



SPACE ENTERPRISE SOLUTIONS FOR THE NATION

Corporate Overview

DOD Programs

SMC Programs
MDA and Air Force Space Command
Other Air Force Programs

Intelligence Community

Satellite Programs
Ground Programs
Enterprise Systems

Civil Customers

NOAA
NASA
Federal Civil
DHS, NNSA, and Others

Other Defense Space

STRATCOM/AFSPC and Pentagon

Space Launch

Space Systems

Aerospace Counterparts

Electronic Programs

Imagery Programs

Aerospace Intelligence Counterparts

NOAA Programs

NASA Programs

Federal Civil Programs

Other Programs

Strategic Space and National Security



AN ORGANIZATION ALIGNED TO SERVE CUSTOMER NEEDS



ENABLING NEW ENTRANTS

CASE STUDY: SPACEX LAUNCH
CERTIFICATION / MISSION ASSURANCE
PROCESS DEVELOPMENT

Falcon 9 First Stage testing in
McGregor, TX



Aerospace-developed Brane
Craft, designed to remove
space debris

CREATING THE NEXT SMALL SATELLITES

CASE STUDY: BRANE CRAFT



Using custom modeling tools to address gaps in enterprise resilience

SPACE WARFIGHTING CONSTRUCT

CASE STUDY: AEROSPACE RESILIENCY CONSORTIUM (ARC)

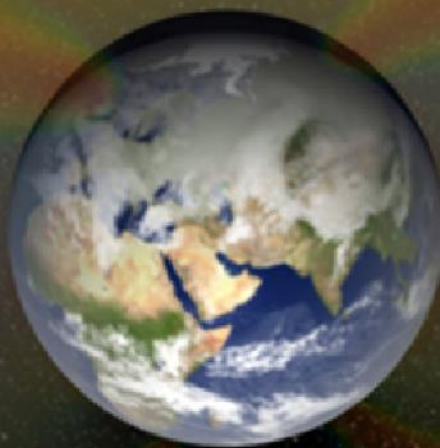


STRATEGIES FOR ELIMINATING COUNTERFEIT PARTS

CASE STUDY: PREVENTION STRATEGIES



Aerospace-developed suite of microdosimeters observes radiation in space



The REACH Payload

CHARACTERIZING THREATS IN THE SPACE ENVIRONMENT

CASE STUDY: RESPONSIVE ENVIRONMENTAL
ASSESSMENT COMMERCIALY HOSTED (REACH)



Corporate Headquarters —
El Segundo, CA
Pasadena, CA
San Diego, CA
Vandenberg AFB, CA
Sunnyvale, CA

Buckley AFB, CO
Colorado Springs, CO
Denver, CO
Peterson AFB, CO
Schriever AFB, CO

Hill AFB, UT

Albuquerque, NM
Kirtland AFB, NM

Houston, TX
Johnson Space Center, TX

Offutt AFB, NE

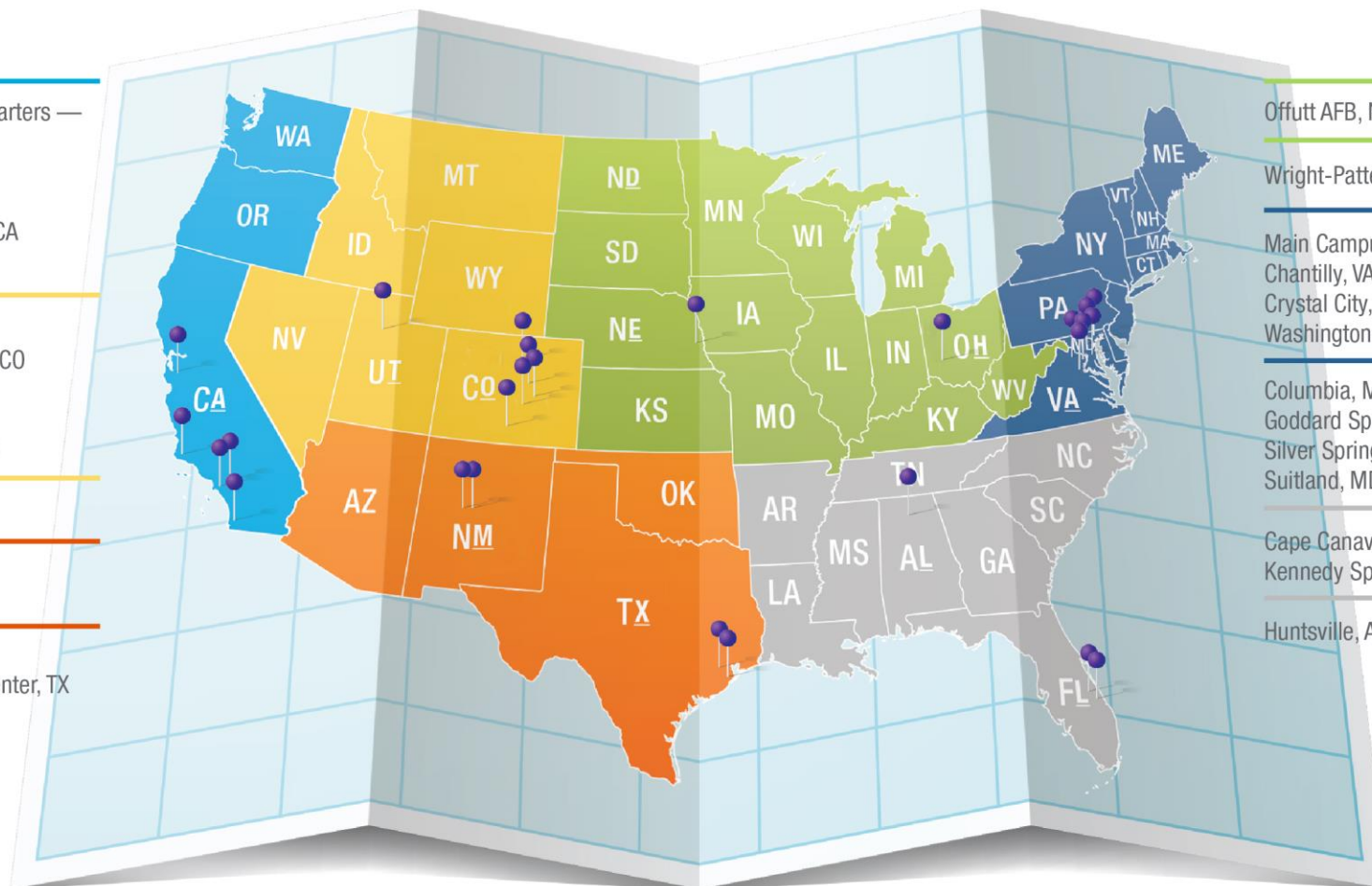
Wright-Patterson AFB, OH

Main Campus —
Chantilly, VA
Crystal City, VA
Washington D.C.

Columbia, MD
Goddard Space Flight Center, MD
Silver Spring, MD
Suitland, MD

Cape Canaveral AFS, FL
Kennedy Space Center, FL

Huntsville, AL



NATIONWIDE SCOPE



ELECTRONICS AND SENSORS

Microelectronics

Analog and digital electronics

Power systems

Parts, materials, and processes

Sensor engineering and exploitation

Optical sensors

Radar systems

COMPUTERS AND SOFTWARE

Computer technology

Information science

Software engineering

Software verification

Software acquisition

Ground systems

Operations engineering

COMMUNICATIONS AND CYBER

Cyber and IA

Resiliency

Vulnerability and penetration testing

Communications architectures and systems

Network systems

Spectrum management

Digital implementation

Communications electronics

Antenna systems

VEHICLE SYSTEMS

Guidance/control

Realtime simulation

Flight/fluid mechanics

Thermal control

Structural/dynamics analysis

Test and evaluation

Risk management

SYSTEMS ENGINEERING

Architecting

Modeling and sim

Mission performance

Concept design

Cost and schedule engineering

Acquisition and support analysis

Resource allocation

Operability assessment

Reliability and failure analysis

PHYSICAL SCIENCES LABORATORIES

Electronics and photonics

Mechanics

Materials

Space environment

Mission-oriented research

Special sensor fabrication

Remote-sensing signatures

AEROSPACE MATRIX SUPPORT



ON-ORBIT SATELLITE PROGRAMS

SBIRS High

Defense Support Program

AEHF and Milstar

Enhanced Polar System

WGS and DSCS

MUOS

GPS

SBSS

GSSAP

Defense Meteorological Satellite Program

Classified programs

DEVELOPMENTAL SATELLITE PROGRAMS

GPS III

Meteorological programs

Operationally Responsive Space

Overhead Persistent Infrared

Classified programs

LAUNCH VEHICLES

EELV

- Atlas V
- Delta IV

New Entrant Launch Systems

- SpaceX Falcon
- ULA Vulcan
- Orbital ATK NGL

GROUND SYSTEMS

Satellite Control Network

Spacelift Range System

Ground control systems for virtually all programs

Enterprise ground system

Battlespace management command and control

Involved in many user terminal programs

CURRENT SPACE ENTERPRISE RESPONSIBILITIES

