

A NATIONAL ASSET

\$92B Weapons Portfolio
523 Foreign Military Sales Cases
65 International Partnerships
46 University Partners
32 Industry Partners
2 Centers of Excellence



**“STRENGTHEN OUR
ALLIANCES... BECAUSE WE
ARE STRONGER TOGETHER”**

(SECAF/CSAF)

PARTNERS



Air Force Research Laboratory
Science & Technology



Air Force Life Cycle Management Center
Acquisition - Intel - Engineering - Weaponeering



96th Test Wing
Weapon Developmental Testing



For more information
E-mail the AFRL/RW at:
[@eglin.af.mil](mailto:AFRL.RW.StratComm@us.af.mil)

WEAPONS TECHNOLOGY INTEGRATION CENTER

WTIC

AFRL | AFLCMC | AFTC



SCIENCE



SYNERGY



SECURITY



A NEW CAPABILITY FOR WEAPONS DEVELOPMENT

Eglin Air Force Base, Florida

96TW-2019-0003 Distribution A Approved, Distribution Unlimited

WHAT IS IT?

**WEAPONS ENTERPRISE
FOCUSED CAPABILITY WITH
STATE-OF-THE-ART
COLLABORATIVE LABS &
SECURE SPACE FOR
NEXT-GEN WEAPONS**

500K Sq. ft - Seats 1,500 Personnel

The WTIC will enable the *digital transition* for weapons development aided by cutting edge digital design labs, modeling and simulation, collaboration secure spaces to experiment with autonomy and artificial intelligence technologies. This capability will expedite scientific discovery and enable breakthroughs that will give our armed forces the unfair advantage in the battlefield *faster and cheaper*. Additionally, close collaboration with academic, private, and international partners ensures that scientific breakthroughs benefit the nation, the state, the local community, and beyond.

STATUS

Programming charrette complete
Submitted in current MILCON program

THE STRATEGIC ENVIRONMENT

The rise of near-peer adversaries and the rapid proliferation of technological advancements has challenged the US military advantage, eroding the uncontested superiority it once had in all domains. Today, every domain is contested. This rapid advancement in technology is also changing the character of war, increasing the speed and complexity with multi-domain warfare and the effects of contested actions in the air, land, sea, sub-sea, space, cyberspace, etc. The complexity of future warfare drives the need for more advanced weapon systems that can operate at the speed necessary; adapt to situations in a complex, multi-domain environment; and perform multiple roles while executing its primary mission.

As directed by our National Security Strategy (NSS) and National Defense Strategy (NDS), to keep our asymmetric military advantage we need to modernize our weapon systems, and, be able to do so at the speed of relevance (software updates in 48 hours & hardware updates in 1/10th the time). The WTIC enables us to achieve both of these needs with modern, digital laboratory space that enhances our research and development capability and a collaborative, multi-disciplinary workforce that enables rapid transition of technologies to the warfighter.

**WE CANNOT EXPECT
SUCCESS FIGHTING
TOMORROW'S CONFLICTS
WITH YESTERDAY'S
WEAPONS OR EQUIPMENT**

— 2018 U.S. National
Defense Strategy



**NEED ADDITIONAL SPACE &
SECURE SPACE**

PROBLEM

- **Eglin has 350K sq. ft space deficit (50% is secure)**
- **Responding** to near-peer tech advances, **28 new weapons programs** began in last 5 years & still growing
- **Cannot** fully support CSAF-directed Cyber Resiliency Office for **\$92B weapons portfolio** w/out secure space
- **Inefficient** stop-gap measures (i.e. - temp space) **have cost \$70M** to date (FY14-19) and aren't solutions
- **Separate** org construction - approx. \$80M more + 8 years longer than WTIC

SOLUTION

- **Adds** additional 500K sq. ft of space including secure space for **new, highly sensitive programs**
- **Includes** modular lab space to **meet rapid acquisition timelines** and facilitate the stand up of new programs
- **Provides** an enduring solution to infrastructure challenges rather than relying on stop-gap solutions

**WTIC - An Enduring Solution to
Infrastructure Challenges**

A PRACTICAL SOLUTION



**NEED 21ST CENTURY
LABORATORY SPACE**

PROBLEM

- **Cannot** develop & deliver multi-domain **hypersonic, networked, & autonomous weapons** in 1960's labs
- **Cannot** integrate new weapons into advanced aircraft in current infrastructure
- **Losing** tech advantage - **turning away \$300M in S&T today and \$2B in next 6 yrs** due to lack of secure modeling, simulation, and analysis space

SOLUTION

- **Adds secure infrastructure** for advanced aircraft integration
- **Adds** novel modeling & simulation space to validate and verify new concepts **saving millions in program costs**
- **Revolutionizes** the design process with digital design labs for **near real-time weapon development** and experimentation - Prototyping real combat capability
- **Provides** warfighter capabilities faster

**Labs Are Our Runways, Enabling the
Weapons Enterprise Mission**



**NEED COLLABORATIVE
SPACE / UNITED WORKFORCE**

PROBLEM

- **Disjointed ops - 5 orgs spread across 23 facilities** impedes resource sharing and collaboration
- **Current** infrastructure limits cross-team integration, flexibility and hiring to support new programs
- **Cannot** meet accelerated weapons development timelines without cooperation of stakeholders within the Weapons Enterprise

SOLUTION

- **Enables** program stand up in **weeks vs. years**
- **Reduces** development and sustainment costs through shared expertise and resources
- **Provides** common space for multidisciplinary teams to collaborate
- **Efficient, collaborative, and innovative** workforce reduces timelines for weapons development and fielding through positive relationship building

**Breaking Down Stovepipes in the
Weapons Acquisition Process**

WTIC BRINGS NEW WEAPON CAPABILITIES TO THE FIELD FASTER

