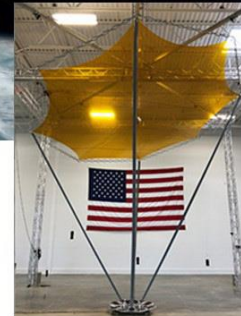
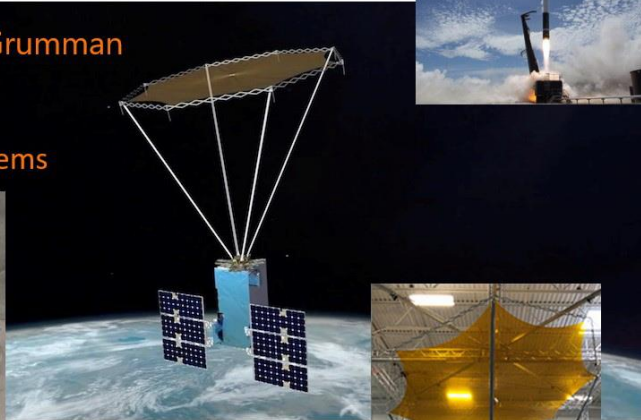
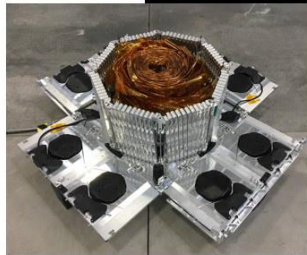


R3D2 SAR Small Satellite with Trident System Instrument launched in March 2019



Trident Systems Merits in Space

Prime constructor **Northrop Grumman**
Spacecraft Bus **Blue Canyon**
Antenna Design **MMA**
S/W-defined Radio **Trident Systems**



R3D2 satellite, **150 kg**, launched by Rocket Lab, into a **425-km**-high orbit, on March 28, 2019.

The mission is to demonstrate low-cost, rapid-deployment space operations: **18 months** from satellite design to launch, **\$6.5 million** launch cost.

[Electron launches DARPA R3D2 mission](#)

Competition Sensitive Information / Trident Pacific Proprietary

DARPA's Radio Frequency Risk Reduction Deployment Demonstration (R3D2) is set for launch in late February to space-qualify a new type of membrane reflectarray antenna. The antenna, made of a tissue-thin Kapton membrane, packs tightly for stowage during launch and then will deploy to its full size of 2.25 meters in diameter once it reaches low Earth orbit.

The launch will take place on a Rocket Lab USA Electron rocket from the company's launch complex on the Mahia Peninsula of New Zealand. Northrop Grumman is the prime contractor and integrated the 150 kg satellite; MMA Design designed and built the antenna. Trident Systems designed and built R3D2's software-defined radio, while Blue Canyon Technologies provided the spacecraft bus.

<https://www.space.com/darpa-experimental-r3d2-satellite-construction.html>