#### **GOVERNMENT OF INDIA**

#### **DEPARTMENT OF SPACE**

# LOK SABHA

# UNSTARRED QUESTION NO. 2279

## **TO BE ANSWERED ON WEDNESDAY, AUGUST 02, 2023**

## **CENTRES OF ISRO**

2279. SHRI NIHAL CHAND:

Will the PRIME MINISTER be pleased to state:

- (a) The number of centres of Indian Space Research Organisation
  (ISRO) in the country at present, State/UT-wise;
- (b) India's position in the field of space research as compared to other countries;
- (c) Whether the Union Government is contemplating to open new space research centre in other parts of the country also;
- (d) If so, the details thereof, State-UT wise; and
- (e) The progress made by India in the field of space research during the last five years?

#### ANSWER

MINISTER OF STATE IN THE MINISTRY OF PERSONNEL, PUBLIC GRIEVANCES & PENSIONS AND IN THE PRIME MINISTER'S OFFICE (DR. JITENDRA SINGH):

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# (a) Indian Space Research Organization has its Centers/Units spread throughout the country with following distribution:

Centres/Units/Liaison Office	State	Number
Regional Remote Sensing Centre [RRSC] (West)	Rajasthan	3
Solar Observatory		
Infrared Observatory		
Space Application Centre	Gujarat	2
Physical Research Laboratory		
Delhi Earth station	Delhi	2
<b>Regional Remote Sensing Centre</b>		
[RRSC] (North)		
Indian Institute of Remote Sensing	Uttarakhand	1
ISTRAC Ground Station	Uttar Pradesh	1
<b>Regional Remote Sensing Centre</b>	West Bengal	1
[RRSC] (East)		
North Eastern Space Application	Meghalaya	1
Centre (NESAC)		
Regional Remote Sensing Centre	Maharashtra	1
[RRSC] (Central)		
Master Control Facility (Bhopal)	Madhya Pradesh	1
National Remote Sensing Centre	Telangana	1
[NRSC]		
Satish Dhawan Space Centre	Andhra Pradesh	2
[SDSC]		

Centres/Units/Liaison Office	State	Number
National Atmospheric Research		
laboratory [NARL]		
U R Rao satellite Centre [URSC]	Karnataka	6
Human space flight Centre [HSFC]		
Laboratory for Electro optics		
systems [LEOS]		
ISRO Telemetry , Tracking and		
command network [ISTRAC]		
Regional Remote Sensing Centre		
[RRSC] (South)		
Master Control Facility [MCF]		
Vikram Sarabhai Space Centre	Kerala	4
[VSSC]		
Liquid Propulsion Systems Centre		
[LPSC]		
ISRO Inertial Systems Unit [IISU]		
Indian Institute of Space Science		
and Technology [IIST]		
ISRO Propulsion Complex [IPRC]	Tamil Nadu	1
Down range Station	Andaman &	1
	Nicobar Islands	

(b) India is the fifth amongst spacefaring nations having end-toend capabilities in space research and development, including the capability to launch from our own land and operate programs of earth observation, satellite communication, meteorology, space science & navigation and ground infrastructure. Now, NewSpace industries are also emerging at fast pace after space sector reforms.

- (c) No, Sir.
- (d) Does not arise.
- (e) During the last five years, significant progress has been made in the Indian Space Research sector. Some of the major achievements are listed below:
  - 27 satellites and 22 Launch Vehicle missions have been successfully accomplished during the period (July 2018 – July 2023), besides the successful Pad Abort Test (PAT) to qualify the Crew Escape System (CES) in July 2018 and the Reusable Launch Vehicle autonomous landing mission in April 2023.
  - In June 2018, India announced a capacity building training programme UNNATI (UNispace Nanosatellite Assembly & Training by ISRO) on Nanosatellites development through a combination of theoretical coursework and hands-on training on Assembly, Integration and Testing (AIT). A total of 90 participants from 45 countries benefitted from the program across three batches. (Two in 2019 and 1 in 2022).
  - India's second mission to Moon, Chandrayaan-2 was successfully launched on July 22, 2019 on-board GSLV Mk

III-M1. Chandrayaan-2 Orbiter is providing valuable science data for the research community.

- The launch of PSLV-C48/ RISAT-2BR1 in December 2019 marked the 50<sup>th</sup> launch of PSLV, the workhorse launch vehicle.
- In 2019, ISRO launched an annual special programme called "Young Scientist Programme" or the *"YUva VIgyani KAryakram"* (YUVIKA), in line with the Government's vision "Jai Vigyan, Jai Anusandhan". A total of 603 students have attended the YUVIKA program spread over 3 years 2019, 2022 and 2023.
- In 2019, the NewSpace India Limited (NSIL) got incorporated, as a wholly owned Government of India Undertaking/ Central Public Sector Enterprise (CPSE), under the administrative control of Department of Space (DOS).
- On June 26, 2020, the Government of India announced Space Sector Reforms – a major transformation of Indian Space Sector with enhanced participation of private players in Indian space programme and playing key roles to boost India's market share in Global Space Economy.
- Setting up of Indian National Space Promotion and Authorisation Centre (IN-SPACe) and enhancing the role New Space India Limited (NSIL) are the two major thrust areas in the Reform.
- The establishment of IN-SPACe was announced in June 2020 by Government of India, as an autonomous agency

under Department of Space, to create eco-system of industry, academia and start-ups and to attract major share in the global space economy, by authorizing and regulating activities of NGEs in space sector through detailed guidelines and procedures. IN-SPACe Headquarters at Ahmedabad was inaugurated by the Hon'ble Prime Minister in June 2022.

- The Hon'ble Minister of State (Department of Space) dedicated ISRO System for Safe & Sustainable Space Operations Management (IS<sup>4</sup>OM) to the nation in July, 2022.
- LVM3 (GSLV MkIII) M2/OneWeb India-1 Mission was successfully accomplished on 23<sup>rd</sup> October 2022.
- Launch of Vikram-S (Prarambh mission), a suborbital launch vehicle from M/s Skyroot Aerospace Pvt. Ltd., Hyderabad, was accomplished successfully on 18<sup>th</sup> November 2022.
- First private launchpad & mission control center established by M/s Agnikul Cosmos Pvt. Ltd., Chennai in ISRO campus at SDSC, SHAR on 25<sup>th</sup> November 2022.
- On Feb 10<sup>th</sup>, 2023, the successful flight of Small Satellite Launch Vehicle (SSLV – D2) took place, launching three satellites – EOS-07, Janus-1 and AzaadiSAT-2 (a combined effort of about 750 girl students across India guided by Space Kidz India, Chennai).
- On March 7<sup>th</sup>, 2023, controlled re-entry experiment for the decommissioned Megha-Tropiques-1 (MT-1) satellite was

carried out successfully, with final impact in the Pacific Ocean, demonstrating the nation's continued efforts towards ensuring the long-term sustainability of outer space activities.

- LVM3 M3/OneWeb India-2 Mission was successfully accomplished on 26<sup>th</sup> March, 2023, placing 36 OneWeb satellites into their intended orbit. With this, NSIL successfully executed its contract to launch 72 satellites of OneWeb to Low Earth Orbit.
- Reusable Launch Vehicle Autonomous Landing Mission (RLV LEX) was successfully demonstrated at the Aeronautical Test Range (ATR), Chitradurga, Karnataka on 2<sup>nd</sup> April, 2023.
- GSLV-F12/NVS-01 mission was successfully accomplished on 29<sup>th</sup> May, 2023. GSLV deployed the NVS-01 navigation satellite, the first of the second-generation satellites envisaged for the Navigation with Indian Constellation (NavIC) service, into a Geosynchronous Transfer Orbit.
- LVM3-M4 successfully launched the Chandrayaan-3 Spacecraft on 14<sup>th</sup> July, 2023. Lunar orbit insertion activities are in progress and Moon landing is scheduled on 23<sup>rd</sup> August, 2023.

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