3.6 Airspace

#### **No Action Alternative**

Under the No Action Alternative, the 1999 Congressional land withdrawal of 201,933 acres from public domain (Public Law 106-65) would expire on November 5, 2021, and military training activities requiring the use of these public lands would cease. Expiration of the land withdrawal would terminate the Navy's authority to use nearly all of the Fallon Range Training Complex's (FRTC's) bombing ranges, affecting nearly 62 percent of the land area currently available for military aviation and ground training activities in the FRTC.

#### Alternative 1 – Modernization of the Fallon Range Training Complex

Under Alternative 1, the Navy would request Congressional renewal of the 1999 Public Land Withdrawal of 202,864 acres, which is scheduled to expire in November 2021. The Navy would request that Congress withdraw and reserve for military use approximately 618,727 acres of additional Federal land and acquire approximately 65,153 acres of non-federal land. Range infrastructure would be constructed to support modernization, including new target areas, and expand and reconfigured existing Special Use Airspace (SUA) to accommodate the expanded bombing ranges. Implementation of Alternative 1 would potentially require the reroute of State Route 839 and the relocation of a portion of the Paiute Pipeline. Public access to B-16, B-17, and B-20 would be restricted for security and to safeguard against potential hazards associated with military activities. The Navy would not allow mining or geothermal development within the proposed bombing ranges or the Dixie Valley Training Area (DVTA). Under Alternative 1, the Navy would use the modernized FRTC to conduct aviation and ground training of the same general types and at the same tempos as analyzed in Alternative 2 of the *2015 Military Readiness Activities at Fallon Range Training Complex, Nevada, Final Environmental Impact Statement* (EIS). The Navy is not proposing to increase the number of training activities under this or any of the alternatives in this EIS.

#### Alternative 2 – Modernization of Fallon Range Training Complex with Managed Access

Alternative 2 would have the same withdrawals, acquisitions, and SUA changes as proposed in Alternative 1. Alternative 2 would continue to allow certain public uses within specified areas of B-16, B-17, and B-20 (ceremonial, cultural, or academic research visits, land management activities) when the ranges are not operational and compatible with military training activities (typically weekends, holidays, and when closed for maintenance). Alternative 2 would also continue to allow grazing, hunting, off-highway vehicle (OHV) usage, camping, hiking, site and ceremonial visits, and large event off-road races at the DVTA. Additionally under Alternative 2, hunting would be conditionally allowed on designated portions of B-17, and geothermal and salable mineral exploration would be conditionally allowed on the DVTA. Large event off-road races would be allowable on all ranges subject to coordination with the Navy and compatible with military training activities.

#### Alternative 3 – Bravo-17 Shift and Managed Access (Preferred Alternative)

Alternative 3 differs from Alternative 1 and 2 with respect to the orientation, size, and location of B-16, B-17, B-20 and the DVTA, and is similar to Alternative 2 in terms of managed access. Alternative 3 places the proposed B-17 farther to the southeast and rotates it slightly counter-clockwise. In conjunction with shifting B-17 in this manner, the expanded range would leave State Route 839 in its current configuration along the western boundary of B-17 and would expand eastward across State Route 361 potentially requiring the reroute of State Route 361. The Navy proposes designation of the area south of U.S. Route 50 as a Special Land Management Overlay rather than proposing it for withdrawal as the DVTA. This Special Land Management Overlay would define two areas, one east and one west of the existing B-17 range. These two areas, which are currently public lands under the jurisdiction of BLM, would not be withdrawn by the Navy and would not directly be used for land-based military training or managed by the Navy.

## **Environmental Impact Statement**

# Fallon Range Training Complex Modernization

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#### 3.6 Airspace

This discussion of airspace encompasses the current uses and controls of the Fallon Range Training Complex (FRTC) airspace. The Federal Aviation Administration (FAA) manages all airspace within the United States (U.S.) and the U.S. territories. Airspace is defined in vertical and horizontal dimensions and also by time and is considered to be a finite national resource that must be managed for the benefit of all aviation sectors including commercial, general, and the military.

#### 3.6.1 Methodology

This discussion of airspace includes all of the existing Special Use Airspace (SUA) within the FRTC, as well as the proposed changes to the SUA that would be the subject of the final FAA rulemaking, subsequent to and depending upon any decision(s) ultimately made about the Navy's Proposed Action.

#### 3.6.1.1 Region of Influence

The region of influence is within the FAA's Western Pacific Region. Oakland and Salt Lake Air Route Traffic Control Centers (ARTCC) are the controlling authorities for the FRTC's designated Air Traffic Control Assigned Airspace (ATCAA), restricted areas, and Military Operations Areas (MOA). Management of FRTC SUA is delegated to Naval Air Station (NAS) Fallon Desert Control, which is responsible for issuing airspace clearances. The ARTCCs activate SUA (in this case, for military use) on a daily basis as defined by FAA schedule and 7400.10 (U.S. Department of Transportation, 2018) series. On those occasions when activation is required outside of established hours, SUA is activated by issuing a notice to airmen. When the SUA is not active, the SUA returns to the national airspace system. Figure 3.6-1 displays the current FRTC airspace.

#### 3.6.1.2 Regulatory Framework

The Office of the Chief of Naval Operations Instruction 3710.7 (series), *Naval Aviation Training and Operating Procedure Standardization* (U.S. Department of the Navy, 2016), establishes specific aviation and airspace management procedures and policies for the Navy to use. The Commander, Naval Air Forces Manual 3710.7 (series), *NATOPS General Flight and Operating Instructions* (Forces, 2016) issues detailed policy and procedure guidance. Marine Corps Order 3500.14, *Aviation Training and Readiness (T&R) Program* (Commandant of the Marine Corps, 2005), and Navy Marine Corps 3500.14C, *Aviation Training and Readiness (T&R) Program Manual* (Commandant of the Marine Corps, 2011) provides applicable Marine Corps aviation training and airspace requirements. The Naval Aviation Warfighting Development Center (NAWDC) and the FRTC have missions to train all Navy and Marine Corps aviation units. Marine Corps aviation units train under Naval Aviation Training guidance, but they also must comply with Marine Corps specific guidance. The FAA's Aeronautical Information Services serves as the FAA's aeronautical charting authority for the development, publication, and dissemination of aeronautical charts and products identified for military and other governmental activities in accordance with and other applicable regulations and orders. FAA regulations that apply to special use airspace management include specific FAA Orders:

- FAA Order 1050.1F (issued July 16, 2015), Environmental Impacts: Policies and Procedures (Federal Aviation Administration, 2015)
- FAA Job Order 7400.2L (issued April 7, 2017), Procedures for Handling Airspace Matters (U.S. Department of Transportation Federal Aviation Administration, 2017)
- FAA Job Order 7400.10 (issued February 16, 2018), Special Use Airspace





Additionally, the Aeronautical Information Services catalogs both the affected airports underneath the FRTC SUA and those in regional proximity. As a component of the overall transportation system, the FAA-managed National Airspace System consists of any or all of the following: all classes of airspace, air routes, special use airspace, airspace management responsibilities, and the actual airspace users. It can be viewed on a local or regional scale. This Environmental Impact Statement addresses:

- Airspace components
- Special use airspace
- Air routes
- Airspace management
- Local and regional airports

#### 3.6.1.3 Approach to Analysis

The Navy analyzed impacts on air traffic and airspace management by considering the current FRTC airspace as well as the proposed changes to the FRTC airspace that would occur in conjunction with the overall proposed range modernization. The Supporting Study: Airspace/Air Traffic Study (available at: https://frtcmodernization.com), considered twelve civil and private recognized airfields that are under or adjacent to the FRTC airspace. Additionally, it examined the nineteen selected regional civil and private airfields, and the five major military and commercial regional airfields, that may contribute civil and commercial traffic that both utilizes FRTC airspace, or are impacted by the activation of SUA in the FRTC. The overall approach to analysis includes evaluating changes to FRTC airspace use based upon the anticipated FAA-approved final realignment of internal FRTC SUA and the overall configuration. Specific airspace impact analysis includes the following evaluations:

- Impacts of the reconfigured Restricted Area airspace over the final bombing range geography at B-16, B 17, and B-20 on general aviation
- Impacts to general aviation with any change in existing commercial and public use of FRTC airspace (to include emergency services as well as access to the Visual Flight Rules [VFR] Corridor)
- Impacts to general aviation and airfield operations at civil and private airports within the region of influence

Supporting airspace analysis, in the Supporting Study: Airspace/Air Traffic Study (available at: https://frtcmodernization.com), examined the FRTC impact on FAA Air Traffic Control utilizing high altitude Jet (J) routes and Q-routes (routes available for use by area navigation equipped aircraft between 18,000 feet mean sea level [MSL] and Flight Level [FL]450 inclusive), and low altitude T-routes (routes available for use by area navigation equipped aircraft from 1,200 feet above the surface [or in some instances higher], up to but not including 18,000 feet MSL) and V-routes (low-altitude airways defined in straight-line segments, each of which is based on a straight line between either two Very High Frequency omnidirectional range stations, or an omnidirectional range and an omnidirectional range intersection). The Military Training Routes that transit the FRTC were also considered in the analysis of the Modernization Environmental Impact Statement action alternatives. This section will discuss potential direct and indirect effects to existing airspace in and adjacent to the FRTC's region of influence.

The FAA, a cooperating agency for this Environmental Impact Statement, follows policies and procedures to ensure their compliance with the National Environmental Policy Act. The FAA has also identified numerous categories that it examines with respect to environmental impacts for most of its actions and will apply to its final rulemaking as required under Code of Federal Regulations (CFR), Title

14, Chapter 1, Subchapter B, part 11, for the modernized FRTC SUA. The Department of Transportation Act of 1966 (set forth in 23 United States Code section 138 and 49 United States Code section 303), Section 4(f) prohibits the Federal Transportation Agency and other U.S. Department of Transportation agencies from using land from publicly owned parks, recreation areas (including recreational trails), wildlife and water fowl refuges, or public and private historic properties, unless there is no feasible and prudent alternative to that use and the action includes all possible planning to minimize harm to the property resulting from such a use. 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. This exemption is consistent within the FRTC for the following FAA Impact Categories as defined in FAA Order 1050.1:

- transportation
- compatible land use
- historical sites and buildings
- cultural areas and specific cultural sites

Under the U.S. Department of Defense Reauthorization, P.L. 105-85, Div. A, Title X, Section 1079, Nov. 18, 1997, 111 Stat. 1916, Special use airspace actions are exempt from Section 4(f) of the Department of Transportation Act as avoidance alternatives result in unacceptable and severe operational and safety concerns. Section 3.5 (Transportation) addresses amplifying information pertaining to Section 4(f).

#### 3.6.1.4 Public Scoping Concerns

Issues raised during the public scoping period in regards to airspace were few. Public concerns were consistent with previously-expressed concerns and addressed livelihood and quality of life such as increased noise in areas not previously affected (addressed in Section 3.5, Transportation), how the changes in airspace configuration would affect civilian use of airspace, and continued operations concerning airfields underneath or adjacent to FRTC airspace. Churchill County expressed concern that the proposed changes may limit future development or expansion of the Fallon Municipal Airport. The Supporting Study: Airspace/Air Traffic Study (available at: https://frtcmodernization.com), details potential modernization influences on Fallon Municipal Airport. The Toiyabe Chapter of the Sierra Club presented general concerns of adverse impacts of airspace use and restrictions on commercial and general aviation, and rural airports. A specific concern was about the potential impacts from the floors of the eastern MOAs on residents and commercial interests. The Aircraft Owners and Pilots Association offered questions and suggestions on general aviation Instrument Flight Rules (IFR) flight plans, a new north-south VFR route through the FRTC, the effects on general aviation of the proposed Reno MOA's floor altitude, and the possible creation of Global Positioning System (GPS) VFR waypoints (to modernize the VFR corridor).

Additionally, Nye County Board of Commissions noted that military airspace operations would have the potential to directly impact operation of Nye County's Federal Aviation Administration-supported National Plan of Integrated Airport Systems (NPIAS) airport at Gabbs. NPIAS development is dependent upon the availability of funding sources and the adequacy of such funding to meet needs varies with type of airport and level of activity. Gabbs is currently categorized as having a Basic role in the NPIAS, with a five-year NPIAS development estimate cost of \$770,000. Eureka County also identified concerns to local operations, and was concerned that the Eureka County airport operations remain unaffected

and that the County can continue to use the airports for the attraction and retention of business and industry, for public safety (firefighting) and medical emergencies, to serve commercial aviation and private pilots, and to support county agriculture and mining industries. The county questioned whether the proposed eastern MOAs would preclude use of the airport at any time, and to what, if any, extent would the active FRTC airspace in any way cause delay to VFR or IFR traffic to the Eureka County airports. Correspondingly, the county questioned if the potential modernization could in any way cause delay to VFR or IFR traffic between major medical facilities and Eureka County including Greater Reno, Las Vegas, Elko, or Salt Lake City areas.

For further information regarding comments received during the public scoping process, please refer to Appendix D, Public Involvement.

#### 3.6.2 Affected Environment

#### 3.6.2.1 Special Use Airspace

SUA refers to airspace areas with "defined dimensions identified by an area on the surface of the earth wherein activities must be confined because of their nature and/or wherein limitations may be imposed upon aircraft operations that are not a part of those activities" (definition from JO 7110.65W Glossary). The majority of SUA is established for military flight activities and may be used for commercial or general aviation when not reserved for military activities. The FRTC uses multiple types of SUA.

A MOA is airspace designated outside of Class A airspace, used to separate or segregate certain nonhazardous military activities from IFR traffic and to identify for VFR traffic the location of these activities. General aviation aircraft flying using visual flight rules may fly through an active MOA during military training operations; however, for safety considerations, most VFR pilots choose to avoid flying through activated MOAs. An ATCAA area is an airspace of defined vertical/lateral limits assigned by FAA Air Traffic Control. ATCAA areas are established for providing air traffic segregation between the specified activities being conducted within the assigned airspace and other IFR air traffic.

The one type of SUA of particular relevance to the FRTC is a Restricted Area. Restricted Areas separate activities considered hazardous to other aircraft. 14 CFR part 73 defines them as follows:

"A restricted area is airspace designated under Part 73 within which the flight of aircraft, while not wholly prohibited, is subject to restriction."

Civilian aircraft are not authorized within active restricted areas. 14 CFR part 73 states that: "No person may operate an aircraft within a restricted area between the designated altitudes and during the time of designation, unless he has the advance permission of the controlling agency." At the FRTC, the scheduling authority is NAWDC, which is also the FAA-defined using agency, and Oakland and Salt Lake City ARTCC are the FAA controlling authorities. NAWDC schedules the airspace, Desert Control manages traffic into and out of the FRTC, and the Range Operations Center controls traffic and ensures safety in the individual bombing ranges and training areas within the FRTC. The FRTC contains nine restricted areas, with six aligned over the four bombing ranges and three for dynamic events (Combat Search and Rescue [Terrain-masking]) not associated with air-to-ground munitions, primarily over the Dixie Valley Training Area. FRTC-restricted airspace complies with the FAA requirement that a restricted area floor may be established to the surface combined with Navy requirements that the Navy owns, leases, or by agreement, controls the underlying surface, as well as ensure that the restricted airspace contour contains all activities conducted therein. The FRTC also currently contains fifteen MOAs, fifteen ATCAAs, and two supersonic operating areas (Table 3.6-1).

Airspace	Description Notes Floor Ceiling		Scheduling/ Controlling Authority			
Restricted Areas (R)						
R-4803	3 NM radius circle	Surface				
R-4804A <sup>1</sup>	5 NM and 3 NM radius circles	Surface	Up to 17,999 feet MSL			
R-4804B	5 NM and 3 NM radius circles	18,000 feet MSL	50,000 feet MSL (as coordinated)	NAWDC/Oakland ARTCC		
R-4810	5 NM and 3 NM radius circles	Surface	Up to 17,000 feet MSL			
R-4812 <sup>2</sup>	5 NM bounded on the east by R-4804 and on the west by R-4810	Surface	Up to 17,999 feet MSL			
R-4813A	15 NM radius circle	Surface		NAWDC/Oakland		
R-4813B	15 NM radius circle	18,000 feet MSL	50,000 feet MSL (as coordinated)	ARTCC		
R-4816N	Northern half of the DVTA	1,500 feet AGL				
R-4816S	1 NM north of U.S. Hwy 50	500 feet AGL	Up to 17,999 feet MSL			
Military Operations	s Areas (MOA)					
Fallon North 1 Fallon North 2	Excluding that airspace within R- 4813A when active, and those portions of the Fallon and Stillwater National Wildlife Refuge areas below 3,000 feet AGL	100 feet AGL	Up to 17,999 feet MSL	NAWDC/Oakland ARTCC		
Fallon North 3				NAWDC/Salt Lake		
Fallon North 4		200 feet AGL		ARTCC		
Fallon South 1				NAWDC/Oakland		
Fallon South 2		100 feet AGL		ARTCC		
Fallon South 3				,		
Fallon South 4 <sup>3</sup>						
Fallon South 5	Excluding that airspace 2 NM either side of U.S. Route 50 between 2,000 feet AGL and 10,500 feet MSL	200 feet AGL		NAWDC/Salt Lake ARTCC		

Airspace	Description Notes	Floor	Ceiling	Scheduling/ Controlling
				Authority
Churchill High	3 NM centered to the point of beginning excluding that airspace within R-4803	9,000 feet MSL	Up to 17,999 feet MSL	
Churchill Low		500 feet AGL	9,000 feet MSL	
Ranch High	Excluding that airspace in R-4810 when active	9,000 feet MSL	13,000 feet MSL	NAWDC/Oakland ARTCC
Ranch Low	Excluding that airspace in R-4810 when active	500 feet AGL	9,000 feet MSL	
Carson		500 feet AGL	Up to 17,999 feet MSL	
Reno		13,000 feet MSL	Up to 17,999 feet MSL	
Air Traffic Control A	Assigned Airspace (ATCA	A)	[	Γ
Bandit Fallon North 1 <sup>4</sup> Fallon North 2 <sup>4</sup>				NAWDC/Oakland ARTCC
Fallon North 3 <sup>4</sup> Fallon North 4 <sup>4</sup>			As coordinated <sup>5</sup>	NAWDC/Salt Lake City ARTCC
Fallon South 14Fallon South 24Fallon South 34		18,000 feet MSL		NAWDC/Oakland ARTCC
Fallon South 4 <sup>4</sup> Fallon South 5 <sup>4</sup>				NAWDC/Salt Lake City ARTCC
Reno <sup>4</sup>			31,000 feet MSL	NAWDC/Salt Lake
Smokie			25,000 feet MSL <sup>5</sup>	City ARTCC
Diamond			28,000 feet MSL <sup>5</sup>	
Duckwater		18 000 feet MSI	25,000 feet MSL <sup>5</sup>	NAWDC/Salt Lake
Zircon		10,000 1001 10132	As coordinated <sup>5</sup>	City ARTCC
Supersonic Operati	ng Areas	1		1
Area A		30,000 feet MSL	50,000 feet MSL or as assigned	NAWDC/Oakland/ Salt Lake City
Area B		11,000 feet MSL	30,000 feet MSL	ARTCC

#### Table 3.6-1: Fallon Range Training Complex Special Use Airspace (continued)

#### Table 3.6-1: Fallon Range Training Complex Special Use Airspace (continued)

<sup>1</sup> Surface to 17,999 feet MSL excluding 2,000 feet AGL up to but not including 8,500 feet MSL, north of and within 1 NM of U.S. Route 50 between the intersection of U.S. Route 50 with W118-26-00 and W118-08-00.

<sup>2</sup> Surface to 17,999 feet MSL excluding that portion from 2,000 feet AGL up to 8,500 feet MSL that lies north of and 1 NM from U.S. Route 50, between the intersections of U.S. Route 50 with W118-25-33 and W118-07-33.

<sup>3</sup> Airspace encompassed by a 3 NM radius centered on the town of Austin, NV; below 2,000 feet AGL. That airspace encompassed by a 3 NM radius centered on Austin Airport, NV. That airspace 2 NM either side of State Route 722 to the town of Austin, then 2 NM either side of U.S. Route 50 to the eastern boundary of the Fallon South 4 MOA between 2,000 feet AGL and 10,500 feet MSL.

<sup>4</sup> ATCAA overlays a MOA with the same name.

<sup>5</sup> All ATCAAs can go as high as 50,000 feet MSL or as coordinated.

Notes: AGL = above ground level, ARTCC = Air Route Traffic Control Center, FL = Flight Level, Hwy = Highway, MSL = mean sea level, NM = nautical miles, NAWDC = Naval Aviation Warfighting Development Center,

U.S. = United States, DVTA = Dixie Valley Training Area

#### 3.6.2.2 Fallon Range Training Complex Air Traffic

Air traffic refers to movements of aircraft through airspace. All airspace, including the FRTC, over the United States is considered National Airspace. Through the FAA, the U.S. Department of Transportation has established safety and security factors that mandate the judicious regulation of airspace use and air traffic control. Accordingly, the FAA distributes and administers regulations applicable to all aircraft. These regulations explain federally permissible uses of designated airspace and define the FAA obligations to control that use. The Navy controls all air traffic throughout the FRTC SUA in accordance with FAA regulations, as the airspace within and adjacent to the FRTC supports both military and non-military (private, service, and commercial) air traffic.

#### 3.6.2.2.1 Air Traffic Control

FAA regulations accommodate the various categories of aviation (military, commercial, or general air travel) within the regulated National Airspace System. The regulatory scheme for airspace and Air Traffic Control varies from highly controlled to uncontrolled. The controlled airspace structure of the National Airspace System consists of three strata of flights under Instrument Flight Rules:

- Victor Airways are low-altitude airways that can be navigated using navigation aids and have names that start with the letter V. They are pre-determined routes that cover altitudes from approximately 1,200 feet above ground level (AGL) up to, but not including 18,000 feet above MSL.
- Jet Routes are high-altitude airways that have names that start with the letter J. These routes run from 18,000 feet to 45,000 feet MSL and are defined by Flight Levels. A Flight Level is the measured altitude with the last two digits omitted, computed at a standard sea-level pressure setting of 29.92 inches of Mercury, and expressed as FL180 to FL450.
- The FAA is replacing high (J) and low (V) altitude routes that rely on ground-based navigation aids with area navigation routes for use by aircraft with area navigation capability. Q-Routes can be flown using positioning from either satellite signals or Distance Measuring Equipment in case of a GPS outage. Q-Routes are replacing many Jet routes in high-altitude airspace (18,000 to

45,000 feet). T-Routes can be flown only with satellite navigation systems and are replacing many Victor routes in airspace from 1,200 feet above the surface to 18,000 feet.

• Flights above 45,000 feet MSL (FL450) are distinctive events, considered random operations and assigned by the FAA as needed.

Examples of highly controlled air traffic situations are flights near airports, where aircraft are in a critical phase of flight, either take-off or landing; and flights on high or low-altitude airways. Less controlled situations include flight under VFR or flight outside of U.S.-controlled airspace. The National Airspace System that includes the FRTC contains various categories of controlled airspace.

#### 3.6.2.2.2 Military Air Traffic

FRTC airspace, both currently, and under any of the Modernization Environmental Impact Statement alternatives, is generally active from 0700–1900, Monday through Friday. As noted in Section 1.3 (Background), the FRTC airspace overlays approximately 10.4 million acres of land and consists of the nine restricted areas, 15 MOAs, 15 ATCAAs, two supersonic operating areas, and a civilian VFR corridor.

NAS Fallon Desert Control periodically reviews the Standard Operating Procedures to ensure safety in FRTC airspace. Oakland and Salt Lake ARTCCs are the controlling authorities for FRTC-assigned restricted areas, MOAs, and ATCAAs. NAWDC is the controlling authority for the ground ranges and all training airspace within the FRTC. NAS Fallon Desert Control delegates management to NAWDC of all SUA within the contiguous FTRTC and is responsible for issuing airspace clearances. Oakland Center issues airspace clearance for the Reno MOA.

NAWDC is the approved, designated range complex authority in charge of scheduling access to all areas of the FRTC. Aircrew and Range Operations Center personnel are jointly responsible for air safety. Specific safety procedures are defined by NAWDC and are applicable for each mission conducting weapons training in the airspace and onto the ranges of the FRTC. They include the following:

- For all weapons drops, a fly-by of the target area by one aircraft to ensure the target area is clear, as well as to clearly identify the intended target(s).
- During the clearing pass for an event, the inflight Range Safety Officer must ensure that nonparticipating aircraft, ground vehicles, and livestock are clear of the surrounding airspace and the intended target.
- Aircrews operating within MOAs and ATCAAs are responsible for abiding by the spatial restrictions specified by Desert Control.

The FRTC airspace is managed by the Navy under a Letter of Agreement between NAWDC and the FAA. Two-way radio communications between Navy aircraft and Air Traffic Control are required at all times. Additionally, Navy aircraft must remain under Visual Meteorological Conditions at all times within the FRTC. Military Assumes Responsibility for Separation of Aircraft (MARSA) is a military command privilege utilized by the FRTC for IFR operations. Individual units or pilots cannot invoke MARSA. When it is authorized, NAWDC, through the Letter of Agreement, ensures that its implementation and terms of use are documented and coordinated with the FAA, as it has jurisdiction over the FRTC. The terms of use assign responsibility and provide for separation among participating aircraft at all times. The FAA responsibility concerning the use of MARSA is to provide separation between military aircraft engaged in MARSA operations and other nonparticipating IFR aircraft.

#### 3.6.2.2.3 Civilian Air Traffic

Civilian air traffic in the region of influence includes scheduled commercial air carrier services, general aviation flying (agriculture/ranching, pilot training, and sightseeing), as well as air transport services. The creation of a VFR corridor allows civilian traffic a quicker transit through FRTC airspace while avoiding military operations. The corridor facilitates civilian aircraft transit through the FRTC SUA, thus ensuring aircraft can avoid delays associated with flying outside and around the FRTC airspace. The current civilian VFR corridor (Figure 3.6-1) follows U.S. Route 50 from Sand Mountain to Austin, Nevada,<sup>1</sup> and is a permanent FRTC feature sustaining general aviation's VFR east-west transit of the FRTC.

As stated above, most SUA is established for military or government use, though civilian VFR aircraft can transit MOAs at any time; however, when restricted areas are not in active use, civilian VFR air traffic may be able to transit through this airspace. Close coordination between military and civilian air traffic control facilities enables safe, effective, real-time use of the FRTC SUA. This procedure allows VFR civilian aircraft to transit SUA scheduled for military use until the scheduled military aircraft is actually en route to that area. When restricted areas are actively being used, the established civilian VFR corridor allows small commercial and private aircraft transit through the FRTC airspace, at any time.

Due to the expansive, hazardous, and persistent use of the FRTC airspace by the Navy, IFR traffic (which is predominantly commercial in nature) is typically limited to non-operating hours only. The FAA and Desert Control work closely throughout the day to coordinate airspace, allowing overflight of the FRTC airspace during normal operating hours, typically above 30,000 feet, when military operations allow.

Because the towns outside of Fallon that lie under the FRTC airspace are remote, access to medical evacuation (MEDEVAC) and fire suppression air service must be continually available. All emergency flights, both helicopter and fixed-wing, are given priority transit through the FRTC at all times. Desert Control ensures that real-time adjustments to airspace occur to expedite emergency aircraft and deconflict all Navy training events along the required routes or in the vicinity of fire suppression activities.

#### 3.6.2.2.4 Local and Regional Airports

There are several registered small airports within or near the existing and proposed FRTC airspace that have been in continued, compatible use with FRTC operations since the establishment of Fallon as a Naval Aviation training complex. These airports (Table 3.6-2), as well as larger regional and international airports outside of the FRTC SUA, are substantial contributors to the commercial traffic flow that flies adjacent to and when available through the FRTC. The Navy performed a supporting Airspace and Airfield Study that identified 36 selected airfields in the regional vicinity of the FRTC to determine any effects on airspace or airfield access that would need consideration in the proposed modernization alternatives. Any associated restrictions to future development and projected flight procedures for general aviation airfields would be enacted by the FAA, with input from NAWDC.

<sup>&</sup>lt;sup>1</sup> Altitude restrictions for the civilian VFR corridor are from 2,000 feet to 8,000 feet above ground level (AGL) from Sand Mountain to Fairview Peak and then from 2,000 feet AGL to 10,500 feet AGL east from Fairview Peak until exiting the FRTC Airspace. From Sand Mountain to Fairview Peak, the corridor extends 1 mile north of Hwy 50. From Fairview Peak to State Hwy 722 at East Gate, the width increases to 1 miles north and 2 miles (3.2 kilometers) south. At East Gate, the corridor widens to 2 miles on each side of U.S. Route 50.

Table 3.6-2: Federal Aviation Administration F	Registered Airfields Under or Near the Fallon R	ange Training Complex Special Use Airspace
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Name (Location Identification)	Location	Remarks	Runway Data	Operations Tempo
Austin (TMT)	70 miles east-northeast of Fallon, Nevada	Bureau of Land Management/Public Use	Asphalt – 1/19 6000'	Average 27/week, 57% transient, 36% local GA, 7% military
Battle Mountain (BAM)	127 miles northeast of Fallon, Nevada	Publicly Owned	Asphalt – 3/21 - 7300', 12/30 7299'	Average 80/week, 43% local GA, 30% transient GA, 19% air taxi, 9% military
Black Rock City (88NV) (Burning Man)	92 miles north-northwest of Fallon, Nevada	Bureau of Land Management/ Leased for Private Use	Dirt – 5R/23L 6272', 5L/32R 6000'	N/A - Preregistration required for use. Detailed info at: http://airport.burningman.org
Black Rock Desert High Altitude Rocket Launch Area	97 miles north-northwest of Fallon, Nevada	Bureau of Land Management/ Public launches under terms of BLM permit	N/A	http://www.aeropac.org/blackrock.html
Crescent Valley (U74)	132 miles northeast of Fallon, Nevada	Bureau of Land Management/Public Use	Dirt - 5/23 5424', 14/32 4650'	50/year, 100% transient GA
Elko Regional Airport (EKO)	181 miles northeast of Fallon, Nevada	Publicly Owned	Asphalt – 6/24 7454', 12/30 3015'	Average 56/day. 48% transient GA, 23% local GA, 18% air taxi, 11% commercial, <1% military
Ely Airport (ELY)	206 miles east of Fallon, Nevada	Publicly Owned	Asphalt – 18/36 6018', 12/30 4825'	Average 44/week, 17% local GA, 35% transient GA, 38% air taxi, 10% military
Empire (18NV)	82 miles north-northwest of Fallon, Nevada	Bureau of Land Management/ Leased for Private Use	Dirt – 18/36 3770', 7/25 3170'	Average 20/month, 62% local GA, 38% transient GA
Eureka Airport (05U)	151 miles east of Fallon, Nevada	County Owned/Public Use	Asphalt – 18/36 5940'	Average 38/week, 70% transient, 30% local GA
Darrow Field Airport (26NV)	6 miles southwest of Fallon, Nevada	Private Use Visual Flight Rules	Asphalt – 16/34 2483'	N/A
Dayton Valley Airpark (A34)	53 miles west-southwest of Fallon, Nevada	Privately Owned/Allows Public Use	Asphalt – 5/23 5343'	Average 53/day, 33% local GA, 48% transient GA, 18% military
Derby Field (LOL)	50 miles north of Fallon, Nevada	County Owned/Public Use	Asphalt – 2/20 5529', 8/26 4931'	Average 25/week, 96% transient, 4% local GA
Dixie Valley Airport (NV30)	50 miles northeast of Fallon, Nevada	Private Use Visual Flight Rules	Asphalt – 16/34 6000'	N/A
Fallon Municipal Airport (FLX)	2 miles northeast of Fallon, Nevada	Publicly Owned	Asphalt – 3/21 5703' Dirt – 13/31 4207'	Average -24/day, 41% local GA, 37% transient GA, 18% air taxi, 4% military

Table 3.6-2: Federal Aviation Administration Registered Airfields Under or Near the Fallon Range	ge Training Complex Special	Use Airspace (continued)
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Name (Location Identification)	Location	Remarks	Runway Data	Operations Tempo
Fallon Naval Air Station/Van Voorhis Field Airport (NFL)	3 miles northeast of Fallon, Nevada	U.S. Navy Owned	13R/31L – 14004', 13L/31R – 11078', 7/25 – 7003'	Naval Air Station Traffic
Fallon Southwest Airpark Airport (1NV1)	5 miles southwest of Fallon, Nevada	Private Use Visual Flight Rules	Gravel – 17/35 2650'	N/A
Gabbs (GAB)	53 miles southeast of Fallon, Nevada	County Owned/Public Use	Dirt – 9/27 5900', 16/34 2800'	Average 200/year, 50% transient, 50% local GA
Hadley (NV83)	104 miles southeast of Fallon, Nevada	Private Use Visual Flight Rules	Asphalt – 17/35 6776'	Average 38/week, 50% transient, 50% local GA
Kingston (N15)	77 miles east of Fallon, Nevada	Public Airport	Dirt/gravel – 7/25 3700', 16/34 3072', Helipad – concrete	12/year – 100% air taxi
McCarran International Airport (LAS)	307 miles southeast of Fallon, Nevada	International Airport	8L/26R – 14512', 8R/26L – 10525', 1R/19L - 9771', 1L/19R – 8988'	Average 1482/day, 66% commercial, 25% air taxi,7% transient GA, 2% local GA,<1% military
Nellis Air Force Base (LSV)	298 miles southeast of Fallon, Nevada	U.S. Air Force Owned	3L/21R - 10120', 3R/21L - 10051'	Average 89/day 100% military
North Las Vegas Airport (VGT)	293 miles southeast of Fallon, Nevada	Publicly Owned	7/25 – 5005', 12R/30L – 5001', 12L/30R – 4203'	Average 485/day, 55% local GA, 30% transient GA, 14% air taxi, 2% military, <1% commercial
O'Toole Ranch (NV02)	63 miles east-southeast of Fallon, Nevada	Private	Dirt – 7/25 4000'	N/A
Reno-Tahoe International Airport (RNO)	65 miles west of Fallon, Nevada	International Airport	16R/34L – 11001', 16L/34R – 9000', 7/25 – 6102'	Average 239/day, 50% commercial, 30% transient GA, 13% air taxi, 5% local GA, 2% military
Silver Springs (KSPV)	25 miles west of Fallon, Nevada	County Owned/Public Use	Asphalt – 6/24 – 4265'	Average 30/day, 52% transient GA, 31% local GA, 17% military

Note: GA = General Aviation





For all of the proposed alternatives, the FAA would sustain established Airport Exclusion Areas (5 nautical mile radius, surface to 1,500 feet AGL) for the Gabbs and Austin airports. Range Operation Procedures, established by NAWDC would create Noise Sensitive Areas (5 nautical mile radius, surface to 3,000 feet AGL) for the following:

- Town of Austin
- Town of Gabbs
- Crescent Valley Airport
- Eureka Airport
- Kingston Airport
- Yomba Tribal Settlement
- Cold Springs
- Middlegate
- City of Fallon

Noise sensitive areas are to be avoided by military aircraft unless safety considerations preclude avoidance. The airport exclusion areas are to be avoided at all times. Figure 3.6-2 depicts regional and local airports located either underneath the FRTC SUA or regionally adjacent to the current FRTC ranges and airspace. Additional regional airfields are included for analysis in the Supporting Study: Airspace/Air Traffic Study (available at: https://frtcmodernization.com).

#### 3.6.3 Environmental Consequences

The analysis of airspace management and use involves consideration of many factors, including the types, locations, and frequency of aerial operations; the presence or absence of already designated (controlled) airspace; and the amount of air traffic using or transiting through a given area. The Navy assessed impacts on airspace with respect to the potential for disrupting existing airspace patterns and systems, safe civil airfield operations, and for causing changes in existing levels of aviation safety. A principal focus of the analysis is the potential for existing or proposed FRTC military air traffic to affect existing airspace conditions. The following provides an analysis of environmental effects of the No Action Alternative and Alternatives 1 through 3 against the environmental baseline as described in Section 2.4 (Environmental Baseline). A summary of the potential impacts with implementation of the No Action Alternative or any of the three action alternatives (Alternatives 1, 2, and 3) is provided at the end of this section (see Section 3.6.3.6, Summary of Effects and Conclusions).

#### 3.6.3.1 No Action Alternative

Under the No Action Alternative, the Proposed Action would not occur. Existing land withdrawal that encompasses the four bombing ranges and the current Dixie Valley Training Area (DVTA) would not be renewed. The Department of the Navy would retain administrative control of the land withdrawn under Public Law 106-65 until environmental remediation and health and safety concerns were completed so as to allow return of the land to Bureau of Land Management for reincorporation into the public domain and the removal of all ground sites supporting training and tracking systems, the airspace of the FRTC would likely no longer be required to support Navy training. Following any relinquishment of Public Law 106-65 lands, the Navy would evaluate the future use of special use airspace and coordinate with the FAA on the disestablishment of special use airspace, as required. The Navy anticipates that any relinquished airspace would likely become available pursuant to applicable FAA policy, procedure, guidance, and

orders. Therefore, no significant negative impacts on airspace would occur with implementation of the No Action Alternative.

#### 3.6.3.2 Alternative 1: Modernization of the Fallon Range Training Complex

Under Alternative 1, the existing SUA (Figure 3.6-2) would be reconfigured horizontally and would also increase vertical tactical airspace by 22 percent. The overall reconfiguration would update FRTC airspace to ensure compliance with the FAA and Navy requirements that the Navy both (1) control and restrict public use of any land that is within a weapons danger zone, and (2) ensure that the restricted airspace configuration matches weapons danger zones. Additionally, it would fully support the creation of corresponding MOAs to existing ATCAAs, as well as the reconfiguration of some of the existing MOAs. Specifically, the new MOAs under the Duckwater and Smokie ATCAAs would have a floor of 200 feet and a ceiling of 17,999 feet AGL. The new Ruby, Zircon, and Diamond MOAs would have a floor of 1,200 feet and a ceiling of 17,999 feet AGL. The Reno MOA would include a vertical expansion with the floor lowering from 13,000 feet to 1,500 feet, and allow for supersonic flight in the ATCAA above 30,000 feet. Supersonic activities are only expected to occur approximately twice a week and activities (maintenance check flights) would take approximately 10 minutes to complete. Figure 3.6-3 depicts the proposed airspace changes that match Restricted Airspace with the proposed new bombing range boundaries, illustrates the new MOAs and ATCAAs and shows proposed changes to existing MOAs and ATCAAs under Alternative 1. Figure 3.6-4 shows the entire airspace configuration for restricted areas, Figure 3.6-5 shows MOA configurations under Alternative 1, and Figure 3.6-6 shows the ATCAA configuration under Alternative 1. Table 3.6-3 lists specific airspace changes that would occur. The following list describes these changes:

- modification of restricted areas to match the proposed land boundaries for Bravo-16, Bravo-17, and Bravo-20 ranges
- increase vertical size of R-4804, and R-4813 to 50,000 feet above MSL
- a minor expansion of the northern border of the FRTC
- establishment of two new restricted areas: R-4805 and R-4814
- establishment of two new restricted areas: R-4816N (Low) and R-4816S (Low) would be established to allow better use of current associated proposed land range changes in the Dixie Valley Training Area
- establishment of a new restricted area (R-4810B) to increase safety and improve efficiency by mirroring the existing R-4812, and the modifications to the adjoining Ranch MOA
- establishment of new MOAs: Ruby, Zircon, Diamond, Smokie, and Duckwater
- establishment of new ATCAA: Ruby

- modification of ATCAAs: Diamond, Smokie, and Duckwater
- recombination and renaming of the Ranch High and Ranch Low MOAs into a single Ranch MOA, and expansion of Ranch MOA and R-4810 (vertically) to 17,999 feet above MSL
- recombination and renaming of the Churchill High and Churchill Low MOAs into a single Churchill MOA
- recombination and renaming of the Fallon South MOAs
- modification of the Reno MOA's floor from 13,000 feet to 1,500 feet and Reno ATCAA ceiling up to 40,000 feet on request
- extension of the VFR corridor eastward (terminating at the eastern edge of the FRTC airspace)
- extension of supersonic operating areas eastward through the Ruby, Diamond, and Zircon airspaces



Figure 3.6-3: Fallon Range Training Complex Updated Airspace Under Alternative 1



Figure 3.6-4: Restricted Airspace Under Alternative 1







Figure 3.6-6: Air Traffic Control Assigned Airspace Under Alternative 1

Current SUA	Proposed SUA	Current Floor/Ceiling <sup>1</sup>	Proposed Floor/Ceiling <sup>1</sup>	Proposed Boundary Changes	Other Proposed Changes		
Restricted Areas							
R-4803	R-4803	Up to 17,999 feet MSL	No change	Increase in horizontal size to the west, to match associated land range changes.	Provides expanded live-fire training capability in B-16.		
R- 4804A <sup>2</sup>	R-4804A <sup>2</sup>						
R-4804B	R-4804B	18,000 feet MSL or as ATC Assigned		No Change	-		
-	R-4804C	-	35,000 feet MSL to 50,000 feet MSL	No Change	-		
-	R-4805A	-	Surface to 17,999 feet MSL	Abuts R-4804 and extends airspace to the			
-	R-4805B	-	18,000 feet MSL to 50,000 MSL	south to encompass the new B-17	-		
R-4810	R-4810	Surface to 17,000 feet MSL	No Change	No Change	-		
-	R-4810B	-	17,000 feet MSL to 17,999 feet MSL	Established to increase safety and improve efficiency by mirroring the existing R-4812, and the modifications to the adjoining Ranch MOA			
R-4812 <sup>2</sup>	R-4812 <sup>2</sup>	Surface to 17,999 feet MSL	No Change	No Change	-		
R-4813A	R-4813A	Surface to 17,999 feet MSL	No Change	No Change	-		
R-4813B	R-4813B	18,000 feet MSL to 34,999 feet MSL	No Change	No	Change		
-	R-4813C	-	35,000 feet MSL to 50,000 feet MSL	No Change			
	R-4814	-	Surface to 29,000 feet MSL	Established to m range land change	atch associated B-20 s to optimize training.		
-	R-4816S (Low)	-	Surface to 499 feet AGL <sup>4</sup>	Established to allow better use of current associated proposed land range changes in the Dixie Valley Training Area and allow usage of Smokey Sams			
R-4816N	R-4816N (Low)	-	Surface to 1,499 feet AGL <sup>4</sup>	Established to allow better use of current associated proposed land range changes in the Dixie Valley Training Area and allow usage of Smokey Sams.			

#### Table 3.6-3: Proposed Special Use Airspace Changes

Current SUA	Proposed SUA	Current Floor/Ceiling <sup>1</sup>	Proposed Floor/Ceiling <sup>1</sup>	Proposed Boundary Changes	Other Proposed Changes				
R-4816N	R-4816N	1,500 feet AGL to 17,999 feet MSL		No Change					
R-4816S	R-4816S	500 feet AGL up to 17,999 feet MSL	No change	-					
	Military Operations Areas (MOA)								
Churchill High Churchill Low	Churchill	9,000 feet MSL/ Up to 17,999 feet MSL 500 feet AGL/9,000 feet MSL	500 feet AGL/ Up to 17,999 feet MSL	No change					
Fallon North 1	Fallon North 1	MOA: 100 feet AGL up to 17,999 feet MSL.		Each of the Fallon North 1 to 3 MOAs northern borders would be expanded slightly to the North. The Fallon North 4 MOA northern border would be expanded to the North.					
Fallon North 2	Fallon North 2	Fallon North 2 ATCAA: 18,000 feet							
Fallon North 3	Fallon North 3	coordinated).	No change						
Fallon North 4	Fallon North 4	MOA: 200 feet AGL up to 17,999 feet MSL. ATCAA: 18,000 feet MSL to (as coordinated).							
Fallon South 1	Fallon South 1	MOA: 100 feet AGL up to 17,999 feet MSL. ATCAA: 18,000 feet MSL to 50,000 feet MSL	No change	No change					
Fallon South 2	Fallon South 2	MOA: 100 feet AGL up to 17,999 feet MSL.		For the Fallon 2 through Fallon 5 MOA/ATCAAs, there are no changes to the airspace but they would be re- aligned in the NAWDC working areas through internal processes.					
Fallon South 3		ATCAA: 18,000 feet MSL to 50,000 feet MSL							
Fallon South 4	Fallon South 3	MOA: 200 feet AGL up to 17,999 feet MSL.							
Fallon South 5	-	ATCAA: 18,000 feet MSL to 50,000 feet MSL	-						
Ranch High		9,000 feet MSL to 13,000 feet MSL	-		Modify the altitudes of the				
Ranch Low	Ranch	500 feet AGL to 9,000 feet MSL	500 feet AGL to 17,999 feet MSL	No change	Ranch Low and High to be combined into a single Ranch MOA				

#### Table 3.6-3: Proposed Special Use Airspace Changes (continued)

Current SUA	Proposed SUA	Current Floor/Ceiling <sup>1</sup>	Proposed Floor/Ceiling <sup>1</sup>	Proposed Boundary Changes	Other Proposed Changes
		MOA: 13,000 feet	MOA: 1,500 feet		Chaff and flare release capability. Supersonic
		MSL up to 17,999	AGL to		
	Reno	feet MSL.	17,999 feet MSL.		
Reno			ATCAA: 18,000		
Neno		ATCAA: 18,000 feet	feet MSL to	-	
		MSL to 31,000 feet	31,000 feet MSL.		30 000 feet
		MSL.	Up to 40,000 feet		50,000 Teet
			MSL on request.		
			MOA: 1,200 feet		-
		-	AGL up to 17,999	New MOA/ATCAA	
	Dubu		feet MSL	(formerly Diamond North ATCAA)	
	Ruby		ATCAA: 18,000		
		-	feet MSL to		
			28,000 feet MSL		
			MOA: 1,200 feet		New MOA under existing ATCAA
		-	AGL up to 17,999		
	7:0000		feet MSL		
	Zircon	ATCAA: 18,000 feet			
		MSL to 50,000 feet	No change		
		MSL.			
			1,200 feet AGL up	Coutboost corpor	Northern Diamond ATCAA renamed Ruby ATCAA
		-	to 17,999 feet		
	Diamond		MSL Southeast com	of current	
	Diamond	ATCAA: 18,000 feet	18,000 feet MSL	Diamond ATCAA	
		MSL to 29,000 feet	to 50,000 feet MSL		
		MSL.	or as assigned.		
			MOA: 200 feet	The borders would be	New MOA under existing ATCAA
	Duckwater	-	AGL up to 17,999		
			feet MSL.		
		ATCAA: 18,000 feet	ATCAA: 18,000		
		MSL to 25,000 feet	feet MSL to		
		MSL.	50,000 feet MSL.	horizontally to	
	Smokie		MOA: 200 feet	better align with local air traffic routes. <sup>4</sup>	New MOA under existing ATCAA
		-	AGL up to 17,999		
			feet MSL.		
		ATCAA: 18,000 feet	ATCAA: 25,000		
		MSL to 25,000 feet	feet MSL to		
		MSL.	29,000 feet MSL		

<sup>1</sup>MSL = Mean Sea Level

<sup>2</sup>Excluding that portion of the VFR corridor from 2,000 AGL up to 8,500 MSL along U.S. Route 50.

<sup>3</sup>AGL = Above Ground Level

<sup>4</sup>Current alignment of Smokie and Duckwater ATCAAs are east and west. Navy proposes (with FAA concurrence) to realign Smokie and Duckwater in a north/south alignment with Duckwater to the north and Smokie to the south. These changes would provide better alignment with local FAA routes in the area.

Notes: MOA = Military Operations Area, SUA = Special Use Airspace, ATCAA = Air Traffic Control Assigned Airspace, NAWDC = Naval Aviation Warfighting Development Center, MSL = Mean Sea Level

The Alternative 1 objective is to make the FRTC airspace fully compatible with the proposed expanded bombing ranges and hazardous training areas, while at the same time allowing Large Force Exercises and emerging advanced tactics to use the existing overall airspace more efficiently. This reconfiguration would also sustain the current FRTC measures to allow as much public and commercial air access as possible.

With Alternative 1, all of the Restricted Areas, to include the new R-4814 that would complete restricted airspace coverage of the expanded B-20 range, would remain over the same corresponding ranges. Therefore, all rules and regulations related to Restricted Areas would remain unchanged from their present status. Non-participating aircraft may not enter Restricted Areas in the FRTC unless they have prior approval from the controlling authority (Desert Control). Non-military aviators must coordinate any flight activities that require entrance into the Restricted Areas with Desert Control, who manages in real time all special use airspace within the FRTC in support of the military training scheduling to determine available flight times for commercial and civil aviation through FRTC airspace. Commercial use of FRTC SUA would continue to operate in existing practices, with Desert Control providing deconfliction where needed.

Military aircraft under Alternative 1 would continue to use existing FRTC airspace, as well as in the proposed establishment of new MOAs southeast of the existing FRTC SUA, and the minor northward expansion between the Carson and Fallon North MOAs. They would continue to comply with noise sensitive and airport exclusion area guidelines. The reconfiguration of the existing MOAs together with the creation of new MOAs would achieve the following goals:

- simplify the composition of the FRTC airspace while facilitating a more efficient use of the airspace for training
- lower the minimum altitude to support the requirement for more realistic training, while improving the safety of operations during the large force exercises

Under Alternative 1, no adverse impacts on general aviation regarding access or usability of the current training area would occur because the Navy is not proposing to add to or change any of the external boundaries or operating hours of the current MOAs that comprise the airspace elements of the FRTC SUAs (with the exception of the minor expansion between the Carson and Fallon North MOAs on the north border of the FRTC airspace). General and commercial aviation access to the proposed new southern and eastern MOAs that would be created under existing ATCAA airspace would operate under the same general aviation access and usability as practiced for the current FRTC MOAs. While the floors of the proposed new MOAs are either 200 feet AGL (Duckwater and Smoke) or 1,200 feet AGL (Ruby, Zircon, and Diamond), general aviation pilots may still fly through a MOA under Visual Flight Rules. FRTC SUA, outside of active restricted areas, follows FAA guidance on MOA usage by civil aviation. NAWDC and Desert Control ATC would make provisions to sustain aerial access to private and public use land beneath the FRTC, and for terminal VFR and IFR flight operations where available. MOAs are always joint use in that VFR aircraft are not denied access, and IFR aircraft may be routed through the airspace. As such, civil traffic would continue to be authorized in all FRTC MOAs.

The Navy would modify or establish restricted areas to comply with its and FAA requirements. The restricted areas would increase in size for the B-16, B-17, and B-20 ranges, but would still be within the current overall FRTC footprint, and the procedures for general aviation access remains unchanged. However, for Gabbs westerly general aviation traffic, rather than proceed direct to Fallon Municipal Airport, the larger B-17 associated restricted airspace would require pilots to turn within 5.5 miles after departure and either fly due north 20 miles to pick up the VFR corridor west, or fly 20 miles southwest before turning north, in order to avoid the proposed R-4805. The two small airports under the proposed Smokie MOA, Hadley and Barker Creek (NV31), have a total of three aircraft based at the fields. Daily operations are not expected to change from current use under the Proposed Action. The Proposed Action would not impact general aviation outside the FRTC airspace, which includes the Eureka airport and the privately owned Red Rock Ranch (NV22) airport just outside the eastern border of the proposed Zircon and Ruby MOA/ATCAA respectively. Eureka airport access, flight patterns, and availability would be unchanged under the Proposed Action.

The current military aviation flight tempo for the FRTC would remain unchanged from the 2015 *Military Readiness Activities at Fallon Range Training Complex, Nevada Final Environmental Impact Statement* (U.S. Department of the Navy, 2015) for the Proposed Action. Procedures for commercial and civilian access to FRTC airspace, to include the sustainment of current Nevada Department of Wildlife and U.S. Fish and Wildlife Service survey flights, and the priority always afforded to MEDEVAC and fire suppression flights, would also remain unchanged. The reconfiguration of the SUA inside the overall FRTC airspace sustains the existing air transportation accessibility factors in the region of influence as they apply to non-military flights through the FRTC MOAs. As such, the implementation of Alternative 1 would not increase the collision potential between military and non-participating civilian aircraft. With the unchanged FRTC operations tempo and procedures, there would be no impact on the use of the access to and use of the VFR corridor, which would be extended through the proposed Zircon and Diamond MOAs to the eastern boundary of the FRTC SUA, or commercial and general aviation's use of the FRTC airspace under Alternative 1.

The Navy is not considering an increase in the number and type of air activities in any of the action alternatives for this proposal. Restricted airspace would be expanded solely to accommodate weapons release ranges and profiles to ensure the safety of Navy personnel and the public. Aircraft flight paths and delivery profiles would not change from their current practices. Similarly, the non-firing flight profiles that are routine and integral components of Navy training at the FRTC would not change. The noise analysis concluded that no significant impacts on the noise environment would occur because the tempo of operations in the Proposed Action and alternatives would not increase from baseline conditions, and the reconfigured airspace actually expands the overall FRTC airspace volume. Sections 3.7 (Noise) and 3.10 (Biological Resources) discuss impacts on the FRTC SUA.

In summary, the proposed internally reconfigured airspace would maintain the existing FRTC airspace footprint in the National Airspace. As such, the FRTC would sustain the capability to operate at the required tempo and would not interfere with existing commercial air traffic patterns or airports/airstrips, would continue to support unrestricted MEDEVAC and fire suppression flights, and would have no impact on the daily logistics flights between Fallon Municipal and Dixie Valley. It would not significantly restrict civilian aviation in the area, aside from westerly traffic out of Gabbs and limiting easterly approaches to Gabbs and O'Toole due to the proximity of the R-4805 boundary. Therefore, implementation of Alternative 1 would not result in significant impacts on airspace.

#### 3.6.3.3 Alternative 2: Modernization of Fallon Range Training Complex with Managed Access

Alternative 2 would have the same withdrawals, acquisitions, airspace changes, and training tempo as Alternative 1 but would allow certain public uses within specified areas of B-16, B-17, and B-20 when the ranges would not be operational (i.e., typically weekends, holidays, and when closed to training to allow for scheduled maintenance).

Under Alternative 2, the reconfiguration of the FRTC SUA would be the same as under Alternative 1, as all differences between Alternative 1 and Alternative 2 are due to differences in public ground access to restricted ranges. The air transportation accessibility factors in the region of influence, as studied for implementation of Alternative 1 would not result in an increase in collision potential between military and non-participating civilian operations. Military aircraft would continue to comply with noise sensitive and airport exclusion area guidelines. Like Alternative 1, there would be no impact on the access to and use of the VFR corridor, which would be extended through the proposed Zircon and Diamond MOAs to the eastern boundary of the FRTC SUA, or commercial and general aviation's use of the FRTC airspace under Alternative 2.

Further, the internally reconfigured airspace under Alternative 2 would maintain the existing ATCAAs activated FRTC airspace footprint in the National Airspace, and would allow the FRTC to operate at the required tempo. It would not interfere with existing commercial air traffic patterns or airports/airstrips, and would continue to support unrestricted MEDEVAC flights. Civilian aviation in the area would not be significantly restricted from the current FRTC impacts. Therefore, implementation of Alternative 2 would not result in significant impacts on airspace.

#### 3.6.3.4 Alternative 3: B-17 Shift and Managed Access (Preferred Alternative)

Alternative 3 encompasses the same modernization and expansion actions as Alternative 1 for all ground ranges. For the B-17 withdrawal only, it would be roughly the same acreage and overall dimensions, but would be shifted to the southeast and rotated counterclockwise. Unlike Alternative 1, the Navy would not withdraw land south of U.S. Route 50 as DVTA. Rather, the Navy proposes that Congress categorizes this area as a Special Land Management Overlay. This Special Land Management Overlay will define two areas (one east and one west of the B-17 range) as Military Electromagnetic Spectrum Special Use Zones. These two areas, which are public lands under the jurisdiction of BLM, would not be withdrawn by the Navy and would not directly be used for land-based military training or managed by the Navy. For Alternative 3, as described for Alternative 1, the entire range would be closed and restricted from public use except for Navy-authorized activities, and any required regulatory or management activities.

Under Alternative 3, the reconfiguration of the B-17 range affects the newly required restricted airspace, which would require R-4805 to shift southeast and slightly rotate counter clockwise. The overall amount of restricted airspace would remain the same as R-4805 proposed in Alternative 1. The remainder of SUA for the rest of the FRTC would remain approximately the same as identified in Alternative 1. Figure 3.6-7 depicts the proposed Alternative 3 Restricted Airspace. The air transportation accessibility factors in the region of influence, as studied for implementation of Alternative 1, would not lead to an increase in collision potential between military and non-participating civilian operations. Military aircraft would continue to comply with noise sensitive and airport exclusion area guidelines. There would be no impact on the VFR corridor or commercial and general aviation's use of the FRTC airspace under Alternative 3.



Figure 3.6-7: Fallon Range Training Complex Restricted Airspace Under Alternative 3

The internally reconfigured airspace under Alternative 3 maintains the existing FRTC airspace footprint in the National Airspace, allowing the FRTC to operate at the required tempo. It would not interfere with existing commercial air traffic patterns or airports/airstrips, and would continue to support unrestricted MEDEVAC flights. Civilian aviation in the area would not be significantly restricted from the current FRTC impacts; however, for Gabbs general aviation traffic, rather than proceed direct to Fallon Municipal Airport, pilots would have to turn immediately after departure and fly due north 20 miles to pick up the VFR corridor west, or fly 20 miles southwest before turning north, in order to avoid the proposed R-4805. Therefore, aside from new westerly VFR routing options from Gabbs and limiting easterly approaches to Gabbs and O'Toole due to the proximity of the R-4805 boundary, implementation of Alternative 3 would not result in significant impacts on airspace.

#### 3.6.3.5 Proposed Management Practices, Monitoring, and Mitigation

#### 3.6.3.5.1 Proposed Management Practices

The Navy would continue current levels of operations, and manage all facets of the FRTC airspace under the guidance of official policies, procedures, and Navy instructions. Specifically, the Navy would:

- Maintain a close working relationship with the FAA in the management of the FRTC SUA, following FAA publication guidance that would fully support the final modernization configuration of the FRTC SUA.
- Continue a proactive outreach to civil and commercial aviation to ensure safe and efficient transit across the FRTC via the VFR Corridor, as well as the safe and efficient managed access and civil flight profiles within the FRTC SUA.
- Ensure that the NAS Fallon Airfield Operations Manual is maintained with the most current airspace information, restrictions, and compliance requirements.
- Avoid Q routes to the maximum extent possible.

#### 3.6.3.5.2 Proposed Monitoring

No monitoring measures are warranted for airspace based on the analysis presented in Section 3.6.3 (Environmental Consequences).

#### 3.6.3.5.3 Proposed Mitigation

NAS Fallon would update the NAS Fallon Airfield Operations Manual to reflect NAWDC operational guidance on noise sensitive areas, and confirmation of FAA airport exclusion area guidelines, for the proposed action.

#### 3.6.3.6 Summary of Effects and Conclusions

Table 3.6-4 summarizes the effects of the alternatives on the airspace environment.

Summary of Effects and National Environmental Policy Act Determinations				
No Action Alternative				
Summary	<ul> <li>The Department of the Navy would retain administrative control of the land withdrawn under Public Law 106-65 until environmental remediation and health and safety concerns were completed so as to allow return of the land to BLM for reincorporation into the public domain.</li> <li>With the reincorporation of the withdrawn and acquired lands into the public domain and the removal of all ground sites supporting training and tracking systems, the airspace of the FRTC would likely no longer be required to support Navy training.</li> <li>Following any relinquishment of Public Law 106-65 lands, the Navy would evaluate the future use of special use airspace and coordinate with the FAA on the disestablishment of special use airspace, as required.</li> <li>The Navy anticipates that any relinquished airspace would likely become available pursuant to applicable FAA policy, procedure, guidance, and orders.</li> </ul>			
Impact Conclusion	No significant impacts on airspace would occur with implementation of the No Action Alternative.			
Alternative 1				
Summary	<ul> <li>Alternative 1 would not result in an increase in collision potential between military and non-participating civilian operations.</li> <li>The tempo of military operations would remain the same as it is today, and established safe separation doctrine and MARSA would continue to apply.</li> <li>Military aircraft would continue to comply with noise sensitive and airport exclusion area guidelines.</li> <li>There would be no impact on the extended VFR corridor or commercial and general aviation's use of the FRTC airspace.</li> <li>Alternative 1 would sustain the capability to operate at the required tempo and not interfere with existing commercial air traffic patterns or airports/airstrips with the exception of westerly departures from Gabbs.</li> <li>It would continue to support unrestricted MEDEVAC and fire suppression flights, and would not significantly restrict civilian aviation.</li> </ul>			
Impact Conclusion	Alternative 1 would not result in significant impacts on airspace.			

#### Table 3.6-4: Summary of Effects for Airspace

#### Table 3.6-4: Summary of Effects for Airspace (continued)

Summary of Effects and National Environmental Policy Act Determinations			
Alternative 2			
Summary	<ul> <li>Managed access on the ground would not impact airspace utilization.</li> <li>Alternative 2 would not result in an increase in collision potential between military and non-participating civilian operations.</li> <li>The tempo of military operations would remain the same as it is today, and established safe separation doctrine and MARSA would continue to apply to the revised FRTC MOAs consistent with the current FRTC application.</li> <li>Military aircraft would continue to comply with noise sensitive and airport exclusion area guidelines.</li> <li>There would be no impact on the extended VFR corridor or commercial and general aviation's use of the FRTC airspace.</li> <li>Alternative 2 would sustain the capability to operate at the required tempo and not interfere with existing commercial air traffic patterns or airports/airstrips, would continue to support unrestricted MEDEVAC and fire suppression flights, and would not significantly restrict civilian aviation in the area.</li> </ul>		
Impact Conclusion	Alternative 2 would not result in significant impacts on airspace.		
Alternative 3			
Summary	<ul> <li>Managed access on the ground would not impact airspace utilization.</li> <li>Alternative 3 would not result in an increase in collision potential between military and non-participating civilian operations, as the tempo of military operations would remain at its current level.</li> <li>MARSA would apply to the revised FRTC MOAs consistent with the current FRTC application.</li> <li>Military aircraft would continue to comply with noise sensitive and airport exclusion area guidelines.</li> <li>There would be no impact on the extended VFR corridor or commercial and general aviation's use of the FRTC airspace.</li> <li>Alternative 3 would sustain the capability to operate at the required tempo and not interfere with existing commercial air traffic patterns or airports/airstrips with the exception of westerly departures from Gabbs.</li> <li>It would continue to support unrestricted MEDEVAC and fire suppression flights, and would not significantly restrict civilian aviation in the area.</li> </ul>		
Impact Conclusion	Alternative 3 would not result in significant impacts on airspace.		

Notes: FRTC = Fallon Range Training Complex, MARSA = Military assumes responsibility for separation of aircraft, FAA = Federal Aviation Administration, MOA = Military Operations Area, VFR = Visual Flight Rules, MEDEVAC = Medical Evacuation

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