

# समाचार पत्रों से चयित अंश Newspapers Clippings

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## OFB ready with new tank shell before Army changes target

The Ordnance Factory Board (OFB) has come up with an enhanced version of Russian T-90 tank ammunition even before the Army changes its mind saying it wants a better product that the factories are supplying now.

The OFB has already got orders from the Army to supply 125mm fin-stabilized armour-piercing discarding sabot (FSAPDS) shells. The current version has a capacity to pierce into steel plates of 460mm thickness that are put on the enemy tanks.

Sensing that the Army may soon demand a higher penetration, the OFB has developed an ammunition that can rip into steel of over 500mm thickness. This comes at a time when the government is considering a case to corporatize the OFB with view to make it more competitive.

The OFB has recently finished supplying over 10,000 tank shells with 460mm piercing capacity. In a bid to continue getting indents, it has now come up with shells having piercing capacity of much beyond 500mm, said sources. Internal trials have been completed over a month ago and the product would be put up before the Army for its final appraisal. The production process takes place in ordnance factories across Vidarbha too.

Even though T-90 tanks have been purchased much earlier, the OFB got the transfer of technology (ToT) for making 125mm FSAPDS shells in 2015-16 from the Russian original equipment maker (OEM).

In line with the original requirement of 460mm capacity, the OFB has supplied over 10,000 shells made out of semi-knocked down material received from Russia. It is gearing up to make a similar number of shells out of completely knocked down (CKD) material. In the meantime, the Army also purchased over 90,000 shells, also of 460mm capacity, directly from Russia.

Sources said even as there has been no official communication from the Army, it has been known through some of the communication and including minutes that the Army may soon change the requirement, said highly placed sources. As the Army has invited request for proposal (RFP), from a whole gamut of ammunition the 125mm FSAPDS rounds were dropped as the piercing capacity was changed to over 500mm from 460mm, said a source.

“If the Army now wants to change the standards, why should it have placed an order for 460mm at all? The Army has also purchased a sizeable quantity from Russian manufacturers,” said a source.

Both T-90 and T-72 tanks, also purchased from Russia, use same ammunition. Even as the FSAPDS shell is also used in the T-72 tanks, the design made by the DRDO could not make its way into the Army. The production of the DRDO-designed shells was stopped nearly a decade ago following an accident, said a source.

(in a nutshell)

- These are 125mm FSAPDS shells
- Production of DRDO-designed shells was stopped after an accident 10 years ago
- OFB got ToT from Russia in 2015-16
- It has begun supplying shells of 460mm piercing capacity
- Army should have decided on yardstick before placing orders

<http://www.defencenews.in/article/OFB-ready-with-new-tank-shell-before-Army-changes-target-586309>

## जैसलमेर में जुटीं आठ देशों की सेनाएं

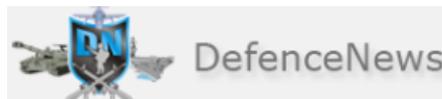
जागरण संवाददाता, जयपुर : भारत-पाकिस्तान अंतरराष्ट्रीय सीमा पर स्थित राजस्थान के जैसलमेर जिले में सोमवार से युद्धाभ्यास 'वॉर गेम एक्सरसाइज' की शुरुआत हो गई। जैसलमेर के रेगिस्तान में होने वाले इस युद्धाभ्यास में भारत सहित आठ देशों की सेनाएं अपना युद्ध कौशल दिखाएंगी। रूस और चीन जैसी बड़ी सैन्य शक्तियां भी हमारी सेना से बहुत कुछ सीखेंगी।

भारतीय सेना से लड़ाई और छोटे युद्ध में दक्षता हासिल करने के लिए सात देशों की सेनाएं जैसलमेर के मिलिट्री स्टेशन में जुटी हैं। जैसलमेर में पांचवीं इंटरनेशनल आर्मी स्काउट मास्टर्स कॉम्पिटिशन का सोमवार को औपचारिक तौर पर आगाज हो गया। भारत में पहली बार हो रही इस अंतरराष्ट्रीय स्काउट मास्टर प्रतियोगिता के आयोजन के पांचवें सीजन का साक्षी होने का गौरव जैसलमेर को प्राप्त हो रहा है। इससे पहले इस प्रतियोगिता के चार सीजन का

### युद्धाभ्यास

- सोमवार से युद्धाभ्यास का आगाज, 14 अगस्त तक होगा आयोजन
- रूस और चीन जैसी बड़ी सैन्य शक्तियां भी ले रही हैं हिस्सा

आयोजन रूस में किया गया था। प्रतियोगिता में पांच राउंड होंगे : इसमें भारत के अलावा रूस, कजाकिस्तान, उज्बेकिस्तान, जिम्बाब्वे, आर्मेनिया, बेलारूस, सूडान और चीन की टीमों शामिल होने के लिए जैसलमेर पहले पहुंच चुकी हैं। यहां पर वे अपने अपने युद्ध कौशल का प्रदर्शन करेंगी और अपनी युद्ध तकनीकों को एक-दूसरे के साथ साझा करेंगी। प्रतियोगिता का मुख्य आयोजन आगामी छह से 14 अगस्त के बीच किया जाएगा। इसमें सभी देशों की सैन्य टीमों के बीच प्रतियोगिताएं होंगी। प्रतियोगिता के दौरान पांच राउंड होंगे।



## India and Myanmar are sending a strong message to China – with a submarine

The Indian Navy's decision to transfer one of its Kilo-class diesel-electric submarines, INS Sindhuvir, to Myanmar hopes to limit Chinese military influence and aid Myanmar in its emerging naval competition with Bangladesh. On its part, Myanmar helps India secure its own maritime interests in the Bay of Bengal region.

Myanmar Commander-in-Chief Senior General Min Aung Hlaing had visited Delhi last month, during which India and Myanmar signed a defence cooperation agreement.

India's willingness to transfer a frontline submarine when it is facing a shortage of such platforms reveals a desire on New Delhi's part to consolidate the growing convergence in security interests with Myanmar. Gone is the time when there were fears of Myanmar offering a 'second coast' to China. Instead, the Indian Navy and the Myanmar Navy today conduct institutionalised joint patrols, and India is constructing connectivity corridors of its own in Myanmar in the form of the Kaladan project.

### **Myanmar's diverse approach**

Myanmar's own quest to acquire an undersea capability was hastened after Bangladesh's acquisition of two old Type 35G Ming-class submarines from China in 2017. Notably, Myanmar has not turned to China to fulfil this requirement. Over the years, Myanmar military officials have voiced concerns about the quality of Chinese equipment supplied to them. Moreover, with Bangladesh wholly dependent on Chinese support for its new naval teeth, Myanmar would ideally want to look elsewhere to get platforms that can give it an edge.

As such, Myanmar has adopted a more diverse approach than Bangladesh on sourcing equipment for its naval modernisation. Although Myanmar set up its key naval dockyard with Chinese input, it has turned to India and Russia for sensors and weapons to equip the warships being constructed there.

For instance, the Myanmar Navy's latest warship design, the Kyan Sittha-class frigate, has a mix of equipment from India, China, and Russia. In particular, the Myanmar Navy has sought Indian ship-borne sensors with each ship of the Kyan Sittha-class outfitted with a DRDO-Bharat Electronics Limited (BEL) HMS-X hull-mounted sonar and BEL supplied search radar. Last month, India also delivered the first batch of the indigenous 'Shyena' light torpedo, which will arm these ships, as part of a deal worth \$37.9 million signed in 2017.

### **Myanmar's China worry**

The Indian Navy Kilo-class submarine due to be transferred to Myanmar is also likely to feature export versions of Indian naval sensors such as the SMX2, which is a submarine sonar suite developed for the international market by the Defence Research and Development Organisation. Although ostensibly being transferred for training purposes, the offensive potential of this submarine is undeniable, given that it is significantly more capable than the older Ming-class submarine, which the Bangladesh Navy operates.

On the other hand, Myanmar is extremely worried about the uninterrupted growth of the China-supported Wa and Kokang rebel groups that operate in its Shan state. In this context, Myanmar's desire to rebalance its security architecture away from dependence on China is understandable. This would also be in keeping with its traditional policy of not becoming beholden to either China or India, while looking to extract benefits from either side.

An example of this is Myanmar's renegotiation of the terms for the development of the Kyaukpyu Port project, which will now receive only a fraction of the initially proposed level of Chinese investment. Nonetheless, Kyaukpyu is indeed being constructed as part of the China-Myanmar Economic Corridor, which itself is part of the Belt and Road Initiative. And India cannot afford to let Kyaukpyu end up hosting a Chinese naval element given its location in the North-Eastern corner of Bay of Bengal.

### **India, the helping hand**

India's decision to transfer a submarine is, therefore, a sort of inducement to encourage Myanmar to stick to its time-tested policy, while also building on the extant synergy in security ties. What helps India's cause is that Myanmar is once again at the receiving end of Western opprobrium over the Rohingya issue and is looking for support from Asian democracies such as India. New Delhi obliged by inviting Commander-in-Chief Hlaing to visit India right after the US announced a visa ban on him.

This commitment to continuity in ties is reflected in the new defence agreement, which, among other things, intends to 'strengthen maritime security by joint surveillance and capacity building'. Clearly, the submarine transfer with its sensor fit would aid such an agenda.

Meanwhile, for Bangladesh, which vehemently opposed Hlaing's visit on account of the Rohingya issue, the message from India is clear: 'Perhaps you should consider diversifying your sources of supply as well'.

<http://www.defencenews.in/article/India-and-Myanmar-are-sending-a-strong-message-to-China-%e2%80%93-with-a-submarine-586302>

*Tue, 06 Aug 2019*

## **China launches 3 Yaogan-30 military satellites**

According to reports by Chinese state-owned Xinhua news agency, China has launched three more Yaogan-30 remote-sensing satellites from the Xichang Satellite Launch Centre in southwestern China on 26 July.

The report states that the satellites, which were placed into orbit by a Long March-2C carrier rocket, are primarily functioned for electromagnetic detection and “related technological tests”.

Analysts contend that the Yaogan-30 satellites are mainly designed for military signals intelligence (SIGINT) purposes and can geo-locate military platforms, particularly warships, by intercepting electromagnetic transmissions such as radar.

The satellites are operated as triplets, positioned in relatively close proximity, that can measure the angular or time difference of arrival of intercepted signals, from which the position of the source can be determined. The satellites have been positioned in a low-Earth orbit with an altitude of 600 km and inclination of 35°.

Shortly after the launch, all three satellites were reported to have reached the intended orbit. The first four groups of Yaogan-30 triplets were launched over a four-month period, from September 2017 to January 2018. The launch of the latest group increases the number of satellites in the constellation to 15.

The previous launch of a Yaogan satellite, on 22 May was unsuccessful because of a malfunction of the carrier rocket’s third stage. Yaogan-33 is thought to have been configured as a synthetic aperture radar satellite.

The increasing number of Chinese military surveillance satellites will provide shorter refresh intervals for areas of critical interest, such as the East and South China Seas.

Near-real time updates of target position from remote sensors may be required by anti-ship ballistic missiles (ASBMs) if the high terminal velocity creates a plasma shield that adversely affects the performance of the missile’s homing radar.

The ability of SIGINT satellites to geo-locate ships at sea is clearly dependent upon those ships making transmissions that can be intercepted. While transmissions can be minimised to reduce the risk of detection by SIGINT satellites, radar will be required to detect incoming ASBMs.

<http://www.defencenews.in/article/China-launches-3-Yaogan-30-Military-Satellites-586296>



*Tue, 06 Aug 2019*

## **Australia rules out hosting US missiles**

Sydney: Australia on Monday (Aug 5) ruled out hosting ground-based US missiles after talks with Washington's top defence and diplomatic officials.

Following an announcement that the United States plans to deploy intermediate-range missiles in Asia - widely seen as an effort to contain China - Australia scotched the notion of locating them Down Under.

"It's not been asked of us, not being considered, not been put to us. I think I can rule a line under that," Prime Minister Scott Morrison said of the notion.

His comments came hours after US Defense Secretary Mark Esper and Secretary of State Mike Pompeo departed Sydney following talks.

Australian Defence minister Linda Reynolds told public broadcaster ABC the issue came up in her meeting with Esper: "I asked him directly, 'was there any expectation of a request', and he said 'no'."

Any formal request would put Australia in a difficult spot between long-time ally the United States and major trade partner China.

Policy toward Beijing has become an increasing point of friction between Washington and Canberra - which has tried to maintain good working relations with Chinese President Xi Jinping's government.

While Australia has a mutual defence treaty with the United States, China's purchases of Australian coal and iron ore kept the latter's economy purring through the global financial crisis.

Pompeo's visit featured a sharp warning for partners to "have their eyes wide open" about China's increasingly assertive behaviour.

He also cautioned Australian policymakers about the risk of turning a blind eye to abuses in order to trade with Beijing.

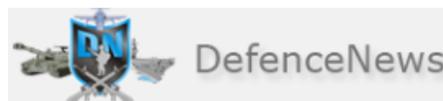
"You can sell your soul for a pile of soybeans, or you can protect your people," he said.

"We think it's possible to have trade with China and yet require them to behave with the same set of rules."

US Marine Corps units regularly rotate through Darwin, raising speculation that the northern city could host missiles after the US withdrawal Friday from the Intermediate-Range Nuclear Forces (INF) treaty with Russia.

Experts say the most likely location for deployment is at American military facilities on the island of Guam. Source: AFP

<https://www.channelnewsasia.com/news/world/australia-rules-out-hosting-us-missiles--11781824>



*Tue, 06 Aug 2019*

## **India to protect spacecraft from cosmic debris with own telescope, radar network**

India will get its own eye in the sky to warn it about space debris that could potentially threaten its satellites and other space assets.

The Indian Space Research Organisation (ISRO) has said that it is working on telescopes and radars that will enable it to track potential risks to its 50 functional satellites in space. At the moment, the agency depends on data from Norad (North America Aerospace Defense Command), ISRO Chief K Sivan told The Times of India.

Sivan said that telescopes and radars would be set up at four locations: Ponmudi in Thiruvananthapuram (Kerala), Mount Abu (Rajasthan), and one each in the deep north and the northeast regions. He added that ISRO's sophisticated multi-object tracking radar installed in Nellore (90km from Sriharikota) would also be a part of the project.

The telescope network will be set up under the Directorate of Space Situational Awareness and Management at Peenya Bengaluru. The foundation stone of the Directorate was laid on August 2.

A press release issued by ISRO said that the Directorate will assimilate tracking data of inactive satellites from indigenous observation facilities and generate useful information from bare

observations through analysis. It added that ‘...the control centre would enable research activities pertaining to active debris removal, space debris modelling and mitigation’.

Debris like inactive satellites, pieces of orbiting objects, near-earth asteroids poses a risk to space assets. Adverse space weather conditions are another risk.

In March this year, India had test-fired an anti-satellite (ASAT) missile jointly developed by the Defence Research and Development Organisation and ISRO. The missile destroyed an Indian satellite in Low Earth Orbit as a demonstration of India’s space defence capabilities.

<http://www.defencenews.in/article/India-to-Protect-Spacecraft-from-Cosmic-Debris-with-Own-Telescope,-Radar-Network-586312>