



GS Paper 3-Space

In a first, private spacecraft lands upright on moon

Associated Press

WASHINGTON

A U.S. company successfully landed its spacecraft on the moon on Sunday, marking only the second private mission to achieve the milestone – and the first to do so upright.

Firefly Aerospace's Blue Ghost Mission 1 touched down shortly after 3.34 a.m. U.S. Eastern Time (0204 IST) near Mons Latreille, a volcanic formation in Mare Crisium on the moon's northeastern near side.

"Y'all stuck the landing, we're on the moon," an engineer at mission control in Austin, Texas, called out as the team erupted in cheers.

CEO Jason Kim confirmed that the spacecraft was "stable and upright" – rate, rejoiced.

The first image from the lander revealed the rocky, pockmarked terrain it had to autonomously navigate in order to select its touchdown spot, having slowed down from thousands of miles per hour to just two mph.

Nicknamed "Ghost Riders in the Sky," the mission is part of a NASA-industry partnership aimed at reducing costs and supporting Artemis, the programme designed to return astronauts to the moon.

Size of a hippopotamus

The golden lander, about the size of a hippopotamus, launched on January 15 on a SpaceX Falcon 9 rocket, capturing stunning footage of the earth and the moon along its 2.8 mil-



The mission is aimed at reducing costs and supporting Artemis, the programme designed to return astronauts to the moon. AP

tion-tolerant computer and an experiment testing the feasibility of using the existing global satellite navigation system to navigate the Moon.

Designed to operate for a full lunar day (14 earth days), Blue Ghost is expected to capture high-definition imagery of a total creating the mysterious lunar horizon glow first documented by Apollo astronaut Eugene Cernan.

Hopping drone

Blue Ghost's arrival will be followed on March 6 by fellow Texas company Intuitive Machines' IM-2 mission, featuring its lander However, the success was tempered by a mishap: the lander came down too fast and tipped over on impact, leaving it unable to generate enough solar power and cutting the mission short.

This time, the company says it has made key improvements to the hexagonal-shaped lander, which has a taller, slimmer profile than Blue Ghost, and is around the height of an adult giraffe.

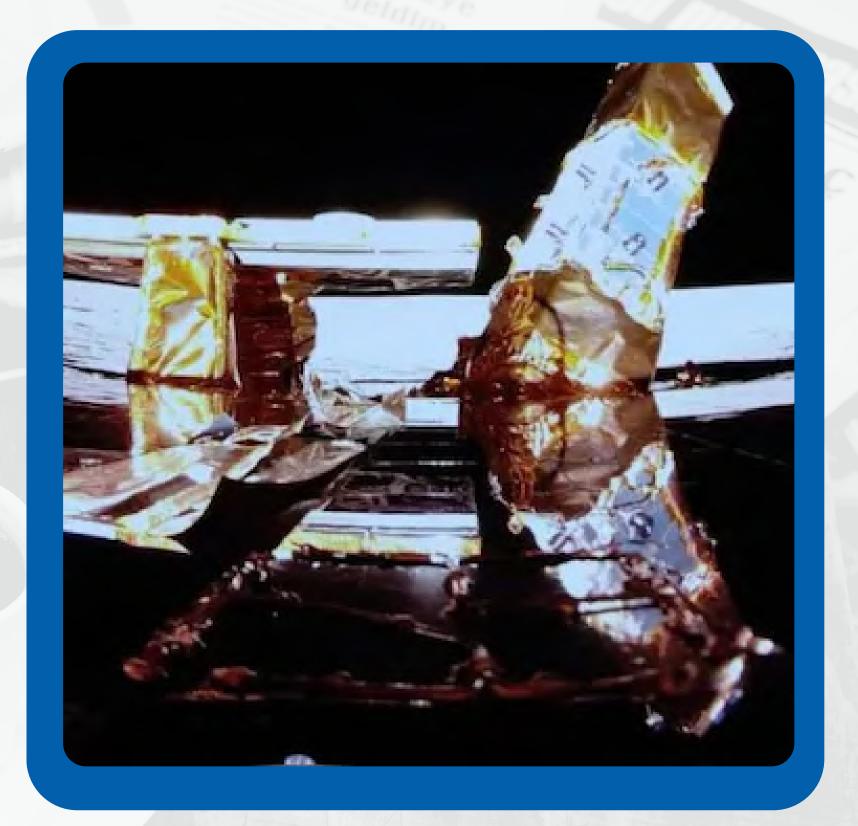
Athena launched on Wednesday aboard a SpaceX rocket, taking a more direct route toward Mons Mouton – the southernmost lunar landing site ever attempted.

Until Intuitive Machines' first successful mission, only five national space agencies had accomplished this feat: the Soviet





 Firefly Aerospace's Blue Ghost Mission 1 successfully landed on the Moon, becoming the second private mission to do so and the first to land upright. The spacecraft carries 10 instruments and is part of NASA's partnership with private companies. It will capture lunar imagery, including a total eclipse on March 14.







GS Paper 3-Species

Research team discovers two more species of jumping spiders in wildlife sanctuary in Kerala

Sarath Babu George THIRUVANANTHAPURAM

A collaborative research involving the University of Kerala reported the discovery of two new species of jumping spiders belonging to the genus *Epidelaxia* from the Shendurney Wildlife Sanctuary in the State. This was the first time the genus had been recorded from India, extending its known range from Sri Lanka to other parts of the subcontinent.

The research team behind the find included Asima A. and G. Prasad from veetha Medical College & Hospitals, Chennai; and Mathew M.J. from the Centre for Arachnology Research at Bharata Mata College, Kochi. Their work, published in the February issue of *Zootaxa*, a peer-reviewed journal, not only added two new species to the region's checklist but also shed light on the rich biodiversity of the Western Ghats.

The two new species, Epidelaxia falciformis sp. nov. and Epidelaxia palustris sp. nov., were discovered during field expeditions to Kulathupuzha in



Epidelaxia falciformis sp. nov. and Epidelaxia palustris sp. nov. from the Shendurney Wildlife Sanctuary. SPECIAL ARRANGEMENT

characterised by their striking physical features, which include a prominent yellow triangular-shaped of the copulatory organs in both males and females. Males of *E. falciformis* have a brown carapace with a along the side of their bodies. The females exhibit similar colouration, with the added feature of white orbital setae around their eyes.

Size variation

The researchers added that the species varied slightly in size, with *E. falciformis* measuring 4.39 mm while the *E. palustris* measured 4.57 mm (males) and 3.69 mm (females). These spiders were described as highly adapted to their environment, inhabiting the dense foliage of the Western Ghats. The





 A collaborative study involving the University of Kerala discovered two new species of jumping spiders, Epidelaxia falciformis and Epidelaxia palustris, in the Shendurney Wildlife Sanctuary. This marks the first record of the genus in India, previously thought to be endemic to Sri Lanka. The species, identified for their distinct markings and reproductive features, were found during field expeditions in 2022 and 2023







GS Paper 2-Education

40% of population does not have access to education in language they understand

Press Trust of India

NEW DELHI

Nearly 40% of the global population does not have access to education in a language they speak or understand, according to UN-ESCO's Global Education Monitoring (GEM) team.

"In some low- and middle-income countries, this figure rises to 90 per cent. More than a quarter of a billion learners are affected," a senior GEM team member said. the report said. Implementation challenges include limited teacher capacity to use home languages, unavailability of materials in home languages and community opposition.

The report was compiled on the 25th anniversary of International Mother Language Day, celebrating a quarter-century of dedicated efforts to preserve and promote the use of mother tongues.

It comes at a time when India is in the process of common. Over 31 million displaced youth are facing language barriers in education.

"Countries face diverse linguistic challenges in education, stemming from both historical and contemporary factors. In the first category, often as a legacy of colonialism, languages have been imposed on local populations that prevented their use for instruction and created educational disparities," the report said. "At the same





UNESCO's report reveals that 40% of the global population lacks education in a language they understand, with 90% in some low-income countries. It advocates for multilingual education policies but highlights challenges like limited teacher capacity and lack of resources





The Indian EXPRESS



GS Paper 2-Governance

The repealed law on dramatic performances, flagged by the PM

APURVA VISHWANATH

NEW DELHI, MARCH 2

PRIME MINISTER Narendra Modi on Saturday asked why a colonial law that "allowed the arrest of people dancing in public places" had continued to exist even 75 years after independence. He was speaking of the government's efforts to repeal archaic and obsolete laws in recent years.

Which law was the PM referring to?

The PM's reference was to The Dramatic Performances Act, 1876, which gave the British government the power to "prohibit public dramatic performances which are scandalous, defam-

atory, seditious or obscene". This law was among those enacted by the

British to clamp down on the nascent Indian nationalist sentiment following the visit of the Prince of Wales, Albert Edward, to India from October 1875 to May 1876.

Other significant laws that were enacted during the 1870s included the draconian Vernacular Press Act, 1878, and the sedition law of 1870.

What were the provisions of the law?

Under the Act, "any play, pantomime or other drama performed or about to be performed in a public place" could be banned if the government was of the "opinion" that the play was "of a scandalous or defamatory nature", or was "likely to excite feelings of disaffection to the Government established by law", or "to deprave and corrupt persons present at the performance".

A Magistrate could warrant the search and seizure of "any house, room or place is used, or is about to be used, for any perform-

> ance prohibited under this Act". As punishment, the law prescribed a jail term of up to

three months and a fine or both.



What was the status of the law after Indian independence?

Parliament formally repealed the law with effect from January 2018 as part of the Narendra Modi government's exercise to weed out obsolete laws.

However, The Dramatic Performance Act had not been a "valid law" since at least 1956. On May 10, 1956, in a ruling titled State versus Baboo Lal And Ors, the Allahabad High Court ruled that the law was inconsistent



PM Modi referenced the Act at an event in New Delhi on Saturday, PMO via PTI

with the Constitution of India.

The law was also introduced in states such as Madhya Pradesh, Karnataka, Delhi and Tamil Nadu, and was later repealed. The Madras HC struck down the Tamil Nadu Dramatic Performances Act, 1954, in 2013.

How did Allahabad HC take up the law?

In June 1953, the Lucknow branch of the Indian People's Theatre Association (IPTA). the oldest body of stage artists in India, had planned to stage a play based on Munshi Premchand's short story 'Idgah' (1938).

The theatre group had applied for permission under the law. However, for reasons unknown, the magistrate in Lucknow cancelled the permission, prohibiting the play.

The prohibitory order was served to the accused in the middle of the performance which they ignored and continued with the performance.

The Allahabad High Court, instead of looking at this specific case, examined the constitutionality of the law. It referred to judgments where colonial statutes that were inconsistent with fundamental rights guaranteed by India's Constitution – from laws on preventive detention to those on censorship – had been struck down or modified.

"In our opinion, the Dramatic Performances Act is ultra vires of the Constitution of India because its procedural part imposes such restrictions on the right of freedom of speech and expression which cannot be covered by the saving clause in Article 19(2)," the Allahabad HC ruled.

The ruling noted the petitioner's contention that the case might have been "victimisation of persons who have a different political ideology than the ideology of the party in power".

Why did India persist with laws enacted by the Raj?

Article 372 of the Constitution ("Continuance in force of existing laws and their adaptation") states that "laws in force in the territory of India immediately before the commencement of this Constitution shall continue in force therein until altered or repealed or amended by a competent legislature or other competent authority".

However, colonial laws do not enjoy the presumption of constitutionality - which means that when a colonial law is challenged, the government must defend the law for it to be valid.

Other laws - those enacted by the Parliament of independent India - are deemed constitutional unless declared otherwise, which means that when challenged in court, the onus is on the petitioner to prove that the legislation violates the Constitution.

Successive governments, including the Narendra Modi government, have defended several colonial laws. Congress-led governments of the past have defended laws on preventive detention and unlawful associations.

The Modi government has retained the sedition law (Section 124A of the Indian Penal Code, 1860), a colonial statute, as "Act

endangering sovereignty, unity and integrity of India" in the Bharatiya Nyay Sanhita, 2023 (Section 152 of BNS). (In 2022, the Supreme Court stayed all trials in respect of charges framed under Section 124A IPC.)

The government has also defended the so-called marital rape exception, another colonial law, which is currently under challenge before the Supreme Court. Exception 2 of Section 375 IPC ("Rape") states that "Sexual intercourse... by a man with his own wife, the wife not being under fifteen years of age, is not rape". This provision has been retained as Exception 2 in Section 63 of the BNS, with the wife's age raised from 15 to 18.

And how did the govt repeal the law?

The repeal of obsolete laws has been a flagship project of the Modi government. Since 2014, it has repealed more than 2,000 such laws in several batches.

Obsolete laws, by definition, are laws which are no longer in use.

The Dramatic Performances Act, 1876. though declared unconstitutional by the High Court almost seven decades ago and no longer in use, was formally deleted by Parliament through The Repealing and Amending (Second) Act, 2017.





 PM Modi questioned why colonial laws, like the Dramatic Performances Act, 1876, which restricted public performances, persisted post-independence. The law, used to suppress nationalism, was repealed in 2018, though it had been deemed unconstitutional in 1956. Other similar colonial laws, like the sedition law and marital rape exception, continue, with the government defending them





PRESS INFORMATION BUREAU GOVERNMENT OF INDIA



GS Paper 2-Governance

Ministry of Panchayati Raj



Ministry of Panchayati Raj to Launch "Sashakt Panchayat-Netri Abhiyan" in a National Workshop on 4th March 2025

Union Minister Shri Rajiv Ranjan Singh and Smt. Annpurna Devi to grace the occasion

1,200+ Panchayat Women Representatives to participate; Primer on Law on Gender Based Violence to be Launched

Posted On: 02 MAR 2025 1:24PM by PIB Delhi





1.The Ministry of Panchayati Raj will launch the Sashakt Panchayat-Netri Abhiyan on 4th March 2025 to empower Women Elected Representatives in Panchayati Raj Institutions. Over 1,200 leaders will participate in discussions, training modules, and cultural performances, aligning with PM Modi's vision of empowering women and fostering inclusive governance.





PRESS INFORMATION BUREAU GOVERNMENT OF INDIA



GS Paper 1-History

Ministry of Culture



President visits UNESCO World Heritage Site Dholavira

Posted On: 01 MAR 2025 7:38PM by PIB Delhi

President of India Smt. Droupadi Murmu, today, visited the UNESCO World Heritage Site Dholavira in Gujarat. The site is located on the arid island of Khadir in Kachchh district.







President Droupadi Murmu visited the UNESCO World Heritage Site Dholavira in Gujarat, praising its conservation by the Archaeological Survey of India. Impressed by its scale and Harappan technological advancements, she highlighted its significance in understanding the ancient civilization. The site, inscribed in 2021, provides key insights into Harappan town planning and water systems.





PRESS INFORMATION BUREAU GOVERNMENT OF INDIA



GS Paper 3-Defence

Ministry of Defence



EXERCISE DESERT HUNT 2025

Posted On: 01 MAR 2025 9:50AM by PIB Delhi





 Exercise Desert Hunt 2025, held at Air Force Station Jodhpur from 24– 28 February, involved the Indian Army's Para (Special Forces), Navy's Marine Commandos, and Air Force's Garud (Special Forces). The drill focused on enhancing coordination and interoperability in combat scenarios like airborne insertion, precision strikes, hostage rescue, and urban warfare.

