The UK Civil Aviation Authority
The UK's independent Spaceflight Regulator

The approach to Regulation of UK activities

29 March 2022
UK spaceflight regulator

- 29 Jul 2021 the CAA became the UK spaceflight regulator
- Our independent status separates safety regulation of spaceflight activities from sector promotion
- In line with the lessons learned from the Piper Alpha disaster
- Single point of contact for all matters related to spaceflight safety regulation
- Strong track record in overseeing the aviation sector in the UK, one of the safest in the world
- Prior experience in regulating rocket activities under the Air Navigation Order 2016.
Our team
Activity scope

- Spaceport
- In orbit
- Range
- Launch
UK space legislation

- **The Outer Space Act 1986 (OSA)** applies to UK nationals and UK companies intending to launch or procure the launch of a space object or operate a space object outside the UK.

- **The Space Industry Act 2018 (SIA)** applies to anyone intending to carry out space activities, sub-orbital activities, and associated activities in the UK.

- **The Air Navigation Order** applies to the launch of a vehicle in the UK that is not capable of operating above the stratosphere.

- The CAA became the UK’s independent space regulator on 29 July 2021.
Regulatory model for launch

**APPLICANT / LICENSEE**
- Engage
  - Initial engagement
  - Determine readiness to apply
- Authorise
  - Prepare application
    - Organisation information
    - Eligibility Criteria
    - Assessment of Environmental Effects (AEE)
    - Construct Safety Case
- Authorise
  - Assess application
    - Engage with applicant
    - Review, analyse, test, inspect
    - Challenge data & assumptions
    - Request re-work / more information
  - Grant licence
    - Scope of permissions
    - Conditions
- Authorise
  - Monitor
    - Perform regulated activities
    - Co-ordinate licensed actors
    - Comply with Regulator directions
    - Notify and report
  - Enforce
    - Monitor operator readiness
    - Monitor compliance
    - Inspect duty holder
    - Put duty holder on notice
    - Direct or suspend activity
    - Revoke licence

**REGULATOR**
- Guideline, Legislation & Regulations
- Engage
  - Initial engagement
- Authorise
  - Prepare application
  - Authorise
  - Monitor
  - Enforce
In orbit – licensed by satellite

Licence assessment based on:

• Application form
• Financial information
• National security question set
• Technical question set for safety and sustainability
• Safety case required for novel proposals
• Cyber security strategy

Ongoing monitoring
Annual health check
Launch – licensed by operator

Licence assessment based on:
- Application form
- Financial information
- Safety case
  - Ground safety analysis
  - Flight safety analysis
  - Safety management system
- Security programme
- Cyber security strategy
- Assessment of environmental effects

Licence

- Ongoing monitoring
- Notifications prior to launch
- Safety case review and revision before significant changes are implemented
Central role of the safety case in the licensing process

- Written demonstration of ALARP
- Organisation risk controls identified/implemented
- Operational risk controls identified/implemented
- Major accident hazards identified
- Safety argument with supporting evidence
- Risks evaluated
- Technical risk controls identified/implemented
Thank you
caa.co.uk/space