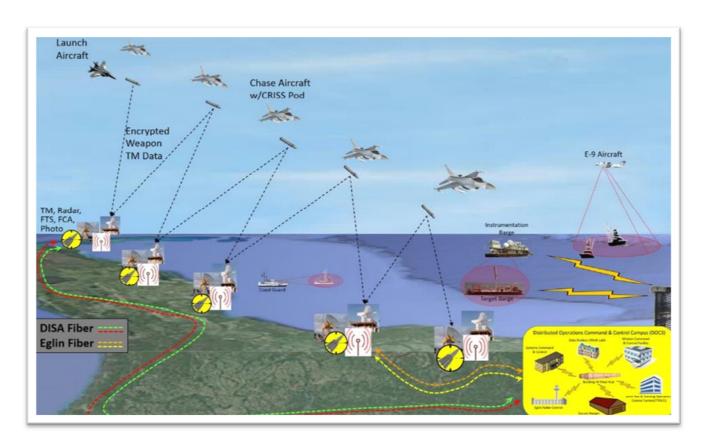
Gulf Range Enhancement Position Paper

Range Solutions for Next Generation Air Armament Test and Training:

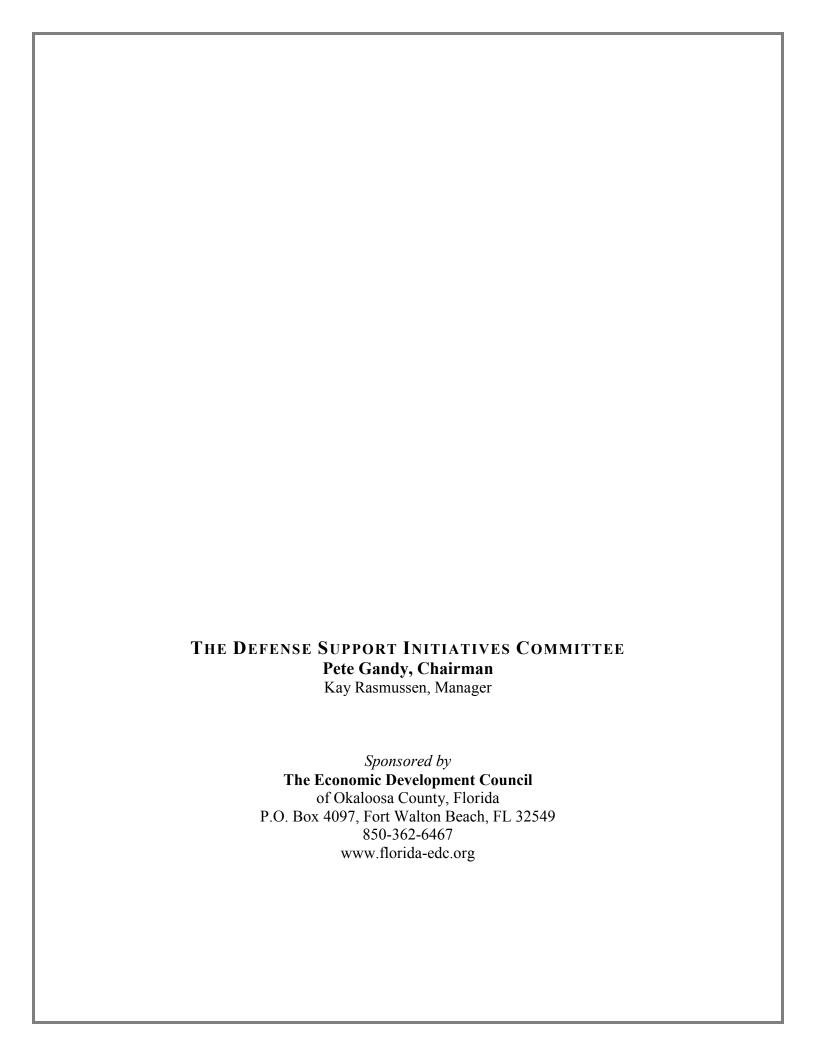
The Eglin Gulf Test and Training Range



Provided by



August 2017





THE DEFENSE SUPPORT INITIATIVES COMMITTEE OKALOOSA. SANTA ROSA AND WALTON COUNTIES

August 23, 2017

Subject: Gulf Range Enhancement Position Paper

The tri-county Defense Support Initiatives Committee is a military installation advocacy group that interfaces at the local, state and Federal levels on topics of regional and national concern. With today's technology, the military services have greater capabilities than ever before—both domestic and abroad. With the growth of these global technological advancements the United States' test and training ranges are increasing in significance. The complexity of range management and capabilities has become more challenging due to research, development, test and evaluation requirements of 5th and 6th Generation aircraft, munitions and cyber security needs. This paper identifies the DSI's advocacy position as it pertains to the Gulf Range Enhancement plans to enhance the Eglin Gulf Test and Training Range capabilities.

Florida benefits from hosting 20 major military installations and three Unified Combatant Commands. Many of these facilities utilize the Eglin Gulf Test and Training Range due to 1) clement weather, and 2) access to thousands of square miles of air and water providing military aviator training and modern weapons testing.

As you are aware, the DSI has held a protective position advocating for regional military ranges for over twenty years. As weapon systems and aircraft become more sophisticated and long-reaching, test and training ranges take on even greater significance to the national security of the United States. It is critical that current Department of Defense ranges be sustained and enhanced to meet the growing demands of future military readiness. The DSI strongly supports the Gulf Range Enhancement Plan's developmental phases supporting increased range enhancement and sustainment, and instrumentation capabilities and capacity. Continued support of military ranges as national assets is vital to our military readiness and superiority. The DSI exists to support our military and pledges to provide assistance as needed.

Respectfully,

Chairman

Enclosure

Kay Kasm Manager

Major Range and Test Facility Base

The Major Range and Test Facility Base (MRTFB) is a designated set of Department of Defense (DoD) facilities, ranges, and their associated workforce that provide the foundation of the Nation's Test and Evaluation (T&E) capabilities deemed critical to maintaining our Nation's military technological superiority. Concurrently, the MRTFB supports the development of rapid response solutions to technology related issues experienced by warfighters engaged in conflict. The MRTFB is collectively regarded as a "national asset." To understand the significance of the Gulf Range Enhancement Program, it is important to understand what the MRTFB is and its importance to the Nation. The "Base" in MRTFB is not synonymous with installation. More accurately, this use of "Base" should be interpreted as synonymous with "foundation".

In the early 1970's the DoD recognized the increasing value of large military test facilities to support development and deployment of U.S. warfighting capabilities and established special oversight of the MRTFB management to 1) provide coordination among major facilities, 2) promote multi-service utilization, and 3) reduce unnecessary duplication of assets and budget requirements.

The MRTFB consists of a broad base of T&E activities and programs structured to integrate all developmental T&E, operational T&E, live-fire T&E, and modeling and simulation activities. These activities compose a strategy to provide information on risk and risk mitigation, to provide empirical data for validation of models and simulations, to permit an assessment of the attainment of technical performance specifications, and to determine whether systems are operationally effective, suitable, and survivable for the intended use.

The MRTFB consists of Army, Navy, and Air Force managed test ranges—one of which is managed by the 96th Test Wing at Eglin Air Force Base, Florida.

The 2007 Department of Defense Directive NUMBER 3200.11 identifies the Major Range and Test Facility Base as the designated core set of DoD Test and Evaluation infrastructure and associated workforce that must be preserved as a national asset to provide T&E capabilities to support the DoD acquisition system.



Major Range and Test Facility Base - National Treasures

The 2010 Department of Defense Instruction NUMBER 3200.18 for the Management and Operation of the Major Range and Test Facility Base states that the MRTFB shall be managed to ensure long-term range sustainment and to minimize the impact of encroachment. It further states that as a national asset, the MRTFB shall be sized, operated, and maintained to provide

DSI GRE POSITION PAPER

test and evaluation information to DoD Component T&E users in support of the DoD Research, Development, Test and Evaluation (RDT&E) and acquisition processes.

Across the military services, gaps in range capabilities to meet evolving requirements are growing rapidly. The military services are under pressure to manage modernization of range capabilities to budgets that do not always account for changing technology needs to meet future requirements. Additionally, it is anticipated that the need for increased use of the MRTFB's ranges with large airspace footprints will continue to increase in order to support realistic testing and training environments critical to readiness of operational forces.

The Fiscal Year 2017 House Armed Services Committee (HASC) recognizes that the MRTFB is a critical component to military technological superiority, and key to ensuring U.S. warfighting capability. The committee has stated that the MRTFB must remain sized, operated, and maintained to preserve core, governmental T&E capabilities, but should also be developed over time to meet future technology needs of the Department.ⁱⁱ

The Senate Armed Services Committee (SASC) notes in the National Defense Authorization Act for Fiscal Year 2017 that a key element of the Third Offset Strategy (next generation technologies) is the development of high speed and hypersonic capabilities to support defense missions. The committee notes that advanced research and development in this area depends on world class testing facilities; such as the MRTFB. iii

The SASC has noted the critical role our national assets of test and training ranges play in providing full-spectrum readiness critical for all of our Services, and that large live training exercises are one of the key components to this training. National test and training ranges such as the Eglin Gulf Test and Training Range (EGTTR), and other United States-based ranges, are critical to hosting realistic large joint-force training exercises. It is critically important to maintain expansive and tactically relevant training ranges to simulate anticipated threat environments for the coming decades.



Eglin Gulf Test and Training Range

According to the 2015 Florida Defense Factbook, defense spending equated to \$79.8 Billion, or 9.5%, of Florida's 2014 Gross State Product, and provided 775,000 direct, indirect and induced jobs. Contributing to that impact is the Eglin Gulf Test and Training Range; the largest military range in the continental United States.



The EGTTR connects test & training ranges and capabilities across the eastern Gulf of Mexico extending from Key West to NW Florida. It includes 180,000 square miles of DoD controlled air-space, as well as 724 square miles of adjacent land ranges, 3,200 square miles of airspace over adjacent land, 17 miles of shoreline access, interconnected radars and 2 launch areas. The training area contains multiple live-fire bombing ranges, including Pinecastle Range, Avon Park Air Force Range and the Eglin Bombing Range, supporting simultaneous maritime, air and land training exercises. Due to its tremendous capabilities, the EGTTR complex is an integral part of DoD's Training Resources Strategy.

The EGTTR is managed by Eglin Air Force Base with a primary function to support research, development, test, and evaluation of conventional weapons and electronic systems. Its secondary function is to support training of operational units. The EGTTR supports multiple users, which include DoD, other government agencies, foreign countries, and private companies. Mission activities conducted within the EGTTR are summarized primarily by air operations and ordnance testing and training.

Some of the criteria realized in valuations of military installations include the current and future mission capabilities and impact on operational readiness, joint war-fighting training; availability and condition of land, water and airspace ranges to maintain a diversity of training areas; and the ability to accommodate future total force requirements.

The EGTTR provides offshore testing and training areas and opportunities supporting 5^{th} and 6^{th} generation weapons and aircraft activities.

Gulf Range Enhancement

Weapons' testing is the major factor in determining Range requirements and limited infrastructure is a contributor to the lack of interoperability testing. There is a growing need to equip ranges to will allow for capabilities and capacity and ensure the best training environment for the best cost. The Air Force Materiel Command A3 (Operations) commissioned a Long Range Stand-Off Weapon Range and Airspace Study in 2015. It looked at all the Range space available in the United States. The result enabled them to place their focus on 3 major ranges: Alaska, Florida (The Eglin Gulf Test and Training Range), and the Utah Test and Training Ranges.

The Gulf Range Enhancement (GRE) plan is an approved United States Air Force program [Program Element (PE) 64759F, Improvement and Modernization] with four phase increments to improve capabilities of the Major Range and Test Facilities Base (MRTFB) in Florida.

Four Phase Increments

- 1. Enhanced centralized remote operations
- 2. Enhanced instrumentation, air-to-air
- 3. Enhanced instrumentation, air-to-surface
- 4. Enhanced instrumentation, down-range

Eglin Gulf Test and Training Range

STH & 6TH Gen Wpns
STH & 6TH Gen Aircraft
Hypersonic ...
Directed Energy ...
Directed Energy ...
Theater Defense Ballistic Missile --Military Mission Line

WYTA-1

EWTA-4

EWTA-4

EWTA-4

EWTA-6

EWTA

Funding profiles were originally proposed using FY12 cost data. However, this FY12 funding baseline will not provide adequate funding in today's market.

The EGTTR GRE provides for activities such as, but not limited to:

- 5th & 6th generation aircraft and weapons integration
- A realistic test and training environment
- Instrumented range space for multi-ship air-to-air and air-to-surface test scenarios
- Instrumented range for Long Range Stand-off Weapons
- Instrumented range for testing and development of projected hypersonic weapons
- Support capabilities to test emerging threat scenarios
- Supports increasing cyber security test requirements

The GRE enables enhanced instrumentation capabilities for current and future generations of aircraft and munitions' testing and training—securing our military superiority.

Conclusion

With today's technology, the military services have greater capabilities and demands than ever before. With the growth of global technological advancements the United States' test and training ranges are increasing in significance. The Major Range and Test Facility Base is regarded as a "national asset" which demands ongoing sustainment and enhancements to maintain our military readiness and superiority. As the Department of Defense's largest multiservice test and training range, the Eglin Gulf Test and Training Range is one component of the MRTFB and the Gulf Range Enhancement Plan defines a path to accomplish the MRTFB's goal.

Timely implementation of the Air Force Gulf Range Enhancement program is critical to countering the growing gap in the ability of the Nation's MRTFB to provide the Department of Defense test and evaluation capabilities required in support of: 1) fielding advanced technology capabilities of 5th generation aircraft and long range standoff air armament; and 2) development of future technology for next generation air armament, including hypersonic strike weapons. Additionally, GRE implementation will enhance the operational readiness of operational forces that rely on the Gulf's MRTFB range complex.

For the MRTFB foundation to be effective requires timely investments to ensure capabilities are enhanced and ready to support development of emerging advanced technologies and the acquisition of new military systems incorporating these technologies. The MRTFB must remain sized, operated, and maintained to preserve core governmental T&E capabilities. This requires development of new capabilities to meet future technological needs of the DoD—before T&E support is needed. The infrastructure and workforce that comprise the MRTFB are spread across the services and other government agencies. Each owner of these capabilities is responsible making the investments necessary to perform their MRTFB T&E missions.

Constrained budgets and high operational ops tempo of recent years has resulted in delays in funding GRE implementation. Based upon the AF's FY18 Program Objectives the current implementation projection is 2019—the year the AF previously projected the GRE needed to be completed. Additionally, instead of programming funding for completion in three years, the program has been forced to incrementally fund phasing over a five to seven year period—very late to meet the Nation's needs.

As a means to strengthen EGTTR and MRTFB capacity and capabilities, and their contributions to the economy and national security, the DSI strongly supports the Gulf Range Enhancement Plan and advocates for its required infrastructure to provide realistic test and training scenarios for our military warfighters.

Acronyms

DoD Department of Defense

DSI Defense Support Initiatives Committee

EGTTR Eglin Gulf Test and Training Range

GRE Gulf Range Enhancement

HASC House Armed Services Committee MRTFB Major Range and Test Facility Base

RDT&E Research, Development, Test and Evaluation

SASC Senate Armed Services Committee

T&E Test and Evaluation

www.globalsecurity.org/military/facilities

[&]quot;National Defense Authorization Act for Fiscal Year 2017, House of Representatives Report 114-537, Report on H.R. 4909; TITLE II—RESEARCH, DEVELOPMENT, TEST, AND EVALUATION

iii SASC NDAA FY17 Report 114-255, Title II, RDT&E.