

# समाचार पत्रों से चयित अंश Newspapers Clippings

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Tue, 21 May 2019

## **‘Combat Drugs’ Synthesized by DRDO, to reduce casualties**

*The Indian defense lab has created a range of new medicines that can help soldiers sustain injuries for longer periods, till they can be transported to better facilities*

The ongoing tussle between armies owing to India-Pak tensions has shed a light on a serious issue amongst security forces. It was determined that over 90% of the personnel who suffer fatal injuries, succumb to those injuries within a matter of hours. Hostile conditions deter them from getting the necessary treatment, and when they are transported to better medical facilities in gravely injured conditions, it often becomes too late. Realizing this, a team at the medical laboratory of the Indian Defense Research and Development Organization (DRDO), has synthesized a range of enhanced drugs, which can help soldiers brave tough, lethal conditions while they are moved to a better facility.

Dubbed ‘Combat Casualty Drugs’, these new medicines involve a range of wound sealants, hyper absorptive dressing materials, and glycerated saline. These medical innovations can keep military personnel from succumbing to injuries sustained during warfare, keeping in mind the varying environmental factors in battlegrounds in jungles, and at higher altitudes.

Developed by a research team at the Institute of Nuclear Medicine and Allied Sciences (INMAS), a department of the DRDO, the drugs were created as the need for quick and effective first aid treatments were realized. The specially created dressing materials, created using cellulose fiber, are 200 times more effective in absorbing blood than the ones currently in use. In fact, the study revealed that conventional dressing methods are not just ineffective, but draw blood out even quicker. The glycerated saline, does not freeze even at temperatures of -18 degrees, it reduces inflammation, and can be lifesaving as trauma caused by severe pain is one of the leading reasons for casualties.

The team has devised several other drugs which will help in drastically reducing the number of lives lost during warfare. They claim that the death toll of 40 CRPF personnel, could have been much lower had the drugs been in use.

<https://technobleak.com/combat-drugs-synthesized-by-drdo-to-reduce-causalities/>

## Defence companies can self-certify product quality: Ministry of Defence

By Chethan Kumar

Bengaluru: In a major policy shift, the defence ministry has decided to allow private firms to self-certify the quality of their products. While industry terms it progressive, defence employees have denounced the move.

The policy, which will also cover defence public sector units (DPSUs), was notified on May 13. Approved by defence minister Nirmala Sitharaman, the objective of the policy is to promote ease of doing business and achieve the vision of 'Make in India'. As per the policy, a mechanism will be instituted for awarding self-certification status to private industry and DPSUs. Currently, supplies by DPSUs and private vendors are subjected to clearance by the Directorate General of Quality Assurance (DGQA).

Slamming the policy, All India Defence Employees Federation, in a statement, said: "This is the latest bombshell on DGQA. In the name of ease of doing business, government is getting rid of another defence establishment."

### 'Scheme to encourage defence companies assume responsibility'

However, the policy paper says that when suppliers with self-evident quality systems are awarded self-certification status, it encourages them to assume direct responsibility to sustain and improve quality. The responsibility of awarding this status will remain with DGQA.

Former DGQA chief Lt Gen Shamsher Singh (ret'd), who spearheaded the new policy, said: "This is a very positive move. Although the existing policy allowed self-certification in some form, DGQA still had to clear inspection notes from vendors." Allaying fears of employee unions, he said: "This is the way forward if we want to achieve Make in India."

Not convinced, MK Ravindra Pillai, leader staff side, Joint Consultative Machinery, DGQA, said: "There has been a concerted effort to reduce staff at DGQA to prevent union activity because we've been fighting corruption. This is another attempt. We'll protest on Tuesday, and a nationwide protest will take place after the new government comes to power."

In the policy paper, the ministry said the scheme is intended to integrate quality throughout manufacturing by ensuring better reliability of products. In a world of fierce competition where quality is the defining factor, it's imperative that defence suppliers are responsible for it, the ministry said.

Hailing the move, Rahul Chaudhry, chairman, Defence Innovators and Industry Association, said: "The government has finally removed one of the biggest hurdles to the Make in India programme." The MoD said the scheme is open only to vendors with state-of-the-art manufacturing who have demonstrated capability to consistently fulfil stipulated requirements during execution of orders.

<https://timesofindia.indiatimes.com/india/defence-companies-can-self-certify-product-quality-mod/articleshow/69419827.cms>

### HIGHLIGHTS

- The defence ministry has decided to allow private firms to self-certify the quality of their products
- While industry terms it progressive, defence employees have denounced the move
- The policy, which will also cover defence public sector units (DPSUs), was notified on May 13

## Indian Army begins 3 nation hunt for new LMGs for Infantry

*The team, which left India a few days ago, is first visiting Bulgaria, where it will meet representatives from Arsenal, a gun and ammunition manufacturer*

*By Shaurya Karanbir Gurung*

New Delhi: The Indian Army has begun its hunt for new light machine guns (LMG) as an army-led team is visiting three countries to procure about 17,000 such guns for the infantry under the fast track procedure, officials said.

The team, which left India a few days ago, is first visiting Bulgaria, where it will meet representatives from Arsenal, a gun and ammunition manufacturer. It will then go to Israel for the Israel Weapon Industries (IWI) and then to South Korea for S&T Motiv. It is visiting these manufacturers because they had responded with their bids to the army's request for procuring 16,400 LMGs under the fast track procedure (FTP).

US-based Sig Sauer had also submitted its bid and the team had planned to visit it, but the company later said that because it has an existing order for 72,400 assault rifles for the Indian Army under the FTP and a few more orders, including from the US Army, it won't have the production capacity for the new LMGs. So, the team decided to visit only Bulgaria, Israel and South Korea.

Last February, the Defence Acquisition Council led by Defence Minister Nirmala Sitharaman had cleared the procurement of the LMGs under the FTP. The FTP is to ensure expeditious procurement for urgent operational requirements of the regular and special forces. It is applied to cases where there has been an unforeseen delay, which is adversely affecting the capacity of the forces. The team, which also has officials from the defence ministry, will evaluate the LMGs produced by the manufacturers.

Officials explained that the army is looking at procuring an LMG with a calibre of 7.62x51mm, which will replace the in-service INSAS LMG that has a calibre of 5.56x45mm. The higher calibre means that the new LMG will be more lethal.

"It will also have belted ammunition, which means that it will have a sustained rate of fire, unlike LMGs wherein the magazine has to constantly be changed," explained an official.

After the visits, the team is expected to return to India by May end. It will then ask the manufacturers to come to India to carry out compatibility tests with Indian made ammunition (produced by the Ordnance Factory Board) at some firing ranges.

The FTP, unlike the normal procurement route, doesn't have lengthy user trials and only has short demonstrations like the ones to be done in India. It looks at procuring equipment which are already in service, so the time required for evaluation is minimised. The team will then submit a report to the defence ministry's acquisition department. The lowest bidder will be selected and the contract will be signed.

"It could take about seven to eight more months for procuring the LMGs," said an official.

<https://economictimes.indiatimes.com/news/defence/indian-army-begins-3-nation-hunt-for-new-lmgs-for-infantry/articleshow/69421569.cms>

## Senior officer moved over lapses in IAF chopper friendly fire case

*On February 27, even as Indian and Pakistani jets were engaged in a dogfight in the Nowshera sector, a Russian-made Mi-17 helicopter of IAF crashed. All six airmen on board the helicopter were killed*

*By Sudhi Ranjan Sen*

New Delhi: The Indian Air Force (IAF) has removed the Air Officer Commanding (AOC) Srinagar Air Base, the senior-most officer of the base, for circumstances related to the crash of an Mi-17 helicopter near Srinagar on February 27 after it came under friendly fire, even as a Court-of-Inquiry (CoI) continues to investigate the matter. A final report is yet to be submitted. An IAF spokesperson declined comment on the matter.

On February 27, even as Indian and Pakistani jets were engaged in a dogfight in the Nowshera sector, a Russian-made Mi-17 helicopter of IAF crashed. All six airmen on board the helicopter were killed. The helicopter was downed by a surface-to-air missile of IAF which mistook the aircraft to be hostile, initial inquiries have revealed.

As the inquiry nears completion, IAF is considering whether or not it should slap criminal charges against those found lacking. “There will be no tolerance of lapses,” said a senior defence ministry official who asked not to be named. Culpable homicide not amounting to murder is one of the charges that IAF is contemplating pressing against those found guilty by the CoI. “Unprecedented as it might be, IAF leadership is clear that such lapses are not repeated,” the official added.

The AOC has been removed because the incident happened on his watch.

The preliminary inquiry into the accident has allegedly indicated several lapses leading to the tragic accident.

For instance, the air traffic control called the helicopter back even as air engagement between Indian and Pakistani fighters intensified. “Ideally, the helicopter should have been sent away to safer zone instead of it being called back to the base,” said a second senior defence ministry official who did not want to be named.

“The incoming helicopter should have been vectored into the pre-designated zone meant for friendly aircraft to hold till the alert was called off,” the official added.

All bases have designated airspace for friendly aircraft in case of an air-defence-alert. “Air defence platforms such as missile systems, air defence guns etc. are kept free; they are free to engage any aircraft which doesn’t identify itself as a “friendly” either through the IFF or by remaining confined to the airspace designated for friendly aircraft,” the second senior officer added.

In this case, the Identification of Friend or Foe (IFF) – a transponder-based identification system that informs the air defence radars whether incoming aircraft is friendly – was switched off, against the laid down protocol.

After a “near-air-miss” incident in Jammu and Kashmir in 2018 between a C-130 J, a US-made transport aircraft, and a Russian-made Su-30 fighter aircraft, IAF Headquarters directed all aircraft coming into land to have their IFF systems on. Surprisingly, the Srinagar Air Base had issued contradictory orders. “Had the IFF system been on, air defence radars would have at least identified Helicopter as a friendly aircraft,” the second senior defence ministry official said.

The Mi-17 helicopter — one of the sturdiest in its category — under the command of squadron leader Siddarth Vashistha took off from Srinagar airbase at about 10 am. The air intrusion alert was sounded almost at the same time as Indian fighters took on Pakistani Air Force fighters over Nowshera. The helicopter crashed around 10.10am over Budgam.

In addition to the six IAF personnel, a civilian was killed on the ground.

<https://www.hindustantimes.com/india-news/senior-officer-moved-over-lapses-in-iaf-chopper-friendly-fire-case/story-3oK8lQdOucGo3mmHnUBazO.html>



Tue, 21 May 2019

## **First surgical strike was in September 2016: Army Northern Command Chief**

*Lt Gen Ranbir Singh's statement appeared to contradict one made by his predecessor*

*Lt Gen (Retd) DS Hooda, who oversaw the 2016 surgical strikes*

*By Divyanshu Dutta Roy*

Udhampur: The top officer of the Indian Army's Northern Command on Monday said that the first surgical strike was carried out by India in September 2016, in the latest comment on a protracted political battle between the BJP-led government at the centre and the opposition over authorising targeted counterattacks across the Line of Control.

Referring to a recent reply by the Director General of Military Operations (DGMO) to a Right to Information (RTI) query, Lieutenant General Ranbir Singh said that the first surgical strike by the armed forces took place in September 2016, to avenge the terror attack in Jammu and Kashmir's Uri, in which 19 soldiers were killed.

"A few days ago, DGMO said in a reply to an RTI that the first surgical strike happened in September 2016. I don't want to go into what political parties say, they will be given an answer by the government. What I have told you is a statement of fact," Lt General Singh said at a news conference, according to news agency ANI.

Lt Gen Singh's response was to a question about Congress's claims of conducting six surgical strikes during the United Progressive Alliance (UPA) rule in a challenge to Prime Minister Narendra Modi and the BJP's statement of being the first government to clear such a military action.

Congress leader Rajiv Shukla had also said that two surgical strikes were carried out when BJP's stalwart Atal Bihari Vajpayee was the Prime Minister - one in January, 2000 and another in September, 2003.

Lashing out at the claims, Prime Minister Narendra Modi mocked the Congress at an election rally on May 3, saying the party that questioned the surgical strikes is now saying "me too, me too." PM Modi also said biting that "it is no video game" and accused the Congress of carrying out surgical strikes only on paper.

However, a day later, the commander who oversaw the 2016 surgical strikes and was tasked by the Congress to draft its national security manifesto for the 2019 Lok Sabha elections, backed the party saying strikes did take place before 2016. Lieutenant General (Retd) DS Hooda, the former chief of the Northern Command, also said that the armed forces will not benefit from the politicisation of military operations.

The 2016 surgical strikes, the subject of a Bollywood blockbuster released earlier this year, refer to the Indian Army's raids on seven terrorist launch pads across the Line of Control (LoC) in retaliation to the Uri attack.

<https://www.ndtv.com/india-news/lieutenant-general-ranbir-singh-first-surgical-strike-was-in-september-2016-says-indian-army-norther-2040238>



*Tue, 21 May 2019*

## **ISRO readies for PSLV-C46/RISAT-2B mission on May 22**

The Indian Space Research Organisation (ISRO) is all set for yet another mission when it will launch RISAT-2B, a radar imaging earth observation satellite using its workhorse launch vehicle PSLV-C46 from SHAR Range Sriharikota, about 80 km from here, on May 22.

ISRO sources on Monday said the launch would take place from the First Launch Pad at 0527 hrs early on Wednesday morning and the 300 kg RISAT-2B will be placed into an orbit 555 km with an inclination of 37 deg to the equator. The Mission Readiness Review Committee would meet at SDSC and after the Launch Authorisation Board gave its clearance, the countdown for the launch was expected to commence tomorrow.

During the countdown, propellant filling operations would be carried out in the four-stage 44.4 metre tall vehicle. The 300 kg RISAT-2B is the fourth flight unit of the RISAT programme and it would be used for reconnaissance, strategic surveillance and disaster management. It uses an active SAR (Synthetic Aperture Radar) imager to provide continuity of service for RISAT-2.

The launch of RISAT-2B will also mark resumption of a vital ring of Indian all-seeing radar imaging satellites after seven years. The sources said that when it was cloudy or dark, 'regular' remote-sensing or optical imaging satellites, which work like a light-dependent camera, could not perceive hidden or surreptitious objects on the ground. Satellites that were equipped with an active sensor, the SAR could sense or 'observe' Earth in a special way from space day and night, rain or cloud.

This all-weather seeing feature is what makes them special for security forces and disaster relief agencies. The Indian space agency was planning to launch at least six such satellites in the near future to add to the reconnaissance capability from about 500 km in space, a constellation of such space-based radars means a comprehensive vigil over the country.

RISAT-2B would be followed by RISAT-2BR1, 2BR2, RISAT-1A, 1B, 2A satellites. ISRO launched its first two radar satellites in 2009 and 2012 and was planning four or five more radar satellite missions this year itself. PSLV-C46 is the 48th mission of PSLV and the 14th flight in 'core alone' configuration (without the use of solid strap on motors). This will be the 72nd launch vehicle mission from SDSC SHAR and 36th launch from the First Launch pad.

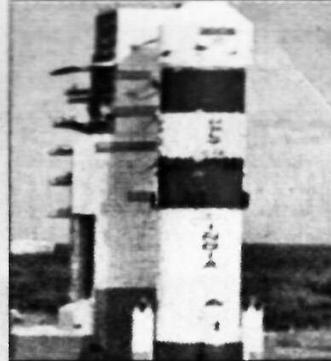
This would be ISRO's third mission this year and also third PSLV launch after it had successfully launched EMISAT and 28 customer satellites in three different orbits on April one. On January 25, PSLV-C44 successfully launched Microsat-R and Kalamsat-V2, in which the fourth stage of the vehicle was used as orbital platform for experiments. In February India's communication satellite GSAT-31 was launched successfully from Kourou in French Guiana.

<http://www.defencenews.in/article/ISRO-readies-for-PSLV-C46/RISAT-2B-mission-on-May-22-584789>

## आरआईएसएटी-2बी का प्रक्षेपण कल

चेन्नई, (वार्ता): भारतीय अंतरिक्ष अनुसंधान संगठन (इसरो) बुधवार को लांच व्हीकल पीएसएलवी-सी46 से पृथ्वी की निगरानी करने वाले रडार इमेजिंग उपग्रह आरआईएसएटी-2बी का प्रक्षेपण करेगा। इसरो सूत्रों ने सोमवार को बताया कि उपग्रह का प्रक्षेपण यहां से करीब 80 किलोमीटर दूर श्रीहरिकोटा से बुधवार सुबह पांच बजकर 27 मिनट पर फर्स्ट लांच पैड से किया जाएगा और फिर 300 किलोग्राम आरआईएसएटी-2बी को भूमध्यरेखा से 37 डिग्री के झुकाव के साथ पृथ्वी की कक्षा में स्थापित कर दिया जाएगा।

मिशन रेडीनेस रिव्यू कमेटी की बैठक के बाद लांच ऑथोराइजेशन बोर्ड प्रक्षेपण के लिए मंजूरी देगा। प्रक्षेपण के लिए उल्टी गिनती कल शुरू हो जाने की उम्मीद है और इस दौरान 44.4 मीटर लंबे लांच व्हीकल में प्रणोदक भरने का काम होगा। तीन सौ किलोग्राम आरआईएसएटी-2बी इसरो के आरआईएसएटी कार्यक्रम का चौथा चरण है और इसका इस्तेमाल रणनीतिक निगरानी और आपदा प्रबंधन के लिए किया जाएगा। यह उपग्रह एक



**उपग्रह का प्रक्षेपण  
श्रीहरिकोटा से  
सुबह पांच बजकर  
27 मिनट पर  
फर्स्ट लांच पैड से  
होगा**

सक्रिय एसएआर (सिंथेटिक अर्पचर रडार) से लैस है बादल छाये रहने या अंधेरे में 'रेगुलर' रिमोट-सेंसिंग या ऑप्टिकल इमेजिंग उपग्रह पृथ्वी पर छिपे वस्तुओं का पता नहीं लगा पाता है जबकि एक सक्रिय सेंसर 'एसएआर' से लैस यह उपग्रह दिन हो या रात, बारिश या बादल छाये रहने के दौरान भी अंतरिक्ष से एक विशेष तरीके से पृथ्वी की निगरानी कर सकता है।

## Virtually energy-free superfast computing developed

London: Scientists have developed a method that can give computers the ability to carry out superfast data processing using light pulses instead of electricity.

The research, published in the journal Nature, shows that magnets can be used to record computer data which consume virtually zero energy.

The advance could possibly solve the problem of high energy costs accompanying data processing, according to researchers at the Lancaster University in the UK.

Most data are encoded as binary information (0 or 1 respectively) through the orientation of tiny magnets, called spins, in magnetic hard-drives.

The magnetic read/write head is used to set or retrieve information using electrical currents which dissipate huge amounts of energy.

The method replaces electricity with extremely short pulses of light -- the duration of which is one trillionth of a second -- concentrated by special antennas on top of the magnet, researchers said.

The new method is not only superfast but also energy efficient as the temperature of the magnet does not increase at all.

"The record-low energy loss makes this approach scalable," said Rostislav Mikhaylovskiy from the Lancaster University.

Researchers said that the breakthrough was achieved by utilising the efficient interaction mechanism of coupling between spins and terahertz electric field.

A very small antenna on top of the magnet was developed to concentrate and thereby enhance the electric field of light. The strong local electric field is sufficient to navigate the magnetisation of the magnet to its new orientation in just one trillionth of a second.

The temperature of the magnet did not increase at all as this process requires energy of only one quantum of the terahertz light -- a photon -- per spin.

The global electricity consumption for data centres lies between two per cent and five per cent, producing heat which in turn requires more power to cool the servers.

Tech-giants such as Microsoft have submerged hundreds of its data centre services in the ocean in an effort to keep them cool and cut costs.

*(This story has not been edited by Business Standard staff and is auto-generated from a syndicated feed.)*

[https://www.business-standard.com/article/pti-stories/virtually-energy-free-superfast-computing-developed-119052000360\\_1.html](https://www.business-standard.com/article/pti-stories/virtually-energy-free-superfast-computing-developed-119052000360_1.html)