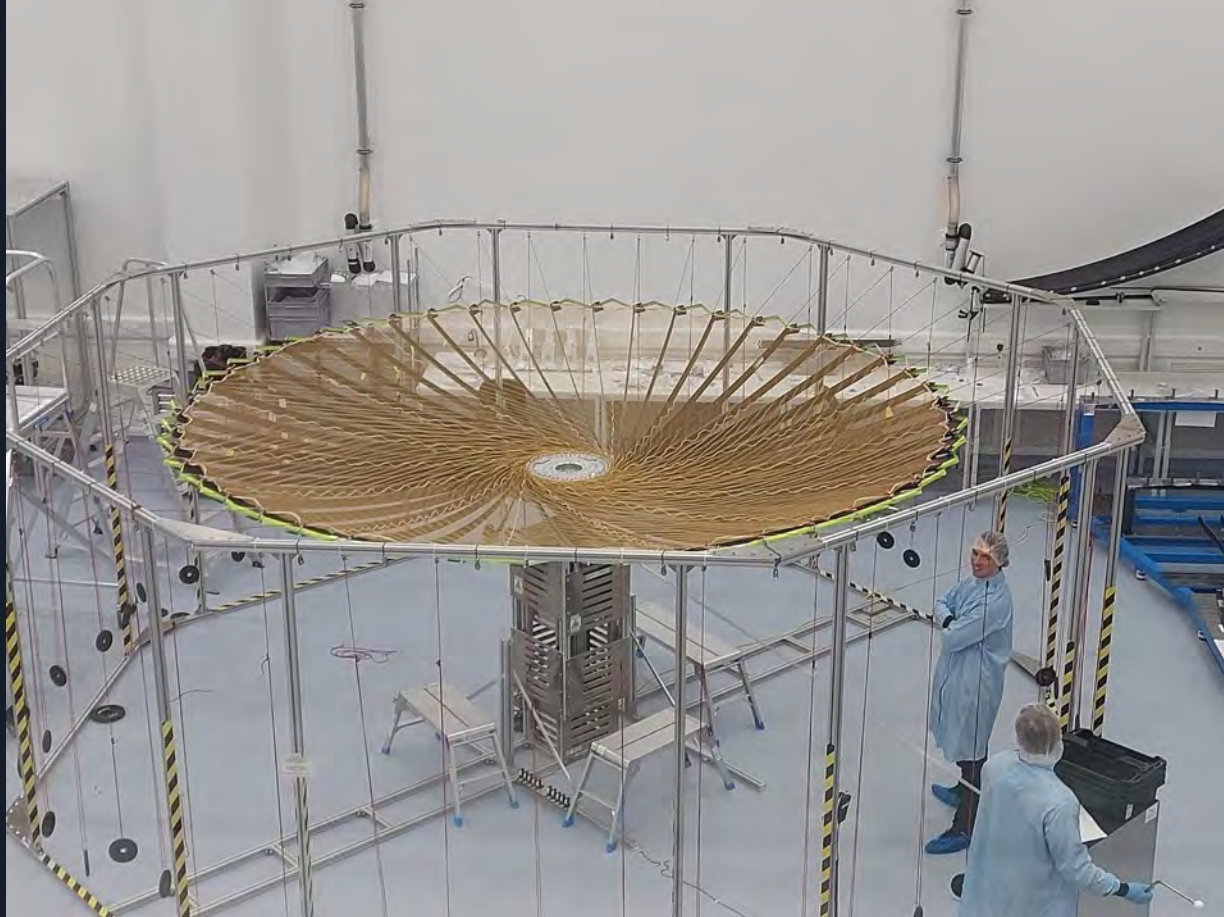
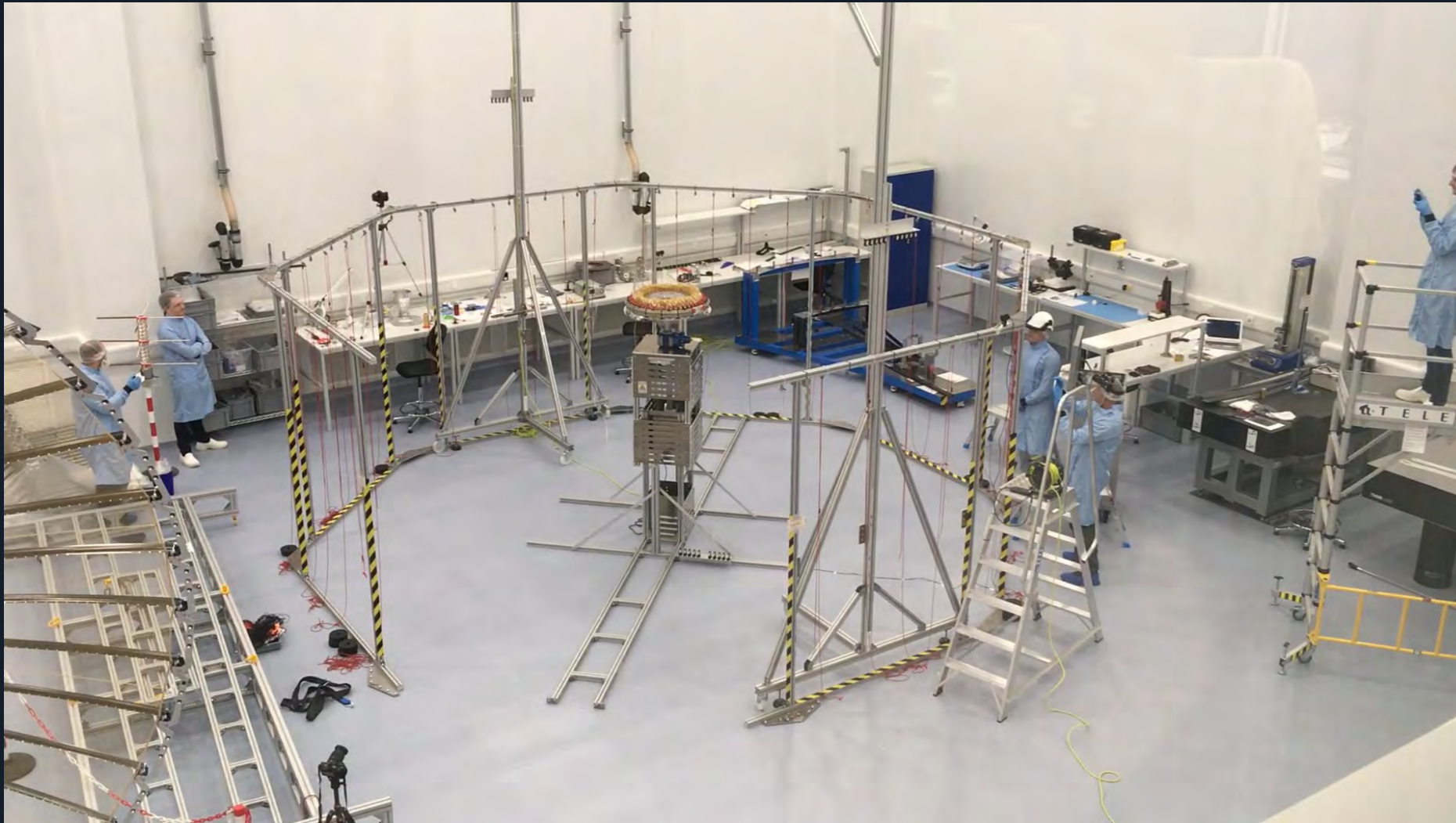


WRA STOWING



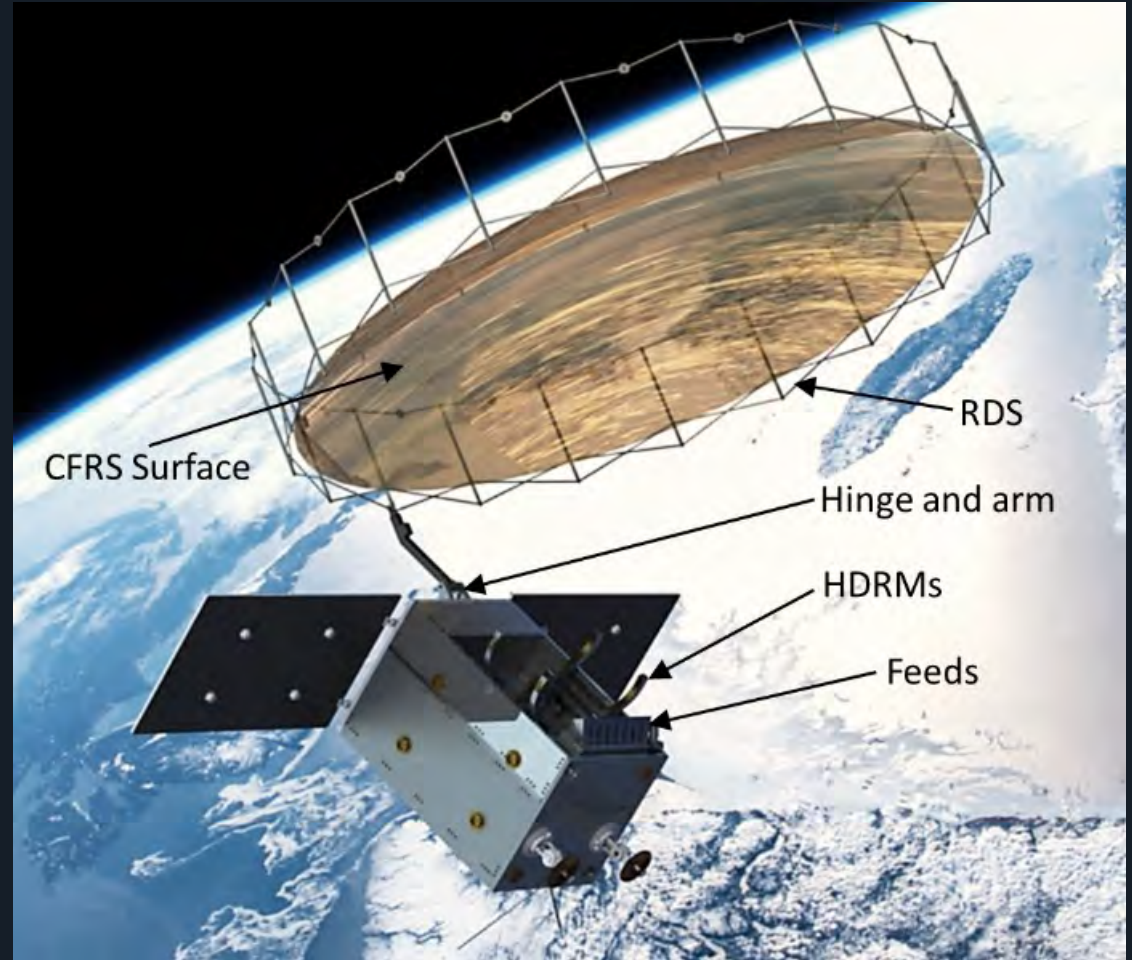
3M WRAPPED RIB EM DEPLOYMENT TEST



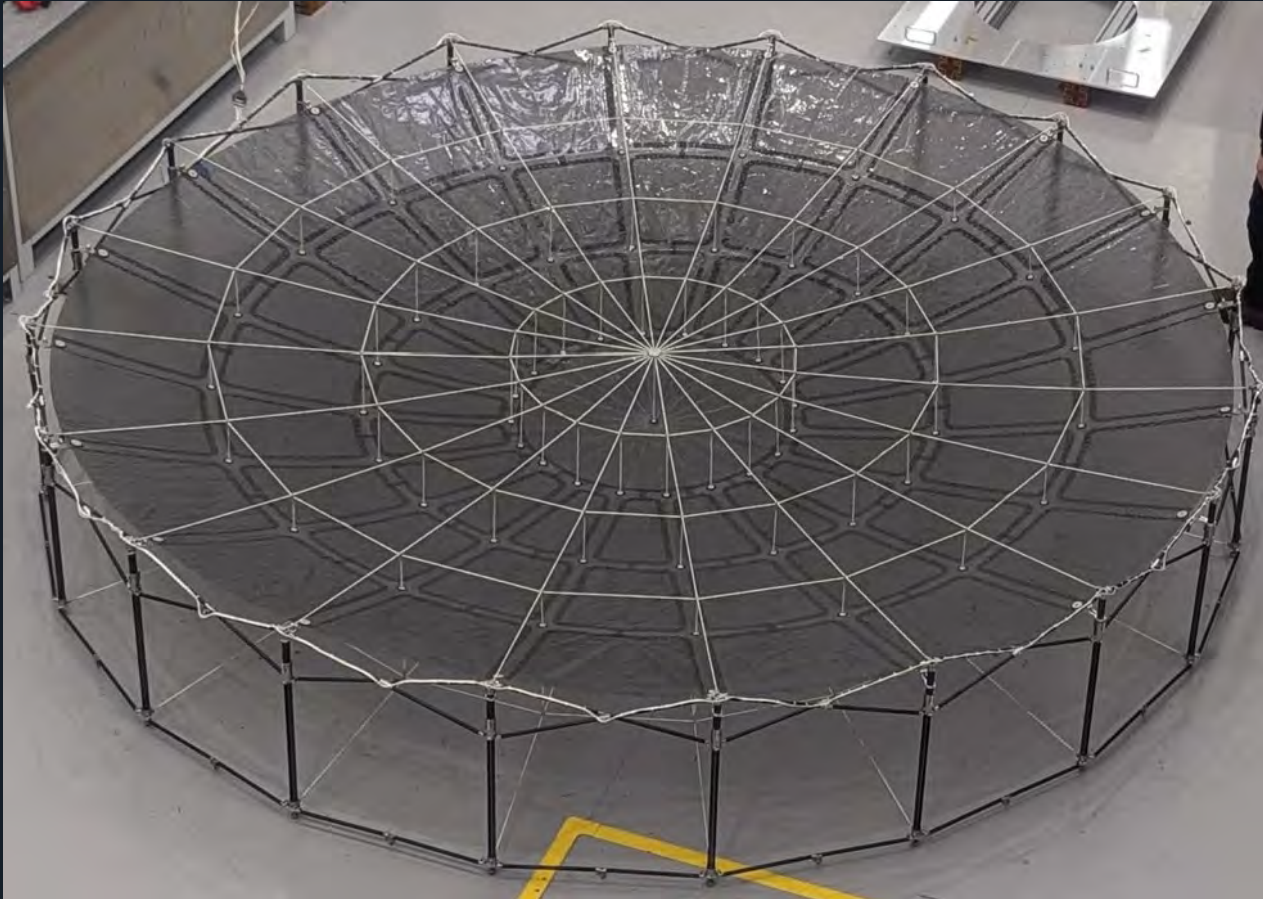
DEPLOYABLE OFFSET REFLECTOR

KEY FEATURES

- › Scalable design
 - › Smallsat compatible
 - › Customisable architecture and configuration
 - › High Gain/surface accuracy
 - › Baseline C-band SAR design for maritime surveillance
- › Design features
 - › Pre-shaped composite membrane surface
 - › Arm or boom deployment
- › Flight contracts in progress, flight target early 2026



REFLECTOR ASSEMBLY (RDS, MEMBRANE, CABLE NETWORK)



› Features

- › Carbon fibre reinforced silicone parabolic membrane
- › RF transparent cable network

› Testing

- › DM deployment ✓
- › DM entanglement test – leading to design improvements
- › EM motorised deployment ✓
- › EM thermal cycling at -20° - 50° ✓

REFLECTOR DEPLOYMENT STRUCTURE (RDS)

› Features

- › Carbon fibre reinforced polymer members
- › Titanium joints
- › 20 facets
- › Motorised deployment

› Testing

- › Active member sine and random vibration ✓
- › Active member thermal vacuum ✓
- › Modal (including cable network) 3.92Hz ✓
- › Motorised deployment ✓



EM stowed RDS

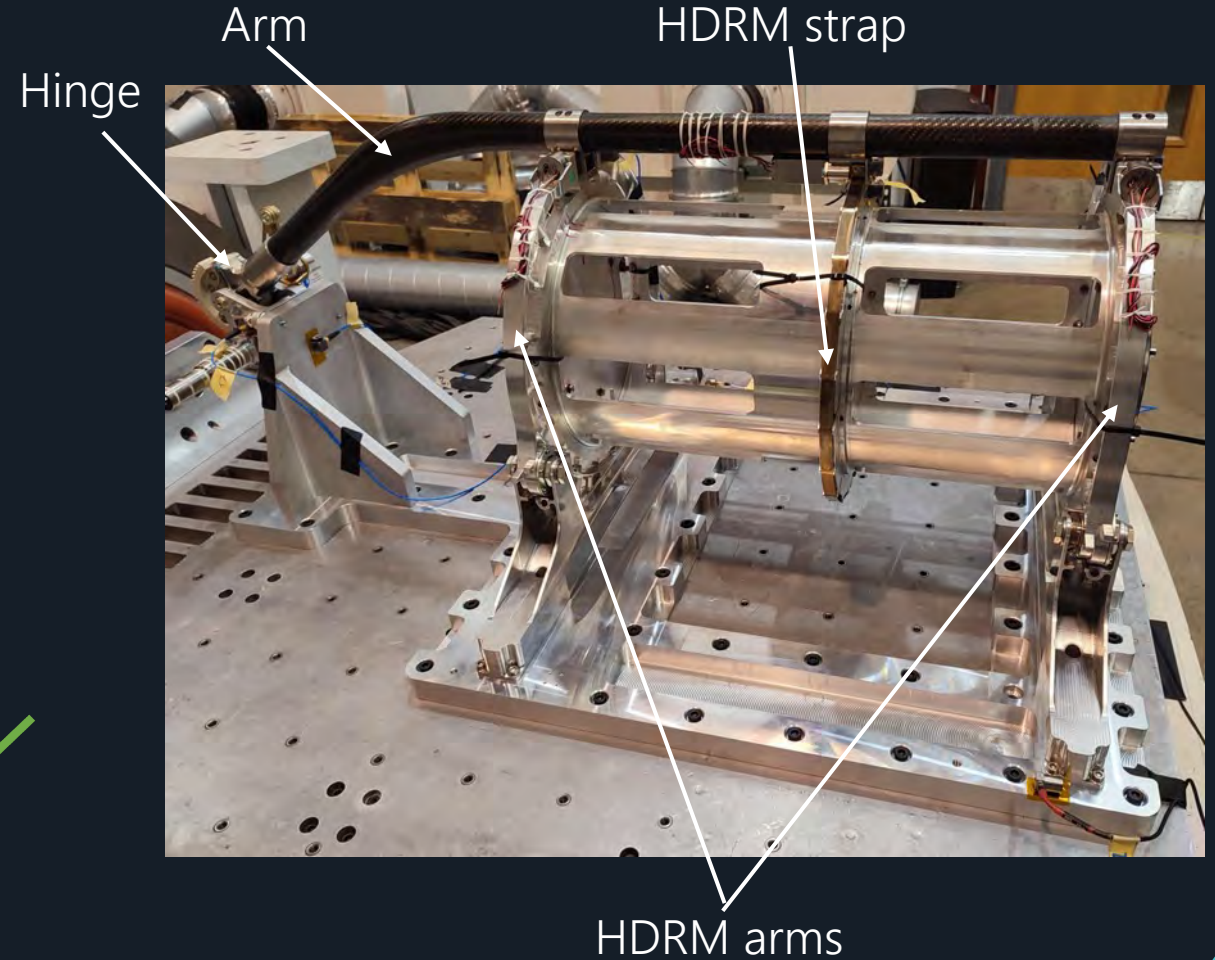
HOLD DOWN RELEASE MECHANISMS (HDRM)

› Features

- › Two main HDRMs with spring loaded arms
- › Secondary HDRM with a spring strap
- › Release by actuators

› Testing

- › Functional tests of both types of HDRMs ✓



Dummy antenna with hinge, arm and HDRMs

WHAT NEXT?

➤ SAR

- Push the aperture to 6m+
- Push the frequency (up to Ka, down to L)
- Explore bistatic/multistatic imaging
- Future Earth Explorers on GEO SAR

➤ Radar instruments

- Anything that needs high gain from a Microsat

➤ Booms for magnetometers



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CONTACT US

HARWELL SPACE CLUSTER
HARWELL OX11 0RL
UNITED KINGDOM

explore@oxford.space
+44 (0) 1235 425 840

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