



Science & Technology  
Facilities Council



# Welcome to the Appleton Space Conference



**Dr Chris Mutlow**  
Director STFC-RAL Space

# Lecture Theatre Safety

**FIRE**

**Bells Ring**

**Leave building;  
go to assembly point -  
car park outside front**

**Security**

**Dial x 5545 (01235 445545)**

**First Aid**

**Dial x 2222 (01235 778888)**

**Fire**

**Dial x 2222 (01235 778888)**



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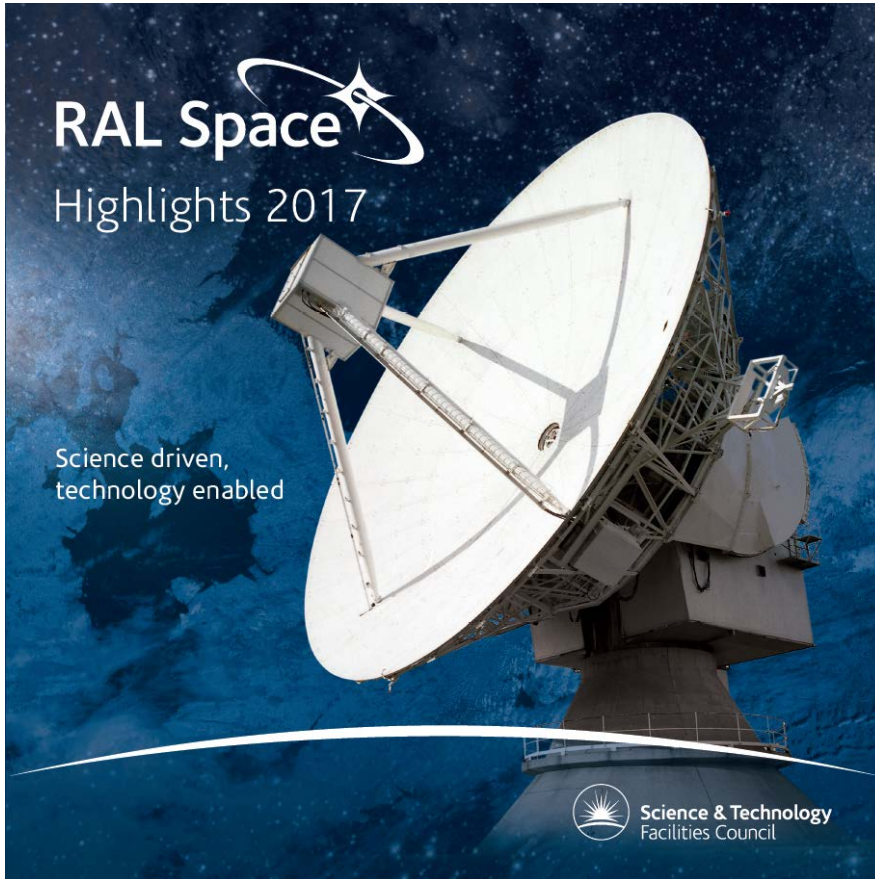
**Follow us on twitter @RAL\_Space\_STFC**

**Join the conversation today**

**#SpaceConf2017**

**Please switch mobile phones to silent**

# RAL Space Highlights 2017



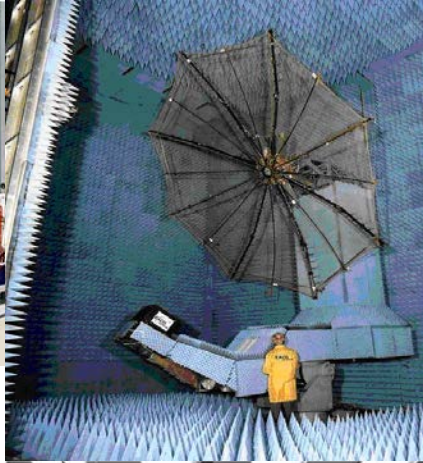
- First time we have produced this a document in this format
- Newly published for this year's Appleton Space Conference - released today!
- Designed to show our community the breadth of our programme.
- Please give us your feedback?

# National Satellite Test Facility

*being built with £99M funding from Industrial Strategy Challenge Fund*

- The current lack of vital space testing infrastructure in the UK results in a gap and impediment to sector growth that the National Satellite Test Facility project will address through to achieving the 2030 economic target.
- The NSTF will, by providing underpinning facilities and skilled staff, establish a solid foundation upon which UK industry can competitively bid for national and international satellite and associated infrastructure contracts; themselves the basis for development of further new service value propositions for public and private sector.
- All facilities will be sized to take the spectrum of satellite sizes up to 7 tonne spacecraft; covering nano-sat / cube-sats, constellations through to large communications and science satellites and payloads
- NSTF will be capable of supporting the UK's low-cost launch programme as needed
- Provide capability directly in the UK post-BREXIT
- From conservative estimates of usage, the Economic Case for the NSTF results in a direct NPV of £290M and a resulting NPV/DEL ratio of 3.9; once established the running costs will be fully met by usage charges paid by industry users.





### Examples of the test facilities we will have:

- Clean Rooms for large satellite preparation & Solar Array Deployment
- Centre of Gravity and moments of inertia
- Vibration, Pyro Shock, and Acoustic
- Thermal Vacuum Chamber
- EMC and a Compact Antenna Test Range



To meet the growth needs of the UK Space industry both large and small





# National Satellite Test Facility at Harwell Campus



**Open for business Late spring / Early Summer 2020**