

July 28, 2015



Mission Focused



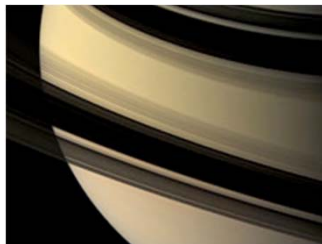
Aeronautics Research

Enable a safer, more secure, efficient, and environmentally friendly air transportation system.



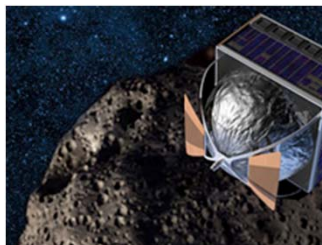
Human Exploration and Operations

Operate the International Space Station and prepare for human exploration beyond low Earth orbit.



Science

Exploring the Earth-Sun system, our own solar system, and the universe beyond.



Space Technology

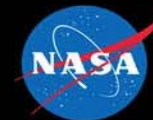
Develop the crosscutting, advanced and pioneering new technologies needed for current and future missions, benefiting the aerospace industry and other agencies, and addressing national needs.



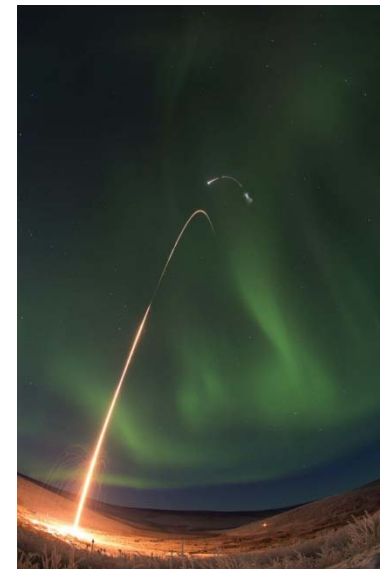
NASA Centers & Facilities



Alaska



Poker Flats Research Range



Engineering and
manufacturing support to
NASA Goddard Space
Flight Center

Oregon



Nanocomposite Optical Inks

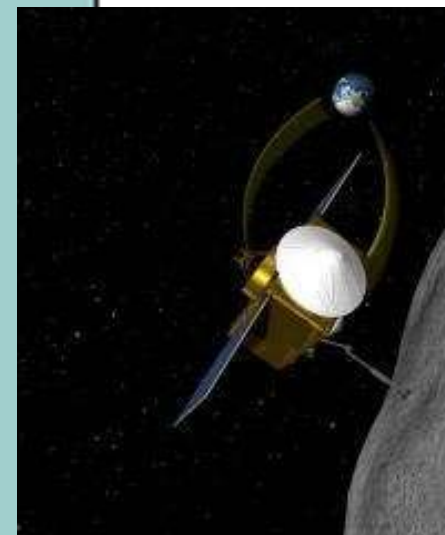
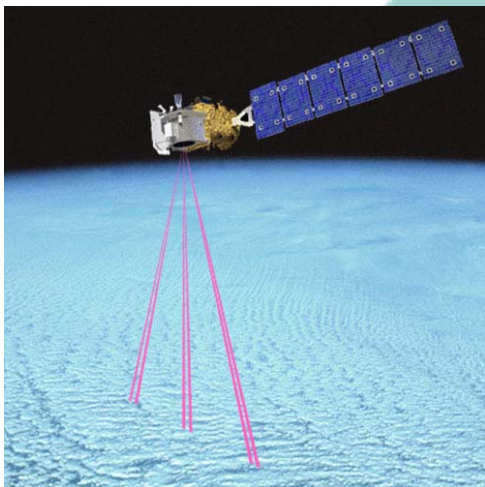


Hyperspectral Radiometry System

Arizona

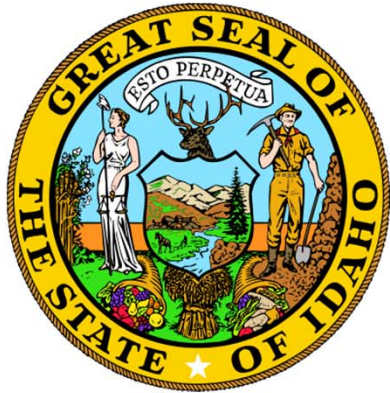


Orbital ATK
IceSat-2



University of Arizona
OSIRIS-Rex Science

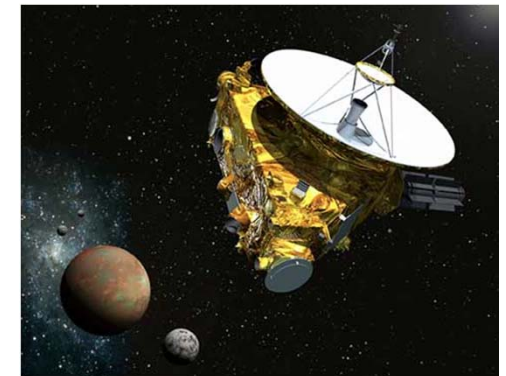
Idaho



University of Idaho
Remote Sensing and
Modeling Cooperative
Agreement



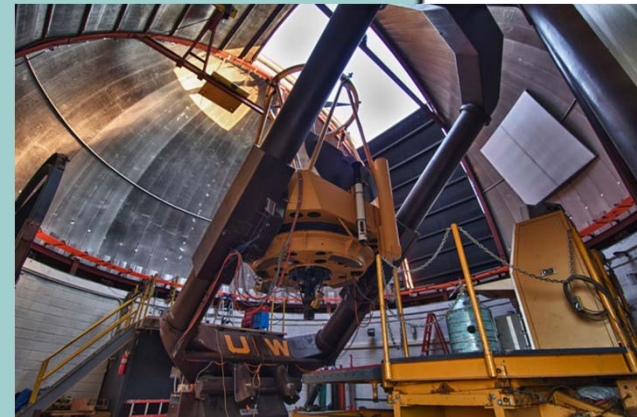
Idaho National Lab
New Horizons RTG



Wyoming



Epsilon Technology Corp
High Temperature
Extensometers



★
University of Wyoming
Infrared Observatory (WIRO)
2.3-Meter Telescope

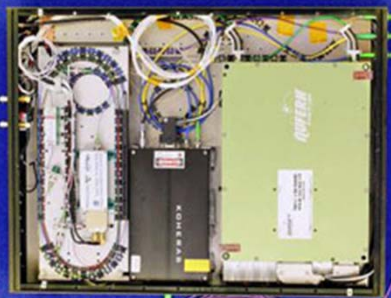
Montana



Astrobiology Research
Cooperative
Agreement



ADVR Inc
Frequency Stabilized Seed



Hawaii



NASA Infrared Telescope Facility



Hawaii Space Exploration Analog and Simulation (Hi-SEAS)



Nevada



Bigelow Expandable Activity
Module (BEAM)

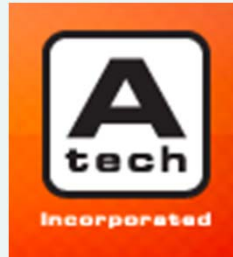
ty work at NASA's Armstrong
Flight Research Center



New Mexico



SA White Sands Test Facility



Compact Lightweight
Isolation Platform for Laser
Communications

Utah



storaGENergy
technologies

High-Performance, Highly
Specialized Batteries

Orbital ATK
Space Launch System Solid
Rocket Booster

Washington



NASA-Boeing testing green
aviation on ecoDemonstrator

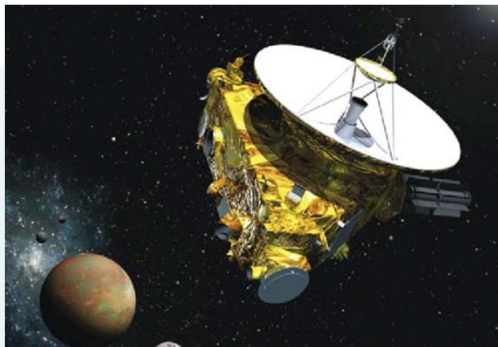


-MODIS-CLOUDSAT-CALIPSO
data analysis

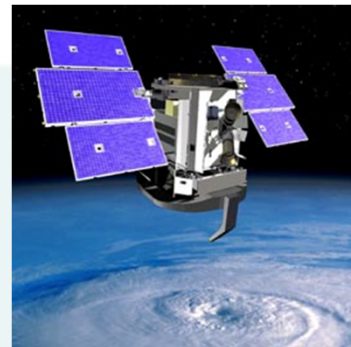
California



Colorado



SwRI, CU/LAASP, Ball
New Horizon's Science and imager



Colorado State University
Cloudsat Science



Lockheed Martin
Orion Spacecraft



My point



You are all part of what
NASA does!

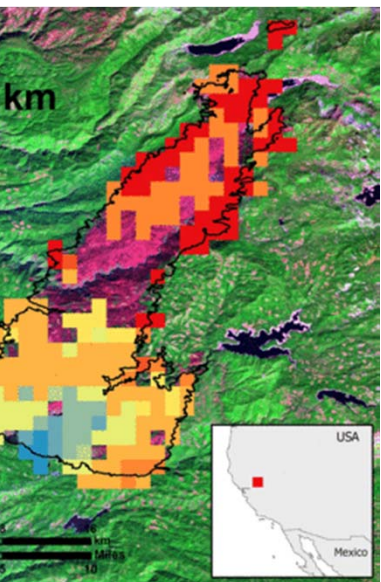


And...



We are part of your lives.

Science



Satellite-based tools
better detect fires
nationwide and
predict their behavior



MODIS data informs
crop growth forecasts



SMAP data improves
flood prediction and
drought monitoring

Technology



NASA AERONAUTICS RESEARCH ON BOARD

COMPUTATIONAL FLUID DYNAMICS (CFD) ♦ ♦
- 1970s-Today

2 COMPOSITE STRUCTURES ♦ ♦
- 1970s-Today

3 WINGLET ♦ ♦
- 1970s-1980s

4 LIGHTNING PROTECTION STANDARDS ♦ ♦
- 1970s-1980s

5 AREA RULE ♦ ♦
- 1950s

6 TURBO-AE CODE ♦ ♦
- 1990s

7 NASA STRUCTURAL ANALYSIS (NASTRAN) ♦ ♦
- 1960s-Today

8 DIGITAL FLY-BY-WIRE ♦ ♦
- 1960s-1970s

9 GLASS COCKPIT ♦ ♦
- 1970s-1980s

10 SUPERCritical AIRFOIL ♦ ♦
- 1960s-1970s

Technology



NASA Helping Colorado Nonprofit Make More Donated Human Tissue Available

September 16, 2014 4:45 PM

Share

656

Tweet

32

Share

18

View Comments



Related Tags: [AlloSource](#), [Centennial](#), [Donated Human Tissue](#), [Human Tissue](#), [Kasthuri Venkat](#), [Mars Rover](#), [NASA](#), [Peter Stevens](#)

CENTENNIAL, Colo. (CBS4) – A nonprofit in Centennial working with NASA scientists is hoping to use space [technology](#) to make sure donated human tissue is safe.

The group called AlloSource is studying the rapid way NASA tests spacecraft for bacteria to see if their tissue bank can do the same. It's bringing out-of-this-world technology down to earth.

Sponsored Links



TaxSlayer

Max your refund with TaxSlayer.

<https://www.taxslayer.com>

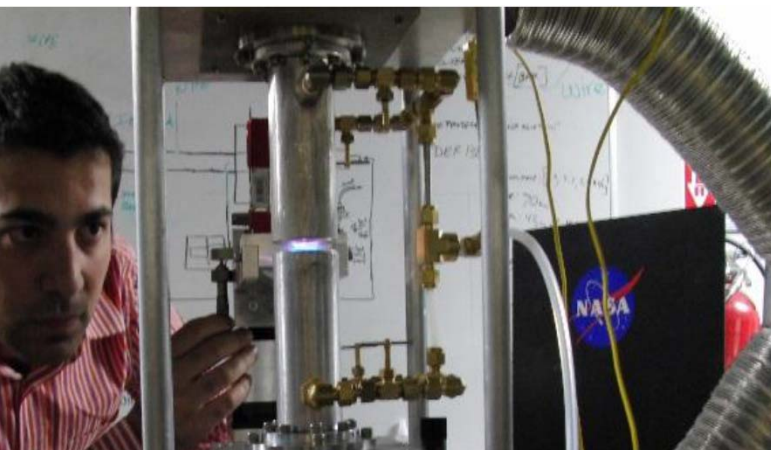
STEM Education



EDUCATOR PROFESSIONAL
DEVELOPMENT



INSTITUTIONAL
ENGAGEMENT

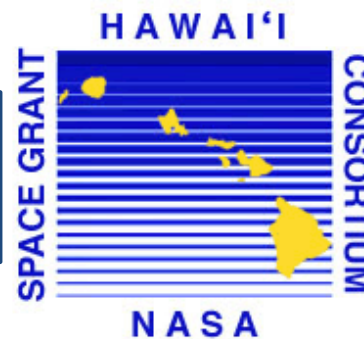
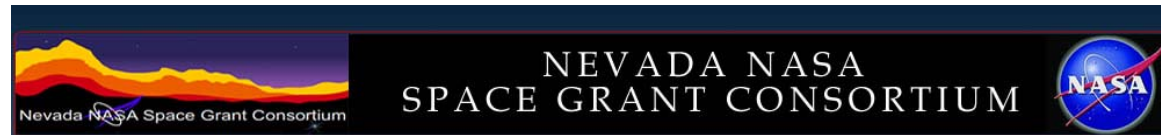


ERNSHIPS FELLOWSHIPS



STEM

STEM Education





The landscape is changing

Traditionally it was
Federal Government
Large Research Institutions
Aerospace Industry

New players



Entrepreneurs – “New Space”



BLUE
ORIGIN



New players



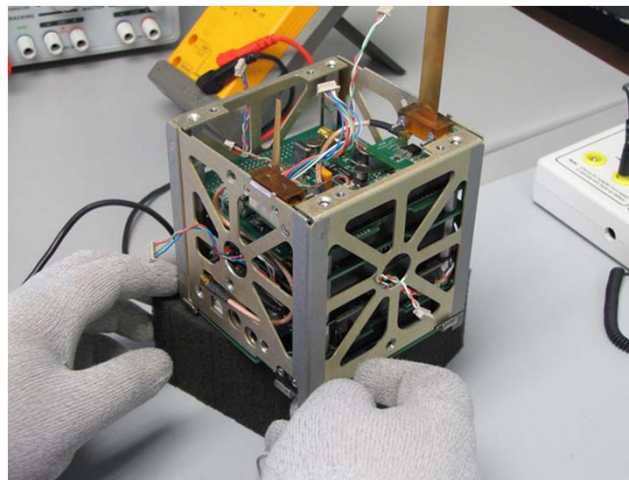
State and local entities



New players



Small Sats – Cubesats- Small startups



UP Aerospace Inc.
A Space Launch Services Company

And we are changing too



- Commercial Partnering/Purchasing
- Hosted payloads + Ride Shares
- Co-development
- Open Innovation
 - Challenges and Prize Competitions
 - Open Source

Challenges, Prize Competitions, and Crowdsourcing



- Reach beyond the “usual suspects” to increase the number of minds tackling a problem.
- Bring out-of-discipline perspectives to bear
- Increase cost-effectiveness to maximize the return on taxpayer dollars.

Astronaut glove stitched together on a Maine beer's dining room table won \$200,000 in a competition.





For more information



www.nasa.gov/spacetech

art.maples@nasa.gov