

FEDERAL AVIATION ADMINISTRATION

ADOPTION OF THE ENVIRONMENTAL ASSESSMENT

And

FINDING OF NO SIGNIFICANT IMPACT/RECORD OF DECISION (FONSI/ROD)

For

Redesignation and Expansion of Restricted Airspace R-4403, Stennis Space Center

Hancock and Pearl River County, MS and St. Tammany Parrish, LA

Introduction

This document serves as a record of: (1) the Federal Aviation Administration's (FAA) adoption of the United States Navy's and National Aeronautics and Space Administration's (NASA) *Final Environmental Assessment for the Redesignation and Expansion of Restricted Airspace R-4403 to Support Military Air-to-Ground Munitions Training and National Aeronautics and Space Administration Rocket Engine Testing at Stennis Space Center, Hancock County and Pearl River County, Mississippi and St. Tammany Parrish, Louisiana*, dated October 2015 (hereinafter "the FEA"); (2) the FAA's finding that the proposed redesignation and expansion of Restricted Airspace R-4403, and associated FAA actions, would not significantly affect the human environment; and (3) the FAA's decision regarding its proposed action.

The Navy and NASA prepared the FEA and a Finding of No Significant Impact (FONSI), which was signed in November 2015, in compliance with obligations under the National Environmental Policy Act (NEPA) and Navy- and NASA-specific environmental regulations. The FAA acted as a cooperating agency and provided input during the Navy's and NASA's environmental process. In accordance with FAA Order 1050.1F, *Policies and Procedures for Considering Environmental Impacts*, the FAA has independently evaluated the information contained in the FEA, and takes full responsibility for the scope and content that addresses FAA actions. The FAA independently evaluated the FEA by ensuring that all relevant impact categories were considered, and those found to have impacts were evaluated in accordance with FAA Order 1050.1F and applicable regulations of the Council on Environmental Quality (CEQ) implementing NEPA. This FONSI/ROD, prepared by the FAA, is in accordance with the CEQ regulations, Department of Transportation (DOT) Order 5601.1C, *Procedures for Considering Environmental Impacts*, and FAA Order 1050.1F. It confirms that the environmental impacts of the relevant FAA actions would not have significant impacts and therefore do not warrant the preparation of an environmental impact statement.

The FAA's proposed action is limited to airspace and air traffic-related activity and does not include any of the ground-based activity of the Navy and NASA proposed action, such as the

acquisition and development of real estate into firing ranges or landing zones. As such the FAA's independent evaluation and adoption of the FEA only supports the FAA proposed action as described below.

Background

Restricted area R-4403, Gainesville, MS, was originally designated on January 6, 1966 (30 FR 10287) for NASA's static testing of large space vehicle rocket stages. R-4403 is a rectangular area, measuring approximately 2 nautical miles (NM) by 2.5 NM with a designated altitude from the surface up to 5,000 feet above mean sea level (MSL). It is located over the NASA-owned Stennis Space Center (SSC) complex typically referred to as the "Fee Area" and portions of the surrounding properties which are not owned by the U.S. government, but in which the U.S. Government has established permanent easements to ensure their noise compatible land use (noise buffer area).

NASA determined that the existing restricted area is too small to fully contain hazards to aviation associated with rocket engine testing and untethered space vehicle propulsion system testing. In addition, the Navy requested restricted airspace to be used for conducting full mission profile training for Special Operations Forces (SOF). This training allows air and ground units to practice integrating their operations to eliminate potential conflicts and coordination problems that could otherwise arise during complex missions when deployed.

The FAA published a Notice of Proposed Rulemaking based on the NASA/Navy airspace proposal to expand R-4403 in the Federal Register, July 10, 2014. Based on comments received in response, further Navy analysis of their planned activity, and FAA feedback regarding the airspace, the DOD revised their airspace proposal.

The FAA published a Supplemental Notice of Proposed Rulemaking (SNPRM) based on the revised airspace proposal in the Federal Register on August 17, 2015. The FEA adopted by this FONSI/ROD addresses the revised proposal.

Proposed Action

The proposed federal action analyzed in the FEA has three elements: (1) the FAA's replacement of the existing Restricted Area R-4403 at SSC with an expanded area to be re-designated as R-4403A, B, C, E, and F; (2) establishment by the Navy of two munitions target areas and a sensor training area for Navy air-to-ground training underlying R-4403C, E, and F; and (3) use of the new R-4403A, B, C, E, and F airspace by the Navy and NASA to accommodate ongoing and evolving testing and training requirements.

The FAA's Proposed Action Described in the SNPRM

The FAA's proposed action, as described in the SNPRM, includes:

R-4403 Gainesville, MS [Removed]

R-4403A Stennis Space Center, MS [New]

Boundaries. That airspace within a 2.5-NM radius centered at lat. 30°21'51"N., long. 89°35'39"W.

Designated altitudes. Surface to 12,000 feet MSL.

Time of designation. Intermittent, 1000 to 0300 local time, as activated by Notice to Airmen (NOTAM) at least 24 hours in advance.

Controlling agency. FAA, Houston ARTCC.

Using agency. NASA, Director, Stennis Space Center, Bay St. Louis, MS.

R-4403B Stennis Space Center, MS [New]

Boundaries. Beginning at lat. 30°29'37"N., long. 89°35'16"W.;
to lat. 30°29'37"N., long. 89°32'33"W.;
thence clockwise along a 0.85-NM arc centered
at lat. 30°28'46"N., long. 89°32'33"W.;
to lat. 30°28'46"N., long. 89°31'34"W.;
to lat. 30°26'25"N., long. 89°31'34"W.;
to lat. 30°24'02"N., long. 89°31'34"W.;
thence counterclockwise along a 4.2-NM arc centered
at lat. 30°22'04"N., long. 89°27'17"W.;
to lat. 30°20'28"N., long. 89°31'46"W.;
to lat. 30°19'19"N., long. 89°35'32"W.;
to lat. 30°18'23"N., long. 89°40'17"W.;
to lat. 30°21'08"N., long. 89°42'25"W.;
to lat. 30°22'22"N., long. 89°42'58"W.;
to lat. 30°23'44"N., long. 89°42'43"W.;
to lat. 30°26'40"N., long. 89°40'51"W.;
thence counterclockwise along a 3-NM arc centered
at lat. 30°29'15"N., long. 89°39'04"W.;
to lat. 30°27'08"N., long. 89°36'37"W.;
to lat. 30°27'58"N., long. 89°35'27"W.;
to lat. 30°28'47"N., long. 89°35'27"W.;
to the point of beginning.

Designated altitudes. Surface to 6,000 feet MSL.

Time of designation. Intermittent, 1000 to 0300 local time, as activated by NOTAM at least 24 hours in advance.

Controlling agency. FAA, Houston ARTCC.

Using agency. NASA, Director, Stennis Space Center, Bay St. Louis, MS.

R-4403C Stennis Space Center, MS [New]

Boundaries. Beginning at lat. 30°27'58"N., long. 89°35'27"W. ;
to lat. 30°22'35"N., long. 89°35'27"W. ;
to lat. 30°22'35"N., long. 89°32'06"W. ;
thence counterclockwise along a 4.2-NM arc centered
at lat. 30°22'04"N., long. 89°27'17"W. ;
to lat. 30°20'28"N., long. 89°31'46"W. ;
to lat. 30°19'19"N., long. 89°35'32"W. ;
to lat. 30°18'23"N., long. 89°40'17"W. ;
to lat. 30°21'08"N., long. 89°42'25"W. ;
to lat. 30°22'22"N., long. 89°42'58"W. ;
to lat. 30°23'44"N., long. 89°42'43"W. ;
to lat. 30°26'40"N., long. 89°40'51"W. ;
thence counterclockwise along a 3-NM arc centered
at lat. 30°29'15"N., long. 89°39'04"W. ;
to lat. 30°27'08"N., long. 89°36'37"W. ;
to the point of beginning.

Designated altitudes. Surface to 10,000 feet MSL.

Time of designation. Intermittent, 2000 to 0500 local time, as activated by NOTAM at least 24 hours in advance; and 1800 to 2000 local time, November 1 to March 1, as activated by NOTAM at least 24 hours in advance, not to exceed 20 days per year.

Controlling agency. FAA, Houston ARTCC.

Using agency. U.S. Navy, Commander, Naval Special Warfare Command, Naval Special Warfare N31 Branch, Stennis Space Center, Bay St. Louis, MS.

R-4403E Stennis Space Center, MS [New]

Boundaries. Beginning at lat. 30°29'37"N., long. 89°35'16"W. ;
to lat. 30°29'37"N., long. 89°32'33"W. ;
thence clockwise along a 0.85M arc centered
at lat. 30°28'46"N., long. 89°32'33"W. ;
to lat. 30°28'46"N., long. 89°31'34"W. ;
to lat. 30°26'25"N., long. 89°31'34"W. ;
to lat. 30°24'02"N., long. 89°31'34"W. ;
thence counterclockwise along a 4.2-NM arc centered
at lat. 30°22'04"N., long. 89°27'17"W. ;
to lat. 30°22'35"N., long. 89°32'06"W. ;

to lat. 30°22'35"N., long. 89°35'27"W.;;
to lat. 30°27'58"N., long. 89°35'27"W.;;
to lat. 30°28'47"N., long. 89°35'27"W.;;
to the point of beginning.

Designated altitudes. Surface to 10,000 feet MSL.

Time of designation. Intermittent, 2000 to 0500 local time, as activated by NOTAM at least 24 hours in advance; and 1800 to 2000 local time, November 1 to March 1, as activated by NOTAM at least 24 hours in advance, not to exceed 20 days per year.

Controlling agency. FAA, Houston ARTCC.

Using agency. U.S. Navy, Commander, Naval Special Warfare Command, Naval Special Warfare N31 Branch, Stennis Space Center, Bay St. Louis, MS.

R-4403F Stennis Space Center, MS [New]

Boundaries. Beginning at lat. 30°29'37"N., long. 89°35'16"W.;;
thence clockwise along a 2.5-NM arc centered
at lat. 30°28'46"N., long. 89°32'33"W.;;
to lat. 30°26'25"N., long. 89°31'34"W.;;
to lat. 30°28'46"N., long. 89°31'34"W.;;
thence counterclockwise along a 0.85-NM arc centered
at lat. 30°28'46"N., long. 89°32'33"W.;;
to lat. 30°29'37"N., long. 89°32'33"W.;;
to the point of beginning.

Designated altitudes. 4,000 feet MSL to 10,000 feet MSL.

Time of designation. Intermittent, 2000 to 0500 local time, as activated by NOTAM at least 24 hours in advance; and 1800 to 2000 local time, November 1 to March 1, as activated by NOTAM at least 24 hours in advance, not to exceed 20 days per year.

Controlling agency. FAA, Houston ARTCC.

Using agency. U.S. Navy, Commander, Naval Special Warfare Command, Naval Special Warfare N31 Branch, Stennis Space Center, Bay St. Louis, MS.

Changes in the Proposed FAA Action Since the SNPRM

Commenters on the NPRM and SNPRM expressed concerns about the potential impact of the proposed re-designated and expanded restricted areas on aircraft transiting the area and on published instrument approach procedures serving Picayune Municipal (MJD) and Stennis International (HSA) airports. The FAA has developed a number of mitigation measures to

address these concerns, including changes to instrument approach procedures at MJD and HSA to avoid conflicts with the expanded Restricted Areas, and the establishment of two new visual flight rules (VFR) navigation waypoints to assist pilots in avoiding the expanded Restricted Areas. These changes to the FAA's proposed action are described below.¹

Revisions to instrument approach procedures serving Picayune Municipal Airport.

- RNAV (GPS) RWY 18 approach will be revised so the missed approaches will steer aircraft west of the runway instead of east and thereby avoid the expanded restricted area.
- RNAV (GPS) RWY 36 will be made inactive while the restricted area is active.
- VOR-A approach heading will change from 132° to 129°.

Revisions to instrument approach procedures serving Stennis International Airport.

- RNAV (GPS) RWY 18 will be revised so the approach starts 0.9 NM further north of the airport, thereby decreasing the altitude of the approach.
- ILS or LOC RWY 18 will be revised with a new instrument approach fix further from the airport. In addition missed approaches will be directed to the more distant fix. There is no change that will result in decrease in flight altitude.

Additional VFR Waypoints

Commenters on the NPRM and SNPRM expressed concern about the adequacy of the existing VPRAM VFR waypoint as a reference to assist pilots in avoiding the southern boundary of the expanded Restricted Areas. In response, the FAA is establishing two new VFR waypoints south of highway I-10 for pilots transitioning east and west in that area.²

Purpose and Need

The purpose of the new R-4403A, B, C, E, and F airspace at SSC is to protect the public, including the general aviation community, while supporting NASA engine testing and DOD tenant missions at SSC. The existing R-4403 airspace is not sufficiently sized and sectorized to accommodate current and emergent NASA and DOD mission requirements at SSC. The re-designation and expansion of R-4403A, B, C, E, and F is needed to segregate non-participating aircraft from potentially hazardous activities associated with current and emerging

¹ Based on the nature of these changes in the FAA's proposed action and their potential for environmental impact, the FAA has determined that they do not require supplementation of the FEA. See Attachment A.

² The new waypoints would assist VFR pilots in avoiding the Restricted Areas by providing navigational reference points and would not specify a flight path or direct the flow of air traffic. As such, they are considered advisory actions, which are not subject to NEPA. Therefore, they require no further environmental analysis.

NASA and DOD airspace and ground uses, including the siting of associated locations for munitions impact and sensor training areas for DOD air-to-ground training.

Alternatives

The FEA analyzed three alternative actions. Alternative 1 consists of the re-designation and expansion of R-4403 as described above in Proposed Action. The following sites would be established: a northern target area (IMP-A) and a southern target area (FW1) to accommodate the delivery of munitions, and a sensor training area (FW2) for simulated (no drop) air-to-ground training. The two target areas would accommodate both high explosive (HE) and target practice (TP) air-to-ground cannon rounds. (TP rounds are lacking explosive components, but may contain tracer material in the base for visual trajectory tracking.) Specifically, the following gunnery training and associated munitions would be authorized for delivery to both the northern target area (IMP-A) and the southern target area (FW1): 25 millimeter (mm) TP, 25mm HE, 30mm HE, 40mm HE, and 105mm HE.

Alternative 2 would also include the re-designation and expansion of R-4403 as described above in “Proposed Action.” However, air-to-ground delivery of HE munitions would be limited to a single munitions target area: the southern target area (FW1). The IMP-A site would be established for delivery of TP-only munitions. The following munitions would be authorized for delivery to FW1: 25mm TP, 25mm HE, 30mm HE, 40mm HE, and 105mm HE rounds and only 25mm TP rounds would be authorized for delivery at IMP-A. The annual estimated munitions expenditures at each of the munitions target areas under Alternative 2 are detailed in Table 2.4-2 of the FEA.

The No Action Alternative would consist of maintaining the existing R-4403 configuration, not establishing new air-to-ground munitions target areas, and restricting NASA and DOD missions to those that are established or those that could operate within the confines of existing R-4403. Although the implementation of the No Action Alternative would not meet the purpose and need of the proposed action, the No Action Alternative was carried forward in the analysis to provide a benchmark to evaluate the potential environmental effects of the proposed action alternatives. NASA would continue to use Temporary Flight Restrictions (TFR) designation to protect incoming aircraft from episodic rocket engine test hazards. At times, the TFRs could be in place at a high level of frequency that would be contrary to the intended “temporary” purpose of TFRs. The No Action Alternative would require the additional actions of increased coordination with the FAA to ensure appropriate issuance of TFR NOTAMs and diligent monitoring of the airspace to support the increased tempo of testing operations.

The autonomous untethered flight vehicle testing of the Morpheus Lander-type system would be limited, if not prohibited, as there is not sufficient open space within R-4403 to accommodate untethered tests that would not have a high risk of affecting existing static test infrastructure. Current DOD ground and air-based riverine/jungle warfare training and testing would continue without additional restricted airspace. The current configuration and tempo of systems/platforms and training operations would continue. DOD interoperability training within the Naval Special Warfare (NSW) Riverine Complex, Stennis would continue with current limitations. DOD would

not be able to utilize the varied training environment at NSW Riverine Complex, Stennis to meet training requirements.

Airspace Issues

The FAA conducted analysis and reviewed stakeholder comments and concerns of the initial proposal the original proposal as described in Notice of Proposed Rulemaking published in the Federal Register, July 10, 2014. The results of the analysis indicated potential issues with general aviation at Picayune Municipal Airport and Stennis International Airport. Potential conflicts with the expanded restricted area included instrument flight procedures into both airports and navigation around the expanded restricted area. In addition other users expressed concerns regarding notification and timing of SUA activation, emergency helicopter access to areas under the expanded restricted area, and various ground safety concerns. Based on comments received in response, further Navy analysis of their planned activity, and FAA analysis of the airspace, the DOD revised their airspace proposal.

The FAA conducted an analysis of the initial proposal as published in the revised airspace proposal as described in the Supplemental Notice of Proposed Rulemaking published in the August 17, 2015.

Mitigations intended to lessen the potential impact of the restricted area expansion include the following:

- The restricted areas will be used intermittently. Overall use of the complex is limited to approximately 160 days per year per the Letter of Procedure.
- The original proposal allowing activation of R-4403C, E and F at “other times by NOTAM with ATC approval” (as described in the July 10, 2014 Notice of Proposed Rulemaking) was eliminated.
- No other subarea can be activated while R-4403A is in use.
- No other subarea can be activated when R-4403B is in use.
- NASA will activate R-4403B only to the altitude required for the specific mission.
- R-4403C will only be activated to 6,000 feet MSL when AC-130 gunships are not participating in a mission.
- Two new VFR waypoints would be established south of I-10 to aid VFR navigation

- A VHF frequency will be added to the New Orleans Sectional Aeronautical chart for pilots to obtain real-time status of the restricted areas.
- R-4403B through F cannot be activated during certain special events that would attract a high volume of air traffic to or through the area.
- ATC can recall the airspace in cases of inflight emergencies, severe weather, severe air traffic congestion or equipment outages (radar and communications).
- ATC can recall the airspace, if necessary, for medevac helicopters.
- Revisions to instrument approach procedures serving Picayune Municipal Airport and Stennis International Airport.

Use of R-4403A through F will be governed by the terms in a Letter of Procedure (LOP) between NASA/SSC, NSWC, Houston Air Route Traffic Control Center (ARTCC) and the ATC facilities at New Orleans, LA and Gulfport, MS. The LOP will include procedures for activating and deactivating the restricted areas and it includes several provisions aimed at lessening potential aeronautical impacts of the restricted areas.

Given these provisions the FAA has determined that proposed expansion of R-4403 will not result in any significant impact to other stakeholders and users of the NAS, including general aviation operations at Picayune Municipal Airport and Stennis International Airport.

Environmental Impacts

The following section contains the results of the FAA's independent evaluation regarding the potential environmental impacts associated with the re-designation and expansion of R-4403³:

Air Quality: The FEA indicates that the proposed action would have only a minor impact on air quality. The relevant Air Quality Control Region is classified as attainment/unclassifiable for all criteria pollutants (40 CFR 81.325). The FAA has determined that because the increase in emissions, including those from the associated procedure changes at Stennis International Airport (see Attachment A) is below the *de minimis* levels in 40 C.F.R. § 93.153(b), there will be no significant impact to air quality as a result of the proposed action.

Climate: The FEA indicates that the Navy and NASA activity within the expanded SUA will result in an increase of 1,211 metric tons of CO₂ emissions per year. The FAA's analysis of

³ The FAA's analysis of environmental impacts of the associated changes in approach procedures at Picayune Municipal Airport and Stennis International Airport is presented in Attachment A. That analysis

the changes to approach procedures indicates an increase of 3.4 metric tons CO₂ emissions per year. As compared to the 6,708.3 x 10⁶ metric tons of CO₂ annually released in the U.S., these increases are insignificant.

Biological Resources: The FEA concluded that there will be no significant impact to biological resources; although, the establishment, use, and long-term maintenance of the munitions target areas will result in minor, primarily localized, effects to about 13 acres of vegetation and habitat. Although such habitats will be avoided to the greatest extent possible, minor impacts to aquatic/wetlands habitats are expected in riverine training zones and from development and use of munitions target areas and associated access roads at FW1

The FAA action does not include any of the ground based activity described above and as a result the FAA action will not contribute to any of the above listed potential impacts. However, the FAA action may result in noise and vibrations from associated airborne activity. The FEA describes the potential that wildlife will experience a slight, but not significant, increase in disturbance from noise, vibration and human activity associated with DOD training and NASA rocket engine and untethered autonomous flight vehicle testing. The FAA has reviewed the noise analysis within the FEA and determined that any significant increase in noise will occur within the existing noise buffer area, which already includes portions of the Pearl River Wildlife Management Area managed by the State of Louisiana. The FAA concurs with the FEA conclusion that that wildlife will experience a slight, but not significant, increase in disturbance from noise and vibration.

According to documentation contained within the FEA, The Navy consulted informally with the U.S. Fish and Wildlife Service (USFWS) under Section 7 Endangered Species Act after concluding that the proposed action may affect, but is not likely to adversely affect the Louisiana black bear, ringed map turtle, gopher tortoise, dusky gopher frog, red-cockaded woodpecker, wood stork, Bachman's warbler, and gulf sturgeon; and no destruction or adverse modification of designated critical habitat for the Gulf sturgeon will occur. The USFWS, Mississippi Field Office concurred with these conclusions on April 10, 2015.

In addition the Navy provided notices to the Louisiana Department of Wildlife and Fisheries, the agency that manages the Pearl River Wildlife Management Area, for both scoping prior to drafting the EA and for comment on the Draft EA. The Navy did not receive a response or comment from the Louisiana Department of Wildlife and Fisheries. However the Louisiana Department of Wildlife and Fisheries has acknowledged the planned Navy action as it has included and labeled the location of the planned Navy range on its July 2015 map of the Pearl River Pearl River Wildlife Management Area to warn hunters and other users of area of potentially dangerous activity.

Coastal Resources: The FEA includes a review of the Navy and NASA proposed action for consistency with the enforceable policies of the federally approved CZMA programs for the Mississippi Coastal Program (Mississippi Department of Marine Resources 1983) and the Louisiana Coastal Resources Program (Louisiana Department of Natural Resources 2014). Based on best available data, Navy and NASA determined that the actions proposed would be

consistent to the maximum extent practicable with the enforceable policies of the Mississippi Coastal Program and the Louisiana Coastal Resources Program. The Coastal Consistency Determinations are provided in Appendix E of the FEA. During the Draft EA review period, Navy and NASA submitted the Coastal Consistency Determinations to the Mississippi Department of Marine Resources and Louisiana Department of Natural Resources for concurrence (see Appendix C.2 of the FEA). The Mississippi Department of Marine Resources concurred with the determination on March 10, 2015. A response to the submitted Coastal Consistency Determination was not received by the Louisiana Department of Natural Resources within the 60-day timeframe specified in 15 CFR Section 930.41. Therefore, in accordance with 15 CFR Section 930.41, concurrence by the Louisiana Department of Natural Resources is presumed.

The FAA proposed action does not include any ground based activity or resultant impact such as development of firing ranges and landing zones, and as such poses less potential to impact coastal resources than the Navy and NASA proposed action. The FAA has reviewed the analysis of the FEA determined that FAA action will not result in any significant impacts to Coastal Resources.

Department of Transportation Act, Section 4(f): 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 transportation program or project for purposes of section 303(c) of title 49, United States Code.” Note that section 4(f) of the Department of Transportation (DOT) Act was codified and remembered in 1983 as section 303(c) of 49 United States Code. Regardless, the DON and NASA determined that the proposed action would not preclude the availability of publicly owned recreational resources.

Farmlands: The FAA has determined that the proposed FAA action does not impact the use of existing farmland or have the potential to convert important farmlands to non-agricultural uses.

Hazardous Materials, Pollution Prevention, and Solid Waste: The airborne activity associated with the proposed FAA that could potentially result in hazardous materials, solid waste and associated pollution is the discharge of airborne munitions and flares which would result in potential solid and toxic waste on the target ranges. The FEA details that munitions and ranges would be managed under the Navy Range Sustainability Environmental Program Assessments (RSEPA) Process for environmental concerns, including clearance and cleanup of munition and munition constituents. Therefore the FAA has determined that the proposed FAA action will not result in significant impacts resulting from hazardous materials, solid waste, or related pollution.

Historical, Architectural, Archeological, and Cultural Resources: Based on the documentation within the FEA, the Navy and NASA conducted a review of historical and cultural resources in the area of effect including the Fee Area and the noise buffer area. Potential

historic resources were identified within the Fee Area associated with NASA engine testing. There are managed under NASA's Integrated Cultural Resources Management Plan. A review of past surveys conducted in the Buffer zone did not result in the identification of significant archaeological sites, historic structures, or other significant cultural resources that would be potentially affected by the proposed action. The Navy and NASA prepared a Joint Cultural Resources Findings Statement for the Redesignation and Expansion of Restricted Airspace R-4403 and Expansion of Restricted Airspace R-4403 and Establishment of Air-to-Ground Munitions and Senior Training Areas at Stennis Space Center signed by Navy and NASA historic preservation officers. The Joint Cultural Resources Findings Statement described the area of potential effects and the concluded that the proposed action was unlikely to impact any cultural or historic resources. The Navy submitted the Joint Cultural Resources Findings Statement with a request for concurrence to the Mississippi State Historic Preservation Office dated November 24, 2014. The Mississippi Department of Archives and History provided concurrence in a letter dated December 26, 2014.

In addition the Navy submitted the Joint Cultural Resources Findings Statement to representatives of the Choctaw Nation who responded with requests that the Navy inform them if any tribal cultural resources are identified during the implementation of project.

The FAA conducted an independent review of the documentation contained within the FEA and determined that there are no historic or cultural resources that will be adversely impacted by the proposed FAA action. The FAA further determined that portions of the area of effect also include portions of the noise buffer area that extends into the State of Louisiana, specifically portions of the Pearl River Wildlife Management Area. The FAA conducted further research and determined that there appear to be no historic properties or structures within the Pearl River Wildlife Management area, nor are there likely to be any historic or cultural resources that would be affected by aviation activity as the area floods annually per information provided by the Louisiana Department of Wildlife and Fisheries.

In addition the Navy provided notices to the Louisiana Department of Culture, Recreation, and Tourism, the agency that includes the State Historic Preservation Officer, for both scoping prior to drafting the EA and for comment on the Draft EA. The Louisiana Department of Culture, Recreation, and Tourism did not provide any comment.

Based on its independent review of the documentation within the FEA and its own analysis the FAA has determined that the airspace action would not affect historic property or cultural resources.

Land Use: The FAA has reviewed the information within the FEA and determined that any potentially significant impacts resulting from aviation activity, primarily noise, are contained within the noise buffer area, an area where the Government has purchased easements to ensure that no the land use is compatible with noise. As such the FAA has determined that the expansion of the R-4403 will not result in any changes to land use.

Natural Resources and Energy Supply: According the information within the FEA, the proposed additional operational missions will consume a relatively small amount of energy and other natural resources (such as munition constituents) when compared to the resources available in the region. The fuels required for operational missions and activities are not in short supply; their use would not have an adverse impact on the continued availability of these resources and the energy resource commitment is not anticipated to be excessive in terms of region-wide usage. Likewise, the energy required for additional operations is not in short supply.

The Navy also states that they maintain compliance with the requirements set forth in Executive Orders 13423 and 13514 would minimize any irreversible or irretrievable effects to multiple non-renewable and renewable resources.

The FAA has reviewed the information within the FEA and concurs that the increase in military operations does not represent a significant impact to natural resources or energy supplies.

Noise: According to the information provided in the FEA, the Proposed Action does not alter the level activity and noise from NASA engine testing, for which the noise buffer area was established around the fee area. The FAA considers the area within the noise buffer as being non-noise sensitive.

The FEA also includes noise analysis of new planned aviation activity, primarily that of the Navy, within the expanded restricted area. The analysis indicates no significant increase in noise outside of the noise buffer area as a result of aircraft operations. The only potential for increase in aircraft noise is at specific helicopter landing zones that the Navy intends to establish within the noise buffer area.

The other potential source of noise increase described within the FEA is the result of discharge of airborne weapons systems. The Navy analysis within the FEA used 62 dB of C weighted noise (dBC better captures the lower frequency sound of explosions than A weighted noise typically used by the FAA) as the threshold for its analysis. The analysis concluded that noise from airborne weapons use exceeding 62 dBC would be contained within the noise buffer area on typical months of activity, and only a few acres of unoccupied, non-noise sensitive land, located outside the noise buffer would experience noise greater 62 dBC during the peak month of training activity. The FAA noise threshold of average annual day Day-Night Average Sound Level (DNL) 65 dB is higher than that used by the Navy for this analysis.

The FAA has determined, based on the analysis within the FEA and its evaluation of the proposed changes to approach flight procedures (see Attachment A), that the proposed action will not 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 DNL 1.5 dB or greater increase, when compared to the no action alternative for the same timeframe.

Socioeconomic, Environmental Justice, and Protection of Children: Because of the minor changes to existing flight procedures at surrounding airports, the FAA has determined that

the proposed action will not impact operations at surrounding airports and thusly not result in any adverse economic impacts to the surrounding community. The expansion of the restricted area and the associated airborne activity are contained within the established noise buffer area, which is not used for any residential, school, daycare, or other noise sensitive activity, and thusly not home to any children or environmental justice community. The FAA has determined that the proposed action will not result in any significant socioeconomic or environmental justice impacts, or adversely impact the protection of children.

Light Emissions and Visual Impacts: The FEA details that the only new source of potentially significant light emission/visual impact is located at the proposed sensor training area. The area is remote and not considered visually sensitive, and the equipment proposed for use in this area would be low to the ground (i.e., not visually apparent in the horizon) with some elements being transitory.

The FAA has reviewed the FEA and the land use under the expanded restricted area and determined that proposed action would not create annoyance or interfere with normal activities from light emissions nor affect the visual character of the area due to the light emissions, including the importance, uniqueness, and aesthetic value of the affected visual resources.

Impact Categories Not Affected: The FAA has determined that the following NEPA impact categories would remain unaffected by the Proposed FAA Action because the resource either does not exist within the study area or the types of activities associated with the Proposed Action would not affect them: construction impacts, wild and scenic rivers, wetlands, floodplains, and water resources (surface water or groundwater).

Cumulative: Chapter 4 of the FEA discusses cumulative impacts and includes an analysis of cumulative impacts that account for surrounding and future federal activity as well as the ground based activity (such as construction and ground disturbance) associated with the proposed action. Based on the analysis in the FEA, the Navy and NASA concluded that negligible and not significant cumulative impacts could occur to airspace and air operations, land use, socioeconomics, air quality, biological resources, soils, and wetlands when compared with other activities past, present, and reasonably foreseeable future actions identified for the area. Based on the FAA's independent evaluation of the FEA, and the additional environmental analysis in Attachment A, the FAA concludes that the cumulative environmental impacts of the proposed action described in the SNPRM and the associated procedure changes at Picayune Municipal Airport and Stennis International Airport would not be significant.

Public Involvement

The DON and NASA coordinated with various federal and state agencies during the NEPA process. A Draft EA was released for a 35-day public review period on December 1, 2014. Notices of the availability of the Draft EA were published in four local newspapers (Picayune Item, Sun Herald, Sea Coast Echo, and Times Picayune), which included daily and weekend editions, and copies of the Draft EA were placed in Page 8 of 9 public libraries in Bay St. Louis, Kiln, and Picayune, Mississippi and Slidell, Louisiana. In addition, a digital copy of the Draft EA

was made available on the NASA SSC NEPA webpage (<http://www.ssc.nasa.gov/environmental/docforms/eas/eas.html>).

The FAA published a Notice of Proposed Rulemaking (NPRM) in the Federal Register on July 10, 2014 (79 FR 39344). Public comments were solicited by the FAA pursuant to the rulemaking requirements of 14 CFR 73 for Special Use Airspace, which includes restricted areas. The public comment period for the NPRM was 45 days, concluding on August 25, 2014. Subsequent to the publication of the NPRM, the Special Use Airspace Proposal was modified by NASA and the DON to: (1) allow for greater clearance for VFR traffic along Interstate I-10; (2) allow for DOD unmanned aerial systems access to R-4403C from Stennis International Airport (KHSA) Class D airspace; (3) simplify R-4403C and D by combining the two airspaces into a single airspace identified as R-4403C (the formerly proposed designation of R-4403D would not be used); and (4) eliminate the use of the area within R-4403E and R-4403F for delivery of air to- ground munitions but maintain its use for sensors.

As a result of the changes in the Special Use Airspace Proposal and consistent with FAA's obligations per the rulemaking process, a supplemental Notice of Proposed Rulemaking was published in the Federal Register on August 17, 2015 to request public comments on the changes in the airspace parameters listed above. The public comment period was 45 days, concluding on October 1, 2015. The FAA received three comments that were addressed already in the draft EA.

Incorporated by Reference

The FAA has also reviewed the following information:

FAA Order 1050.1F, *Environmental Impacts: Policies and Procedures*, Federal Aviation Administration Office of Environment and Energy, dated July 16, 2015

1050.1F Desk Reference, Federal Aviation Administration Office of Environment and Energy, dated July 2015

FAA Order JO 7400.2K, Change 1, *Procedures for Handling Airspace Matters*, Federal Aviation Administration Air Traffic Organization, dated July 24, 2014

Final Environmental Assessment for Redesignation and Expansion of Restricted Airspace R-4403 at Stennis Space Center in Hancock and Pearl River County, MS and St. Tammany Parrish, LA, dated October 2015.

Guidance for Noise Screening of Air Traffic Actions, Mitre Product Number MP090164R1, Mitre Corporation, dated December 2012

Pearl River Wildlife Management Area (Map), Louisiana Department of Wildlife and Fisheries, dated April 2015, published at <http://www.wlf.louisiana.gov/wma/2789>.

Adoption

In accordance with FAA Order 1050.1 F, paragraph 8-2, the FAA has conducted an independent evaluation of the FEA. Based on its independent evaluation, the FAA has determined that the FEA adequately assesses and discloses the environmental impacts of the re-designation and expansion of R-4403, as described in the SNPRM, and that adoption of the FEA by the FAA is authorized under 40 C.F.R. § 1506.3 and FAA Order 1050.1F, paragraph 8-2.

In addition, as explained in Attachment A, the FAA has determined that the associated changes to instrument procedures at Picayune Municipal Airport and Stennis International Airport do not constitute substantial changes in the FAA's proposed action that are relevant to environmental concerns. Therefore, the FAA has concluded that a supplement to the FEA is not required.

Accordingly, the FAA adopts the FEA and takes full responsibility for the scope and content that addresses FAA actions.

Decisions and Orders

After careful and thorough consideration of the FEA and the facts contained herein, I find that the Proposed Action is consistent with existing national environmental policies and objectives as set forth in Section 101 of National Environmental Policy Act 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.

I have 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 FEA, the NPRM, and the SNPRM.

Accordingly, under the authority delegated to me by the Administrator of the FAA, I approve the FAA actions described in the "Proposed Action" section above and direct that actions be taken that will enable implementation of those actions.

Approved: _____



Date: _____

3/22/16

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.