

ORION CONTRACT: FA8620-18-C-4005 DISTRIBUTION STATEMENT D. Distribution authorized to the Department of Defense and U.S. DoD contractors only; Critical Technology; 24 FEB 2012. Other requests shall be referred to USAF/AFMC/ASC, Wright-Patterson AFB, OH 45433-7101.

WARNING – The Orion slides contain technical data whose export is restricted by the Arms Export Control Act (Title 22, U.S.C., Sec 2751, et seq.) or the Export Administration Act of 1979, as amended, Title 50, U.S.C., App. 2401 et seq. Violations of these export laws are subject to severe criminal penalties. Disseminate in accordance with provisions of DoD Directive 5230.25.

DESTRUCTION NOTICE – For classified documents, follow the procedures in DoD 5220.22-M, Industrial Security Manual, Section 11 -19 or DoD 5200.1-R, Information Security Program Regulation, Chapter IX. For unclassified, limited documents, destroy by any method that will prevent disclosure of contents or reconstruction of the document.



A Boeing Company



/ WHO WE ARE

Operating at the intersection of technology and robotic aviation

- Founded in 1989 with a vision to utilize autonomous aircraft for atmospheric research
- Designed, produced, and flown more than 70 unique aircraft
- Creating advanced aircraft through the development and application of versatile and intuitive autonomous systems
- Developing experimental aircraft that enable innovative technologies leading to safe, sustainable, autonomous flight
- From technology maturation to integration into the airspace, we are advancing the future of mobility





















CENTAUR OFFERS A MULTI-ROLE CAPABILITY

UNMANNED

- Locate air vehicle operator and sensor operator at a ground control station
- Connect via line-of-sight (LOS) or beyond Line-of-sight BLOS datalink



VIP TRANSPORT

- Four seat transport
- Easily converted from ISR mission

HYBRID

- Operates like an unmanned aircraft, controlled from a ground station
- Comply with traffic avoidance, airspace requirements via onboard safety pilot



MANNED

- Fly like any manned aircraft
- Locate sensor operator on board aircraft or in ground station



TRAINER

- Easy to fly
- Multi Engine aircraft for transition





Introduction to Orion

CONTRACT: FA8620-18-C-4005 DISTRIBUTION STATEMENT D. Distribution authorized to the Department of Defense and U.S. DoD contractors only; Critical Technology; 24 FEB 2012. Other requests shall be referred to USAF/AFMC/ASC, Wright-Patterson AFB, OH 45433-7101.

This report is Competition Sensitive and contains Proprietary Data marked with vertical bars in margins on applicable pages. The Government's rights to use, modify, reproduce, release, perform, display, or disclose technical data contained in this report are restricted by paragraph (b)(3) of the Rights in Technical Data – Noncommercial Items clause (DFARS 252.227- 7013 (FEB 2012) contained in the above identified contract. Any reproduction of technical data or portions thereof marked with this legend must also reproduce the markings. Any person, other than the Government, who has been provided access to such data must promptly notify the above named contractor.



Medium-Altitude, Long-Endurance Unmanned Aircraft



 Open architecture, large payload capacity and built-in mission flexibility bring revolutionary capability in an ultra-endurance ISR UAS platform. As an ultra-long endurance UAS platform with an 80-hour endurance capability, Orion provides versatile and cost-effective capabilities.



 Key enabler in persistent surveillance ISR, stand-off monitoring, ultra-endurance loitering and Multi-INT payload deployments. From C-130J deployable solutions to long range remote operations, Orion's flexible payload capacity and extended onstation time provide a revolutionary mission capability.





 Aurora has worked jointly with the US Air Force to develop a Block 1 Orion specific Military Airworthiness Plan (MACP, AR15-285) and Tailored Airworthiness Certification Criteria (TACC, AR12-041C). These documents define the process and specific criteria for the Block 1 system to obtain military airworthiness.



Warning: Contents Subject to the Restrictions on the Title Slide



Odysseus Persistent Enabled Capabilities

Defense ISR



Odysseus provides persistent ISR coverage for months

- Maritime Domain Awareness
- Communications Relay
- SIGINT & SAR/GMTI
- Multi-Int Tip & Cue

Data & Communications



Odysseus extends terrestrial networks and supplements non-terrestrial networks

- 4G/5G Direct to Handset
- Communications Backhaul
- Aerial Layer Mesh Networking

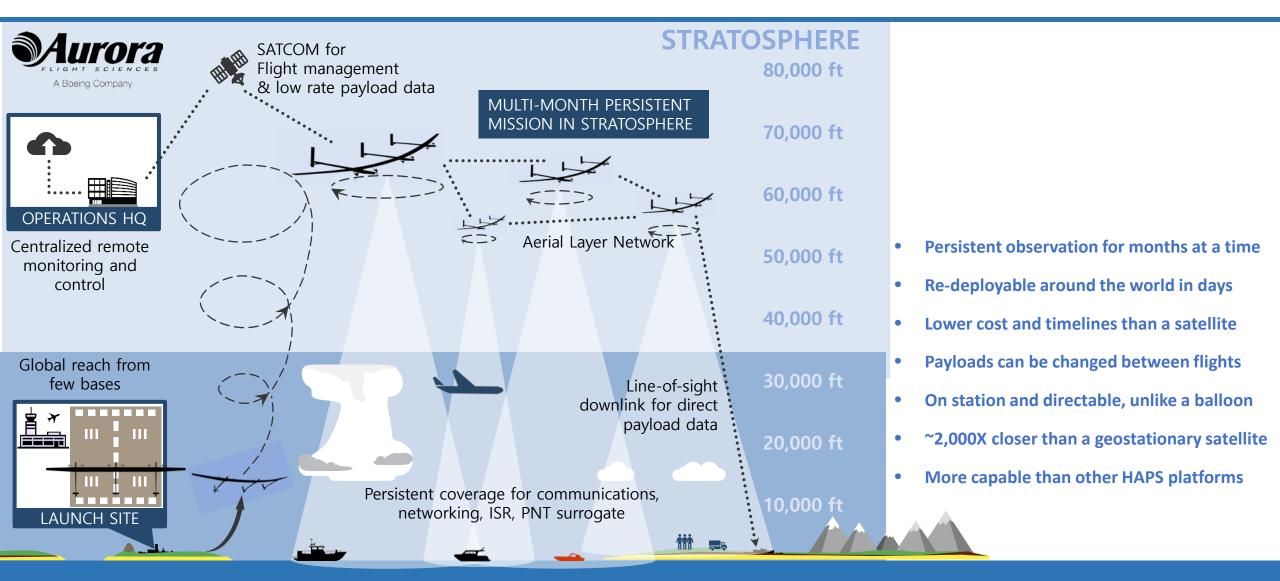
Environmental Sciences



Odysseus enables long duration science missions

- Atmospheric Research
- Earth Observation
- Natural Resource Management
- Wildland Fire Management





ODYSSEUS SOLAR POWERED HIGH ALTITUDE PSEUDO-SATELLITE

Operating altitude 60-85k ft • Payload 140+ lbs • Endurance 3+ months • Speed 50-85 kts true



SUMMARY

- > Aurora leverages 30+ years of Long Endurance UAV experience
 - > Centaur is a low risk UAV integration into civil airspace
 - > Orion is a heavy-lift, multi-day, multi-mission platform
 - > Odysseus will redefine persistence, on-station time to be measured in months
- Multi-Mission support across Defense and Commercial requirements
 - > ISR, Comms, Search and Rescue, Border Monitoring, Law Enforcement, Drug Interdiction, Marine Safety, Environmental Protection
- > Minimal to no additional personnel to be deployed
 - > Centaur and Orion: General aviation MX
 - > Odysseus: Based in lower 48, supporting Artic AOR



QUESTIONS

