

## **DRDO anti-drone system to be deployed for Trump-Modi roadshow**

- *Donald Trump and PM Narendra Modi will take part in a 22km-long roadshow in Ahmedabad and jointly address a gathering at the newly- built cricket stadium in Motera*
- *The DRDO system is equipped to instantaneously detect and identify drone threats and terminate them*

Ahmedabad : An anti-drone system developed by the Defence Research and Development Organisation (DRDO) will be part of the foolproof security arrangements being made for the roadshow of US President Donald Trump and Prime Minister Narendra Modi here on February 24, said officials.

Along with the local police, teams of the Rapid Action Force, the State Reserve Police Force, Chetak Commando and the Anti-Terrorist Squad would be deployed on strategic locations, said special commissioner of police, crime branch, Ajay Tomar.

They will work closely with national agencies like the National Security Guard (NSG) and the Special Protection Group (SPG), he said.

Trump and Modi will take part in a 22km-long roadshow in Ahmedabad and jointly address a gathering at the newly- built cricket stadium in Motera area of the city.

Over 1,10,000 people are expected to attend the mega event christened "Namaste Trump".

"We will be utilising an anti-drone system developed by DRDO to secure the roadshow route. Apart from police personnel on the ground, we will also deploy our men on the terraces of roadside houses.

"Some of the streets on the roadshow route and near Motera will remain closed for traffic on February 24," said Tomar at a press conference.

The DRDO system is equipped to instantaneously detect and identify drone threats and terminate them. A drone or an unmanned aerial vehicle refer to an unpiloted aircraft or spacecraft.

Earlier, the police had said more than 10,000 police personnel, to be led by 25 senior IPS officers, will be deployed for the roadshow security.

While a majority of the residents near the stadium have been asked not to use the road unless it is absolutely necessary, Tomar said people will be allowed to move in and out of housing colonies in case of an emergency situation.

He said students appearing for exams can use the roads closed for traffic on Monday by showing their hall tickets.

Tomar said it is not yet known whether Modi and Trump will travel in the same car or separate vehicles during the roadshow.

The IPS officer said it is most likely the dignitaries will not use an open vehicle during the show.

As per the route plan, Trump and Modi will first reach the Sabarmati Ashram, a place closely associated with Mahatma Gandhi, from the international airport.

From the Sabarmati Ashram, both the leaders would take the SP Ring Road via the Indira Bridge near the airport to reach the cricket stadium in Motera.

<https://www.livemint.com/news/india/drdo-anti-drone-system-to-be-deployed-for-trump-modi-roadshow-11582208459422.html>

## DRDO missile scientists to study cargo from detained Chinese ship at Gujarat port

*Based on a high-level intelligence tip-off, the Department of Revenue Intelligence and Kandla Customs detained the Chinese ship on February 3 for misdeclaring a “dual use” industrial autoclave, which can be used in the manufacture of ballistic missiles, as an industrial dryer*

*By Shishir Gupta*

New Delhi: Missile scientists from the Defence Research and Development Organisation (DRDO) will physically open and examine the suspected cargo seized at Kandla port from detained Chinese ship Dai Cui Yun, bound for Port Qasim, Karachi, on Friday to ascertain whether the 2005 Indian law against weapons of mass destruction (WMD) and the UN convention on the same subject can be invoked against both the consignee and consignor.

Based on a high-level intelligence tip-off, the Department of Revenue Intelligence and Kandla Customs detained the Chinese ship on February 3 for misdeclaring a “dual use” industrial autoclave, which can be used in the manufacture of ballistic missiles, as an industrial dryer. The ship left the Chinese port of Jiangyn on January 17.

As reported in HT, the Chinese ship Da Cui Yun was allowed to leave for final destination Port Qasim on Thursday evening after signing guarantees with the Kandla Customs. The ship left Kandla Port at 7.31 pm on Thursday and is expected at Port Qasim at 1.30 am on Saturday. The autoclave has been seized by the Kandla customs and will be opened for examination today.

For starters, even before the final inspection is carried out, Indian authorities have decided to charge the ship under the Customs Act for wrong declaration of goods, according to an official familiar with the matter who asked not to be named. The ship could be released as per procedure after charges are formally slapped against it, the official said. “But that decision is yet to be taken,” he added.

Initial examination of the orange-coloured equipment had revealed “complex” circuitry inside it, a second official who didn’t want to be named said, adding that “scientists want to carry out a more detailed investigation”.


### UNDER LENS

**JANUARY 17**

- Merchant vessel Da Cui Yun leaves Chinese port of Jiangyn for Port Qasim, Karachi, via Kandla port in Gujarat
- Prior to this, vessel harboured in Shanghai for 5 days and also passed through Nantong Port

**FEBRUARY 3**

- Ship reaches Kandla port
- Authorities issue no-objection certificate after verifying ship had no dues. An 'onward-sailing memo' issued for February 4



**FEBRUARY 5**

- Authorities, about to issue final clearance for the vessel to set sail, receive tip-off
- Ship detained for wrongly declaring autoclave, which can also be used to manufacture missiles, as a dryer

■ Initial probe of orange-coloured equipment reveals 'complex' circuitry inside it, officials say

■ DRDO scientists will physically open and examine the 18m x 4m autoclave on Friday

The autoclave was off-loaded for physical inspection last week and the ship moved from pier to anchorage at the mouth of Kandla creek. A seizure memo has been issued. No police case had been registered till Thursday.

As there is prima facie evidence of a “dual use” item used in a WMD delivery platform, the DRDO scientists will physically examine the 18m x 4m autoclave on Friday. Once the physical verification is done, the government will invoke the Weapons of Mass Destruction and Their Delivery Systems (Prohibition of Unlawful Activities) Act 2005 as well as the UN Convention on WMD. In 1999, the authorities at Kandla Port had booked North Korean ship Ku Wol San carrying missile parts for Pakistan under the Arms Act.

Clause 4(C) of the 2005 law makes it clear that its provisions apply to “any ship, aircraft or any other means of transport registered in India or outside India, wherever it may be.” Under the law, contravention of section 8 pertaining to missile delivery systems attracts a punishment of not less than five years which may be extended up to imprisonment for life with an added fine.

According to Indian national security planners, the seizure of the dual-use autoclave has substantiated Indian assertions over the past two decades that Pakistan’s nuclear programme and its missile delivery systems are borrowed and based on technology from China and perhaps North Korea.

Meanwhile, the security agencies are also looking at the parties involved — Islamabad-based United Construction Company, which was importing the equipment, and Hong Kong-based company General Technology Ltd which booked the consignment.

<https://www.hindustantimes.com/india-news/drdo-experts-to-study-chinese-vessel-s-cargo/story-tmOktwvGIjFCOmQZe7xall.html>

 THE ECONOMIC TIMES

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## India’s Rs 1.2 L-cr N-submarine project closer to realisation

*The plan to build six advanced attack submarines will be nuclear powered but armed with conventional missiles and torpedoes. Sources told ET that the initial design phase for the new boats has progressed successfully and more resources will now be deployed to move to the more complex detailed design and construction*

*By Manu Pubby*

New Delhi: India is taking a crucial step for its Rs 1.2 lakh crore project to produce future nuclear-powered submarines, with top levels of the government processing clearances for the detailed design phase.

The plan to build six advanced attack submarines — to be nuclear powered but armed with conventional missiles and torpedoes — is being monitored closely and the first of the boats could roll out in a decade if things go as per plan.

Sources told ET that the initial design phase for the new boats has progressed successfully and more resources will now be deployed to move to the more complex detailed design and construction — to be undertaken by the Directorate of Naval Design (Submarine Design Group) with assistance from the Defence Research and Development Organisation (DRDO).

The timing of the critical clearances coincides with the pace of current work at the Ship Building Centre (SBC) in Visakhapatnam, where the Arihant class of nucleararmed submarines are being built. Major structural work on the fourth of the class is nearing completion and the centre would be able to

take on work for the next generation of vessels as early as next year, if need be. Though this is unlikely as the developmental phase will take longer.

Sources said the second of the Arihant class — the slightly bigger and better-armed INS Arighat — is expected to be commissioned this year, adding teeth to India's nuclear deterrence. Two follow-on boats after that are likely to enter service before 2024.

This would leave SBC with adequate space and resources to commence building the next generation of nuclear-attack submarines. While the Arihant project took over two decades to fructify, the next generation submarines are likely to progress at half the given time as adequate experience is now available, both in terms of design and construction of nuclear submarines.

As reported by ET, work on the submarine project gained pace last year with a defence public sector unit working on a special metal alloy for the hull and testing of a scale model as part of the design process. The plan to build six nuclear-powered attack submarines (SSNs) kicked off in 2015 when the NDA government gave a go ahead to a long-pending project for the Indian Navy.

India and Russia have also signed a \$3 billion deal to lease an advanced nuclear attack submarine that will be fitted with indigenous communication systems and sensors. This submarine will fill in the gap and will be used for crew training before the indigenous boats are pressed into service.

**Indian Nuclear Submarine Plan**

**IN SERVICE**  
**INS Arihant** Indigenous, equipped with nuclear-capable missiles

**INS Chakra** On a 10-year lease from Russia, armed with conventional weapons

**UNDER CONSTRUCTION**  
**Arihant Class** Second submarine of the class expected to enter service this year, remaining two by 2024

**UNDER DEVELOPMENT**  
**Chakra** \$3 billion deal signed with Russia to lease another nuclear-attack submarine, not expected before five years

**Future SSNs** 6 boats planned, design progressing. Expected to cost ₹20,000 cr each

BCCL

Nuclear attack submarines — powered by a nuclear reactor but armed with conventional weapons — will give India a significant strike and area denial capability in the region. These vessels can remain underwater for months, making them almost impossible to detect and are a big deterrence for enemy vessels. The US Navy operates over 55 nuclear attack submarines. China has at least 10 in service and is rapidly expanding the fleet, including deployments in the Indian Ocean and several port calls to neighbouring nations.

The project will enter India to a select league of five nations that have such a capability. The last country to enter this club was China in 1974 with its Han class boats. Details are not known but a new, more powerful nuclear reactor is being designed for the programme as well by the Bhabha Atomic Research Centre. The INS Arihant and Chakra (on lease from Russia) are the two nuclear-powered submarines currently in service with the navy.

<https://economictimes.indiatimes.com/news/defence/indias-rs-1-2-l-cr-n-submarine-project-closer-to-realisation/articleshow/74234776.cms>



## **Self-reliance in small arms manufacturing fundamentally necessary for India: CISC R Hari Kumar**

New Delhi: India needs to be self-reliant in manufacturing small arms, even as the armed forces' urgent requirements are being currently met through imports, Vice Admiral R Hari Kumar, Chief of Integrated Defence Staff to the Chairman Chief of Staff Committee (CISC), said on Thursday.

He expressed hope that the defence manufacturing would be more competitive with private companies in the fray, and said the ongoing reforms in defence procurement process should give an opportunity to the "OEMs (original equipment manufacturers) to partner with the Indian companies to enter this (small arms) market".

"While we have imports taking place to meet our current and urgent requirements, self-reliance in this sector is fundamentally necessary for the nation in the long run. It is essential that the basic weapons are manufactured here," Kumar said addressing the International Conference on Small Arms here.

"To modernize the small arms inventory, the DRDO (Defence Research and Development Organisation) is also developing a new assault rifle with the ammunition being developed by the ARDE (Armament Research and Development Establishment) and we hope that this would be ready for trial soon," he noted.

A case for fast-track procurement of assault rifle for the frontline troops is in progress, he said, adding at the same time, a "major development" is the joint venture with Russia with the production of 6.7 lakh AK-203 rifles in Amethi.

"We need to achieve self-reliance in this basic military capability to provide the frontline troops with contemporary weapons. We need to make this happen for the Make in India initiative as articulated by our honourable prime minister," Kumar stated.

<https://www.outlookindia.com/newscroll/selfreliance-in-small-arms-manufacturing-fundamentally-necessary-for-india-cisc-r-hari-kumar/1739294>