



The Mid-Atlantic Aviation Partnership (MAAP)

The Virginia/New Jersey/Maryland UAS Test Site

Presentation to the Senate Finance Committee,
Transportation Subcommittee

Karen Jackson, Secretary of Technology
January 29, 2014

UAS Test Site



- The FAA Modernization and Reform Act of 2012 required the FAA to establish a program to integrate UAS into the NAS at six Test Ranges.
- Awards were announced Dec 30, 2013 to:
 - University of Alaska
 - State of Nevada
 - Griffiss International Airport (Rome, NY)
 - North Dakota Department of Commerce
 - Texas A&M University—Corpus Christi
 - **Virginia Polytechnic Institute and State University (Virginia Tech)**



Our Team



- Awarded the FAA UAS Test Site OTA through Virginia Tech
- Led by Virginia Tech, Rutgers and University of Maryland
- Includes Academia, Government, Industry, Economic Development Agencies and Non-Profit Organizations
- Specific Team strengths:
 - Three universities ranked in U.S. News and World Report top 100
 - Companies w/ experience in UAS development, manufacture, operation and testing
 - Existing relationships to federal UAS R&D centers
 - William J. Hughes FAA Technical Center
 - NASA Langley
 - NASA Wallops
 - NAVAIR Patuxent River
 - NSWC Dahlgren
 - International airport with 10,000' runway





CORE TEAM

ACADEMIA: Virginia Tech; Rutgers, the State University of New Jersey; National Institute of Aerospace; Liberty University; New Jersey Institute of Technology; Rowan University; The Richard Stockton College of NJ; Virginia State University, Old Dominion University

GOVERNMENT: Commonwealth of Virginia; State of New Jersey; New Jersey Department of Transportation; New Jersey Economic Development Authority; South Jersey Transportation Authority; Virginia Small Aircraft Transportation System Lab (VSATS); Virginia Department of Aviation

INDUSTRY: Aerosim Flight Academy; American Aerospace Advisors; Aurora Flight Sciences; B4Team; Engility; Enterprise Engineering Services; Hi-Tec Systems; KSI Video; NAVMAR Applied Science Corporation; Pentagon Performance; Sentinel Robotic Solutions; Sunhillo; UAV PRO; DDL Group; Mr. Fred McKee; Operational Strategies Incorporated

ECONOMIC DEVELOPMENT ORGANIZATIONS: Choose New Jersey; Eastern Shore Defense Alliance; Fredericksburg Regional Military Affairs Council; Hampton Roads Military and Federal Facilities Alliance; Virginia Economic Development Partnership

RESEARCH PARKS: Stockton Aviation Research and Technology Park; NASA Wallops Research Park



The ***safe and efficient*** integration of Unmanned Aircraft Systems (UAS) into our National Airspace System



Our Commitment



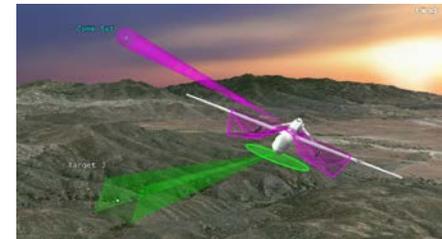
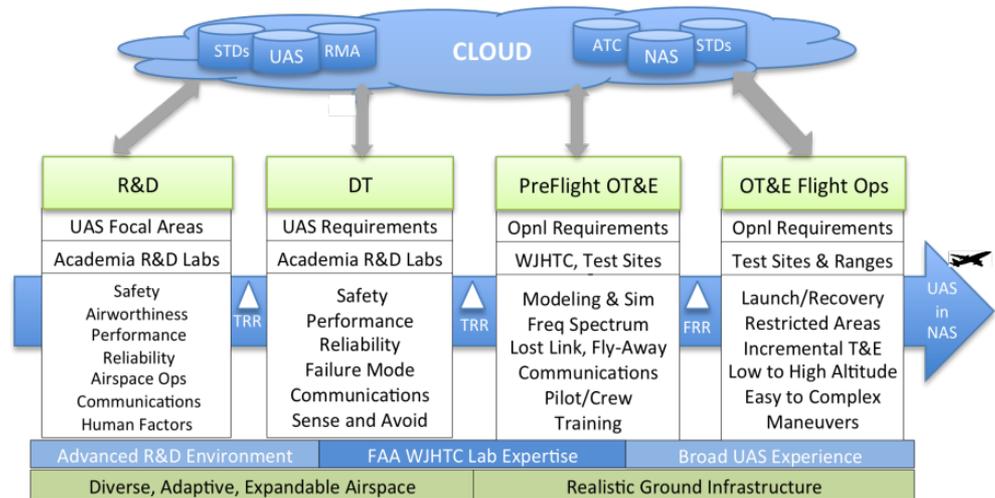
- Safety First!
- Best Value
- Collaboration
- Responsiveness





Our Approach

- Maintain a clear focus on the Safety and Efficiency of integration of UAS in the NAS
- Support FAA Challenges and Priorities for NAS Integration
- Support the UAS lifecycle from innovation to integration
 - Research & Development
 - Realistic Test & Evaluation
 - Modeling & Simulation
 - Operational Flight Testing
- Conduct incremental flight testing in a safe environment
- Manage Big Data to support FAA decisions makers



Our Ranges



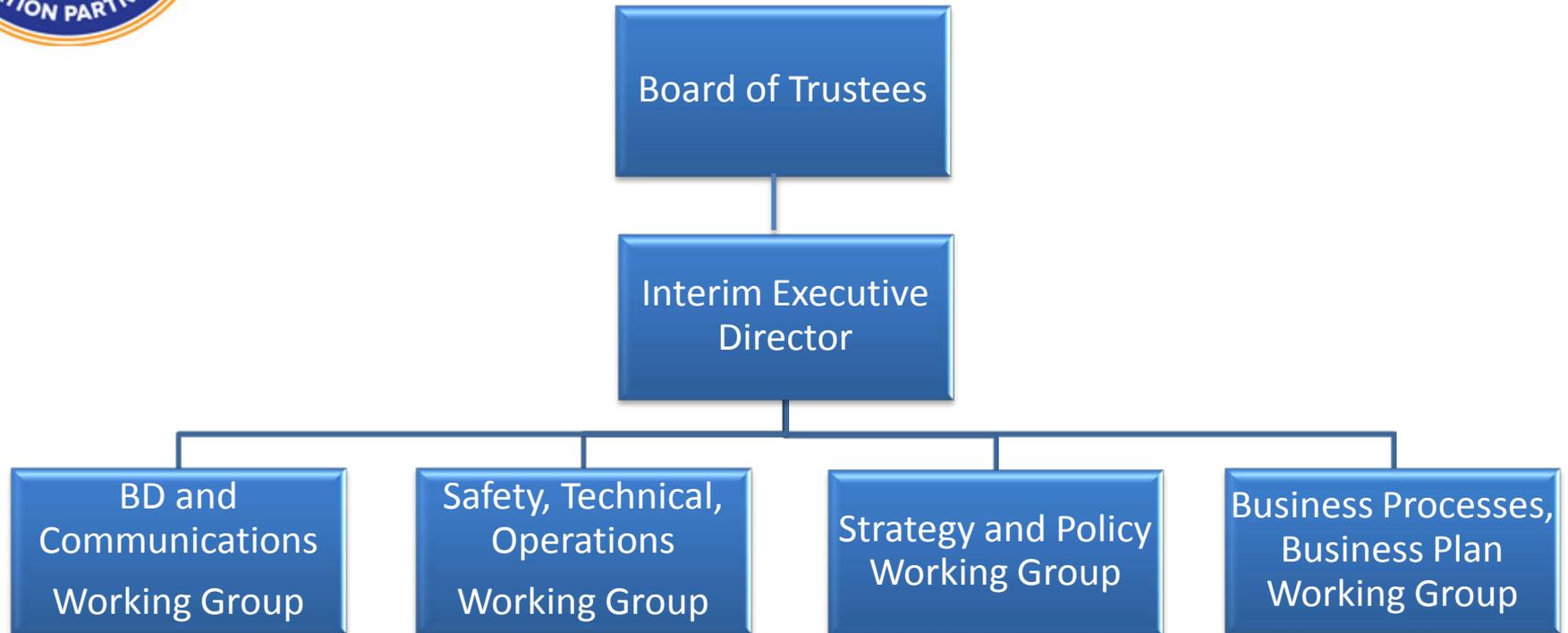
- Early flight testing to occur in existing Restricted Areas.
- With demonstrated performance of systems under test, will move into Warning Areas and newly designated Special Activity Airspace
 - Maximum safety to persons and property
 - Full Aviation Infrastructure
 - Adjacent airports/airfields
 - Surveillance Coverage
- Initial phase of a long-term Airspace Analysis Plan that will evolve our test sites and ranges with the needs of the FAA and UAS industry
- Proposed ranges will provide safety, flexibility and capacity



Proposal Airspace is indicated above.

Test Site COA to be submitted Spring 2014

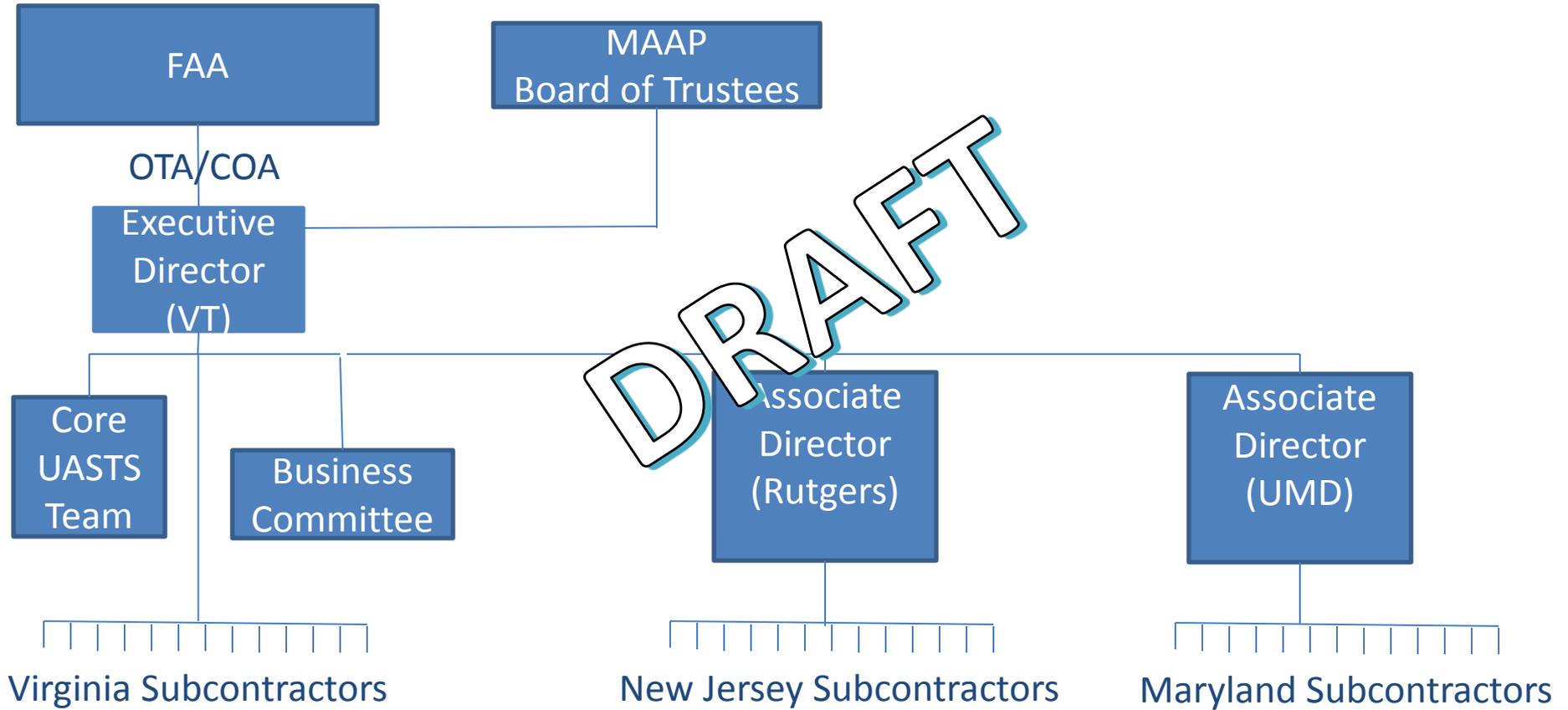
The MAAP Today



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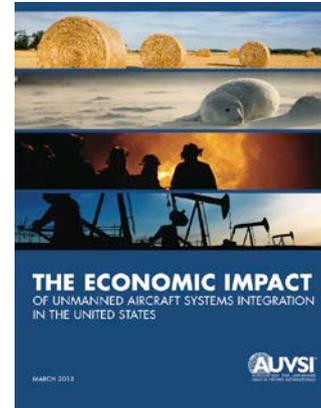
UAS Test Site Organization



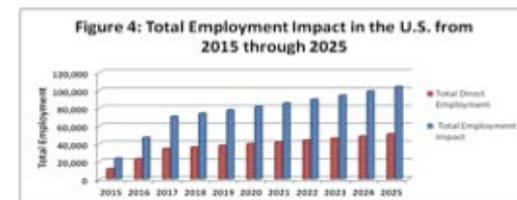
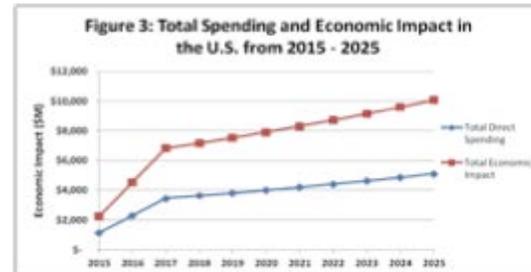


Economic Impact Study

- Economic impact of UAS integration into NAS
- Study sponsored by the Association of Unmanned Vehicle Systems International
- Conclusions:
 - In the first three years
 - Economic impact of UAS integration will exceed \$13B
 - NAS Integration will create more that 70,000 jobs
 - Precision Agriculture and Public Safety are the most promising applications
 - Every year that NAS integration is delayed will cost the U.S. more than \$10B in potential economic impact



While we project more than 100,000 new jobs by 2025, states that create favorable regulatory and business environments for the industry and the technology will likely siphon jobs away from states that do not.





Questions?