



# Roundtable Session on Growing the Space Weather Enterprise A Federal Perspective

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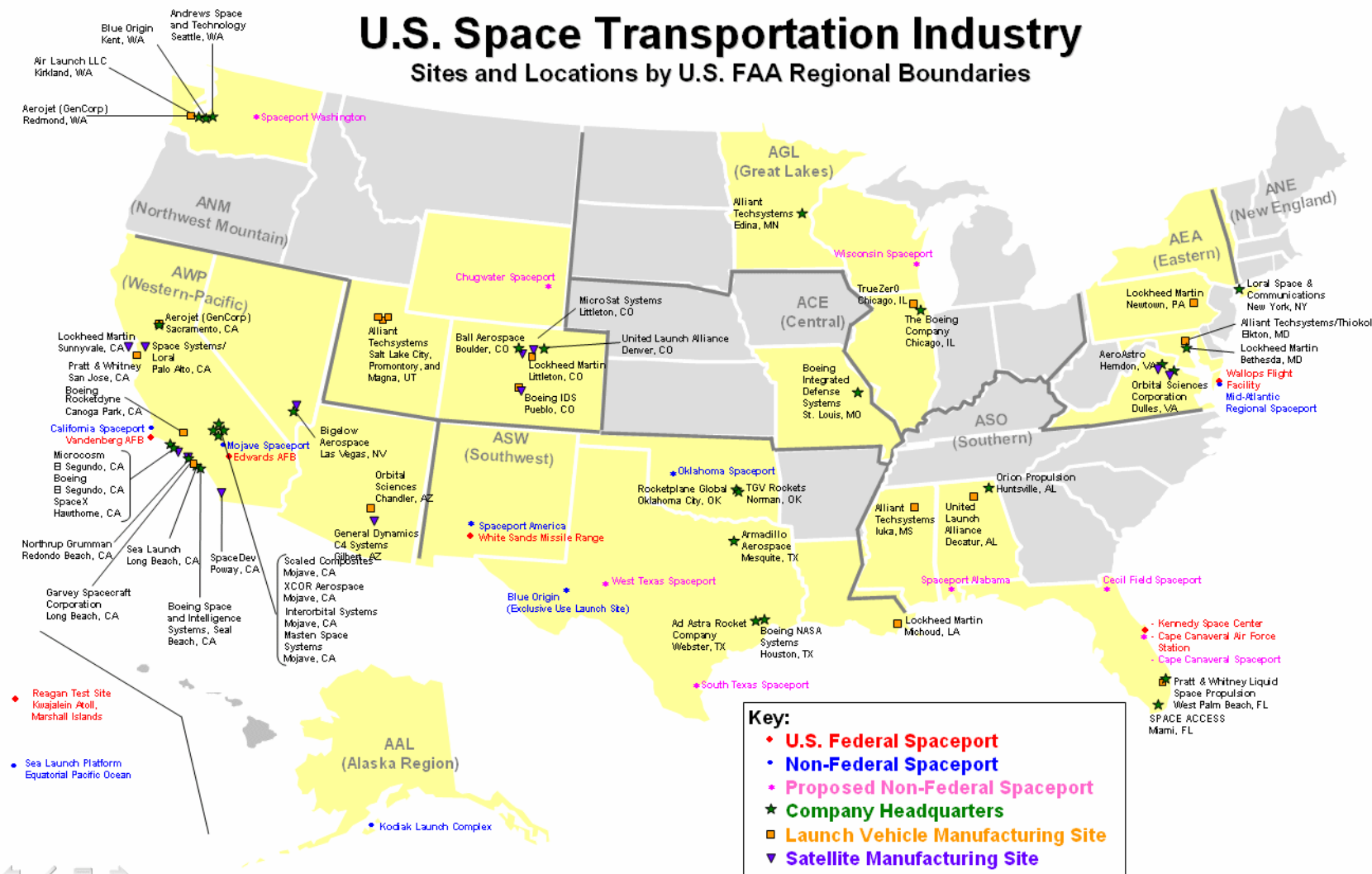
# Exploit Recent International Collaboration and Economic Growth

- EU decision to develop its own Space Situational Awareness effort
- WMO desire to embrace the operational space weather community
- Expansion of operational capacity in Brazil and Korea
- ICAO led development of space weather aviation manual
- Joint EU-US emergency preparedness for severe space weather
- EU/DLR cooperation on targeted research and development
- Preparations for NextGen and SESAR (Air Traffic Control)



# Opportunities in Commercial Space Are Right Ahead

## U.S. Space Transportation Industry Sites and Locations by U.S. FAA Regional Boundaries





# Managing the US Space Weather Enterprise Across Agencies

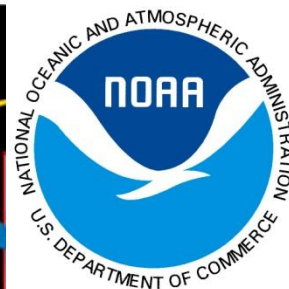
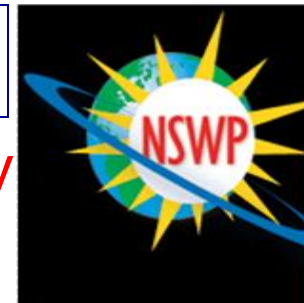


## • National Space Weather Program

NATIONAL SCIENCE AND TECHNOLOGY COUNCIL



Today



COMMITTEE ON ENVIRONMENT & NATURAL RESOURCES		
AIR QUALITY RESEARCH (SC)	GLOBAL CHANGE RESEARCH/ CLIMATE CHANGE SCIENCE (SC)	US GROUP ON EARTH OBSERVATIONS (SC)
DISASTER REDUCTION (SC)	OCEAN SCIENCE & TECHNOLOGY (SC)	WATER AVAILABILITY & QUALITY (SC)
ECOLOGICAL SYSTEMS (SC)	TOXICS AND RISK (SC)	

COMMITTEE ON HOMELAND & NATIONAL SECURITY		
DECONTAMINATION STANDARDS & TECHNOLOGY (SC)	FOREIGN ANIMAL DISEASE THREAT (SC)	NUCLEAR DEFENSE RESEARCH & DEVELOPMENT (SC)
DOMESTIC IMPROVISED EXPLOSIVE DEVICES (SC)	HUMAN FACTORS (SC)	STANDARDS (SC)
ELECTRIC GRID VULNERABILITY (IWG)	INFRASTRUCTURE (SC)	

COMMITTEE ON SCIENCE		
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DIGITAL DATA (IWG)	PHYSICS OF THE UNIVERSE (IWG)	SCIENTIFIC COLLECTIONS (IWG)
DOMESTIC ANIMAL GENOMICS (IWG)	PLANT GENOMES (IWG)	SOCIAL, BEHAVIORAL, ECONOMIC SCIENCES (SC)
EDUCATION & WORKFORCE DEVELOPMENT (SC)	PRION SCIENCE (IWG)	TRANSBORDER MOVEMENT OF RESEARCH MATERIALS (IWG)

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BIOMETRICS & IDENTITY MANAGEMENT (SC)	INNOVATION & COMPETITIVENESS (SC)	NETWORKING & INFORMATION TECHNOLOGY (SC)
BUILDINGS TECHNOLOGY RESEARCH & DEV. (SC)	MANUFACTURING RESEARCH & DEVELOPMENT (IWG)	QUANTUM INFORMATION SCIENCE (TF)

## • Space Situational Awareness (SC)

Tomorrow?





# Managing the Space Weather Enterprise Across Sectors

- Commercial Space Weather Interest Group



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- Commercial Space Weather Interest Group



Customers Unwilling or Unable to Pay for Tailored Products and Services





# Drawing a Line in the Sand?

## Public Sector

- Observations
- Numerical Forecast Models
- Decision Support Services
- Global/Regional Products
- Validation & Verification
- Research & Development
- Stakeholder Outreach & Education
- Training & Work Force Development



## Private Sector

- Observations
- Numerical Forecast Models
- Decision Support Services
- Global/Regional/Local Products
- Interdisciplinary Value Added Support
- Research & Development
- Business Development & Marketing
- Yes/No, Go/No-Go Operational Guidance