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Thu, 23 Dec 2021 12:13PM

DRDO successfully conducts second flight-test of indigenously developed conventional Surface-to-Surface missile 'Pralay'

Defence Research and Development Organisation (DRDO) successfully conducted second flight-test of indigenously developed conventional Surface-to-Surface missile 'Pralay' from Dr APJ Abdul Kalam Island off the coast of Odisha on December 23, 2021. For the first time, two consecutive flight tests of a ballistic missile have been conducted successfully on two consecutive days. The flight test met all the mission objectives. This launch proves the system in both the configurations of the missile.

In today's launch, the 'Pralay' missile was tested for heavier payload and different range to prove the precision and lethality of the weapon. This launch was monitored by all the range sensors and instruments, including Telemetry, Radar and Electro-Optic Tracking System deployed across the eastern coast and the down range ships positioned near the impact point.

Raksha Mantri Shri Rajnath Singh has congratulated DRDO and associated teams for this consecutive successful development flight trial. Secretary Department of Defence R&D and Chairman DRDO Dr G Satheesh Reddy appreciated the associated team and said, with this successful flight test, the country has proved strong design and development capabilities in defence R&D.

https://pib.gov.in/PressReleasePage.aspx?PRID=1784515

पत्र सूचना कार्यालय
भारत सरकार

रक्षा मंत्रालय

Thu, 23 Dec 2021 12:13PM

रक्षा अनुसंधान और विकास संगठन (डीआरडीओ) ने स्वदेशी रूप से विकसित पारंपरिक 'सरफेस टू सरफेस' मार करने वाली मिसाइल 'प्रलय' का दूसरा उड़ान परीक्षण सफलतापूर्वक पूरा किया

रक्षा अनुसंधान और विकास संगठन (डीआरडीओ) ने 23 दिसंबर, 2021 को ओडिशा के तट पर डॉ. एपीजे अब्दुल कलाम द्वीप से स्वदेशी रूप से विकसित पारंपरिक सरफेस टू सरफेस मार करने वाली मिसाइल 'प्रलय' का दूसरा उड़ान परीक्षण सफलतापूर्वक पूरा किया। पहली बार बैलिस्टिक मिसाइल के लगातार दो दिन तक दो उड़ान परीक्षण सफलतापूर्वक पूरे किये गये। इस उड़ान परीक्षण ने मिशन के सभी उद्देश्यों को पूरा किया। यह प्रक्षेपण मिसाइल के दोनों विन्यासों में प्रणाली को सफल साबित करता है।

आज के प्रक्षेपण में 'प्रलय' मिसाइल का हथियारों की सटीकता और घातकता सिद्ध करने के लिए भारी पेलोड और विभिन्न रेंज के लिए परीक्षण किया गया। इस प्रक्षेपण की पूर्वी तट और प्रभाव बिंदु के पास स्थित डाउन रेंज जहाजों में तैनात रडार और इलेक्ट्रो-ऑप्टि टेलीमेट्रीक ट्रैकिंग सिस्टम सहित सभी रेंज सेंसर और उपकरणों द्वारा निगरानी की गई।

रक्षामंत्री श्री राजनाथ सिंह ने इस लगातार सफल विकास उड़ान परीक्षण के लिए डीआरडीओ और संबंधित टीमों को बधाई दी है। रक्षा अनुसंधान एवं विकास विभाग के सचिव और डीआरडीओ के अध्यक्ष डॉ. जी सतीश रेड्डी ने संबंधित टीम की सराहना करते हुए कहा कि इस सफल उड़ान परीक्षण से देश ने और विकास में अपने मजबूत डिजाइन और विकास क्षमताओं को सिद्ध कर दिया है।

https://pib.gov.in/PressReleasePage.aspx?PRID=1784530

Press Information Bureau
Government of India

రక్షణ మంత్రిత్వ శాఖ

Thu, 23 Dec 2021 12:13PM

దేశీయంగా అభివృద్ధి చేసిన ఉపరితలం- నుంచి- ఉపరితల క్షిపణిని రెండ వసారి విజయవంతంగా ప్రయోగించి, పరీక్షించిన డిఆర్‌డిఒ

దేశీయంగా అభివృద్ధి చేసిన సంప్రదాయ ఉపరితలం నుంచి ఉపరితల క్షిపణి ప్రళయ్ రెండవ ప్రయోగాన్ని 23 డిసెంబర్ 2021న ఓడిషా తీరంలోని డాక్టర్ ఎపిజె అబ్దుల్ కలాం దీవి నుంచి డిఫెన్స్ రీసెర్చ్ అండ్ డెవలప్‌మెంట్ ఆర్గనైజేషన్ (రక్షణ పరిశోధన & అభివృద్ధి సంస్థ - డిఆర్‌డిఒ) విజయవంతంగా నిర్వహించింది. తొలిసారి, ఒక బాలిస్టిక్ (గతిశీల) క్షిపణిని వరుసగా

రెండు రోజులలో రెండుసార్లు విజయవంతంగా ప్రయోగించి పరీక్షించడం జరిగింది. మిషన్ లక్ష్యాలన్నింటినీ ఈ ప్రయోగం నెర వేర్చింది. ఈ ప్రయోగం క్షిపణిలోని రెండు కన్ఫిగరేషన్ (సమగ్రాకృతి)ని రుజువు చేస్తుంది.

నేటి ప్రయోగంలో, ఆయుధ ఖచ్చితత్వాన్ని, ఘాతుకతను నిరూపించేందుకు ప్రళయ్ క్షిపణిని అధిక భారం (పేలోడ్)తో, భిన్న పరిధిలో పరీక్షించారు. ఈ ప్రయోగాన్ని తూర్పు తీరం వెంట మోహరించిన టెలిమెట్రీ, రాడార్, ఎలక్ట్రో ఆప్టిక్ ట్రాకింగ్ వ్యవ స్థ, ప్రభావం చూపే ప్రదేశం వద్ద నిలిపిన డౌన్ రేంజ్ నౌకలు సహా అన్ని రేంజ్ సెన్సార్లు, సాధనాల ద్వారా పర్యవేక్షించడం జ రిగింది.

అభివృద్ధి ప్రయోగ పరీక్షలు వరుసగా జరిపినందుకు డిఆర్‌డిఒను, సంస్థ అనుబంధ బృందాలను రక్షణ మంత్రి రాజ్‌నాథ్ సింగ్ అభినందించారు. ఈ విజయవంతమైన ప్రయోగ పరీక్షకు కారణమైన బృందాన్ని అభినందిస్తూ, బలమైన నమూనా, , అభివృద్ధి సామర్థ్యాలు రక్షణ రంగం ఆర్&డికి ఉన్నాయని దేశం రుజువు చేసిందని రక్షణ శాఖ కార్యదర్శి, డిఆర్‌డిఒ చైర్మన్ డాక్టర్ జి సతీష్ రెడ్డి అన్నారు.

https://pib.gov.in/PressReleasePage.aspx?PRID=1784585

Hindustan Times

Fri, 24 Dec 2021

DRDO successfully tests Pralay missile for second day in a row

The Defence Research and Development Organisation (DRDO) tested the missile from Dr APJ Abdul Kalam Island off the Odisha coast. It has a range of 150 to 500 kilometre, depending on payload, and can be launched from a mobile launcher.

New Delhi: India on Thursday successfully tested the locally developed surface-to-surface missile Pralay, the second test of the conventional missile in two days, the defence ministry announced.

The Defence Research and Development Organisation (DRDO) tested the missile from Dr APJ Abdul Kalam Island off the Odisha coast. It has a range of 150 to 500 kilometre, depending on payload, and can be launched from a mobile launcher.

DRDO successfully conducts the second flight test of indigenously developed surface-to-surface missile 'Pralay' from Dr A P J Abdul Kalam Island off the coast of Odisha. (PTI)

"In Thursday's launch, the missile was tested for heavier payload and different range to prove the precision and lethality of the weapon," the ministry said in a statement.

The launch was monitored by range sensors and instruments, including telemetry, radar and electro-optic tracking systems deployed along India's eastern coast and ships positioned near the impact point.

The flight test met all the mission objectives, the ministry said.

The twin flight tests came days after India tested an advanced variant of the Agni class of missiles from the Dr APJ Abdul Kalam Island test facility on December 18.

The new generation nuclear-capable ballistic missile, named Agni P, can strike targets at a maximum range of 2,000 km and will further strengthen India's credible deterrence capabilities, as previously reported.

It is a canisterised missile with a range between 1,000 and 2,000 km.

The other variants of the Agni missiles developed by DRDO include the 700-km Pakistan-specific Agni-I, the 2,000-km range Agni-II, the 3,000-km range Agni-III, 4,000-km range Agni-IV and the 5,000-km range Agni-V missile.

The Agni P test came a week after India successfully tested a new locally-developed anti-tank missile and concluded a series of tests of extended range rockets also developed indigenously, weapons that will be inducted into the armed forces shortly.

The weapons successfully tested on December 11 were the helicopter launched stand-off anti-tank (SANT) missile and Pinaka extended range (ER) rocket systems.

SANT has a range of 10 km.

The new Pinaka rocket system has longer range with reduced length compared to the earlier variant. While Pinaka Mk-1 rockets have a range of 36 km, the ER variant can hit targets more than 48 km away and has been developed as per the requirements of the Indian Army.

https://www.hindustantimes.com/india-news/drdo-successfully-tests-pralay-missile-for-second-day-in-a-row-101640286014140.html

Press Information Bureau
Government of India

Ministry of Defence

Thu, 23 Dec 2021 8:56PM

DRDO successfully conducts Flight-Test of Indigenous Aerial Target 'Abhyas'

DRDO successfully conducted the flight test of Indigenously developed High-speed Expendable Aerial Target (HEAT) Abhyas today from Integrated

Test Range (ITR), Chandipur off the coast, Odisha. During the flight trial, High subsonic speed trajectory at a very low altitude with high endurance was demonstrated. Two boosters provided initial acceleration during launch and a small turbo jet engine is used to sustain high subsonic speed with long endurance. The indigenous data link designed by Bengaluru based Industry partner has been successfully flown and tested during the flight.

The performance of the system during the entire flight duration has been confirmed from the data captured by various Range instruments deployed.

Aeronautical Development Establishment (ADE), bengaluru based DRDO laboratory along with other DRDO laboratories has developed this indigenous unmanned aerial target system to meet the requirement of aerial targets of Indian Armed Forces. The aircraft is controlled from a ground based controller and an indigenously developed MEMS based Inertial Navigation System along with the Flight Control Computer which helps it to follow the pre-designated path in a fully autonomous mode.

Raksha Mantri Shri Rajnath Singh said that the successful test is noteworthy testimony of synergy between scientists and industry.

Secretary DD R&D & chairman DRDO complimented scientists of the laboratory, their team members and associated industry partners for the successful development efforts.

https://pib.gov.in/PressReleasePage.aspx?PRID=1784674

Press Information Bureau
Government of India

రక్షణ మంత్రిత్వ శాఖ

Thu, 23 Dec 2021 8:56PM

స్వదేశీ వైమానిక లక్ష్యం 'అభ్యస్' ఫ్లైట్-టెస్ట్‌ను విజయవంతంగా నిర్వహించిన డీఆర్‌డిఓ

డీఆర్‌డిఓ ఈ రోజు ఇంటిగ్రేటెడ్ నుండి దేశీయంగా అభివృద్ధి చెందిన హై-స్పీడ్ ఎక్స్‌పెండబుల్ ఏరియల్ టార్గెట్ (హెచ్ ఈఏటి) అభ్యాస్ విమాన పరీక్షను విజయవంతంగా నిర్వహించింది.

ఒడిశా తీరంలోని చాందీపూర్ టెస్ట్ రేంజ్ (ఐటీఆర్). ఫ్లైట్ ట్రయల్ సమయంలో అధిక శక్తితో చాలా తక్కువ ఎత్తులో హై సబ్‌సోనిక్ స్పీడ్ ప్రదర్శించబడింది. ప్రయోగ సమయంలో రెండు బూస్టర్‌లు ప్రారంభ త్వరణాన్ని అందించాయి. మరియు ఎక్కువ సేపు అధిక సబ్‌సోనిక్ వేగాన్ని కొనసాగించడానికి చిన్న టర్బో జెట్ ఇంజన్ ఉపయోగించబడుతుంది. మరియు బెంగళూరు ఆధారిత పరిశ్రమ భాగస్వామి రూపొందించిన స్వదేశీ డేటా లింక్ విమానంలో విజయవంతంగా ఎగురవేయబడింది.

మొత్తం ఫ్లైట్ వ్యవధిలో సిస్టమ్ యొక్క పనితీరు వివిధ శ్రేణి సాధనాల ద్వారా సంగ్రహించబడిన డేటా నుండి నిర్ధారించబడింది.

ఏరోనాటికల్ డెవలప్‌మెంట్ ఎస్టాబ్లిష్‌మెంట్ (ఏడీఈ), బెంగళూరు ఆధారిత డీఆర్‌డీఓ లాబొరేటరీతో పాటు ఇతర డీఆర్ డిఓ ప్రయోగశాలలు భారత సాయుధ దళాల వైమానిక లక్ష్యాల అవసరాలను తీర్చడానికి ఈ స్వదేశీ మానవరహిత వైమానిక లక్ష్య వ్యవస్థను అభివృద్ధి చేశాయి. విమానం గ్రౌండ్ బేస్డ్ కంట్రోలర్ మరియు స్వదేశీంగా అభివృద్ధి చేయబడిన ఎంఈఎంస్ ఆధారిత ఇనర్షియల్ నావిగేషన్ సిస్టమ్‌తో పాటు ఫ్లైట్ కంట్రోల్ కంప్యూటర్‌తో నియంత్రించబడుతుంది. ఇది ముందుగా నిర్ణయించిన లక్ష్యాన్ని పూర్తిగా స్వయంప్రతిపత్తి మోడ్‌లో అనుసరించడానికి సహాయపడుతుంది.

రక్షణ మంత్రి శ్రీ రాజ్‌నాథ్ సింగ్ మాట్లాడుతూ..విజయవంతమైన ఈ పరీక్ష శాస్త్రవేత్తలు మరియు పరిశ్రమల మధ్య సమన్వయానికి నిదర్శనమని చెప్పారు.

సెక్రటరీ డిడి ఆర్ అండ్ డి మరియు డీఆర్‌డీఓ ఛైర్మన్ విజయవంతమైన అభివృద్ధి ప్రయత్నాల కోసం ప్రయోగశాల శాస్త్రవేత్తలు, వారి బృందం సభ్యులు మరియు అనుబంధ పరిశ్రమ భాగస్వాములను అభినందించారు.

https://pib.gov.in/PressReleasePage.aspx?PRID=1784699

THE TIMES OF INDIA

Fri, 24 Dec 2021

DRDO successfully conducts flight test of HEAT Abhyas

BALASORE: Defence research and development organisation (DRDO) successfully conducted the flight test of indigenously developed high-speed expendable Aerial Target (HEAT) Abhyas on Thursday from Integrated Test Range (ITR), Chandipur off the coast of Odisha.

During the flight trial, a high subsonic speed trajectory at a very low altitude with high endurance was demonstrated. Two boosters provided initial acceleration during launch and a small turbojet engine is used to sustain high subsonic speed with long endurance. The indigenous data link designed by Bengaluru based industry partner was successfully flown and tested during the flight.

DRDO successfully conducted the flight test of indigenously developed high-speed expendable Aerial Target (HEAT) Abhyas

The performance of the system during the entire flight duration has been confirmed from the data captured by various range instruments deployed.

Aeronautical Development Establishment (ADE), Bengaluru based DRDO laboratory along with other DRDO laboratories has developed this indigenous unmanned aerial target system to meet the requirement of aerial targets of Indian Armed Forces. The aircraft is controlled from a ground-based controller and an indigenously developed MEMS-based Inertial Navigation System along with the Flight Control Computer which helps it to follow the pre-designated path in a fully autonomous mode.

Defence Minister Rajnath Singh said that the successful test is noteworthy testimony of synergy between scientists and industry.

https://timesofindia.indiatimes.com/india/drdo-successfully-conducts-flight-test-of-heat-abhyas/articleshow/88459964.cms

हिन्दुस्तान

Fri, 24 Dec 2021

'प्रलय' मिसाइल के बाद DRDO ने किया HEAT का परीक्षण

By Ashutosh Ray

नई दिल्ली: देश में गुरुवार को 'प्रलय' मिसाइल के सफल परीक्षण के साथ डिफेंस रिसर्च ऑर्गनाइजेशन (DRDO) को एक और बड़ी सफलता हासिल हुई है। डीआरडीए ने देश में बनी हाई-स्पीड एक्सपेंडेबल एरियल टारगेट (HEAT) का आज सफलता पूर्वक अभ्यास किया। डीआरडीओ की ओर से यह अभ्यास ओडिशा के चांदीपुर तट पर किया गया।

इस अभ्यास का एक वीडियो भी सामने आया है जिसमें आप देख सकते हैं कि तरह से हाई-स्पीड एक्सपेंडेबल एरियल अपने टारगेट के लिए निकलता हुआ नजर आ रहा है। 15 सेकेंड के वीडियो में हाई-स्पीड एक्सपेंडेबल एरियल टारगेट की लॉन्चिंग भी दिखाई गई है। इसके बाद वो काफी देर तक अपने

टारगेट की ओर बढ़ता हुआ नजर आ रहा है। यह टेस्टिंग काफी कम ऊंचाई से की गई है। इसके लिए एक छोटे से टर्बो इंजन का सहारा लिया गया।

भारत ने गुरुवार को लगातार दूसरे दिन ओडिशा तट के पास सतह से सतह पर मार करने में सक्षम स्वदेशी बैलिस्टिक मिसाइल 'प्रलय' का सफल परीक्षण किया। डीआरडीओ ने कहा कि पहली बार लगातार दो दिन, रक्षा अनुसंधान एवं विकास संगठन द्वारा विकसित बैलिस्टिक मिसाइल का सफलतापूर्वक उड़ान परीक्षण किया गया। एपीजे अब्दुल कलाम द्वीप से प्रक्षेपित की गई मिसाइल ने मिशन के सभी उद्देश्यों को पूरा किया।

डीआरडीओ ने कहा, 'आज, हथियार की सटीकता तथा मारक क्षमता को साबित करने के लिए भारी 'पेलोड' और विभिन्न रेंज के लिए 'प्रलय' मिसाइल का परीक्षण किया गया।' दूसरे परीक्षण की निगरानी सभी रेंज सेंसर और उपकरणों द्वारा की गई, जिसमें टेलीमेट्री, रडार तथा पूर्वी तट पर तैनात इलेक्ट्रो-ऑप्टिक ट्रैकिंग सिस्टम और प्रभाव बिंदु के पास स्थित डाउन रेंज जहाज शामिल हैं।

https://www.livehindustan.com/national/story-drdo-successfully-conducted-the-flight-test-of-high-speed-expendable-aerial-target-heat-today-5397297.html

MW@20

Fri, 24 Dec 2021

4 Things to know about the Indian Army's New AERVs

By Aswathi Nair

The first batch of the indigenously developed, next-gen Armoured Engineer Reconnaissance Vehicles (AERV) was formally inducted into the Indian Army Corps of Engineers by Gen. Manoj Mukund Naravane, Chief of Army Staff.

Here's what we know about the new AERVs:

Design and manufacturing

The vehicle was designed and developed by two facilities of the Defence Research and Development Organisation (DRDO) — the Vehicles Research Development Establishment (VRDE) in Ahmednagar, and the Research and Development Establishment in Pune. The AERV has been manufactured at the Ordnance Factory, Medak, and a number of electronic and sensing equipment have been installed by BEL, Pune. The vehicle has over 90 percent indigenous content.

Capabilities

The AERV is a versatile BMP-IIK amphibious Infantry Combat Vehicle (ICV) fitted with instruments for water reconnaissance, land reconnaissance, navigation and data backup.

It has been designed to meet the tactical and combat requirements of military engineers carrying out terrestrial and underwater surveys in hostile terrains, primarily for the construction of assault bridges for both offensive and defensive operations.

According to BEL, "AERV is capable of measuring soil bearing capacity on riverbanks to determine if they are motorable for military vehicles on Go-No Go basis (critical parameters for bridge laying), dry and wet gaps in day and night conditions, slopes and height of river banks or canals."

The vehicles rely on the Military Grid Coordinate System to traverse terrains and can store data from various instruments on its control console for further analysis and decision-making.

Timelines

Despite the limitations brought about by the Covid-19 pandemic, the Indian Army received the vehicles as per schedule, with as many as 15 units already been. A total of 53 units of the AERV have been ordered and they will be deployed with the individual engineering formations, mainly on the Western front.

What this means for the Indian Army

According to DDRO, "The system will enhance existing engineer reconnaissance capabilities of Indian Army and would be a major game-changer in support of mechanised operations in future conflicts."

About the induction, Gen Naravane said, "The old reconnaissance vehicles we had were extensively used in various operations. In the changing battlefield, we are acquiring new capabilities and new equipment. It is a matter of pride if these equipments are indigenously manufactured. You can recall that we recently inducted a short-span bridging system developed by the DRDO. These new additions will certainly augment the Army's capabilities, especially on the Western front."

https://www.mansworldindia.com/more/news/4-things-to-know-about-the-indian-armys-new-aervs/

DRDO on Twitter


DRDO
@DRDO_India
Consecutive second flight test of new surface to surface missile 'Pralay' conducted successfully from Dr APJ Abdul Kalam Island today.
#IndigenousTechnologies
Watch on Twitter
1:03 PM · Dec 23, 2021


DRDO
@DRDO_India
DRDO successfully conducted the flight test of Indigenously developed High-speed Expendable Aerial Target (HEAT) Abhyas
pib.gov.in/PressReleasePa...
Watch on Twitter
9:05 PM · Dec 23, 2021


DRDO @DRDO_India · 9h
Encouraging new technology developments #TDF, DRDO supported project "Composite Material Seawater Pump" has been successfully realised and handed over for Indian Naval applications in presence of Secretary DDR&D & senior @Indiannavy officials today. @Startupindia #AmritMahotsav

Defence News

Defence Strategic: National/International

Fri, 24 Dec 2021

नौसेना में तीसरे विमानवाहक पोत की जरूरत पर संसदीय समिति ने जोर दिया

रक्षा मंत्रालय ने की गई कार्रवाई का जिक्र करते हुए कहा कि तीसरे विमानवाहक पोत की आवश्यकता को लेकर भारतीय नौसेना की देयताओं और भविष्य की अधिग्रहण परियोजनाओं में काम किया जायेगा।

नई दिल्ली: भारत की लंबी तटरेखा एवं प्रतिकूलताओं को ध्यान में रखते हुए संसदीय समिति (Parliamentary committee) ने देश में तीन विमानवाहक पोतों की जरूरत पर जोर देते हुए कहा कि इससे नौसेना (Navy) की युद्धक क्षमता में काफी वृद्धि होगी। बीजेपी (BJP) सांसद जुएल ओराम की अध्यक्षता वाली रक्षा संबंधी संसदीय समिति की एक रिपोर्ट संसद में बुधवार को पेश की गयी। समिति ने सरकार द्वारा की गयी कार्रवाई रिपोर्ट में यह बात कही। रिपोर्ट के अनुसार, रक्षा मंत्रालय ने की गई कार्रवाई का जिक्र करते हुए कहा कि तीसरे विमानवाहक पोत की आवश्यकता को लेकर भारतीय नौसेना की देयताओं और भविष्य की अधिग्रहण परियोजनाओं में काम किया जायेगा।

समिति को बताया गया कि अभी पूर्वी एवं पश्चिमी समुद्री तटों के दोनों ओर दो विमानवाहक पोत काम कर रहे हैं। रिपोर्ट के अनुसार, समिति ने कहा कि जब पहले दो विमानवाहकों में से कोई एक मरम्मत के लिये जाता है तो इस विशाल पोत की मरम्मत में काफी समय लगता है। ऐसे में इसके कारण उत्पन्न होने वाली परिचालन कमियों को दूर करने के लिये एवं किसी संभावित परिस्थिति से निपटने के लिये 'तीन विमानवाहक अपरिहार्य आवश्यकता' है।

अभी पूर्वी एवं पश्चिमी समुद्री तटों के दोनों ओर दो विमानवाहक पोत काम कर रहे हैं

समिति ने कहा कि मानक परिदृश्य यह है कि हर समय दो विमानवाहक पोतों की तैनाती हो जबकि एक का मरम्मत एवं रखरखाव हो। रिपोर्ट में कहा गया है, "समिति चाहती है कि भावी अधिग्रहण की रूपरेखा तैयार करते समय नौसेना, समिति द्वारा की गई टिप्पणियों को ध्यान में रखे और इसके परिणाम से समिति को अवगत कराए।"

https://ndtv.in/india-news/parliamentary-committee-stresses-on-need-for-third-aircraft-carrier-in-navy-2667221

INDIA TODAY

Fri, 24 Dec 2021

Army Chief, Commanders discuss security situation along China, Pakistan borders

The top leadership discussed the security situation along the China and Pakistan border.

By Manjeet Negi

New Delhi: In their first meeting after the death of Chief of Defence Staff General Bipin Rawat in a chopper crash, top Army brass led by Chief General Manoj Mukund Naravane today discussed the security situation along the China and Pakistan border.

Photo for representation

The Army top leadership was briefed on the situation along the China border including the activities of the People's Liberation Army, sources told India Today TV.

India and China have been in a military standoff since April-May last year after China showed unilateral aggression. India responded very aggressively to Chinese aggression and checked their actions at multiple locations. The Galwan clash also took place there in which both sides suffered casualties.

India has been working towards establishing peace in the area but has also maintained a high level of preparedness to thwart any misadventure by enemy troops. Both sides have deployed a large number of troops in the area along with heavy weaponry. The infrastructure build-up has also been very heavy.

https://www.indiatoday.in/india/story/army-chief-commander-security-situation-pakistan-borders-1891512-2021-12-24

Press Information Bureau
Government of India

Ministry of Defence

Thu, 23 Dec 2021 5:35PM

Indian Army launches in-House Messaging Solution

The Indian Army, today launched a contemporary messaging application named, ASIGMA (Army Secure IndiGeneous Messaging Application) which is a new generation, state of the art, web based application developed entirely in-house by team of officers of the Corps of Signals of the Army.

The application is being deployed on the Army's internal network as a replacement of Army Wide Area Network (AWAN) messaging application which has been in service for past 15 years. The application has been fielded on Army owned hardware and lends itself to lifetime support with future upgrades. The bespoke messaging application meets all futuristic user requirements and boasts of an enhanced user experience. It has a variety of contemporary features including multi-level security, message prioritisation and tracking, dynamic global address book and various options to meet the Army's requirements.

This future ready messaging application will meet real time data transfer and messaging requirements of the Army, especially in the backdrop of current geo political security environment and is in line with the Government of India's, Make in India initiative.

The Indian Army has braced automation in a major way, especially post COVID-19 outbreak and is taking substantial steps towards paperless functioning. ASIGMA will further boost these

efforts and will add to the host of other applications already being employed by the Army over its captive pan Army network.

https://pib.gov.in/PressReleasePage.aspx?PRID=1784606

नवभारत टाइम्स

Fri, 24 Dec 2021

भारतीय सेना ने व्हाट्सऐप जैसा मैसेजिंग ऐप लॉन्च किया, पूरी तरह है देसी

भारतीय सेना ने व्हाट्सऐप जैसा मैसेजिंग ऐप लॉन्च किया है। इसका नाम है आर्मी सिक्योर इंडीजीनियस मैसेजिंग एप्लिकेशन यानी एएसआईजीएमए। यह पूरी तरह से मेड इन इंडिया है।

Edited by अमित शुक्ला

नई दिल्ली: भारतीय सेना ने गुरुवार को आंतरिक संचार के लिए एएसआईजीएमए नामक एक नए 'मैसेजिंग एप्लिकेशन' की शुरुआत की। एक आधिकारिक बयान में कहा गया है कि एएसआईजीएमए (आर्मी सिक्योर इंडीजीनियस मैसेजिंग एप्लिकेशन) को पूरी तरह से सिग्नल कोर के अधिकारियों की एक टीम ने विकसित किया है।

सेना ने कहा, 'नई एप्लिकेशन को आर्मी वाइड एरिया नेटवर्क (एडब्ल्यूएएन) मैसेजिंग एप्लिकेशन के प्रतिस्थापन के रूप में सेना के आंतरिक नेटवर्क पर तैनात किया जा रहा है, जो पिछले 15 वर्षों से सेवा में है।'

बयान में कहा गया है कि 'बीस्पोक मैसेजिंग एप्लिकेशन' भविष्य की सभी आवश्यकताओं को पूरा करता है। इसमें कहा गया है, 'यह भविष्य के लिए तैयार मैसेजिंग एप्लिकेशन सेना की वास्तविक समय डेटा स्थानांतरण और मैसेजिंग आवश्यकताओं को पूरा करेगा, विशेष रूप से वर्तमान भू-राजनीतिक सुरक्षा वातावरण की पृष्ठभूमि में और यह भारत सरकार की 'मेक इन इंडिया' पहल के अनुरूप है।'

बयान में कहा गया है कि भारतीय सेना विशेष रूप से कोविड-19 महामारी के बाद कागज रहित कामकाज की दिशा में पर्याप्त कदम उठा रही है।

https://navbharattimes.indiatimes.com/india/indian-army-launches-messaging-application-for-internal-communication/articleshow/88456930.cms

THE HINDU

Fri, 24 Dec 2021

Indian ship in Iran as part of 'Bridges of Friendship'

Kochi: INS Sudarshini, a sail training ship of the Indian Navy, called at Port Sahid Bahonar at Bandar Abbas in Iran on Wednesday on a three-day visit.

The ship is on the culmination phase of deployment to Gulf region as part of Indian Navy's efforts towards familiarising friendly foreign navies on various facets of operations and training on board sail training platforms and extending "Bridges of Friendship". The ship was escorted to the

port by IRIS Zereh and was accorded a warm welcome by the Naval band of IRI Navy at the jetty. A delegation of the IRI Navy 1st Naval Region and Naval Attaché Indian embassy received the ship.

The reception was followed by an on-board visit by Gaddam Dharmendra, Ambassador of India to Iran. He, along with his team, were provided a guided tour of the ship. The ship's staff were hosted at a banquet lunch on invitation by the Ambassador. Personnel from IRI Navy were also invited to the event. A joint cake cutting ceremony was held to mark the visit.

The Commanding Officer, accompanied by the Naval attaché of India, called on the Commander of the IRI Navy 1st District. Historical maritime linkages, mutual co-operation between both the Navies on the subject of training cadets and young officers and various aspects of sail training were discussed during the meeting.

Capt. Hamza, Director of Training (IRI Navy), visited the ship with a team of Officers from IRI Navy. They were provided an in-depth overview of the functioning and features of the ship during harbour training of IRI Navy Cadets.

IRI Navy trainee officers (Sea Riders) designated to undergo sail training visited the ship for a familiarisation tour of the ship. Practical knowledge on subjects of seamanship, sail arrangement, rope work and the technicalities of sail training were shared. Hands-on practical knowledge and experience on sail rigging of both sides was also imparted during this visit.

https://www.thehindu.com/news/cities/Kochi/indian-ship-in-iran-as-part-of-bridges-of-friendship/article38023563.ece

Science & Technology News

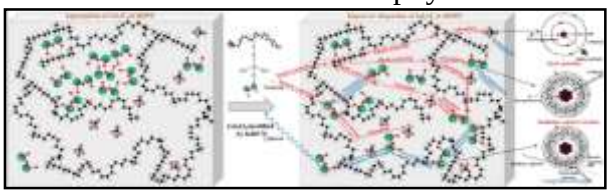
PHYS.ORG

Fri, 24 Dec 2021

Scientists invent lead-free composite shielding material for neutrons and gamma-rays

By Zhang Nannan

Dr. Huo Zhipeng and his student Zhao Sheng from the Hefei Institutes of physical science (HFIPS) of the Chinese Academy of Sciences recently developed a lead-free neutron and gamma ray composite shielding material that has high shielding properties and is environmentally friendly. Their results were published in *Nuclear Materials and Energy*.



Schematic diagram of shielding mechanism of modified nano composite shielding material. Credit: Huo Zhiping

The composite, modified-gadolinium oxide/boron carbide/high density polyethylene (Gd_2O_3/B_4C/HDPE), was tested safe and effective to shield neutron and gamma rays through a series of intricate and comprehensive experiments.

Neutron, as an electrically neutral particle, has a strong penetrability and always emits secondary gamma rays during particle collision process. The scientific and efficient scheme of shielding neutron is to select high Z (atomic number), low Z materials, and neutron absorbing materials simultaneously for combined shielding. However, lead-containing materials are restricted in application with biological toxicity.

Rare earth element gadolinium, usually exists in the form of non-toxic Gd_2O_3 in nature, has always shown high average thermal neutron absorption, high temperature resistance and good gamma shielding performance.

The researchers studied the shielding mechanism first, and then adopted the coupling agents to modify the surface of Gd_2O_3 to improve the interfacial compatibility and dispersion of Gd_2O_3 in the matrix.

"It is lead-free and poses no threat to the environment or humans," said Dr. Huo, who has been engaged in radiation and environmental protection for years.

He further explained how this radiation shielding system worked. Fast neutrons collide with gadolinium (Gd) inelastically, and collide elastically with hydrogen until they become thermal neutrons, finally, absorbed by high Z element Gd and boron.

The experimental results show that the neutron shielding rate of the composite can reach 98% under the condition of 15 cm thickness in CF-252 environment. In cS-137 and CO-60 environments, the gamma shielding rates of the composite are 72% and 60%, respectively, at the same thickness. Its comprehensive shielding performance is better than conventional boron-polyethylene collimating shielding, and it is suitable for neutron spectrum and gamma spectrum diagnosis system of Experimental Advanced Superconducting Tokamak (EAST). It is expected to be a promising radiation shielding material for neutron-gamma mixed fields, according to the researchers.

More information: Zhipeng Huo et al, Surface modified-gadolinium/boron/polyethylene composite with high shielding performance for neutron and gamma-ray, *Nuclear Materials and Energy* (2021). DOI: 10.1016/j.nme.2021.101095

https://phys.org/news/2021-12-scientists-lead-free-composite-shielding-material.html