



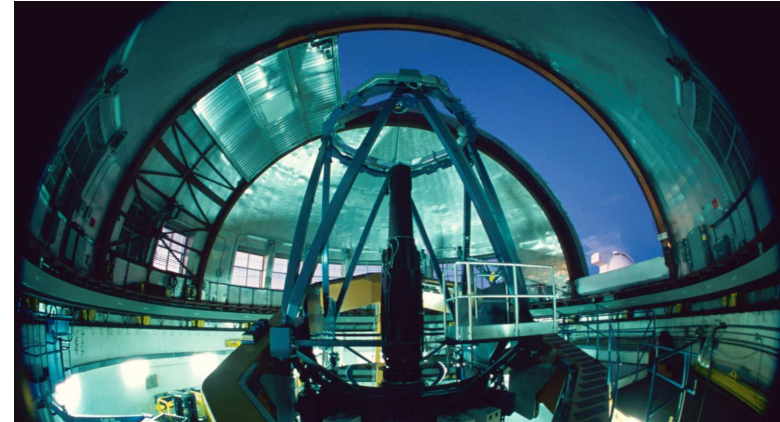
Science & Technology Facilities Council

# UK Astronomy Technology Centre



## Who we are

The UK ATC is the national centre for astronomy technology, located in Edinburgh. We design and build instruments for many of the world's major ground and space-based telescopes

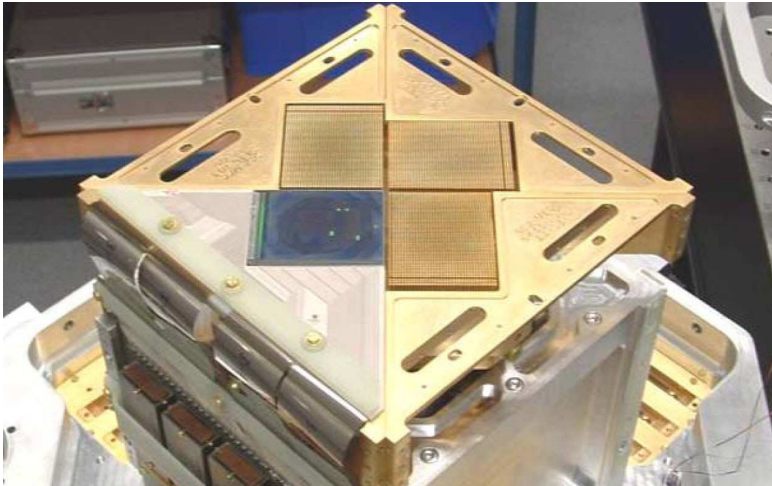


## Expertise

- IR and visible optical systems
- Optomechanical systems
- Instrument and mechanism control
- Precision engineering for extreme environments
- Data capture and analysis
- Precision Assembly
- System modelling

# ATC seeks partners for developing two technologies for defence

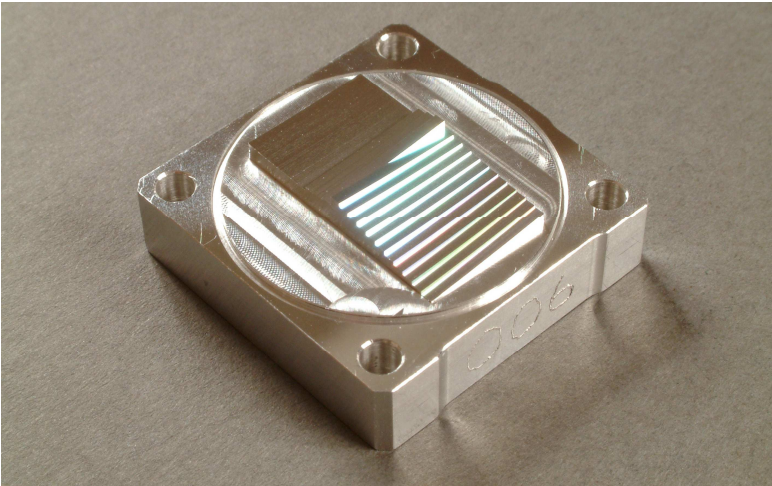
**THz detector array  
for homeland security**



Sensitive array based THz (sub-mm) detector provides order-of-magnitude faster imaging for concealed object detection

1280 Pixel array  
NEP  $\sim 10^{-17}$  W Hz<sup>-1/2</sup>  
Current wavelength 450 or 850  $\mu$ m

**Image slicers  
for hyperspectral imaging**



Machined image slicers allow highly efficient simultaneous spectral and spatial imaging in the IR.

21 slices  
Diffraction limited performance  
Wavelength 2-30  $\mu$ m

