

April 5, 2026 – Dinamani Newspaper – Tit bits

1. The Ministry of Defence has initiated steps to design and manufacture a 1,000-kilogram air-dropped bomb for the Indian Air Force. Senior officials from the Ministry of Defence stated the following:-

(i) The project to design and manufacture the 1,000-kilogram air-dropped bomb for the Indian Air Force—entirely within India—is scheduled to be executed in two phases.

(ii) The first phase involves designing and developing six prototypes of the 1,000-kilogram bomb variant. The second phase, which will commence upon satisfactory completion of the first, involves the actual procurement of the bombs. Plans are in place to design and manufacture this bomb along the lines of the 2,000-kilogram American MK-84 bomb.

(iii) A timeframe of two and a half years—spanning from the date of issuance of the Expression of Interest (Eoi) to the date of signing the final contract—has been established for the design and development of this bomb. During this period, the creation of bomb prototypes, their testing, evaluation, and finally, the conclusion of the contract will take place.

(iv) The testing of the bombs will be conducted at sites owned by the Indian Air Force within India, or at other designated locations. Following the issuance of the Expression of Interest, eligible private-sector Indian companies may participate in the selection process for the contract to design and manufacture the bomb.

(v) Under the category for the procurement of indigenously designed and manufactured defense equipment, plans have been formulated to procure 600 air-dropped bombs.

2. Rini Sampath (31), a native of Tamil Nadu, is contesting the Democratic Party's primary election for the mayoral post of Washington D.C., the capital of the United States.

(i) With this, she has earned the distinction of being the first South Asian woman in Washington's history to contest a major political party's primary election for the office of Mayor.

(ii) Born in the Theni district of Tamil Nadu, Rini Sampath immigrated to the United States with her parents at the age of seven. Having resided in Washington for over a decade, she currently works as a Government contractor.

3. NASA's 'Artemis II' spacecraft, currently journeying toward the Moon, has successfully completed the first half of its voyage.

(i) The spacecraft reached this significant milestone 2 days, 5 hours, and 24 minutes after its early-morning launch from the Kennedy Space Center in Cape Canaveral, Florida, USA.

(ii) NASA has announced that the spacecraft is currently positioned closer to the Moon than it is to Earth. Speaking live from the spacecraft, astronaut Christina Koch remarked with emotion, "We can now see the Moon through the spacecraft's window; it is a magnificent sight."

(iii) Meanwhile, the astronauts aboard the spacecraft expressed their joy by sharing beautiful photographs and videos of Earth. In particular, a full image of Earth captured by Commander Reid Wiseman took social media by storm.

(iv) As the next phase of the mission, the spacecraft is expected to enter the Moon's gravitational sphere of influence around midnight on Sunday or in the early hours of Monday. Thereafter, the Moon's gravitational pull will exert a stronger influence on the spacecraft than Earth's gravity.

(v) Upon reaching this milestone, the crew will set a new record in human history for the farthest distance traveled from Earth by humans.

(vi) Subsequently, as part of their plan to orbit the Moon, the crew will make their closest approach to the lunar surface on the sixth day of the mission to conduct observations. NASA has confirmed that all the astronauts remain in good health and high spirits.

4. Google 'Gemma 4': Google has launched its new 'Gemma 4' AI model. Designed to run directly on smartphones and computers, it will help provide advanced AI services without internet access.

5. Microsoft 'MAI' models: Microsoft has launched new AI models 'MAI-Transcribe-1', 'MAI-Voice-1', and 'MAI-Image-2'. These are faster at producing accurate voice-recorded translations and high-quality images.

6. Bharti Airtel, an Indian enterprise, has emerged as the world's second-largest telecommunications company, serving a global customer base exceeding 650 million.

(i) Airtel's telecommunications services span across various countries in India and the African continent. Furthermore, Airtel's services are also available in neighboring nations such as Sri Lanka and Bangladesh. In this regard, Gopal Vittal, Managing Director and CEO of Bharti Airtel, stated the following:

- "This milestone for our company entails a significant responsibility to provide excellent service to our customers."
- He added that the company would continue to work tirelessly to enhance the customer service experience through innovative initiatives and unwavering reliability.

7. During the period extending up to February of the 2025-26 fiscal year—which concluded last March—India's pharmaceutical exports achieved a record milestone, surpassing \$28 billion.

(i) The Pharmaceuticals Export Promotion Council (Pharmexcil) stated that this represents a growth of over 5 percent when compared to the corresponding period of the previous 2024-25 fiscal year.

(ii) Speaking at a meeting held in Hyderabad on Saturday, Pharmexcil Director General K. Raja Bhanu noted that the Indian pharmaceutical sector has successfully maintained its growth momentum despite facing global economic challenges.

(iii) He attributed this surge primarily to the increased demand for pharmaceutical formulations, biological products, and AYUSH products in the international market.

(iv) In the preceding 2024-25 fiscal year, India's pharmaceutical exports stood at \$30.47 billion. Despite challenges such as price erosion and trade-related issues, an annual growth rate of 9.4 percent was recorded.

(v) Pharmexcil Chairman Namit Joshi pointed out that certain tax-related changes in the U.S. market this year had led to increased procurement activity; he added that the precise growth rate would become clear once the final figures for the month of March are released.

(vi) Target for the Year 2030:

- India's overall pharmaceutical manufacturing sector is currently valued at \$60 billion. It is projected that this valuation will rise to \$130 billion by the year 2030.
- Driven by factors such as Government policy reforms and an increase in Foreign Direct Investment (FDI), a specific target has been set to boost exports alone to \$65 billion by 2030.

(vii) Global Standing:

- Globally, India ranks third in pharmaceutical production. More than 60 percent of India's pharmaceutical exports are destined for developed nations, where quality standards and regulatory compliance are strictly enforced. Notably, the United States holds the leading position with a 34 percent share, followed by European nations with 19 percent.

8. Young Indian boxer Vishwanath Suresh performed brilliantly in the Asian Boxing Championships, defeating the reigning world champion and number 1 boxer Sansar Tashkenbey of Kazakhstan to advance to the semifinals.

9. Dmitry Trenin, the new head of a Russian state-backed think tank and former military officer, has stressed the need to maintain a positive balance in Russia's relations with India and China.

(i) Dmitry Trenin, who was elected as the new head of the Russian International-Security Affairs Council (RIAC) on April 1, gave his first press conference in the capital, Moscow.

10. ISRO is currently conducting a project in Ladakh to assess the physical and mental resilience of astronauts. In a statement released regarding this initiative, ISRO noted the following:

(i) The 'Mithra' project has been launched in Leh, the capital of Ladakh, to study and evaluate how astronauts—as well as members of ground-based space research teams—function in high-altitude environments, and to assess their physical and psychological well-being.

(ii) This research and evaluation exercise, which commenced on April 2nd, is scheduled to continue until April 9th. The study is being conducted at an altitude of approximately 3,500 meters, amidst challenging conditions characterized by low temperatures, isolation, and a reduced oxygen supply; such an environment poses risks where vital organs—such as the heart, brain, and lungs—could be compromised within minutes due to the lack of sufficient oxygen reaching the body's tissues. The primary objective of this research is to understand and assess how astronauts and support teams perform under such demanding circumstances.

(iii) It has been stated that the scientific data yielded by this project will prove invaluable for the 'Gaganyaan' mission—India's human spaceflight program—as well as for future space missions involving long-duration travel.