taken through mission-mode approach under different schemes to bring down imports. For instance, several editions of the defence acquisition procedure have certainly provided more favourable platforms for indigenously designed, developed, and manufactured category (IDDM) weapons. Similarly, the strategic partnership gateway, several lists of restrictive items for imports, enhancement of FDI to 74 percent, establishment of new defence industrial corridors, and above all, corporatisation of ordnance factories are aimed at consolidating and expanding the domestic MIC.

The political economy of this turn-around is not without concerns. First, for all the big hopes about technology transfers taking place either through FDI, collaborative arrangements with the DRDO, and institutional mechanisms such as the technology development fund (TDF), it is debatable if India will readily get state-of-the-art technology in weapons-production. The MICs in all countries guard their intellectual rights rather jealously. Techno-nationalism will ensure a generational gap in weapons technology trade, even if this comes through the best collaborative projects.

Second, defence R&D, education, and production are all compartmentalised in the Indian context where networked and reciprocal arrangements simply don't co-exist. India's MIC growth so far is largely due to entrepreneurial State and State-led investments. Private sector participation is marginal. The MIC proliferation will take place only if supplemented by private sector's volitional and enhanced investments in all sectors.

Third, India will remain a big emerging market for global arms-producing companies. It is debatable if western companies will not bandwagon their State-supported mercantilism at some stage to thwart and punch holes in India's burgeoning MIC, and re-build their arms deals with India. This apprehension gains ground since some stakeholders in India always have a fascination for 'foreign toys' even if it means sabotaging domestic programmes like the 'Maruti' in the sixties.

If the great power club were to be judged by military power, and, in particular, the resilience and expanse of its domestic MIC, India would remain out of the club for foreseeable future. India has a

woeful presence in the SIPRI list of top 100 arms-producing companies — Hindustan Aeronautics Limited, ordnance factories, and the Bharat Electronics, ranked quite low (42, 60 and 66). While India aims at expanding the MIC size to \$25 billion by 2025 along with \$5 billion weapons export basket, the road to self-reliance is a long journey.

Probably, we need to make more public policy efforts to accelerate the momentum.

<https://www.moneycontrol.com/news/opinion/defence-military-self-reliance-weapons-manufacturing-tech-arms-long-journey-8202371.html>



Mon, 07 Mar 2022

Closer Defence Ties Way Forward: UK on India's Russia-Ukraine Stance

The UK foreign secretary's remark came when asked why she thought India "did not vote alongside the other 141 countries" against Russia at UN.

Britain said on Monday that India's stance on the Russia-Ukraine conflict was the result of its dependence on Russia and therefore the way forward would be to ensure closer economic and defence ties between India and the UK.

Foreign Secretary Liz Truss was asked about India's stance during a hearing of the UK Parliament's Foreign Affairs Committee (FAC), the influential cross-party panel responsible for examining the administration and policy of the Foreign, Commonwealth and Development Office (FCDO).

The minister confirmed that she had spoken to External Affairs Minister S Jaishankar to encourage a stand against Russian actions in Ukraine.

"I have spoken to my counterpart, Minister Jaishankar, and encouraged India to stand against Russia and made it very clear that we see this as a violation of sovereignty, that every country that believes in freedom and democracy should absolutely abhor," said Truss.

"I think the issue for India is there is some level of dependence on Russia, both in terms of its defence relationships but also in terms of its economic relationships. And I think the way forward is for a closer economic and defence relationship with India. Both by the United Kingdom and also our like-minded allies," she said.

Referencing the ongoing free trade agreement (FTA) negotiations, which entered its second phase in London on Monday, the minister said the aim was to bring India closer into a circle of democratic nations.

"I have been to India as Foreign Secretary. We are working on those closer security links, we have done joint exercises – for example, we had the Carrier Strike Group operating with India. We are looking at areas like security, we are now negotiating a trade agreement -- this is the way that we are going to bring India closer into a circle of countries that support freedom, democracy and sovereignty," the minister added.

The chair of the FAC, Conservative Party MP Tom Tugendhat, had specifically asked Truss for her view on why she thought India "did not vote alongside the other 141 countries" against Russia.

India has so far abstained in all Ukraine-related votes condemning Russian action at the UN, including on a resolution each in the Security Council, General Assembly and Human Rights Council. It has stressed on the need for an immediate end to violence in favour of a path of diplomacy.

Link: <https://www.ndtv.com/world-news/closer-defence-ties-way-forward-uk-on-indias-russia-ukraine-stance-2809279>

Oceanographers in demand as US Navy expands across Pacific

The workload for the Naval Meteorological and Oceanographic Command is increasing as the US Navy moves out to smaller ports and new operating environments around the world, according to the command's top leader.

The Navy's maritime expansion is partly driven by the regular deployment of Freedom-class coastal combat ships to the Indo-Pacific region, which began in 2019. These ships, with their shallow draft, can enter ports that larger ships cannot. Service leadership has deferred port calls to places such as Puerto Princesa and Davao City in both the Philippines, as examples of stops LCS can do best thanks to their size.

This trend will likely increase under new Navy and Marine Corps operational concepts, with the former seeking distributed maritime operations and the latter seeking smaller units that continually maneuver island chains and coastal areas under advanced base operations.

Rear Admiral Ron Pirate, who leads the Naval Meteorology and Oceanography Command at the Stennis Space Center in Mississippi, said he had "decades of work" stemming from requests to support the Navy's geographic expansion. The command is leveraging unmanned and semi-autonomous technologies as well as a global network of partners to help the Navy obtain the information it needs to succeed.

Pirate told Defense News in an interview on February 16 that METOCs are well represented in large deployment units such as carrier strike groups, but with the Navy planning to spread its forces, "can we provide the same level of support? can, the same strategic advantage of independent employers in a place where maybe communication is poor or rejected? So it has given us a challenge not only do we collect the data, but how do we structure the data and then we How do we distribute that data, so it's available to these different types of platforms and warships."

He added that US naval and combined capabilities can be more or less effective depending on weather and oceanographic factors – as can the capabilities of potential adversaries – so understanding the environment below and above the ocean can help fleet commanders plan their missions. Might help to make . And when it matters. ,

The research vessel Kilo Moana recovered several US Navy oceanographic gliders in the Pacific Ocean on October 25, 2021. (Captain David Martin / US Navy)

When the Navy wants to operate in an area that the command has not yet surveyed, the go-to systems may be T-AGS Pathfinder-class oceanographic survey ships operated by Military Sealift Command. Piret said there are only a handful in inventory, and so the command is considering options. Options include sending in an unmanned craft with sensors, detecting light and carrying technology off an aircraft over shallow water, sending an expeditionary crew with their kit on board a ship of opportunity, or the host country or nearby partners. Including requesting help from.

Piret also serves as the Navy's hydrographer, a role in which he collaborates



Research vessel Kilo Moana recovered several U.S. Navy oceanography gliders in the Pacific Ocean

with the International Hydrographic Organization.

He added that this decades-long effort to establish mapping standards that ensure the safety of navigation has brought together not only countries that have the capability to do mapping themselves, but also countries that need to develop some hydrography capability, he added. are not trying.

Through this collaboration, it may be that the US Navy seeks to attempt operations in a new smaller port in the Pacific. Or the host country may be interested in conducting hydrographic surveys so that not only can the US Navy enter, but also commercial traffic. Or a third party may also be interested in conducting the survey on behalf of the US and the host country.

Pirate said the military and commercial benefits are intertwined, which could help many interested parties meet some of the growing requirements to survey ports and harbors when the US Navy has Don't have the ability to do it alone.

Megan Eckstein is a naval warfare reporter at Defense News. She has covered military news since 2009 with a focus on US Navy and Marine Corps operations, takeover programs and budgets. She has reported from four geographic fleets and is happiest when she is recording stories from a single ship. Megan is a University of Maryland alumna.

Link: <https://worldnationnews.com/oceanographers-in-demand-as-us-navy-expands-across-pacific/>

Science & Technology News



Mon, 07 Mar 2022

How the tech community has rallied to Ukraine's cyber-defence

By Joyce Hakmeh and Esther Naylor

From an army of volunteers to EU and Nato teams, the variety of online actors working for the cause is unprecedented.

As the conflict in Ukraine escalates, expert cyber-watchers have been speculating about the kind of cyber-attacks that Russia might conduct. Will the Kremlin turn off Ukraine's power grid, dismantle Ukraine's transport system, cut off the water supply or target the health system? Or would cybercriminals operating from Russia, who could act as proxies for the Russian regime, conduct these activities?

Over the past decade, Ukraine has experienced many major cyber-attacks, most of which have been attributed to Russia. From election interference in 2014, which compromised the central electoral system and jeopardised the integrity of the democratic process; to a hack and blackout attack in a first-of-its-kind fully remote cyber-attack on a power grid in 2015, resulting in countrywide power outages; to one of the costliest malicious software attacks, NotPetya, in 2017, which significantly disrupted access to banking and government services in Ukraine and, subsequently, spilled over to France, Germany, Italy, Poland, Russia, the UK, the US and Australia.

On the eve of 13 January, as troops were amassing along the Ukrainian border, about 70 Ukrainian government websites were taken down due to "unauthorised interference", dubbed WhisperGate. The following day, these websites were defaced with a political threat that Ukrainian data had been leaked and with a warning to "be afraid and expect the worst". The attacks did not stop there. Almost a month later, further denial of service attacks took down government websites and state-owned banking services. The UK, US and Australia were quick to publicly attribute the attacks to

Russia, and name and shame the military intelligence arm of the Russian armed forces (GRU) as responsible for the attacks.

In response to the Russian threat, there have been unprecedented efforts by private and government entities – and even individuals – to support Ukraine’s cyber resilience.

Responding to cyber-attacks and building national cyber resilience has never been – and will never be – the sole responsibility of governments. It requires a whole-of-society approach grounded in international cooperation efforts. For the first time since its inception, the EU rapid cyber response team, with capabilities to detect and respond to a variety of threats, and headed by Lithuania, was deployed to help defend against cyber-attacks targeting Ukraine. The Romanian national cybersecurity agency and a cybersecurity company called Bitdefender launched a public-private partnership to provide pro bono technical support and threat intelligence to Ukraine’s government, businesses and citizens for “as long as it is necessary”. Nato, which has been working for a number of years with Ukraine to increase its cyber defences, signed an agreement a few weeks before the invasion aimed at enhancing cyber cooperation with Ukraine.

The tech community leveraged its resources and knowledge to expose cyber-attacks and threats, and limit their spread. Shortly after WhisperGate, Microsoft shared technical analysis on the tools and techniques used in the attack and recommendations for those affected, and it continues to do so. The Slovakia-based cybersecurity firm ESET exposed the nefarious component of the HermeticWiper malware attacks in February, a malware designed with a component aimed at “wiping” the data out of systems. This timely technical analysis provided vital information to security experts and governments about the technical steps that should be put in place to mitigate and protect against hacks.

At the same time, efforts within Ukraine started to materialise. In what has been referred to as an unprecedented effort in the midst of an armed conflict, a whole “IT army” of volunteers was assembled in response to a request by the minister of digital transformation to support the country’s cyber-defence efforts, with reports of some even operating from within bomb shelters.

The solidarity shown so far is unprecedented and a testament to the benefits and potential of collective action across sectors and communities. As the war continues, this solidarity will become even more important.

<https://www.theguardian.com/commentisfree/2022/mar/07/tech-community-rallied-ukraine-cyber-defence-eu-nato>

