



The Stratospheric layer of Deep Sensing & Network Extension

# ZEPHYR

High Altitude Platform System (HAPS)

SENSE DEEP  
EXTEND NETWORKS  
PERSIST FOR MONTHS



**AIRBUS**

**U.S. SPACE & DEFENSE**



# Why U.S. Zephyr is Different

- **Proven in the Stratosphere:** 64 Days & 30,000 NM travelled in a single flight; +150 days total in the stratosphere
- **Precise Maneuverability & Agility** enables operations in complex international airspace without risk of unintended drift into adversary-controlled airspace
- **Closest HAPS to Operational Capability**
- **Over 10 x Zephyr 8B models produced;** Improved Zephyr 8C production model planned for late '24
- **Affordable, Attributable** vs. other larger HAPS options
- **U.S. Based Zephyr Program** with cleared HAPS professionals to support sensitive global USG / DoD missions

## Specifications

- **Dimensions:** 82' wingspan; 165 lbs
- **Endurance:** Current = 64 Days (Goal: Up to 180 Days)
- **Operational Altitude:** Between 60,000 ft - 75,000ft
- **Technology Readiness Level (TRL):** 7
- **System Content:** +60% U.S. components
- **Availability:** On contract supporting U.S. DoD now; planning '24 & '25 flights now; payload integration available now

## Defense Missions

Persistence Missions	Competition	Crisis	Conflict
Deep Sensing	x	x	x
Long-Range Targeting			x
Indications & Warning	x	x	x
Network Extension & Comms Relay	x	x	x
Battle Damage Assessment			x
Assured Positioning, Navigation & Timing (APNT)	x	x	x

## Enabling Zephyr Payloads

Electronic Support (ES)	Ready to fly in 2023
Electro Optical & Infrared (EO/IR)	Demonstrated & Planned
Synthetic Aperture Radar (SAR)	Produced and Planned
Signals Intelligence (SIGINT)	Planned
Electronic Intelligence (ELINT)	Planned
Assured Position, Navigation & Timing (APNT)	Planned
Various Communications & Network: 5G, Link 16, MESH, Optical Communications, etc.	Demonstrated & Planned