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## **Topic** → **MICE TOURISM**

## 'India poised to become the capital of MICE tourism'

#### The Hindu Bureau

NEW DELHI

India is poised to become the global capital of MICE (Meetings, Incentives, Conferences, and Exhibitions) tourism, Union Tourism Minister Gajendra Singh Shekhawat said on Friday while inaugurating a two-day seminar organised by the Indian Exhibition Industry Association here.

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"New segments of tourism are emerging, with MICE tourism being the most important and fastest-growing segment in the country. The exhibition and conference infrastructure across the nation,





MICE Tourism stands for Meetings, Incentives,
Conferences, and Exhibitions (or Events). It is a
specialized niche of tourism in which large groups,
usually planned well in advance, are brought together
for a particular purpose related to business or
professional interests.

Here's what each component typically involves:

- Meetings Organized gatherings of people for business, education, or networking purposes. These can be corporate meetings, board meetings, or seminars.
- 2. Incentives Travel rewards given by companies to employees or partners as a motivation or recognition

for good performance. These are typically leisure-oriented.

- 3. Conferences Large formal gatherings where individuals discuss particular topics, share research, or conduct training. Often includes keynote speakers, panels, and workshops.
- 4. Exhibitions/Events Trade shows, expos, or public events where businesses showcase products or services, usually aimed at networking, marketing, or sales.

#### Why it's important:

MICE tourism is a high-value segment of the travel industry. It brings significant revenue to host cities through hotel bookings, dining, transportation, and other services.

#### **Prelims Facts**

□ Prime Minister also laid the foundation stone of Missile
Test Range at Nagayalanka in Andhra Pradesh worth
around Rs 1,460 Crore. It will comprise a launch center,
technical instrumentation facilities, Indigenous Radars,
Telemetry and Electro-Optical systems enhancing the
country's defence preparedness

### **Topic - Mt MAKALU**



### ITBP team scales Mt. Makalu, fifth highest peak in the world

The Indo Tibetan Border Police (ITBP) has successfully scaled Mt. Makalu – the world's fifth highest peak, at an altitude of 8,485 metres above sea level – the China-border guarding force said on Friday. The ascent to the Himalayan peak in Nepal was made on April 19, it said. The International Mountaineering Expedition to Mt. Makalu and Mt. Annapurna (8,091 m) was flagged off from Delhi on March 21. "It was a historic twin summit attempt – the first of its kind in ITBP history. Both peaks were being attempted for the first time by the force, adding to the challenge and legacy of this mission. Both peaks are in Nepal," the ITBP said. Led by Deputy Commandant Anoop Kumar Negi and Nihas Suresh as deputy leader, the 12-member team was divided into two groups of six climbers each.



Mount Makalu is the fifth highest mountain in the world, standing at 8,485 meters (27,838 feet) above sea level. It is part of the Mahalangur Himalayas and is located in the border region between Nepal and the Tibet Autonomous Region of China, approximately 19 km southeast of Mount Everest.

#### **Key Facts about Mount Makalu:**

 Name Origin: The name "Makalu" is believed to come from the Sanskrit word "Maha-Kala," meaning "Big Black," a name for the Hindu god Shiva.

- Shape: Makalu is known for its distinctive pyramid-like shape, with four sharp ridges.
- First Ascent: The first successful ascent was made on May 15, 1955, by a French expedition led by Jean Franco, with climbers Lionel Terray and Jean Couzy among the first to reach the summit.
- Climbing Difficulty: Makalu is considered one of the more challenging 8,000-meter peaks due to its steep pitches, knife-edged ridges, and technical rock and ice climbing.
- Makalu-Barun National Park: The mountain lies within this protected area, which is rich in biodiversity, home to species like red pandas, snow leopards, and over 3,000 flowering plants.

**Topic - Brain computer interface** 

#### Indian scientists help develop brain-computer interface that aids movement of people struggling due to paralysis

#### Ramya Kannan CHENNAI

Researchers at the University of California, San Fran cisco (UCSF) have achieved a significant breakthrough in assistive technology for individuals with paralysis. The lead author of a scien-The lead author of a scientific paper on the project, an Indian who grew up in Chennal, Nikhilesh Natraj, says they have developed a brain-computer interface (BCI) that allows a paralysed man to control a robotic arm simply by imagining the movements he wishes to execute.

Dr. Natraj is a neuroscientist and neural engineer at the Weill Institute for Neurosciences, UCSF. "Here, our team has developed a framework that allows a paralysed man to control a robotic arm for 7

months straight using just his thoughts alone, with minimal calibration," he says. The results of this study were published in a re-cent volume of the peer-re-viewed journal *Cell*.

#### Developing stability

To start with, the team had to understand the neural patterns behind movepatterns behind move-ment. The key was disco-vering how activity shifts in the brain day to day as a study participant repeat-edly imagined making specific movements. Once a machine learning/Al al-gorithm was programmed to account for those shifts, it worked for months at a time.

Karunesh Ganguly, pro-fessor of neurology and a member of the UCSF Weill Institute for Neurosciences



of brain activity in animals represent specific movements, saw that these patterns changed day to day. If one assumed that the same thing was happening in humans, these changes would explain why the participants' BCIs became unstable and quickly lost the ability to recognise movement patterns. The team worked with an individual who had been paralysed of brain activity in animals who had been paralysed

speak or move, a note on the university website

The study participant had tiny sensors implanted on the surface of his brain on the surface of his brain that could pick up brain activity when he imagined moving. The sensors do not send pulses to the brain, but only read out the intent to move from the movement regions of the brain, Dr. Natraj explains.

Signal processing
To see whether and how
his brain patterns changed
over time, the participant
was asked to imagine moving different parts of his
body. The BCI recorded
the brain's representations
of these movements
through the sensors.

Analysing the patterns

in the high-dimensional sensor data, the team found that while the structure of movement repre stayed same, their locations in the high-dimensional shifted slightly from day to day. By tracking these day. By tracking these shifts and predicting how it would evolve, the team was able to overcome inwas able to overcome in-stability in BCI systems and developed an end-to-end signal processing and AI framework.

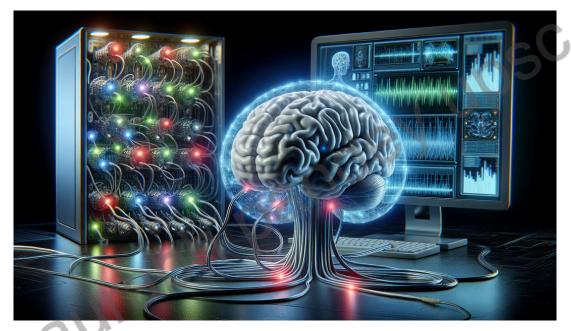
framework.

The participant was then tasked with imagining himself making simple movements with his fingers, hands or thumbs while the sensors recorded his brain activity to train the AI. The read out signals were then decoded to actuate a robotic arm. Initially, he practised on a virtual robot arm that gave him

crucial feedback on the ac-curacy of his visualisa-tions, helping him refine his direction and control.

Eventually, the partici-pant managed to control a real-world robotic arm exerear-world robotic arm exe-cuting the action. He man-aged to open a cabinet, re-trieve a cup, and hold it under a water dispenser – simple tasks but those that

simple tasks but those that can be life-changing for those living with paralysis. Having established that it can be done is the first stage, a lot more work needs to be put into refining the technique and for it to be deployed among people who have paralysis, Dr. Natraj says. Especially, the system should be able to work fluidly in complex scenarios with many distractions, such as when going to a crowded grocery store, he adds.





A Brain-Computer Interface (BCI) is a technology that creates a direct communication pathway between the brain and an external device, typically a computer or machine. BCIs are designed to read neural signals, process them, and translate them into commands that can control devices—such as robotic limbs, computers, or even speech

# synthesizers—without the need for physical movement.

#### **Mark** How BCIs Work:

- Signal Acquisition: Electrical activity in the brain (usually measured using EEG, ECoG, or implanted electrodes) is captured.
- Signal Processing: The raw brain signals are filtered and decoded to identify patterns associated with specific thoughts or intentions.
- 3. Command Execution: The decoded signals are translated into commands that control external devices or applications.

### Types of BCIs:

- Invasive: Electrodes are implanted directly into the brain (used in clinical settings, e.g., for paralysis or epilepsy).
- Non-invasive: Uses external sensors (like EEG caps) placed on the scalp—safer but less accurate.
- Partially invasive: Electrodes are placed inside the skull but not directly in brain tissue.

#### Applications:

Medical: Restoring movement in paralyzed individuals, controlling prosthetics, treating

- neurological conditions (e.g., Parkinson's, epilepsy).
- Communication: Helping people with conditions like ALS to communicate via thought-controlled typing.
- Neurogaming: Controlling games with brain activity.
- Military/Defense: Research into enhanced soldier performance or remote control of drones.
- Brain-to-brain communication (experimental):
   Sharing thoughts or motor commands between people.

### **Topic** → **India** at a **Crossroads**

A profound shift in the global order



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The Feyn Charles relicion I need to Abeled an The Feyn Charles relicion and Beleration impossing rule based restrictions on all for the common goods. In conceptal foundation of a world disheld between chosen's and recipients' children of the control foundation of a recipient foundation of a belief to the control foundation of the children of the childre

U.S. President Donald Trump is not whimsics the is responding to a more equal world moving out of the colonial frame that is attempting to out of the colonial frame that is attempting to the colonial frame that is attempting to countries to subordinate their interests and the way tarfish have been described and defined arbitrarily based on trade imbalance intrudes into how rantonial laws shorted and the colonial countries to the colonial colonial countries of the colonial col

A post-WTO frame The 'breakup' of the G7 and G20 now leaves global agenda-setting open. Since 2020, the U.S China, the European Union and India base together contributed nearly three quarters of growth, with the U.S. and China accounting for almost half. There is also a decline in the relativ power of the U.S. Russia has become an Asian power, increasing energy links with China and

India.

Asia will soon again have two-thirds of globa wealth and power (as had been the case throughout civilisation except for the age of colonialism). Geopolitics has returned to its



natural state of co-existence sharing prosperity, India has to be strategic to graps new opportunities with the 'dismantling' of the WTO for its tise. The U.S. and China are pretry much each balanced in terms of influence, trade, technolog defensive military capacity and playing till off-ort on aird fevels. The challenge is to manager and redominism with the U.S. publing its agricultural a superpolation of the challenge of the part of par

statement of Prime Minister Navendra Mod that this is the Asian Century. The turmod within the Association of Southeart Asian Nations (ASEAN) is Association of Southeart Asian Nations (ASEAN) is common market, with faltered concessions to dature prosperity. As the WTO's 'most-favoured' antaron' clause of non-discrimination withers propose a new cooperative architecture to ASEAN and the African Union, as their potential consumption will exceed current consumption in India's world-feeds neglionaries should be given

India's world-class diplomats should be given the task of conting up with a new type of principles of global governance for a more equal world. Gaining from global value chains that are dependent more on technology than on tariffs requires lying out a new type of rules that reduce non-tariff barriers and treat linkages between goods, services, investment and infrastructure up pur of composite agreements, with a review of national impacts animally.

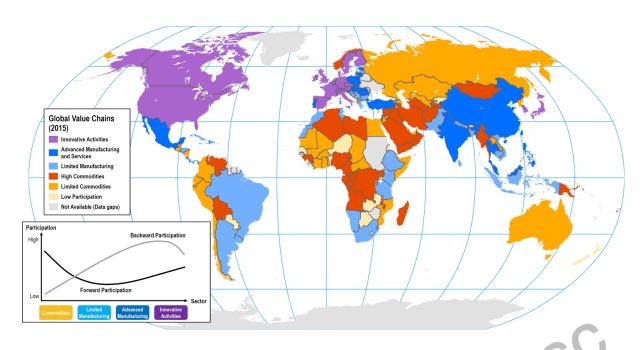
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Lesson from China The most important lesson in China re-emergence is national consensus

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### □ The Shift from Trade Routes to Global Value Chains

Unlike the past, where trade routes defined economic power, we are now witnessing a transformation in global value chains.

- □ These chains are being reshaped by force, and India must adapt to this new reality. The question is, how can India position itself to benefit from these changes?
- □ The Post-Colonial Order and Globalization

  For the past 75 years, the post-colonial order has been characterized by globalization, which imposed multilateralism and rule-based restrictions for the common good. However, this framework is becoming obsolete.

□ The rise of China as a dominant player has shifted the dynamics, leaving traditional institutions like the World Trade Organization (WTO) and the United Nations struggling to maintain relevance. The Rise of China China's emergence as a global powerhouse has changed the game. □ It has overtaken the United States in terms of manufacturing and global trade, leading to a re-evaluation of the global economic order. This shift has significant implications for India, which must now navigate a world where China is a key player. The Decline of Traditional Institutions As the U.S. withdraws from its leadership role, the G-7 and G-20 are losing their grip on global agenda-setting. □ This vacuum presents an opportunity for India to step up and assert its influence on the world stage. The New Trade Reality □ The WTO framework is disintegrating, replaced by bilateral and often unequal trade deals.

□ Tariffs and trade rules are now used as tools of
power, not fairness.
□ India must act strategically to benefit from the
restructuring of global trade—just as China
leveraged WTO entry.

#### The Role of the G-7 and G-20

□ The recent fragmentation of the G-7 and G-20 highlights the need for new alliances and partnerships. India must seize this moment to forge relationships that can help shape a more equitable global order.

#### The New Global Landscape

□ As we move forward, the balance of power is shifting. The U.S. and China are now evenly matched in terms of influence, trade, and technology. India must find its place in this new landscape, leveraging its strengths to build a prosperous future.

#### The Balance of Power

□ With Russia emerging as a significant player in
Asia, the geopolitical landscape is evolving.
□ India has the opportunity to strengthen its ties
with both China and Russia, creating a more
balanced approach to international relations.
The Emergence of Asia
□ Asia is on the brink of reclaiming its historical
position as a center of global wealth and power.
□ India must be strategic in its efforts to collaborate
with other Asian nations, particularly in the context
of the Association of Southeast Asian Nations
(ASEAN).
India's Strategic Opportunities
_ To capitalize on those changes. India must adopt
<ul><li>□ To capitalize on these changes, India must adopt a strategic approach.</li></ul>
□ This includes building new alliances and
fostering technological innovation.
□ The future of global trade will depend on
technology, and India has the potential to lead in
this area.

proposals.

## **Building New Alliances** □ India should propose a new cooperative architecture with ASEAN and the African Union, focusing on shared prosperity. □ As traditional trade agreements lose their relevance, India can position itself as a leader in creating new frameworks for collaboration. The Importance of Technological Innovation □ Technological innovation is crucial for India to regain its competitive edge. □ By investing in research and development, India can harness its vast human resources and data to drive growth and innovation. **Need for Strategic Foreign Policy Shift** India's foreign policy has historically focused more on tactics and diplomacy, not economic strategy. □ Time to shift from UN-centered diplomacy to economic and technological diplomacy. □ Encourage trade-focused diplomacy, tech partnerships, and global governance reform

#### **Emphasizing Innovation and Technology**

- □ Unlike China, India once led in software but lost momentum.
- China now leads in hardware and is catching up in Al and semiconductors.
- India must:

- Leverage its digital infrastructure (like Aadhaar and UPI),
- Develop open-source Al models,
- Drive academic-industry partnerships, and
- Regain its technological edge through national consensus and grand challenges.

#### **Lessons from the Past**

□ The need for national consensus on economic policies is paramount. Political parties must come together to focus on nurturing talent and skills development.

#### The Need for National Consensus

□ To achieve prosperity, India must prioritize
 collaboration between political parties and states.

□ This consensus will enable the country to harness its potential and regain its status as a global leader.

#### The Role of Education and Skills Development

- □ Investing in education and skills development is essential for India's future.
- □ By fostering a culture of innovation and entrepreneurship, India can create a workforce that is equipped to thrive in the digital age.

#### Strategic Lessons from China

- China's success lies in endogenous development—not copying the West.
- India should prioritize:
  - Patent creation (as a better future prosperity indicator than GDP),
  - Affordable electricity (as a key enabler of economic growth),
  - Skills and employment development,
  - Al and cyber power leadership

#### Conclusion

India stands at a critical juncture, much like the

Zamorin of old. The choices made today will shape the future of the nation. By embracing strategic thinking, fostering innovation, and building new alliances, India can navigate the complexities of the modern world and emerge as a global leader.

Q "The 21st century belongs to Asia, but only if Asian powers rise together." Discuss India's role in shaping a cooperative Asian economic and geopolitical architecture (250 Words)

### **Topic** → **Strengthening Parliamentary Oversight in India**

#### Strengthening parliamentary oversight in India







#### **Background**

□ The Constituent Assembly, after intense debates, chose the parliamentary system for India.

□ Dr. B.R. Ambedkar defended this system for offering "more responsibility and less stability," ensuring daily and periodic accountability of the executive. The Importance of Legislative Oversight Checks and Balances in the Constitution ¬ While the Constitution enshrines checks and balances, legislative oversight has often been diminished. □ Efficiency in governance is crucial, but not at the cost of transparency. Strengthening the role of Parliament in scrutinizing executive action is essential for not just making laws but also ensuring their effective implementation and accountability. The Need for Transparency If India seeks 'Maximum Governance', it must also commit to 'Maximum Accountability', starting with an empowered and effective Parliament. This is where the real challenge lies—ensuring that the mechanisms of accountability are not just in place but are actively functioning. **Mechanisms of Accountability in Parliament Question Hour and Zero Hour** 

□ Over decades, Parliament has developed an array of
mechanisms to fulfill this mandate—some formal, some
by convention.
□ From the daily scrutiny of Question Hour to the
spontaneity of Zero Hour, these tools form the
framework of accountability.
□ In theory, they empower Members of Parliament
(MPs) to ask probing questions, seek detailed
information, and even move a no-confidence motion if
necessary.

#### **Standing Committees**

- Parliamentary committees, including the
   Department-related Standing Committees (DRSC),
   meet regularly and generate detailed reports.
   However, these reports are often not taken up for
- discussion on the floor, limiting their influence on legislation or executive action.

#### **Current Challenges**

- Oversight mechanisms, though constitutionally enshrined, are often weakened in practice.
- Question Hour is frequently disrupted; in the 17th Lok Sabha, it functioned only 60% of scheduled time (52% in Rajya Sabha).

- Parliamentary Committees like DRSCs submit detailed reports, but:
  - Their findings are rarely debated in the House.
  - Limited stakeholder consultation and short tenures affect effectiveness.
  - MPs lack technical expertise and research support.

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#### Success Stories of Legislative Oversight

#### **Notable Recommendations**

- □ Even with its inconsistencies, Indian legislative oversight has had notable successes.
- □ For instance, the Standing Committee on Railways recommended waiving dividend payments by Indian Railways in 2015 to improve its financial health, which was implemented in 2016.

#### The Role of the Public Accounts Committee

- □ The Public Accounts Committee (PAC) has also made significant contributions, exposing critical delays and corrupt practices during events like the Commonwealth Games in 2010.
- On average, the PAC has made 180
   recommendations every year in the past eight years,
   with 80% accepted by the government

#### **Proposed Reforms**

- Post-legislative scrutiny: Assess law implementation and impact, as practiced in the UK.
- 2. Strengthen committees:
  - Create sub-committees for follow-up.
  - Mandate debates on select reports in Parliament.
  - Provide dedicated research and technical staff.
- 1. Enhance accessibility:
  - Translate reports into regional languages.
  - Use infographics, short videos, and public summaries.
- 1. Use technology:
  - Employ Al and data analytics to help MPs track budgets, policy outcomes, and irregularities more effectively.

#### Conclusion

Strengthening legislative oversight means honoring the mandate citizens have given their representatives. It's about ensuring that the machinery of government stays transparent, accountable, and truly "of the people, by the people, and for the people." As we move forward, it's crucial to remember that a robust democracy thrives on active participation and accountability.

#### Q "Accountability is the cornerstone of democracy."

Examine the role of legislative oversight in strengthening democratic governance in India.(150 Words)

#### Q "Maximum Governance demands Maximum

Accountability." Discuss how the Indian Parliament can be reformed to ensure transparent and responsible governance(150 words)

Q Despite constitutional mechanisms, legislative oversight in India remains weak. Critically examine the factors contributing to this weakness and suggest ways to enhance parliamentary scrutiny. (250 words)

### **Topic** → **Uncontrolled Reentry of Soviet-Era Kosmos** 482 Spacecraft

#### Soviet-era spacecraft set to plunge to Earth half-century after failed launch

Associated Press CAPE CANAVERAL

CAPE CANAVERAL

A Soviet-era spacecraft meant to land on Venus in the 1970s is expected to soon plunge uncontrolled back to Earth, possibly within the first two weeks of May.

It's too early to know where the half-ton mass of metal might come down or how much of it will survive reentry, according to space debris-tracking experts.

Dutch scientist Marco Langbroek predicts the failed spacecraft will reenter around May 10. He estimates it will come crashing in at 150 mph (242 kph), if it remains intact.

"While not without risk, we should not be too worried," Mr. Langbroek said in an email. The object is relatively small and, even if it doesn't break apart, "the risk is similar to that of a random meteorite fall, sev-



1972, one of a series of Venus missions. PT

eral of which happen each

eral of which happen each year. You run a bigger risk of getting hit by lightning in your lifetime, "he said.

The chance of the space-craft actually hitting someon or something is small, he added. "But it cannot be completely excluded."

The Soviet Union launched the spacecraft known as Kosmos 482 in 1972, one of a series of Venus missions. But it never

made it out of Earth orbit made it out of Barth orbit because of a rocket mal-function. Most of it came tumbling down within a decade. But Mr. Langbroek and others believe the landing capsule itself—a a spherical object about 3 feet (I meter) in diameter— has been circling the world in a highly elliptical orbit for the past 53 years, gra-dually dropping in altitude.

It's quite possible that the L000-pound-plus (nearly 500-kilogram) spacecraft will survive reentry. It was built to withstand a descent through the carbon dioxide-thick atmosphere of Venus, said Mr. Langbroek of Delft University of Technology in the Netherlands.

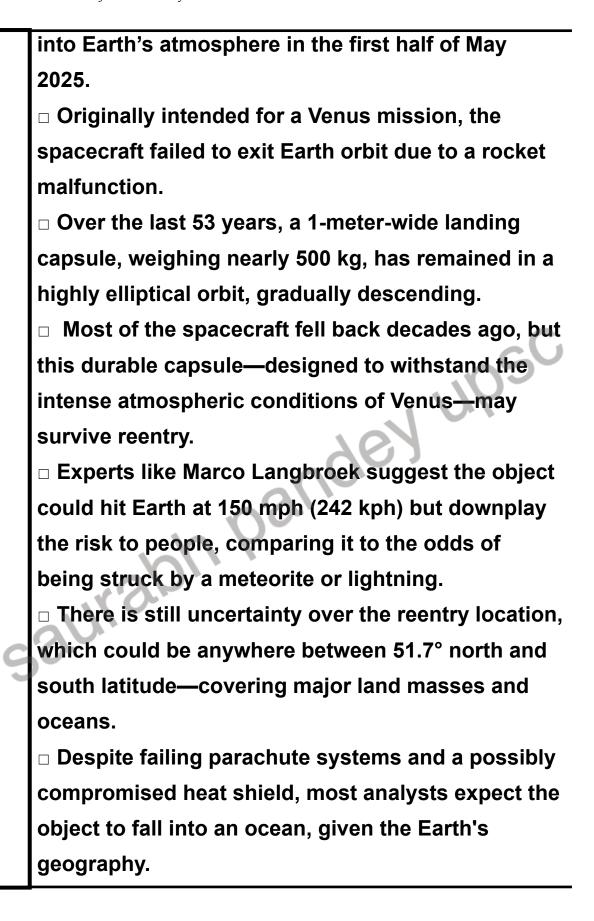
Experts doubt the parachute system would work after so many years. The heat shield may also be compromised after so long

compromised after so long in orbit.

The spacecraft could reenter anywhere between 51.7 degrees north and south latitude, or as far north as London and Ed-monton in Alberta, Cana-da, almost all the way down to South America's down to South America's Cape Horn. But since most of the planet is water, "chances are good it will in-deed end up in some ocean," Mr. Langbroek said.



□ A Soviet Venus lander, Kosmos 482, launched in 1972, is expected to make an uncontrolled reentry



□ The event highlights the long-term hazards of space debris and the need for better tracking and disposal strategies for aging satellites.



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