

# Space debris issue worsens, to delay future expeditions

Fragment numbers that can destroy spacecrafts has more than doubled in less than quarter of a century



## 28,000

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PARIS: Scientists sounded the alarm on Tuesday over the problems posed to space missions from orbital junk — the accumulating debris from mankind's six-decade exploration of the cosmos. In less than a quarter of a century, the number of orbiting fragments large enough to destroy a spacecraft has more than doubled, a conference in Germany heard. And the estimated tally of tiny objects — which can harm or degrade spacecraft in the event of a collision, and are hard to track — is now around 150 million. "We are very much concerned," said Rolf Densing, director of operations at the European Space Agency (ESA), pleading for a worldwide effort to tackle the mess. "This problem can only be solved globally."

Travelling at up to 28,000 kilometres (17,500 miles) per hour, even a minute object impacts with enough energy to damage the surface of a satellite or manned spacecraft. In 1993, monitoring by ground-based radar showed there to be around 8,000 manmade objects in orbit that were larger than 10 centimetres across, a size big enough to inflict catastrophic damage, said Holger Krag, in charge of ESA's space debris office. "Today, we find in space roughly 5,000 objects with sizes larger than 1 metre, roughly 20,000 objects with sizes over 10 centimetres... and 750,000 'flying bullets' of around one centimetre."

### FACT OF THE MATTER

