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समाचार पत्रों से चयनित अंश

Newspapers Clippings

डीआरडीओ समुदाय को डीआरडीओ प्रौद्योगिकियों, रक्षा प्रौद्योगिकियों, रक्षा नीतियों, अंतर्राष्ट्रीय संबंधों और विज्ञान एवं प्रौद्योगिकी की नूतन जानकारी से अवगत कराने हेतु दैनिक सेवा

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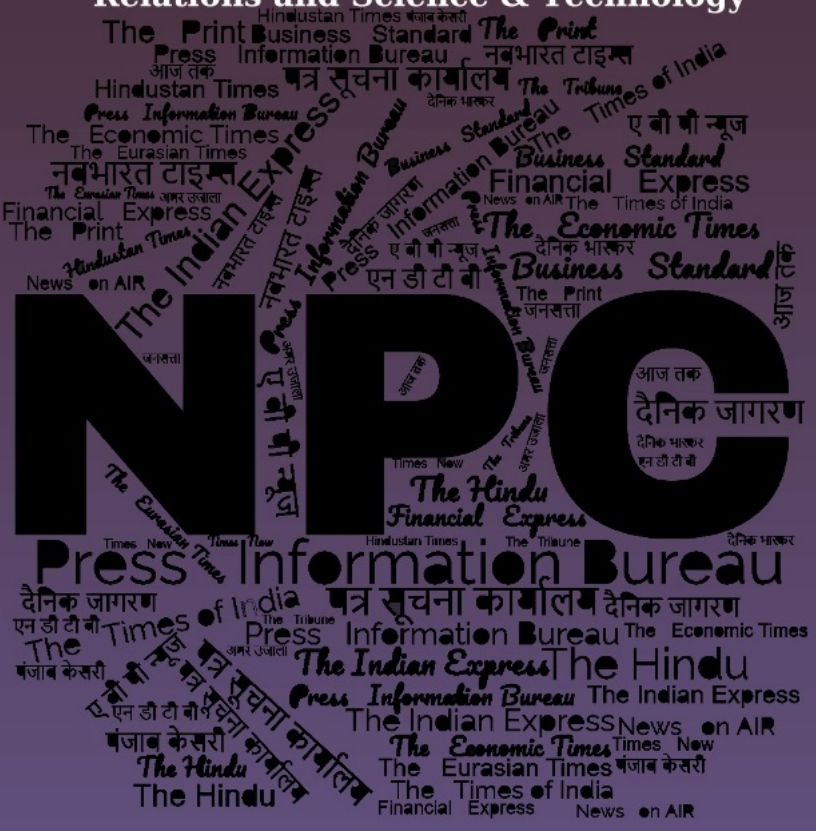

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CONTENTS

DRDO News

लद्दाख में स्वदेशी आकाश प्राइम वायु रक्षा प्रणाली का किया परीक्षण

Source: Dainik Jagran, Dt. 17 Jul 2025

राज्य ब्यूरो, जागरण ● जम्मू: आपरेशन सिंदूर के दौरान दुश्मन के ड्रोन हमलों को सटीक प्रहारों से नाकाम बनाने वाली भारतीय सेना की एयर डिफेंस यूनिट ने लद्दाख के उच्चतम पर्वतीय क्षेत्र में आकाश प्राइम वायु रक्षा प्रणाली का सफल परीक्षण किया। आकाश प्राइम को 15 हजार फीट तक की ऊंचाई पर स्थापित किया जा सकता है। यह 25-30 किमी की दूरी पर स्थित लक्ष्य को भेद सकती है।

लद्दाख में अत्यधिक ठंड, कम आक्सीजन में आकाश प्राइम के मिसाइलों ने 15 हजार फीट से हवा में तेजी से उड़ रहे दो टारगेट एयरक्राफ्ट मार गिराए। सतह से हवा में प्रहार करने वाले इस नए मिसाइल सिस्टम का सफल परीक्षण एयर डिफेंस यूनिट ने रक्षा अनुसंधान एवं विकास संगठन (डीआरडीओ) के वरिष्ठ अधिकारियों के साथ मिलकर किया। इस प्रणाली को डीआरडीओ ने ही विकसित किया है। यह प्रणाली लद्दाख के चुनौतीपूर्ण मौसम में सटीक प्रहार करने में सक्षम पाई गई। आकाश प्राइम प्रणाली से एयर डिफेंस की तीसरी व चौथी रेजिमेंट का गठन होगा।

वायु रक्षा प्रणाली के परीक्षण के दौरान प्रक्षेपित मिसाइल ● एएनआइ

तीसरा डिफेंस कारिडोर बनाने की तैयारी

जयपुर: राजस्थान में तीसरा डिफेंस कारिडोर बनाने की योजना पर काम शुरू हो गया है। सेना की सप्त शक्ति कमांड ने इस संबंध में राज्य सरकार को प्रस्ताव भेजा है। सेना का मानना है कि पाकिस्तान से सटी 1078 किमी लंबी सीमा को देखते हुए यहां हथियारों की मरम्मत व निर्माण की सुविधाएं जरूरी हैं।

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Akash Prime tested, can hit targets in Pak, China

Source: The Tribune, Dt. 17 Jul 2025

The successful test was carried out at an altitude of 15,000 feet in Ladakh today, sources said.

The trial was carried out by the Army Air Defence along with senior officials of the Defence Research and Development Organisation, which has developed the system.

During the trial, the Akash Prime —- a surface-to-air missile — registered a direct hit against a very fast-moving airborne target in a high-altitude area in a rarefied atmosphere.

The need to develop the Akash Prime arose as the firing parameters and trajectory of the missile change when launched at high altitudes. The lack of oxygen pressure has to be factored into the trajectory of the missile.

The Army already has Akash missiles in its arsenal which were used with success in Operation Sindoor. The Indian Air Force uses the Akash-NG (New Generation), which offers a significantly extended range (70-80 km).

The focus of the Akash Prime is on enhanced precision and operational capability in specific, difficult terrains and extreme cold weather conditions, while maintaining a range of 30-35 km, consistent with the existing Akash variant of the Army.

https://www.tribuneindia.com/news/india/akash-prime-tested-can-hit-targets-in-pak-china/

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₹20,000 crore project: Indigenous Awacs gets go-ahead, to be developed by DRDO

Source: The Economic Times, Dt. 17 Jul 2025

The government has given a go-ahead to the production of next generation airborne early warning and control systems (Awacs India) which will be a major force multiplier for the Indian Air Force (IAF) and propel India into a select league of nations with such indigenously developed capability.

Under the project, expected to cost around ₹20,000 crore, the IAF will get six large Awacs that will be capable of tracking enemy aircraft, ground sensors and other equipment at large distances, besides acting as a flying operations control centre. With the government clearances in place, the Defence Research and Development Organisation will work with a host of Indian companies as well as Airbus to integrate a complex antenna and other systems onboard the A321 aircraft.

IAF already has six of the aircraft that were taken from Air India in the past. These aircraft will undergo complex structural modifications and integration of a range of systems, including a dorsal fin mounted on the top that will enable an all-round radar coverage. The project is expected to take around three years for completion and would give Indian companies valuable expertise in working on complex systems from the development stage. It includes a fully indigenous mission control system and AESA radars.

Awacs India programme - also referred to as the Netra MkII - has been spearheaded by DRDO, which also recently got a go-ahead from the government to move into the prototype production

stage for fifth generation Advanced Multirole Combat Aircraft. This is also the first time that an Airbus platform will be used for such an application, marking an entry into a domain that has traditionally been dominated by Boeing. The project could also open up export opportunities for India in the future as well.

The air force currently operates the much smaller 'Netra' early warning aircraft, which have been successfully utilised in conflicts with Pakistan. It also has three IL76 'Phalcon' systems that were jointly developed with Israel and Russia but the fleet has faced major technical and availability issues.

https://economictimes.indiatimes.com/news/defence/indigenous-awacs-gets-go-ahead-to-be-developed-by-drdo/articleshow/122590361.cms?from=mdr

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Defence News

बीते जमाने के हथियारों से नहीं जीते जा सके आज के युद्ध: सीडीएस

Source: Dainik Jagran, Dt. 17 Jul 2025

नई दिल्ली, आइएएनएस : चीफ आफ डिफेंस स्टाफ जनरल अनिल चौहान ने आधुनिक युद्ध में महत्वपूर्ण बदलाव को रेखांकित करते हुए कहा कि भविष्य की चुनौतियों का सामना करने के लिए स्वदेशी ड्रोन प्रणाली जरूरी है। बीते जमाने के हथियारों से युद्ध नहीं जीते जा सकते। युद्धक्षेत्रों में पुरानी तकनीक पर भरोसा नहीं किया जा सकता। आज के युद्ध आने वाले कल की तकनीक से लड़े जाने चाहिए।

मानेकशा सेंटर में एक कार्यक्रम को संबोधित करते हुए जनरल चौहान ने कहा कि युद्ध की प्रकृति मौलिक रूप से विकसित हुई है। युद्ध के इतिहास में हमने भारी राइफलों से लेकर हल्के, लंबी दूरी के परिष्कृत हथियारों तक क्रांतिकारी बदलाव देखे हैं। लेकिन, सबसे बड़ा बदलाव ड्रोन और यूएवी प्रणालियों का उदय है। निगरानी उपकरणों से लेकर युद्ध के मैदान में प्रभावी कार्रवाई करने तक उनकी उपयोगिता कई गुना बढ़ गई है।

स्वदेशी ड्रोन प्रणाली पर केंद्रित कार्यशाला में बोलते सीडीएस जनरल चौहान ● प्रेट्र

जनरल ने कहा, हाल के वैश्विक संघर्षों ने दर्शाया कि कैसे ड्रोन रणनीतिक संतुलन को बदल सकते हैं, युद्धक्षेत्र में बड़ा बदलाव

'आपरेशन सिंदूर' का जिक्र करते हुए जनरल चौहान ने बताया कि 10 मई को पाकिस्तान ने संघर्ष के दौरान बिना हथियारों वाले ड्रोन और लुइटरिंग म्यूनिशन्स का उपयोग किया। इनमें से किसी ने भी भारतीय सैन्य या नागरिक ढांचे को नुकसान नहीं पहुंचाया। इस अभियान ने निचले हवाई क्षेत्र को सुरक्षित करने और एकीकृत काउंटर-यूएएस सिस्टम विकसित करने की आवश्यकता को बल दिया है। ड्रोन छोटे, कम गति वाले होने के बावजूद युद्ध को नया रूप दे रहे हैं। वे सस्ते हैं, उनका पता लगाना मुश्किल है। पारंपरिक सैन्य सोच के विपरीत है। 'आपरेशन सिंदूर' ने हमें दिखाया है कि हमें आयातित ड्रोन या काउंटर-ड्रोन तकनीक पर निर्भर क्यों नहीं रहना चाहिए।

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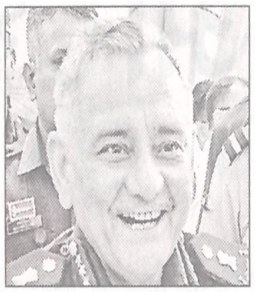
ड्रोन और मानव रहित हवाई प्रणाली में आत्मनिर्भर हो

Source: Jansatta, Dt. 17 Jul 2025

जनसत्ता ब्यूरो
नई दिल्ली, 16 जुलाई।



प्रमुख रक्षा अध्यक्ष जनरल अनिल चौहान ने कहा कि हाल के वैश्विक संघर्षों में यह बात सामने आई है कि कैसे ड्रोन 'युद्ध के रणनीतिक संतुलन को गैर आनुपातिक रूप से प्रभावित कर सकते हैं।' उन्होंने यह भी कहा कि 'आपरेशन सिंदूर' के दौरान पाकिस्तान ने 10 मई को हथियार रहित ड्रोन का इस्तेमाल किया।

प्रमुख रक्षा अध्यक्ष जनरल अनिल चौहान ने बुधवार को कहा कि हाल के वैश्विक संघर्षों में यह बात सामने आई है कि कैसे ड्रोन 'युद्ध के रणनीतिक संतुलन को गैर आनुपातिक रूप से प्रभावित कर सकते हैं।' उन्होंने इस बात पर जोर दिया कि ड्रोन और मानवरहित हवाई रोधी प्रणाली (सी-यूएएस) में आत्मनिर्भरता भारत के लिए रणनीतिक रूप से अनिवार्य है।

सीडीएस ने यह भी कहा कि 'आपरेशन सिंदूर' के दौरान पाकिस्तान ने 10 मई को हथियार रहित ड्रोन का इस्तेमाल किया। हालांकि, उनमें से कोई भी वास्तव में भारतीय सैन्य या नागरिक बुनियादी ढांचे को कोई नुकसान नहीं पहुंचा सका। जनरल चौहान 'मानेकशा सेंटर' में आयोजित एक कार्यक्रम को संबोधित कर रहे थे। सीडीएस ने कहा कि 'आपरेशन सिंदूर' ने दिखाया है कि क्यों स्वदेशी रूप से विकसित मानव रहित हवाई प्रणालियां (यूएएस) और सी-यूएएस 'हमारे क्षेत्र और हमारी जरूरतों के लिए महत्त्वपूर्ण हैं'। 'यूएवी और सी-यूएएस के क्षेत्र में विदेशी ओईएम से वर्तमान में आयात किए जा रहे महत्त्वपूर्ण घटकों के स्वदेशीकरण' विषय पर थिंक टैंक 'सेंटर फार ज्वाइंट वारफेयर स्टडीज' के सहयोग से एकीकृत रक्षा कार्मिक मुख्यालय (एचक्यू-आइडीएस) की मेजबानी में एक दिवसीय कार्यशाला आयोजित की जा रही है।

रक्षा मंत्रालय ने मंगलवार को कहा कि यह आयोजन हाल में भारत-पाकिस्तान के बीच हुए सैन्य संघर्ष की पृष्ठभूमि में हो रहा है जिसमें 'आपरेशन सिंदूर' भी शामिल है। इस संघर्ष ने यूएवी और सी-यूएएस के सामरिक महत्त्व व परिचालन प्रभावशीलता को रेखांकित किया।

उद्घाटन सत्र में अपने मुख्य संबोधन में सीडीएस ने कहा कि ड्रोन वास्तविकता का प्रमाण हैं और हाल के संघर्षों में उनके व्यापक उपयोग ने दिखाया है कि कैसे ड्रोन 'युद्ध के रणनीतिक संतुलन को गैर आनुपातिक रूप से प्रभावित कर सकते हैं।' उन्होंने कहा कि ड्रोन का असमान उपयोग बड़े मंचों को संवेदनशील बना रहा है और सेनाओं को हवाई रणनीतिक सिद्धांत, सी-यूएएस के विकास और इसके अनुकूल युद्ध कौशलों के वैचारिक पहलुओं पर पुनर्विचार करने के लिए प्रेरित करता है।

सीडीएस ने यह भी कहा कि 'आपरेशन सिंदूर' के दौरान पाकिस्तान ने 10 मई को हथियार रहित ड्रोन का इस्तेमाल किया। हालांकि, उनमें से कोई भी वास्तव में भारतीय सैन्य या नागरिक बुनियादी ढांचे को कोई नुकसान नहीं पहुंचा सका। जनरल चौहान ने कहा कि उनमें से अधिकतर को मार गिराया गया जबकि कुछ को जस की तस अवस्था में बरामद किया गया।

सीडीएस ने जोर देकर कहा कि 'आपरेशन सिंदूर' ने हमें दिखाया है कि हमारे भूभाग और हमारी जरूरतों के लिए स्वदेशी रूप से विकसित यूएएस, सी-यूएएस क्यों महत्त्वपूर्ण हैं। आत्मनिर्भरता के सिद्धांत को रेखांकित करते हुए जनरल चौहान ने कहा कि हम उन आयातित विशिष्ट तकनीकों पर निर्भर नहीं रह सकते जो हमारे आक्रामक और रक्षात्मक अभियानों के लिए महत्त्वपूर्ण हैं। उन्होंने कहा कि विदेशी तकनीकों पर निर्भरता हमारी तैयारियों को कमजोर करती है, उत्पादन बढ़ाने की हमारी क्षमता को सीमित करती है और इसके कारण महत्त्वपूर्ण पुर्जों की कमी होती है।

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Can’t win today's warfare with yesterday’s weapons, desi drone tech must: CDS General Anil Chauhan

Source: The Times of India, Dt. 17 Jul 2025

Stressing on acquiring the most advanced but indigenous defence technologies to have an upper hand over adversaries, chief of defence staff general Anil Chauhan said that “in today’s warfare, you cannot win with yesterday’s weapon systems”. “Today's warfare has to be fought with tomorrow’s technology,” he said.

The CDS advocated for accelerated development of homegrown drone technology and counter-UAS grids, cautioning that outdated technology cannot be relied upon in modern battlefields.

In his address at an event held at the Manekshaw Centre in Delhi, CDS Chauhan also pointed out that during Operation Sindoor, Pakistan had used unarmed drones and loiter munitions on May 10 but “none of them could actually inflict any damage to Indian military or civilian infrastructure, and most of them were neutralised through a combination of kinetic and non-kinetic means”.

Laying stress on self-reliance in drone and UAV technology, he said, “Our 'Operation Sindoor' has shown us why we must not depend on imported drone or counter-drone technology. Indigenous systems are critical. Foreign systems come with limitations — their specifications are widely known, allowing adversaries to anticipate tactics.”

Gen Chauhan said recent conflicts globally have demonstrated how drones can “shift tactical balance disproportionately”.

Asserting that self-reliance in UAVs and Counter-Unmanned Aerial Systems (C-UAS) is a “strategic imperative” for India, he said Operation Sindoor has shown why indigenously developed Unmanned Aerial Systems (UAS) and C-UAS “built for our terrain and our needs are crucial”.

“Asymmetric drone warfare is making large platforms vulnerable and driving militaries to rethink the conceptual aspects of air doctrines, development of C-UAS and adaptive moves of engagement,” he said.

“In the history of warfare, we have witnessed revolutionary changes — from heavy rifles to lighter, more sophisticated long-range weapons. But the biggest shift is the emergence of drones and unarmed aerial systems. Their utility has grown multifold — from basic surveillance tools to becoming effective force multipliers on the battlefield,” Gen Chauhan said.

He explained that drones, despite being smaller and less aerodynamic, are reshaping conventional warfare. “They are cheaper, harder to detect and yet sophisticated. This defies traditional military thinking,” he said. Operation Sindoor, he said, clearly demonstrated the need to secure lower airspace and develop integrated counter-UAV systems.

His statement comes amid a global shift towards drone-dominated conflicts, like in the case of the Israel-Iran conflict and the Russia-Ukraine war, where hundreds of drones are being used for bombing strategic targets, individuals and even key installations.

https://timesofindia.indiatimes.com/india/cant-win-todays-warfare-with-yesterdays-weapons-desi-drone-tech-must-cds-general-anil-chauhan/articleshow/122592318.cms

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Pak drones could not inflict damage on Indian military, civil infrastructure during Operation Sindoor: CDS Anil Chauhan

Source: The Indian Express, Dt. 17 Jul 2025

None of the unarmed drones and loitering munitions deployed by Pakistan against India during Operation Sindoor could inflict any damage to Indian military or civilian infrastructure, Chief of Defence Staff (CDS) General Anil Chauhan said on Wednesday, adding that most of them were killed through a “combination of kinetic and non-kinetic means” and some could be recovered in almost intact conditions.

Delivering the keynote address at a workshop at Manekshaw Centre, General Chauhan further said that Operation Sindoor has shown why indigenously developed Unmanned Aerial Systems (UAS) and Counter-Unmanned Aerial Systems (C-UAS) “built for our terrain and our needs are crucial”.

The day-long workshop on ‘Indigenisation of Critical Components Currently Being Imported from Foreign OEMs in the Areas of UAV & C-UAS’, hosted by Headquarters, Integrated Defence Staff (HQ-IDS), in collaboration with the think-tank Centre for Joint Warfare Studies, comes in the immediate backdrop of Operation Sindoor, which has underlined the strategic importance and operational effectiveness of UAVs and C-UAS, the Defence Ministry stated on Tuesday.

The CDS said that India cannot rely on imported niche technologies that are crucial for our offensive and defensive missions. He said that dependence on foreign technologies weakens India’s preparedness, limits its ability to scale up production, and leads to a shortfall of critical spares for sustenance and round-the-clock availability.

General Chauhan also said that recent global conflicts have shown how drones can shift tactical balance disproportionately, adding that self-reliance in UAVs and C-UAS is a strategic imperative

for India. He said asymmetric drone warfare is making large platforms vulnerable and driving militaries to rethink the conceptual aspects of air doctrines, the development of C-UAS, and adaptive moves of engagement.

Military leaders, scientists, policymakers and private industry representatives were present at the event, which aims to develop a "strategic roadmap" for indigenisation, to reduce reliance on foreign companies for critical UAV and C-UAS components.

https://indianexpress.com/article/india/pakistan-drones-indian-military-civil-infra-cds-anil-chauhan-operation-sindoor-10129389/

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11 देशो को निर्यात होंगे कानपुर में बने स्वदेशी पैराशूट

Source: Dainik Jagran, Dt. 17 Jul 2025

विवेक मिश्र ● जागरण

● रक्षा मंत्रालय के पीएसयू ग्लाइडर्स इंडिया लि. कंपनी के कानपुर स्थित ओपीएफ में उत्पादन

● जीआइएल की एक्सपोर्ट सेल वैश्विक स्तर पर भारतीय उत्पादों की सप्लाई के लिए तलाश रही संभावनाएं

कानपुर : आयुध पैराशूट फैक्ट्री (ओपीएफ) में निर्मित पैराशूट विदेश में भी धाक जमा रहे हैं। रक्षा मंत्रालय के पीएसयू ग्लाइडर्स इंडिया लिमिटेड (जीआइएल) की उत्पादन इकाई ओपीएफ उन्नत पैराशूट निर्यात करने के लिए तैयार है। ओपीएफ द्वारा विभिन्न श्रेणियों में पैराशूट अलग-अलग डिफेंस एक्सपो में प्रदर्शित किए गए। दक्षिण कोरिया, दक्षिण अफ्रीका, इंडोनेशिया, केन्या, वियतनाम, नेपाल, संयुक्त राज्य अमेरिका, गुयाना, मलेशिया, तंजानिया आदि 11 देशों के रक्षा अधिकारियों को पैराशूट पसंद आए हैं। ओपीएफ को सुखोई, जगुआर, मिग, तेजस जैसे युद्धक विमानों के पैराशूट बनाने की महारत हासिल है। आयुध निर्माणी के निगमीकरण के बाद आयुध अफसरों को वैश्विक रक्षा क्षेत्र में डिफेंस एक्सपो में जाकर मेक इन इंडिया का प्रचार-प्रसार की छूट मिली। विशेषज्ञों ने बदलते समय के साथ आधुनिक पैराशूट के अनुसंधान व विकास पर फोकस बढ़ाया। ओपीएफ के पास पहले से लड़ाकू विमान सुखोई, जगुआर, मिराज, मिग 21 और मिग 29, तेजस, पी सेवन हैवी ड्रॉप पैराशूट, गजराज 2 पैराशूट बनाने की तकनीक है।

पैराशूट का प्रोटोटाइप ● ओपीएफ

कानपुर में बने पैराशूट सेना को आपूर्त किए जा रहे हैं। मलेशिया को पैराशूट निर्यात हो रहा है। करीब 11 देशों में भारतीय पैराशूट के निर्यात के लिए एक्सपोर्ट सेल लगातार वार्ता कर रही है। डिफेंस एक्सपो के जरिये भी विभिन्न देशों से अच्छा रिस्पांस मिला है। प्रबल संभावना है कि इस साल के अंत तक बड़ी संख्या में पैराशूट के निर्यात ऑर्डर मिलेंगे।

– एमसी बालासुब्रमणियम, सीएमडी, ग्लाइडर्स इंडिया लिमिटेड कंपनी।

आपात स्थिति में पायलट की सुरक्षित लैंडिंग कराएगा सिस्टम

डीआरडीओ की इकाई एरियल डिलीवरी रिसर्च एंड डेवलपमेंट एस्टेब्लिशमेंट (एडीआरडीई) के इंजीनियरों ने पायलट पैराशूट सिस्टम का डिजाइन तैयार किया है। फाइटर प्लेन तेजस मार्क 1ए की गति 2205 किमी प्रतिघंटा से ज्यादा है। यह 50 हजार फीट की ऊंचाई तक उड़ान भरने में सक्षम है। ऐसे में सेना ने इस पैराशूट की मांग की। इस पैराशूट को ओपीएफ ने बना लिया है।

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India likely to get 3 Apache attack choppers from US for its Army on July 21

Source: The Times of India, Dt. 17 Jul 2025

The first consignment of three Apache attack helicopters from the US for the Indian Army is likely to reach the country on July 21 that will enhance the combat strength of the land force. The AH-64E, also known as "tanks in the air" due to its heavy-duty firepower, will be delivered to the

Hindon Air Force Station on July 21. The remaining three helicopters are expected to be delivered by the end of the year.

Previously, IAF had purchased 22 Apaches under a deal with the US govt and Boeing in 2015. The US completed delivery of all 22 Apache attack helicopters to the IAF in July 2020. Two squadrons of the IAF are already active — one located in Pathankot, which houses the first eight Apache helicopters and the other one in Jorhat, operating as HU-137 Squadron.Later in the year, when US President Donald Trump, during his first term, visited India, New Delhi signed a deal worth $600 million to buy six Apache helicopters.

The Army formed its first Apache squadron in Jodhpur over 15 months ago but its deployment was delayed due to global supply chain issues and shifting geopolitical climate. These helicopters were earlier scheduled to arrive between May and June 2024, but the deployment was delayed.

Capable of carrying out precision attacks at standoff ranges and operating in hostile airspace with threats from ground, the addition of these attack helicopters to the Indian Army will provide a combative edge to India in any future joint operations as the IAF already has AH-64Es squadrons.

The AH-64E Apache, also known as the Apache Guardian, is a highly advanced, multi-role combat helicopter known for its enhanced capabilities in network-centric and multi-domain warfare. Apache helicopters are equipped with state-of-the-art targeting systems that provide accurate data on the target in all weather conditions. They also have night vision navigation systems, which will make the offensive capabilities of the Army even more effective.

https://timesofindia.indiatimes.com/india/india-likely-to-get-3-apache-attack-choppers-from-us-for-its-army-on-july-21/articleshow/122592685.cms

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India seeks U.S. nod for co-production of Javelin missiles

Source: The Hindu, Dt. 17 Jul 2025

India has submitted letter of request to United States for co-production of Javelin anti-tank guided missiles (ATGMs) in the country.

A top defence source who has confirmed the development said that India has shown interest and submitted the proposal to the U.S. authorities for co-production of javelin missile. The development is also aligned with ‘Make In India’ initiative of the NDA government.

“It will ensure operational readiness and reduce the dependability on foreign support. The talks are in advance stage,” the official added. Javelin is one of the most advanced third-generation ATGMs in the world.

Amid growing urgency to replenish and add new weaponry, the official said that they were already in touch with the United States for procurement of javelin missiles under emergency procurement.

Considering India’s strategic imperatives, particularly the need to counter evolving threats from both Pakistan and China, the Javelin missile system presents a strong case for bolstering India’s anti-tank warfare capabilities, the official added.

Priority for weight-less missile systems

Defence forces are looking at shoulder-fired missile systems that are less in weight and can be carried in difficult terrain by troops without engaging too many of them to carry it.

Defence Minister Rajnath Singh recently held a phone conversation with U.S. Defence Secretary Pete Hegseth to review ongoing and forthcoming initiatives aimed at enhancing defence cooperation between the two countries. Javelin is developed and produced jointly by American defence majors Raytheon and Lockheed Martin.

https://www.thehindu.com/news/national/india-submits-letter-of-request-to-us-for-co-production-of-javelin-missiles/article69817598.ece

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Indian drone shield

Source: The Times of India, Dt. 17 Jul 2025

In what should worry the security establishment, there's been an uptick in Pakistani smugglers pushing drones laden with drugs, arms and ammunition deeper into India. After a brief lull during Operation Sindoor, drone-borne smuggling has resumed with greater precision, reportedly using Chinese drones that can fly higher to evade detection.

This is hardly petty smuggling but part of a well-planned Pakistani ICAD (illegal, coercive, aggressive and deceptive) strategy to undermine India's security. The goal is to get drugs, guns and money to criminal elements on this side of the border. It's part of Pakistan's old doctrine of bleeding India with a thousand cuts. Consider this: last Sept, a police team in Punjab discovered a haul of Nato-grade guns – most likely originating in Afghanistan – from smugglers linked to Pakistani drone drops. With such weapons being also found with terrorists in Kashmir, the modus operandi is clear.

Drone drops from Pakistan started after the nullification of Article 370 in 2019. To counter this BSF adopted anti-drone systems like Dronaam that neutralise Pak-origin UAVs using laser. Even specialised anti-drone teams have been set up. But the versatility of drone tech means that it is constantly evolving.

Drones can be modified and adapted to evade detection, they can change modus operandi and alter application. The Ukraine war exemplifies this. Drone tech is changing every fortnight. This also means counter-drone tech has to constantly innovate in real time.

That in turn means creating a large pool of expertise throughout the security establishment and linking this with R&D institutes. Drones are rapidly transforming from FPV to fibre optic to the oncoming AI versions. The only way to stay ahead of the curve is to heavily invest in drone tech in both industry and academia. India must create its own drone shield.

https://timesofindia.indiatimes.com/blogs/toi-editorials/indian-drone-shield/

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Rethinking the reinforced one-front war concept

-by Abhijit Singh, retired naval officer and former head of maritime policy at ORF, New Delhi

Source: The Hindu, Dt. 17 Jul 2025

Indian strategists have long worried about the deepening security partnership between China and Pakistan. The bilateral relationship today extends well beyond arms sales to include diplomatic shielding, intelligence sharing, and even elements of tactical integration. Some observers, however, suggest a more diabolical possibility: the threat of a “reinforced one-front war”— a scenario in which India would face Pakistan and China fighting together on a single front. Proponents of this view imagine a deeper military integration, with Pakistan benefiting directly from Chinese technology, intelligence, security assets, and even military personnel. When the balloon goes up, they warn, China would act as a strategic enabler on India’s western front, turning Pakistan’s challenge into a more formidable, integrated threat.

The argument seems almost a truism at first glance. China’s support for Pakistan is undoubtedly real, sustained, and strategically motivated. Even so, describing it as a “reinforced one-front war” risks overstating the degree of operational integration in ways that misread Beijing’s intentions and distort India’s own strategic calculus. At the very least, it calls for a dispassionate assessment of the facts.

Not one front

Let us start with the undeniable. China has become Pakistan’s principal arms supplier, providing everything from advanced drones to missile systems, naval vessels, and ISR (intelligence, surveillance, reconnaissance) platforms. China’s BeiDou satellite navigation system supports Pakistani missile targeting. During moments of crisis — such as the Balakot strikes and Operation Swift Retort — Beijing has offered diplomatic cover, blocking UN sanctions and tempering the international fallout. China ensures Pakistan remains a capable military adversary, able to field modern platforms and fight on more equal terms with India, despite economic constraints. Chinese weapons lock Pakistan into a client-supplier relationship that deepens Beijing’s political influence in Islamabad.

Worrying as these developments are, they do not readily lend themselves to the notion of a single, integrated military front. Arms transfers — even at scale — are not the same as a shared war plan. India itself is a major buyer of Russian, Israeli, American, and French military systems. Nobody claims India is fighting America’s or Russia’s wars by proxy. India has even begun exporting weapons — such as BrahMos missiles to the Philippines — without any suggestion from Beijing that Manila is fighting an Indian war against China. Likewise, Azerbaijan does not accuse India of forming an integrated front with Armenia, despite significant Indian arms sales in recent years. Similarly, advanced sales — such as China’s potential supply of J-35 stealth fighters to Pakistan, or India’s exploration of Russia’s Su-57 — do not imply joint war planning or a unified front.

China may have provided direct military support to Pakistan during Operation Sindoor, even monitoring the performance of its weapons systems in Pakistani use, as Indian military officials recently stated. However, monitoring is standard practice for arms suppliers. The U.S., Russia, Israel, and France all routinely do this, and India itself will understandably be interested in how the BrahMos missile performs in the Philippines. Some might argue that this is a false equivalence — that the China–Pakistan strategic partnership is by no measure comparable to the relationship between India and the Philippines. This does not detract from the principal issue: monitoring and even limited intelligence sharing are typical of arms sales relationships. But they are not evidence of a single, unified war front with joint command or shared operational planning.

What many alarmist narratives often gloss over is that China and Pakistan have very different strategic interests vis-à-vis India. For Pakistan, the military contest with India is existential — a constant, defining rivalry. For China, India is a regional competitor to be managed and contained, but not an existential enemy. Beijing's principal strategic focus remains the U.S. While China has much to gain from an India tied down on its western border, Beijing's preferred denouement is an India that is cautious, preoccupied, and wary of escalation. That is precisely why China might be careful about escalation itself. This caution is evident in the absence of any commitment to join Pakistan in a full-scale war with India. Indeed, no joint commands exist; no integrated operational planning has been demonstrated. China-Pakistan military exercises, while symbolically important, fall short of the combined-force planning seen in alliances such as NATO or even U.S.-South Korea.

Challenges for India

This is not to deny the challenge of China-Pakistan collusion altogether. Their defence partnership does complicate India's security environment, increasing the costs of military preparedness and the demand for sophisticated countermeasures from air defence to ISR and precision strike capabilities. Even so, framing the threat as a single "reinforced one-front war" risks misunderstanding. It imagines a level of operational integration that does not exist, encouraging Indian planners to over-invest in blunt, worst-case military postures that may be unaffordable or strategically rigid. It also underplays opportunities for diplomatic management with China, further shrinking India's options.

Beijing may shield Pakistan diplomatically and arm it militarily, but it also has an interest in limiting escalation that could trigger nuclear thresholds or force Chinese military intervention. That is a lever India can look to exploit. Overstating China's willingness to fight India directly on Pakistan's behalf risks creating a self-fulfilling prophecy in which all crisis management is abandoned in favour of maximalist, binary threat perceptions.

However serious the China–Pakistan nexus may appear, Indian planners ought to avoid turning prudent concern into simplistic formulations. Instead of declaring the threat a single, unified front, Indian analysts must see it for what it is: a complex, asymmetric partnership in which China equips Pakistan to be a tougher local rival without assuming the costs and risks of fighting India itself. That is the harsh strategic truth. Planning for it requires clear-eyed analysis, not rhetorical overreach.

https://www.thehindu.com/opinion/op-ed/rethinking-the-reinforced-one-front-war-concept/article69818634.ece

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Science & Technology News

IIT Madras unveils new 8.5-kg wheelchair that enables independence

Source: The Hindu, Dt. 17 Jul 2025

The Hindu Bureau
CHENNAI

It weighs 8.5 kg, is minimalistic, and comes in 14 colours. IIT Madras's latest innovation is YD One, which it claims is India's lightest active rigid-frame wheelchair. Born out of the joint efforts of TTK Centre for Rehabilitation Research and Device Development, and THRYV Mobility, a fully incubated start-up within IIT Madras, the device was launched in Chennai on Wednesday.

The device has a single frame made of aerospace-grade material. It can be fully customised and is available in sizes from 13 to 18 inches. So, what's so special about it? "With the monoframe, minimalistic design, you slap 120 kg on it and make it run through two lakh cycles of double drum test, and drop it for 6,666 times for drop test, and the device won't have a crack or scratch. That's precision engineering and innovative geometry," said Justin Jesudas, founder and CEO, THRYV Mobility.

Most wheelchairs in the market are heavy and hospital-grade, which are unfit for community use.

"This is the reason why you find this population [of wheelchair users] largely invisible, despite being high in numbers. We wanted to change this narrative," said Mr. Jesudas, who is himself a wheelchair user for the past 15 years.

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The Tribune
The Statesman
पंजाब केसरी जनसत्ता
The Hindu
The Economic Times
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Hindustan Times
नवभारत टाइम्स
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The Asian Age
The Pioneer