SPACE RANGE

ManTech's Space Range: Protecting the Space Enterprise From the Ground Up

In 2020, the power of the United States to deliver full-spectrum global space capabilities is unprecedented. Unfortunately, so is the power to hack them. A June 2018 cyberattack attributed to Chinese espionage took control of satellites and telecom systems in the U.S. and Southeast Asia. As the world races to 5G dominated by Huawei and ZTE, imagine the challenges that lie ahead.

Warfighters rely on vital space assets for data, intelligence and communications essential to mission success across the multi-domain ecosystem of land, sea, air, cyber and space. Similarly, all 16 critical infrastructure industries – from health care and public health to the Defense Industrial Base and financial services – depend on precise timing and dependable voice and data communications made possible by America's space enterprise. In a very real sense, space is the most important and sensitive critical infrastructure of all.

Every facet of space, from complex ground stations to data transport facilities to the spacecraft themselves, faces the same challenge: securing critical mission and command and control (C2) functions. While the nation has committed to designing resiliency and redundancy into current and future systems, it must still protect legacy space assets.

The Number 1 responsibility of the space community is to safeguard our space assets with advanced cybersecurity solutions that anticipate and foil attacks.

Enter ManTech's Space Range

ManTech has embraced the challenge of identifying and capturing the unique threats and vulnerabilities in the space domain with our newest offering, the ManTech Space Range. Built upon the success of ACRE®, ManTech's innovative and fully operational cyber range, we are expanding our robust, scalable and hyper-realistic range to encompass the unique requirements of a cyber infrastructure supporting a space enterprise.

ManTech's ACRE range and highly trained team of space and cyber professionals are unrivaled within the IC and DoD. Our **offense-informed cyber defense** is an integral part of how we replicate any space, ground and network environment at any classification level to tackle today's toughest cyber threats.

ManTech's Space Range provides "the right stuff" for customers to train to defend America's vital space enterprise from the ground up. Most importantly, ManTech's Space Range provides leaders with the confidence that critical space communications, navigation and intelligence gathering capabilities will be available and reliable when needed most.

What Sets ManTech's Space Range Apart

- ManTech's Space Range is a reusable, flexible, physical and virtualized space and cyber range that brings best-in-class cyber defense expertise to space and to a new generation of space professionals.

- ManTech's Space Range is built using a Software Defined Infrastructure (SDI) model which enables customers to efficiently create exact replicas of an existing cyber architecture.

- Entire space, ground and network environments can be converted to Software Defined Infrastructure (SDIs) on demand, to ensure a no-touch deployment of the designated environments.

- Ability to provide a **before and after vulnerability assessment** accurately modeling the effects of possible courses of action on legacy, current, and future space and ground cyber infrastructures and ensuring architecture compliance with existing regulations.

- Realistic network traffic stimulation, including unique space protocols, traffic shaping, orbitology effects, automated users and even external attackers — all while realistically replicating the unique challenges of the space domain.

- ManTech's team of Space and Cyber professionals bring an **offense-informed cyber defense** mindset providing realistic training scenarios and cutting-edge solutions to today's toughest cyber challenges.

Easy, Accurate and Hyper Realistic

- User-friendly drag-and-drop interfaces facilitate a rapid manual or automated replication of any space environment, reducing setup and reset time from weeks to months to hours.

- A virtualized environment that replicates highly complex and fragile space architectures in a safe, isolated and secure environment.

- Realistic IT environments providing the spectrum of networking protocols and devices to ensure fully-structured environments versus "flat" lab-grade networks.

- Hands-on realistic real-time cyber defense training.

- Live-fire exercises that demonstrate worst case scenarios providing best-in-industry training opportunities.

- Testing of workforce incident response knowledge.

- Accurately validate emergency response options too dangerous to test in an actual environment.

- Practice and improve Enterprise Cyber Security effectiveness, risk and contingency of operations.

- Custom-developed exercises available upon request.

The next major cyber threat to critical infrastructure in space could happen any time. When it comes to supporting our customers' role in safeguarding the space assets of our nation and our allies, ManTech's Space Range is ready for lift-off.

- -

LEARN MORE

Visit our website at ManTech.com/capabilities/space range or email: spacerange@mantech.com

ManTech
mantech.com