FEDERAL AVIATION ADMINISTRATION

PARTIAL ADOPTION OF THE ENVIRONMENTAL ASSESSMENT

And

FINDING OF NO SIGNIFICANT IMPACT/RECORD OF DECISION

For

CREATION OF RESTRICTED AREAS (RA) R-5601G AND R-5601H, FORT SILL, OKLAHOMA

Introduction
This document serves as the Federal Aviation Administration's (FAA) adoption of the Fort Sill, Oklahoma, Final Environmental Assessment (FEA), Creation of Restricted Area (RA) R-5601G and R-5601H (February 2014) and Finding of No Significant Impact (FONSI). This document is prepared and issued by the Federal Aviation Administration (FAA) and serves as the FAA’s Finding of No Significant Impact and Record of Decision (FONSI/ROD) for implementation of the proposed federal action dealing with creation of restricted areas (RAs) R-5601G and R-5601H.

Background
On December 20, 2011 the FAA responded to a Headquarters, U.S. Army Aeronautical Services Agency request that the FAA participate as a cooperating agency in the EA for the Creation of RAs R-5601G and R-5601H at Fort Sill, Oklahoma. The FAA accepted cooperating agency status in accordance with the CEQ regulations at 40 C.F.R. 1501.6 and 1508.5 and the October 4, 2005 Memorandum of Understanding between the FAA and Department of Defense Concerning SUA Environmental Actions.

Airspace Proposal
After consultation with FAA’s Central Service Center, the U.S. Army submitted a proposal for the creation of R-5601G in November 2014 and a proposal for the creation of R-5601H in June 2015. Specifically, the proposals called for the creation of R-5601G and R-5601H, and adding two new subareas to restricted area R-5601. The current areas, R-5601A, B, C, and F, are not wide enough to allow for realistic training tactics using advanced laser and targeting systems. The proposal would meet those objectives that were developed and refined during recent wars in Southwest Asia.

As the lead agency, the U.S. Army published the FEA in accordance with the National Environmental Policy Act (NEPA) in February 2014. The FEA concluded with a FONSI, which was signed on May 16, 2014. As a cooperating agency, the FAA provided input to Fort Sill during the environmental review and impact analysis process. In accordance with FAA Order 1050.1F "Environmental Impacts: Policies and Procedures" Paragraph 8-2.a concerning Adoption of Other Agencies’ National Environmental Policy Act Documents, the FAA has independently evaluated the information contained in the FEA and takes full responsibility for the scope and content that address FAA actions. The FAA’s evaluation included all relevant impact categories under FAA Order 1050.1F.1

1 The FEA refers to the impact categories in FAA Order 1050.1E, which was in effect when the Army prepared the FEA. The impact categories were modified by FAA Order 1050.1F, which cancelled FAA Order 1050.1E effective July 16, 2015.
On October 19, 2015, the FAA published in the FEDERAL REGISTER a notice of proposed rulemaking (NPRM) (80 FR 63153) to establish two restricted areas and amend using agency information for six other restricted areas designated to support hazardous training activities conducted within the Fort Sill, OK, special use airspace (SUA) complex.

**Proposed FAA Action**

The proposed airspace action consists of creating Special Use Airspace (SUA) units R-5601G and R-5601H as illustrated in Figure 2.1-1 of the FEA and described below. The R-5601G RA would consist of the existing restricted area complex to the north, underlying the Washita Military Operations Area (MOA) from 500 feet above ground level (AGL) to (but not including) 8,000 feet mean sea level (MSL). Time of designation would be from sunrise to 2200 local time, Monday-Friday; other times by Notice to Airmen (NOTAM).

The R-5601H RA would fill in a restricted area gap overlying the Fort Sill base proper from the surface to Flight Level 400 (FL 400) or 40,000 ft. (MSL). This gap is surrounded on three sides by existing restricted areas also rising to FL 400, and contains a non-joint use military airfield. Time of designation would be by NOTAM.

Both of these proposals are designed to correct a current training shortfall by segregating hazardous non-eye safe laser activity employed at ranges matching modern tactics and weapons capabilities. FAA’s review of the Airspace Proposal indicated that there would be no munitions employed from within either R-5601G or R-5601H. Both areas would contain aircraft operations exclusively.

The environmental impacts of the Proposed Action are addressed under Alternative A within the Army’s FEA, which is adopted by this document.

**R-5601G Fort Sill, OK**

**Boundaries:** Beginning at lat. 34°46'07"N., long. 98°25'50"W.; to lat. 34°45'03"N., long. 98°29'46"W.; thence counterclockwise via the 46 NM arc of SPS VORTAC to lat. 34°43'46"N., long. 98°49'55"W.; to lat. 34°47'00"N., long. 98°51'00"W.; to lat. 34°50'30"N., long. 98°46'02"W.; to lat. 34°57'51"N., long. 98°25'47"W.; to the point of beginning.

**Designated altitudes.** 500 feet AGL to (but not including) 8,000 feet MSL.

**Time of designation.** Sunrise to 2200 local time, Monday-Friday; other times by NOTAM

**R-5601H Fort Sill, OK**

**Boundaries.** Beginning at lat. 34°38'15"N., long. 98°20'56"W.; to lat. 34°38'30"N., long. 98°21'41"W.;
to lat. 34°38'50"N., long. 98°22'06"W.;
to lat. 34°39'53"N., long. 98°22'16"W.;
to lat. 34°40'47"N., long. 98°23'09"W.;
thence counterclockwise along an arc, 3-mile
radius centered at lat. 34°38'18"N., long. 98°24'07"W.;
to lat. 34°40'12"N., long. 98°26'18"W.;
to lat. 34°38'15"N., long. 98°26'19"W.;
to the point of beginning.

**Designated altitudes.** Surface to FL 400.

**Time of designation.** By NOTAM.

Subsequent to publication of the NPRM, the FAA identified a number of geographical lat/long.
coordinates updated to the R-5601A-E, G, and H boundaries information to more accurately reflect the
existing boundaries using digital charting capabilities. Additionally, the arc radius distance listed in the
R-5601B and R-5601H descriptions was determined to be described using statute miles and is being
updated to reflect the corresponding nautical mile distance. Finally, the R-5601H controlling agency
title proposed in the NPRM did not match the controlling agency title for the other R-5601 complex
restricted areas and is being updated to match. These changes are editorial in nature or represent very
minor changes to airspace boundaries and do not alter the conclusions of the environmental analysis
conducted in support of the action.

The FAA’s Proposed Action amends 14 C.F.R. part 73 to establish two new restricted areas (R-5601G
and R-5601H) at Fort Sill, OK, and updates the using agency information listed for the existing
restricted areas (R-5601A-F) as noted in the NPRM. Subsequent to the Final Rule, the FAA is also
incorporating the restricted area updates listed below:

**R-5601A:** The geographical coordinates “lat. 34°40'47"N., long. 98°23'09"W.” in the boundaries
description are changed to “lat. 34°40'47"N., long. 98°23'07"W.” and the geographical coordinates “lat.
34°43'30"N., long. 98°24'01"W.” are changed to “lat. 34°43'30"N., long. 98°23'59"W.” to coincide with
I-44.

**R-5601B:** The geographical coordinates “lat. 34°40'47"N., long. 98°23'09"W.” in the boundaries
description are changed to “lat. 34°40'47"N., long. 98°23'07"W.” and the geographical coordinates “lat.
34°43'30"N., long. 98°24'01"W.” are changed to “lat. 34°43'30"N., long. 98°23'59"W.” to coincide with
I-44. Further, the geographical coordinates “lat. 34°40'54"N., long. 98°37'54"W.” are changed to “lat.
34°40'54"N., long. 98°37'56"W.” to coincide with Oklahoma State Highway No. 115. Lastly, the arc
radius “3-mile” is changed to “2.6 NM” to retain the existing boundary defined in terms of NM.

**R-5601C:** The geographical coordinates “lat. 34°40'54"N., long. 98°37'54"W.” in the boundaries
description are changed to “lat. 34°40'54"N., long. 98°37'56"W.” to coincide with Oklahoma State
Highway No. 115.
**R-5601D:** The geographical coordinates “lat. 34°40'54"N., long. 98°37'54"W.” in the boundaries description are changed to “lat. 34°40'54"N., long. 98°37'56"W.” to coincide with Oklahoma State Highway No. 115.

**R-5601E:** The geographical coordinates “lat. 34°38'15"N., long. 98°37'58"W.” in the boundaries description are changed to “lat. 34°38'15"N., long. 98°37'57"W.” to match the corresponding point in R-5601B and R-5601C.

**R-5601G:** Establish R-5601G to abut the northern boundary of R-5601F, to the north, underlying the Washita MOA. The new restricted area extends upward from 500 feet above ground level (AGL) to, but not including, 8,000 feet MSL. It extends laterally across approximately three quarters of the restricted area complex, west to east, and between 5 NM to 11 NM, south to north, along the northern boundary of the R-5601 complex. Additionally, the geographical coordinates “lat. 34°46'07"N., long. 98°25'50"W.” in the boundaries description are changed to “lat. 34°46'03"N., long. 98°25'50"W.” to ensure a shared boundary with R-5601F. Lastly, the controlling agency “FAA, Fort Worth Center” is changed to “FAA, Fort Worth ARTCC”.

**R-5601H:** Establish R-5601H to fill a small airspace area over Fort Sill Army Post, OK, surrounded by two continuously active restricted areas (R-5601A and R-5601B). The new restricted area extends upward from the surface to FL400. Additionally, the geographical coordinates “lat. 34°40'47"N., long. 98°23'09"W.” in the boundaries description are changed to “lat. 34°40'47"N., long. 98°23'07"W.” to match the corresponding point in R-5601A; the arc radius “3-mile” is changed to “2.6 NM” to retain the existing boundary defined in terms of NM; and the geographical coordinates “lat. 34°40'12"N., long. 98°26'18"W.” are changed to “lat. 34°40'11"N., long. 98°26'18"W.” to coincide with the 2.6 NM arc radius.

This Proposed Action also changes the using agency information “U.S. Army, Commanding General, Fort Sill, OK,” listed for R-5601A-E to “U.S. Army, Commanding General, U.S. Army Fires Center of Excellence (USAFCOE), Fort Sill, OK” and the using agency “Commanding General, United States Army Field Artillery Center (USAFACFS), Fort Sill, OK,” listed for R-5601F is changed to “U.S. Army, Commanding General, U.S. Army Fires Center of Excellence (USAFCOE), Fort Sill, OK.” These changes reflect the current organizational responsibilities and match the using agency information in R-5601G and R-5601H.

The boundaries, designated altitudes, times of designation, and controlling agency information for restricted areas R-5601A-F is not changed by this Proposed Action.

**Purpose and Need**

The purpose of this proposal is to provide participating fighter or bomber aircraft pilots with laser firing and maneuvering airspace to conduct laser training at realistic distances, to arm weapons, and to conduct hazardous flight activities while training at Fort Sill’s existing R-5601 complex as described above. The Proposed Action does not include bringing additional aircraft or different types of aircraft to airspace in the vicinity of Fort Sill, although the new RAs would extend the training area for military aircraft, including the use of Unmanned Aircraft Systems (UASs) outlined in the airspace proposal. The sorties will consist of aircraft that already use the airspace in the region of the proposed RAs (F-16, AT-38, and F-18). No additional aircraft sorties or flight operations would occur.
Flight operations, and weapons and training events, currently utilize a variety of altitudes in the R-5601 complex. The flight operations and altitudes that are ongoing, and would continue under the Proposed Action, include: basic surface attack, surface attack tactics, suppression/destruction of enemy air defense, close air support, basic interdiction, and non-eye-safe combat laser operations. All weapons and chaff and flare events would continue to be conducted in the areas where these events are currently being conducted. Although none of the land under the airspace proposed as R-5601G and R-5601H would be exposed to weapons events, the longer look weapons systems would be armed in the areas proposed as R-5601G and R-5601H. Ongoing weapons events, including high-, medium-, and low-altitude inert and live bombing runs, would continue. The bombing runs that are currently being conducted in the Quanah/Falcon Range include level, climbing, and diving deliveries, which use training and inert bombs; 20-, 25-, and 30-millimeter strafe; and unguided munitions from MK-82 up to MK-84. A typical training run includes the aircraft climbing to the appropriate training altitude, making an aggressive turn at military power to avoid non-RA and then proceeding to the target and dropping the munitions. After dropping on target, the aircraft makes another aggressive turn and returns to R-5601B or R-5601C airspace to continue additional training runs.

All weapons deliveries would continue to occur in either R-5601B or R-5601C. No supersonic flight would be conducted, and the proposed R-5601G and R-5601H would only be used for aircraft maneuvering, longer range targeting, and weapons arming. Training chaff and flares are currently used in the existing RAs and military operations area (MOA) in accordance with Air Force Instruction (AFI) 11-214, and would not change under the Proposed Action.

**Alternatives**
The EA analyzed four alternative actions.

1. The No Action Alternative would not create any additional RAs at Fort Sill.
2. Alternative A: Creation of R-5601G and R-5601H.
3. Alternative B: Creation of R-5601G, and
4. Alternative C: Creation of R-5601H.

Based on the results of the Army’s EA, Fort Sill selected Alternative A as the preferred alternative.

This document adopts those portions of the Army’s FEA that support the creation of R-5601G and R-5601H as described in the Proposed FAA Action above and analyzed as Alternative A in the Army’s FEA.

**Environmental Impact Categories:** The following section contains the results of the FAA’s independent evaluation regarding the potential environmental impacts associated with the Proposed Action:

**Noise and Noise-Compatible Land Use:** Under FAA Order 1050.1F, an action would cause a significant noise effect if it “would increase noise by DNL 1.5 dB or more for a noise sensitive area that is exposed to noise at or above the DNL 65 dB noise exposure level, or that will be exposed at or above the DNL 65 dB level due to a 1.5 dB or greater increase, when compared to the no action alternative for the same timeframe.” The Order also requires that special consideration be given to the evaluation of the significance of noise impacts on noise sensitive areas within certain specified types of properties,
Proposed R-5601H overlies Fort Sill. Aviation activity containing the airspace proposed for R-5601G would not change. According to Section 3.7.2.2 of the FEA:

Under the Proposed Action, there would be no change in the number of aircraft or the types of aircraft using the R-5601 complex. Operational patterns would remain the same and operations after 10:00 p.m. and before 7:00 a.m. would remain infrequent. Noise levels in existing R-5601 subunits would not change relative to the No Action Alternative (Table 3.7-2). The volume of airspace that would become R-5601G is currently used by military aircraft and the frequency of operations in this area (about 60 per week) would not be expected to increase with establishment of RA. No aspect of current operations would change and establishment of R-5601G would not result in any changes to DNLmr.

The FEA also states that under the Proposed Action the Army would continue to avoid overflights below 5,500 MSL over the Wichita Mountains National Wildlife Refuge. Based on the above information, the FAA concludes that the Proposed FAA Action would not create a significant noise impact.

Air Quality: Under FAA Order 1050.1F, an action would significantly affect air quality if it would “cause pollutant concentrations to exceed one or more of the National Ambient Air Quality Standards (NAAQS), as established by the Environmental Protection Agency under the Clean Air Act, for any of the time periods analyzed, or to increase the frequency or severity of any such existing violations.”

As stated in Section 3.2.2.2 of the FEA: “Emissions within [the Restricted Airspace under the Proposed Action] would be comparable to the baseline emissions described previously, because the Proposed Action does not include additional construction, and aircraft operations are not anticipated to increase.” Based on this information, the Proposed FAA Action would not significantly affect air quality.

As stated in the Army’s FEA, the area around Fort Sill is designated as an attainment area. Therefore, EPA’s General Conformity Regulations do not apply.

Climate: Although there are no federal standards for aviation-related GHG emissions, it is well-established that GHG emissions can affect climate. The Council on Environmental Quality (CEQ) has indicated that climate should be considered in NEPA analyses. Given that emissions under the Proposed Action would be comparable to baseline emissions (see “Air Quality” above), the FAA concludes that the Proposed Action would not significantly affect climate.

Biological Resources (including Fish, Wildlife, and Plants): Under FAA Order 1050.1F, an action would have a significant impact in this category if it is determined that the action would be likely to jeopardize the continued existence of a federally listed threatened or endangered species, or would result in the destruction or adverse modification of federally designated critical habitat. The FAA has not established a significance threshold for non-listed species, but Exhibit 4-1 in Order 1050.1F lists several factors to consider.

---

The Proposed FAA Action does not involve construction, ground disturbing activities, additional personnel or equipment, or change in military operations. Changes in military airspace operations include laser targeting in areas currently not exposed to lasers. Potential impacts to wildlife resources from laser operations at Fort Sill are anticipated to be insignificant. The creation of RA R-5601G and R-5601H at Fort Sill is not anticipated to increase the frequency of aerial training exercises or traffic that could potentially affect migratory bird species. Consequently, there would be no effect on federally-protected species or federally-designated critical habitat such as the black-capped vireo. Therefore, implementation of the Proposed Action would not have significant impacts on biological resources in the affected areas.

Department of Transportation Act, Section 4(f): The designation of airspace for military flight operations is exempt from Section 4(f) of the Department of Transportation Act, codified at 49 U.S.C. §303 and the National Defense Authorization Act of 1997 (PL 105-85, Nov. 18, 1997).

Historic Architectural, Archaeological, and Cultural Resources: The FAA has reviewed the documentation prepared by the U.S. Army within its Environmental Assessment including consultation with the Tribal Historic Preservation Office of the Cheyenne and Arapaho Tribes. The letter from the Tribal Historical Preservation Office indicated that there were no objections to the Proposed Action under Section 106 of the National Historical Preservation Act (NHPA). The Army also sent NHPA Section 106 consultation letters to the Kiowa, Comanche, Apache, and Fort Sill Apache tribes for consultation. The FAA during its analysis contacted Fort Sill and requested a consultation letter be submitted to the State Historical Preservation Office (SHPO) to ensure compliance with Section 106 requirements for RA’s R-5601-G and R-5601-H. A letter was subsequently sent to the SHPO by Fort Sill on July 13, 2016. A response was received via letter on August 23, 2016 and the SHPO found no historic properties affected by the Proposed Action. The Proposed Action will not increase aircraft operations or change altitudes, nor result in construction or land alteration with the change in airspace.

Light Emissions: The FAA has not established a significance threshold for light emissions. Military training operations in R-5601G would include laser targeting in airspace currently not exposed to lasers, but the lasers would not reach ground areas outside the current target area. Therefore, the FAA concludes that the Proposed Action would not present any significant effects from light emissions.

Socioeconomics Impacts, Environmental Justice, and Children’s Environmental Health and Safety Risks: This project is not anticipated to have any impacts to population groups living within the vicinity of Fort Sill. As there would be no adverse impacts to populations, there would be no disproportionate impacts to minority groups or other sensitive or disadvantaged populations.

Cumulative Impacts: The Proposed Action will not result in a significant cumulative impact as a result of the establishment of the additional restricted airspace. The area underlying the proposed additional Restricted Airspace defines the geographic extent for the cumulative effects analysis. Analysis of the Proposed Action, when considered cumulatively with past, present, and reasonably foreseeable future actions, would not result in adverse and/or significant impacts to noise and noise-compatible land use; biological resources (including fish, wildlife, and plants); historical, architectural, archeological and
Based on independent review of the airspace proposal, the FAA has determined there would be no significant cumulative impacts as a result of the establishment of RAs R-5601G and R-5601H.

Impact Categories Not Affected: The following NEPA impact categories would not affect or be affected by the Proposed Action because the resource either does not exist within the study area or the types of activities associated with the Proposed Action are not involved in the Proposed Action: coastal resources, construction impacts, farmlands, floodplains, hazardous materials, hazardous and solid waste, natural resources and energy supply, water quality, wetlands, and wild and scenic rivers.

Public Involvement
The FAA reviewed the Army’s Notices of Availability (NOA) for public review of its draft EA in Appendix B of the draft EA and found that the notices met the requirements outlined in Order 1050.1F. The draft EA was published in the local newspaper on November 10, 2013. The draft EA was made available for public review during the 30 day comment period from November 11, 2003, to December 11, 2013. The draft EA was distributed to the public, organizations, and regulatory agencies via letter and copies sent to local libraries. The final EA and draft FONSI were also made available for public review and comment from March 16 through April 17, 2014. The FAA has copies of all correspondence sent to regulatory agencies on file regarding the Proposed Action.

Adoption
Based on the FAA’s independent evaluation of the Army’s FEA, the FAA has determined that the Army’s FEA adequately assesses and discloses the environmental impacts of the re-designation and expansion of R-5601 as described in the NPRM, and that adoption of the Army’s FEA by the FAA is authorized under 40 C.F.R. §1506.3 and FAA Order 1050.1F, paragraph 8-2. Accordingly, the FAA adopts the Army’s FEA and takes full responsibility for the scope and content that addresses FAA actions.

Decision and Order
After careful and thorough consideration of the Army’s FEA and facts contained herein, the undersigned finds that the Proposed Action is consistent with existing national environmental policies and objectives as set forth in Section 101 of the National Environmental Policy Act, as amended, and other applicable environmental requirements, and will not significantly affect the quality of the human environment or otherwise include any condition requiring consultation pursuant to Section 102(2) (C) of NEPA. Therefore, an environmental impact statement will not be prepared.

The undersigned has carefully considered the FAA’s statutory mandate under 49 U.S.C. §40103 to ensure the safe and efficient use of the national airspace system as well as the other aeronautical goals and objectives discussed in the Final EA and the NPRM. The undersigned concurs that the Proposed Action provides the best airspace proposal for meeting the needs stipulated in the Final EA, and that all practicable means to avoid or minimize environmental harm from that alternative have been adopted.
Accordingly, under the authority delegated to the undersigned by the Administrator of the Federal Aviation Administration, the undersigned approves and authorizes all necessary agency action to implement the Proposed Action.

This decision signifies that applicable Federal environmental requirements relating to the Proposed Action have been met. The decision enables the FAA to complete its rulemaking actions related to the above-described proposed action.

Leslie Swann, Acting Manager
Airspace Policy and Regulations Group
Mission Support Service
Air Traffic Organization
Federal Aviation Administration
Right of Appeal
This document constitutes a final order of the FAA Administrator and is subject to exclusive judicial review under 49 U.S.C. §46110 by the U.S. Circuit Court of Appeals for the District of Columbia or the U.S. Circuit Court of Appeals for the circuit in which the person contesting the decision resides or has its principal place of business. Any party having substantial interest in this order may apply for review of the decision by filing a petition for review in the appropriate U.S. Court of Appeals no later than 60 days after the order is issued in accordance with the provisions of 49 U.S.C. §46110. Any party seeking to stay implementation of the ROD must file an application with the FAA prior to seeking judicial relief as provided in Rule 18(a) of the Federal Rules of Appellate Procedure.