

EARTH &
SPACE



1950

Engines, fuels and lubricants research has been a major endeavor at the Institute since it was founded. SwRI developed new techniques using stationary automotive engines and automotive fleet tests as research tools for evaluating fuels and lubricants.

DEEP SEA TO DEEP SPACE & EVERYWHERE IN BETWEEN

ENERGY &
ENVIRONMENT



D025650

1958

Although far from an ocean, the Institute quickly became known for its deep sea design and development work. Engineers conceived, designed and tested a scale model of the world's first deep diving submarine built out of aluminum, the Aluminaut.



D003247

MANUFACTURING &
CONSTRUCTION

1957

One of SwRI's first internal research programs studied direction finding using this shielded loop antenna and carefully calibrated instrumentation. The signals intelligence program area persists today.



DC5778

AUTOMOTIVE &
TRANSPORTATION

1971

The Institute pioneered and remains internationally recognized for its engine exhaust measurement and analysis research, which contributes to national emissions standards.



D025620

CHEMISTRY &
MATERIALS



BIOMEDICAL &
HEALTH

2021

In addition to developing space instruments, avionics and small satellites, SwRI is home to the principal investigators for five NASA space missions, with research ranging from the Sun to the outer reaches of our solar system, including the Lucy mission to Jupiter's Trojan asteroids, which launched in 2021.

DEFENSE &
SECURITY

2000

SwRI conducts vacuum distillation tests and develops new processes to help industry develop methods to create quality fuels and useful chemicals from renewable feedstocks.



D016501_4285

1989

SwRI developed a two-robot system to strip paint from military fighters using a plastic bead blasting technique.



D019737_3814

2014

To support the U.S. Department of Defense, SwRI develops both unmanned aerial systems and ground vehicles, connecting them to provide more global information about the surrounding environment. This technology can help remove military personnel from particularly hazardous duties.



DEF4230

1996

Institute engineers solve problems and develop new technology to improve the safety, reliability and efficiency of large industrial engines, turbomachinery and gas transmission technology.



DE64659

ELECTRONICS &
AUTOMATION

CELEBRATING SEVENTY-FIVE YEARS OF ADVANCED SCIENCE AND APPLIED TECHNOLOGY