

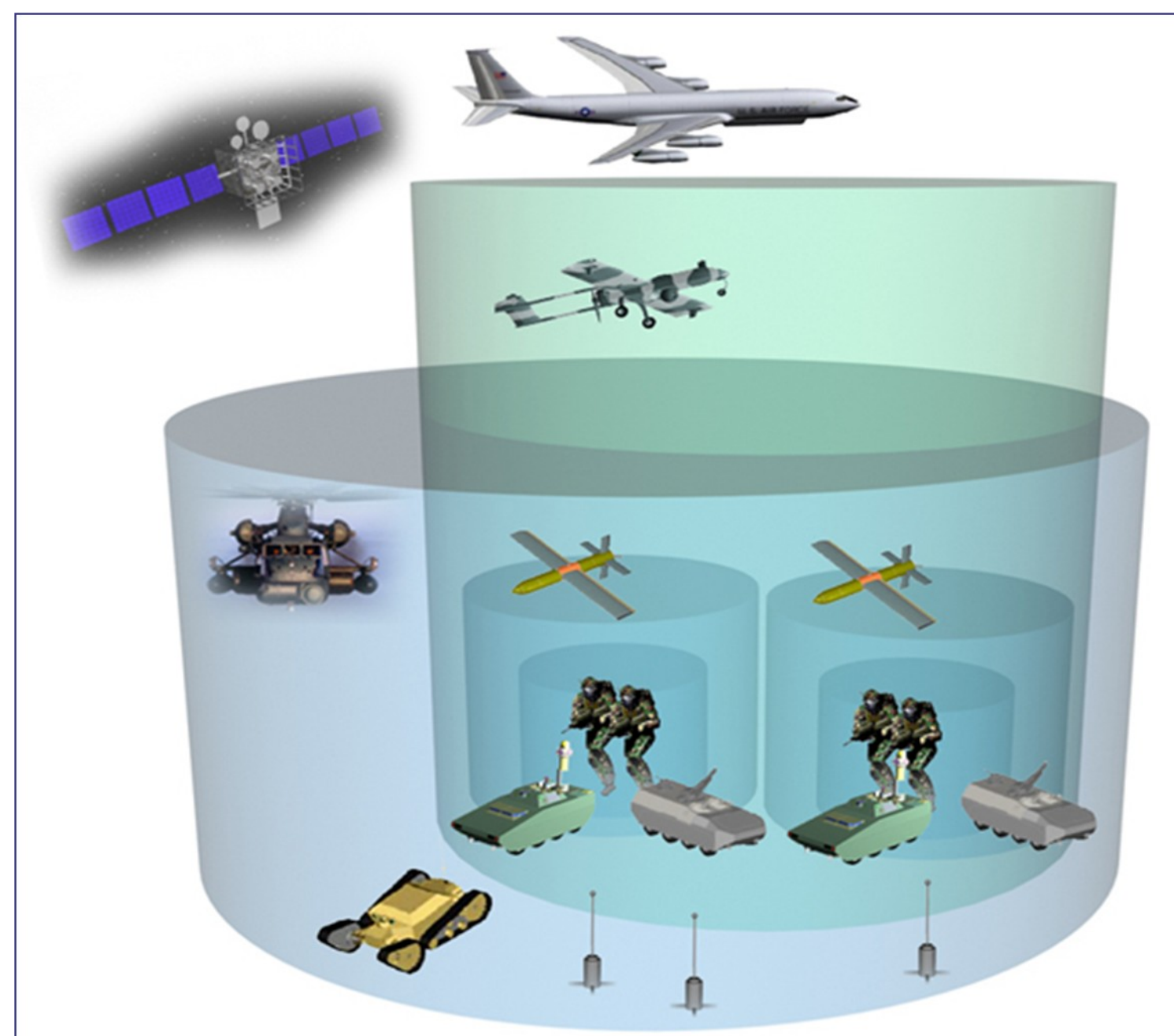
Cybersecurity: Aerospace System-of-Systems

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Defense Intelligence, Reconnaissance, and Surveillance (ISR) Network Cybersecurity

Goal: Analyze and improve cybersecurity of mobile systems in defense ISR networks to improve System-of-Systems performance and robustness



Defense ISR Network Objectives:

- Secure and protect networks from cyberattacks and unauthorized breaches
- Enable net-centricity and information security in a dynamic, mobile environment

System-of-Systems Analysis Objectives:

- Formulate defense ISR SoS model
- Conduct trade studies with an emphasis on improving network robustness and resilience

Integration of Civil Unmanned Aerial Vehicles Into National Airspace System

Goal: Develop methods to integrate civil unmanned aerial vehicles (UAVs) into the National Airspace System (NAS) complex network safely and securely



Typical Civil Unmanned Aerial Vehicle Applications:

- Fire Fighting
- Disaster Relief
- Border Patrol

Objectives of System-of-Systems (SoS) Approach:

- Develop cybersecurity model, anticipate and address possible network vulnerabilities
- Evaluate NAS SoS performance after new UAV integration