



## The Final Frontier Flash



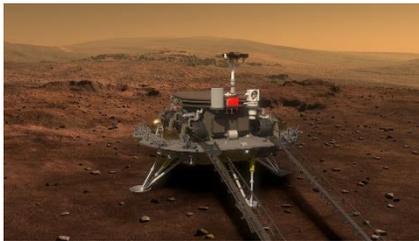
### Russia just tested satellite-destroying tech in space, US Space Command claims

- On July 15th, a Russian satellite called Kosmos 2543 released an unknown object into orbit...the object was released near another Russian satellite.
- There was no kinetic impact and no debris.
- Kosmos 2543 itself was deployed from Kosmos 2542

in December 2019. 2543 then released a "grandbaby" object on 15 July.

- [Kosmos 2543 previously "stalked" a US National Security satellite.](#)

**"The Russian satellite system used to conduct this on-orbit weapons test is the same satellite system that we raised concerns about earlier this year, when Russia maneuvered near a U.S. government satellite" — Gen Raymond**



### China successfully launches interplanetary mission to Mars with rover in tow

- China's first major mission to Mars: Tianwen-1
- Tianwen-1 contains an [orbiter, lander & rover](#)...launched on Long March 5 from Wenchang
- The orbiter will map and image Mars from above.
- If the rover and lander survive their landing,

the lander will act as a delivery platform and provide a ramp for the rover to roll away and traverse the Martian terrain.

**This is one of THREE separate Mars expeditions launched this month (UAE and the USA being the others). July 2020 provides [optimal orbital conditions](#) for sending probes from Earth to Mars. These conditions persist for 1-2 months and only occur every 2 years. If China's landing is successful, it will have pulled off a feat that only NASA has mastered, elevating the nation into an elite tier of the global space community.**

[Click for Chinese Video History of Beidou](#)



### China Completes Beidou Global Navigation System:

- Chinese President Xi announced the completion of the BeiDou-3 GNSS on 31 July 2020.
- 48 Satellites: 42 Operational + 6 Test
  - 6 in Geo-Stationary Orbit (GEO)
  - 10 in Inclined Geo-Stationary Orbit (IGSO)
  - 26 in Mid Earth Orbit (MEO)

- [5 meter accuracy in Asia-Pacific region & 10 meter accuracy globally](#)

- Beidou offers short message communication of up to 1,200 Chinese characters and the ability to transmit images

- Key to China's success was its development of rubidium atomic clocks

**BEIDOU is a key component to [China's BELT and ROAD Initiative](#): marketed as an alternative to GPS to better serve the economic and social development in Belt and Road countries and regions.**

**For China, among the chief advantages of the system is the ability to replace GPS for guiding its missiles, especially important now amid rising tensions with Washington.**