

26<sup>th</sup> August 2024

## First Reusable Hybrid Rocket Of India

India's first reusable hybrid rocket Rhumi-1 was launched from Chennai by Space Zone India in collaboration with Martin Group.



India launched its first reusable hybrid rocket RHUMI 1

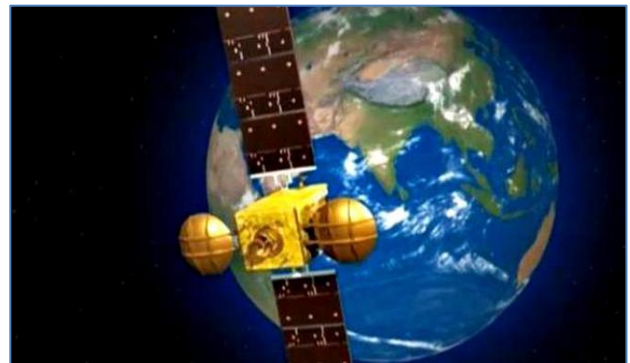
### Key points

- ❖ It does not use any firework, has no TNT on board and has a hybrid motor which can be charged with standard fuel and has an electronically controlled parachute release mechanism.
- ❖ Logistics involved the use of Liquid-skin Heavy Utilization Multiple Ignition type 1 rocket commonly referred to as RHUMI-1, the rocket had a combination of liquid and solid fuels to increase efficiency and to mobilize recurrent inexpensive resources.
- ❖ During the first attempt of the launch in February 2023 a parachute failure rendered the rocket controllable only if it could be retrieved from the sea which was impossible.
- ❖ In order to avoid such an occurrence in the future, the team has provided for the next launch extra several timers.

- ❖ Unlike other rocket designs where the fuel and the oxidizer are mixed throughout the rocket, accident explosions are prevented in RHUMI-1, by employing a combination of the solid rocket propellant together with the liquid oxidizer only during combustion.
- ❖ Space Zone India is also developing two-stage rockets with payloads up to 500 kg and has expressed interest in future testing in UAE deserts.

## India's first observatory to monitor space activity

India's first commercial SSA(Space Situational awareness) observatory which will monitor objects with a size of 10 cm orbiting around the Earth is being developed in the Garhwal region of Uttarakhand by the space start-up Digantara.



### Key Points

- ❖ The SSA (Space Situational awareness) observatory will help India to track space activities which includes space junk and military satellites functioning above the Indian territory.

- ❖ High-quality observations coupled with data from its ground-based sensor network partners will therefore improve India's capability to monitor events in the Earth orbit, especially the geo-stationary, medium and high Earth orbits.
- ❖ This observatory shall also give India Indigenous means for observing space activities over the subcontinent.

#### Low Earth Orbit

- ❖ **Definition:** An orbit that is relatively close to Earth's surface. It is normally at an altitude of less than 1000 km but could be as low as 160 km above Earth.
- ❖ **Applications of LEO:** LEO is commonly used for communication and remote sensing satellite systems, as well as the International Space Station (ISS) and Hubble Space Telescope.

#### Middle Earth Orbit

- ❖ **Range:** Medium Earth orbit comprises a wide range of orbits anywhere between LEO and GEO.
- ❖ The range of this orbit is between 2000 km – 35,780km.
- ❖ **Applications:** MEO is commonly used for navigation systems, including the U.S. Global Positioning System (GPS).

#### High Earth Orbit

- ❖ **Range:** When a satellite reaches 42,164 kilometers from the Earth's center (about 36,000 kilometers from the surface), it is said to be in high Earth orbit.
- ❖ **Applications:** Because satellites in this orbit provide a steady view of the same surface, geostationary orbit is particularly useful for weather monitoring and communication (phones, television, radio).

#### Bharat Health Initiatives For Sahyog Hita And Maitri (BHISM)

Prime Minister Narendra Modi presented four Bharat Health Initiatives for Sahyog Hita and Maitri—BHISHM Cubes—to the Government of Ukraine .



#### Key points

- ❖ BHISHM Cube consists of medicines and equipment for the first line of care for all kinds of injuries and medical situations.
- ❖ It also includes surgical equipment for a basic operation room that can manage 10 to 15 basic surgeries per day.

- ❖ The Cube has the capacity to handle about 200 cases of diverse nature in emergency situations such as trauma, bleeding, burns, and fractures, among others.
- ❖ It can also generate its own power and oxygen in limited amounts.
- ❖ A team of experts from India has been deployed to provide initial training to the Ukrainian side to operate the Cube.
- ❖ The gesture underscores India's continued commitment to providing humanitarian assistance to Ukraine.

- ❖ TRAI said that, in November 2022, the Department of Telecommunications stated that the proliferation of the PM-WANI scheme is quite limited and far below the targets due to the extremely high cost of internet connectivity charged by Telecom Service Providers.
- ❖ The Authority said that it is necessary to rationalize the cost of broadband connectivity to accelerate the proliferation of the PM-WANI scheme.

**TRAI Releases A Draft  
Telecommunication Tariff Order For  
PM-WANI Scheme**

Telecom Regulatory Authority of India (TRAI) released a draft Telecommunication Tariff Order on the regulatory framework for the PM-WANI scheme.



**Key points**

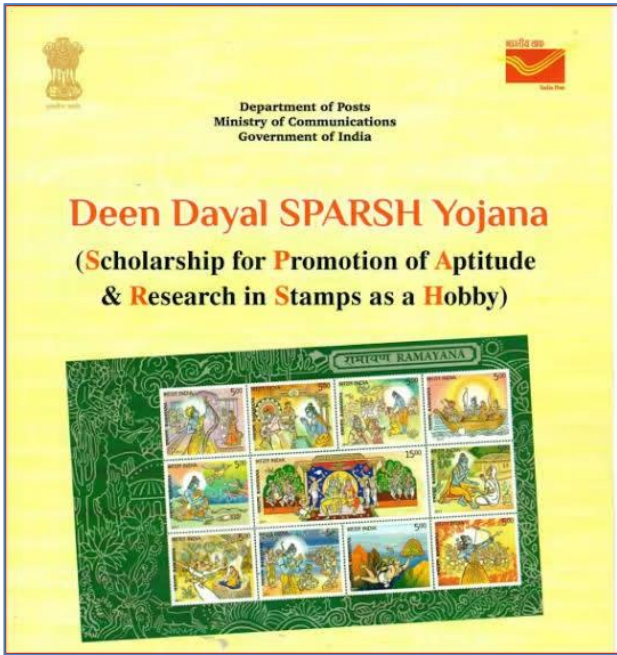
- ❖ The scheme was launched in December 2020 by the Department of Telecommunications to provide affordable and high-speed internet access to the public in rural and remote areas of the country.

**PM-WANI: Prime Minister Wi-Fi Access Network Interface**

- ❖ Nodal Ministry: Ministry of Communications & Information Technology
- ❖ Aim: To enhance the proliferation of public WiFi hotspots to create robust digital communications infrastructure in the country, especially in rural areas.

**Deen Dayal SPARSH Yojana**

The scheme was launched by the Department of Posts under the Union Ministry of Communications for the purpose of encouraging research and scholarship skills among the students of India, under the name Deen Dayal SPARSH Yojana.



### Key Points

- ❖ With the objectives to promote stamp collection as a hobby the Scholarship for Promotion of Aptitude and Research in Stamps as a Hobby or Deen Dayal SPARSH Yojana is a scheme for students studying in classes VI, VII VIII and IX in any school affiliated to central and state Boards/ Councils/ Recognised by C.B.S.E/ I.C.S.E.
- ❖ The scholarship will be open for only those students who are associated with a Philately club or who have a Philately Deposit Account.
- ❖ The quantum of the scholarship is Rs 6000 per annum and the amount will be released every three months.
- ❖ Scholarships are provided for a period of one year, students can however, reapply the next year according to the provisions of the Yojana.

- ❖ Each of the selected schools will be provided with a Philately Mentor who will help the selected students.
- ❖ Extra requirement of the mentor is also to establish the school-level Philately Club, providing tips to young philatelists on how to develop their collection, and to inspire new learners to take up Philately.

### About Philately

- ❖ **Philately** is the hobby that involves the collection and or study of postage stamps and other related items.
- ❖ As an interest, it includes the gathering, sorting, classifying, preservation, exhibiting, and caring of stamps and associated paraphernalia, especially those arranged by themes.

### Short News

- ❖ Odisha Chief Minister Mohan Charan Majhi on Friday announced standard operating procedure (SOP) for Subhadra Yojana, which entitles a financial assistance of Rs 10,000 annually to over one crore women in the state.
- ❖ Indian para athletes **Sumit Antil** and **Bhagyashri Jadhav** have been named joint flag-bearers for the Paris 2024 Paralympics Opening Ceremony, which is set to be held on August 28.

- ❖ Bandhan Bank announced the launch of 'Avni', a savings account exclusively for women.
- ❖ Mumbai ranks 2nd, with New Delhi securing the 3rd position in the **Global Property Price Index**.
- ❖ Goldman Sachs Group Inc. has reduced India's growth forecast by 20 basis points for both this year and the next, attributing the downgrade to a reduction in central government spending. The bank now predicts that the Indian economy will grow by 6.7% in 2024 and 6.4% in 2025.
- ❖ Harivansh Narayan Singh, the Deputy Chairman of Rajya Sabha (Bihar) has released the book titled '**Bharat ke 75 mahan krantikari**' (75 Great Revolutionaries of India).
- ❖ Morne Morkel has been appointed as the new bowling coach of Team India, joining Gautam Gambhir's coaching staff.
- ❖ Union Minister JP Nadda inaugurated the '**First Policy Makers' Forum**' in New Delhi, which was attended by policymakers and drug regulators from 15 different countries.
- ❖ **Satya Prakash Sangwan**, Vice-President of the Paralympic Committee of India, has been appointed as the **Chef de Mission** for India's largest-ever contingent at the **Paris 2024 Paralympic Games**, comprising 84 para-athletes across 12 sports.
- ❖ Indian wrestler **Ronak Dahiya** achieved a remarkable victory by winning the **Bronze medal** in the **Men's Greco-Roman 110 kilograms** category at the **Under-17 World Wrestling Championship**.
- ❖ Sri Lanka has issued the world's longest postage stamp, measuring **205 mm**.

Important Daily Current Affairs Question

Q1. Which of the following department launched Deen Dayal SPARSH Yojana ?

- (a) Department of Posts
- (b) Department of Education
- (c) Department of Science and Technology
- (d) Department of Information and Broadcasting

Ans.: (a)

Q2. What does BHISHM stand for in the context of Bharat Health Initiatives?

- (a) Bharat Health Initiatives for Science, Humanity, and Medicine.
- (b) Bharat Health Initiatives for Strength, Hope, and Motivation
- (c) Bharat Health Initiatives for Social Harmony and Medical Research
- (d) Bharat Health Initiatives for Sahyog, Hita, and Maitri

Ans.: (d)

