

# समाचार पत्रों से चयित अंश Newspapers Clippings

दैनिक सामयिक अभिज्ञता सेवा

**A Daily Current Awareness Service**



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## Common people to soon get anti-trauma medicines that save soldiers

To ensure immediate and effective medication to soldiers and the public in the event of terror attacks and accidents, the Defence Research & Development Organisation (DRDO) has developed medicines such as a wound-healing gel and freeze-resistant saline water that are extremely helpful at higher altitudes in saving lives in the absence of doctors.

The Institute of Nuclear Medicine and Allied Sciences (INMAS) -- DRDO's Delhi-based bio-medical and clinical research lab -- has so far been providing the medicines to the Army and Central Armed Police Forces (CAPF) -- but now it is also planning to collaborate with the premier AIIMS health facility to take these to the common people.

The INMASEAL Gel, INMASEAL Gauze dressing and Sodium Chloride solution have been developed to save the lives of victims in the periphery in the absence of doctors.

According to medical science, 60 per cent of deaths from combat injuries are caused due to excessive bleeding.

INMAS Joint Director Aseem Bhatnagar explained that the INMASEAL Gel is extremely effective in stopping profuse bleeding.

"The Chitosen gel formulation can stop blood oozing within a minute even in case of venous rupture. It can be applied at multiple sites and is extremely useful in case of battlefield casualty, gunshot injuries, road accident injuries and falls," Bhatnagar told IANS.

Currently, this medication -- meant to stop profuse blood flow due to trauma injuries -- is available at a much higher cost of Rs 8,000.

Till now, at least 11,000 units of the medication have been provided to security personnel and, of this, 4,000 units were given to CAPF personnel during the 2014 Lok Sabha elections.

The INMASEAL Gauze dressing, a single-time medication to stop bleeding but sterilised by gamma radiations, reduces bleeding and stops oozing of blood, INMAS scientist Amit Tyagi said.

"The dressing gauze can be used in any environment, from high altitude to hot Rajasthan desert. It can stop oozing of blood in significantly short span of time with enhanced natural wound-healing process."

The dressing is even effective at a temperature of -40 degrees Celsius, where normally all other dressings and bandages do not work.

Indian security personnel suffer trauma injuries while carrying out operations against Maoists and terror groups -- the most recent one being the death of 25 CRPF troopers in Chattisgarh's Sukma district.

INMAS Director A.K. Singh told IANS that around 5,000 tubes have been supplied to the armed forces in Jammu and Kashmir and the CAPF.

The third product developed by INMAS is a Sodium Chloride formulation, also known as saline water, which does not freeze even at -17 degrees Celsius.

"Unlike normal saline which freezes at high altitudes, this formulation does not freeze at all. It has been developed for places where we cannot give blood-transfusion to the injured personnel," Singh said, adding that the medication is immensely helpful in reducing brain oedema.

He stressed that the saline water has additional uses such as reducing pulmonary oedema, reducing oedema from traumatic injuries and increasing blood pressure and blood fluid volume in case of blood loss.

According to INMAS, though the medications are currently being supplied to the security forces only, an agreement with AIIMS was on the anvil to make them available to common people.

Various meetings have been held between AIIMS Trauma Chief Rajesh Malhotra and the DRDO in the matter.

"A DRDO team came to the trauma centre a fortnight ago to look into various collaboration projects. They have developed very nice products to stop bleeding in acute injuries. There is a need for capacity building as combat-like casualties are very common in public life including gas cylinder blasts, burns and fractures," Malhotra told IANS.



Thu, 18 May, 2017

## **Army gets its first artillery guns three decades after Bofors, will be tested at Pokhran today**

*By Sushant Singh*

***The Rs 2,900-crore deal, which was a government-to-government deal under the Foreign Military Sales (FMS) route, was completed in November last year.***

Nearly three decades after the Bofors howitzers were inducted, the Army has got its first artillery guns from BAE Systems. Two 155mm/39 caliber ultra light howitzers (ULH) will be firing at the Pokhran field firing range in Rajasthan on Thursday.

Having initiated the deal for M777 guns with the United States in 2010, the government finally announced a deal for 145 guns on June 26 last year. The Rs 2,900-crore deal, which was a government-to-government deal under the Foreign Military Sales (FMS) route, was completed in November last year.

The Army has not seen induction of any modern artillery gun after the Swedish Bofors guns were inducted in the late 1980s. There was a controversy over payment of alleged kickbacks in the deal, which put on the backfoot all deals for the modernisation of the artillery.

The Army has plans to equip 169 regiments with 3,503 guns by 2020 but acquisition plans, which include indigenously manufactured guns, have been delayed considerably.

The two M777 guns, which will fire at Pokhran on Thursday, will be used for compilation of firing tables — a calibration for target acquisition with various types of ammunition used with the guns. These guns have been designed for firing Indian ammunition in Indian conditions, and are already in service with the US, Canadian and Australian armies. These guns have been deployed by these armies in both Iraq and Afghanistan.

After these two guns, three M777 guns will come to India in September 2018 and used for training. Thereafter, five guns will be inducted every month from March 2019 to June 2021. These guns, which will equip seven artillery regiments, are capable of firing at a range of 24 to 40 km, depending on the type of ammunition used.

While the first 25 guns will be inducted directly, 120 of the 145 guns will be assembled in India by Mahindra Defence as part of offsets obligation.

The modular design of the M777 gun allows it to be towed along narrow and treacherous mountain roads, which dot India's borders with both Pakistan and China. Moreover, it can be transported to the battlefield, slung under heavy-lift helicopters like the Chinook, which India has signed to acquire from the US. The US-made C130J Super Hercules, used for strategic airlift by India are capable of carrying two M777 guns on a single sortie.

Thu, 18 May, 2017

## Bofors jinx breaks: 155mm artillery guns land today

By Rajat Pandit

India has now exorcised the ominous Bofors ghost haunting its artillery modernisation plans for the last 30 years. In the first modern 155mm artillery guns to be inducted by the Army since the 1980s, two of the 145 M-777 ultralight howitzers ordered from the US will touch down here on Thursday morning.

### TO EQUIP NEW 'MOUNTAIN STRIKE CORPS'

#### A) THE BOFORS GHOST

- ▶ Army has not inducted a single 155mm artillery gun since infamous Bofors scandal of mid-1980s
- ▶ Bofors was followed by corruption cases against South African Denel in 2005, Singapore Technology Kinetics in 2009 & others to further derail artillery modernisation

Army's major modernisation plan 'Perspective Artillery Profile 2027' worth over ₹ 1 lakh crore is only now taking off



#### B) BREAKING THE JINX

- ▶ India inked \$737 million (almost ₹ 5,000 crore) contract for acquisition of 145 M-777 ultra-light howitzers from US in Nov 2016
- ▶ Defence ministry signed ₹ 4,366 crore deal with L&T to supply 100 self-propelled, tracked 'K-9 Vajra-T' howitzers in collaboration with its South Korean partner Hanwha Tech Win earlier this month
- ▶ Dhanush howitzers (indigenous upgraded version of original Bofors guns) undergoing final trials. Army has placed ₹ 1,260 crore order for 114 guns. In all, 414 guns required

#### C) M-777 ULTRA-LIGHT HOWITZERS

- ▶ Pentagon first notified plan to sell 145 M-777 guns for \$647 million to India in Jan 2010
- ▶ Deal stuck due to high costs & 'non-compliant offsets offer'
- ▶ New \$737 million deal finally cleared by CCS in Nov 2016
- ▶ First 25 howitzers to be

imported. Rest 120 will be assembled in India

- ▶ 155mm/39-calibre howitzers have a strike range from 24 to 40 km
- ▶ Guns are partly made of titanium & car-

be swiftly air-lifted to high-altitude areas

All 145 guns to be delivered by June 2021

- ▶ Will equip new 17 Mountain Strike Corps being raised for 'quick reaction force capabilities' against China

Defence sources said on Wednesday the two howitzers, which will come in a chartered aircraft from the UK, will be taken to the Pokhran ranges for testing and "compilation of the firing tables" for subsequent use. "The firing tables, with the guns being tested for different kinds of Indian ammunition with bimodular charges, will take some time to be formulated," said a source.

The delivery schedule for the air-mobile howitzers, being acquired under a \$737 million deal inked with the US in a government-to-government deal, will quicken from March 2019 onwards. "Five guns will then be delivered every month till all 145 are inducted by June 2021. While the first 25 guns will be imported, the remaining 120 will be assembled in India with artillery-manufacturer BAE Systems selecting Mahindra as its business partner here," he added.

The arrival of the M-777 guns, which are primarily meant for the front with China, comes soon after the government also inked a Rs 4,366 crore contract with engineering conglomerate L&T for the supply of 100 self-propelled howitzers in collaboration with its South Korean partner Hanwha Tech Win. These 155mm52calibre tracked guns called K-9 Vajra-T, in turn, are to be delivered within 42 months, as earlier reported by TOI.

The Army has not inducted a single 155mm artillery gun since the Bofors scandal brought down the Rajiv Gandhi government, and derailed all plans for technology transfer and indigenous manufacture.

Subsequent scandals revolving around other global artillery manufacturers (see graphic), like South African Denel and Singapore Technology Kinetics, further punched gaping holes in the Army's long-range, highvolume firepower. Interestingly, the original Swedish Bofors company is now owned by BAE Systems.

Thu, 18 May, 2017

## **Navy warship rescues Liberian merchant vessel from pirates**

New Delhi: The Indian Navy foiled a piracy bid in the Gulf of Aden on Tuesday after it received a distress call from a Liberia registered merchant vessel.

The navy's patrol vessel, INS Sharda, deployed in the piracyinfested waters since April 6, reacted swiftly after MV Lord Mountbatten reported an incident of attempted piracy 230 nautical miles south-west of Oman's Salalah port. The merchant vessel faced threat from two suspicious mother vessels and eight skiffs, a navy spokesperson said.

The warship immediately charted course towards Mountbatten that was around 30 nautical miles away. "On arriving in the area at around 1900 hrs, Sharda detected two dhows along with eight skiffs in vicinity, three of which fled on sighting the warship," the spokesperson said.

Supported by an armed helicopter, the navy's marine commandos boarded and investigated the suspicious boats. The absence of fishing gear on the boats indicated malicious intent and possible piracylinked intentions, the official said.

The commandos recovered an automatic rifle with 28 rounds during the search operation.

The latest incident comes a month after warships from India, China and Pakistan operated jointly in the Gulf of Aden to rescue a merchant vessel attacked by Somali pirates.

The Tuvalu-flagged bulk carrier (OS 35) was travelling from Kelang in Malaysia to the Yemeni port city of Aden when it was hijacked by the pirates.



Thu, 18 May, 2017

## **NTRO now under Intelligence Act**

*By Vijaita Singh*

*Will have same curbs as IB, RAW*

The National Technical Research Organisation (NTRO), which reports to the Prime Minister's Office (PMO) and the National Security Advisor (NSA) will now have the same "norms of conduct" as the Intelligence Bureau (IB) and the Research and Analysis Wing (R&AW).

The Home Ministry issued a notification on May 15 listing NTRO under The Intelligence Organisations (Restriction of Rights) Act, 1985, a demand being made by the organisation for over a decade now.

### **Few strictures**

The Act prevents employees of a notified agency from forming unions/associations, puts restrictions on the employee's freedom of speech, bars any communication with the press, or publishing a book or other document without the permission of the head of the intelligence organisation.

Both IB and R&AW have on earlier occasions opposed the inclusion of any other organisation in the list of monitoring agencies under the Act.

In 2012, the Home Ministry under the UPA government had declined to give phone surveillance powers to NTRO arguing that it was not notified under the Act.

The NTRO was created after the 1999 Kargil conflict as a dedicated technical intelligence agency.

It has been fighting tooth and nail to get included in the list as it has the right to lawfully intercept and monitor communications externally.

Many security agencies like the National Investigation Agency (NIA), the Directorate of Revenue Intelligence (DRI), the Narcotics Control Bureau (NCB) among others have been asking the Home Ministry to include them under the Intelligence Organisations Act.

“In the schedule to the Intelligence Organisations (Restriction of Rights) Act, 1985 after serial number 3 and the entries relating thereto, the following shall be inserted namely-The National Technical Research Organisation,” the notification issued by the Home Ministry said.

### **Interception powers**

An NTRO official told *The Hindu* that the amendment had nothing to do with enhanced interception powers but to “bring certain norms of conduct applicable to other intelligence agencies.” The official said the Act does not allow them to intercept phones internally.

NTRO hires many people from the private sector and the Act means they will have the same safety net and restrictions available to other spy agencies.

“The Official Secrets Act is already applicable to NTRO employees. We have restrictions about getting involved in political activities in the country among other things. We only make external intrusions,” said the NTRO official.

Another official said, “We are also working for the country. No one seems to recognise that. The notification will bring that respect and sanctity to our work.”



*Thu, 18 May, 2017*

## **Cabinet gives nod for 10 indigenous nuclear reactors**

*Approval shows strong belief in the capability of Indian scientists, says Centre*

The Union Cabinet on Wednesday cleared the proposal to construct 10 indigenous pressurised heavy water nuclear reactors with a total capacity of 7,000 MWe.

Briefing the media on the Cabinet decisions, Power Minister Piyush Goyal said each of the reactors would have a capacity of 700 MWe. “We already have 6,780 MWe of operational nuclear power plants and about 6,700 MWe of plants under implementation, which will be set up by 2021-22.”

The decision comes against the backdrop of recent troubles for India’s international collaborations in nuclear projects. While the U.S. deal, involving Toshiba Westinghouse for six reactors in Andhra Pradesh, is floundering after Westinghouse filed for Chapter 11 bankruptcy, the deal with French company Areva for reactors in Jaitapur remain mired in negotiations over costing.

### **No timeline**

While the Minister said these 10 plants would create Rs. 70,000 crore worth of business for domestic manufacturers and generate about 33,400 jobs, he did not provide a timeline for their completion, saying the government would update the details when they are clear.

“The approval also shows our strong belief in the capability of India’s scientific community to build our technological capacities,” an official statement said.

### **Rapid advances by India**

“The design and development of this project is a testament to the rapid advances achieved by India’s nuclear scientific community and industry. It underscores the mastery our nuclear scientists have attained over all aspects of indigenous PHWR technology,” it added.

## Big push for nuclear, coal power

Key decisions taken at Wednesday's meeting of the Cabinet

### APPROVAL FOR CONSTRUCTION OF 10 UNITS OF INDIA'S INDIGENOUS PRESSURIZED HEAVY WATER REACTORS

**HOW IT HELPS:** Will result in a significant augmentation of nuclear power generation capacity



- Will bring substantial economies of scale and maximise cost and time efficiencies



- Will strengthen India's credentials as a major nuclear manufacturing powerhouse
- Will create about 33,400 jobs and add about 7,000 MW capacity



REUTERS

### COAL LINKAGE POLICY

- Will ensure adequate supply of fuel to power plants
- Will help power producers ensure fuel supplies in a coordinated manner

- Is expected to reduce power costs to consumers
- Will cut down on the use of imported coal
- Fuel supply pact will help banks exposed to the power sector to cut down on NPAs



Nod for Biopharma Mission to accelerate research

- Construction of an electrified third line on the Manmad-Jalgaon route
- Construction of an electrified double line on the Guntur-Guntakal route



- Four laning of Dwarka-Porbandar Section of NH-8E in Gujarat

- An Indian Agricultural Research Institute in Assam

India generated 37,674 million units of nuclear energy in 2016-17, according to the Nuclear Power Corporation of India, at a capacity factor of 80%. The two major projects under construction at the moment are located in Rajasthan and Gujarat, of 1,400 MWe each. Both plants, comprising two units of 700 MWe each, are under review.

“The 10 reactors will be part of India's latest design of 700 MWe PHWR fleet with state-

of-the-art technology meeting the highest standards of safety,” it added.

The Cabinet also approved a coal linkage policy, called the Scheme for Harnessing and Allocating Koyala Transparently in India (Shakti), that will award fuel supply agreements to coal plants already holding letters of assurance (LoAs). Thermal plants holding LoAs will be eligible to sign fuel supply pacts under the new policy after ensuring that all the conditions are met.

# MAIL TODAY

Thu, 18 May, 2017

## China sends rocket launchers to South Sea Island

Beijing has installed 'anti-frogman' rocket launchers on a disputed island to ward off Vietnamese combat divers as tensions continue to rise in the South China Sea region. The defence system has been built on Fiery Cross Reef, which is administered by China but also claimed by the Philippines, Vietnam and Taiwan. Chinese media claim that the Norinco CS/AR-1 55mm anti-frogman launcher has the capability to discover, identify and attack enemy combat divers Beijing is continuing to build up its military in the disputed Spratly Islands despite criticism from the US.

China has said that military construction on the islands it controls in the South China Sea will be limited to necessary defensive requirements, and that it can do what it likes on its own territory. But the United States has repeatedly stressed on the need for freedom of navigation by conducting periodic air and naval patrols near them that have angered Beijing. The state-run Defence Times newspaper did not say when the defence system was installed. But it said it was part of a response that began in May 2014, when Vietnamese divers installed large numbers of fishing nets in the Paracel Islands.

China has conducted extensive land reclamation work at Fiery Cross Reef, including building an airport, one of several Chinese-controlled features in the South China Sea where China has carried out such work. More than \$5 trillion (~300 lakh crore) of world trade is shipped through the South China Sea every year. Besides China's territorial claims in the area, Vietnam, Malaysia, Brunei, the Philippines and Taiwan have rival claims. Recently, China had taken steps to bolster its position in the area by deploying airborne early warning and control aircraft to the Jialaishi Air Base in China's Hainan island— and that makes smaller nations in the region who already feel the country is stealing its territory more nervous.

## Missiles make Moon ballistic

*South Korea's new President warns of high chance of clashes with North*

Seoul, May 17: South Korean President Moon Jae-in warned on Wednesday there was a "high possibility" of military clashes along the border with North Korea as tensions mount over Pyongyang's weapons ambitions.

Mr Moon, who was sworn in last week, warned that the North's nuclear and rocket pro-

grammes were "advancing rapidly", days after Pyongyang launched what appeared to be its longest-range missile yet.

"I will never tolerate the North's provocations and nuclear threats," Mr Moon said on a visit to the defence ministry, urging the South's military to adopt a "watertight defence posture".

"We are living in the reality where there is a high possibility of military clashes" along the disputed sea border off the Korea's west coast or along the heavily-fortified land frontier, he said.

Tensions between Washington and Pyongyang have ramped up in recent weeks with

the Trump administration saying military action was an option.

Left-leaning Mr Moon favours engagement with the North, but after Sunday's missile launch said dialogue would be possible "only if Pyongyang changes its behaviour". —AFP

## HP shows off 'The Machine'

**H**ewlett Packard (HP) unveiled a new computer prototype this week and claims that it could handle more data than any similar system in the world. The Palo Alto, California-based company said the prototype contains 160 terabytes of memory, capable of managing the information from every book in the US Library of Congress five times over.

It is the latest prototype from "The Machine" research project by HPE, which aims to create super-fast computers by designing them around memory. Traditionally, the way processors, storage and memory interact can bog down computers.

The prototype underscores HPE's ambition to lead computer technology as huge datasets place new strains on devices. "We need a computer built for the Big Data era," HPE's Chief Executive Meg Whitman said in a news release.

While large data centres that piece together many computers may have enough calculating power, they cannot transfer data efficiently, said Kirk Bresniker, Hewlett Packard Labs Chief Architect, in an interview. That means HPE's single-system model may one day compete with the infrastructure spearheaded by cloud-computing companies like Amazon.com.

HPE expects its model will over time contain more and more memory. While the prototype now remains years away from being commercially available, HPE is already bringing some of the given tech from its research program to the market.

Still, companies and the scientific community have yet to concur on what technology will best serve its users.

"You need computing that scales up with the size of the dataset," said Kathy Yelick, a professor of electrical engineering and computer sciences at the University of California at Berkeley. There's still discussion "about what the right answer is." —Reuters



Thu, 18 May, 2017

## Indian N-scientist in US jail

By Sandeep Rai

*Bhardwaj Allegedly Stalked Texas Univ Student He 'Liked'*

An Indian nuclear scientist has been lodged in a detention centre in Texas, US, since December 2016 on serious charges of harassing and stalking a female student and preventing a police officer from carrying out his duty.

Tarun K Bhardwaj, 38, told TOI over phone that he “liked“ the student at A&M University , Texas. “I am a victim of racial discrimination and have been framed for highlighting high-level corruption. Charges of harassment of a female student is not such a big deal as I liked her.“ After a PhD from Bhabha Atomic Research Centre, Bhardwaj left for the US in 2007 as a researcher. While working as assistant research scientist at the university in College Station, Texas, he was arrested several times in 2015. Documents accessed by TOI from Brazos County court show he was accused of harassing a student, for which he had to sign surety bonds, which he allegedly violated several times. Later he was directed to wear a GPS monitoring device which he allegedly removed illegally .

Prasoon Bhardwaj, his brother in Bulandshahr, UP, said, “Tarun exposed corruption and racial discrimination there. He was then charged with sexual harassment and sacked in September 2015. He went to court and had been facing pressure to withdraw the case. When he didn't agree, he was arrested.“

The family has written to the PMO and external affairs ministry seeking assistance.

Government officials told TOI there was very little to indicate the scientist's innocence. A senior official in the Consulate General of India's Houston office, said the current detention was the fifth in a row “and every time he has been booked for harassing the same female student...Once court proceedings are over, he will be deported.“

A&M University did not reply to mails sent by TOI.