

# ICG, Navy to buy 15 C-295 for maritime surveillance

JAMNAGAR, Nov 24 (ANI)

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IN A major boost for Make in India in the defence sector, the Indian Coast Guard and the Navy will acquire 15 C-295 transport aircraft that are being manufactured in India in a joint venture between Tata Advanced Systems and Airbus.

The proposals for the acquisition of these 15 aircraft are at an advanced stage in the defence ministry, in which nine planes would be procured by the Navy while six would be taken by the Indian Coast Guard.

The transport aircraft would be equipped with the required radars and sensors and turned into a maritime patrol plane by the Defence Research and Development Organisation's Centre for Airborne Systems (CABS), defence officials said.

# Ex-Pak soldiers among J&K ultras: Army

Sanjay Khajuria | TNN

**Jammu:** Northern Army Commander Lieutenant General Upendra Dwivedi indicated Friday the presence of retired Pakistani soldiers among terrorists in J&K, flashing the alert days after the Rajouri encounter in which five army personnel and a top Lashkar-e-Taiba died along with another operative.

"When we tried to seek identification of foreign terrorists, we came to know that some of them are retired army personnel (of Pakistan)," Lt Gen Dwivedi replied when asked about the possible presence of Pakistan special forces personnel among terrorists. He added that there could now be around two dozen terrorists in Jammu region, including the Rajouri-Poonch belt.

The Rajouri encounter on November 22-23 underscored the foreign terror



**DOMINO EFFECT**

threat again. Among the two terrorists killed during the shootout was Quari, a top Pakistan-based Lashkar commander and bomb expert trained in Afghanistan. The other was a sniper.

"Pakistan is making attempts to push foreign terrorists into this region due to lack of support from the local pop-

## Commendation for hideout-buster K-9

**Jammu:** An army dog, Domino, has been awarded a "commendation card" and feted as a "silent warrior" for helping soldiers trace the hideout of the terrorists in Rajouri's Bajimal encounter, reports **Sanjay Khajuria**.

According to army officials, Domino helped the troops reach the location by following one of the terrorist's blood trails in the forested Kalakote area during the November 22-23 gunfight in which five soldiers and two terrorists were killed. Northern Army Commander Lt Gen Upendra Dwivedi awarded the card to Domino and his handler, lance naik Lucky Kumar.

Two army dogs have died from terrorists' bullets in recent times, one in September this year and the other in October 2022.

Meanwhile, search operations are still on in the Bajimal-Kalakote zone to flush out any other hiding terrorists, Brigadier Soumeet Patnaik of Rashtriya Rifles (RR) said on Friday.

ulation, especially youths. Our efforts are on to neutralise the foreign terrorists," Lt Gen Dwivedi said. He feared that Pakistan may try to push in more terrorists in the run-up to next year's Lok Sabha polls.

Paying his respects to the five soldiers, including two officers, who perished in the encounter, Lt Gen Dwivedi

hailed their supreme sacrifice. He recalled a recent interaction with Sanjay Bisht of 9 Para, one of the martyrs.

"I had pinned him a commendation card myself on November 18 and asked what he wanted to do in the future. His reply was that he will do something big within seven days," Lt Gen Dwivedi said.



# How the magic of recycling plastics can be fun and games

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**New Delhi:** There was a huge statement underlying Prime Minister Narendra Modi's appearance in Parliament wearing a sleeveless jacket made of material recycled from plastic bottles early this year. Not only did it show how intrinsic plastic is to our day-to-day lives but also conveyed how we could transition from a "throwaway economy" to a "reuse economy" that would help save resources and simultaneously deal with the growing menace of hazardous waste.

Statistics show that 50% of plastic waste in the country remains unutilised, finding its way to landfills and water bodies, polluting the air, water and soil and, ultimately, affecting human health, with micro-plastics (tiny shards of plastic up to 5 mm in length) even entering our food chain.

Banning a few hard-to-collect/recycled single-use plastic items with effect from July 1, 2022 and prohibiting the manufacture, import, sale and use of plastic carry-bags thinner than 120 microns (one micron is a thousandth of a millimetre) from December 31 the same year may only be a limited answer to a big problem.

That's why the government last year came out with rules — notified as extended producer responsibility (EPR)— to streamline collection and recycling of plastic

## PLASTIC WASTE IN INDIA

Plastic waste generation increases substantially in five years

Year	Plastic Waste Generated (lakh TPA*)
2015-16	15.9
2020-21	41.2

2015-16 **15.9**

2020-21 **41.2**

\*lakh TPA: lakh tonnes/annum



### RECYCLING GAP LEADS TO POLLUTION

➤ **50%** of plastic waste remains unutilised\*\*

**Total plastic waste | 34.7 lakh TPA**

**Total plastic waste recycled | 15.8 lakh TPA**

\*\* 2019-20 data

**Total plastic waste co-processed in cement kilns | 1.7 lakh TPA**

**No. of organised recycling units | 100**

**No. of unorganised recycling units | 10,000**

(Source: MoEFCC)

### REUSING PLASTIC WASTE

- Making pellets/chips for use in road construction
- Manufacturing different household/industrial products
- Manufacturing of wearables
- Using as industrial composting

- End-of-life disposal through co-processing in cement/steel plants
- End-of-life disposal through waste-to-energy plants
- End-of-life disposal through waste-to-oil unit

waste. It also has provisions for waste generators to earn tradable credits by efficiently managing plastic waste.

Meanwhile, there has also been a global effort at the UN level to end plastic pollution. All member countries, including India, are working together to develop a legally binding instrument on plastic pollution, and aim to finalise it by end 2024.

Globally, 353 million tonnes of plastic waste was generated in 2019, with only



9% of it recycled. Another 19% was incinerated, while 50% ended up in landfills and 22% evaded waste management systems.

Sensing the urgency, talks among countries have focused on measures considering the entire lifecycle of plastics, from extraction and product design to production

to waste management. Such an agreement may lead to a thriving circular economy based on a global financial mechanism to support developing countries.

Concern for human and environmental wellbeing led to this TOI partnership with ITC and Recycle India Foundation. "YiPpee! Better World: Create Magic aims to convert plastic waste into playground equipment in parks across four cities — Delhi-NCR, Kolkata, Mumbai, and Bengaluru," said Kavita Chaturvedi, COO (Snacks, Noodles & Pasta), ITC Foods Division, adding, "Parks are an integral part of our society and through this campaign we want to create magic in children's lives... while calling on the larger community to participate in the movement."

The partners will collect plastic waste and epicycle them. This "has never been tried in India at this scale — installing this upcycled equipment in 16 parks across these four cities and making sure children avail of the benefits and are educated regarding the recycling of plastic," said Recycle India Foundation co-founder and secretary Ashish Agarwal, adding that the campaign would "showcase the magic of recycling" and make people aware "about proper waste management and the potential of wealth in waste".



# Airlines need to prepare SOPs to tackle signal spoofing: Regulator

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**Mumbai:** Pilots of Indian carriers will soon have their airlines' standard operating procedures to fall back on when faced with satellite signal jamming or spoofing, problems that could affect an aircraft's navigation systems. The Directorate General of Civil Aviation (DGCA) on Friday issued an advisory to pilots, airlines and air traffic control officials on handling Global Navigation Satellite System (GNSS) signal interference.

Among other measures, airlines have been asked to report actual or suspected cases of GNSS interference to the regulator, prepare SOPs for pilots on how to handle the situation, include the topic in pilots' recurrent training, and most importantly, conduct a safety risk assessment to learn of the risks and hazards that may occur due to loss of on-board GNSS-based navigation systems.

In the past few months, airline and charter jets flying near conflict zones in the Middle East and parts of central Europe have been increasingly reporting navigation problems caused due to spoofing or jamming of GNSS signals. Air India and IndiGo operate flights over some of these regions. "The SOPs will have to be region-specific, as the procedures to handle an aircraft navigation system failure due to GPS spoofing when overflying say, Russia, would be different from the procedures to follow when flying over, say, Iran or Estonia or Turkey," said a senior pilot.

"An SOP would decrease the pilots' workload that comes with GPS spoofing and navigation failure. A pilot will be better prepared to handle such eventualities."

On October 1, TOI reported on the problems faced by pilots after their aircraft became targets of GNSS/GPS spoofing, particularly over Iran airspace. On October 4, the DGCA announced a committee for monitoring GNSS spoofing in Indian airspace. The DGCA advisory is based on recommendations given by the committee. Early this month, Europe's civil aviation regulator had updated its safety bulletin to address the problem. "With increased reliance and dependency on GNSS, its interference including jamming and spoofing has become a real threat in airspace," said the advisory, issued by Vikram Dev Dutt, director general of civil aviation.

It states that airlines should understand the potential impact of GNSS interference on their aircraft fleet, and they should coordinate with aircraft manufacturers to obtain their recommendations. Airlines have been asked to develop contingency procedures to mitigate GNSS interference on aircraft, remain updated by studying various circulars issued by different aviation authorities and provide timely briefing to pilots on the latest information on GNSS interference, such as affected areas and air routes, potential impact and reporting obligations. The advisory has also asked the Airports Authority of India, to carry out a risk assessment and prepare an SOP.

## HOW AIRCRAFT NAVIGATE

Modern jets rely on the Global Navigation Satellite System (GNSS) for navigation

➤ Aircraft are also equipped with conventional navigation systems that can compute an aircraft's position independently without help from satellite signals

➤ Since the conventional navigation system is prone to error, reliance on GNSS has gone up over the years

## SAT NAVIGATION SYSTEMS VULNERABLE TO ATTACKS



## JAMMING AND SPOOFING

**Jamming** | Is an intentional radio frequency interference with GNSS signals. This interference prevents receivers from locking onto satellite signals and has the main effect of rendering the GNSS system ineffective or degraded for users in the jammed area

**Spoofing** | Involves broadcasting counterfeit satellite signals to deceive GNSS receivers, causing them to compute incorrect position, navigation, and timing data

**EFFECT** | Intentional interference due to jamming or spoofing attack could lead to hazardous misleading information which could affect flight safety. The impact could be temporary with recovery on leaving the affected areas, or permanent with non-recoverable failure

## WHAT IS GNSS?

GNSS includes satellite constellations of:

- 1 US's Global Positioning System (GPS)
- 2 Russia's GLONASS
- 3 Europe's Galileo
- 4 China's BeiDou



## AREAS WITH CASES

GNSS interference cases have been observed with increased frequency in:

- Geographical areas surrounding conflict zones
- Southern and eastern Mediterranean, and Black Sea
- Baltic Sea and the Arctic area
- Airspaces over Istanbul, Ankara, Baghdad, Tehran, Tel Aviv, Cairo, Amman, Samara, Moscow and Minsk



**Nov 6:** European Union's civil aviation regulator updated its safety bulletin on GNSS interference. Among the mitigation measures listed both by the European and Indian civil aviation regulators is: Ensuring that pilots are informed about possible spoofing and jamming of satellite signals, including during recurrent ground training

Source: DGCA, EASA



# TRUST, a driving force between India, Australia

Helping in efforts to secure a free, open, peaceful and prosperous Indo-Pacific region

NEW DELHI, Nov 24 (PTI)

EXTERNAL Affairs Minister S Jaishankar on Friday said in this complicated world, it is the trust between like-minded partners such as India and Australia that is helping in efforts to secure a free, open, peaceful and prosperous Indo-Pacific region along with a rules-based international order.

In his virtual address at the sixth edition of the Australia-India Leadership Dialogue (AILD), Jaishankar said a driving force of the relationship is the convergence in understanding of, and approach to, the geo-strategic environment, particularly in the common Indo-Pacific region.

The AILD has quite aptly

used the phrase 'Bridges of Bharosa (trust)' as one of its themes, he noted.

"In this complicated world, it is the Bharosa or trust between like-minded partners such as India and Australia, along with others, that is helping us in our efforts to secure a free, open, peaceful and prosperous Indo-Pacific region along with a rules-based international order," Jaishankar said.

His remarks come amid China's growing assertiveness in the Indo-Pacific region.

As strong democracies and dynamic economies of the Indo-Pacific, India and Australia can make a difference through cooperation on a practical, progressive and sustainable agenda, he said,



External Affairs Minister S Jaishankar speaks at the Australia-India Leadership Dialogue 2023, via a video conference on Friday. (PTI)

adding that it makes them a force for global good.

Jaishankar said India and Australia share a deep friendship and this year has turned out to be a defining one for our 'dosti'.

"We have witnessed many firsts: the First Annual Leaders Summit, two visits to India by Australia's Prime Minister, which is a first, an entry into force of our Economic Cooperation and Trade Agreement (ECTA), record high bilateral trade, the establishment of a Little India in Sydney, new Consulates General in Bengaluru and Brisbane, more flight connections, Australian university campuses in India, recognition of educational qualifications, mobility agreements, and dare I say, seven meetings between our foreign ministers in 2023," he said. It is also particularly reassuring to see the strong bipartisan support that India-Australia relations enjoy in both the countries, Jaishankar said.

# Monitoring outbreak of respiratory illnesses among kids in China: Govt



NEW DELHI, Nov 24 (PTI)

THE Union Health Ministry on Friday said it is closely monitoring the outbreak of H9N2 and clusters of respiratory illnesses in children in China.

There is a low risk to India from both the avian influenza case reported in China as well as the clusters of respiratory illness, it said. India, the Ministry said, is prepared for any kind of exigency that may emerge from the current influenza situation in that country.

Some media reports have indicated clustering of cases of respiratory illness in children in

northern China for which the World Health Organisation (WHO) has also issued a statement, it said.

Based on available information, an increase in incidence of respiratory diseases in China has been reported in the last few weeks. "The usual causes of respiratory illness in children have been implicated and there has been no identification of an unusual pathogen or any unexpected clinical manifestations," the Ministry said.

Recently, a meeting was held under the Directorate General of Health Services to discuss the preparedness measures against human cases of avian influenza in the country against the backdrop of a human case of H9N2 (avian influenza virus) in October in China that was reported to the WHO, it said.

"The overall risk assessment by the WHO indicates a low probability of human to human spread and low case fatality rate among human cases of H9N2 reported to the WHO so far.

The need for strengthening surveillance among human, animal husbandry and wildlife sectors and improving coordination was recognised.