National Aeronautics and Space Administration

Doing Business with

NASA Langley Research Center

SpaceCom2018

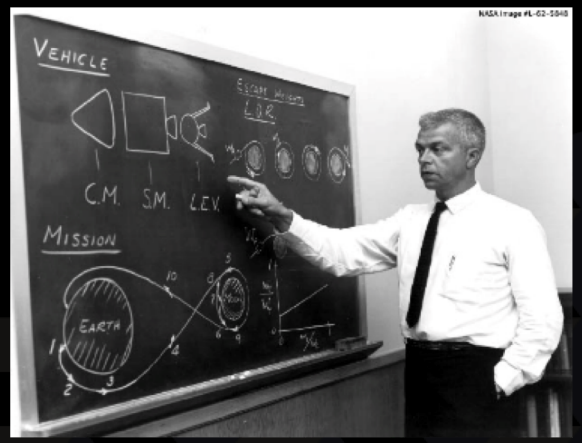


Aerospace Innovation Spanning 100+ Years at NASA Langley

CELEBRATING 100 YEARS
Langley Research Center 1917-2017



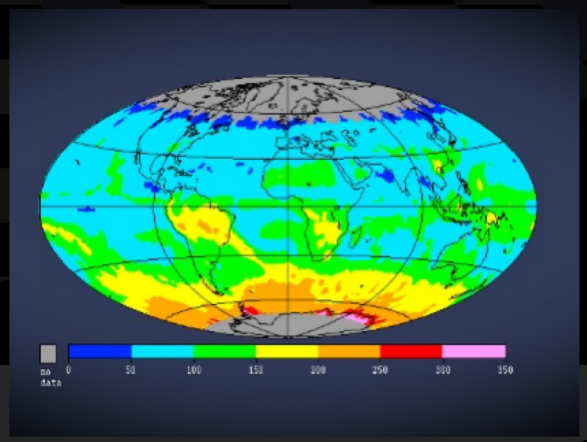
















EXPLORE FLIGHT

National Aeronautics and Space Administration



Advance Urban Air Mobility for Emerging Markets



Improve Commercial Air Transport Markets

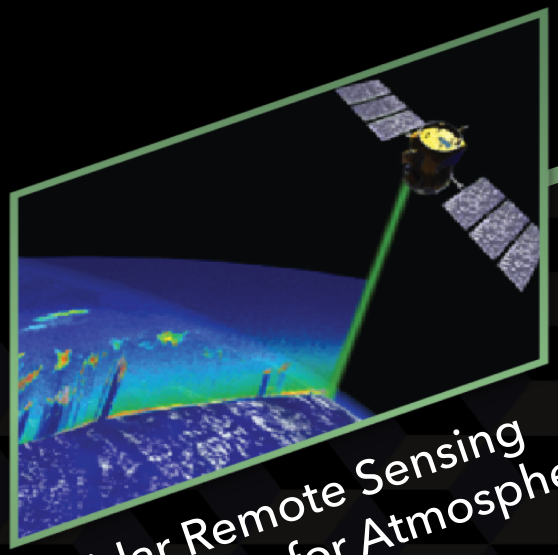
Fly Everywhere

NASA Langley Research Center

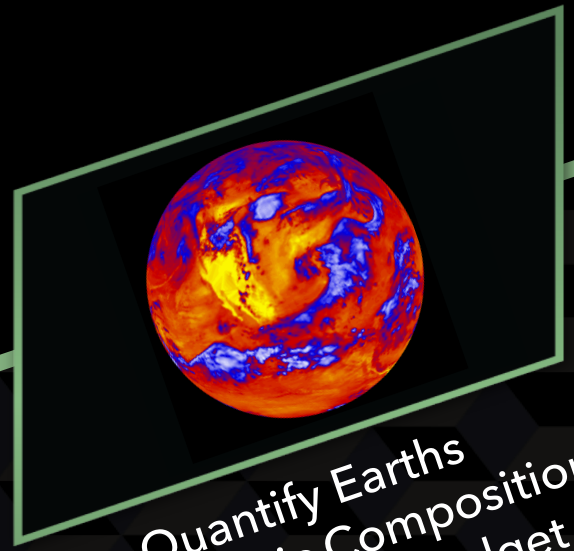
OPTIMIZE.....MOBILIZE.....TRAILBLAZE

EXPLORE EARTH

National Aeronautics and Space Administration



Lidar Remote Sensing Technologies for Atmospheric Measurements



Quantify Earths Atmospheric Composition and Radiation Budget



Capture Regional and Global Measurements of Winds, CO_2 Clouds and Aerosols

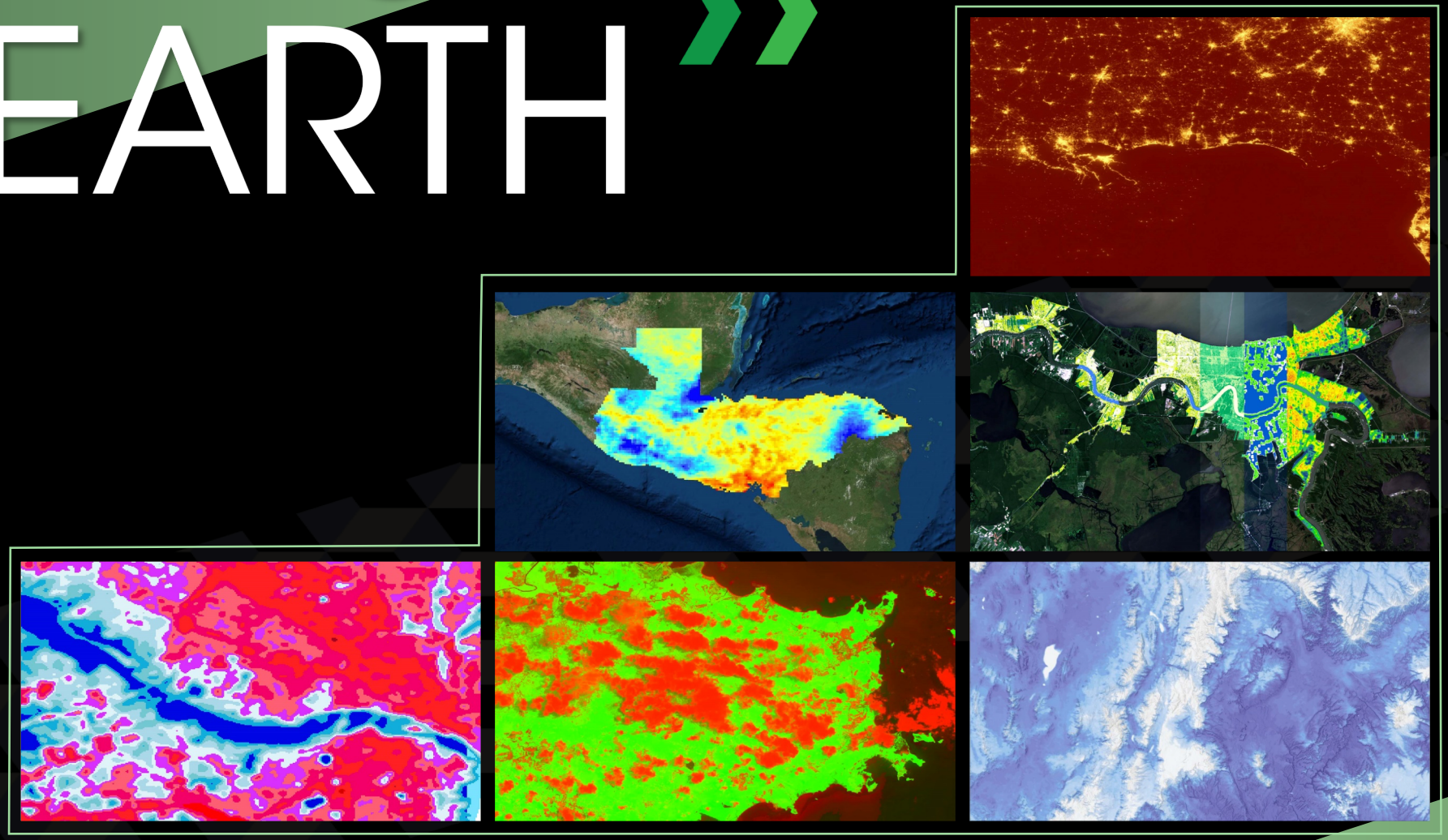
Understand Our Home Planet

NASA Langley Research Center

DEVELOP*.....*MEASURE*.....*UNDERSTAND

EXPLORE EARTH »

National Aeronautics and Space Administration



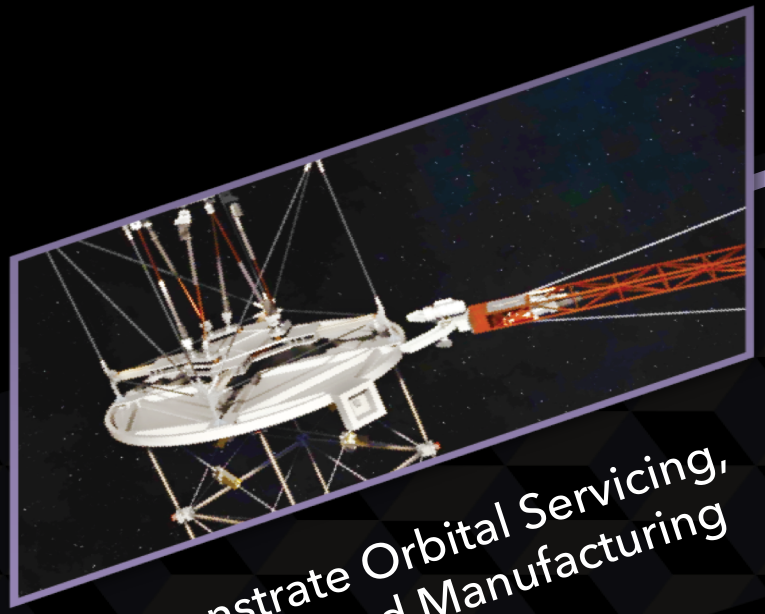
20th DEVELOP ANNIVERSARY

Earth Observing Data used by DEVELOP students

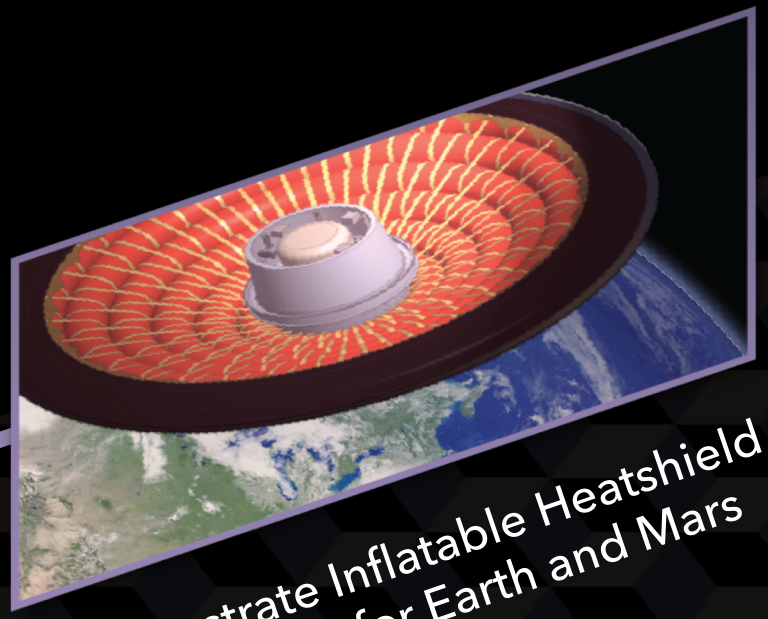
NASA Langley Research Center

EXPLORE MOON to MARS

National Aeronautics and Space Administration



Demonstrate Orbital Servicing, Assembly and Manufacturing



Demonstrate Inflatable Heatshield Technology for Earth and Mars

Reach to Deep Space

NASA Langley Research Center

BUILD.....PROTECT.....ARRIVE

National Aeronautics and Space Administration

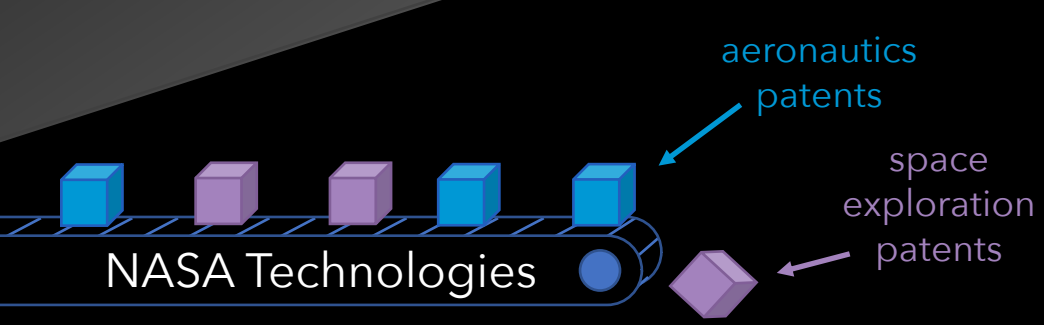


EXPLORE NASA PARTNERSHIPS

NASA Langley Research Center

Market Applications of NASA Technology

National Aeronautics and Space Administration



NASA Langley Research Center

Connect, Advance, Accelerate through Partnerships

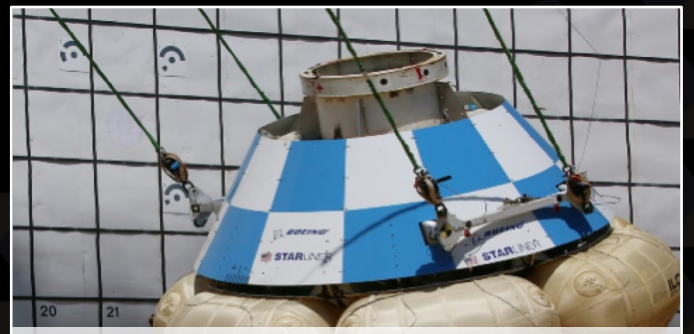
National Aeronautics and Space Administration



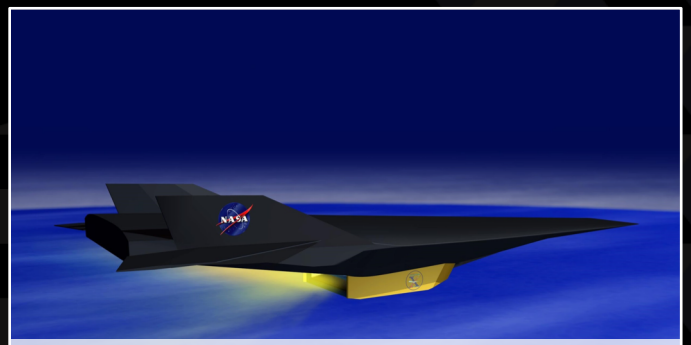
Public Private Partnerships (e.g. Tipping Point)

TEMPO

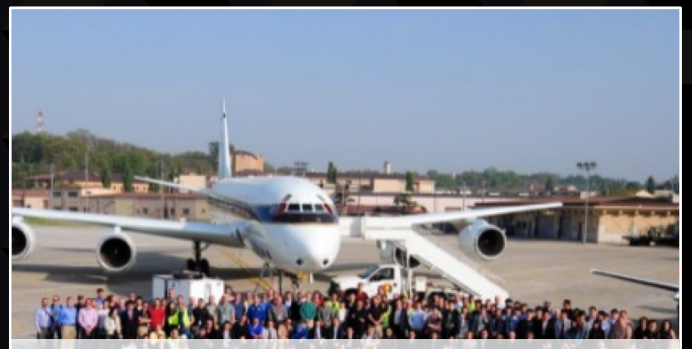
Secondary/Hosted Payloads



Reimbursable Agreements



Collaboration with Other Government Agencies



Academia & International

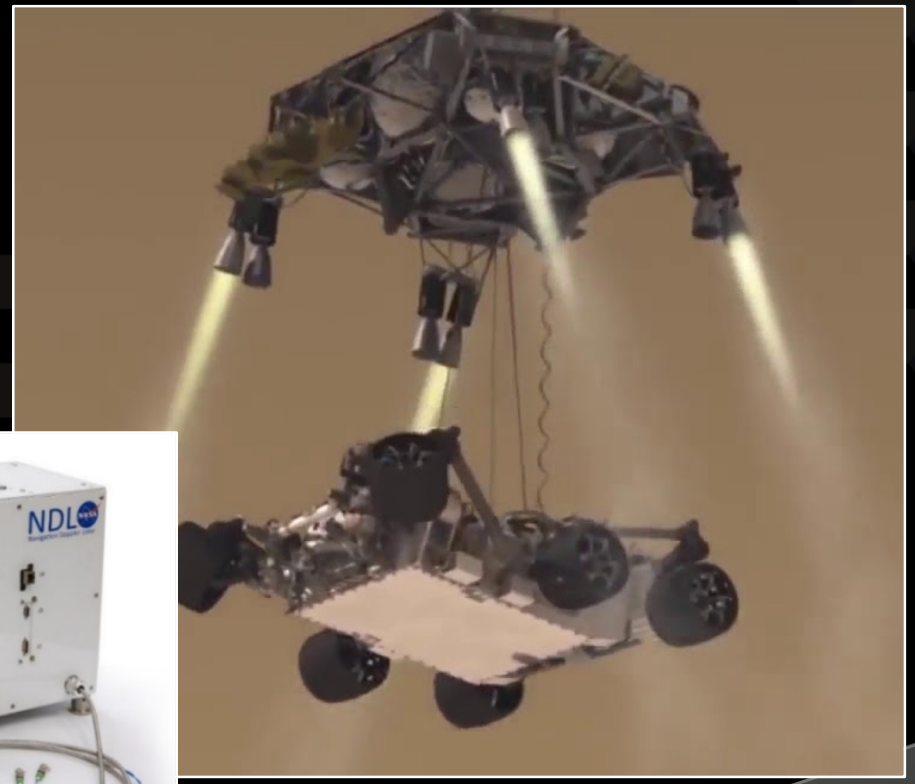


Tech Transfer & SBIR

Navigation Doppler Lidar

- High-performance, compact and cost-effective **velocity and altitude sensor** developed for landing vehicles
- Adaptable for driverless vehicles



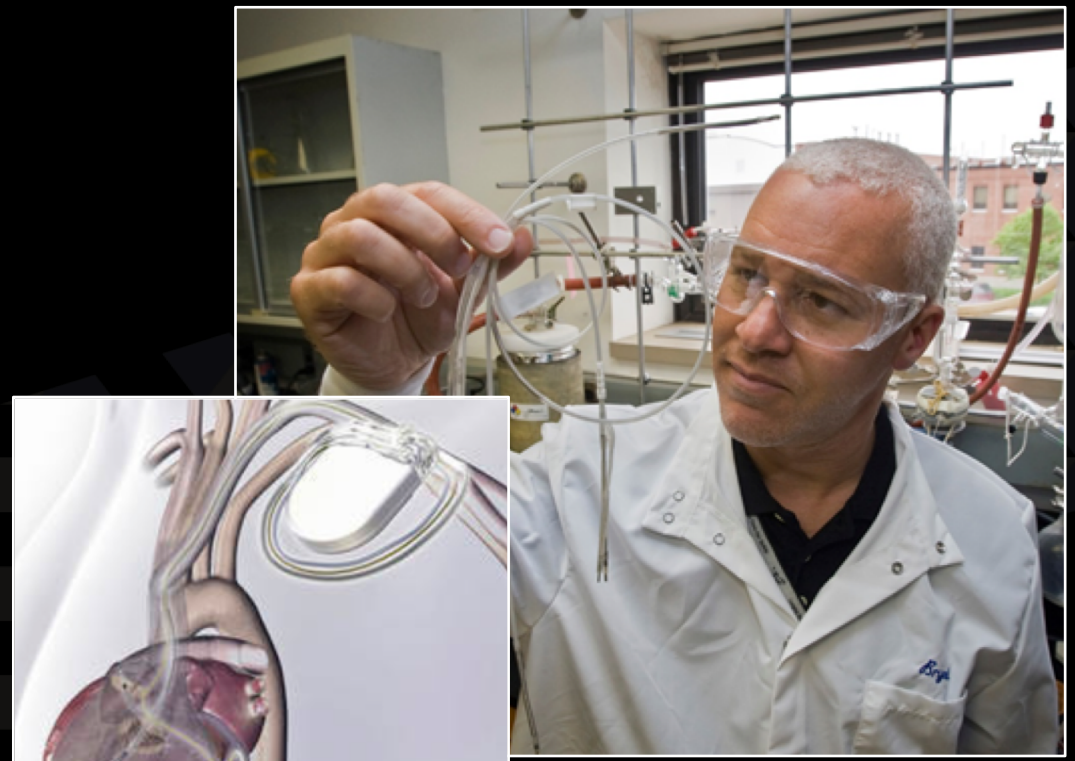


Success Stories

National Aeronautics and Space Administration

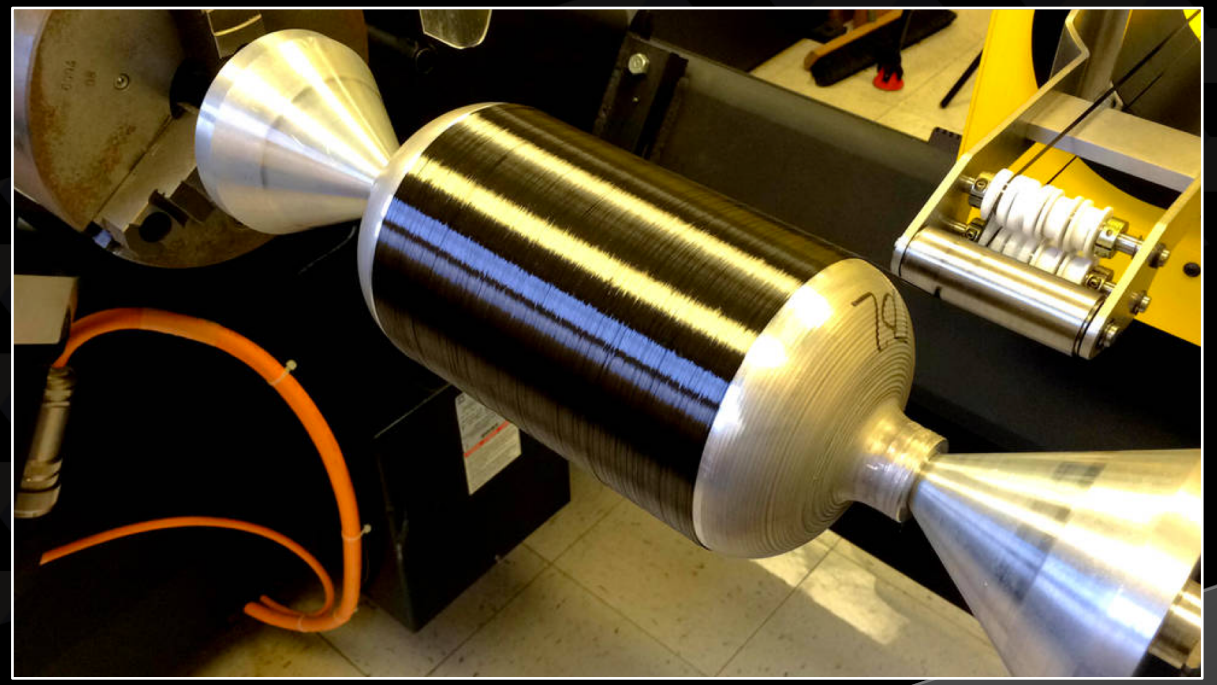
LaRC Soluble Imide

- One of NASA Langley's most significant licenses is saving lives in pacemakers
- Flexible, thin coating for pacemaker leads



Nanocomp: Miralon

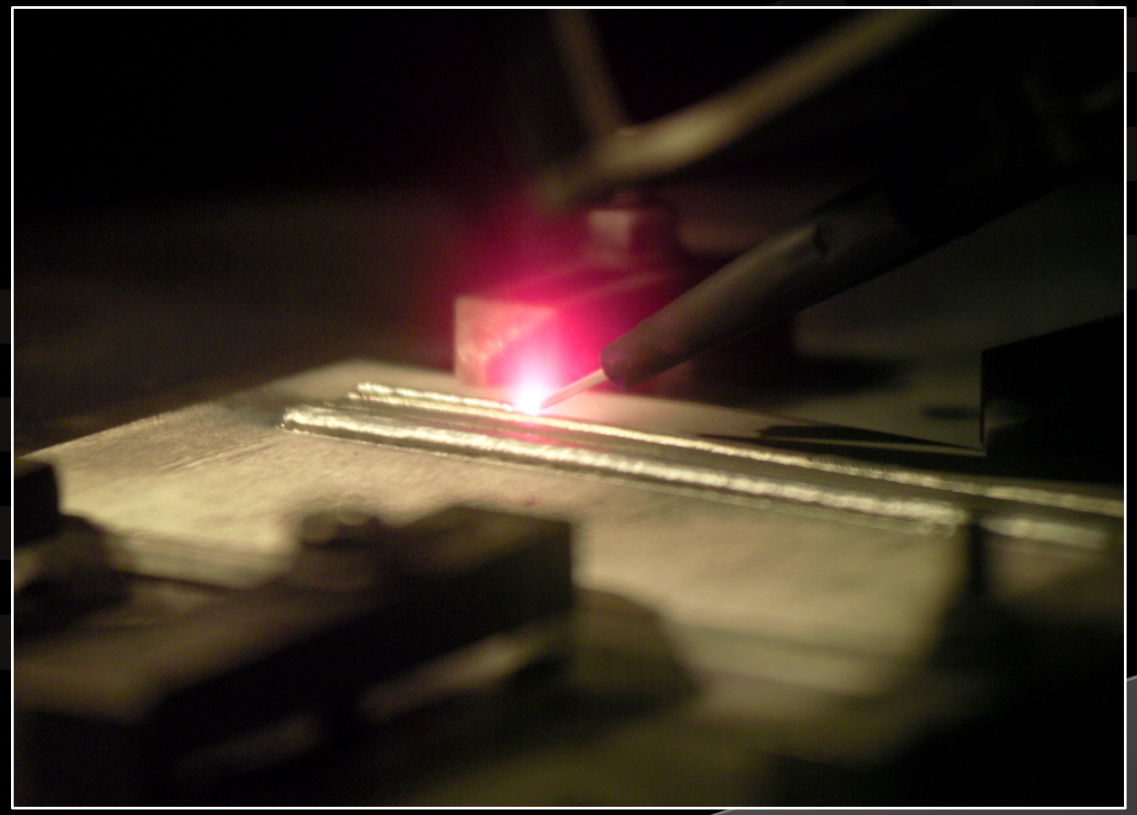
- Miralon Carbon Nanotube products provide strength, ductility, electrical conductivity and thermal transport across several material formats including **sheets, tape, yarn** and dispersed products.
- Harnessing an SBIR innovation in new materials for NASA missions



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COSM: EBF3 Real-Time Beam Steering

- SBIR funded to perform analysis and design while integrating into the engineering model ($125k)
- Tipping Point collaboration – 25% industry and 75% NASA



EXPLORE LANGLEY

National Aeronautics and Space Administration



Infrasonic Sensing System

2014 NASA Invention of the Year



Navigational Doppler Lidar



Insitu crimped connection testing

Sensors

EXPLORE LANGLEY

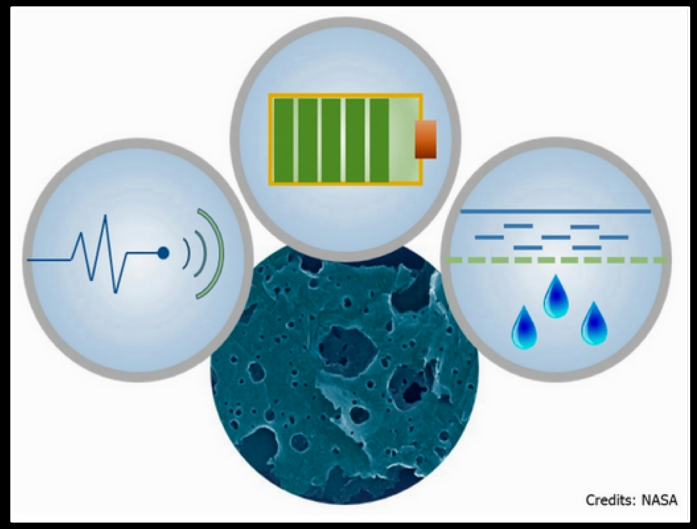
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Exfoliated Hexagonal Boron Nitride



TEEK Foam Insulation



Holey Graphene

Materials & Manufacturing

NASA Langley Research Center

National Aeronautics and Space Administration

NASA Langley Research Center

Office of Strategic Analysis, Communication and Business Development (OSACB)

LaRC-Partnerships@mail.nasa.gov

757-864-3000

EXPLORE NASA PARTNERSHIPS

National Aeronautics and Space Administration

Doing Business with NASA Langley Research Center

SpaceCom2018