



INTEGRITY *ISR*

6 August 2020

The Final Frontier Flash



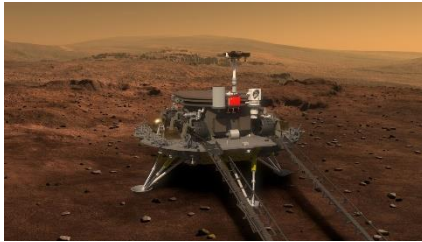
Russia just tested satellite-destroying tech in space, US Space Command claims

- 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.