# **Federal Contracting Conference**

# Space Florida

#### Jim Kuzma Space Florida

May 21, 2012



### FLORIDA TEAM APPROACH





#### **Governor Rick Scott**









# **STRUCTURE & ROLE:**

- <u>Public Corporation & Independent Special District</u>
- <u>Infrastructure Role</u> ... Largely defined Spaceport & Aerospace Industry Needs
- <u>Economic Development Role</u> ... for the Space & related Aviation/Aerospace Industry
- <u>Investment and Financing Role</u> ... ... for Spaceports and Industry Projects Statewide!



### SPACE FLORIDA: Powers Under Florida Law

- Own & lease real estate, and machinery & equipment
- Hold rights to intellectual property
- Issue revenue bonds, assessment bonds, and conduit or other debt instruments consistent with fulfilling mission
- Create and update a statewide Spaceport Master Plan
- Exercise most powers of local government within the designated Spaceport territory (per the Spaceport Master Plan)



# **ORGANIZATIONAL OVERVIEW:**

- Organizational Units
  - Fulfillment Functions
    - Spaceport Development & Operations
    - Facilities Management
    - Research & Technology Advancement
    - Education and Talent Supply Chain
  - Investment & Deal Execution Functions
    - Marketing & Business Development
    - Investments and Special Projects
  - Finance/Administration/Support Functions



# **Space/Aviation/Aerospace**

... ... An Industry in Transition!

- Global Competitiveness / Technology Leveling
- Tightening National Budgets for New Initiatives
- Continued Industry Consolidations / Partnering
- Significantly Increased Integration of Space

with other Platforms / Technologies

New Companies, New Applications, New Markets



# Florida's Aerospace Industry Today

# Otal Ecompanies3891 Aerospace/Aviation EconomicImpact17.8Billion 74232Employed Wages9.1Billion

\*Source: Dept. of Economic Opportunity 2011 Space & Aerospace Labor Market Industry Profile



# New Applications Growth Areas

Potential for growth in Florida's aerospace sector has never been better:

- Commercial & Civil Aerospace Programs
- UAVs, ISR Technologies and CYBER
- Microgravity R&D / LEO Exploitation
- Small Satellites & Other New Space Systems
- Clean Energy & Advanced Materials
- New Space / Defense Technology Applications

## ... ... And Much More ... Next-Gen Systems



# Vision 2020 ... ... Strategies for Growth

- *"Florida ... Positioned as a Global Leader With Premier Aerospace Industry Presence"* 
  - Goal: "3x" Growth 2020
  - **Implementation Strategies:**
  - Diversification of Industry Statewide ... ... 10 target sectors.
  - Vertical Integration of the Supply Chain Depth & Breadth of Aerospace Supplier Base.
  - <u>Targeted Infrastructure Investment</u>



# Vision 2020 : Strategy Overview



#### FOUNDATION OF ENABLING CAPABILITIES

R&D • Infrastructure • Workforce • Education • Partnerships Business Environment • Influence and Advocacy • International

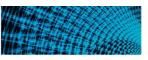
#### STRATEGIC RESOURCES

### **"VISION" FOCUS .... 10 TARGET MARKET SECTORS:**

- Transportation & Advanced Aerospace Platforms
- Satellite, Robotic Systems & Payloads
- Ground & Operations Support Systems
- Agriculture, Climate & Environmental Monitoring
- Civil Protection & Emergency Management
- ISS & Human Life Sciences
- Communications & Cyber-Security
- Adventure Tourism
- Clean & Alternative Energy Applications
- Advanced Materials & New Products

### **DIVERSIFICATION IS FLORIDA'S SPACE FUTURE!**

SPACE FLORIDA



Communications, Cybersecurity and Robotics



### **TRANSITIONING TO SPACEPORTS FUTURE**

- Multi-mission... Integrated Air, Land, Sea, Space, Unmanned
- Business Case Driven
- Multi-User Standards Based
- Coordinating Authority







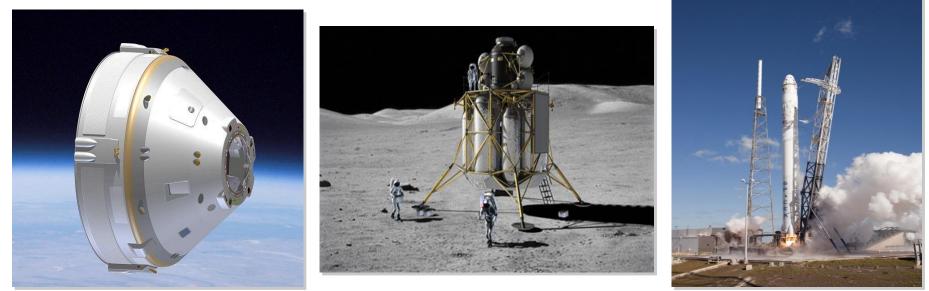
**Adventure Tourism** 



SPACE FLORIDA



### POSITIONING FLORIDA FOR THE NEXT-GENERATION CIVIL SPACE PROGRAM.



- Partnering With KSC to Repurpose & Rebuild
- Working with Next-Gen hardware manufacturers: launch, spacecraft, propulsion, ground systems



Civil Protection and Emergency Management







### **DIVERSIFYING FLORIDA'S LAUNCH ACTIVITY**



- LC 46: Minotaur, Athena
- LC 36: Masten, Other Next-Gen
- Shuttle Landing Facility/Skid Strip Capabilities
- Small Launch Systems Capabilities









### **DIVERSIFYING FLORIDA'S AIR SPACE ACTIVITY**



NASA Dryden Flight Research Center Photo Collection http://www.dfrc.nasa.gov/Gallery/Photo/index.html NASA Photo: ED02-0185-01 Date: September 7, 2001 Photo By: Dick Jones - Sandia Labs





### **UAV/Hybrid Air Manufacturers Advanced Aerospace Platforms Applications Center FAA Test Range Designation** Statewide Aviation/UAV/Space Operations Plan



### **SECURING FLORIDA'S LEADERSHIP ROLE IN ISS**

SPACE FLORIDA

Florida as a Ground Node for the International Space Station:

- Space Life Sciences Lab as a Centerpiece
- World Class Satellite Processing and Research Clusters
- CASIS as Manager of the National Lab





Ground and Operations Support Systems



### DEVELOPING NEXT- GEN SPACE INDUSTRY ... SMALL-SATELLITE INDUSTRY CLUSTERS

- Integrated with Florida's Universities
- Active Recruitment of Developers and Manufacturers



- <u>Space Simulation & Modeling Center</u>
- Technologies in Broad Commercial/Civil/Military Applications Development







SPACE FLORIDA

# **Enabling Future Technologies**

**Broadband: Silicon Photonics** 

**Components: Magnetic Memory** 

**Energy: Fuel Cells** 

**Entertainment: Social Gaming** 

**Health Care: Biosensors** 

Materials: Carbon Nanotubes, Plastic Transistors, OLED Displays

Microprocessors: Extreme Ultraviolet Lithography

**Mobile: Self-Driving Cars** 

**Nanocomputers - Nanomedicine** 

Networking: Grid Computing, Microsoft SPOT

**Recycling: Reverse Engineering** 

**Robotics: Cognitive Machines** 

Security: Quantum Cryptography

Software: Text Mining

Warfare: Electromagnetic-Bombs, Infrared Countermeasures

Wireless: Mesh Networks, Radio-Frequency ID Tags









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