

**FREEMAN  
AIR & SPACE  
INSTITUTE**

**KING'S**  
*College*  
**LONDON**

# Postgraduate Air & Space Conference 2025

Wednesday 11 June, 2025



**09:30 - 10:10**

**Registration + Coffee**

**10:10 - 10:20**

**Welcome Address from FASI Co-Directors**

Sophy Antrobus, Wyn Bowen & David Jordan

**10:20 - 11:50**

**Panel 1: Air Power and the War in Ukraine**

Chair: Arun Dawson, PhD Candidate, Freeman Air & Space Institute

- Dezso Wyner: Adaptation and Emulation: The Evolution of Drone Warfare in the Russia-Ukraine Conflict from Bayraktar TB-2s to Fiber Optic Guided FPVs
- Joe Murphy: Recognising the importance and challenges of civilians supporting Ukraine's drone capabilities
- Anton Hahn: On Chances and Limitations: Parameters for a Western Strategy to Rebuild the Ukrainian Air Force
- Yevheniia Horyunova: Russian Military Aviation in Crimea: From the Occupation of the Peninsula to Participation in the Full-Scale War Against Ukraine (Online)

**11:50 - 12:15**

**Coffee Break**

**12:15 - 13:45**

**Panel 2: Space Sustainability: Norms and Vulnerabilities**

Chair: Julia Balm, Research Associate, Freeman Air & Space Institute

- Thomas Colledge: Norm Entrepreneurship in the Sustainable use of Low Earth Orbit
- Jason Allen: Mega-Constellation Vulnerabilities: Cyber-Physical Threats to Dual-Use Space Infrastructure in the New Space Era
- Julian Rittweger and Alexander Edward Aitken Balke: Golden Dome: How America is Risking Nuclear Deterrence by Militarizing the Space
- Ching Wei Sooi: The Regime Governing Outer Space Security – Taking Stock of State Compliance

**13:45 - 14:45**

**Lunch Break**

**14:45 - 16:15**

**Panel 3: Participation in Space: Competition, Policy and Diversity**

Chair: Aleix Nadal, PhD Candidate, Freeman Air & Space Institute

- Molly Doyle: Competition vs Collaboration: Where Does the Outer Space Treaty Fit in Contemporary Space Activity?
- Cameron McColgan and Matt Smith: Small state Spacepower in the Age of Great Power Competition
- Gaby Flouret: The U.S. Space Department
- Julia Bradley: Gender and Outer Space

**16:15 - 16:40**

**Coffee Break**

**16:40 - 17:55**

**Panel 4: The Future of Air Power: Innovation, Ethics, and Decision-Making**

Chair: Sophy Antrobus, Co-Director, Freeman Air & Space Institute

- Jamie Gray: Airborne Early Warning and Control: Suitable for the 21st century?
- Lilie Weaver: Military Decision Making and Artificial Intelligence
- Blythe Crawford: Betablockers – Impediments to scaling military innovation

**17:55 - 18:00**

**Close of conference by FASI Co-Directors & drinks reception**