1.0 Purpose and Need

Environmental Impact Statement

Fallon Range Training Complex Modernization

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1 Purpose of and Need for the Proposed Action

1.1 Introduction

The Commander, United States (U.S.) Pacific Fleet, a Command of the U.S. Navy (hereinafter referred to as the Navy), proposes to modernize the land and airspace configurations of the Fallon Range Training Complex (FRTC) in northwest Nevada.

The Navy constantly evaluates its warfighting tactics, techniques, and procedures for their effectiveness against changing threats worldwide. As new weapons systems are developed and introduced to the Fleet and tactics updated to successfully employ these weapons systems, training requirements also change. Changes to training requirements can, in turn, drive the need to expand or modify training ranges. At the FRTC, a number of new weapons systems have been introduced to the Fleet in recent years (e.g., Joint Direct Attack Munitions); and new systems, including new aircraft (e.g., F-35C, EA-18G), will need to be employed in future training activities. However, the FRTC bombing ranges (Bravo [B]-16, B-17, B-19, and B-20) and the Dixie Valley Training Area (DVTA) have not changed substantially in size or configuration since the 1990s. To configure the FRTC bombing ranges to meet modern training requirements, the Navy proposes the following actions:

- Congressional renewal of the 1999 Public Land Withdrawal of 202,864 acres, which is scheduled to expire in November 2021;
- withdrawal and reservation by Congress for military use of approximately 618,727 acres of additional public land;
- acquisition of approximately 65,153 acres of private or state-owned (non-federal) land;
- expansion of associated Special Use Airspace (SUA) and reconfiguration of existing airspace; and
- modification of range infrastructure to support modernization.

The elements of this proposal are based on the results of a comprehensive assessment of air warfare by the Naval Air Warfare Development Center (NAWDC), which is the Naval Aviation Warfighting Center of Excellence for the Department of the Navy, to address current, emergent, and future FRTC training capabilities titled *Ninety Days to Combat* (U.S. Department of the Navy, 2015a) (discussed in full in Section 1.4, Purpose of and Need for the Proposed Action). With the implementation of the proposed modernization, the FRTC would be capable of supporting the aviation and ground training and readiness requirements for the training missions assigned to the FRTC, into the foreseeable future.

Under the proposed action, the type and tempo of aviation and ground training would be similar to what was evaluated in Alternative 2 of the 2015 *Military Readiness Activities at Fallon Range Training Complex, Nevada Final Environmental Impact Statement* (U.S. Department of the Navy, 2015a). In addition to analyzing the type and tempo of military readiness training activities within the FRTC, that Environmental Impact Statement (EIS) accounted for the introduction of new platforms (aircraft) and weapons systems. This current EIS analyzes physical changes to the FRTC.

At the time the Record of Decision (ROD) for the 2015 *Military Readiness Activities at Fallon Range Training Complex, Nevada Final Environmental Impact Statement* was signed, NAWDC's assessment of the capabilities of the FRTC to meet future training requirements was still under consideration by the Navy. Changes in future range design and tactics at the FRTC were not considered in that EIS. The ROD acknowledged that the Navy would analyze any proposed physical or operational changes to the FRTC in

accordance with the National Environmental Policy Act (NEPA) when such changes were considered ripe for analysis.

The Navy has prepared this current EIS in accordance with NEPA, as implemented by the Council on Environmental Quality (CEQ) and Navy Regulations. The Navy is the lead agency for this EIS pursuant to 40 Code of Federal Regulations (CFR) section 1501.5. Cooperating agencies for this EIS, pursuant to 40 CFR section 1501.6 and section 1508.5, include:

- Bureau of Land Management (BLM)
- Federal Aviation Administration (FAA)
- U.S. Fish and Wildlife Service
- Nevada Department of Wildlife
- Nevada Department of Minerals
- Nevada Department of Agriculture
- Nevada Department of Transportation
- Nevada Governor's Office of Energy
- Churchill County, Nevada
- Eureka County, Nevada
- Lander County, Nevada
- Mineral County, Nevada
- Nye County, Nevada
- Pershing County, Nevada

The Navy is also working closely with the following 13 federally recognized Native American Tribes and 1 Tribal Council to prepare this EIS:

- Duckwater Shoshone Tribe
- Fallon Paiute-Shoshone Tribe
- Fort McDermitt Paiute and Shoshone Tribe
- Lovelock Paiute Tribe
- Pyramid Lake Paiute Tribe
- Reno-Sparks Indian Colony
- Summit Lake Paiute Tribe
- Te-Moak Tribe of Western Shoshone Indians of Nevada (comprised of the Battle Mountain Band, Elko Band, South Fork Band, and Wells Band)
- Washoe Tribe of Nevada and California
- Walker River Paiute Tribe
- Winnemucca Paiute Tribe
- Yerington Paiute Tribe
- Yomba Shoshone Tribe
- Inter-Tribal Council of Nevada

In accordance with 36 CFR part 800 (regulations implementing Section 106 of the National Historic Preservation Act [NHPA] of 1966 [54 United States Code {U.S.C.} 300101 et seq.], as amended); Executive Order 13175, *Consultation and Coordination with Indian Tribal Governments*; and regulations implementing NEPA (40 CFR part 1500 et seq), consultation with Native American Tribes has been ongoing throughout the development of this EIS. The Navy solicited comments from the above listed Tribes above by letter, phone, and e-mail, and has received both written and oral responses. The Navy invited the listed Tribes to be present at meetings with cooperating agencies and hosted separate meetings with these Tribes regarding the proposal. The Navy will continue to consult with tribes on a Government-to-Government basis, including but not limited to consultation under NHPA Section 106.

1.2 Location

The FRTC is located in northern Nevada and encompasses approximately 223,562 acres of training land (Table 1-1) and 8,670 acres of land at the Naval Air Station (NAS) Fallon main base. In addition, the FRTC has approximately 12,256 square nautical miles (NM^2) of SUA associated with NAS Fallon. The FRTC airspace overlies large parts of Churchill, Lander, and

Special Use Airspace

Airspace of defined dimensions wherein activities (e.g., military training flights) must be confined because of the nature of their activities or wherein limitations may be imposed upon aircraft operations that are not a part of those activities.

Eureka counties, as well as small portions of Pershing County in the north, Nye County in the south, Elko County in the east, Mineral County in the southwest, and Lyon and Washoe Counties in the west. U.S. Highway 50 bisects the FRTC and is a main east-west transportation route through the complex (Figure 1-1).

Table 1-1: Management of Current Fallon Range Training Complex Land Assets

Area	Land Category	
	Withdrawn[1] (acres)	Navy Fee Owned[2] (acres)
B-16	27,359	0
B-17[1]	53,546	25
B-19	29,012	0
B-20	21,576	19,429
DVTA	68,809	28
Shoal Site	2,561	0
Totals[+]	202,864	19,483

[1]The existing withdrawn acreage represents the area that is presented in the Navy's withdrawal request segregation package and are lands that the Navy is requesting for renewal. As a result of numerous land surveys by the BLM since 1999, this number does not match the acreage values as described in PL 106-65.
[+]Due to rounding of acreage values at the category level, some total columns may not match calculated totals
[2]In addition to the Withdrawn and Navy Fee-Owned lands, there are approximately 1,215 acres of Navy controlled non-federal lands as part of the B-17 range not listed in the table.

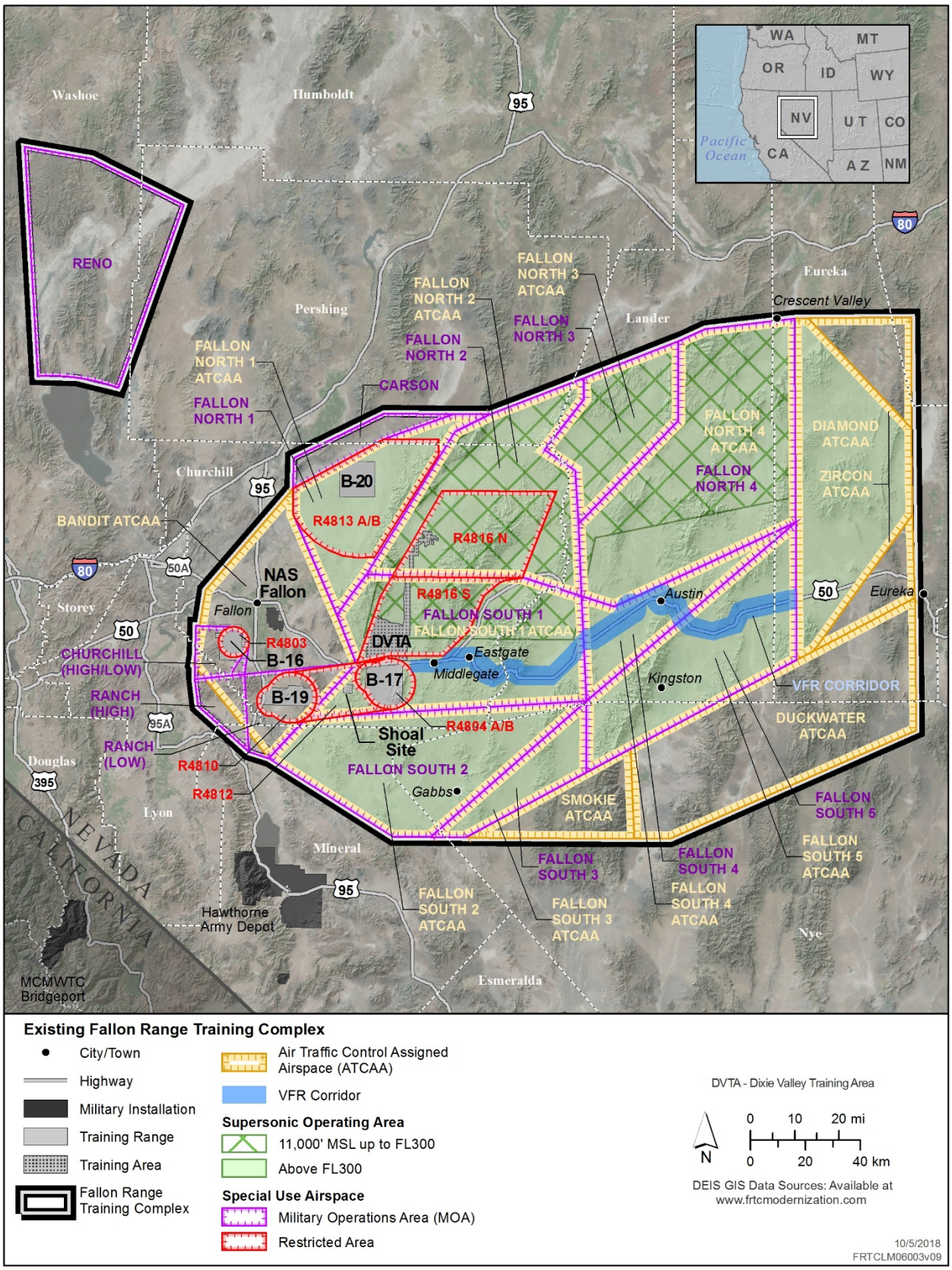


Figure 1-1: Existing Fallon Range Training Complex

1.3 Background

The FRTC hosts training for aviation and ground military units necessary to ensure military readiness for the defense and security of the United States and its interests abroad. Since World War II, the Navy has extensively used the ranges and airspace of the FRTC to conduct military air warfare and ground training, including live-fire training activities. The area in which the FRTC is located provides an ideal training environment due to its climate, potentially usable land areas, terrain, and military airspace.

The FRTC's characteristics include suitable weather for year-round training and designated airspace for overland supersonic training. The region provides large areas suitable for realistic training and space for freedom of tactical maneuver, where naval personnel can build and sustain combat skills and readiness.

The FRTC consists of four live-fire ranges (B-16, B-17, B-19, and B-20) and one non-firing training area (the DVTA, which includes the Shoal Site):

History of the FRTC

1942	U.S. Army airfield established in Fallon
1943	First training range established (B-20)
1944	Naval Auxiliary Air Station commissioned with transfer of a property from the Army
1953	Establishment of B-16, B-17, and B-19. Public Land Order 898 indefinitely withdrew 56,011 acres of land for B-16, B-17, and B-19 for military use (Figure 1-2).
1984	Naval Strike Warfare Center based at NAS Fallon
1996	Naval Strike and Air Warfare Center (NSAWC) formed which consolidated the Naval Strike Warfare Center, Navy Fighter Weapons School (TOPGUN), and Carrier Airborne Early Warning Weapons School (TOPDOME)
1986	Public Law 99-606 enacted, withdrew 21,576 acres for use of B-20 for training
1999	Public Law 106-65 signed, which withdrew approximately 201,933 acres of land for military use for a 20-year term. Land was withdrawn for B-16 (27,253 acres), B-17 (52,830 acres), B-19 (29,276 acres), B-20 (21,577 acres), the DVTA (68,437 acres), and the Shoal Site (2,560 acres). This number does not match the acreage values as described in the BLM segregation package (and land acreage tables within this EIS) as a result of numerous map revisions and land surveys by the BLM since 1999

- B-16's primary use is unit-level ground and air training. Typical training activities that have historically occurred include Naval Special Warfare tactical ground mobility training using wheeled vehicles with crew-served weapons and small arms, fixed-wing inert ordnance (practice bombs armed only with small spotting charges in order to identify weapon impact location), helicopter gunnery (machine gun) training, and Close Air Support and Combat Search and Rescue missions. Naval Special Warfare Tactical Ground Mobility Course training, Naval Aviation basic air-to-ground training, and Helicopter Gunnery Training Range training have historically occurred at B-16. The majority of B-16 is closed to the public due to safety reasons, with only small portions accessible to the public under the terms of the 1999 Military Lands Withdrawal Act (Public Law 106-65). Table 2-9 provides a complete list of training activities conducted at B-16.

Combat Search and Rescue

A specific task performed by rescue forces to recover distressed personnel during war or military operations other than war. Also called CSAR.

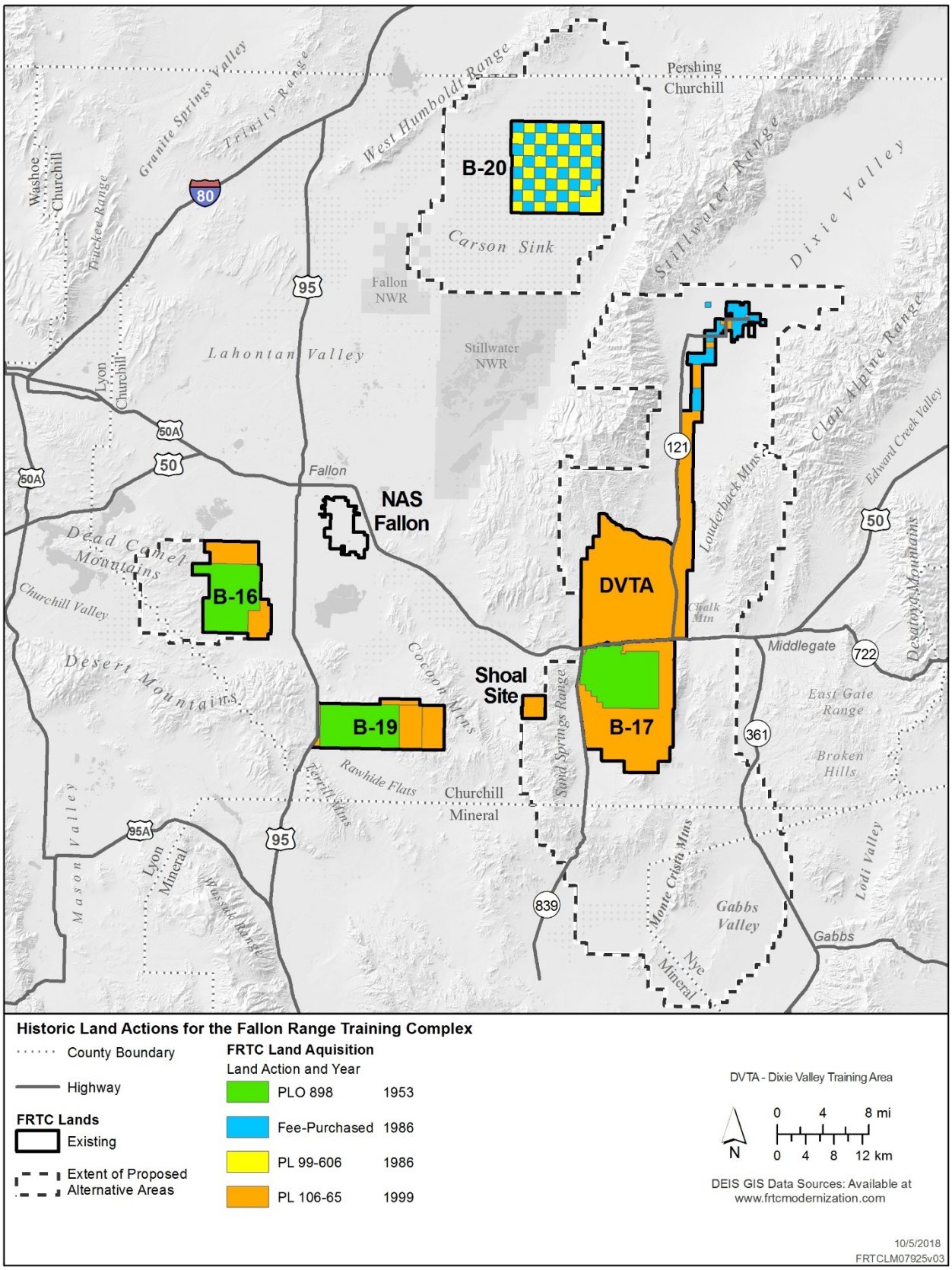


Figure 1-2: Historic Land Actions for the Fallon Range Training Complex

- B-17's primary use is advanced training with multiple aircraft. The Navy has heavily developed B-17 and it is the most frequently used bombing range within the FRTC. The range contains a variety of targets and target configurations and provides the most challenging and high-complexity scenarios for all types of training events. It accommodates live and inert munitions. B-17 is not accessible by the public for safety reasons. Table 2-9 provides a complete list of training activities conducted at B-17.
- B-19 is used for Air-to-Ground munitions delivery and rotary-wing strafing (firing at a ground target from helicopter). The range also has a small arms range managed by the Nevada Army National Guard. Small portions of B-19 are accessible to the public under the terms of the 1999 Military Lands Withdrawal Act. Table 2-9 provides a complete list of training activities conducted at B-19.
- B-20's primary use is for advanced weapons training and large force exercises. It contains a variety of targets and target complexes and is capable of accommodating both live and inert ordnance. B-20 is not accessible by the public for safety reasons. Table 2-9 provides a complete list of training activities conducted at B-20.
- The DVTA is typically used for Convoy Training, fixed-wing and helicopter Night Vision Device training, helicopter mountain-flying training, and Combat Search and Rescue activities. The DVTA also supports aviation electronic warfare and some Naval Special Warfare activities. No Air-to-Ground munitions delivery training or live-fire training activities occur within the DVTA. The majority of the DVTA is accessible to the public under the terms of the 1999 Military Lands Withdrawal Act. There are several facilities on the DVTA that are fenced and locked, including radar sites, a maintenance yard, and an electronic support facility [Centroid Complex]). Table 2-9 provides a complete list of training activities conducted at the DVTA.
- The Navy typically uses the Shoal Site for Combat Search and Rescue activities. There is no air-to-ground munitions delivery or live-fire training conducted. The Shoal Site is accessible to the public under the terms of the 1999 Military Lands Withdrawal Act.

The FRTC's SUA includes 9 restricted areas, 15 Military Operations Areas (MOAs), 14 Air Traffic Control Assigned Airspaces (ATCAA), 2 supersonic operating areas (where aircraft can exceed Mach 1, or the speed of sound), and a Civilian Visual Flight Rules (VFR) corridor. Specifically, the FRTC SUA includes:

- Restricted Airspaces (established by 14 CFR part 73) are areas of airspace that, when activated, are closed to commercial and general aviation aircraft. Restricted areas activate as necessary to support safe range operations, during specific land bombing events and as needed for specific non-ordnance activities, such as lasing. Outside of normal operating hours (during which restricted areas are generally activated), activation of the Restricted Airspace is communicated to the public via FAA-issued Notices to Airmen.
- MOAs are areas of SUA used to separate certain non-hazardous military activities from instrument flight rules flights. Non-hazardous activities can include air combat maneuvers, air intercepts, and low-altitude tactics. MOAs are joint use, in that Civilian VFR traffic has access and priority flight traffic (emergency flights, Medical Evacuations) may transit through the airspace. General aviation pilots using visual flight rules may fly though active MOAs during military training, but many avoid doing so.
- ATCAAs are airspace assigned by FAA Air Traffic Control to segregate air traffic between the specified activities being conducted within the assigned airspace and other Instrumented Flight

Rules (IFR) traffic. They may be requested by the military to support SUA, and are evaluated concurrently with SUA to determine the overall aeronautical impact of the SUA proposal. When not activated, the area can be used for commercial or other IFR traffic. IFR are rules and regulations established by the FAA to govern flight under conditions in which flight by VFR is not safe. IFR flight depends upon flying by reference to instruments in the flight deck, and navigation is accomplished by reference to electronic signals.

- Supersonic operating areas are defined airspace within SUAs and ATCAAs where aircraft can perform activities with airspeeds greater than the speed of sound. Two supersonic operating areas have been established at FRTC to conduct military training that requires high-performance flight profiles, including aircraft flying at supersonic speeds (i.e., greater than the speed of sound or Mach 1). Supersonic Operating Area A is comprised of the entire FRTC boundary for all altitudes above Flight Level 300 (standardized pressure altitude of 30,000 feet) (9,144 meters). Area B is from 11,000 feet (3,353 meters) above mean sea level (MSL) up to Flight Level 300. Area B is above approximately 2,682,705 acres (1,085,652 hectares) of BLM land and 131,424 acres (53,185 hectares) of private land. Land use beneath Area B is mostly ranching, farming, and public land recreation, but recently solar energy development is occurring on both BLM and private land.
- VFR corridors are routes that aircraft (civilian and military) can operate within using visual references without an air traffic control clearance or communication with air traffic control. VFR requires 3,000 feet of vertical separation, must be flown below 10,000 feet MSL and have a visibility greater than 5 miles. If weather conditions are such that the pilot cannot operate according to VFR, he or she must use IFR and cannot use the VFR corridor unless directed by air traffic control. The current VFR corridor is defined in FAA Order 7400.10 and follows U.S. Highway 50 from Sand Mountain to Austin, Nevada, and civilian and military aircraft may use it to transit the FRTC airspace. Within the Fallon MOAs, military aircraft avoid the VFR corridor between the altitudes of 2,000 feet above ground level and 8,500 feet MSL, unless abiding by VFR criteria (max 250 knots below 10,000 feet).

In terms of range infrastructure, the FRTC has a sophisticated threat Integrated Air Defense System (comprised of 37 real or simulated radars throughout the DVTA), a Tactical Combat Training System range (the system collects time, space, position, and weapon employment information from participants in training exercises and transfers the information to a ground system that can provide live monitoring of tactical scenarios and debriefing), multiple target types (e.g., bull's-eye, simulated compounds, missile launchers/air defense sites, tanks, simulated petroleum and oil facilities, laser-guided bomb targets, and radar vans), and supporting target facilities.

The FRTC includes an Electronic Warfare Complex, which consists of a variety of systems, both mobile and fixed in place, located beneath the FRTC airspace. These systems are widely dispersed on Navy fee-owned, withdrawn BLM, and BLM rights-of-way lands, with most of the fixed sites in the general vicinity of B-17 and the DVTA. The systems train aircraft crews in defensive maneuvers and tactics by simulating and disabling the electronic jamming capabilities of attacking aircraft. The various fixed and mobile systems offer tailored configurations and levels of complexity to meet many mission scenarios (such as strike/attack, helicopter penetration and reconnaissance, and Combat Search and Rescue).

The FRTC is supported by NAS Fallon. NAS Fallon includes an airfield with control tower, runways, personnel housing; and maintenance, support, retail, recreation, administration, and utility support facilities.

The FRTC is the only location available to the Navy that can support, house, and train an entire Carrier Air Wing (upward of 60 aircraft and all aircrew and support crews) for advanced Strike Warfare, Electronic Warfare, and Air Warfare training. In fact, every Navy Carrier Air Wing trains at the FRTC prior to deployment as part of the Optimized Fleet Response Plan (an approximately 36-month cycle of maintenance, basic and integrated training, deployment, and sustainment). The FRTC supports five main weapons and tactics courses: TOPGUN (F-18 Super Hornet), SEAWOLF (MH-60 helicopter), HAVOC (EA-18G Growler), Carrier Airborne Early Warning Weapons School (E-2D, Hawkeye), and Viper University (F-16 Viper). The Naval Special Warfare Command also utilizes the FRTC for unit-level training in Tactical Ground Mobility, Special Reconnaissance, Sniper Sustainment, and Land Navigation prior to deployment. The FRTC offers joint (involving multiple Services) integrated training opportunities, which are vital to advanced-level Carrier Air Wing training; support for other mission areas and Tactical Development and Evaluation (including military Unmanned Aircraft Systems [UAS] and other intelligence, surveillance, and reconnaissance platforms); and support for training activities of other Services and government agencies.

Advanced Strike Warfare

Operations to destroy or neutralize enemy targets on land.

Electronic Warfare

Operations to enable aircrews to detect and identify the kind of electronic signals they might encounter flying in hostile territory. Electronic Warfare training does not include the use of munitions.

Air Warfare

Operations involving detection, tracking, destruction, or neutralization of enemy air platforms and airborne weapons.

Tactical Ground Mobility

Use of non-standard vehicles (HUMVEE or MRAP) for tactical driving, vehicle operations, and basic maintenance in the field.

1.4 Purpose of and Need for the Proposed Action

The overarching purpose of any military force is to be able to successfully conduct combat operations in support of national policy and security objectives. To accomplish this purpose, the military force must train regularly and with sufficient realism. The purpose of the Proposed Action, therefore, is to provide sustainable and modernized airspace, range, maneuver areas, training facilities, and range infrastructure and resources. This will support acceptably realistic air warfare training activities as well as special operations ground training activities in order to meet emergent and future threats. These activities are prescribed by NAWDC, and other Naval Warfare authorities, such as the Naval Special Warfare Command.

Current range configurations do not support realistic training as identified in *Ninety Days to Combat.* The Proposed Action is needed because the existing FRTC bombing ranges (B-16, B-17, B-19, and B-20) have not changed substantially in size or configuration since the 1990s. As new weapons systems are developed and introduced to the Fleet, and tactics are updated to successfully employ these weapons systems, training requirements also change. Changes to training requirements can, in turn, drive the need to expand or modify training ranges. At the FRTC, new weapons systems have been introduced to the Fleet in recent years (e.g., Joint Direct Attack Munitions) and new systems, including new aircraft (e.g., F-35C, EA-18G), will need to be employed in future training activities. As documented in *Ninety*

Days to Combat (U.S. Department of the Navy, 2015b), warfare technology has continued to evolve, most notably with regards to the distance at which munitions can be employed.

In addition to the training activities that occur on the bombing ranges, the Navy also conducts critical non-hazardous training within the DVTA, such as Electronic Warfare training, Dynamic Targeting operations, Combat Search and Rescue, Naval Special Warfare, and other training activities. The DVTA has also not changed substantially in size or configuration since its creation in the 1990s. The DVTA must be retained and expanded to preserve a viable location to train the Navy's air and ground forces in these critical non-ordnance training activities.

With the implementation of the proposed modernization, the FRTC would be fully capable of supporting the aviation and ground training and readiness requirements for the training missions assigned to the FRTC, into the foreseeable future. In this regard, the Proposed Action fulfills the Navy's execution of its congressionally mandated roles and responsibilities under 10 U.S.C. section 5062 and 10 U.S.C. section 167.

1.5 Training Needs and the Capabilities Evaluation Process

To achieve success in combat, the Navy develops a strategy for successfully employing its assets. NAWDC takes this strategy and develops it into combat doctrine. NAWDC is responsible for conducting and providing a continuous and comprehensive assessment of Air Warfare to address current, emergent, and future capabilities to the Fleet and is directly responsive in real time to our deployed Naval forces. NAWDC, through its subject matter experts, is responsible for developing aviation Tactics, Techniques, and Procedures (TTP) that support this combat doctrine and drive advanced naval aviation training. NAWDC's specific duties include

- providing the most threat-realistic training environment available to deploying forces;
- developing and validating aviation TTP. These training requirements define tactical level guidance for the effective employment of weapons systems, platforms (specific aircraft and other vehicles), and forces. In other words, TTP identify the required combat skills a warfighter needs to repetitively practice prior to deployment to be ready to respond in an actual combat situation when deployed;
- assessing warfighting requirements across all Strike Warfare missions;
- providing independent assessments and recommendations to the Chief of Naval Operations regarding investments in or proposed changes to existing programs that may impact naval aviation; and
- promoting prioritization, rapid development, and delivery of new doctrine, technologies, and training.

Similarly, the Naval Special Warfare subject matter experts develop the TTP for ground mobility training and non-weapons training capabilities using the same principles as outlined for NAWDC.

The current FRTC bombing ranges (B-16, B-17, B-19, and B-20) have not changed substantially in size or configuration since the 1990s. However, warfare technology has continued to evolve. Modern weapons can reach targets at greater distances than ever before, but current range boundaries limit the distance pilots can release ordnance. In response to gaps in training capabilities at the FRTC as a result of NAWDC's continuous assessment of capabilities for the Fleet, NAWDC completed a comprehensive study in 2015 titled *Ninety Days to Combat* to formalize FRTC requirements (U.S. Department of the Navy, 2015b). This document included a focused analysis of the capabilities the FRTC should provide to

fully sustain Navy training across mission areas, as well as a comparison of the FRTC's current capabilities against required capabilities. This comparison revealed that none of the training requirements supporting the TTP for the delivery of precision-guided munitions and Air Warfare (including Large Force Exercise) events can be fully met at the FRTC as presently configured (see Section 1.5.1, Weapons Release Training and Need for Expanded Range Area).

What is a Large Force Exercise?

Large Force Exercises at the FRTC are based on the principle of "crawl, walk, run." Training exercises begin with simple scenarios and advance to scenarios involving the entire Carrier Air Wing. Training exercises bring together squadrons and teach them to work together under real world scenarios. During the advanced phase of training, Large Force Exercise scenarios include standoff strike, force concentration, self-escort, defense in depth, long-range strike, and other activities.

The Navy evaluated the identified training capability gaps against the real-world constraints (e.g., regional roadways, commercial airspace, population centers) of meeting all TTP requirements. To fully meet the requirements would require a prohibitively large area, approximately double the amount of land as proposed in this EIS (see Section 1.5.2, Airspace Training Need versus Current Range Capability). This evaluation resulted in the development of modified range tactical requirements that would support TTP training requirements to approach full TTP specifications. Even though not all requirements are met, TTP could still achieve an acceptable level of training capabilities. Concurrently, NAWDC worked with Naval Special Warfare to identify similar gaps and actions that would support ground mobility training requirements that acceptably approach the full TTP, as TTPs for Naval Special Warfare activities also cannot fully be met at FRTC in its current configuration (see Section 1.5.3, Ground Mobility Training Need versus Current Range Capability).

What is Tactically Acceptable?

The weapon release parameters listed in Table 2-1 represent the NAWDC-approved, tactically acceptable release (threshold) parameters for the current cadre of Navy Non-Combat Expenditure Allocations. "Threshold" range requirements were defined as the minimum capabilities to allow training to an acceptable readiness level.

In summary, current FRTC training capabilities do not, and will not, meet future and emergent needs of the Fleet and Unified Combatant Commands with the FRTC's current configuration. The current capabilities are so constrained that they limit the overall quality of the training provided. The Navy's Proposed Action to modernize the FRTC would close training capability gaps to tactically acceptable levels but would still not achieve full TTP compliance because that would require land and airspace approximately double what is being requested. The sections below present the comparisons of training needs against the current capabilities of the FRTC.

1.5.1 Weapons Release Training and Need for Expanded Range Area

In *Ninety Days to Combat* (U.S. Department of the Navy, 2015b), NAWDC analyzed the land and airspace (see Section 1.5.2, Airspace Training Need versus Current Range Capability, for discussion of airspace requirement) needed to meet combat training requirements for modern aircraft and weapon systems. When comparing older aircraft and mission profiles with modern aircraft and weapons systems, NAWDC noted the following differences:

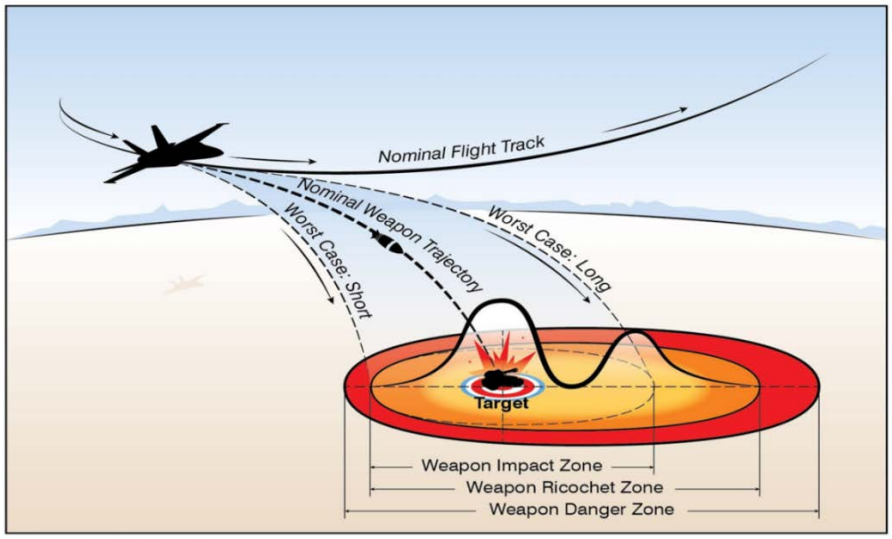
- Older aircraft flew at lower altitudes, approached targets at closer distances (4–5 miles) before dropping munitions, and because of this close range release, required a smaller safety area surrounding the target area during training.

- Modern aircraft fly at higher altitudes, release munitions at targets from 10–12 miles away, and require a larger safety area surrounding the target area during training.

Though munitions can reach targets at greater distances than ever before, current range boundaries (which do not accommodate modern weapons safety requirements) limit this type of training. Even if actual target areas were to remain the same, if release distances are increased, the safety area that is required during training in case of weapons failure also increases.

To fully meet the TTP for weapons release parameters and to employ longer-range weapons systems, aircrews would need to be able to release weapons from any direction (a 360-degree attack azimuth) and at substantial distances from a target (Table 1-2, Full TTP Compliance column). These release parameters have associated Weapons Danger Zones (WDZ). A WDZ represents the minimum safety requirements designed for aviation weapons training on Department of Defense ranges to protect public safety. A WDZ encompasses the ground and airspace for horizontal and vertical containment of projectiles, fragments, debris, and components resulting from the firing, launching, or detonation of aviation-delivered ordnance. This three-dimensional zone is calculated for each specific weapon type as delivered by a specific aircraft type up to specific air speeds, attack angle, heading, and distance from the target by the aircraft. The WDZ accounts not only for weapon accuracy, but also for potential weapon failures, ricochets, or broaches (a broach occurs when a weapon impacts the ground, burrows underground, and re-surfaces in another area, before finally coming to rest). To ensure public safety, and per Chief of Naval Operations Instruction 3710 and FAA Joint Order 7400.8, the Navy must both (1) control and restrict public use of any land that is within a WDZ, and (2) ensure that restricted airspace configuration matches WDZs.

Figure 1-3 illustrates the WDZ for a single weapon delivery. The WDZ represents the entire expected weapon hazard pattern from weapon release to impact and detonation, based on a probability of containment accuracy of 99.99 percent. The outermost oval represents the farthest that the weapon may travel based upon release conditions and depicts the area that the weapon will fall within (with 99.99 percent accuracy). The inner oval considers all potential weapon flight paths or failure modes, to include the worst-case “long” (past the target) or worst-case “short” (not reaching the target) weapon impacts, along with weapon ricochets.



Source: Marine Corps Order 3570.1, Range Safety

Figure 1-3: Weapons Danger Zone for a Single Firing Azimuth

When using multiple weapons or firing azimuths (release headings), the WDZ analysis tool calculates the hazard pattern for all ordnance trajectories, called a "Composite WDZ." The Composite WDZ depicts the hazard pattern for a combination of weapons released to the same target but with multiple firing azimuths. The WDZ analysis tool performs this by calculating the individual weapon WDZs and then combines them into one larger hazard pattern. In Figure 1-4, Panel A shows a single weapon WDZ for a northern (0 degree) firing azimuth. Panel B displays three additional firing azimuths for three additional cardinal headings (0, 90, and 270 degrees). Panel C adds two more firing azimuths. Finally, Panel D overlays all azimuths, and the outer perimeter of all combined WDZs becomes the new Composite WDZ. The Navy then used the composite WDZs described above (and Surface Danger Zones for ground-based ordnance) for each scenario to assist in the design of ranges, as well as to determine how much land is required in order to contain the WDZ.

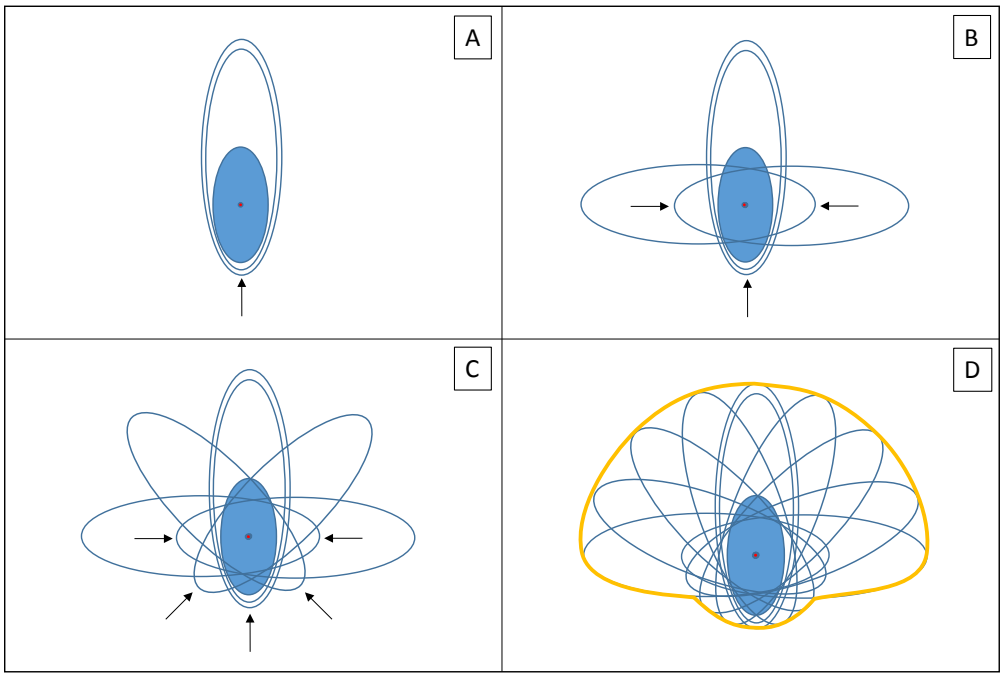


Figure 1-4: Creation of Composite Weapons Danger Zone from Numerous Firing Azimuths

NAWDC has identified the weapons release parameters for the ideal case (360-degree firing azimuth) (U.S. Department of the Navy, 2015b). By overlapping the ideal case over existing ranges at the FRTC, the Navy noted the following:

- Existing range boundaries would not be able to contain the WDZs associated with the ideal case (Figure 1-5, Panel B and Figure 1-6, Panel B).
- The Navy would need to request withdrawal or propose acquisition of a very large amount of land to meet the WDZ requirements of the ideal case. Doing so would be both unattainable as a practical matter and undesirable because of the potential level of impacts on the surrounding area and communities.

Noting these real-world constraints, NAWDC has refined parameters to the "tactically acceptable" level (180-degree firing azimuth) and has identified more achievable land and airspace requirements (Figure 1-5 and Figure 1-6, Panel C, which shows the WDZ for the Joint Direct Attack Munitions [the largest of the WDZs] at the B-17 and B-20 ranges as proposed for expansion).

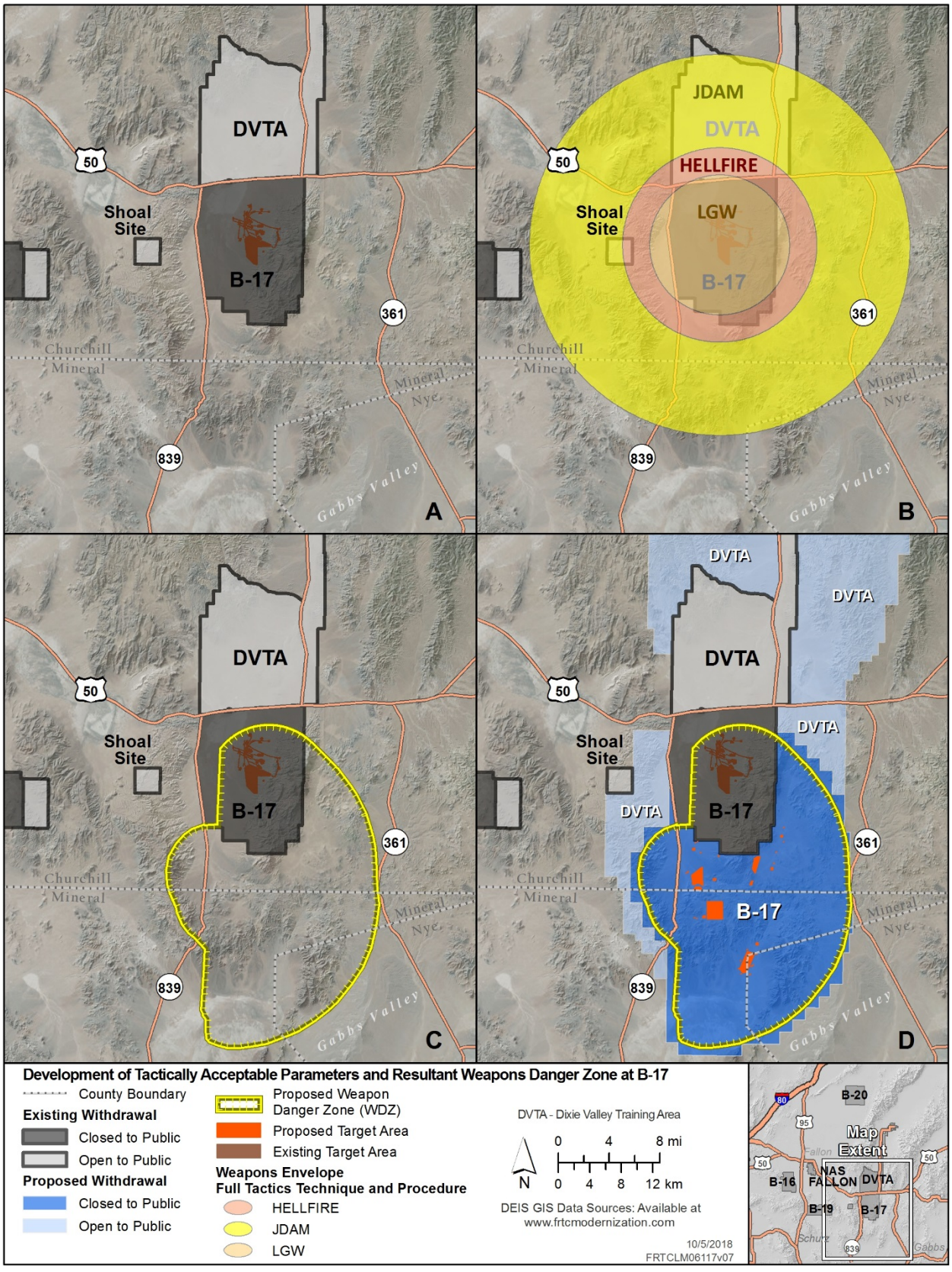


Figure 1-5: Development of Tactically Acceptable Parameters and Resultant Weapons Danger Zone at B-17

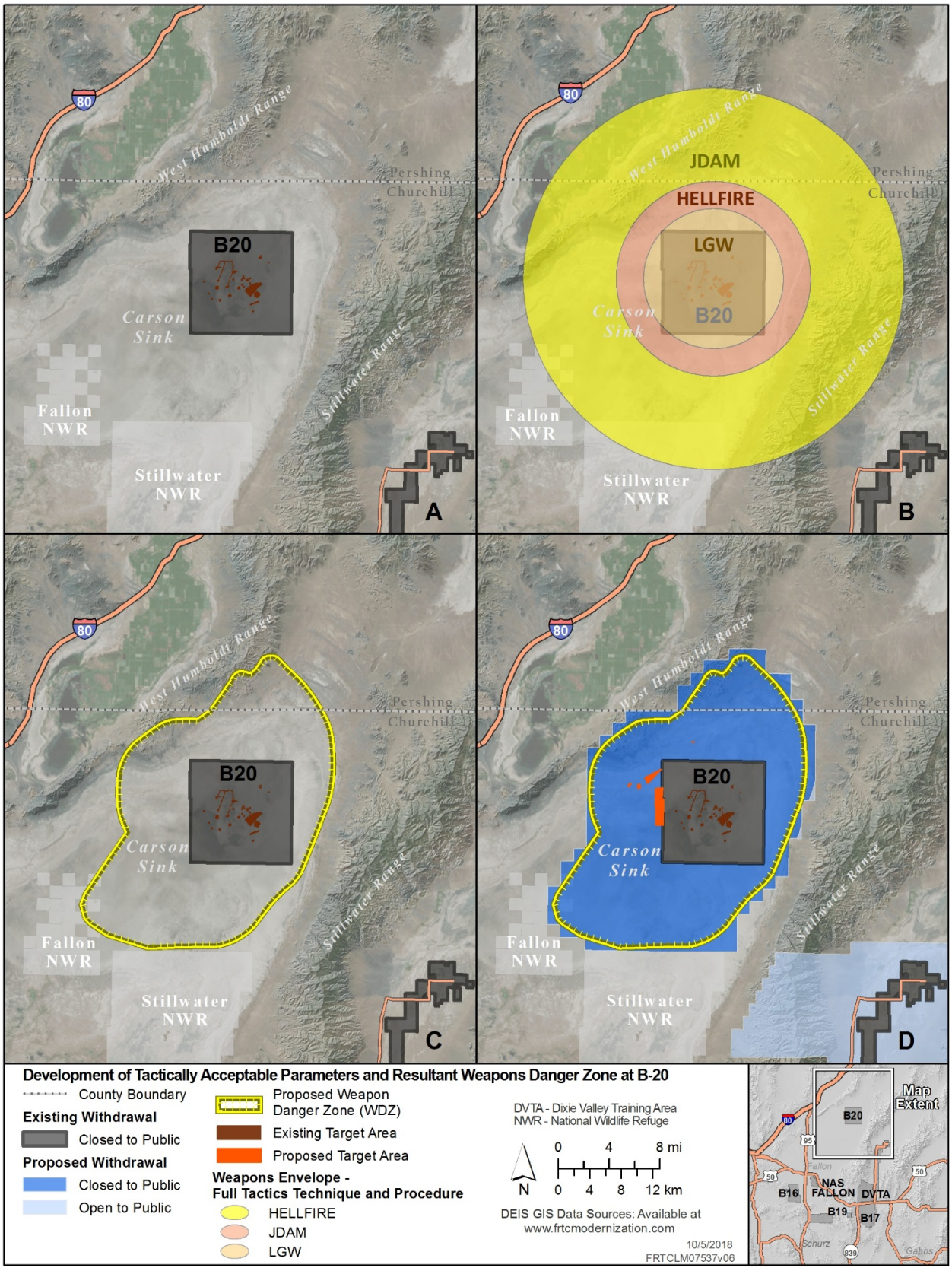


Figure 1-6: Development of Tactically Acceptable Parameters and Resultant Weapons Danger Zone at B-20

The parameter changes are tactically acceptable because they would allow the Navy to acceptably approach full TTP compliance. If modernization of the ranges does not occur, the current capabilities of the FRTC do not allow the Navy to approach full TTP compliance to a tactically acceptable level. Panel D (Figure 1-5 and Figure 1-6) displays the area of land under the WDZ needed at B-17 and B-20 for the Navy to both (1) control and restrict public use of any lands that are within a WDZ, and (2) ensure that restricted airspace configuration matches WDZs.

Table 1-2 shows the full TTP compliance and tactically acceptable release parameters compared against the FRTC's current capabilities. All of the WDZs for munitions listed in Table 1-2 (Laser-Guided Weapons, HELLFIRE, and Dual-Mode Laser-Guided Bomb) are smaller than, and fit within, the WDZ for the Joint Direct Attack Munition. The tactically acceptable parameters for Dual-Mode Laser-Guided Bomb is smaller than that of the Joint Direct Attack Munition. While in an optimal situation the Dual-Mode Laser-Guided Bomb is larger than the Joint Direct Attack Munition WDZ, in the tactically acceptable scenario, the WDZ for Dual-Mode Laser-Guided Bomb is subsumed by the Joint Direct Attack Munition target.

Table 1-2: Tactics, Techniques, and Procedures Supportable Weapons Release Training versus Capabilities

Weapons Class[1]	Parameter	Full TTP Compliance	Current Capability	Tactically Acceptable Parameters
Laser-Guided Weapons	Release Range (NM [miles])	6.8 (7.8)	5 (5.8)	5 (5.8)
	Release Altitude (ft. MSL)	35,000	30,000	30,000
	Attack Azimuth (degrees)	360	360	360
Joint Direct Attack Munitions	Release Range (NM [miles])	13 (14.9)	4 (4.6)	10 (11.5)
	Release Altitude (ft. MSL)	35,000	30,000	30,000
	Attack Azimuth (degrees)	360	180	180
HELLFIRE	Release Range (NM [miles])	5 (5.8)	3 (3.5)	4.3 (4.9)
	Release Altitude (ft. MSL)	2,000	700	2,000
	Attack Azimuth (degrees)	360	35	180
Dual-Mode Laser-Guided Bomb	Release Range (NM [miles])	14 (16.1)	7 (8.1)	14 (16.1)
	Release Altitude (ft. MSL)	35,000	30,000	30,000
	Attack Azimuth (degrees)	360	40	<180

[1] WDZs for Laser-Guided Weapons and HELLFIRE are smaller than, and fit within, the WDZ for the Joint Direct Attack Munition. Release parameters for Dual-Mode Laser-Guided Bomb are estimated. The Dual-Mode Laser-Guided Bomb has not yet been deployed to the Fleet, and minimally acceptable TTPs have not yet been developed.

Notes: ft. = feet; MSL = mean sea level; NM = nautical mile(s); TTP = Tactics, Techniques, and Procedures

1.5.2 Airspace Training Need versus Current Range Capability

To fully meet training to advanced combat TTP and support Air Warfare (including Large Force Exercise) events, *Ninety Days to Combat* states that SUA would require the following characteristics:

- Size – 100 x 200 nautical miles of SUA (20,000 square nautical miles). The current FRTC SUA is 8,958 square nautical miles.
- Vertical Range – From 500 feet above ground level to 50,000 feet mean sea level. The current FRTC SUA varies in vertical limits, and only small portions approach required specifications.
- Supersonic Capability – SUA must be fully supersonic capable. Currently, the FRTC meets this requirement within portions of the existing MOA boundaries.

Achieving this size of SUA at the FRTC is unlikely due to heavily used commercial routes that surround the FRTC airspace and general civilian aviation using the National Airspace System in the western United States. Regional airspace surrounding the FRTC, and including the FRTC when the SUA is not active, is administered and controlled by Air Route Traffic Control Centers in Oakland, CA for the western FRTC airspace and Salt Lake City, UT for the eastern airspace. Accordingly, NAWDC, in developing the FRTC airspace component of the Proposed Action during meetings with FAA in 2016, 2017, and 2018, configured airspace training scenarios to conform to the National Airspace System limitations, reduced weapons release parameters by modifying Navy requirements for restricted airspace associated with the bombing ranges, and modified the supersonic capability requirement. While not a perfect solution, the Navy deemed this configuration tactically acceptable because the Navy would still be able to train to scenarios of advanced combat TTP. Further, by modifying vertical airspace, the Navy would be able to meet training and tempo requirements by being able to schedule activities at distinct elevations, or "stacking" activities on top of each other. Additionally, the airspace must be available for blocks of time, year-round to accommodate pre-deployment training tempo. The airspace must also be available during darkness to meet nighttime training that supports TTP, to include non-weapons training such as combat search and rescue.

1.5.3 Ground Mobility Training Need versus Current Range Capability

To fully support training to TTP for ground mobility training, land areas would need to be controlled by the Navy and fully contain the Surface Danger Zones for both the firing range (distance) and firing direction (azimuth) for the largest fire-and-maneuver activities, which include basic and advanced Immediate Action Drills and Integrated Close Air Support. The largest land area required would be that associated with Integrated Close Air Support, which would require a firing distance of 9.2 NM (10.6 miles) and azimuth of 360° (Table 1-3, Full TTP Compliance column). The existing B-16 range can only accommodate a 60° radius area over a distance of 2.5 miles for individual and crew-served weapons firing across open ground, which severely limits the training and realism available for individual and crew-served weapons employed in live-fire scenarios.

Immediate Action Operations

Activities to train proper responses to enemy visual or physical contact.

Close Air Support

Close Air Support is air action by fixed-wing and rotary-wing aircraft against hostile targets that are in close proximity to friendly forces and requires detailed integration of each air mission with the fire and movement of those forces.

NAWDC worked with Naval Special Warfare to identify similar gaps and actions that would support ground mobility training requirements that acceptably approach the full TTP, as TTPs for Naval Special Warfare activities also cannot fully be met at FRTC in its current configuration. The Navy identified the

weapons release or firing parameters for the ideal case (360-degree firing azimuth). By overlapping the ideal case for all proposed weapon use (a composite SDZ/WDZ, both air-to-ground and ground based) over existing ranges at B-16, the Navy noted that:

- Existing range boundaries (Panel A, Figure 1-7) would not be able to contain the WDZs/SDZs associated with the ideal case (Panel B, Figure 1-7)
- The Navy would need to locate the proposed Immediate Action Drill WDZ/SDZ to the east of the existing targets on B-16 to allow concurrent use to meet tempo requirements (Panel C, Figure 1-7)
- The Navy would need to request withdrawal or propose acquisition land to the east of the existing B-16 to meet the WDZ/SDZ requirements of the ideal case (Panel D, Figure 1-7).

Table 1-3: Ground Mobility Training Need versus Current Range Capability

Training Event	Weapon Caliber	Parameter	Full TTP Compliance[1]	Current Capability	Tactically Acceptable Parameters
Static Live Fire	5.56, 7.62, 300WM, .50 Cal, 40mm, 84mm	Azimuth (degrees)	40	20	40
		Range (miles [km])	4.7 (7.5)	6.8	4.7 (7.5)
Basic Live Fire IADs (Open Terrain)	5.56, 7.62, 40mm, 84mm	Azimuth (degrees)	360	20	360
		Range (miles [km])	2.5 (4.1)	2.5 (4.1)	2.5 (4.1)
Advanced Live Fire IADs (Open Terrain)	5.56, 7.62, 40mm, 84mm	Azimuth (degrees)	360	60	360
		Range (miles [km])	2.5 (4.1)	2.5 (4.1)	2.5 (4.1)
Advanced Live Fire IADs (.50 Cal open terrain)	.50 Cal	Azimuth (degrees)	180	None	180
		Range (miles [km])	4.2 (6.8)	None	4.2 (6.8)
Advanced Live Fire IADs (Urban Village)	5.56, 7.62, 40mm, 84mm	Azimuth (degrees)	360	None	360
		Range (miles [km])	2.5 (4.1)	None	2.5 (4.1)
Integrated Close Air Support	MK-76, 20mm TP	Azimuth (degrees)	360	None	360
		Range (miles [NM])	10.6 (9.2)	None	5.8 (5.0)

Notes: cal = caliber, IADs = Immediate Action Drills, km = kilometer, mm = millimeter, NM = nautical mile(s), TTP = Tactics, Techniques, and Procedures. Distances calculated for munitions ranges are initially provided in kilometers from requirements calculations.

[1] While almost all training events can achieve full TTP compliance under the proposed modernization, Integrated Close Air support cannot support the full TTP of up to 10.6 miles (9.2 NM). The value presented here is the Tactically Acceptable Parameter for Integrated Close Air Support. Integrated Close Air Support is presented in nautical miles because these munitions are delivered from an aerial platform.

The current Naval Special Warfare Tactical Ground Mobility course training area does not have sufficient space to accommodate the firing directions and distances needed for advanced live-fire and integrated Close Air Support activities. Table 1-3 shows what would hypothetically be required for full compliance with TTP as well as the tactically acceptable parameters identified by the Navy for ground mobility training compared against FRTC's current capabilities. The tactically acceptable parameters are very close to the full TTP (the exception is Close Air Support) as defined by Naval Special Warfare.

1.5.4 Non-Weapons Training Need and the Current Range Capability

To approach meeting the advanced combat TTP, non-weapons capabilities (Electronic Warfare, Combat Search and Rescue, Land Navigation, and Convoy Escort) must include the required airspace, varied topography land areas, range tracking, instrumentation, and communications infrastructure. The Navy must be able to control land uses. The placement of electronic signal transmitters requires various terrain elevations in order to replicate opposition forces and threats. In addition, any area chosen must be free of electromagnetic interference to preserve a "clean" spectrum for Electronic Warfare training.

The existing DVTA is a non-live-fire training area on Navy-managed land that is generally open to public use (e.g., recreation, and limited off-highway vehicle use). Infrastructure, mining, and geothermal development existing near the DVTA has degraded training realism and potentially compromise aircrew safety, particularly in low-altitude, dark, and low-light conditions. If allowed to continue unabated, aircrew and Special Forces personnel would be unable to safely train or train to tactically acceptable parameters within the DVTA. Currently, given the extent of existing development, the Navy can utilize only undesirably predictable and repetitive scenarios due to the limited availability of multiple signal locations and elevations, and due to having only a minimal set of combat search and rescue recovery sites for helicopters.

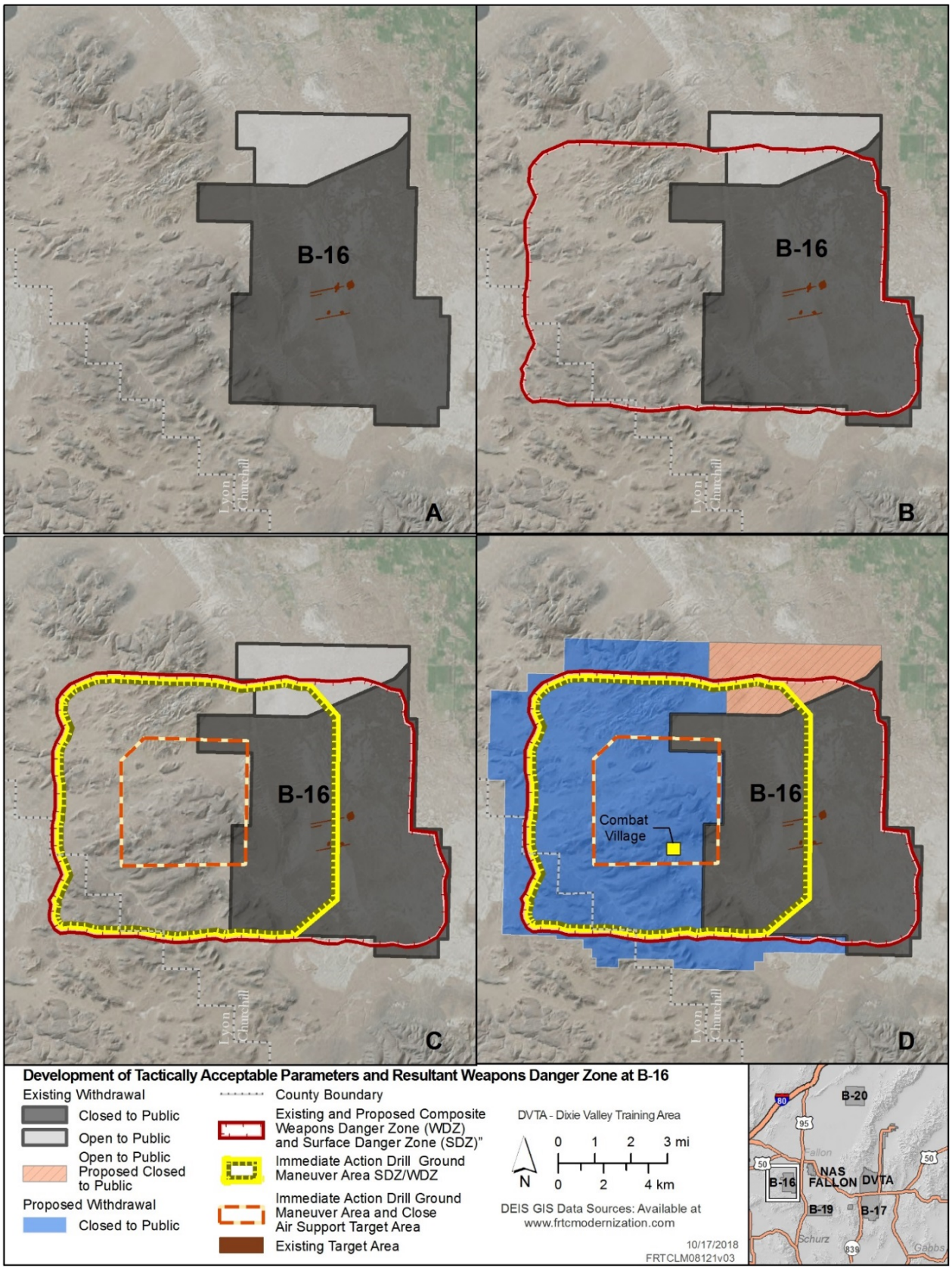


Figure 1-7: Development of Tactically Acceptable Parameters and Resultant Weapons Danger Zone at B-16

1.6 Scope of Environmental Analysis

CEQ implementing regulations for NEPA (40 CFR part 1500) provide guidance about considering alternatives to a federally proposed action. This guidance requires rigorous exploration and objective evaluation of reasonable alternatives. Only those alternatives determined by the Navy to be reasonable and that meet the purpose and need of the proposal require detailed analysis (See 40 CFR section 1502.14.). Reasonable alternatives are those that meet the purpose and need, meet screening factors, and are practical or feasible from a technical and economic standpoint. The range of alternatives initially considered includes reasonable alternatives as well as alternatives that the Navy ultimately did not carry forward for detailed study after having determined that they either would not meet the purpose and need or would otherwise not be reasonable.

The Navy developed the alternatives considered in this EIS after careful input and assessment by subject matter experts, including military units and commands that use the ranges, military range management professionals, cooperating agencies, tribal participants, and Navy environmental managers and scientists. Additionally, the public submitted comments on the scope of the analysis, including environmental issues and potential viable alternatives during the scoping period for this EIS (August 26, 2016 through December 12, 2016). The Navy incorporated all substantive comments submitted during the scoping process into its identification and development of potential alternatives to the Proposed Action.

The Navy has considered what it believes are all potentially relevant environmental resource areas for analysis in this EIS. To comply with NEPA, CEQ, Department of the Navy, BLM, and FAA regulations, the discussion of the affected environment (i.e., existing conditions) focuses on those resource areas that would potentially be subject to more-than-negligible impacts as a result of the Navy implementing a given alternative. The level of detail describing a resource is commensurate with the anticipated level of potential impact.

Describing the environment and analyzing impacts requires a comprehensive and systematic review of relevant literature and data to ensure that the Navy uses the best available information for analysis. Section 1.6.1 (Methodology) describes the data used and the characteristics of the best available data, and provides a general approach to analysis. Each resource section lists the regulations applicable to that resource, discusses the affected environment and the environmental consequences of implementing the No Action and action alternatives, and summarizes potential impacts.

Chapter 3 (Sections 3.1 through 3.15) assesses the potential impacts on 15 resource categories

- Geological Resources
- Land Use
- Mining and Mineral Resources
- Livestock Grazing
- Transportation
- Airspace
- Noise
- Air Quality
- Water Resources
- Biological Resources
- Cultural Resources
- Recreation
- Socioeconomics
- Public Health and Safety and Protection of Children
- Environmental Justice

Chapter 3 applies current resource protection measures (e.g., standard operating procedures, management practices, and conservation measures that are integral to the activities covered by the

Proposed Action and alternatives) as part of the process of determining environmental consequences. If the analysis identifies potential adverse impacts on the resource from implementing the No Action or action alternatives, the Navy will identify methods and coordinate with cooperating agencies to minimize or mitigate those impacts, where appropriate and practicable. Mitigation measures are discussed at the end of each resource section and summarized in Chapter 5 (Management Practices, Monitoring, and Mitigation Measures).

Through the environmental impact analysis process, the Navy has identified potentially impacted resources, defined the expected geographic scope (called the region of influence for each resource, and analyzed potential impacts to those resources. The region of influence is the geographic area where impacts may potentially occur. For most resources, the region of influence coincides with the air and land training areas of the FRTC. However, there will be variations in the breadth of the region of influence for some resource areas, with some regions of influence being relatively smaller and some being relatively larger. For example, the region of influence for geological resources includes only the footprint encompassing the requested withdrawals and proposed acquisitions, but the region of influence for noise includes land areas underlying SUA that experience aircraft noise.

Because some topics may affect multiple resources, several sections may address the same resources. For example, infrastructure (defined in this EIS as physical and organizational structures and facilities, such as buildings, roads, and power supplies), as it relates to removing or relocating utilities, is discussed in the transportation, air quality, socioeconomics, and environmental justice sections.

As described in Section 1.1 (Introduction), several federal and state agencies are cooperating agencies for this EIS. As the FAA and BLM have specific policies, procedures, and organizational structures for NEPA analyses, the Navy has compared the resource categories defined by each federal agency with the Navy's resource categories and organizations. The Navy has worked to develop an overall approach to the NEPA analysis for this EIS that integrates FAA and BLM practices and policies, as these two agencies must also prepare rule-making documents that either utilize or adopt the information described in this EIS.

The FAA is a cooperating agency for this EIS, as the Proposed Action would require FAA rulemaking for SUA pursuant to FAA Joint Order 7400.10. Establishment of new MOA and restricted area airspace would require rulemaking or non-rulemaking actions, as applicable, in each case per requirements in FAA Orders 1050.1 and 7400.2. The airspace modifications proposed in this EIS requires the FAA to complete an aeronautical study that examines the potential impacts of each SUA proposal on the safe and efficient use of airspace and Air Traffic Control procedures. A draft concept of the airspace proposals is typically presented to the FAA during the initial planning processes and, as feasible, the FAA study of the finalized proposals is normally performed concurrently with the draft EIS review processes. Such study includes an overview of the existing airspace structure and use and an analysis of the proposed actions on the existing air traffic environment, to include (1) IFR and VFR en route operations, (2) public airports and charted private airfields, (3) Air Traffic Control services, and (4) other airspace proposals and cumulative impacts in the region. This analysis also considers measures to mitigate or avoid, minimize, or reduce any impacts of these actions. FAA Order 1050.1F, which identifies "environmental impact categories," includes procedures for ensuring NEPA compliance. Table 1-4 presents each FAA Environmental Impact Category and the section(s) within this EIS that address those resources.

The BLM is also a cooperating agency for this EIS, as the Proposed Action includes the withdrawal of BLM public lands. The BLM complies with policies and procedures outlined in BLM NEPA Handbook H-1790-1 (Bureau of Land Management, 2008) to ensure NEPA compliance for its major actions. These policies and procedures support BLM rulemaking under the Federal Land Policy and Management Act of 1976 (43 U.S.C. section 1701 et seq.). In the same way as the Navy and other federal agencies, the BLM identifies issues based on scoping comments (40 CFR part 1502.6) and focuses on issues significant to a proposed action (40 CFR part 1500.1). Table 1-4 presents issues commonly considered as "elements" by BLM and the section(s) within this EIS that address each element.

Table 1-4: Federal Aviation Administration Categories, Bureau of Land Management Elements, and Environmental Impact Statement Categories

FAA Category	BLM Element	EIS Resource Section Where Addressed
Air Quality	Air Quality	Air Quality
--	Areas of Critical Environmental Concern	Land Use Cultural Resources Water Resources Public Health and Safety
Biotic Resources	Fish Habitat Invasive and Nonnative Species and Noxious Weeds Migratory Birds Special Status Species Vegetation Wildlife Wild Horses and Burros	Biological Resources
--	Cave and Karst Resources	Geological Resources
--	Climate Change	Air Quality
Coastal Zone Management	--	n/a[1]
Coastal Resources	--	n/a[1]
Compatible Land Use	--	Land Use Noise
Construction	--	Throughout (except airspace)
Department of Transportation Act, Section 4(f)	--	n/a[2]
Energy Supplies, Natural Resources, and Sustainable Design	--	n/a[3]
Environmental Justice	Environmental Justice	Environmental Justice
Farmlands	Farmlands (prime or unique)	Land Use Geological Resources
--	Forests and Rangelands	Land Use
--	Forest Products	Land Use

Table 1-4: Federal Aviation Administration Categories, Bureau of Land Management Elements, and Environmental Impact Statement Categories (continued)

FAA Category	BLM Element	EIS Resource Section Where Addressed
Floodplains	Floodplains	Water Resources
--	Geology and Minerals	Geological Resources Mining and Mineral Resources
Hazardous Materials	Hazardous Wastes	Public Health and Safety Water Resources Geological Resources
Historic and Archaeological	Cultural Resources Historic Trails Native American Concerns	Cultural Resources Recreation
--	Human Health and Safety	Public Health and Safety
Induced Socioeconomic	Socioeconomic Values	Socioeconomics
--	Land Use, Realty, and Transportation	Land Use Transportation
--	Lands with Wilderness Characteristics Outside Existing Wilderness Study Areas (WSAs)	Land Use
Light Emissions and Visual Effects	Visual Resources	Cultural
--	Livestock Grazing	Grazing
Noise	Noise	Noise
--	Renewable Energy	Mineral and Mining Resources
Social Impacts	--	Socioeconomics
--	Soils	Geological Resources
--	Paleontological Resources	Geological Resources
Water Quality	Water Resources	Water Resources
Wetlands	Wetlands and Riparian Zones	Water Resources Biological Resources
Wild and Scenic Rivers	Wild and Scenic Rivers	Land Use
--	Wildland Fire Ecology and Management	Public Health and Safety Biological Resources
Cumulative Impacts		Cumulative Impacts

[1]Not addressed in this EIS; the region of influence is geographically separate from coastal areas.
[2]Designation of airspace for military flight operations is exempt from section 4(f). The National Defense Authorization Act for Fiscal Year 1998 (Public Law 105-85) provided that "[n]o military flight operations (including a military training flight), or designation of airspace for such an operation, may be treated as a transportation program or project for purposes of section 303(c) of title 49, United States Code."
[3]This category evaluates potential impacts on supplies of energy and natural resources needed to build and maintain airports, which is not part of the Proposed Action or Alternatives.

1.6.1 Methodology

In accordance with NEPA and the Administrative Procedure Act of 1946 (5 U.S.C. sections 551–559), the analyses used the best available data accepted by the appropriate regulatory and scientific communities. The Navy reviewed primary literature, including journals, books, periodicals, bulletins, Department of Defense operations reports, County Master Plans, theses, dissertations, species management plans, and other technical reports published by government agencies, private businesses, or consulting firms to assist in analysis of potential environmental consequences. The Navy conducted internet searches and evaluated websites for the credibility of the source, the quality of the information, and the relevance of the content to ensure the use of high-quality information.

The Navy considered both direct and indirect effects resulting from the action alternatives. Direct effects occur in the same location and at the same time as the agency action (40 CFR part 1508.8). Indirect effects are reasonably foreseeable and caused by the action, but occur later in time or at a distance (40 CFR part 1508.8).

The term "significantly" or "significance," as used in NEPA, requires considerations of both context and intensity. Context means analyzing the significance of an action in several perspectives, such as society as a whole (e.g., human, national), the affected region, the affected interests, and the locality. Significance varies with the setting of a proposed action. For instance, in the case of a site-specific action, significance would usually depend on the effects in the locale rather than in the world as a whole. Both short- and long-term effects are relevant. Intensity refers to the severity or extent of the potential environmental impact. Another understanding of intensity is in terms of the potential extent of the likely change. In general, the more sensitive the context, the less intense a potential impact would need to be to be considered significant. Likewise, the less sensitive the context, the more intense a potential impact would need to be to be considered significant.

While specific methods used to analyze the effects of the Proposed Action vary by resource, all resource analyses follow this general approach:

1. Describe existing resource conditions (affected environment) based on geographic areas within the FRTC or as otherwise appropriate based on the resource area-specific region of influence. Because the FRTC is a large area, each resource section splits the affected environment discussion into the five main areas (B-16, B-17, B-20, the DVTA, and Special Use Airspace [Impacts pertaining to B-19 are analyzed in a more-limited manner since the Navy is not proposing or requesting any changes with respect to the current configuration of B-19.]).
2. Review existing federal and state regulations and standards relevant to resource-specific management or protection.
3. Identify resource conditions or areas that require specific analytical attention, such as designated critical habitat for federally listed species.
4. Analyze the specific actions entailed within a given alternative to determine what components of the alternative may affect the particular resource.
    a. Review and analyze data sources for information on the resource, including modeling efforts and scientific research.
    b. Determine specific impacts to the resource that could result from Navy activities.

c. Adjust initial impact determinations as appropriate to account for the use of standard operating procedures, management practices, and other impact avoidance, minimization, or mitigation measures.

d. Determine overall impacts to the resource associated with the Proposed Action and Alternatives, given the applicable regulatory framework.

5. Summarize impact findings concerning resource effects.

The Navy reviewed and evaluated additional information, such as unique resource characteristics; public and agency scoping comments; previous environmental analyses; agency and tribal consultations; resource-specific information; and applicable laws, regulations, and Executive Orders. This process helped focus the information presented in the affected environment and the analysis presented in the environmental consequences sections.

1.7 Key Documents

Key documents are sources of information incorporated into this EIS. Documents are considered to be key because of similar actions, analyses, or impacts that may apply to this Proposed Action. CEQ guidance encourages incorporating documents by reference. Documents incorporated by reference in part or in whole include the following:

- *Final Legislative Environmental Impact Statement for Withdrawal of Public Lands for Range Safety and Training Purposes*, May 1998 (U.S. Department of the Navy, 1998)
- *Final Legislative Environmental Impact Statement for the Renewal of the B-20 Land Withdrawal*, December 1998 (U.S. Department of the Navy, 1998)
- *Final Environmental Impact Statement, Proposed Fallon Training Range Complex Requirements*, January 2000. A ROD was also prepared by the FAA for airspace changes proposed in this EIS. (U.S. Department of the Navy, 2000)
- *Environmental Assessment for Airfield Operations at Naval Air Station Fallon*, August 2013 (U.S. Department of the Navy, 2013)
- *Environmental Assessment for Proposed Addition of Training Activities and Range Enhancements at Naval Air Station Fallon on Training Range Bravo-16, Churchill County, Nevada*, September 2014 (U.S. Department of the Navy, 2014)
- *Ninety Days to Combat: Required Training Capabilities for the Fallon Range Training Complex 2015-2035,* June 2015 (U.S. Department of the Navy, 2015b)
- *Military Readiness Activities at Fallon Range Training Complex, Nevada Final Environmental Impact Statement,* December 2015 (U.S. Department of the Navy, 2015a)

The Navy has made the above-referenced documents available on the project website (www.frtcmodernization.com). Other documents incorporated by reference in this EIS will be made available—or information provided as to how to access such documents—upon request.

1.7.1 Final Environmental Impact Statement for Withdrawal of Public Lands for Range Safety and Training Purposes – May 1998

In this EIS, the Navy proposed to withdraw federally administered land within the FRTC to facilitate and improve the realistic operational and strategic combat training conducted on existing FRTC lands (see History of the FRTC in Section 1.3, Background) and to provide public safety buffers. All lands requested for withdrawal at the time were being administered by the BLM, Bureau of Reclamation, or the Department of Energy. The focus was on the FRTC ranges B-16, B-17, B-19, the Shoal Site, and Dixie

Valley Training Area. A separate Legislative EIS (see below) evaluated the land withdrawal renewal for B-20. Besides the No Action Alternative, the Navy evaluated three action alternatives. Identified impacts of the withdrawal included the closure of public access and potential effects on mining, visual resources, and recreation from development of small sites and from integrated air and ground training activities. The withdrawal of the requested 202,864 acres of public lands was approved by Congress in the Military Lands Withdrawal Act of 1999 (Public Law 106-65) in October 1999 for a 20-year period.

1.7.2 Final Legislative Environmental Impact Statement for the Renewal of the Bravo-20 Land Withdrawal – December 1998

This Legislative EIS supported the Congressional reauthorization of the withdrawal of public lands comprising B-20. In November 1986 under the Military Lands Withdrawal Act of 1986 (Public Law 99-606), the Navy applied for the renewal of 21,576 acres of withdrawn land and the continued use of B-20 for training operations as specified in Section 1(a)(2)(A) and (B) of Public Law 99-606. Under the Proposed Action, there were no increases in aircraft operations. As presented in the analysis of the EIS, the Proposed Action would not result in any significant impacts. The Military Lands Withdrawal Act of 1999 (Public Law 106-65) reauthorized the withdrawal of these public lands in October 1999 for a term of 20 years, which expires in November 2021.

1.7.3 Final Environmental Impact Statement, Proposed Fallon Training Range Complex Requirements, January 2000

In 1998, the Naval Strike and Air Warfare Center (now NAWDC) conducted an evaluation (resulting in a Training Requirements Document) of the training assets at NAS Fallon and compared these capabilities against Navy tactical aviation training objectives. The Training Requirements Document assessed and reported current and future training needs and operational requirements for NAS Fallon and outlined changes necessary to both update and consolidate Navy training on public and Navy-managed lands and update airspace parameters overlying these lands.

Under the Proposed Action, the Navy proposed to develop Electronic Warfare sites on public and Navy-managed lands, four tracking instrumentation subsystem remote sites on public lands, fiber optic cable routes from the air station to the B-16 and B-19 training ranges, and helicopter gunnery ranges on B-17 and B-19. The Navy also proposed to use Navy-managed lands in Dixie Valley for Close Air Support training, revise the operating hours of the Reno MOA, and raise the ceiling of restricted area airspace to allow for high-altitude weapons delivery training at B-17 and B-20. Because actions were going to occur on lands managed by both the Navy and the BLM Carson City and Battle Mountain Field Offices and required rights-of-way from BLM, the Navy and the BLM prepared the EIS as joint lead agencies.

The Navy did not identify any significant impacts from any of the alternatives analyzed. The ROD, released on April 14, 2000, announced the decision to implement the Preferred Alternative, Alternative 2, for the Proposed FRTC Requirements. Changes to the FRTC under Alternative 2 included developing new fixed and mobile Electronic Warfare sites; developing new Tracking Instrumentation Subsystem sites; developing additional targets at B-17 and B-19; laying fiber optic cable to B-16 and B-19; utilizing Navy-managed lands in Dixie Valley for Close Air Support training; performing Hellfire missile and high-altitude weapons delivery training at B-17 and B-20; and proposing changes to special use airspace.

1.7.4 Environmental Assessment for Airfield Operations at Naval Air Station Fallon, August 2013

The Navy evaluated the potential for environmental impacts if it maintained then-currently conducted airfield operations, conducted operations with introduction of new types of aircraft, and increased

airfield operations to meet future training requirements. The Navy was scheduled to progressively transition from aging aircraft to newer aircraft beginning in 2015, with the transition complete by 2028. As aircraft transitions occur, Carrier Air Wings and other aviation units would arrive at NAS Fallon to participate in training events with newer aircraft, such as the F-35C Lightning II, EA-18G Growler, and RQ-21A Blackjack. Under the Proposed Action, F-35C training courses were expected to begin in 2017. Proposed facility development required to support aircraft missions at NAS Fallon would include space for aircraft maintenance, crew and equipment, administration, training, and a UAS runway and staging area. This Environmental Assessment was focused on airfield operations only and did not include analysis of training activities in the FRTC. As described in the Finding of No Significant Impact dated August 19, 2013, it was determined that the Proposed Action would not significantly affect the quality of the human environment.

1.7.5 Environmental Assessment for the Proposed Addition of Training Activities and Range Enhancements at Naval Air Station Fallon on Training Range Bravo-16, Churchill County, Nevada, September 2014

The Navy proposed to conduct additional training activities and provide training enhancements for the existing Tactical Ground Mobility platform and air/ground inter-operability training that had been conducted at B-16 since 2008. The Proposed Action was to improve the B-16 training range to meet Navy and joint training requirements by (1) closing to public entry two portions of B-16 that were then open to the public and installing a new fence around these areas; (2) installing rail-mounted moving target systems for live-fire training; (3) developing and operating a semi-prepared expedient landing zone for C-130 aircraft; (4) developing and operating a launch and recovery area for unarmed, UAS training; (5) re-routing the primary access road to the Drop Zone to accommodate the new C-130 aircraft and UAS operations; (6) installing a new range tower within the Drop Zone; (7) installing visual cueing items, including relocatable habitat units; and (8) establishing two free maneuver areas in the southwestern and northwestern portions of B-16.

The Navy evaluated the environmental consequences of the two action alternatives and a No Action Alternative. Both action alternatives would have provided additional training activities and training enhancements and improved the B-16 training range to meet Navy and joint training requirements. As described in the Finding of No Significant Impact dated September 29, 2014, it was determined that the Proposed Action would not result in significant impacts on the human or natural environment.

1.7.6 Ninety Days to Combat: Required Training Capabilities for the Fallon Range Training Complex 2015–2035, June 2015

This document identifies the required warfighting capabilities for naval aviation and Naval Special Warfare, describes the current capability of NAWDC and the FRTC to support those requirements, and is the foundation of the Proposed Action described in full in Chapter 2 (Description of Proposed Action and Alternatives). It compares the current range capabilities against what would be needed to be able to fully train to Navy Doctrine TTP. These TTP are informed by current policies, available resources, current strategy and campaign concepts, threats, lessons learned, fielded or emerging technologies, and threat tactics and procedures. Finally, it identifies FRTC land and airspace capability gaps that inhibit the ability to train aircrew and Special Forces to a tactically acceptable level of combat capability prior to deployment.

1.7.7 Final Environmental Impact Statement for Military Readiness Activities at Fallon Range Training Complex, December 2015

The Navy evaluated the potential for environmental impacts from conducting military readiness activities at the FRTC in its current configuration. The Proposed Action was to continue and enhance training activities within the existing FRTC by:

- increasing existing aviation and ground training activities,
- conducting training activities with new platforms and systems as they transition into the fleet to replace older platforms and systems, and
- conducting new ground training activities (e.g., Dismounted Fire and Maneuver Training and Ground LASER Training).

The Proposed Action included adjusting activities from then-current (baseline) levels to levels needed to accommodate evolving mission requirements. The Proposed Action was a step toward ensuring the continued vitality and viability of the FRTC as an essential training resource. The Proposed Action resulted in increases in training activities to achieve and maintain a state of military readiness commensurate with the Navy national defense mission. Chapter 2 (Description of Proposed Action and Alternatives) of this current Modernization EIS (Section 2.4, Environmental Baseline [Current Training Activities]) discussed the types and tempos of training performed under Alternative 2 (the Alternative selected in the ROD). As described in the ROD dated February 26, 2016, Alternative 2, as described above would have no significant impacts for any of the resource areas analyzed, and no mitigation measures were identified.

1.8 Relevant Laws, Regulations and Policies

The Navy has prepared this EIS based upon federal and state laws, statutes, regulations, and policies that are pertinent to the implementation of the Proposed Action. Relevant laws, regulations, and policies include the following:

- NEPA (42 U.S.C. sections 4321 et seq.)
- CEQ Regulations for Implementing the Procedural Provisions of NEPA (40 CFR parts 1500–1508)
- Navy procedures for implementing NEPA (32 CFR part 775)
- Clean Air Act (42 U.S.C. sections 7401 et seq.)
- Federal Water Pollution Control Act "Clean Water Act" (33 U.S.C. sections 1251 et seq.)
- Federal Land Policy Management Act (43 U.S.C section 1701 et seq.)
- FAA Order 1050.1F, Environmental Impacts: Policies and Procedures
- FAA Joint Order 7400.2L, Procedures for Handling Airspace Matters
- NHPA (54 U.S.C. section 3001 et seq.)
- National Wildlife Refuge System Administrative Act and the National Wildlife Refuge Systems Improvement Act (16 U.S.C. sections 668dd–668ee and Public Law 105-57)
- National Trails System Act (16 U.S.C. section 1241 et seq.)
- Nevada Revised Statutes Chapter 405, Control and preservation of public highways
- Endangered Species Act (16 U.S.C. section 1531 et seq.)
- Migratory Bird Treaty Act (16 U.S.C. sections 703–712)
- Bald and Golden Eagle Protection Act (16 U.S.C. sections 668–668d)
- Comprehensive Environmental Response, Compensation, and Liability Act (42 U.S.C. section 9601 et seq.)

- Emergency Planning and Community Right-to-Know Act (42 U.S.C. section 11001 et seq.)
- Federal Noxious Weed Act (7 U.S.C. section 2801 et seq.)
- Federal Insecticide, Fungicide, and Rodenticide Act (7 U.S.C. section 136 et seq.)
- Resource Conservation and Recovery Act (42 U.S.C. section 6901 et seq.)
- Taylor Grazing Act (43 U.S.C. sections 315–316o)
- Nevada Revised Statutes Chapter 568, Grazing and ranching
- Farmland Protection Policy Act (7 U.S.C. sections 4201 et seq.)
- General Mining Law of 1872 (30 U.S.C. sections 22 et seq.)
- Mineral Leasing Act (30 U.S.C. sections 181 et seq.)
- Materials Act of 1947 (30 U.S.C. sections 601–604)
- Geothermal Steam Act (30 U.S.C. section 1001 et seq.)
- The Military Construction Authorization Act (10 U.S.C. section 2671)
- Federal Cave Resources Protection Act (16 U.S.C. sections 4301 et seq.)
- Earthquake Hazards Reduction Act (42 U.S.C. sections 7701 et seq.)
- Defense Withdrawal ("Engel Act") (43 U.S.C. sections 155-158)
- Paleontological Resources Preservation Act (16 U.S.C. sections 470aaa et seq.)
- The Sikes Act of 1960 (16 U.S.C. sections 670a–670o, as amended by the Sikes Act Improvement Act of 1997, Pub. L. No. 105-85)
- Archeological Resources Protection Act (16 U.S.C. sections 470aa–mm)
- Native American Graves Protection and Repatriation Act (25 U.S.C. sections 3001–3013)
- American Indian Religious Freedom Act (42 U.S.C. section 1996)
- Wild and Free-Roaming Horses and Burros Act (16 U.S.C. sections 1331–1340)
- Wilderness Act (16 U.S.C. sections 1131 et seq.)
- Land and Water Conservation Fund Act (54 U.S.C. 200301 et seq.)
- Nevada Revised Statutes Chapter 533, Adjudication of vested water rights
- Nevada Revised Statutes Chapter 534, Underground water and wells
- Executive Order (EO) 11988, Floodplain Management
- EO 11990, Protection of Wetlands
- EO 12088, Federal Compliance with Pollution Control Standards
- EO 12898, Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations
- EO 13007, Indian Sacred Sites
- EO 13045, Protection of Children from Environmental Health Risks and Safety Risks
- EO 13112, Invasive Species
- EO 13175, Consultation and Coordination with Indian Tribal Governments
- EO 13693, Planning for Federal Sustainability in the Next Decade
- EO 13751, Safeguarding the Nation from the Impacts of Invasive Species

1.9 Public and Agency Participation and Intergovernmental Coordination

A Notice of Intent to prepare an EIS was published in the Federal Register on August 26, 2016 (78 Federal Register 31909; Appendix A, Federal Register Notices). The Notice of Intent announced the public scoping period and the dates, times, and locations of public scoping meetings. Notices announcing the intent to prepare an EIS and of scoping meetings were placed in local newspapers (*Battle Mountain Bugle, Eureka Sentinel, Lahontan Valley News, Lovelock Review-Miner, Mineral County*

Independent News, Nevada Appeal, Reno Gazette-Journal, and *Tonopah Times-Bonanza*) and on the project's website (www.frtcmodernization.com). The Notice of Intent also announced that the Navy would operate an informational phone line (775-426-4081) for public inquiries. The Navy solicited public and agency comments during a scoping period from August 26, 2016, through November 25, 2016. To allow time for additional public input, the Navy extended the public scoping comment period from November 25, 2016, until December 12, 2016. A Notice of Extension was published in the *Federal Register* on November 10, 2016 (81 Federal Register 78999) and in the aforementioned newspapers. Public scoping meetings were held in Fallon, Lovelock, Reno, Austin, Eureka, Hawthorne, and Gabbs, Nevada from October 3 through 7, 2016.

The Navy considered comments from the public, government agencies and officials, tribes, and nongovernmental organizations, in the preparation of this EIS. Comments received are categorized in Table 1-5. A total of 328 comment letters were received with over 1,500 distinct comments. Comment letters were submitted via the project website's electronic comment form (181), postal mail and e-mail (111), in writing at the scoping meetings (21), and orally (15) at the scoping meetings. The comment summary below provides a brief overview of the general issues or concerns expressed by the public. The majority of comments expressed general opposition to the proposal. The following list is intended as a general summary and presents issues and concerns in no particular order:

- General concerns about land withdrawal and expansion (too much land proposed to be removed from public use)
- Requests to change the boundaries of proposed land withdrawal
- Impacts to the local customs, culture, and economy
- Impacts on land use, public access (including access to historical sites), and road closures
- Impacts on wilderness areas and wildlife refuges, wildlife, grazing, mining claims, geothermal leases, general recreation (particularly hunters and off-highway vehicles), and landowners
- Impacts on the economy, specifically socioeconomic impacts on ranch and cattle owners, loss of tax revenue from land withdrawal, and impacts on property value
- Concerns about current investments made to improve water supplies for wildlife (small and big game guzzlers) and habitat
- Unexploded ordnance concerns and impacts on wildlife
- Requests for fair compensation for economic losses
- Request for scoping comment period extension by 60 or 90 days (with most comments referring to the original November 25, 2016, comment period deadline)
- Various requests to be a cooperating agency

Table 1-5: Categorization of Public Scoping Comment by Resource Area

Resource Area	Number of Comments[1]	Percentage of Comments
Land Use *(total)*	285	18%
Minerals and Mining (specific)	*105*	*7%*
Grazing (specific)	*101*	*6%*
Land Use (not grazing, minerals, or mining)	*79*	*5%*
Proposed Action	219	14%
Recreation (total)	206	13%
Recreation (not Off-Highway Vehicle or hunting)	*82*	*5%*
Hunting (specific)	*73*	*5%*
Off-Highway Vehicle (specific)	*51*	*3%*
Socioeconomics	162	10%
Biological Resources	88	6%
Water Resources and Quality	68	4%
National Environmental Policy Act Process/Public Participation	63	4%
Other	62	4%
Alternatives Development	56	4%
Utilities/Infrastructure	50	3%
Transportation	48	3%
Cultural Resources, including Native American Traditional Resources	43	3%
Airspace and Aviation	37	2%
Airborne Noise	33	2%
Mitigation	30	2%
Public Health and Safety	30	2%
Comment Extension Request	20	1%
Hazardous Materials/Wastes	19	1%
Cumulative Impacts	15	1%
Air Quality/Climate	13	1%
Soils	11	1%
Environmental Justice and the Protection of Children	9	1%
Total	**1567**	**100%**

[1] Comment totals by resource issue exceed the actual number of total comments received, as some contained multiple comments on more than one resource area.

Following the public scoping period, the Navy reviewed comments and conducted over 170 additional meetings with various stakeholders and tribes to discuss potential alternatives to the Proposed Action. Many comments indicated the desire to have an alternative that would generally avoid restrictions on land uses (or that would involve fewer restrictions than originally envisioned by the Navy), or requested reconfigurations of the Bravo ranges to alleviate potential impacts to hunting, grazing, recreation, transportation, and other concerns. While not all of these suggestions met the purpose and need or the screening factors, the Navy has incorporated some of the suggestions into Alternatives 2 and 3 of this EIS.

The Navy has prepared this Draft EIS to inform the public of the Proposed Action and to allow the public an opportunity for review and comment. The Draft EIS review period began with a Federal Register notice and will be 60 days in length. The public notice has been published in the aforementioned

newspapers indicating the availability of the Draft EIS and the locations where public review copies are available. The Draft EIS is also available on the project website. The Navy will hold public meetings to describe the environmental impacts of the Proposed Action and alternatives and to receive comment on the Draft EIS impacts analyses. The Navy has also setup a general phone information line at 775-426-4081 which describes this process and will be monitored in case a member of the public requires assistance.

The Final EIS will include updates to the Draft EIS and responses to public, tribal, and agency comments received on the Draft EIS.

The Final EIS will include a complete set of all substantive comments received on the Draft EIS and the Navy's responses to such comments. Response to public comments may also take other forms, including correction of data, clarifications of and modifications to analytical approaches, and inclusion of additional data or analysis. A 30-day waiting period will follow the issuance of the Final EIS. The Navy will sign a ROD after consideration of the Final EIS and public comments. The Navy will publish a *Notice of Availability of the ROD* in the *Federal Register*; distribute the ROD to tribes, agencies, interested parties, and local newspapers; and post it on the FRTC EIS website. The ROD will document the Navy's final decision on the Proposed Action (to include potentially identifying an action alternative as a proposal to be submitted to Congress for action), the rationale behind that decision, and any commitments to mitigation and monitoring. Congress will then review the Navy's proposal and ROD and will be the ultimate decision maker for this action.

Following this decision by Congress, it is anticipated that the Navy's Office of Economic Adjustment Program will provide technical and financial assistance to state and local governments to undertake Compatible Use and Joint Land Use Studies in response to Military Department compatibility concerns. Joint land use studies represent a planning process that promotes open, continuous dialogue among the Military, surrounding jurisdictions, and states to support long-term sustainability and operability of military missions The last Joint Land Use Study was completed for NAS Fallon in May of 2015, and serves as a comprehensive strategic plan with specific implementation actions to address and prevent incompatible civilian development that could impair the operational utility of military missions or impact available resources (i.e., air, land, electromagnetic spectrum).

The following discusses the funding process for certain payments and other anticipated costs associated with potential implementation of the proposed action. Under the proposed action, the Navy would need to acquire certain privately-held property in conjunction with the proposed expansion of the Bravo ranges and the DVTA--around 360 total parcels totaling approximately 67,000 acres, from around 100 different owners. (See discussion of action alternatives in Chapter 2.) Private land owners would receive just compensation for any loss of privately-owned land acquired by the United States, to be determined by calculating the fair market value of parcels in accordance with federal appraisal rules codified in the Uniform Appraisal Standards for Federal Land Acquisitions. Additionally, as discussed in Chapter 5 (Mitigation), the EIS will identify a variety of measures to avoid, minimize, or otherwise mitigate certain anticipated environmental impacts of the Navy's proposed action. While not all such measures identified in the EIS would necessarily be implemented, any mitigation measures committed to in the ROD would be binding upon the Navy. Further, the Navy has authority under 43 U.S.C. section 315q of the Taylor Grazing Act of 1934, as amended, to make payments to federal grazing permit holders for losses suffered by the permit holders as a result of the withdrawal or other use of former federal grazing lands for war or national defense purposes.

The EIS acknowledges these projected costs and/or analyzes the environmental impacts associated with them; however, the actual funding for these costs would be provided outside the EIS and the Navy's NEPA process, as part of any legislative authorization of the proposed action subsequent to issuance of a Navy ROD. For example, implementation of mitigations would be paid for either (1) through project-specific appropriations associated with any potential overall legislative implementation of the proposed action as part of the National Defense Authorization Act (NDAA) (which directs DoD action and policy and authorizes construction and mitigation, but does not make appropriations of funds) and the Military Construction, Veterans Affairs, and Related Agencies Appropriations Act (MCON) (which appropriates funding for military construction projects such as the proposed action, including funding for project-specific mitigations); or (2) through funds appropriated for general Navy operations through the Department of Defense Appropriations Act (DoDAA) (which appropriates funding for operations and maintenance of military installations, including range and environmental management).

The NDAA, MCON and DoDAA are annual legislative actions. The overall proposed land withdrawal is projected to be included as part of the NDAA for Fiscal Year (FY) 2021. Funding for the proposed acquisition of non-federal property (to include compensable water rights) and for any payments under 43 U.S.C. section 315q is projected for MCON FY 2021. Funding for range and environmental management is projected for DoDAA FY 2021 and subsequent years.

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